

HP SOA Systinet

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Demo Guide

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Welcome to 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.

How This Guide is Organized

This chapter describes the demos provided with SOA Systinet. Running the demos is a good way to learn about SOA Systinet capabilities.

- [REST API Demo on page 11](#) demonstrates basic interaction with the REST API.
- [SDM Demo on page 13](#) shows how to use *SDM* and its Java client to model *SOA*.
- [Contract Demo on page 17](#) creates a provider, consumer and contract.
- [Reporting Demo on page 21](#) demonstrates how to create tasks and perform them via the http interface.

Each demo is in a directory under `PLATFORM_HOME/demos/`.

Document Conventions

The typographic conventions used in this document are:

run.bat make	Script name or other executable command plus mandatory arguments.
<code>[--help]</code>	A command-line option.
either or	A choice of arguments.
<i>replace_value</i>	A command-line argument that should be replaced with an actual value.
<code>{arg1 arg2}</code>	A choice between two command-line arguments where one or the other is mandatory.
<code>rmdir /S /Q System32</code>	Operating system commands and other user input that you can type on the command line and press Enter to invoke. Items in <i>italics</i> should be replaced by actual values.
<code>C:\System.ini</code>	Filenames, directory names, paths and package names.
<code>a.append(b);</code>	Program source code.
<code>server.Version</code>	An inline Java or C++ class name.
<code>getVersion()</code>	An inline Java method name.
Shift-N	A combination of keystrokes.
Service View	A label, word or phrase in a GUI window, often clickable.
New->Service	Menu choice.

Documentation Updates

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

- Software version number
- 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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- For the latest information about support processes and tools available for products formerly produced by Systinet, we encourage you to visit the Systinet Online Support Web site at: <http://www.systinet.com/support/index>.
- If you have additional questions, contact your HP Sales Representative.

HP Software Support

You can visit the HP Software Support Web site at:

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HP Software online support provides an efficient way to access interactive technical support tools. As a valued support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts

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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. To find more information about access levels, go to: www.hp.com/managementsoftware/access_level

To register for an HP Passport ID, go to: www.managementsoftware.hp.com/passport-registration.html

1 REST API Demo

The purpose of this demo is to introduce the REST Java client and to show how to interact with SOA Systinet using this client. The basic operations CREATE, UPDATE, DELETE, UNDELETE, PURGE and GET are demonstrated.

The demo creates a collection and stores this to a collection sample XML document (taxonomy). After that the document is updated, deleted, undeleted and finally it is purged.

You can find the demo source code in: `PLATFORM_HOME\demos\rest\api\src`

This procedure explains how to build and run the demo:

- 1 Ensure that the demo is properly configured and SOA Systinet is running.
- 2 Change your working directory to: `PLATFORM_HOME\demos\rest\api`
- 3 To get help run: **run.bat**
- 4 Build the demo using: **run.bat make**
- 5 Run the demo using: **run.bat publish**

The output of this demo will resemble the following:

```
Publishing...
Probing secure port using 'https://localhost:8843/soa/systinet/platform/restBasic/repository/'...
...secure port OK
Running demo...
Creating demo collection...
  Successfully created!
Creating taxonomy...
  Successfully created:
https://localhost:8843/soa/systinet/platform/restBasic/repository/demo/demoTaxonomy.xml
Getting taxonomy...
  Successfully obtained:
  https://localhost:8843/soa/systinet/platform/restBasic/repository/demo/demoTaxonomy.xml
```

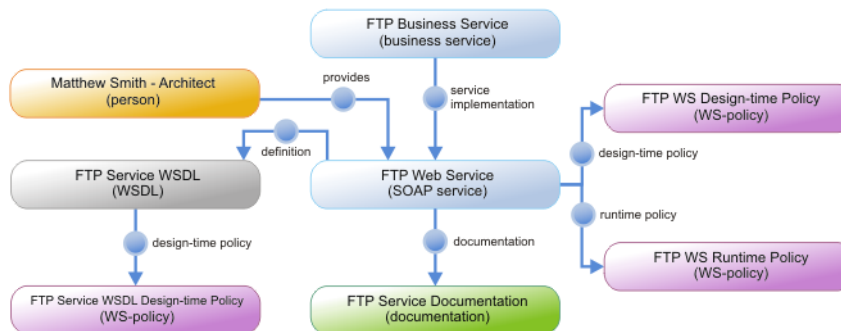
```
with root element
  {http://systinet.com/uddi/taxonomy/v3/5.0}taxonomy
Updating taxonomy...
  Successfully updated: https://localhost:8843/soa/systinet/platform/restBasic/repository/
demo/demoTaxonomy.xml?revision=2
Deleting taxonomy...
  Successfully deleted: https://localhost:8843/soa/systinet/platform/restBasic/repository/
demo/demoTaxonomy.xml?revision=2
Undeleting taxonomy...
  Successfully undeleted: https://localhost:8843/soa/systinet/platform/restBasic/repository/
demo/demoTaxonomy.xml?revision=2
Purging taxonomy...
  Successfully purged!
Demo successfully finished!
```

- 6 To unpublish the demo run: **run.bat unpublish**
- 7 To rebuild the demo, execute **run.bat clean** to delete the classes directory and **run.bat make** to rebuild the demo classes.

2 SDM Demo

The purpose of this demo is to show how to use the SDM Java API to interact with SOA Systinet REST http interface. The example publishes artifacts relating to a Business Service artifact. The business service described enables use of the FTP protocol via a standard web service interface.

Figure 1. SDM Demo Artifacts



These artifacts are published by the demo:

- **FTP Business Service:** The Business Service artifact represents a logical service and contains descriptive information about the service in business terms. Technical information can be found in business service implementations.
- **Matthew Smith Architect.** SDM distinguishes two types of contacts – *persons* and *organizational units*. Matthew Smith is represented by a Person artifact. The fact that he is responsible for the *FTP service* in the SOA system is expressed using the `provides` relationship.
- **FTP Service.** There is only one implementation of the *FTP Business Service* in the demo. It is represented by the SOAP Service artifact and both artifacts are associated using the **service** relationship.

- **FTP Service WSDL.** Technical details of the SOAP Service artifact are described not only in its metadata descriptor but also using references to other artifacts. The data of the WSDL artifact is a WSDL document describing the *FTP Web Service*. It is attached to the SOAP Service artifact using the **definition** relationship.
- **FTP Service WSDL Design-time policy.** SDM allows the attachment of policies describing various aspect of the artifacts directly to them using relationships. Such policies may contain assertions describing compliance, change management preferences or other information.
- **FTP WS Runtime Policy.** Other policy information mentioned in the previous paragraph may for example specify limits on the number of requests to be issued against the FTP Web Service.
- **FTP Service Documentation.** The SDM allows a number of documents to be attached to a web service in a Documentation artifact. These typically describe the web service and related artifacts.

You can find the demo source code in: `PLATFORM_HOME\demos\sdm\ftpservice\src`

This procedure explains how to build and run the demo:

- 1 Ensure SOA Systinet is running and that the demo environment and properties are correct for your installation.
- 2 Change your working directory to: `PLATFORM_HOME\demos\sdm\ftpservice`
- 3 To get help run: **run.bat**
- 4 Build the demo using: **run.bat make**
- 5 Run the demo using: **run.bat publish**

The output of this demo will resemble the following:

```
Publishing...
Probing secure port using
'https://localhost.localdomain:8843/soa/systinet/platform/restBasic/repository/'...
...secure port OK
Publishing FTP Service SDM model...
Going to publish WS-Policies...
  Published:
https://yourhost:8843/soa/systinet/platform/restBasic/repository/wsPolicies/-
ftpServiceWsRuntimePolicy.xml
  Published:
```

```

https://yourhost:8843/soa/systinet/platform/restBasic/repository/wsPolicies/ftpServiceWsDesignTimePolicy.xml

  Published:
https://yourhost:8843/soa/systinet/platform/restBasic/repository/wsPolicies/ftpServiceWsdlDesignTimePolicy.xml
Going to publish WSDL...
  Published: https://yourhost:8843/soa/systinet/platform/restBasic/repository/wsdl/ftpService.wsdl
Going to publish documentation...
  Published:
https://yourhost:8843/soa/systinet/platform/restBasic/repository/documentation/ftpServiceDocumentation.pdf
Going to publish Web Service...
  Published:
https://yourhost:8843/soa/systinet/platform/restBasic/repository/serviceArtifacts/FTPServiceWs
Going to publish contact...
  Published:
https://yourhost:8843/soa/systinet/platform/restBasic/repository/contactArtifacts/MatthewSmithArchitect
Going to publish Business Service...
  Published:
https://yourhost:8843/soa/systinet/platform/restBasic/repository/businessServiceArtifacts/FTPServiceBs
Getting Web Service:
https://yourhost:8843/soa/systinet/platform/restBasic/repository/serviceArtifacts/FTPServiceWs
FTP Service descriptor:

<a:webServiceArtifact ...>
  ...
</a:webServiceArtifact>
Getting WSDL:
https://localhost.localdomain:8843/soa/systinet/platform/restBasic/repository/wsdl/ftpService.wsdl
FTP Service WSDL descriptor:

<a:wsdlArtifact ...>
  ...
</a:wsdlArtifact>
FTP Service successfully published!

```

6 To unpublish the demo run: **run.bat unpublish**

You can then publish again. To unpublish and publish in a single step: **run.bat republish**

This is useful if you want to experiment by making changes to the demo.

7 To rebuild the demo, execute **run.bat clean** to delete the classes directory and **run.bat make** to rebuild the demo classes.

Once the demo data is published, you can view the published artifacts using either the web UI or the http interface:



Please change the hostname and port in the URL according to your installation settings.

- Use

<http://localhost:8080/soa/systinet/platform/web/service/businessServiceArtifact/view/BusinessServiceArtifact?document=FTPServiceBs&collection=businessServiceArtifacts> to check the published FTP Business Service. You may follow the relationship to its implementation (FTP Web Service) and other artifacts.

- The XML representation of the business service SDM descriptor can be obtained using <http://localhost:8080/soa/systinet/platform/rest/repository/businessServiceArtifacts/FTPServiceBs?desc>
- If you are reviewing an artifact via the http interface, you may return to the UI using the link <http://localhost:8080/soa/systinet/platform/rest/repository/businessServiceArtifacts/FTPServiceBs?view>.



Note the `view` parameter.

3 Contract Demo

The purpose of this demo is to show the creation a contract between a service provider and a service consumer.

The demo is published in three steps:

- 1 The first step is to create a business service artifact – the provider. The business service `ready for consumption` property is set to `true` to indicate that the service can be consumed. Along with the business service a service level objective (SLO) artifact is also published describing conditions under which the service can be consumed.
- 2 In the second step a consumer, Daniel Johnson, is created. He is represented by a `person` artifact. The consumer also creates a `request` for a consumption artifact that references the provider, the preferred SLO and the consumer.

3 Figure 1. Contract Overview



Finally the contract artifact is created. The consumer reviews the request for consumption and if they are satisfied, they create a contract. The contract is approved by the creation of the relationship from the artifact representing the provider (business service) to a particular revision of the contract.

You can find the demo source code in: `PLATFORM_HOME\demos\contractmgr\simplecontract\src`

This procedure explains how to build and run the demo:

- 1 Ensure that the demo is properly configured and SOA Systinet is running.
- 2 Change your working directory to: `PLATFORM_HOME\demos\contractmgr\simplecontract`
- 3 To get help run: **run.bat**
- 4 Build the demo using: **run.bat make**
- 5 Run the first demo step – provider – using: **run.bat provider**

The output of this demo step will resemble the following:

```
Preparing provider ...
Preparing Provider in the following steps:
1. Trying to publish Provider: Postal Address Verification and Correction Business Service
   Published!
2. The provider is trying to publish the Platinum SLO
   Published!
3. Attaching SLO to provider
   Attached!

Prepare provider summary

The following artifacts have been published:
* provider at:
  https://localhost:8843/soa/systinet/platform/restBasic/repository/businessServiceArtifacts/
PostalAddressVerificationBusiness
Service
* SLO at:

https://localhost:8843/soa/systinet/platform/restBasic/repository/sloArtifacts/PostalAddressVerificationSlo
```

- 6 Run the second demo step – *consumer* – using: **run.bat consumer**

The output of this demo step will resemble the following:

```
Preparing consumer ...
Checking provider's artifacts:
  SLO found!

Preparing Consumer in the following steps:
1. Finding Person artifact representing consumer
```

```
Found: contactArtifacts/DanielConsumerJohnson
2. Trying to publish a Contract request
   Published!

Prepare consumer summary

The following artifact has been published:
* contract request at:
  https://localhost:8843/soa/systinet/platform/restBasic/repository/contractRequestArtifacts/
  DanielJohnsonContractRequest
```

7 Run the third demo step – contract – using: **run.bat contract**

The output of this demo step will resemble the following:

```
Preparing contract ...
Checking provider's artifacts:
  SLO found!

Checking consumer's artifacts:
  Contract request found!

1. Provider is trying to publish the contract:
   Using Usage Plan: usagePlanArtifacts/PostalAddressVerificationUsagePlan?revision=1
   Using Contract request: contractRequestArtifacts/DanielJohnsonContractRequest?revision=1
   Published!
2. Provider is confirming Contract contractArtifacts/
  PostalAddressVerificationAndDanielJohnsonContract?revision=1 ...
   Contract confirmed by provider:
     contractArtifacts/PostalAddressVerificationAndDanielJohnsonContract?revision=1
```

8 To unpublish the demo run: **run.bat unpublish**

9 To rebuild the demo, execute **run.bat clean** to delete the classes directory and **run.bat make** to rebuild the demo classes.

Once the demo is published, you may review the published artifacts using both the web UI and the http interface:



Please change the hostname and port in the URL according to your installation settings.

- Access Contract Management UI at <http://localhost:8080/soa/systinet/platform/web/cm/providerHome>. Login either as `demoapprover/changeit` (provider participant of the demo) or `demouser/changeit` (consumer participant of the demo).
- Use <http://localhost:8080/soa/systinet/platform/web/cm/viewContractAgreementDocumentPostalAddressVerificationAndDanielJohnsonContract&collection=contractArtifacts> to review the contract artifact.
- Use <http://localhost:8080/soa/systinet/platform/rest/repository/contractArtifacts/PostalAddressVerificationAndDanielJohnsonContract?desc> to review the XML representation of the contract.

4 Reporting Demo

The purpose of this demo is to show how to create a reporting framework task and how to perform that task via the http interface.

The demo creates a Task artifact. The task specifies the use of an included selector, that every document stored in the WSDL collection should be validated against the WSDL 1.1 XML schema. The action is performed by referencing the reporting framework tool to be invoked.

The task execution is initiated by invoking the execute operation on the Task artifact using the http client. As a result, the execute call obtains the URL of the index report. The index report in turn references sub-reports (one for each document that was validated).

Polling is used in order to determine the status of the index report. Once the index report is closed and all the documents are validated the demo finishes.

You can find the demo source code in: `PLATFORM_HOME\demos\reporting\task\src`

This procedure explains how to build and run the demo:

- 1 Ensure that the demo is properly configured and SOA Systinet is running.



Also ensure that [SDM Demo on page 13](#) is published.

- 2 Change your working directory to: `PLATFORM_HOME\demos\reporting\task`
- 3 To get help run: **run.bat**
- 4 Build the demo using: **run.bat make**
- 5 Run the demo using: **run.bat publish**

The output of this demo will resemble the following:

```
Publishing...
Probing secure port using 'https://localhost:8843/soa/systinet/platform/restBasic/repository/'...
...secure port OK
Running demo...
Be sure that FTP Service demo is published!
Creating task...
  Published:
https://localhost:8843/soa/systinet/platform/restBasic/repository/taskArtifacts/ReportingDemoTask
Executing task asynchronously...
  Created report: https://localhost:8843/soa/systinet/platform/restBasic/repository/reportArtifacts/1

Checking report status:
  Sub-reports count: 0
  Sub-reports count: 0
  Sub-reports count: 0
  Sub-reports count: 1
  Sub-reports count: 1
  Sub-reports count: 1
Task execution finished with status: Ok
Demo successfully finished!
```

6 To unpublish the demo run: **run.bat unpublish**

7 To delete the classes directory run **run.bat clean**.

Once the demo is published, you may also perform the task directly from the browser by accessing the following link:



Please change the hostname and port in the URL according to your installation settings.

- <https://localhost:8443/soa/systinet/platform/restBasic/repository/taskArtifacts/ReportingDemoTask?execute>



Log in as [demouser/changeit](#).