# **HP Select Federation**

For the Windows® and Linux operating systems

Software Version: 7.01

## **Quick Start Guide**

Document Release Date: March 2008 Software Release Date: March 2008



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The following table indicates changes made to this document since the last released edition.

#### **Changes to this Document**

Chapter	Changes
All chapters	Added the Red Hat Linux operating system-specific information where applicable.
Documentation Updates	Updated the documentation URL.
Support	Updated this section's information and URLs.
Chapter 2, Installing the Select Federation IDP Instance	<ul> <li>Changed the installation to an HTTPS installation.</li> <li>In step 1, changed the Windows executable from install.exe to installSF.exe.</li> </ul>
Chapter 3, Installing the Select Federation SP Instance	<ul> <li>Changed the installation to an HTTPS installation.</li> <li>In step 1, changed the Windows executable from install.exe to installSF.exe.</li> </ul>
Chapter 4, Exchanging Metadata	<ul> <li>Added server certificate transfer sections: <ul> <li>Adding the SP Site's Server Certificate to the IDP's Trust Store on page 24.</li> <li>Adding the IDP Site's Server Certificate to the SP's Trust Store on page 29.</li> </ul> </li> <li>Changed the section heading "Downloading the IDP's Metadata into the SDP Site" to Downloading the IDP's Metadata into the SP Site on page 34.</li> </ul>
Chapter 5, Using the Demonstration Application	<ul> <li>Updated the explanation of Figure 1 in How an SP-Initiated Federation Works on page 38.</li> <li>Updated the screen shots in each section to reflect the HTTPS installation.</li> </ul>

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## 1 Introduction

### **About This Guide**

Quick start guide is intended for a quick, easy-to-use demonstration of Select Federation for customers and field personnel. This is not intended to be an introductory guide that explains what federation is or what Select Federation is. It is assumed that you are familiar with federation from a business and high-level technology point of view, is familiar with the terminology used and has read introductory material about Select Federation. This document does not replace the HP Select Federation Installation Guide and HP Select Federation Configuration and Administration Guide. If you have questions regarding the why's, how's, or would like to learn about the many advanced configuration options of Select Federation please refer to the HP Select Federation Configuration and Administration Guide included with the software.

When you deploy Select Federation in your site, you must set the site role. In this guide you will install one Select Federation instance as an Authority Site (IDP) on one machine and a second Select Federation instance as an Application Site (SP) on another machine. Typically, you and your Trusted Partner agree in advance on how to set up the federation. Generally, one site hosts the application, while the other provides the authentication for end users to seamlessly access the application.

## **Prerequisites**

### Software Requirements

You must have the following software:

- Windows 2003 or Red Hat Linux AS, version 3.0 Update 5 and 4.0
- Select Federation 7.00
- LDAP Directory accessible

### Hardware Recommended Specifications

Following are the recommended hardware specifications:

- Intel Pentium PCs Processor Speed: 1 GHz
- Memory: 1 GB RAM or higher
- Disk Space: 2 GB disk space

## Using this Guide

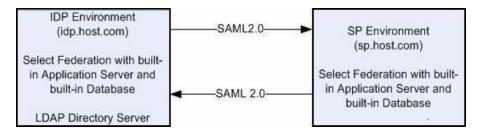
This guide walks you through the following procedures:



This guide assumes you are installing the IDP and SP instances on separate machines.

- Installing the Select Federation IDP Instance shows how to install Select Federation as an Authority Site (IDP) on Windows 2003 and Red Hat Linux AS, version 3.0 Update 5 and 4.0 using the Built-in Application Server and database.
- Installing the Select Federation SP Instance shows how to install Select Federation as an Application Site (SP) on Windows 2003 and Red Hat Linux AS, version 3.0 Update 5 and 4.0 using the Built-in Application Server and database.
- Exchanging Metadata shows how to use Select Federation to exchange partner information using the SAML 2.0 protocol.
- Using the Demonstration Application shows how to use the sf-demo Demo Application that is shipped with Select Federation. The Demo Application demonstrates federated Single Sign-On and other Select Federation capabilities.

Your environment for the purposes of this guide is shown in the following diagram:



# 2 Installing the Select Federation IDP Instance

This chapter provides instructions for installing the Select Federation IDP instance on the default Built-in Application Server using the Select Federation Derby Built-in database.



Be sure you install the IDP instance on a different machine than the SP instance.

## Before You Begin

Gather the following information:

- Company Name
- Host Name where Select Federation will be run
- Port Number to use for the built-in application server
- LDAP Directory hostname
- LDAP Directory Port
- LDAP Directory Base DN
- LDAP Directory User ID attribute name
- Keystore password



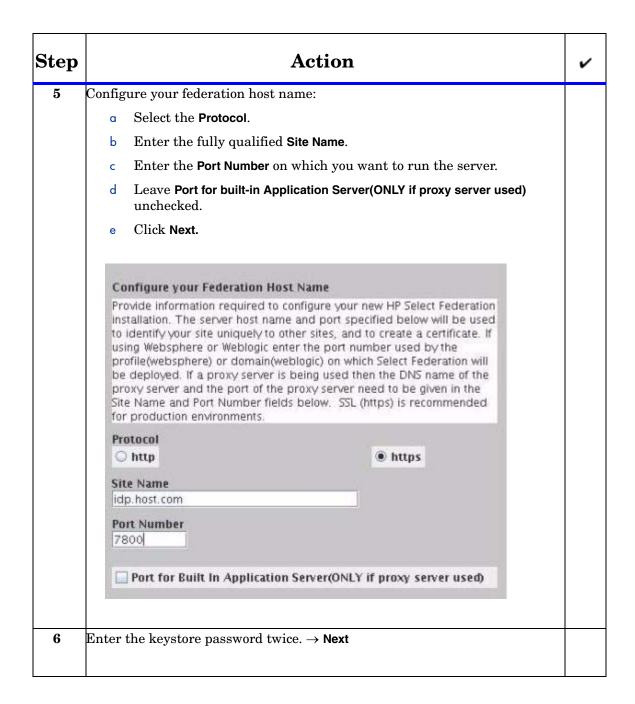
Notes on this data:

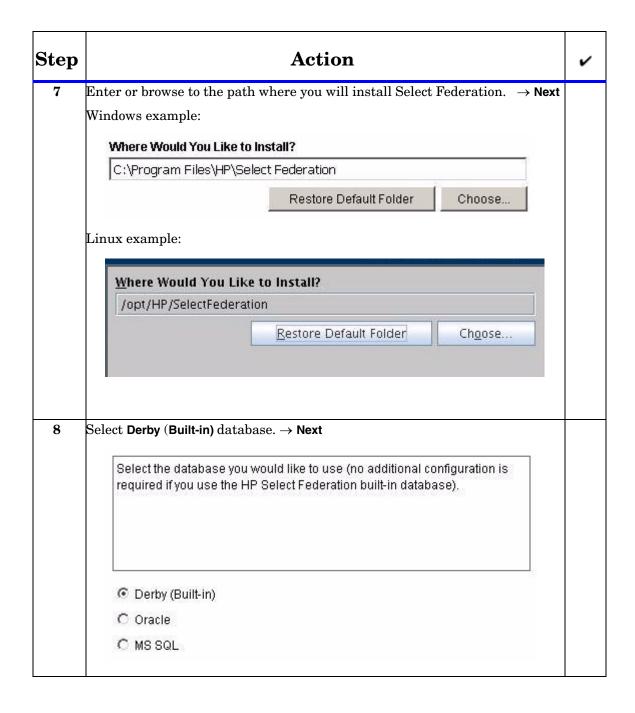
- Company Name: This is used to generate certificates and signing keys for Select Federation. This name must be an ASCII text string without special characters.
- Keystore Password: This creates and opens the key file that stores the signing key. The password must be at least 6 characters long.

# Procedure

Perform the following steps to install the Select Federation IDP instance.

Step	Action	~
1	Start the installation by running the Select Federation install executable located on the CD:	
	• For Windows: installSF.exe	
	• For Linux: installSF.bin	
2	m Read~and~select I accept the terms of the license agreement. $ ightarrow$ Next	
3	Enter a company name. → <b>Next</b> This is used to generate certificates and signing keys for Select Federation. This name must be an ASCII text string without special characters.	
4	${ m Choose}$ Application Server as Built-in Application Server. $ ightarrow$ Next	





Step	Action	~
9	Select IDP only as the site role for this instance of Select Federation. $ ightarrow$ Next	
	Choose a role for your site. Choosing a particular role will install features specific to that role, excluding the ones that are not required.	
	C SP only (all IDP functionality will be disabled)	
	DP only (all SP functionality will be disabled)	
	C Both IDP and SP	
	C Federation Router	
	C Federation Router and Local IDP	
10	Do not integrate Select Federation with Select Access.  Leave Deploy HP Select Federation integrated with HP Select Access unchecked.  → Next	
	Please select the check box if you want to deploy HP Select Federation and	
	integrate it with an existing installation of HP Select Access.	
	□ Deploy HP Select Federation integrated with HP Select Access	
11		
11	☐ Deploy HP Select Federation integrated with HP Select Access	
11	☐ Deploy HP Select Federation integrated with HP Select Access  Select LDAPV3 as your Profile Service. → Next  If you plan to have a profile server or attribute authority at your site, please specify the source of the profile information below. Note that the choices below are for the source of the profile information; whether the service is a SAML attribute authority or a Liberty Profile service is determined by the protocol used by the querying SP and by the namespace mapping of the	

Step	Action	~
12	Configure your LDAP directory. → <b>Next</b>	
	Configure LDAP Directory Enter the name or IP of the LDAP Directory Server, the administrative username and password, and if required, the Base DN (fixed component of the DN which is used to query the directory). If the Base DN input box is disabled, it means the base DN is not required at this time.	
	ds.host.com	
	<b>Port</b> 400	
	Login Name cn=Directory Manager	
	Password	
	*****	
	Base DN	
	dc=company,dc=com	
	Connect to the directory server using SSL	
13	Enter the attribute name that maps to the user ID in your Directory configuration.  Check Enable sub tree search for directory. → Next	
	Check Enable sub free search for directory. — Next	
	Additional Directory Configuration: Optionally configure some additional directory server parameters here. The first parameter is the name of attribute that contains the userId. This is prefixed to the userId and then concatenated to the base DN to form the full DN of the user object to be created. The checkbox can be selected to enable sub-tree searching for your directory.	
	The name of the attrbute that would contain the user id uid	
	Enable sub tree search for directory	

Step	Action	~
14	Do not integrate with Select Audit.	
	Leave Integrate HP Select Audit $unchecked.  o Next$	
	Integrate with HP Select Audit (optional)	
	If you have HP Select Audit installed and would like to integrate it with HP Select Federation, specify the Select Audit Connector port number below (the value shown is the default). Otherwise, proceed to the next step in the installation.	
	☐ Integrate HP Select Audit	
	Connector Port 9979	
15	Verify that the installation information is correct. $\rightarrow$ Install	
16	Select Done.	
	The Select Federation IDP instance has been installed.	

# 3 Installing the Select Federation SP Instance

This chapter provides instructions for installing the Select Federation SP instance on the default Built-in Application Server using the Select Federation Derby Built-in database.



Be sure you install the SP instance on a different machine than the IDP instance.

## Before You Begin

Gather the following information:

- Company Name
- Host Name where Select Federation will be run
- Port Number to use for the built-in application server
- Keystore password



Notes on this data:

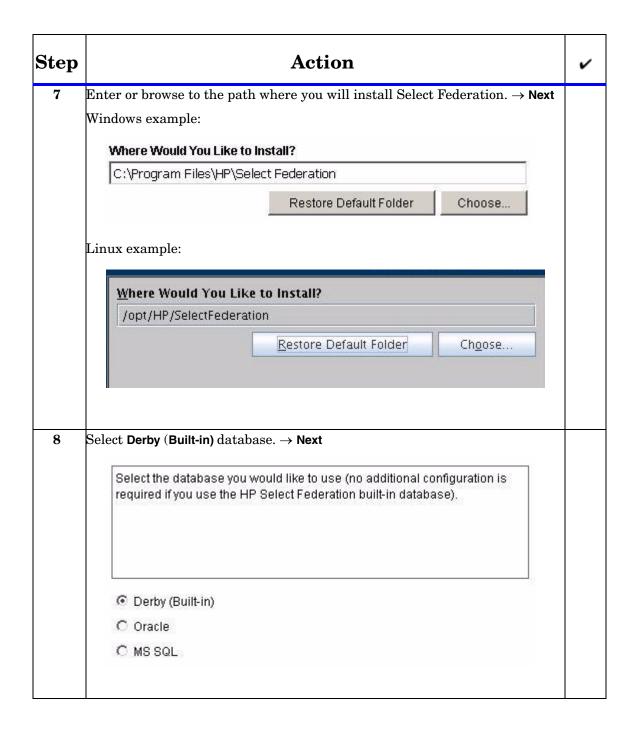
- Company Name: This is used to generate certificates and signing keys for Select Federation. This name must be an ASCII text string without special characters.
- Keystore Password: This will create and open the keyfile that stores the signing key. The
  password must be at least 6 characters long.

# Procedure

Perform the following steps to install the Select Federation SP instance.

Step	Action	~
1	Start the installation by running the Select Federation install executable located on the CD:	
	• For Windows: installSF.exe	
	• For Linux: installSF.bin	
2	$\operatorname{Read}$ and $\operatorname{select}$ I accept the terms of the license agreement. $ o$ Next	
3	Enter a company name. → <b>Next</b> This is used to generate certificates and signing keys for Select Federation. This name must be an ASCII text string without special characters.	
4	${ m Choose}$ Application Server as Built-in Application Server. $ ightarrow$ Next	

### Step Action Configure your federation host name: Select the Protocol. Enter the fully qualified **Site Name**. Enter the **Port Number** on which you want to run the server. Leave Port for built-in Application Server(ONLY if proxy server used) unchecked. Click Next. Configure your Federation Host Name Provide information required to configure your new HP Select Federation installation. The server host name and port specified below will be used to identify your site uniquely to other sites, and to create a certificate. If using Websphere or Weblogic enter the port number used by the profile(websphere) or domain(weblogic) on which Select Federation will be deployed. If a proxy server is being used then the DNS name of the proxy server and the port of the proxy server need to be given in the Site Name and Port Number fields below. SSL (https) is recommended for production environments. Protocol https O http Site Name sp.host.com Port Number 7801 Port for Built In Application Server(ONLY if proxy server used) 6 Enter the keystore password twice. $\rightarrow$ **Next**



Step	Action	~
9	Select SP only as the site role for this instance of Select Federation. $\rightarrow$ Next	
	Choose a role for your site. Choosing a particular role will install features specific to that role, excluding the ones that are not required.	
	SP only (all IDP functionality will be disabled)	
	C IDP only (all SP functionality will be disabled)	
	C Both IDP and SP	
	C Federation Router	
	C Federation Router and Local IDP	
10	Do not integrate Select Federation with Select Access.  Leave Deploy HP Select Federation integrated with HP Select Access unchecked.  → Next	
	Please select the check box if you want to deploy HP Select Federation and integrate it with an existing installation of HP Select Access.	

Step	Action	~
11	Do not integrate with Select Audit.	
	Leave Integrate HP Select Audit unchecked. $ ightarrow$ Next	
	Integrate with HP Select Audit (optional)	
	If you have HP Select Audit installed and would like to integrate it with HP Select Federation, specify the Select Audit Connector port number below (the value shown is the default). Otherwise, proceed to the next step in the installation.	
	☐ Integrate HP Select Audit	
	Connector Port 9979	
12	Verify that the installation information is correct. $\rightarrow$ Install	
13	Select <b>Done</b> .  The Select Federation SP instance has been installed.	

# 4 Exchanging Metadata

### Introduction

Metadata in a federation is an online exact description of the Trusted Partner site with which you want to federate. The metadata describes the various URLs at which different site services (such as Single Sign-On and Single Logout) are available. It also describes the public key certificates so that sites receiving messages from these Trusted Partner sites can confirm that the messages are signed correctly and have not been tampered with.

In Select Federation, site configuration is done using the Administration console. The Administration console enables an administrator to publish the site's metadata as well as import other sites' metadata. To add Trusted Partner sites to your federation, both you and your Trusted Partner need to upload each other's metadata. Metadata exchange is mutual, so you need to ensure that the other site has added your metadata to its federation.

There are two ways to get data from your Partners:

- If the Partner's metadata file is available, download it from a well-known URL or get the metadata securely from the administrator of the Partner. See "Adding a Partner for which Metadata is Available" in the *HP Select Federation Configuration and Administration Guide.*
- If a metadata file or download is NOT available, see "Adding a Partner for Which Metadata is Not Available" in the *HP Select Federation Configuration and Administration Guide*.

In this chapter, you will download each Partner's metadata from a URL. But, before you exchange metadata, you need to add each Partner's server certificate to the Trusted Partner's trust store. To do this, you will use the Certificate Management Tool (CMT) that is bundled with Select Federation.

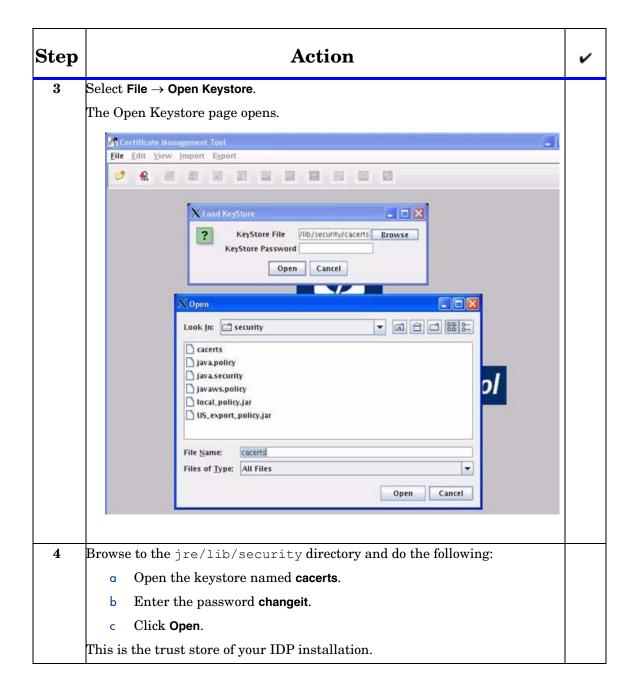
The following sections describe the process of exchanging metadata from a URL:

- Adding the SP Site's Server Certificate to the IDP's Trust Store
- Adding the IDP Site's Server Certificate to the SP's Trust Store
- Downloading the SP's Metadata into the IDP Site
- Downloading the IDP's Metadata into the SP Site

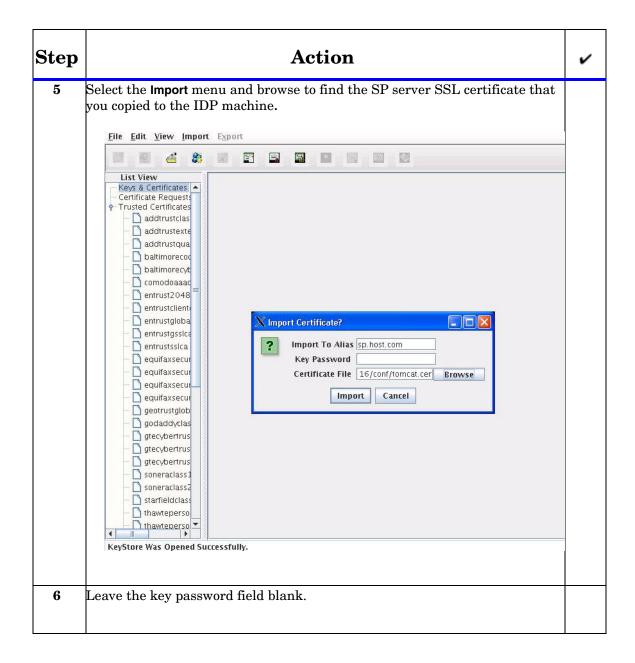
# Adding the SP Site's Server Certificate to the IDP's Trust Store

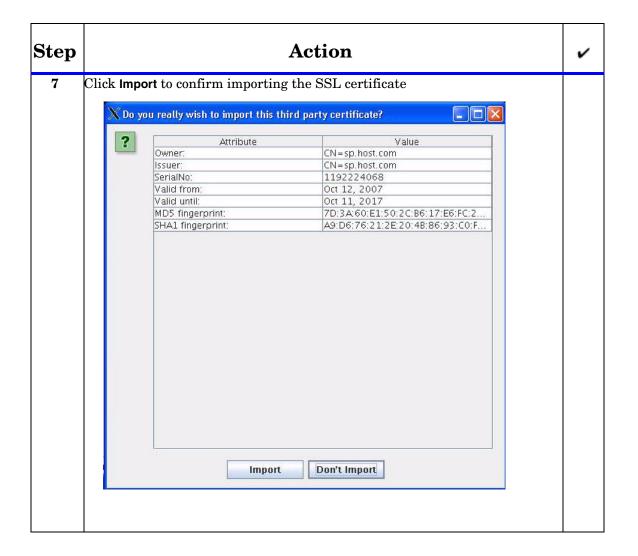
Perform the following steps to add the SP site's server certificate to the IDP's trust store.

Step	Action	~
1	Transfer the SP site's server certificate to the machine hosting your IDP.	
	a Go to the \$SF_HOME/conf directory.	
	This is where the Built-in application server's SSL certificate (tomcat.cer) file is located.	
	b Copy the tomcat.cer file to the machine that hosts your IDP using a secure file transfer mechanism.	
2	Launch the Certificate Management Tool on the IDP machine as follows:	
	• For Windows:	
	cd <idp_install_dir>\tools\cmt</idp_install_dir>	
	cmt.bat	
	• For Linux:	
	cd <idp_install_dir>/tools/cmt</idp_install_dir>	
	./cmt.sh	
	The Certificate Management Tool graphical interface opens.	

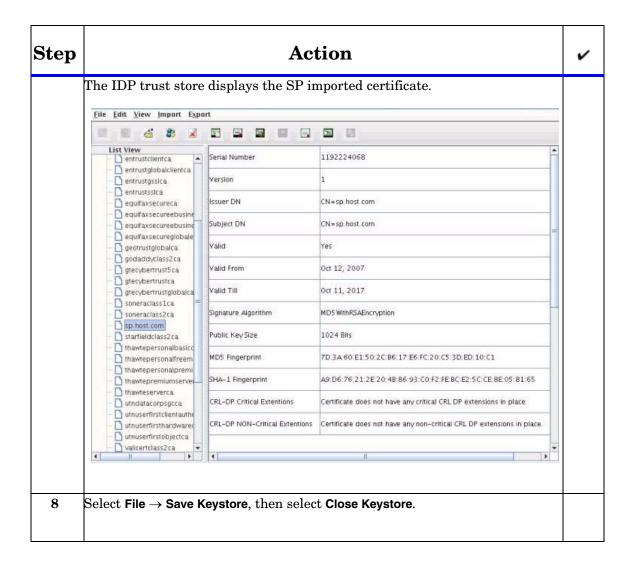


Exchanging Metadata 25





Exchanging Metadata 27

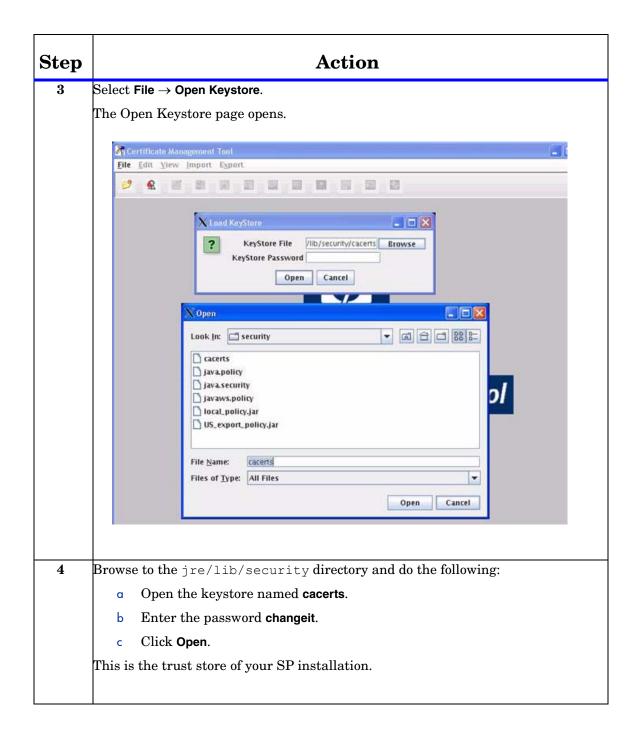


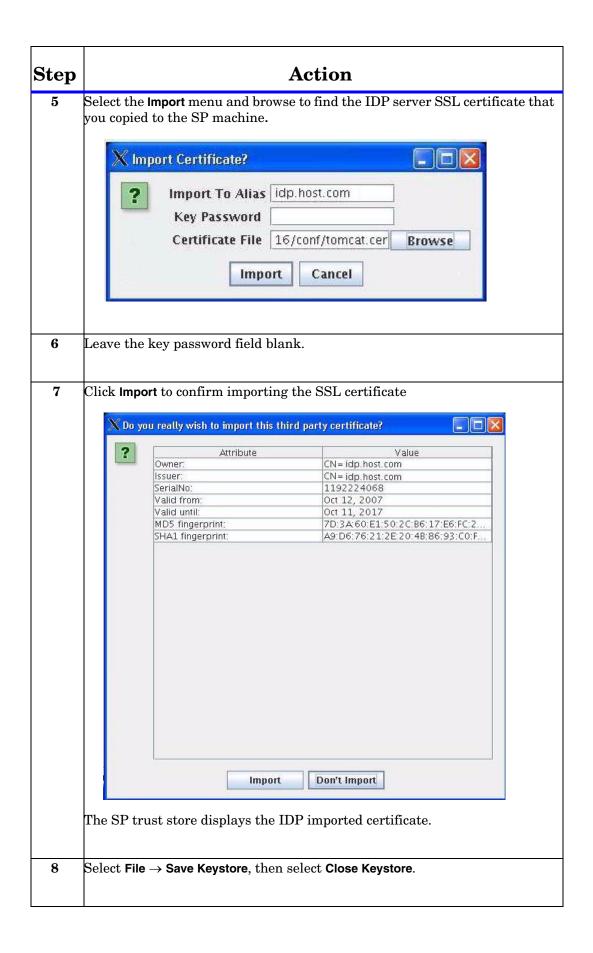
# Adding the IDP Site's Server Certificate to the SP's Trust Store

Perform the following steps to add the IDP site's server certificate to the SP's trust store.

Step	Action
1	Transfer the IDP site's server certificate to the machine hosting your SP.
	Go to the \$SF_HOME/conf directory to access the Built-in application server's SSL certificate (tomcat.cer) file.
	b Copy the tomcat.cer file to the machine that hosts your SP using a secure file transfer mechanism.
2	Launch the Certificate Management Tool on the SP machine as follows:
	• For Windows:
	cd <sp_install_dir>\tools\cmt</sp_install_dir>
	cmt.bat
	• For Linux:
	cd <sp_install_dir>/tools/cmt</sp_install_dir>
	./cmt.sh
	The Certificate Management Tool graphical interface opens.

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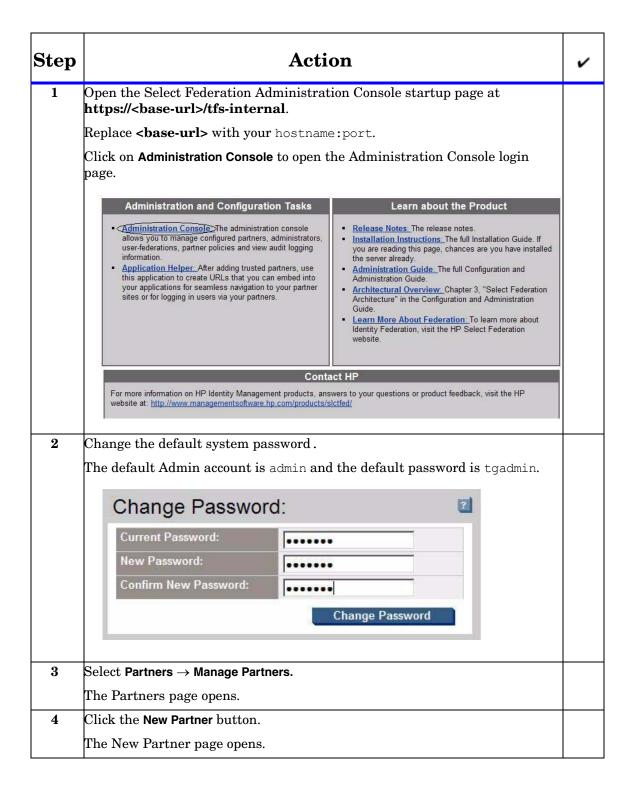


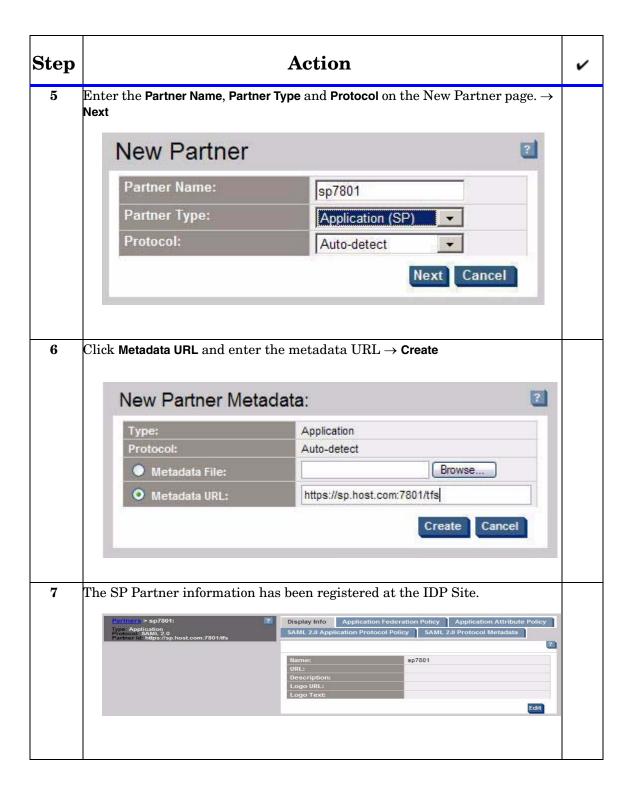


Exchanging Metadata 31

## Downloading the SP's Metadata into the IDP Site

Perform the following steps to download the SP's metadata into the IDP site.

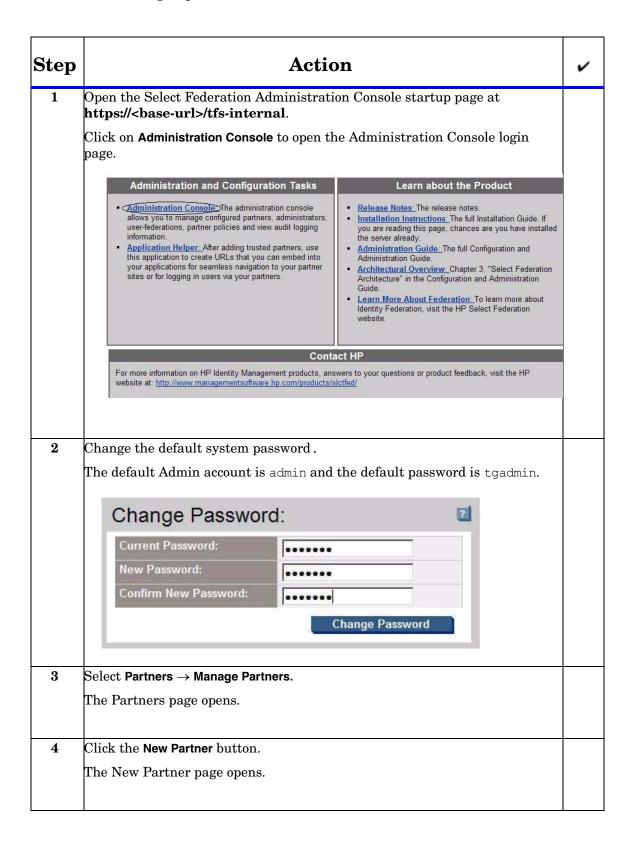


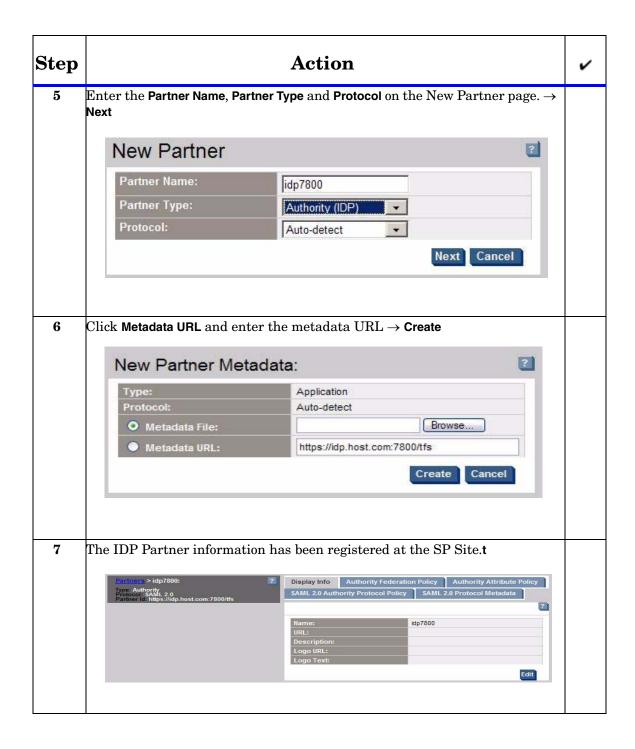


Exchanging Metadata 33

## Downloading the IDP's Metadata into the SP Site

Perform the following steps to download the IDP's metadata into the SP site.





Exchanging Metadata 35

# 5 Using the Demonstration Application

## Introduction

Demonstration application is a J2EE application that demonstrates federated Single Sign-On and other capabilities provided by Select Federation. The Demonstration application is bundled with Select Federation. The Demonstration application can also serve as sample code, which you can use to enable your own applications.

You can navigate to the Demonstration application using the following address at the top-level URL: **<br/>base-url>/sf-demo** 

The Demonstration application consists of two parts:

- Identity Provider (IDP) Demo
- Service Provider (SP) Demo

The Select Federation Demonstration application focuses on two concepts:

- **Identity Federation**: The act of linking a user's account at an IDP to the user's account at an SP. An opaque identifier (called federated ID) generated by IDP for that particular user and that particular SP. IDP and SP map federated ID to local IDs.
- **Federation Termination**: Also known as Single Logout (SLO) is the act of de-linking the accounts, users terminated in the home domain lose access to all the common applications.

This chapter provides the following Demonstration application use cases:

- SP-Initiated Federation
- IDP-Initiated Federation
- SP-Initiated Single Logout
- IDP-Initiated Single Logout

The Demonstration application pages are color coded. All SP functionality is shown with orange colored headers and all IDP functionality with green colored headers. Functionality that is shared by both IDP and SP is in neutral colors. The Demonstration application uses pseudonyms as the name federation policy. For details on the Name Federation Policy, see the HP Select Federation Configuration and Administration Guide.

# SP-Initiated Federation

## How an SP-Initiated Federation Works

Service Provider

1 4 2 3

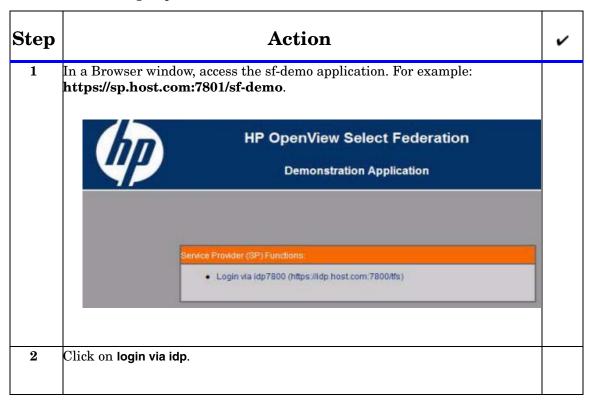
Figure 1 SP-Initiated Federation Flow with an SP-Initiated SSO

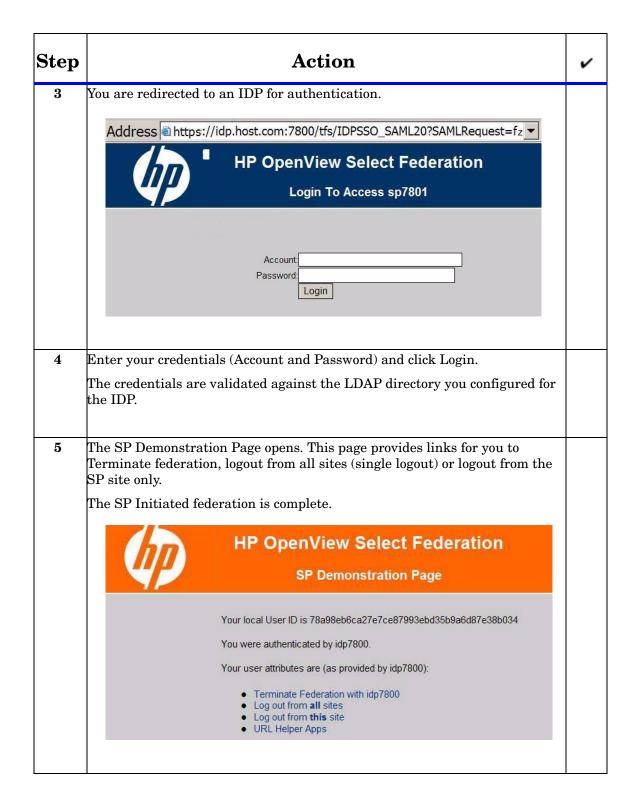
Following is a step-by-step explanation of this diagram:

- 1 User attempts to access the SP Demonstration application and is prompted to federate.
- 2 User selects the IDP from the list of IDPs and the user is redirected to the IDP.
- 3 User logs on at the IDP.
- 4 IDP generates a federated ID and redirects the user back to the SP.
- 5 SP picks up the federated ID from the artifact at the IDP using a back-channel and accesses the service at the SP as a federated user.

## Procedure

Perform the following steps to create an SP-initiated federation.

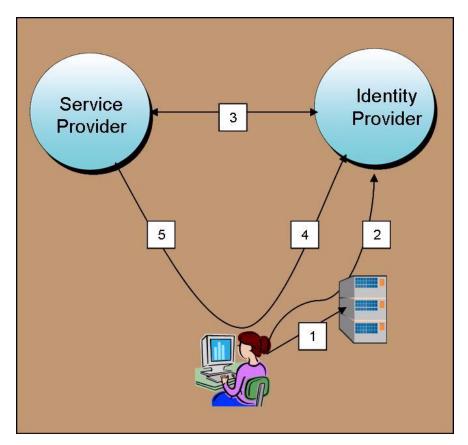




# **IDP-Initiated Federation**

## How an IDP-Initiated Federation Works

Figure 2 IDP-Initiated Federation Flow.

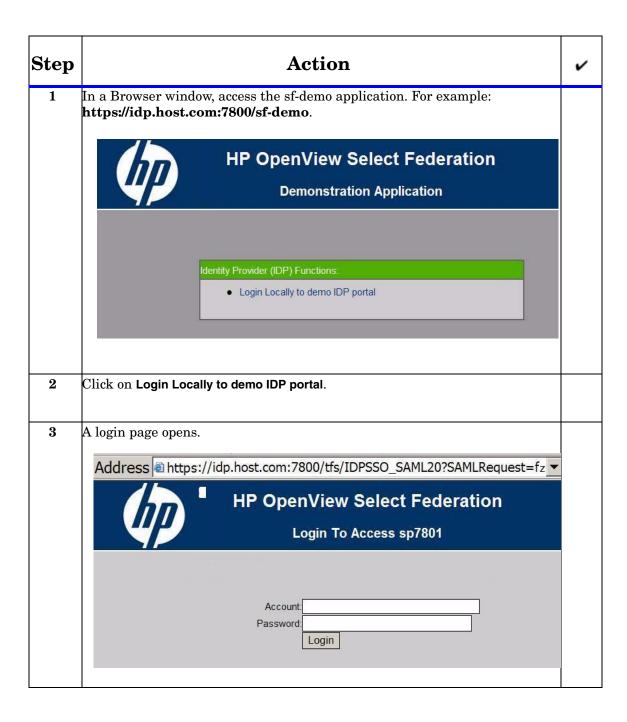


Following is a step-by-step explanation of what is happening in an IDP-Initiated SSO:

- 1 User logs on locally at an IDP site.
- 2 User selects a "federated" link to access the federated SP site and is first sent to the IDP.
- 3 IDP verifies the user authentication and authenticates to the SP to get a token for the user.
- 4 IDP generates a federated ID and redirects the user to the SP.
  - Signed assertions
  - Artifact reference
- 5 User accesses the service at the SP as a federated user.

## **Procedure**

Perform the following steps to create an IDP-initiated federation.



The IDP Demonstration Page opens. This page provides links for you access your Trusted Partners, logout from all sites (Single Logout) of from the IDP site.  HP OpenView Select Federation  IDP Demonstration Page  Welcome: John Doe  Your UserID is John  Your user attributes are:  • personal_email: john@doe.com • name_lisstname: John  Seamlessly access your trusted partners • sp7801(https://sp.host.com/7801/t/s) (no target URL)  • Log out from all sites • Log out from this site • URL Helper Apps  6 Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page	Step	Action	,	
The IDP Demonstration Page opens. This page provides links for you access your Trusted Partners, logout from all sites (Single Logout) of from the IDP site.  HP OpenView Select Federation  IDP Demonstration Page  Welcome: John Doe  Your UserID is John Your user attributes are:  • personal_email: john@doe.com • name_firstname: John  Seamlessly access your trusted partners • sp7801(https://sp.host.com/7801tfts) (no target URL)  • Log out from all sites • LOR JURL Helper Apps  6 Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page	4	Enter your credentials (Account and Password) and click Login.		
access your Trusted Partners, logout from all sites (Single Logout) or from the IDP site.  HP OpenView Select Federation IDP Demonstration Page  Welcome: John Doe  Your UserID is John Your user attributes are:  • personal_email: john@doe.com • name_lastname: Doe • name_firstname: John  Seamlessly access your trusted partners  • sp7801(https://sp.host.com.7801/tfs) (no target URL)  • Log out from all sites • Log out from this site • URL Helper Apps  6 Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page		The credentials are validated against the LDAP directory you configured for the IDP.		
Welcome: John Doe  Your UserID is John  Your user attributes are:  • personal_email: john@doe.com • name_lastname: Doe • name_firstname: John  Seamlessly access your trusted partners • sp7801(https://sp.host.com;7801tfts) (no target URL)  • Log out from all sites • Log out from this site • URL Helper Apps  Glick on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page	5	The IDP Demonstration Page opens. This page provides links for you to access your Trusted Partners, logout from all sites (Single Logout) or log out from the IDP site.		
Your UserID is john  Your user attributes are:  • personal_email: john@doe.com • name_lastname: Doe • name_firstname: John  Seamlessly access your trusted partners  • sp7801(https://sp.host.com:7801/t/s) (no target URL)  • Log outfrom all sites • Log outfrom this site • URL Helper Apps  6 Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page				
Your user attributes are:  • personal_email:john@doe.com • name_lastname: Doe • name_firstname: John  Seamlessly access your trusted partners • sp7801(https://sp.host.com:7801/tfs) (no target URL)  • Log out from all sites • Log out from this site • URL Helper Apps  6 Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page		Welcome: John Doe		
personal_email:john@doe.com     name_lastname:Doe     name_firstname:John      Seamlessly access your trusted partners      sp7801(https://sp.host.com:7801/hts) (no target URL)      Log out from all sites     Log out from this site     URL Helper Apps  Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page		Your UserID is john		
• name_lastname: Doe • name_firstname: John  Seamlessly access your trusted partners  • sp7801(https://sp.host.com:7801/ffs) (no target URL)  • Log out from all sites • Log out from this site • URL Helper Apps  6 Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page		Your user attributes are:		
Sp7801(https://sp.host.com:7801/tfs) (no target URL)      Log out from all sites     Log out from this site     URL Helper Apps  Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page		name_lastname : Doe		
Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation SP Demonstration Page		Seamlessly access your trusted partners		
Click on your Trusted Partner link to access your SP Demonstration The IDP-initiated federation is complete  HP OpenView Select Federation SP Demonstration Page		sp7801(https://sp.host.com:7801/tfs) (no target URL)		
The IDP-initiated federation is complete  HP OpenView Select Federation  SP Demonstration Page		Log out from this site		
SP Demonstration Page	6	Click on your Trusted Partner link to access your SP Demonstration Page.  The IDP-initiated federation is complete		
Your local User ID is 78a98eb6ca27e7ce87993ebd35b9a6d87e38b0				
		Your local User ID is 78a98eb6ca27e7ce87993ebd35b9a6d87e38b034		
You were authenticated by idp7800.		You were authenticated by idp7800.		
Your user attributes are (as provided by idp7800):		Your user attributes are (as provided by idp7800):		
<ul> <li>Terminate Federation with idp7800</li> <li>Log out from all sites</li> <li>Log out from this site</li> <li>URL Helper Apps</li> </ul>		<ul> <li>Log out from all sites</li> <li>Log out from this site</li> </ul>		

# SP-Initiated Single Logout

## How an SP-Initiated Single Logout Works

Service Provider 2 Identity Provider 1 2

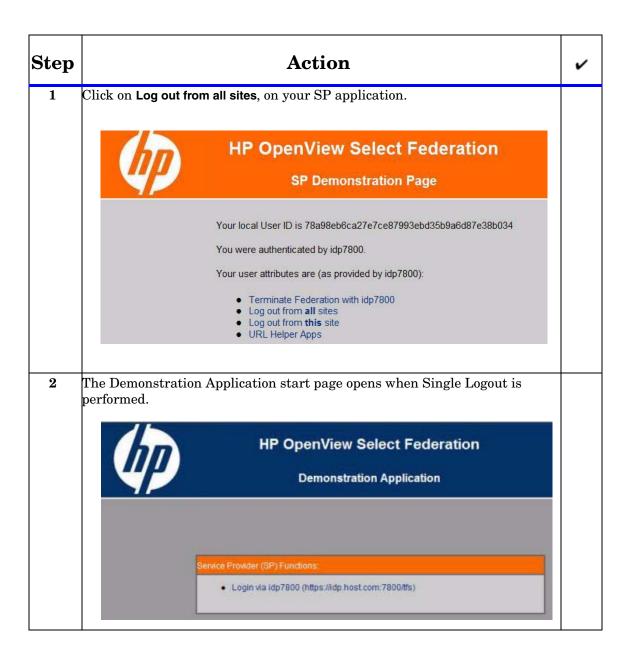
Figure 3 SP-Initiated Single Logout Flow.

Following is a step-by-step explanation of this diagram:

- 1 User requests global logout at the SP site.
- Using redirect, the SP initiates the Single Logout at the IDP. (The SP can initiate a logout using various mechanisms. See the *HP Select Federation Configuration and Administration Guide* for the different options.)
- 3 IDP initiates Single Logout at other SPs (either using GET, redirects or using the SOAP service).
- 4 IDP redirects the user back to the Single Logout Return URL at the originating SP.

## **Procedure**

Perform the following steps to create an SP-initiated Single Logout:



# **IDP-Initiated Single Logout**

# How an IDP-Initiated Single Logout Works

Service Provider

2 Identity Provider

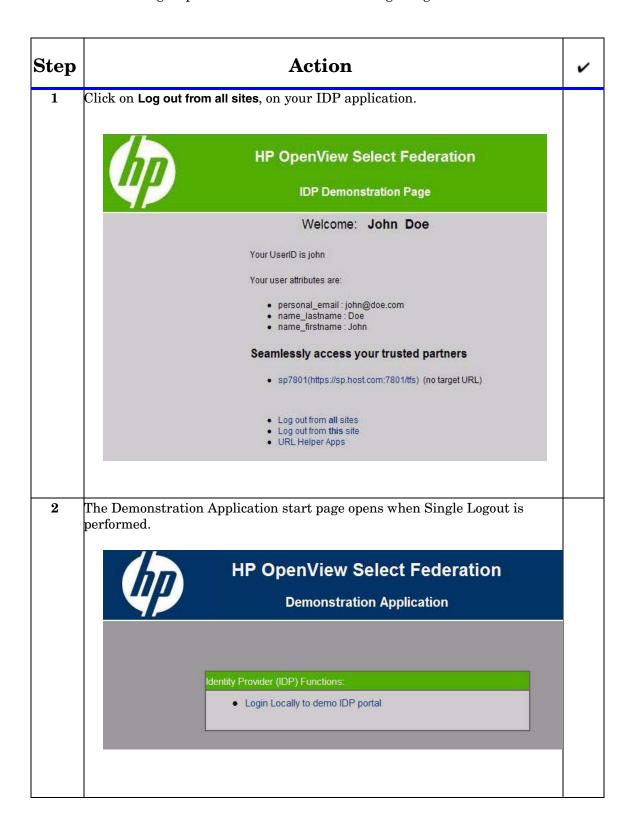
Figure 4 IDP-Initiated Single Logout Flow.

Following is a step-by-step explanation of this diagram:

- 1 User requests global logout at the IDP Site.
- 2 For each SP that the user is logged onto, the IDP initiates a redirect based logout.
- 3 If using a redirect based logout, the SP logs out the user and redirects the user back to the Single Logout Return URL at the IDP.

## **Procedure**

Perform the following steps to create an IDP-initiated Single Logout:



# Glossary

#### **Access Control**

The authorization policies and conditions that regulate identity access to resources with a goal towards preventing unauthorized use or use in an unauthorized manner.

#### **Access Management**

The process of authentication and authorization.

#### Activation

Process of setting up mapping from a federated name identifier to a local user ID.

#### **Active Directory Federation Services (ADFS) (WS-Federation 1.0)**

A feature of Microsoft Windows 2003 Server R2, which allows a federation with Active Directory-based users, by using the WS-Federation 1.0 protocol.

#### **Active Server Pages (ASP)**

Microsoft pages, which log users in by invoking the IDP-FSS over a secure channel. See also Identity Provider Filter-Support Service (IDP-FSS).

#### **ADAM**

**Active Directory Application Mode** 

#### **ADFS**

See Active Directory Federation Services (ADFS) (WS-Federation 1.0).

#### Administrator

An identity with full permission to manage Select Federation.

#### API

See Application Program Interface (API).

#### **Application Helper**

Select Federation component that helps you configure URLs in your application for seamless navigation to the Service Provider (SAML Consumer) sites or for authentication through the Identity Provider (SAML Producer) sites.

#### **Application Program Interface (API)**

An interface that enables programmatic access to an application.

#### **Application Site Role**

An Application Site (also called a Service Provider (SP) Site), which is a Trusted Partner site that participates in a federation to provide a service or application to common users and relies on an authority site to provide authoritative user authentication and other information. For example, in a federation of an extranet with partners' corporate portals, the site hosting the extranet is the Application Site.

#### **Artifact Binding**

Specifies that the browser should be redirected from the Authority Site (IDP) to the Application Site (SP) using a random string known as the "artifact" and that string should then be used by the SP over a SOAP call to retrieve the actual protocol message.

#### ASP

See Active Server Pages (ASP).

#### Attribute

One or more characteristics that are part of an identity profile. For each identity, an attribute has a corresponding value. For example, an attribute called "Department" may be assigned the values of, "IT", "Sales", or "Support". These attributes are interpreted and assigned appropriately to profiles in different applications (LDAP-compliant directories, databases, SAPs, and so on) based on the mapping rules defined for that application.

#### Authentication

The act of verifying the credentials of an identity and matching them with an identity profile. The evaluation of credentials ensures that the identity is truly who or what they claim to be.

#### **Authority Site Role**

An Authority Site (also called an Identity Provider (IDP) Site), which is a Trusted Partner site that participates in a federation to authenticate users and provide other authoritative user information to other sites. For example, in a federation of an extranet with partners' corporate portals, the portals act as the Authority Site.

#### Authorization

The process of defining and enforcing the entitlements of an identity. Checking whether the entitlements of an authenticated principal permit the principal to perform the requested operation. Authentication is a prerequisite for authorization. See Access Control and Authentication.

#### **Bindings**

Possible ways in which messages can be conveyed in the context of a browser-based user transaction between an Authority Site (IDP) and an Application Site (SP).

#### $\mathbf{C}\mathbf{A}$

**Certificate Authority** 

#### **CardSpace**

An active client software protocol that manages the release of identity information to Service Providers (SP). Identity information is organized into "cards" on the end user's computer. Each computer contains a set of "claims" or identity attributes, such as name or email

address. Each time the user is required to authenticate to an SP, the user selects one of these cards, which determines the set of claims that will be sent.

#### **Certificate Revocation Checking**

Verifies the validity of certificates against a certification authority's published list of revoked certificates. Select Federation provides a simple means of enabling certificate revocation checking via Certificate Revocation Lists or CRLs.

#### Context

A Select Identity concept that defines a logical grouping of users that can access a Service.

#### CSR

Certificate Service Request

#### **Delegated Administrator**

An identity that has been added by the root administrator. The delegated administrator can perform all functions that the root administrator performs except admin-related functions such as add and remove admins and change admin passwords. When Select Federation is running in Standalone mode, the delegated administrator also cannot view the Admin Audit log. But when Select Federation is integrated with Select Access, then the delegated administrator can view the Admin Audit log. See Root Administrator.

#### **Domain-Local Users**

Set of users who are limited to the domain controlled by an access management system (such as Select Access, SiteMinder, COREid, or Sun Access Manager).

#### DS

Discover Service

#### **DST**

(Data Services Template) DST-based services such as the Personal Profile service (ID-PP) and the Employee Profile service (ID-EP).

#### **Edge Router**

A Federation Router that is located at the edge of an enterprise where employees of that enterprise use applications offered by partners of the enterprise. Those applications request authentication of users (employees) of the Federation Router, and the Federation Router "routes" that authentication request to the appropriate departmental authority. See Federation Router.

#### **Event**

Federation activity such as **Logged In**, **Received Logout Request**, **Logged Out**, and so on. Select Federation logs server events (operational activities of enabled users) and administrator events (all the federated identity activities of each administrator).

#### **Event Plugin Chain**

A set of plugins that are called in order whenever an event occurs. A chain may contain one or more Event Plugins. See Event.

#### **Federation**

The combination of business and technology practices to enable identities to span systems, networks and domains in a secure and trustworthy fashion. This is analogous to how passports are used to assert our identity as we travel between countries.

#### **Federation Router**

A Select Federation installation that simplifies trust relationships between Authority Sites (IDPs) and Application Sites (SPs). The Federation Router acts as an intermediary for multiple organizational entities.

#### Filter-Support

A dedicated Java web application, which integrates Select Federation with the filters provided for the corresponding web servers: IIS, Apache 2.0 and Java Servlet Containers. Filter-Support also integrates Select Federation with web servers that cannot access the Select Federation databases, which are normally kept behind a firewall.

#### Filter-Support Service (FSS)

A servlet component that exposes Select Federation functionality to non-java applications, which can make web requests through xml messages. FSS exposes two main pieces of functionality: a) allowing trusted programs to inject a Windows-authenticated user-id into an IDP session, and b) allowing trusted programs to query for user attributes.

#### **FSS**

See Filter-Support Service (FSS).

#### **GMT**

See Greenwich Mean Time (GMT).

#### **Greenwich Mean Time (GMT)**

Standard time used throughout the world based on the mean solar time of the meridian of Greenwich. See Universal Coordinated Time (UTC).

#### Group

For Select Federation, a Group shares a common set of policies. All groups and partners within that Group inherit those policies. An administrator may override the Group setting for a particular partner within that Group.

#### **Identity Mapping**

The process of determining a local user ID against which to map an incoming federated name identifier. Two common techniques for identity mapping are either generating a random local user ID based on the federated name identifier or using any attributes available to determine a local user ID.

#### **Identity Provider Filter-Support Service (IDP-FSS)**

A servlet component of the Integrated Windows Authentication (IWA). The IDP-FSS enables a trusted program to add a Windows-authenticated user ID into an IDP session.

#### **Identity Provider (IDP)**

An Authority organization or web site that asserts the identity of users to the Service Providers or SPs in a federated network. The assertion of the user identity is done using standard protocols such as SAML and Liberty.

#### **Identity Web Services Framework (ID-WSF)**

Liberty Identity Web Services Framework security mechanism, which is a federated web service protocol. ID-WSF is used to build federated (identity-based) web services.

#### **IDP**

See Identity Provider (IDP).

#### **IDP-FSS**

See Identity Provider Filter-Support Service (IDP-FSS).

#### **ID-WSF**

See Identity Web Services Framework (ID-WSF).

#### $\mathbf{IE}$

Internet Explorer

#### IIS

See Internet Information Server (IIS).

#### **Impersonation Token**

Any token that allows actions to be carried out on the user's behalf. For example, in Windows, tokens issued through Kerberos are often used for impersonating users. Various technologies running on Windows have APIs defined that take an impersonation token and apply them to threads and/or processes that can then leverage them for whatever actions they need to perform on behalf of the users.

#### **Inbound Windows Integration (IWI)**

Inbound-integration that seamlessly integrates federated users at a Select Federation Application (SP) site to applications hosted on the Windows environment.

#### **Integrated Windows Authentication (IWA)**

Outbound integration that allows Select Federation to leverage a user's Windows logon credentials to seamlessly authenticate the user and transfer the user to a Trusted Federation Partner site.

#### **Internet Information Server (IIS)**

The web server that is bundled with the Windows 2003 Server.

#### **IWA**

See Integrated Windows Authentication (IWA).

#### IWI

See Inbound Windows Integration (IWI).

#### **JAVA**

Object-oriented programming language.

#### **JVM**

Java Virtual Machine. A platform independent execution environment that converts Java bytecore into machine language then executes it.

#### **Keystore**

A database of keys. The private keys are associated with a certificate chain, which authenticates the corresponding public key. The keystore also contains certificates from trusted entities. By generating the keystore, you add another layer of security to the data that is exchanged in the Select Federation system.

#### **LDAP**

See Lightweight Directory Access Protocol (LDAP).

#### **LECP**

Liberty Enabled Client/Proxy Service.

#### Liberty Identity-based Web Services Framework (ID-WSF)

A protocol that provides standards for discovering and invoking identity-based web services.

#### **Liberty Identity Federation Framework (ID-FF)**

An open standard federation standard protocol that provides basic single sign-on capabilities.

#### **Lightweight Directory Access Protocol (LDAP)**

A set of open protocols for accessing information directories. LDAP can make the physical network topology and protocols transparent so that a network identity can access any resource without knowing where or how it is physically connected.

#### **LUAD-WSC**

Liberty-enabled User-Agent or Device that acts as a WSC.

#### Metadata

Online exact description of a Trusted Partner site in a federation. The metadata describes the various URLs at which its site services (such as Single Sign-On, Single Logout) are available. It also describes the public key certificates so that sites receiving messages from these Trusted Partner sites can confirm that the messages are signed correctly and have not been tampered with. See Single Sign-On (SSO) and Single Logout (SLO).

#### **Microsoft Management Console (MMC)**

MMC is used to set up server authentication and to import the pkcs/pfx format file into your local store on the IIS machine.

#### **MIME**

Multipurpose Internet Mail Extension

#### **MMC**

See Microsoft Management Console (MMC).

#### NTLM (NT LAN Manager)

Default network authentication protocol for Windows NT 4.0.

#### **OCSP**

See Online Certificate Status Protocol (OCSP).

#### Online Certificate Status Protocol (OCSP)

OCSP support exists in JDK 1.5. OCSP support is available for the Built-in application server (Tomcat 5.5.23) and WebLogic 9.1 and 9.2.

#### Partner

For Select Federation, the main entity in a federation trust relationship. A partner is described in terms of its protocol metadata, various descriptive attributes, and policy information. Select Federation allows partners to be grouped together in "Groups."

#### **Passive URLs**

Passive URLs are for resources where users' personalized content is not critical for the application. Users are allowed to access these URLs even though they cannot be authenticated without being prompted. However, if the user is already logged in at the IDP, has a federation session with Select Federation, or can be authenticated without being prompted, the user's identity and attribute information is presented in the federation session to the application.

#### **PDC**

**Primary Domain Controller** 

#### Plugin

Compiled code that can interact with the core product to provide additional functionality, without replacing parts of the core product. In the context of Select Federation, the "compiled code" can be thought of as Java compiled code that is packaged in JARs and the "core product" can be thought of as any Select Federation install.

#### **POST Binding**

Specifies that the protocol message is to be delivered to an SP from an IDP through an autoposted HTML form.

#### **Presence Service**

A service that informs the WSC if a user is online, available, and so on. See Web Service Consumer (WSC).

#### **Privacy Manager**

End-user visible component of Select Federation. Its visibility allows extensive customizing.

#### **Protected URLs**

Protected URLs require users to be authenticated to allow access to these URLs. If a user is not authenticated, the filter redirects the user to Select Federation for authentication. The Select Federation installation may authenticate the user locally or initiate federated logon at another Authority (IDP).

#### Protocol

A set of rules that controls or enables communication between two endpoints. In the context of Select Federation, an endpoint is software that is capable of using any one of the many protocols that Select Federation supports.

#### **Root Administrator**

The "super user" administrator who has complete entitlement to all functionality in the Select Federation Administration Console. The root administrator's logon is always admin. Only the root administrator can add and remove delegated administrators and change administrators' passwords.

#### SAML

Security Assertion Markup Language open standard federation protocol. Identity federation standard that was created by the OASIS Security Services Technical Committee (SSTC).

#### Secure Sockets Layer (SSL)

A handshake protocol, which supports server and client authentication.

#### Service Provider (SP)

An application that allows authenticated access based on an authentication performed by an IDP using a federated identity protocol such as Liberty or SAML.

#### Single Logout (SLO)

Permits a user to do a global log out from all active sites.

#### Single Sign-On (SSO)

Session/authentication process that permits a user to enter one set of credentials (such as name/password, secureId, fingerprint, and so on) to access multiple applications. A Web SSO is a specialized SSO system for web applications.

#### **Site Role**

Type of web site in a federation. Typically, you and your Trusted Partner agree in advance on how to set up the federation. Generally, one site hosts the application, while the other provides the authentication for end users to seamlessly access the application. When you deploy Select Federation in your site, you must set the site role as one of the following: (1) an Authority Site, (2) an Application Site, (3) both an Authority and Application Site, or (4) a Federation Router. See also Service Provider (SP), Identity Provider (IDP), and Federation Router.

#### **SLO**

See Single Logout (SLO).

#### **SOAP**

Simple Object Access Protocol is a fundamental web services standard for XML-based communication between web service providers and consumers.

#### SP

See Service Provider (SP).

#### SSC

Self Signed Certificate

#### SSL

See Secure Sockets Layer (SSL).

#### SSO

See Single Sign-On (SSO).

#### TLS

Transport Layer Security

#### **Universal Coordinated Time (UTC)**

Standard time used throughout the world based on the mean solar time of the meridian of Greenwich. Formerly known as Greenwich Mean Time (GMT).

#### **Unprotected URLs**

Unprotected URLs allow users access to these URLs without being authenticated. Typically, special URLs such as the logon URL and logout URL are unprotected URLs.

#### **UPN**

User Principal Name

#### UTC

See Universal Coordinated Time (UTC).

#### WAP

Wireless Application Protocol

#### Web Service Consumer (WSC)

An application that uses web services. It may not be a web service in itself, but uses XML and typically SOAP-based communication with a web service to perform some of its functions.

#### Web Service Provider (WSP)

A web service application that services requests it receives based on XML and typically SOAP-based communication.

#### WSC

See Web Service Consumer (WSC).

### WSP

See Web Service Provider (WSP).

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