Installation and Upgrade Guide
Document version: 1.0 – 2015-12-18

CUSTOMER

SAP S&OP 3.0 SP3 Installation and Upgrade Guide

Document History

Caution

Before you start the implementation, make sure you have the latest version of this document. You can find the latest version at the following location:help.sap.com/sop/

The following table provides an overview of the most important document changes.

Table 1

Version	Date	Description
1.0	2015-12-18	Initial version

Content

1 SAP S&OP 3.0 SP3 Installation and Upgrade Guide

About this Document

This guide described how to install and upgrade Sales and Operations Planning (S&OP) 3.0 SP 3.

2 Prerequisites Checklist

Understanding and ensuring your system meets all of the described prerequisites before you begin installing or upgrading the product will help ensure a successful outcome.

Before installing the application for the first time or installing an upgrade release, ensure that:

- Your system meets the supported configuration described in the Product Availability Matrix (PAM)
- The prerequisite software described in the table below has already been installed and configured
- You have read through the Release Central Note (2238288) and visited its links to related SAP Notes that provide additional, specific details regarding issues or limitations for the release you are installing or upgrading
- You have experience working in Linux and you have the privileges required to work in the system

Table 2

Prerequisites	More information
SAP HANA Platform Edition version specified in the PAM (includes SAP HANA Studio), installed on a SAP-certified HANA appliance (on the same page where you download the packages to install S&OP, select the link for Required Components of other Product Versions to download the required components)	SAP Help Portal for SAP HANA Platform
SAP HANA Application Function Library (AFL) 1.0 and the SOP Application Function Library (AFL) for SAP HANA 1.0. (on the same page where you download the packages to install S&OP, select the link for Required Components of other Product Versions to download the required components) Refer to About SAP HANA AFL [page 7] for more information.	SAP Help Portal for SAP HANA Platform: • SAP HANA Update and Configuration Guide • SAP HANA Developer Guide • SAP HANA Server Installation Guide • SAP HANA Administration Guide Refer to About SAP HANA AFL [page 7] for more information.
SAP Data Services (optional; download from service.sap.com)	SAP Help Portal for SAP Data Services
You have downloaded the following installation packages from sap.service.com (see the PAM for links to the currently supported version of the installation packages; the exact name of each package depends on the release you are downloading): • HCO_SFND<**patch**>.ZIP (extract to HCO_SFND<**patch**>.tgz) • HCO_SOP<**patch**>.ZIP (extract to HCO_SOP<**patch**>.tgz) • SOPEXCELADDON<**patch**>.EXE (add-in for Microsoft Excel)	Product Availability Matrix (PAM)Product Availability Matrix (PAM)

Prerequisites	More information
You have root privileges for the servers on which you are installing the application	

2.1 About SAP HANA AFL

Before installing SAP Sales and Operations Planning, it is important to take into consideration the SAP HANA AFL component.

Starting with SAP HANA SPS 08 SAP HANA Studio, HLM and HALM are not recommended for installing SAP HANA AFL. This also applies to SOP AFL. The recommended tools are hdblcm or hdblcmgui as described in SAP Note 1997526.

For information on the migration required for SOP AFL, using hdblcm instead of hdbupd and hdbinst, refer to SAP Note 2004755

It is important to distinguish between installation and update scenarios:

- New installation: applies to SAP S&OP customers who initially install SOP AFL
- Migration: This applies only to customers who are already using the SOP Library with HANA SPS 07 or lower, and want to upgrade to SAP HANA SPS 08
- Update: SAP S&OP customers using SOP AFL based on SAP HANA SPS 08 who want to update to a higher SAP HANA SPS 08 Revision (> Rev.80)

The installation and update processes are described in the SAP HANA Server Installation and Update Guide, which is available on SMP under help.sap.com/hana_platform. The migration process is described in SAP Note 2004755. It is also mentioned in the SAP HANA Server Installation and Update Guide referring to SAP Note 2014334.

As of SPS 08, the product-specific AFLs are released individually and are no longer released as part of SAP HANA AFL. Therefore, before updating AFL, it is necessary to perform a migration. For more information, see SAP Note 2014334 in Related Information.

Before updating to <S&OP version xx> a one-time migration must be performed in order to ensure the functional correctness of the Supply & Operations Planning Library (SOP AFL). The necessary migration procedure is described in SAP Note 2004755, SOP Migration from SAP HANA AFL (SP7) to SAP SOP AFL FOR SAP HANA (SP8).

For subsequent updates of SOP AFL, refer to the SAP HANA system component update information in the SAP HANA Server Installation and Update Guide. This is available on SAP Help Portal help.sap.com/hana_appliance under Installation and Upgrade Information -> SAP HANA Update Guides -> SAP HANA Server Installation and Update Guide.

For automated updates of the SOP AFL, refer to the section Perform an Automated Update.

3 Overview and Workflow

Use this workflow as a guide to install and configure or upgrade your application. Before installing or upgrading, ensure that your environment meets all the prerequisites described in the Product Availability Matrix (PAM). For more information, see Prerequisites Checklist. [page 6]

Installing for the first time

If you have not installed the product in your environment before, use the workflow in the following table to guide you through the installation process. See *Technical System Landscape* [external document] for information on the deployment model and technical system landscape.

> **Note**
>
> After you finish importing the delivery units (DUs), there are several post-installation configuration steps that are specific to this product. The following information only provides an overview of the tasks involved. Refer to the indicated documents for detailed steps on how to accomplish each task.

Table 3

To install for the first time	See this information for more details
Prepare SAP HANA for installing the application.	*Preparing SAP HANA for Installation* [external document]
Install the SAP HANA revision specified in the PAM.	
Install the AFLs that corresponds to the SAP HANA revision.	
Use SAP HANA Application Lifecycle Manager in the Google Chrome browser to import the contents of the application delivery units (DU) into SAP HANA from the compressed files you downloaded from SAP Service Marketplace in the following order: 1. HCO_SFND DU 2. HCO_SOP DU	Importing a Delivery Unit [page 14]
Log on to the SAP S&OP Web client and perform the post-installation configuration steps.	Post-Installation Configuration [page 16]
Activate the data model.	Refer to the online help topic "Activating a Data Model"
Set up your master data library, manage your planning model, and manage the miscellaneous settings for your home page and planning view settings.	Refer to the online help topics under "Configuring - Web Client"

To install for the first time	See this information for more details
(Optional) Create additional, custom roles with permission combinations that you choose.	Refer to the online help topic "Defining Roles"
Create and provision new user accounts in the system.	Refer to the online help topic "Adding Users, and Assigning Roles and Visibility Filters"
(Optional) Create visibility filters to control the view for selected users.	Refer to the online help topic "Creating Visibility Filters"
Notify users of their new account and credentials and push the add-in for Microsoft Excel to their client systems.	Refer to the online help topic "Installing the Add-In for Microsoft Excel"

Installing an upgrade release

If you are installing a support pack (SP) or patch release in an environment where an existing release is already installed, use the workflow in the following table to guide you through the upgrade process.

> **Note**
>
> For an upgrade installation, you do not need to prepare SAP HANA for installation or perform the post-installation configuration steps as you would for a new installation.

Table 4

To install an upgrade release	See this information for more details
Read and understand the changes contained in the latest patch, as described in the SAP Notes that accompany the patch. The latest patch SAP Notes are available through links in the Release Information Note or central note for the main release.	Release Information Note
Upgrade to the AFL revisions specified in the PAM.	version specified in the PAM
Upgrade to the SAP HANA revision specified in the PAM.	version specified in the PAM
Use SAP HANA Application Lifecycle Manager in the Google Chrome browser to import the contents of the application delivery units (DU) into SAP HANA from the compressed files you downloaded from SAP Service Marketplace in the following order: 1. HCO_SFND DU 2. HCO_SOP DU	Importing a Delivery Unit [page 14]
Restart SAP HANA.	SAP HANA Administration Guide

To install an upgrade release	See this information for more details
Log on to the Web client and run the post-installation script.	
Re-save the certificates you added Configuring Application Jam Certificates [page 23].	
For some patch releases, you must reactivate your planning areas. Refer to the release notes for the patch to determine whether this is required for the patch you installed.	• Release Information Note • Refer to the online help topic "Activating a Data Model"
Push the updated version of the add-in for Microsoft Excel upgrade to your user's client systems and notify users to download the application.	Refer to the online help topic "Installing the Add-In for Microsoft Excel"

3.1 Technical System Landscape

The SAP Sales and Operations Planning application utilizes SAP Data Services or SAP HANA Cloud Integration (HCI) to integrate data into the system landscape.

The following figure provides an overview of the deployment model and technical system landscape employed by SAP Sales and Operations Planning.

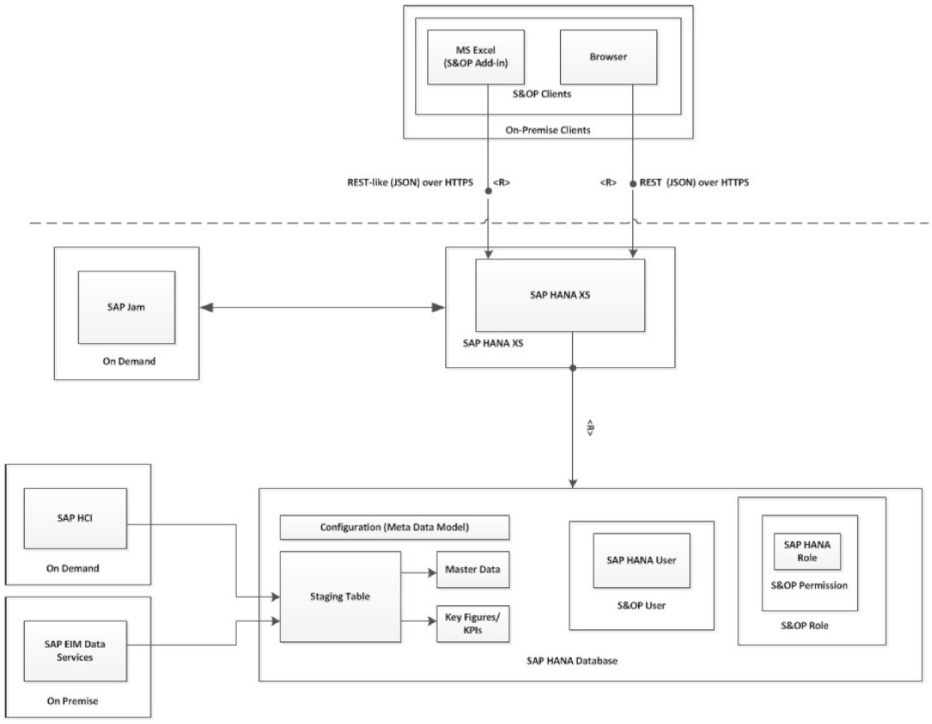


Figure 1: SAP Sales and Operations Planning technical system landscape

4 Preparing SAP HANA for Installation

Context

To prepare to install the application, after downloading and extracting the installation packages that install the XS engine, you must configure SAP HANA system parameters.

Prerequisites

Before installing the application, you must download and extract the compressed installation packages.

> **Note**
> If the SAP HANA database server is shared by other applications, before configuring the SAP HANA system parameters, ensure these new settings will not adversely affect the other applications. If you are installing an upgrade of S&OP to a previous release, you already prepared SAP HANA when you installed the initial release, and you do not need to perform the steps in this section.

Steps

1. Configure SAP HANA system parameters.
   1. Open HANA Studio.
   2. Connect as `SYSTEM` user.
   3. Run the following SQL statements.

      > **Note**
      > Do not try to copy the entire list of SQL statements because line breaks cannot be preserved and you will not be able to execute the statements. Copy each statement individually and be sure to include the ending semicolon. To copy and paste all of the SQL statements at once in a console-ready format, refer to SAP Note 2037733

      Syntax

```
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini','SYSTEM') SET
('planningengine','use_rc_history') = 'yes' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini','SYSTEM') SET
('planningengine','allow_nulls_for_emptycells') = 'yes' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM') SET
('memorymanager', 'disablefencing') = 'yes' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM') SET
('planningengine', 'materialize') = 'no' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'SYSTEM') SET
('planningengine', 'use_ple_aggregate') = 'no' WITH RECONFIGURE;
```

```
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'System') set
('planningengine', 'use_cache_snapshot') ='no' with reconfigure;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'System')
SET('calcengine', 'llvm_cache_lifetime_minutes') ='10000' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('daemon.ini', 'System') SET('scriptserver',
'instances') ='1' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('daemon.ini', 'System') SET('sapwebdisp',
'instances') ='1' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('xsengine.ini', 'System') SET('httpserver',
'embedded') ='true' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'System') SET('search',
'late_materialization_threshold') ='1000000' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('xsengine.ini', 'System') SET('jsvm',
'max_runtime_bytes') ='4000000000' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('xsengine.ini', 'System') SET('httpserver',
'sessiontimeout') ='7200' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('xsengine.ini','SYSTEM') SET
('httpserver','max_request_runtime') = '10000' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini', 'System')
SET('graph_engine', 'enable') ='yes' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('xsengine.ini', 'System') SET('scheduler',
'enabled') ='true' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini','SYSTEM') SET
('sql','nested_trigger_limit') = '16' WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini','SYSTEM') UNSET
('search','qo_use_mcsj') WITH RECONFIGURE;
ALTER SYSTEM ALTER CONFIGURATION ('indexserver.ini','SYSTEM') UNSET
('search','qo_extensive_checks') WITH RECONFIGURE;
GRANT AFL__SYS_AFL_SOP_AREA_EXECUTE_WITH_GRANT_OPTION to _SYS_REPO;
GRANT SELECT ON SCHEMA _SYS_STATISTICS TO _SYS_REPO WITH GRANT OPTION;
```

2. f you will need to upload files greater than 100 Mb in size when importing data, in the file `/usr/sap/<SID>/HDB<InstNo>/<host>/wdisp/sapwebdisp.pfl`, add the following line:`icm/HTTP/max_request_size_KB = -1`.

Step Result

The -1 switch disables the standard 100 Mb maximum.

3. Restart the server to implement the updates.
4. Test whether the HANA XS engine is accessible by opening it in a browser with a URL in the following format:

Syntax

```
http://<hostname>:80<instance number>
```

For example:

Syntax

```
http://zoocorp.biz:8000
```

Next Steps

After preparing SAP HANA, next import the delivery units (HCO_SFND<patch>.tgz and application DUs) to your SAP HANA instance per the procedure Importing a Delivery Unit [page 14].

5 Importing a Delivery Unit

Context

You can import a delivery unit (for example, from a file) for your application content or your software components using the *SAP HANA Application Lifecycle Manager*.

A delivery unit is a group of transportable objects used for content delivery. You can use a delivery unit to transport the design-time objects that are stored in the SAP HANA repository between two systems, for example, from a development system to a consolidation system.

> **Note**
>
> If a system is configured to work with object *Change Management*, all activated objects must be approved before their release. Only released objects can be exported thereafter from that system.

To import a delivery unit (for example, from a file to the SAP HANA repository) using the *SAP HANA Application Lifecycle Manager*, perform the following steps.

Prerequisites

To import a delivery unit with the *SAP HANA Application Lifecycle Manager*, you must ensure the following prerequisites are met:

- You have access to an SAP HANA system
- You have been granted the SAP HANA user role `sap.hana.xs.lm.roles::Administrator`

Steps

1. Open the *SAP HANA Application Lifecycle Manager*.

   The *SAP HANA Application Lifecycle Manager* is available on the SAP HANA XS Web server at the following URL: `http://`**<WebServerHost>**`:80`**<SAPHANAinstance>**`/sap/hana/xs/lm`
2. Choose the *Delivery Units* tile.
3. Choose *Import*.
4. Select the delivery unit you want to import.

   Choose *Browse* to display a file explorer, which you can use to locate the DU you want to import, and choose *Open*.

   > **Recommendation**
   >
   > Exported DUs have the file extension `.tgz`, for example, `MyDU.tgz`.

   ### Step Result

   The *Delivery Unit Import Confirmation* screen displays, containing the list of objects included in that DU.

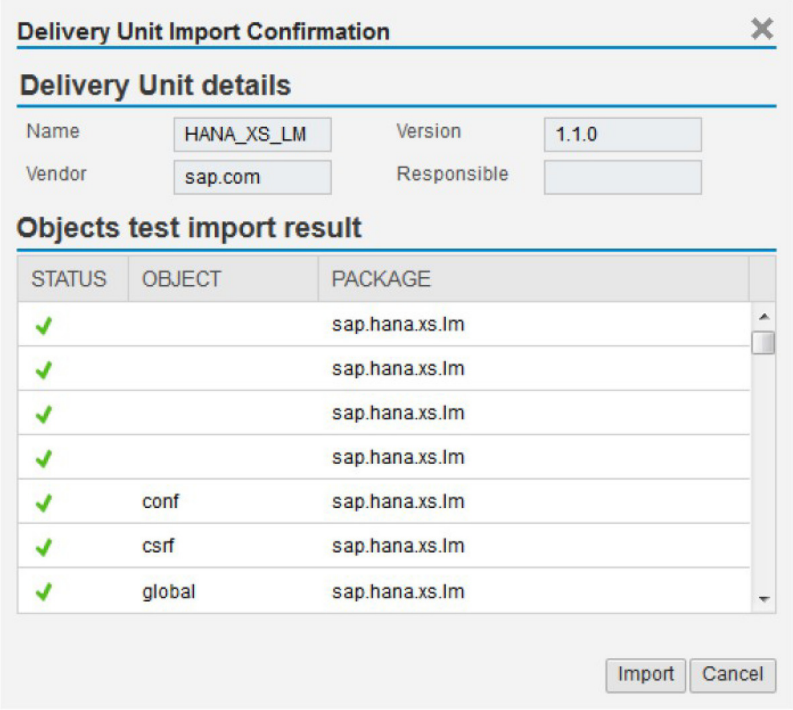


Figure 2: Delivery Unit Import Screen

5. Confirm that this is the delivery unit that you want to import.

   Click *Import* to import the selected delivery unit.

> **Note**
>
> The import operation overwrites any identical objects in the target system with the content of the imported DU.

6 Post-Installation Configuration

If this is the first time you have installed the application, there are additional post-installation configuration tasks you must complete before users can begin working with the product.

After installing the application, perform the following tasks to complete first-time configuration.

> **Note**
>
> If you have an on premise version of SAP S&OP, you need to run the post-installation script after every import of a DU or any change to the SAP S&OP code (for example, via a note).

> **Note**
>
> If you are installing an upgrade to a previous release, use the instructions provided in Upgrading an Existing Release [page 17]

1. Restart SAP HANA.
2. Using SAP HANA Studio, verify or create the following technical user: `SOPITADMIN`.
3. Assign the role `sap.sop.catalogue:SAPSOPROLE_SOP_ITADMIN`.

   > **Note**
   >
   > After creating users, verify they can log in from SAP HANA Studio. Users may be forced to reset passwords the first time they log in. Be sure that the passwords are regularly changed for these accounts.

4. Launch the web client interface using the following URL: `http://<host-name>:80<instance number>/sap/sop/ui/login.html`

   For example:

   > **Syntax**
   >
   > `http://zoocorp.biz:8000/sap/sop/ui/login.html`

5. Log in as the user **sopitadmin**.
6. Enter (and confirm) initial passwords for the displayed users.
7. Click *Execute Post Installation Script*.

   > **Note**
   >
   > You must provide the password for new users before you click the execute script button.

   This action generates some of the required dynamic objects such as additional users, roles, and procedures and verifies some required system configurations.
8. The users generated by the post-installation script include:
   - SOPADMIN: Used for SAP S&OP administration and user support. Available only if you have installed SAP Sales and Operations Planning package.
   - SAPSOPINTEG: Used to execute the secure file transfer protocol (SFTP) process for data loads into the system

- SOPBGADMIN: Used for running background jobs

When they log in to SAP HANA Studio, these users will be prompted to change their passwords.

> **Note**
>
> If, after you click *Execute Post Installation Script*, only one user is created, refresh your browser and return to the Post Installation screen to create the remaining users.

9. Activate the data model as described in the online help and the Model Configuration Reference Guide.
10. Configure the application settings, model, and users, then import your data as described in the online help.
11. Install the background processing framework. Refer to SAP Note 1901852 for more details
12. Install and configure the SAP S&OP add-in for Microsoft Excel as described in the online help.

6.1 Upgrading an Existing Release

Context

If you are upgrading an existing application release, follow these instructions. These steps are mandatory each time a new set of delivery units (DU) is imported into the system. To upgrade an existing release:

Steps

1. After importing the DUs, launch the web user interface using the following URL: `http://`**<host-name>**`:80`**<instance number>**`/sap/sop/ui/login.html`. For example, `http://zoocorp.biz:8000/sap/sop/ui/login.html`.
2. Log on as the user **SOPITADMIN**.
3. Enter (and confirm) initial passwords for the displayed users.
4. Click *Execute Post-Installation Script*.
5. Re-configure the SAP Jam destination trust store by following the instructions in Configuring the Jam http Destination [page 28].

6.2 SAP Jam Integration

Context

In order to complete your installation process, you need to configure SAP Jam for the SAP S&OP HANA system.

Steps

1. Generate trust certificates. See Generating Trust Certificates [page 18].
2. Create and configure the oAuth client in SAP Jam. See Configuring the OAuth Client [page 19].
3. Set Collaboration properties in the SAP S&OP Global Configuration Parameters. See Setting Collaboration Properties [page 22].
4. Configure SAP S&OP Jam Certificates. See Configuring Application Jam Certificates [page 23].
5. Set up the http destinations. See Configuring the Jam http Destination [page 28].
6. Map the SAP S&OP user with the SAP Jam user. See Mapping an Application User with a Jam User [page 31]
7. Test the SAP Jam configuration. See Testing Jam Configuration [page 32].

6.2.1 Generating Trust Certificates

Context

Begin configuring for SAP Jam Integration by using openssl. Openssl is a certificate generation tool installed by default on Linux systems.

Steps

1. Create a private certificate using the following openssl command: `openssl genrsa -out privatekey.pem 1024`

   #### Step Result

   This generates the certificate `privatekey.pem` in your current directory.
2. Generate an X509 certificate from the private certificate generated in the previous step using the following command: `openssl req -new -x509 -key privatekey.pem -out publickey.cer`.

   #### Step Result

   This generates a `publickey.cer` file in your current directory.

> **Note**
> You can view the certificate contents with any editor, for example, vi. These certificates are required in order to complete SAP Jam integration.

6.2.2 Configuring the SAP Jam Service

Context

To configure the SAP Jam service, you need to configure SAP HANA to the SAP Jam service trust relationship.

Prerequisites

Before you can configure the SAP Jam service, make sure that SAP Crypto libraries are installed and that SSL is enabled for HANA XS Engine. Refer to How to Configure SSL for SAP HANA XS Engine using SAPCrypto for information on how to set this up.

Steps

1. Log onto SAP Jam with your company admin credentials.
2. Click on your name on the top.
3. From the menu, select *Jam Admin*.
4. Navigate to *OAuth Clients* and click *Add OAuth Client*.

6.2.2.1 Configuring the OAuth Client

Steps

1. Log onto SAP Jam with your company Admin credentials.

   ### Step Result

   The following window appears:

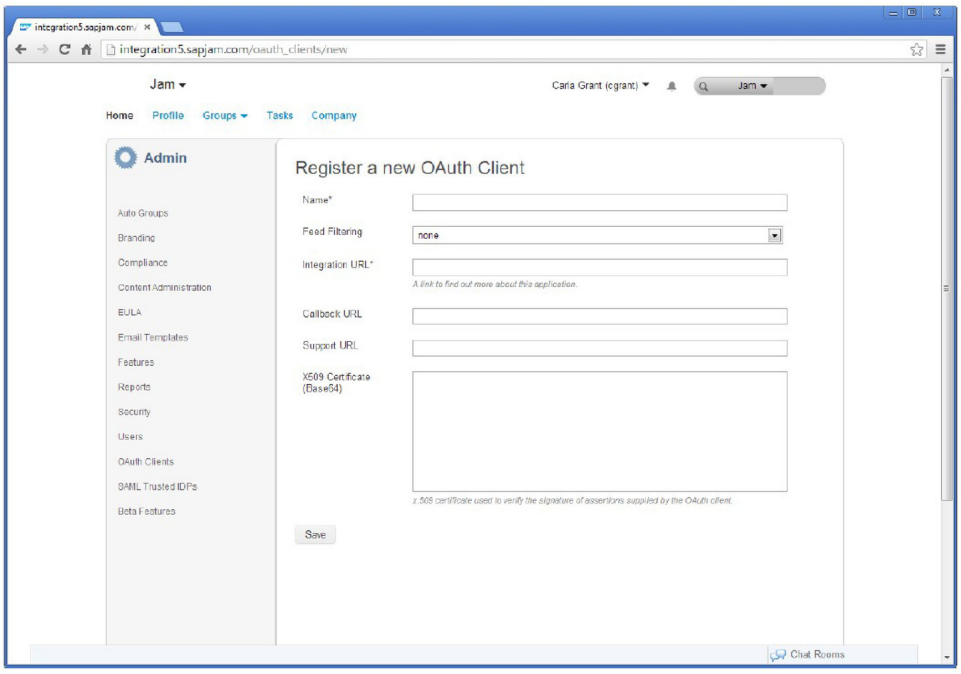


Figure 3: Registering a new OAuth Client window

2. Click your name at the top of the window.
3. From the menu, select *Jam Admin*.

4. Navigate to *OAuth Clients* and click *Add OAuth Client*.
5. Copy the certificate and paste it into the corresponding field.
6. Click *Save*.

Step Result

The following window appears (your specific information will differ):

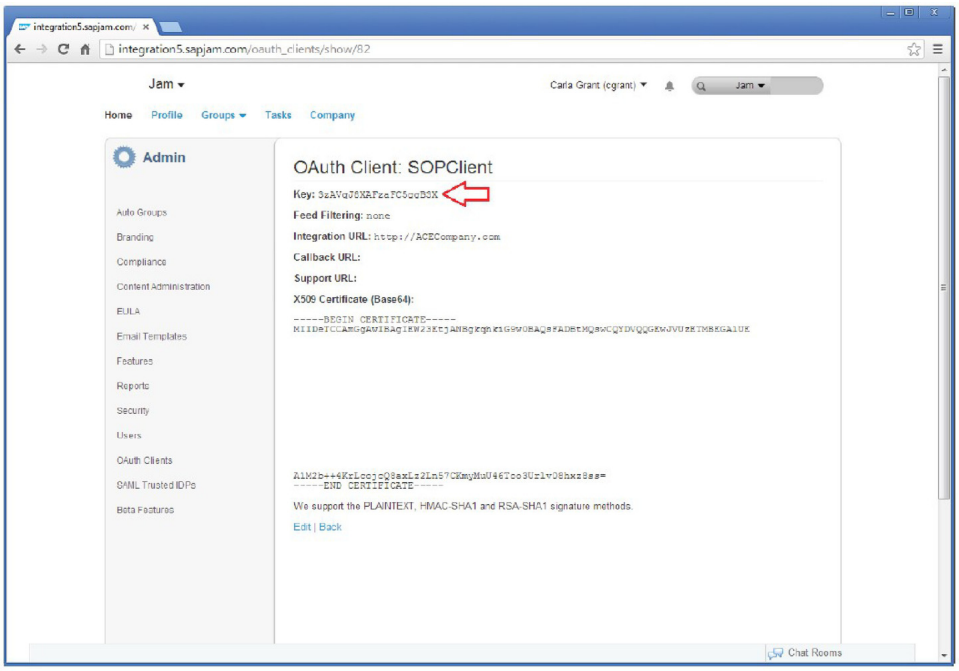


Figure 4: OAuth Client Result

7. Copy and paste the key into a text file. Save this information, as you will need it later as Client ID.

6.2.2.2 Configuring the SAML IdP

Context

Once you configure the OAuth client, you must configure the SAML IdP.

Steps

1. From the left panel of the following window, choose *SAML trusted IDPs* and click *Register Your Identity Provider*.

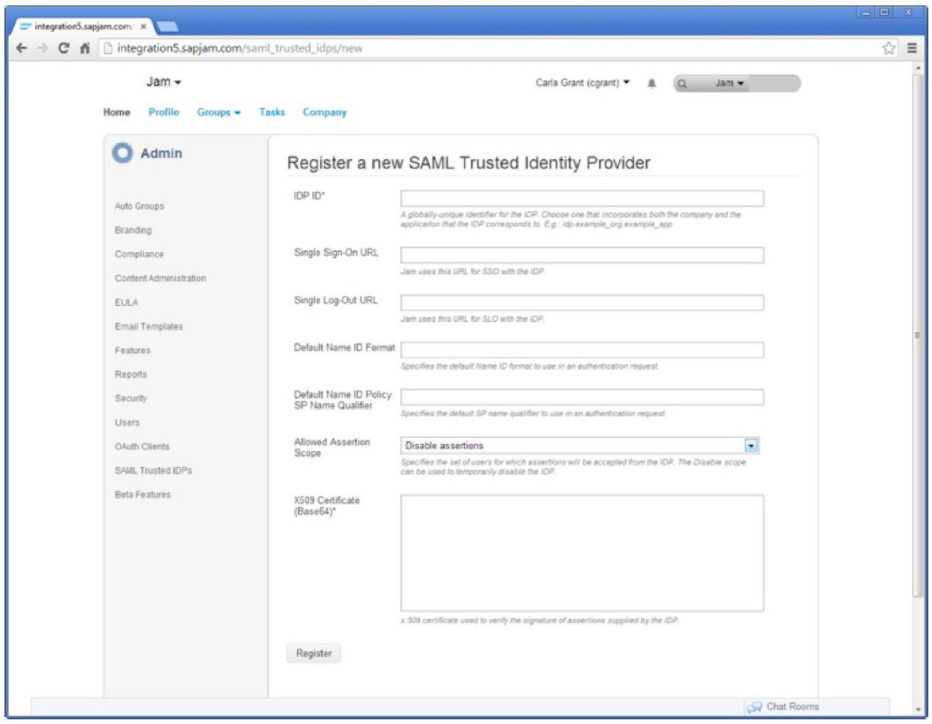


Figure 5: Register a new SAML Trusted Identity Provider window

2. Enter a unique ID for the IdP ID, and write it down for later use. For example, `<SID>IDPTrust`, where **<SID>** is the SAP HANA system ID.
3. From the *Allowed Assertion Scope* dropdown, select *Users In My Company*.
4. Paste the certificate in the corresponding field.
5. Click *Register*.

6.2.3 Setting Collaboration Properties

Context

You need to set collaboration properties in the Global Configuration Parameters.

Prerequisites

Before you begin this task, make sure you have information on SAP Jam system details such as Jam host, client ID, and company ID.

Steps

1. Log onto the Configuration user interface and select *Manage Global Configuration*.

2. Fill out the following collaboration parameters under this Collaboration Group: `http://host:port/sap/sop/ui/main.html#configuration`
3. Click *New*.
4. Select the parameter group *Collaboration*, the parameter name, and the values for your SAP Jam system:

   Table 5

Parameter Name	Parameter Value
COLLABORATION ENABLED	true
IdP	The IdP ID you entered in Configuring the SAML IdP [page 20].
COLLAB_DESTINATION_PACKAGE	`sap.sop.jam.config`
CLIENT_ID	This is the key that SAP Jam generated when you configured the OAuth client in Configuring the OAuth Client [page 19].
RECIPIENT_HOST	This is the SAP Jam instance provided to you. For example: `https://jamsalesdemo8.successfactors.com`
Company ID	The parameter provided by the SAP Jam admin team

5. Click *Save*.

6.2.4 Configuring Application Jam Certificates

Context

In order to configure SAP Jam for Sales and Operations Planning, you need to insert the relevant certificates.

Steps

1. Log onto SAP S&OP Web client as the SOPITADMIN user.
2. Click the *Jam OAuth Certificates* button. These buttons are only visible for the SOPITADMIN role.

   #### Step Result

   The following dialog appears, which lists existing certificates on the left hand side.

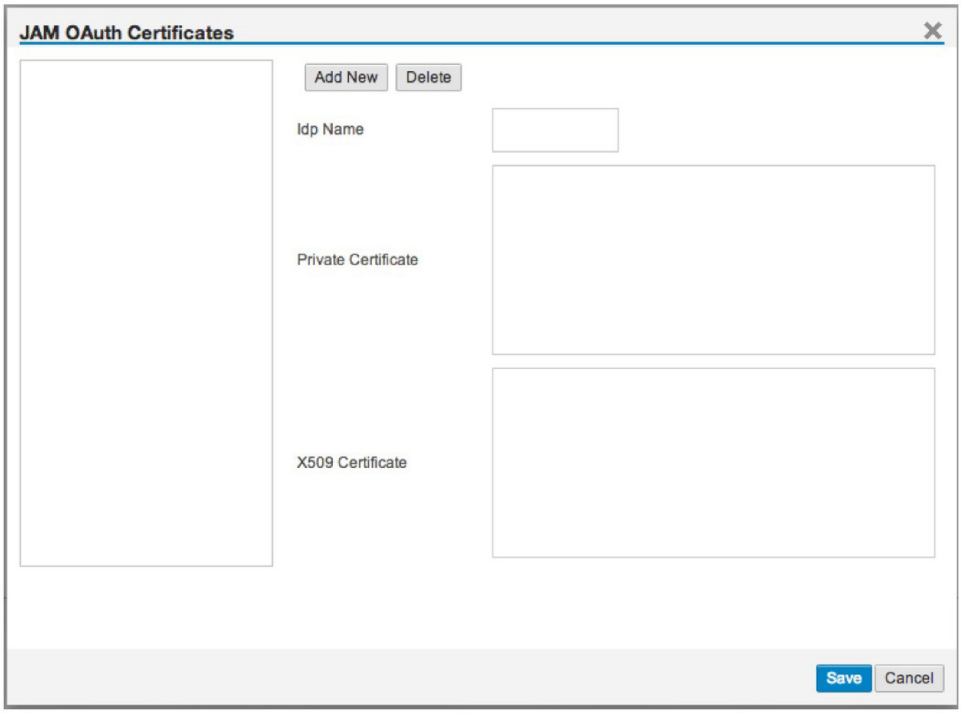


Figure 6: JAM OAuth Certificates window

3. To add new certificate click *Add New*.

   If there are no certificates, you do not need to click *Add New;* instead, enter the values below:

   Table 6

Name	Value
IdP Name	The IdP ID you entered in Configuring the SAML IdP [page 20].
Private Certificate	Copy and paste the PRIVATE certificates, which you generated in Generating Trust Certificates [page 18] into the Private Certificate field.
X509 Certificate	Copy and paste the X509 certificates, which you generated in Generating Trust Certificates [page 18] into the X509 Certificate field.

4. Click *Save*.

Step Result

This persists the certificate in the SAP HANA database, which is encrypted.

5. To ensure the certificate is saved, reopen the Jam OAuth Certificates dialog by clicking the *JAM OAuth Certificates* button.

Step Result

The dialog displays the stored certificate.

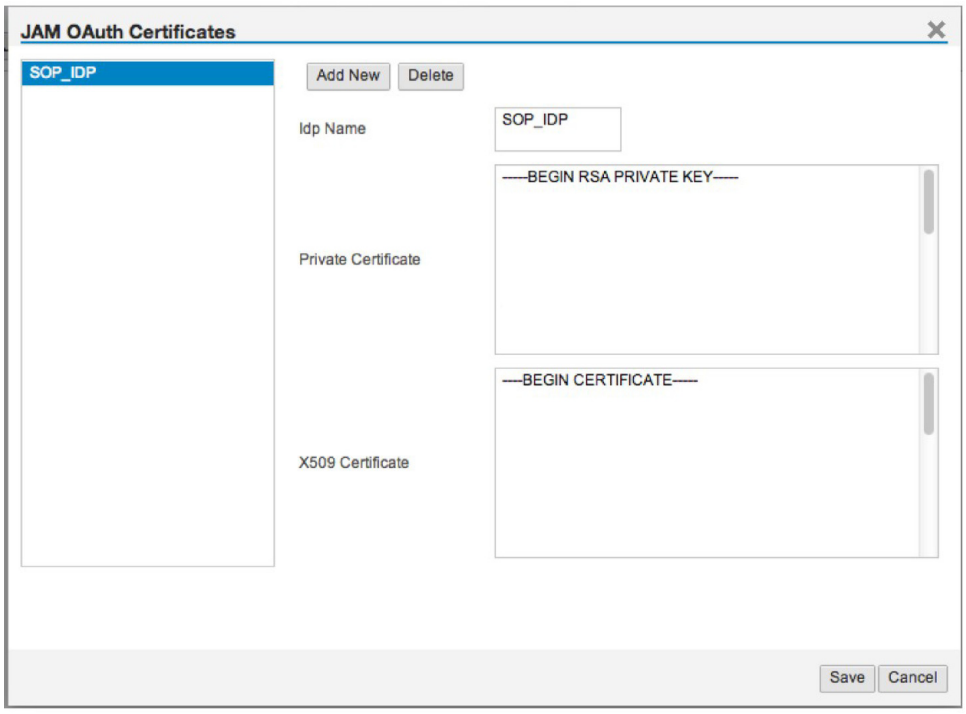


Figure 7: Result of configuring the application Jam certificate

6.2.5 HTTP Destination Configuration

You need to configure http destinations in order to set up SAP Jam for SAP S&OP.

6.2.5.1 Creating Application Jam Destination Package

Steps

1. Log onto the Web user interface as SOPITADMIN user and click the *Create JAM Destination* button.
2. Enter the destination values for the JAM Service and JAM Session destination, and click *Save*.
   Refer to the following examples:

Syntax

```
host = "";
port = 443;
description = "";
useSSL = true;
pathPrefix = ";
authType = none;
useProxy = true;
proxyHost = "";
```

```
proxyPort =;
timeout = 0;
```

The following is an example of destination file content:

- `sap.sop.jam.config.jam_service.xshttpdest`: this points to the SAP Jam service landscape to be used

  Syntax

```
host = "jamsalesdemo8.successfactors.com";
port = 443;
description = "Collaboration JAM Service Access Point Configuration";
useSSL = true;
pathPrefix = "/api/v1";
authType = none;
useProxy = true;
proxyHost = "yourProxy";
proxyPort = 8080;
timeout = 0;
```

- `sap.sop.jam.config.jam_session.xshttpdest`: this points to the SAP Jam service landscape, and is used to create the session

  Syntax

```
description = "Collaboration JAM Service Access Point Configuration";
host = "jamsalesdemo8.successfactors.com";
port = 443;
pathPrefix = "/v1";
useProxy = true;
proxyHost = "proxy";
proxyPort = 8080;
authType = none;
useSSL = true;
timeout = 0;
```

Note

In case SSL is required for http destinations, make sure that SAP HANA is SSL enabled.

Next Steps

In order to complete creating the SAP S&OP Jam destination package, you need to set up libsapcrypto and webdispatcher.

6.2.5.2 Setting up libsapcrypto and webdispatcher

Context

To set up libsapcrypto and webdispatcher:

Steps

1. Download libsapcrypto.so and sapgenpse from SAP Service Marketplace.
2. Refer to How to Configure SSL for SAP HANA XS Engine using SAPCrypto for information on how to set up libsapcrypto and webdispatcher.

6.2.5.3 Configuring the Trust Store

Context

After you have configured the SAP Jam destinations, you need to configure the trust store in SAP HANA Admin.

Prerequisites

You must have SAP HANA Admin rights in order to enable the trust store.

Steps

1. Log onto the XS Admin user interface: `http://<replacehost>:<replaceport>/sap/hana/xs/admin`.
2. Navigate to *Trust Manager* and click on the plus sign to create a new a trust store.
3. Enter a name and click *create*.

   #### Step Result

   The name appears in the list box.
4. Select the trust store name.

   #### Step Result

   The trust store appears on the right hand side.
5. You can download trust certificates from the public Jam site jam4.sapjam.com/. You need to select the *https* in the browser link and download the certificates. This is different for different browsers.

   If you do not want to download certificates in this way, use the instructions in Steps 6 and 7.
6. To download the service provider certificate:

1. Retrieve the SSL certificate of the service provider. You can obtain this from, for example: Firefox via the icon to the website https://jam4.sapjam.com; Internet Explorer or Chrome via the Security Report.
2. Save this certificate in a file with Base64 format. You can choose whether you want to use the client certificate or the CA certificate; the latter has a much longer validity.
3. Obtain the client certificate by displaying the certificate dialog. Navigate to the *Details* tab and select *Copy to File*.
4. From the *Certificate Export Wizard* dialog, activate the *Base64* option.

7. Download the CA certificate.
   1. The CA certificate requires the same steps except that you first jump to a different dialog.
   2. Open the certificate dialog and navigate to the *Certificate path* tab.
   3. Highlight the second to last certificate and choose *View Certificate*.

      Step Result

      A second certificate dialog opens and you can proceed as described in the client certificate steps above. The client certificate is valid for three years, while the CA certificate is valid for 10 years:
8. Import the Jam public certificates into the trust store by clicking *Browse Certificates*.
9. Import both the certificates created above and click *Save*.

Step Result

The Jam trust store is now configured.

6.2.5.4 Configuring the Jam http Destination

Steps

1. Log on with SYSTEM user.
2. Choose the *XS Applications* tab.
3. Through the left panel, navigate to the http destinations: `http://`**<replacehost>**`:`**<replaceport>**`/sap/hana/xs/admin`
4. Select the *XS Applications* navigation link.
5. Go to the package `sap/sop/jam/config` and select the destination file.

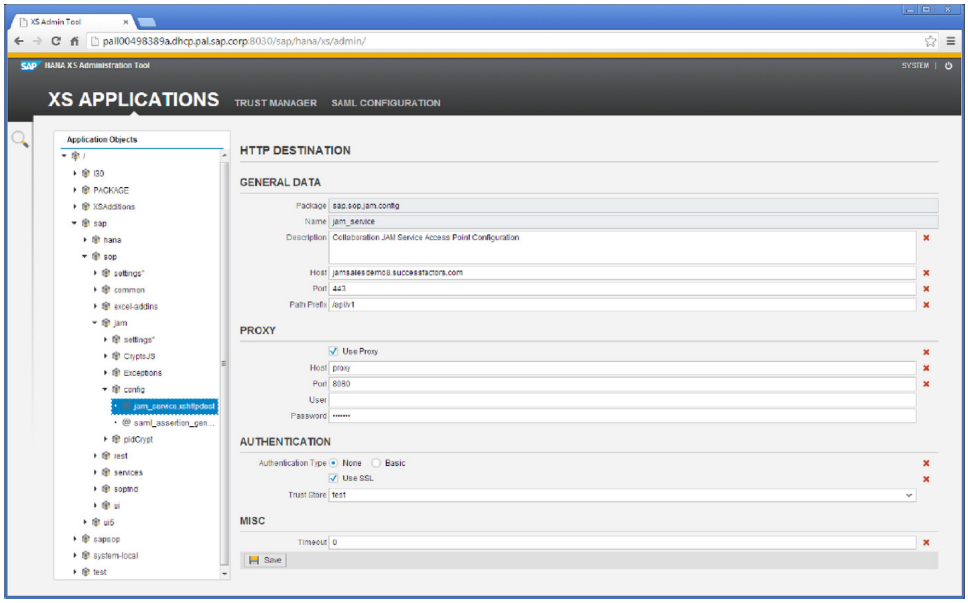


Figure 8: XS Applications window

6. Edit the destination and click *Save*.
7. If the SYSTEM user does not have enough privileges, assign them to the user by executing the following:

   Syntax

   ```
   call "_SYS_REPO"."GRANT_ACTIVATED_ROLE"
   ('sap.hana.xs.admin.roles::SAMLAdministrator', 'SYSTEM')
   ```

8. Assign the user all the roles of type: `sap.hana.xs.admin.roles::*`

Step Result

There will be two destination files.

9. Select *jam_service.xshttpdest*.

Step Result

On the right hand side, the destination properties appear.

10. Under Authentication, select the trust store you configured in Configuring the Trust Store [page 26] and click *Save*.
11. Repeat this process for the other destination file *jam_session.xshttpdest*.

Step Result

This configures the XS SAP Jam destination.

6.2.5.5 Creating Users in SAP Jam

Context

Before you can map an SAP S&OP user with an SAP Jam user, you need to create SAP Jam users. If you have already created SAP Jam users, you can skip this topic.

Steps

1. Prepare the user import file.

   Refer to the sample CSV file that SAP emailed you, and use this as the basis for creating the user import list for SAP Jam. The sample CSV file contains four standard demo users. It is critical that you name the CSV file according to the following, case-sensitive format: `UserDirectory_<jamcompanyid>.csv`. For example, `UserDirectory_jam0088.csv`.
2. Upload users to BizX.
   1. Using the URL and credentials that SAP emailed you, log onto BizX with Internet Explorer. These credentials must include the following information:

      Syntax

      ```
      Company = <Company ID>
      Username = <user>
      Password =  <password>
      ```
   2. Use ONLY Internet Explorer to navigate to Manage Users -> Import Employee Data.
      - Type: Basic Import
      - Choose your File
      - File Encoding: Unicode (UTF-8)
      - Validate Import File Data
      - Import
3. Upload users to SAP Jam via an FTP server.
   1. Connect from a network that permits FTP communication.
   2. Create an FTP session with any FTP client, for example, FileZilla or Winscp, and connect to the FTP server with the hostname and credentials supplied to you via Email. Your credentials should include the following information:
      - Server
      - Port
      - User
      - Password
   3. Make sure the import file follows the naming convention: `UserDirectory_<company ID>.csv`, where `<company ID>` is in lowercase, for example, `UserDirectory_jam0086.csv`.
   4. Upload the employee export file to the folder: `/salesdemo8/export/`.

      The import to the SAP Jam demo tenant is handled by a batch process, which runs every hour. You can check progress in the FTP client: The process is finished once the uploaded file is moved to subfolder `archive`.

4. Reset the user password in BizX.
    1. Log onto BizX as an admin user:

    Syntax

    ```
    Company = <Company ID>
    Username = <user>
    Password =  <password>
    ```

    2. Navigate to Manage Users->Reset User Passwords.
    3. Set the passwords for the users JSMITH, JACK, JIM, ASHLYN and DAVID (the standard demo users from your import file) to Abcd1234.
    4. Log onto BizX with each of the users and change the password to Welcome1234.

6.2.5.6 Mapping an Application User with a Jam User

Prerequisites

Before you can map an SAP S&OP user with an SAP Jam user, you must create the SAP Jam users in the SAP Jam system provisioned for SAP S&OP. Refer to Creating Users in SAP Jam [page 29] for instructions.

Steps

1. From the Web client, click the *User Management* navigation icon.
2. From the *User Management* window, select the user you want to map to SAP Jam.
3. Select the user and enter the SAP Jam Email ID in the *Alternate Email* ID field.
4. Click *Save*.

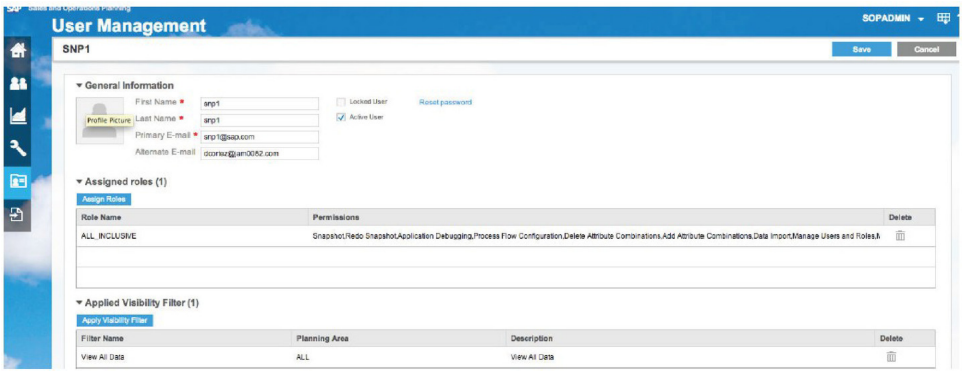


Figure 9: User Management window

5. Navigate to the *Collaboration* window.

Step Result

You will see that the SAP Jam application is loaded into the application.

6.2.5.7 Testing Jam Configuration

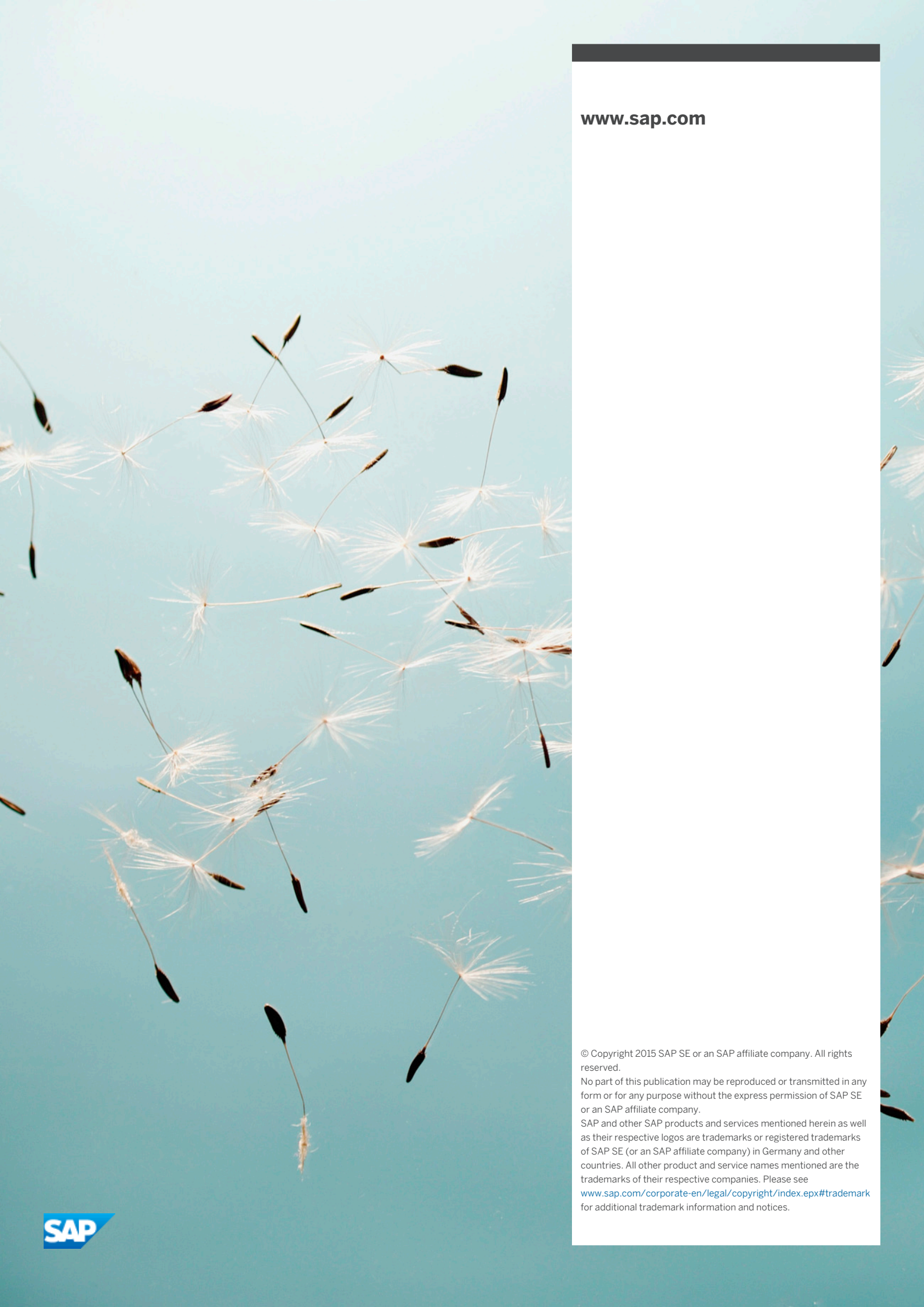
Steps

1. Paste the following into a browser to view the results: `<SOP Base URL>/sap/sop/jam/jamUnitTests.xsjs`

Typographic Conventions

Table 7

Example	Description
<Example>	Angle brackets indicate that you replace these words or characters with appropriate entries to make entries in the system, for example, "Enter your **<User Name>**".
Example > *Example*	Arrows separating the parts of a navigation path, for example, menu options
Example	Emphasized words or expressions
Example	Words or characters that you enter in the system exactly as they appear in the documentation
www.sap.com	Textual cross-references to an internet address
/example	Quicklinks added to the internet address of a homepage to enable quick access to specific content on the Web
123456	Hyperlink to an SAP Note, for example, SAP Note 123456
Example	• Words or characters quoted from the screen. These include field labels, screen titles, pushbutton labels, menu names, and menu options. • Cross-references to other documentation or published works
`Example`	• Output on the screen following a user action, for example, messages • Source code or syntax quoted directly from a program • File and directory names and their paths, names of variables and parameters, and names of installation, upgrade, and database tools
`EXAMPLE`	Technical names of system objects. These include report names, program names, transaction codes, database table names, and key concepts of a programming language when they are surrounded by body text, for example, `SELECT` and `INCLUDE`
EXAMPLE	Keys on the keyboard



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