

# Enabling Single Sign-On for Common Identity using Ping Federate

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# Introduction

## Introduction

This document covers the configuration of the required software components essential for achieving a Single Sign-on (SSO) solution with WebEx Messenger using Ping Federate.



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# Enabling SSO for WebEx Messenger

## Configure Federated Web SSO

1. Log into <http://www.webex.com/go/connectadmin> with your administration credentials.
2. Select the **Configuration tab > System Settings > Security Settings**.
3. Select **Federated Web SSO Configuration**.
4. In the **WebEx SAML Issuer (SP ID)** field, enter the name for the SAML agreement.

**Note:** You can use the fully qualified domain name (FQDN) of your organization.

5. Complete all the required fields.
6. Select **Export** to export the metadata to a location on your computer. You will import this file next.

## Create a New SP Connection

1. Go to PingFederate  
<https://ping0a.uc8sevtlab13.com:9999/pingfederate/app>.
2. In **SP Connections**, select **Create New**.

3. Select **Do not use a template for this connection**.
4. Select **Next**.
5. Select the **Browser SSO Profiles** check box.
6. Select **Next**.
7. Select **Choose File** to navigate to and select the metadata file.
8. Select **Next**.
9. Ensure all information is correct in the **General Info** tab.
10. Select **Done**.

## Configure the Browser SSO

1. Select **Configure Browser SSO**.
2. Select the **SP-Initiated SSO** check box.
3. Select **Next**.
4. Select **Configure Assertion Creation**.
5. Select the **Standard** radio button.
6. Select **Next** to add all the attributes that Messenger needs for JIT (Just in time Provision).

ATTRIBUTE CONTRACT	SUBJECT NAME FORMAT
SAML_SUBJECT	urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified

EXTEND THE CONTRACT	ATTRIBUTE NAME FORMAT	ACTION
email	urn:oasis:names:tc:SAML:2.0:attrname-format:basic	Edit / Delete
firstname	urn:oasis:names:tc:SAML:2.0:attrname-format:basic	Edit / Delete
lastname	urn:oasis:names:tc:SAML:2.0:attrname-format:basic	Edit / Delete
uid	urn:oasis:names:tc:SAML:2.0:attrname-format:basic	Edit / Delete
updateTimeStamp	urn:oasis:names:tc:SAML:2.0:attrname-format:basic	Edit / Delete

urn:oasis:names:tc:SAML:2.0:attrname-format:basic Add

**Note:** If JIT is not required you can skip this step.



7. Select **Next**.
8. Select **Map New Adapter Instance....** to map to an authentication mechanism you have previously configured in PingFederate.
9. From the **ADAPTER INSTANCE** drop-down, select the adapter instance.
10. Select **Next**.
11. Select **Retrieve additional attributes from multiple data stores using one mapping**.
12. Select **Next**.
13. Select **Add Attribute Source** which in this case is the active directory domain controller for our domain.

The screenshot displays the 'Attribute Sources & User Lookup' configuration interface. At the top, there are navigation tabs for 'Main', 'SP Connection', and 'Browser SSO'. Below these, the 'Attribute Sources & User Lookup' section is active, with sub-tabs for 'Data Store', 'LDAP Directory Search', 'LDAP Filter', and 'Summary'. A teal banner indicates that the server uses local data stores for supplemental attributes. The configuration form includes the following fields:

Attribute Source Id	ad1a *
Attribute Source Description	ad1a *
Active Data Store	ad1a.uc8sevtlab13.com
Data Store Type	LDAP

A 'Manage Data Stores...' button is located at the bottom of the form.

14. Select **Next**.
15. Specify the **Base DN** and select the root object class **<Show All Attributes>**.

Please configure your directory search. This information, along with the attributes supplied in the

Base DN:

Search Scope:

Attributes to return from search

ROOT OBJECT CLASS	ATTRIBUTE
<input type="text" value="- SELECT -"/>	<input type="text" value="Subject DN"/>
<input type="text" value="- SELECT -"/>	<input type="text" value=""/>
<input type="text" value="&lt;Show All Attributes&gt;"/>	

16. Select **Add Attribute** to add all the AD attributes to comply to the JIT attributes requested in the assertion.
17. Select **Next**.
18. In the Filter text box, enter the ldap filter containing the username provided by the user.
19. Select **Next**.
20. Select the source and value for the assertion attributes provided by the AD datastore, as shown below, from the drop-downs.

Fulfill your Attribute Contract with values from one or more data stores, the authentication adapter, or dynamic text values.

ATTRIBUTE CONTRACT	SOURCE	VALUE
SAML_SUBJECT	LDAP (ad1a)	mail
email	LDAP (ad1a)	mail
firstname	LDAP (ad1a)	givenName
lastname	LDAP (ad1a)	sn
uid	LDAP (ad1a)	mail
updateTimeStamp	LDAP (ad1a)	whenChanged

The asseration configuration is shown below.

This task provides the configuration for creating SAML assertions to enable SSO access to resou

Assertion Configuration	
Identity Mapping	Standard
Attribute Contract	SAML_SUBJECT, email, firstname, lastname, uid, updateTimeStamp
Adapter Instances	1

Configure Assertion Creation

21. Select **Done**.
22. Select **Next**.
23. Select **Configure Protocol Settings**.
24. Select the **Post** and **Redirect** check boxes.
25. Select **Summary** to view the protocol settings, as shown below.

Summary information for your Protocol Settings configuration. Click a heading link to edit a configuration setting.

Protocol Settings	
<b>ASSERTION CONSUMER SERVICE URL</b>	
Endpoint	URL: /cas/SAML2AuthService?org=uc8sevtlab13.com&type=connect2 (POST)
<b>ALLOWABLE SAML BINDINGS</b>	
Artifact	false
POST	true
Redirect	true
SOAP	false
<b>SIGNATURE POLICY</b>	
Require digitally signed AuthN requests	false
Always sign the SAML Assertion	true
<b>ENCRYPTION POLICY</b>	
Status	Inactive

26. Select **Done**.

## Configure Certificate for the Assertion and Activate

1. In the **SP Connection** tab, select **Configure Credentials**.

2. Select the certificate you created for the SAML assertions.
3. Select **Next**.
4. Select **Done**.
5. Select the **Next**.
6. In the **Activation & Summary** tab, ensure the **Active** radio button is selected.
7. Select **Save**.

## Export the Metadata

1. In the **SP Connection** tab, select the **Export Metadata** link.
2. Select the signing certificate from the drop-down.
3. Select **Export**.

## Import SAML Metadata in WebEx Messenger

1. Log into <http://www.webex.com/go/connectadmin> with your administration credentials.
2. Select the **Configuration tab > System Settings > Security Settings**.
3. Select **Federated Web SSO Configuration**.
4. Select **Import SAML Metadata** to import the metadata file you downloaded.
5. In the **AuthContextClassRef** field, enter  
urn:oasis:names:tc:SAML:2.0:ac:classes:unspecified.

This string ensures that Ping Federate can deliver Kerberos and Form based authentication.

**Important:** For Cisco Jabber to work with Cisco WebEx Messenger Instant Messenger and Presence and deliver on-premise Cisco Unified Call Manager (CUCM) and Unity connection, you must provide the UC details for CUCM and connections in the Webex Messenger administrator portal.

To use SSO in Cisco WebEx Messenger and Cisco WebEx Meeting Center, ensure loose integration is enabled for both.

See *Cisco Unified Communications Integration with Cisco WebEx* and *Provision Loosely Coupled Integration* in the [Cisco WebEx Messenger Administration Guide](#).



# Migration from WebEx Messenger to Common Identity SSO Authentication

## Request to Add Domain to Common Identity

Contact your Customer Success Manager (CSM) or Universal Agent (UA) to submit an ops request to add the domain to CI or email: [ci-messenger-sync@cisco.com](mailto:ci-messenger-sync@cisco.com).

## Create a Password in CI

As none of the users migrated from Cisco WebEx Messenger have a password, you must create a password for an existing administrator now.

1. Connect to <https://web.ciscospark.com> and enter the email address of the administrator.
2. Select **Next**.
3. Select **Can't access your account?**.

An email is automatically sent to that user asking them to reset their password.

## Configure SSO in Cloud Collaboration Management

1. Connect to <https://admin.ciscospark.com> using the email address and password that you previously reset.
2. From the top navigation bar, select **Service Setup > Enterprise Settings** to download the CI metadata to configure Ping Federate.
3. In the **Enterprise Settings** window, select **Integrate a 3rd-party identity provider (Advanced)**.
4. Select **Next**.
5. Select **Download Metadata File** to browse to and save the metadata file.

## Create a New SP Connection for CI

1. Go to your PingFederate Administration portal <https://ping0a.uc8sevtlab13.com:9999/pingfederate/app>.
2. Select **Create New**.
3. Select the **Do not use a template for this connection** radio button.
4. Select **Next**.
5. Select **Browser SSO Profiles**.
6. Select the **Import Metadata** tab.
7. Select **Choose File** to browse to and import the metadata file downloaded from Cisco WebEx Messenger.
8. Select **Next**.
9. Review the information in the **General** tab.
10. Select **Done**.

## Configure the Browser SSO for CI

1. Select **Configure Browser SSO**.
2. Select the **SP-Initiated SSO** check box.
3. Select **Next**.
4. Select **Configure Assertion Creation**.
5. Select the **Transient** radio button and the check box below it.
6. Extend the contract attributes, as shown below.

EXTEND THE CONTRACT	ATTRIBUTE NAME FORMAT	ACTION
mail	urn:oasis:names:tc:SAML:2.0:attrname-format:basic	Edit / Delete
uid	urn:oasis:names:tc:SAML:2.0:attrname-format:basic	Edit / Delete

urn:oasis:names:tc:SAML:2.0:attrname-format:basic

7. Select **Next**.



8. Select **Map New Adapter Instance**.
9. From the **ADAPTER INSTANCE** drop-down, select the the authentication mechanism you configured previously.
10. Select **Next**.
11. Select the **Retrieve additional attributes from multiple data stores using one mapping** radio button.
12. Select **Next**.
13. Select **Add Attribute Source** which in this case is is the active directory domain controller for our domain.

Attribute Source Id: ad1a \*

Attribute Source Description: ad1a \*

Active Data Store: ad1a.uc8sevtlab13.com

Data Store Type: LDAP

Manage Data Stores...

14. Select **Next**.
15. Specify the **Base DN** and select the root object class **<Show All Attributes>**.

ROOT OBJECT CLASS	ATTRIBUTE
- SELECT -	Subject DN
- SELECT -	
<Show All Attributes>	

16. Select **Add Attribute** to add the mail attribute from the active directory.
17. Select **Next**.
18. In the Filter text box, enter the ldap filter containing the username provided by the user.
19. Select **Next**.
20. Select the source and value for the assertion attributes provided by the active directory datastore, as shown below, from the drop-downs.

ATTRIBUTE CONTRACT	SOURCE	VALUE
mail	LDAP (ad1a)	mail
uid	LDAP (ad1a)	mail

The assertion configuration is shown below.



21. Select **Done**.
22. Select **Next**.
23. Select **Configure Protocol Settings**.
24. Select the **Post** and **Redirect** check boxes.
25. Select **Next**.
26. Select the **Always sign the SAML Assertion** check box.
27. Select **Summary** to view the protocol settings, as shown below.



28. Select **Done**.

---

## Configure Certificate for the Assertion and Activate

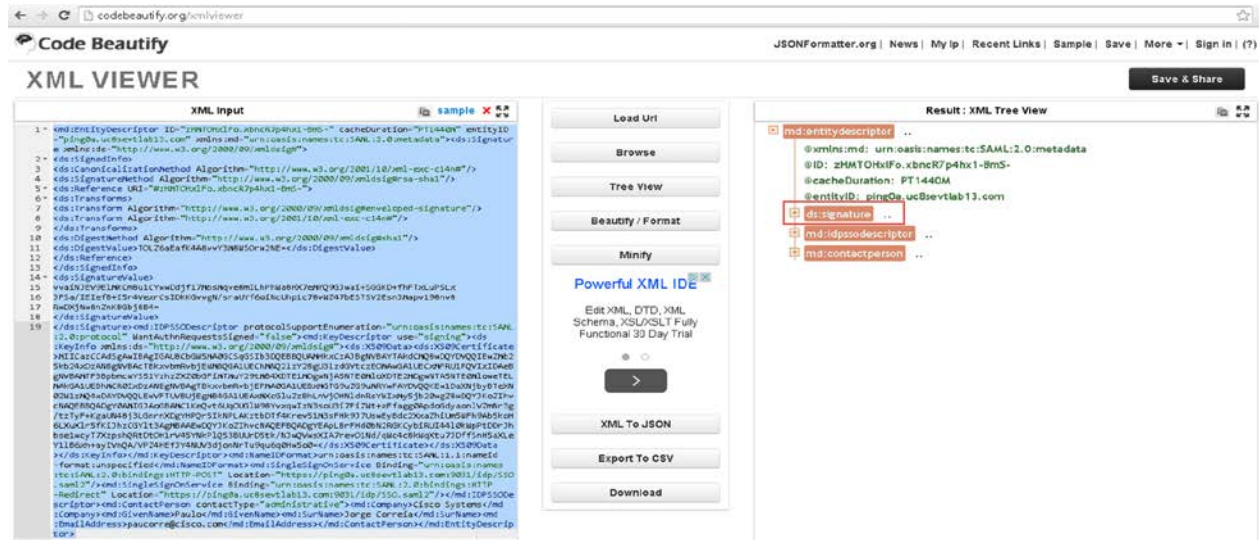
1. In the **SP Connection** tab, select **Configure Credentials**.
2. Select the certificate you created for the SAML assertions.
3. Select **Next**.
4. Select **Done**.
5. Select the **Next**.
6. In the **Activation & Summary** tab, ensure the **Active** radio button is selected.
7. Select **Save**.

## Export and Edit the Metadata for CI

1. In the **SP Connection** tab, select the **Export Metadata** link.
2. Select the signing certificate from the drop-down.
3. Select **Export**.
4. Use an XML editor to remove the elements not required in CI.

**Note:** There are several XML editors available online but we recommend Code Beautify <http://codebeautify.org/xmlviewer>.

5. In the XML editor, browse to the metadata file you exported.
6. Remove all the XML Tags except entitydescriptor, idpssodescriptor and contact person..



7. Select **Download** to download the edited file.

8. The metadata file should look like this:

```
<?xml version="1.0"?>
- <md:EntityDescriptor xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata" entityID="ping0a.uc8sevtlab13.com" cacheDuration="PT1440M" ID="Jg1_f0P2GAmNX4H54euo"
  - <md:IDPSSODescriptor WantAuthnRequestsSigned="false" protocolSupportEnumeration="urn:oasis:names:tc:SAML:2.0:protocol">
    - <md:KeyDescriptor use="signing">
      - <ds:KeyInfo xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
        - <ds:X509Data>
          <ds:X509Certificate>MIICazCCAdSgAwIBAgIGAUSCbGw5MA0GCSqGSIb3DQEBBQUAMHkxCzAJBgNVBAYTAkdCMQ8wDQYDVQQIEwZMb25k24xDzAF
          </ds:X509Data>
        </ds:KeyInfo>
      </md:KeyDescriptor>
      <md:NameIDFormat xmlns:urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified="urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified"
        <md:SingleSignOnService Location="https://ping0a.uc8sevtlab13.com:9031/idp/SSO.saml2" Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST"/>
        <md:SingleSignOnService Location="https://ping0a.uc8sevtlab13.com:9031/idp/SSO.saml2" Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect"/>
      </md:IDPSSODescriptor>
    - <md:ContactPerson contactType="administrative">
      <md:Company>Cisco Systems</md:Company>
      <md:GivenName>Paulo</md:GivenName>
      <md:SurName>Jorge Correia</md:SurName>
      <md:EmailAddress>paucorre@cisco.com</md:EmailAddress>
    </md:ContactPerson>
  </md:EntityDescriptor>
```

## Complete SSO Configuration in Cloud Collaboration Management

1. Connect to <https://admin.ciscopark.com> using the email address and password that you previously reset.
2. From the top navigation bar, select **Service Setup > Enterprise Settings** to download the CI metadata to configure Ping Federate.
3. In the **Enterprise Settings** window, select **Integrate a 3rd-party identity provider (Advanced)**.
4. Select **Next**.
5. Select **Import** to browse to and import the edited metadata file.

---

A success message is displayed when the import of the metadata file is complete.

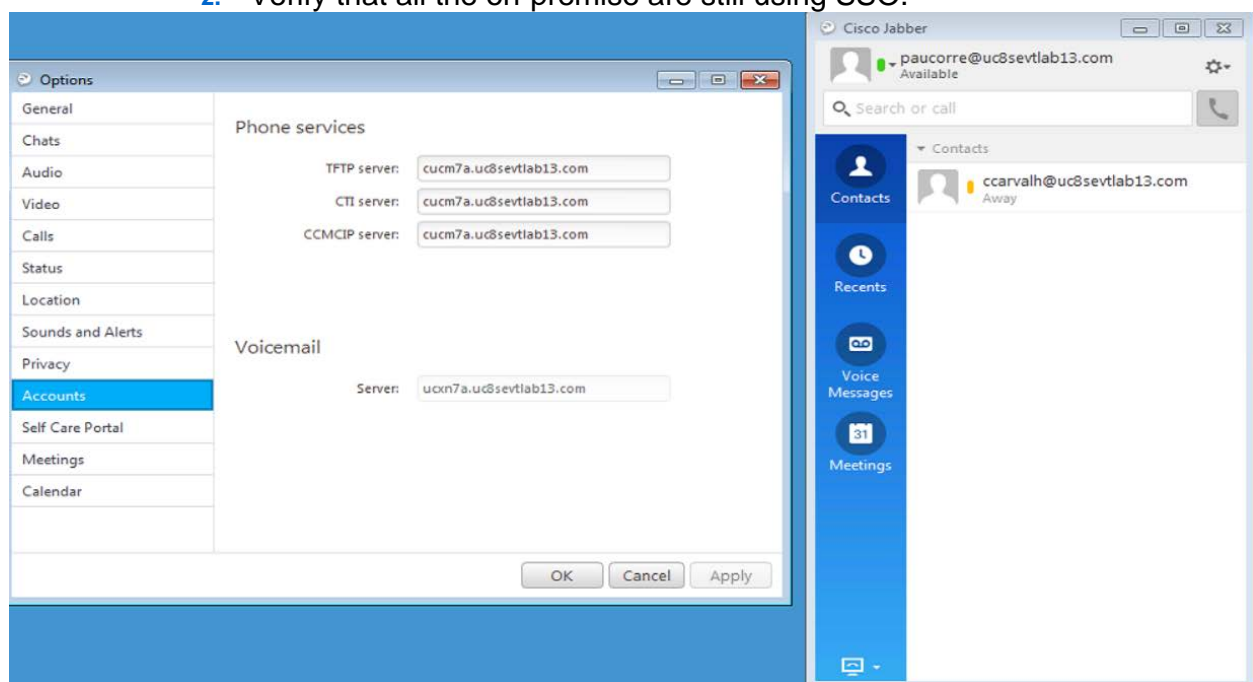
6. Select **Next**.
7. Select **Test SSO Configuration** .
8. Sign in with the administrator details.

## Redirect Authentication

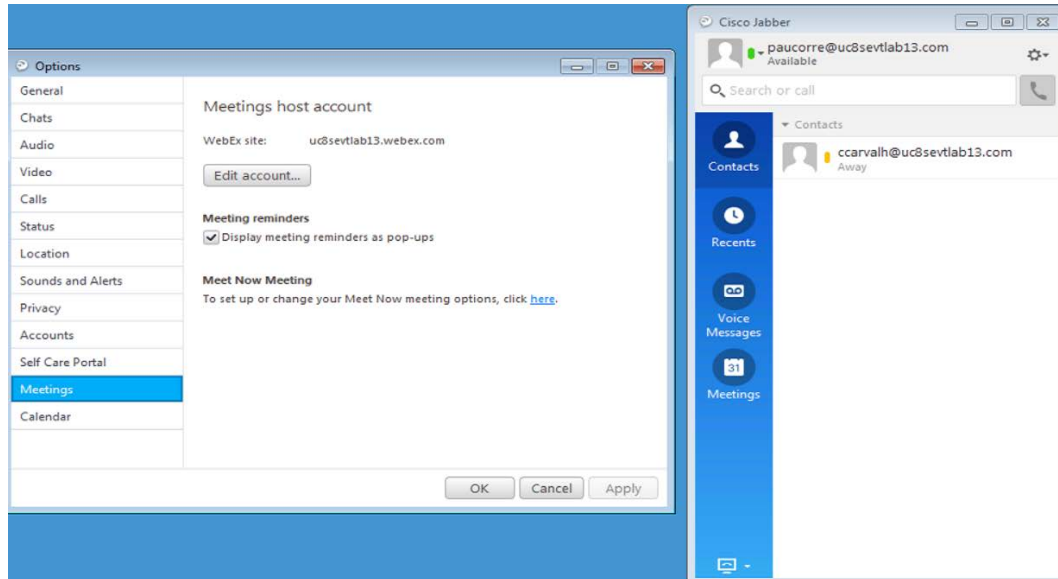
- Before you can verify the Jabber authentication in CI, authentication must be redirected from the WebEx Messenger platform to the CI platform, To do this contact the CSM to update the existing ops request or submit a new ops request or email: [ci-messenger-sync@cisco.com](mailto:ci-messenger-sync@cisco.com).

# Verification of Cisco Jabber Authentication in CI

1. Start Cisco Jabber.
2. Verify that all the on-premise are still using SSO.



3. Verify that WebEx Meeting Center is enabled for loose Integration.



4. Finally, verify that Cisco Jabber logs contain the string `idbroker.webex.com`, indicating that it is connecting to CI.

```

2015-06-05 09:34:31,893 DEBUG [0x000016e4] [ervices\impl\TransportHttpClient.cpp(87)]
[csfunified.telemetry.TransportHttpClient]
[CSFunified::telemetry::TransportHttpClient::getAccessTokenForMetricsService] - About to
execute access token request: [url] https://idbroker.webex.com/idb/oauth2/v1/access\_token
[method] 1
[followRedirects] 1
[transferTimeout] 0
[connectionTimeout] 0
[numRetries] 0
[authType] 1
[acceptable cryptographic protocols] TLS_1_0 TLS_1_1 TLS_1_2
[useSystemProxy] 1
[header] User-Agent:
[size of body] 64
2015-06-05 09:34:31,893 DEBUG [0x000016e4] [sf-netutils\src\common\PolicySet.cpp(84)]
[csf.common.PolicySet] [csf::common::PolicySet::getPolicy] - Successfully found Policy with
nature EDGE_USAGE [NEVER_USE]
2015-06-05 09:34:31,893 DEBUG [0x000016e4] [ls\src\http\BasicHttpClientImpl.cpp(253)]
[csf.httpclient] [csf::http::BasicHttpClientImpl::execute] - Edge policy enforced successfullly with
transformed Url: https://idbroker.webex.com/idb/oauth2/v1/access\_token for request #1
2015-06-05 09:34:31,893 DEBUG [0x000016e4] [etutils\src\http\HttpRequestData.cpp(71)]
[csf.httpclient] [csf::http::HttpRequestData::consumeEasyCURLConnection] - Acquired lock
(_easyCurlConnectionMutex)
2015-06-05 09:34:31,893 DEBUG [0x000016e4] [etutils\src\http\HttpRequestData.cpp(80)]
[csf.httpclient] [csf::http::HttpRequestData::consumeEasyCURLConnection] - Releasing lock
(_easyCurlConnectionMutex)

```



---

2015-06-05 09:34:31,894 INFO [0x000016e4] [etutils\src\http\CurlHttpUtils.cpp(1015)]  
[csf.httpClient] [csf::http::CurlHttpUtils::configureEasyRequest] - \*-----\* Configuring request  
#1 POST [https://idbroker.webex.com/idb/oauth2/v1/access\\_token](https://idbroker.webex.com/idb/oauth2/v1/access_token)

