Foglight® 8.0.0

Integration with SAML 2.0 in PingFederate

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Legend

WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death

CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

IMPORTANT, **NOTE**, **TIP**, **MOBILE**, or **VIDEO:** An information icon indicates supporting information.

Foglight® 8.0.0 – Integration with SAML 2.0 in PingFederate Foglight Version– 8.0.0

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Foglight and SAML 2.0 Integration in PingFederate

Starting with release 5.9.3, Foglight® Management Server supports Active Directory Federation Services (ADFS) 2.0 and PingFederate 8.x (and later) using the Security Assertion Markup Language (SAML) 2.0 protocol. Follow the below steps in sequence to completely integrate SAML SSO with the Foglight Management Server on the PingFederate server.

NOTE: PingFederate supports both http protocol and https protocol. Foglight SAML login on PingFederate could be using either IP address or the host name. For detailed configurations about IP or host name logon, refer to Before you begin.

- Before you begin
- Step 1: Configuring the SP Connection
- Step 2: Configuring Browser SSO
- Step 3: Configuring Assertion Creation
- Step 4: Configuring Protocol Settings
- Step 5: Configuring Credentials
- Step 6: Setting up SAML in Foglight

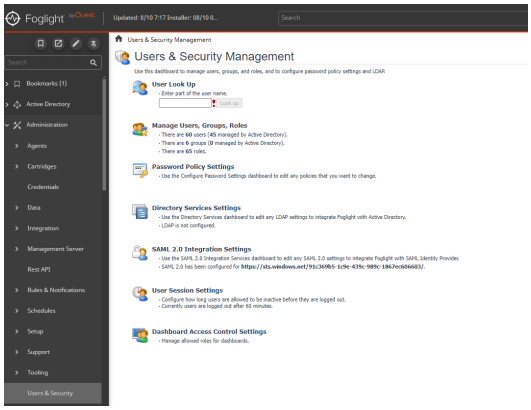
Before you begin

NOTE:

- If you are about to use SAML IP login, make sure to run the following command: "`-Dquest.saml.hostname=<foglight-server-ip>`" to start up your Foglight Management Server.
- When logging into your Foglight Management Server, make sure to keep using the same approach as what you configured during the SAML integrations. For example, if you set up the HTTPS SAML login using the IP address, you must log into your Management Sever with https://<foglight-server-ip>:<foglight-server-port>.

You need to enable SAML 2.0 SSO Configuration in your Foglight Management Server prior to setting up the SAML integration. Follow the steps below to enable SAML 2.0 SSO Configuration:

1. Log into the Foglight Management Server as a Security Administrator.
2. Under **Dashboards**, click **Administration** > **Users & Security**, and then click **SAML 2.0 Integration Settings.** The *SAML 2.0 SSO Configuration* dashboard appears.
3. Click **Enable**.



4. Download the metadata file that is to be imported to the PingFederate server later. Foglight supports both HTTP and HTTPS logon:

- For HTTP logon: Get the metafile from the Foglight server URL:
  - IP logon: http://<foglight_server-ip>:<port>/console/saml2/metadata.xml
  - Host name logon: http://<foglight_server-host-name>:<port>/console/saml2/metadata.xml
- For HTTPS logon: Get the metafile from the Foglight server URL:
  - IP logon: https://<foglight_server-ip>:<port>/console/saml2/metadata.xml
  - Host name logon: https://<foglight_server-host-name>:<port>/console/saml2/metadata.xml

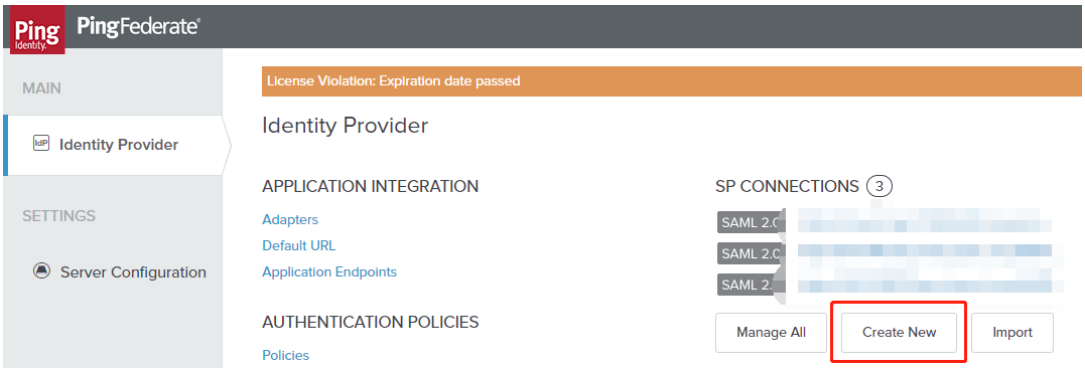
Step 1: Configuring the SP Connection

To configure the Service Provider (SP) connection:

1 Sign in PingFederate as an administrator.

2 Click **Identity Provider** and navigate to **Identity Provider** configurations.

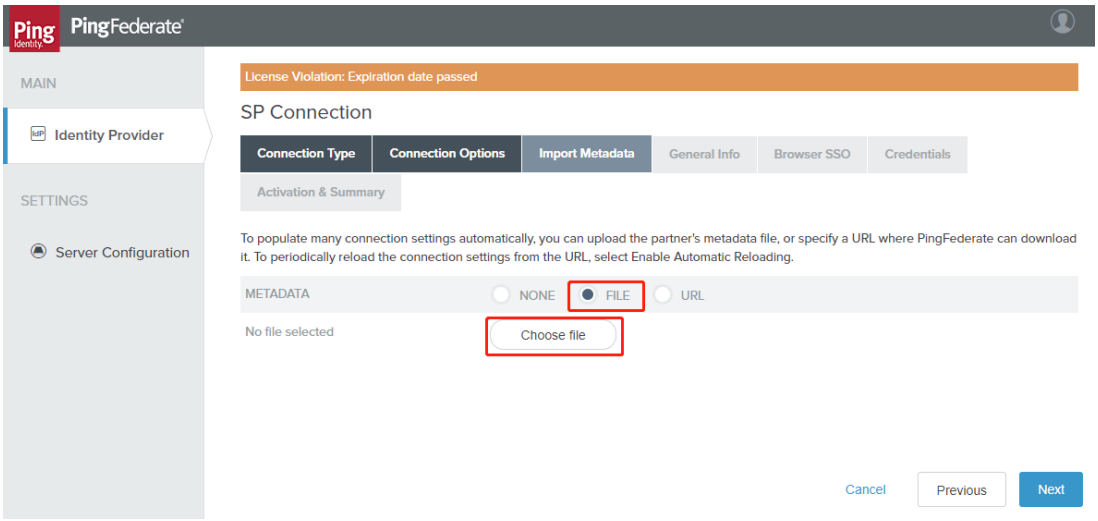
3 Under **SP CONNECTIONS**, click **Create New**.



4 On the **Connection Type** tab, select the **BROWSER SSO PROFILES** connection template and click **Next**.

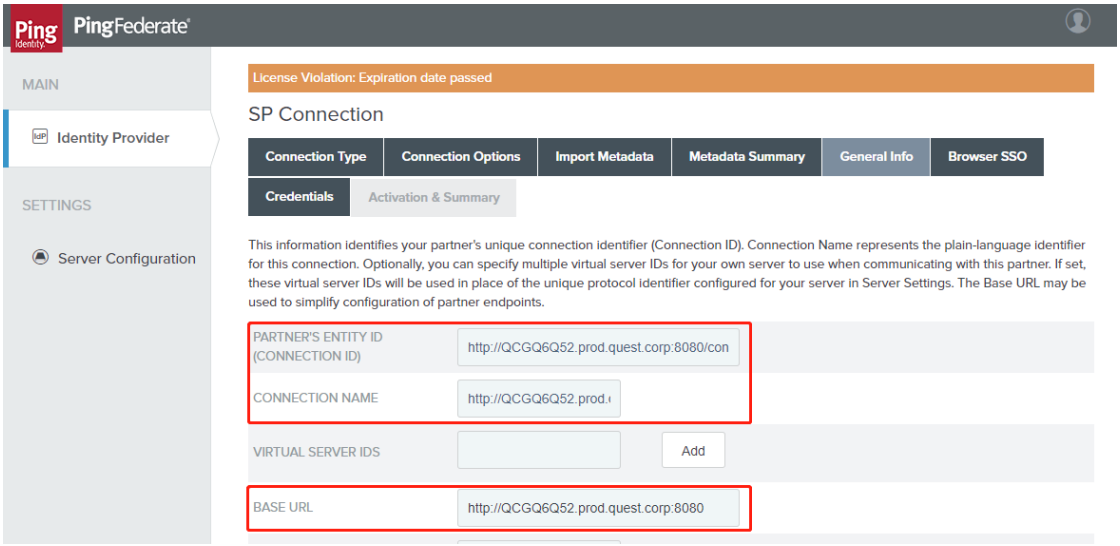
5 On the **Connection Options** tab, select **BROWSER SSO** and click **Next**.

6 On the **Import Metadata** tab, select **FILE** as the type of importing metadata, and then click **Choose file** to select the Foglight SSO metadata file. Click **Next**.



7 On the **Metadata Summary** tab, review the information and click **Next**.

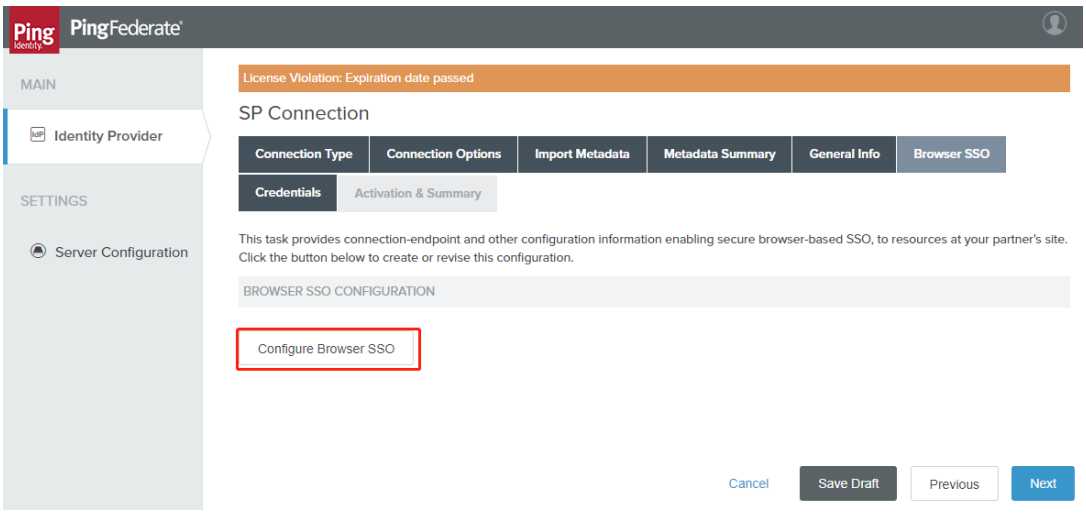
8 On the **General Info** tab, ensure that the **PARTNER'S ENTITY ID**, **CONNECTION NAME**, and **BASE URL** fields pre-populate based on the metadata, and then click **Next**.



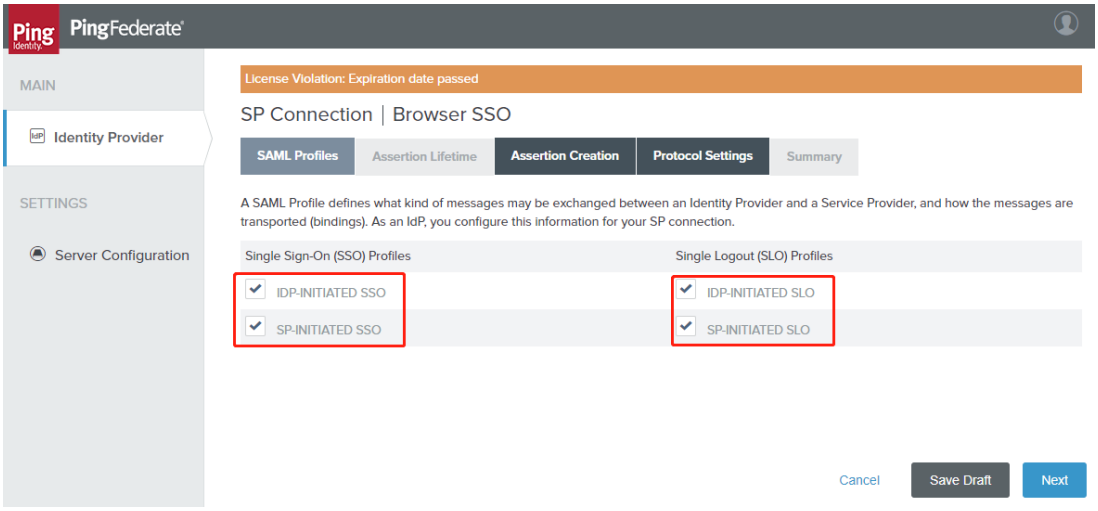
Step 2: Configuring Browser SSO

To configure the browser SSO:

1 On the **Browser SSO** tab, click **Configure Browser SSO**.



2 On the **SAML Profiles** tab, select all of the options and click **Next**.

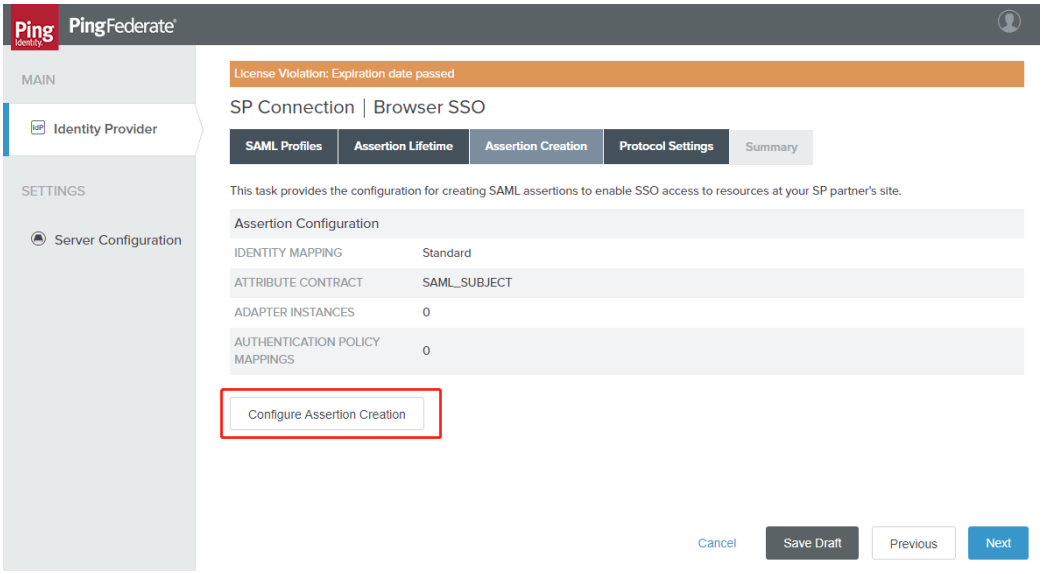


3 On **Assertion Lifetime** tab, enter your desired assertion validity time (default is 5) and click **Next**.

Step 3: Configuring Assertion Creation

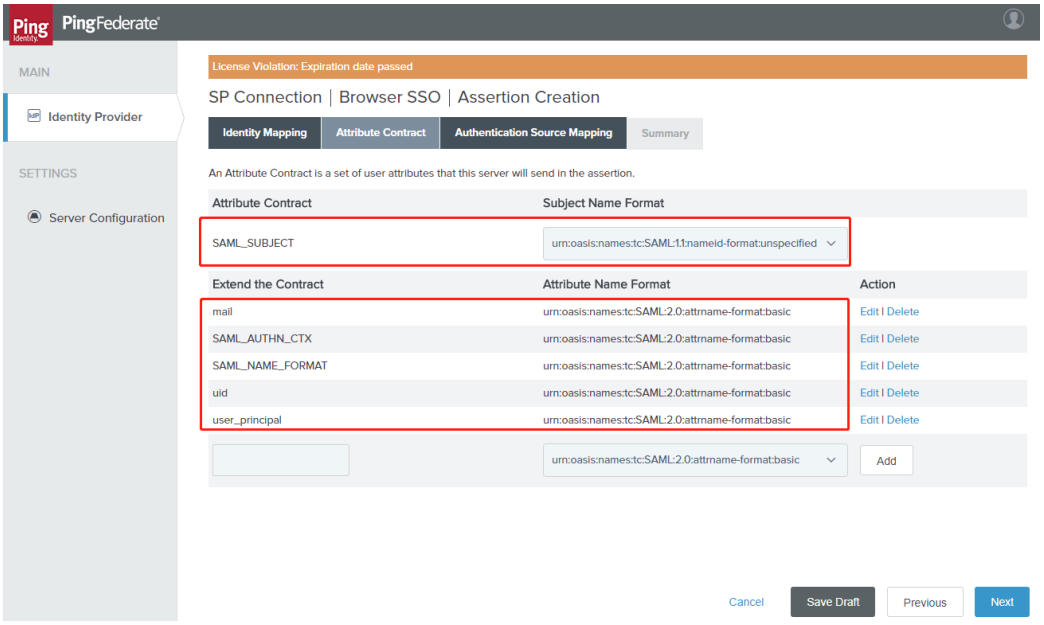
To configure assertion creation:

1 On the **Assertion Creation** tab, click **Configure Assertion Creation**.

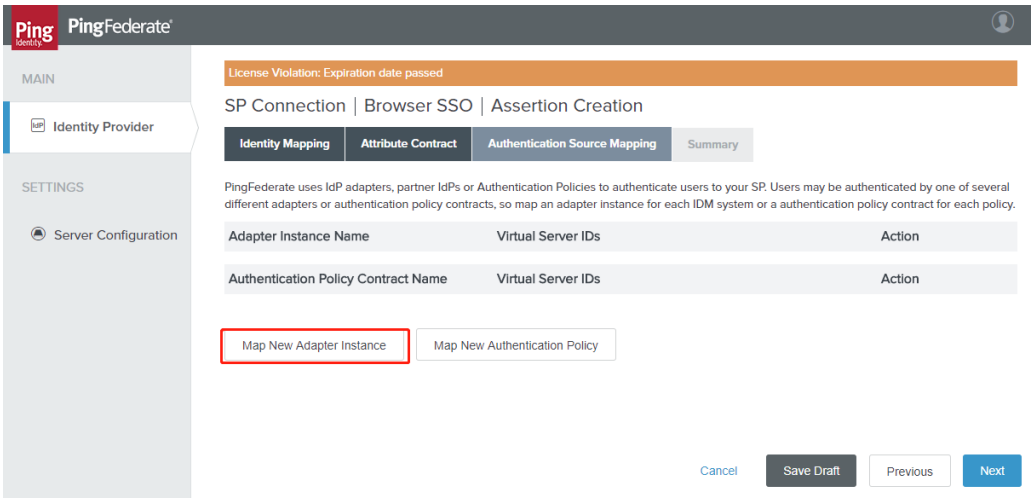


2 On the **Identity Mapping** tab, choose the **STANDARD** option and click **Next**.

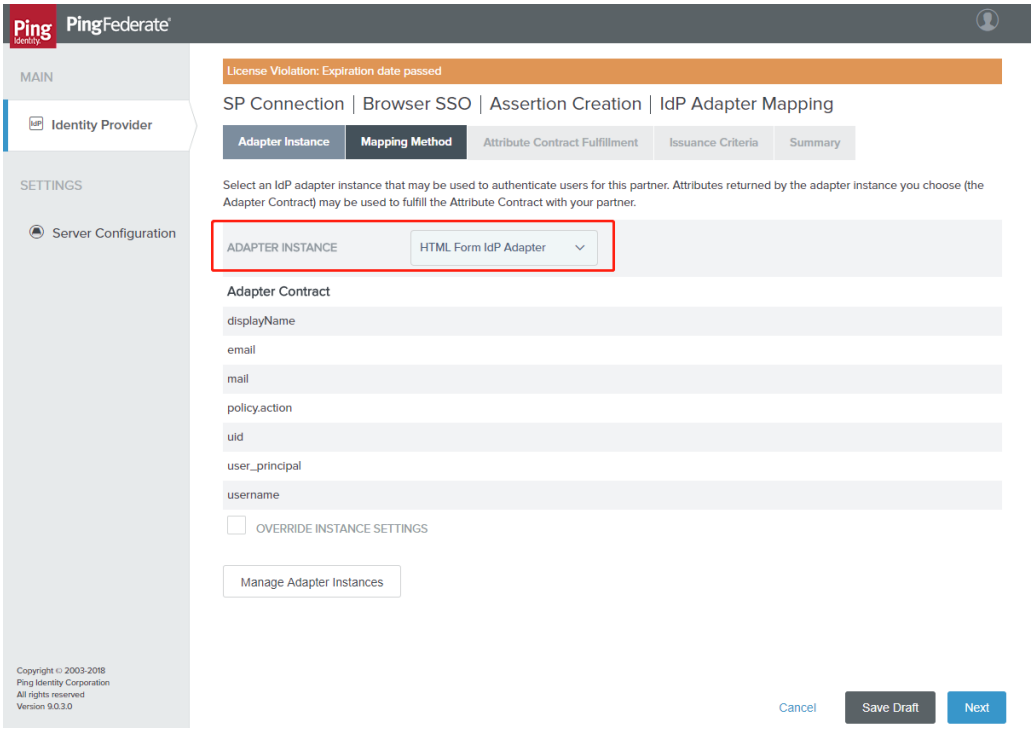
3 On the **Attribute Contract** tab, select the **Subject Name Format** for the **SAM_SUBJECT** and extend the contract as below, and then click **Next**.



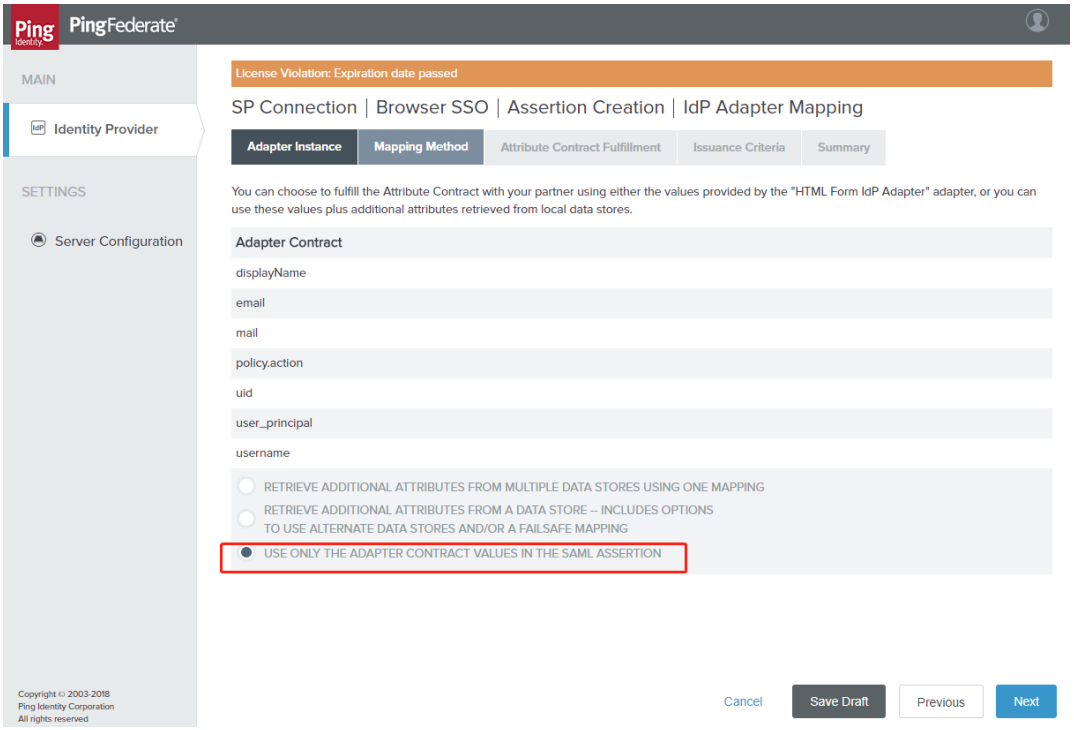
4 On the **Authentication Source Mapping** tab, click **Map New Adapter Instance**.



5 Select an **Adapter Instance** and click **Next**. The adapter must include the user's username.

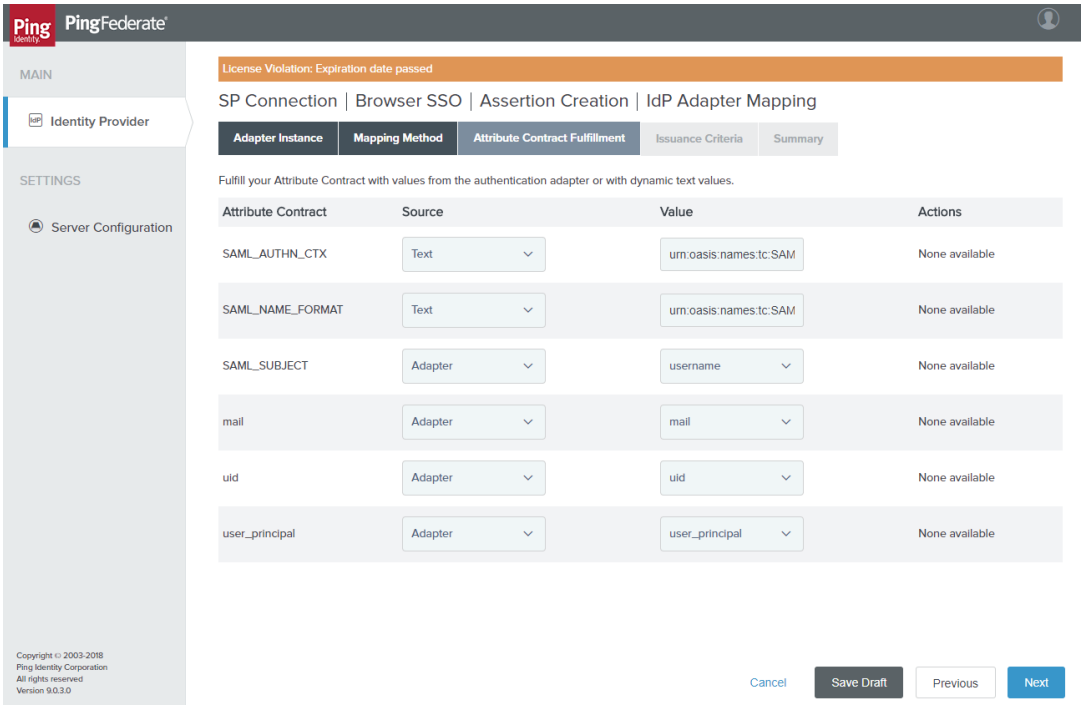


6 On the **Mapping Method** tab, select **USE ONLY THE ADAPTER CONTRACT VALUES IN THE SAML ASSERTION** and click **Next**.



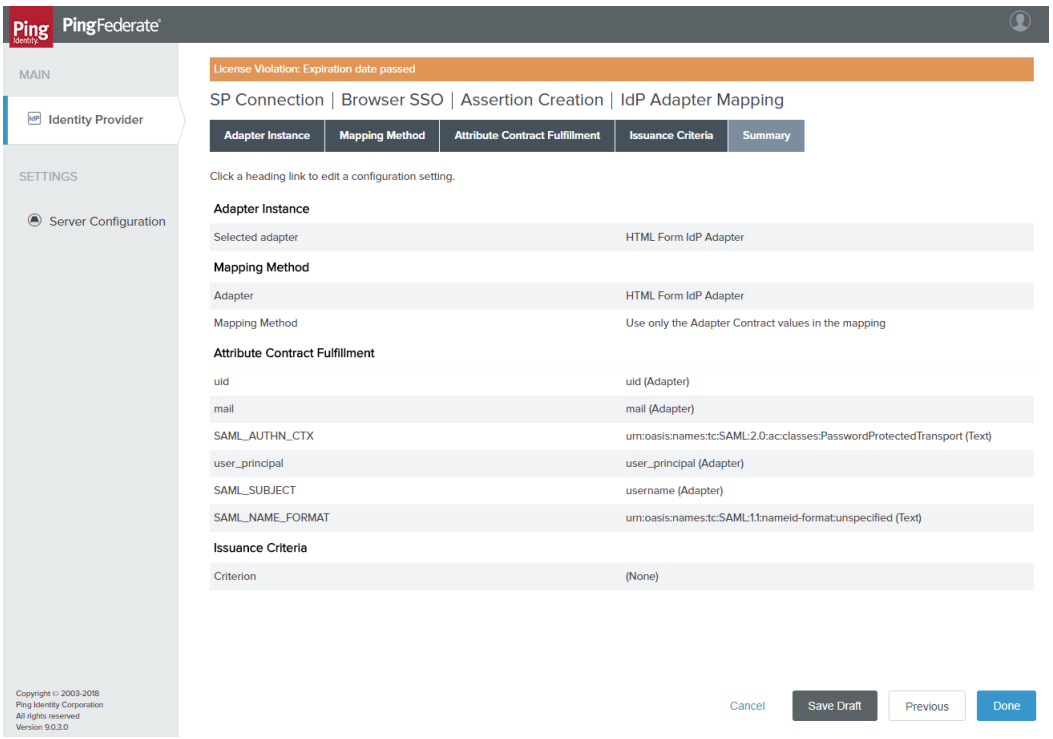
7 On the **Attribute Contract Fulfillment** tab, fulfill your **Attribute Contract** as below and click **Next**.

Attribute Contract	Source	Value
SAML_AUTHN_CTX	Text	urn:oasis:names:tc:SAML:2.0:ac:classes:PasswordProtectedTransport
SAML_NAME_FORMAT	Text	urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified



8 On the **Issuance Criteria** tab, leave the default values as is and click **Next**.

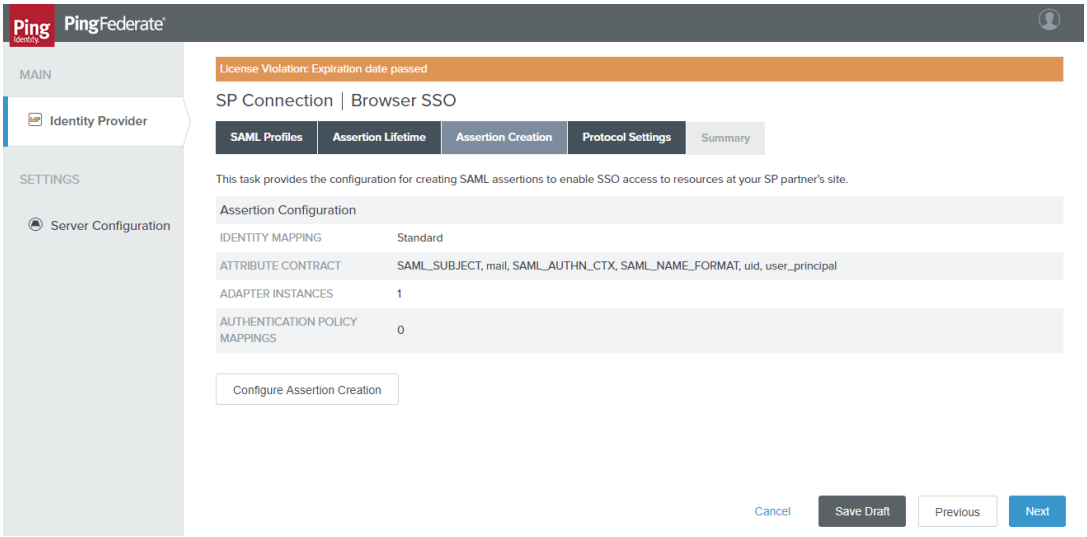
9 On the **Summary** tab, verify adapter mapping configurations and click **Done**.



10 On the **Authentication Source Mapping** tab, click **Next**.

11 On the **Summary** tab, click **Done**.

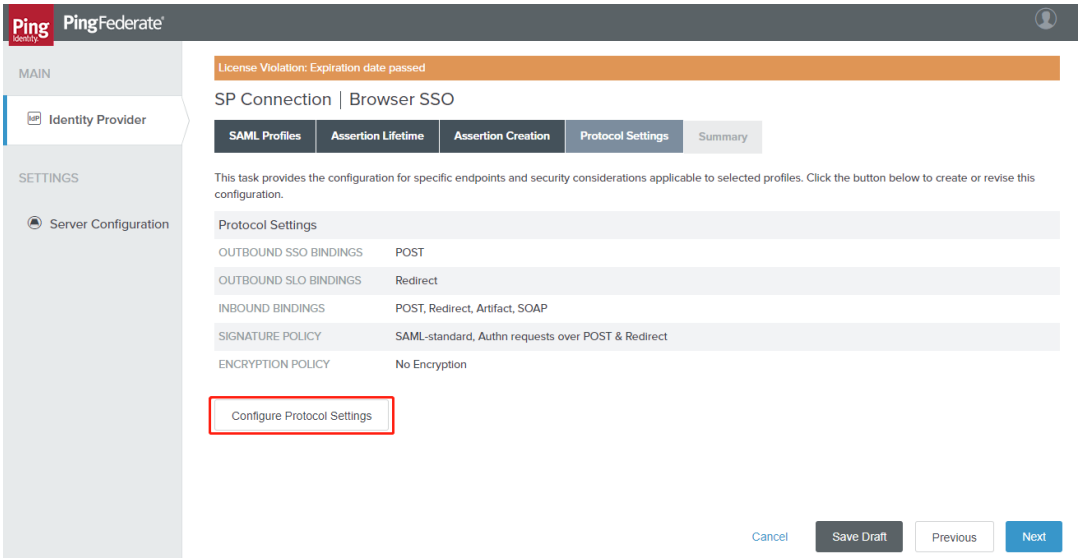
12 On the **Assertion Creation** tab, click **Next**.



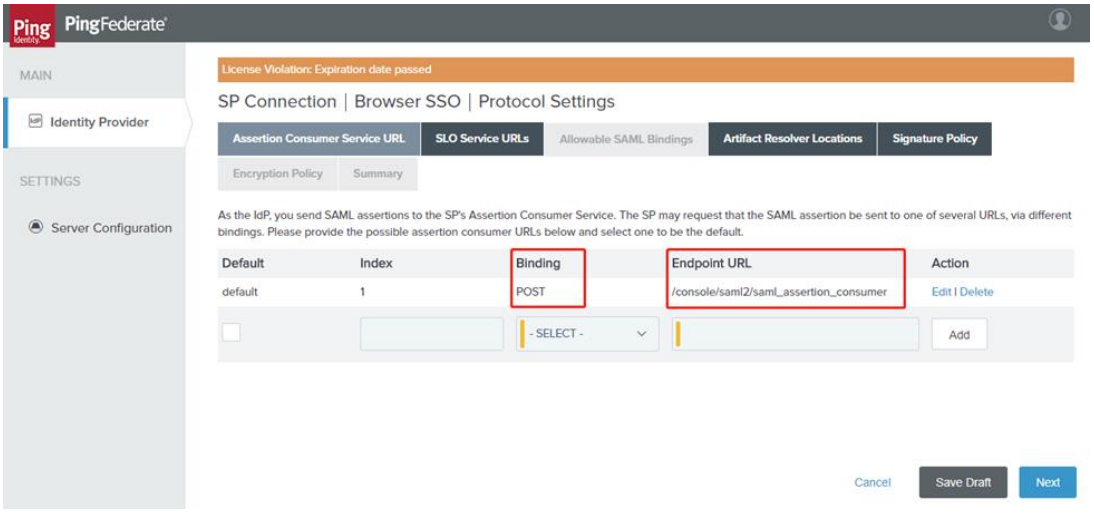
Step 4: Configuring Protocol Settings

To configure protocol settings:

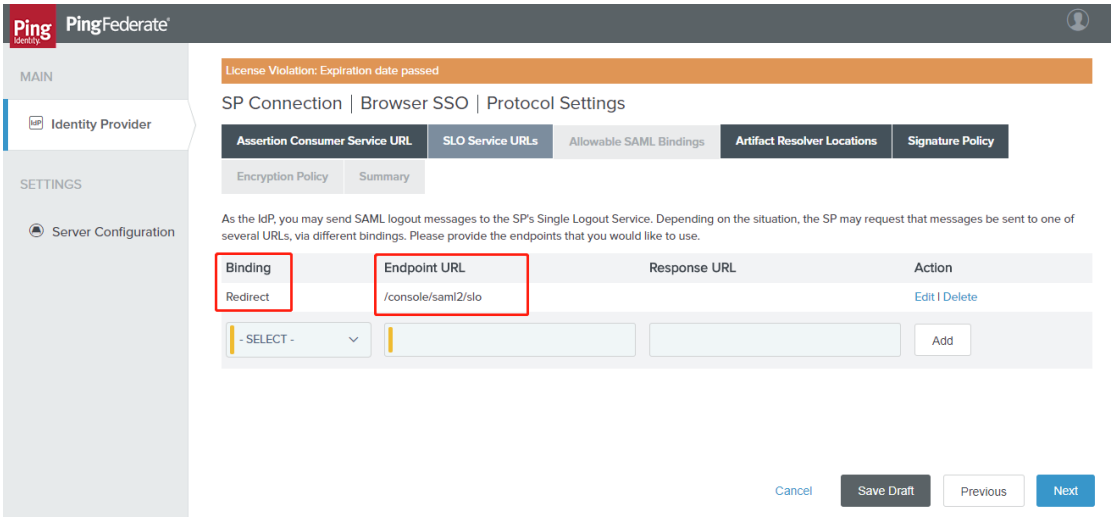
1 On the **Protocol Settings** tab, click **Configure Protocol Settings**.



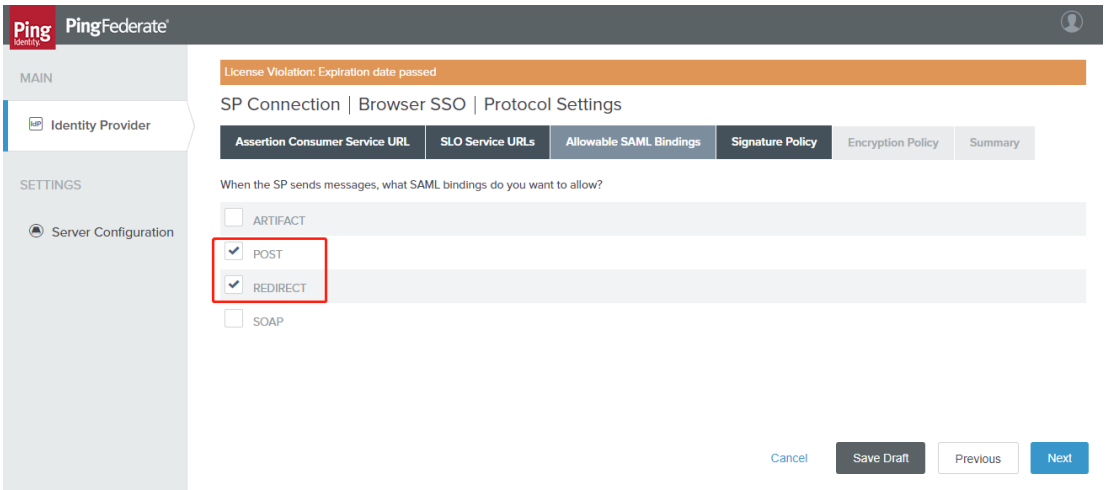
2 On the **Assertion Consumer Service URL** tab, ensure the **Binding** and **Endpoint URL** are set as below and click **Next**.



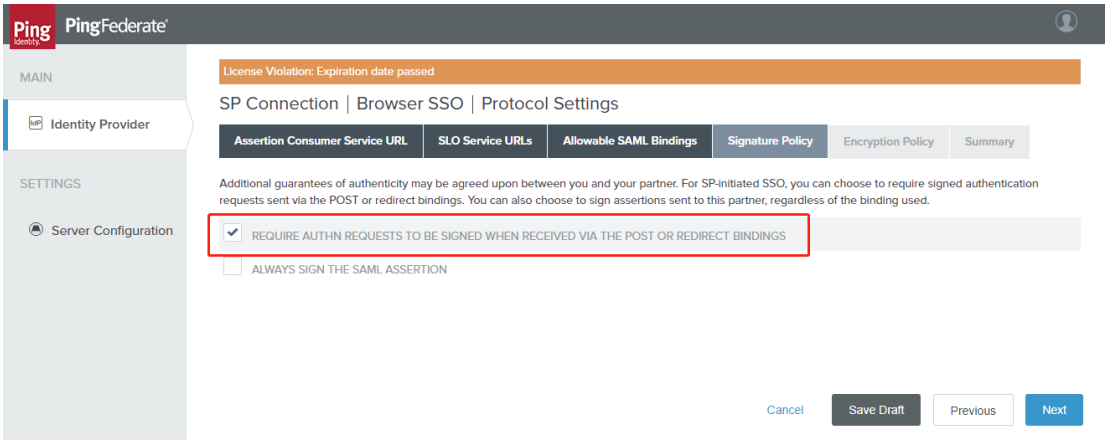
3 On the **SLO Service URLs** tab, ensure the **Binding** and **Endpoint URL** are set as below and click **Next**.



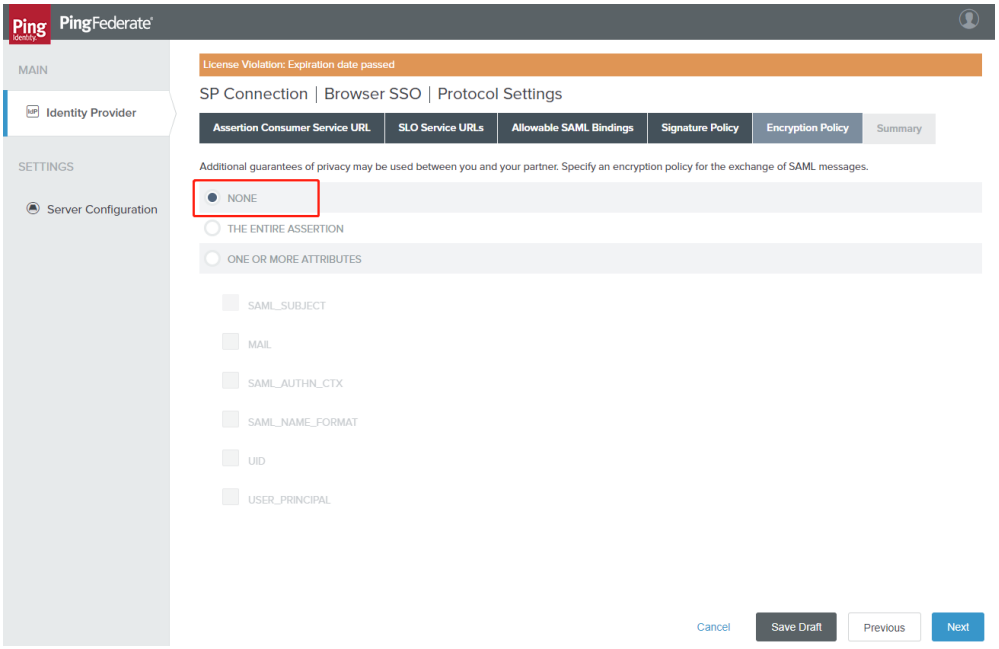
4 On the **Allowable SAML Bindings** tab, select **POST** and **REDIRECT** and click **Next**.



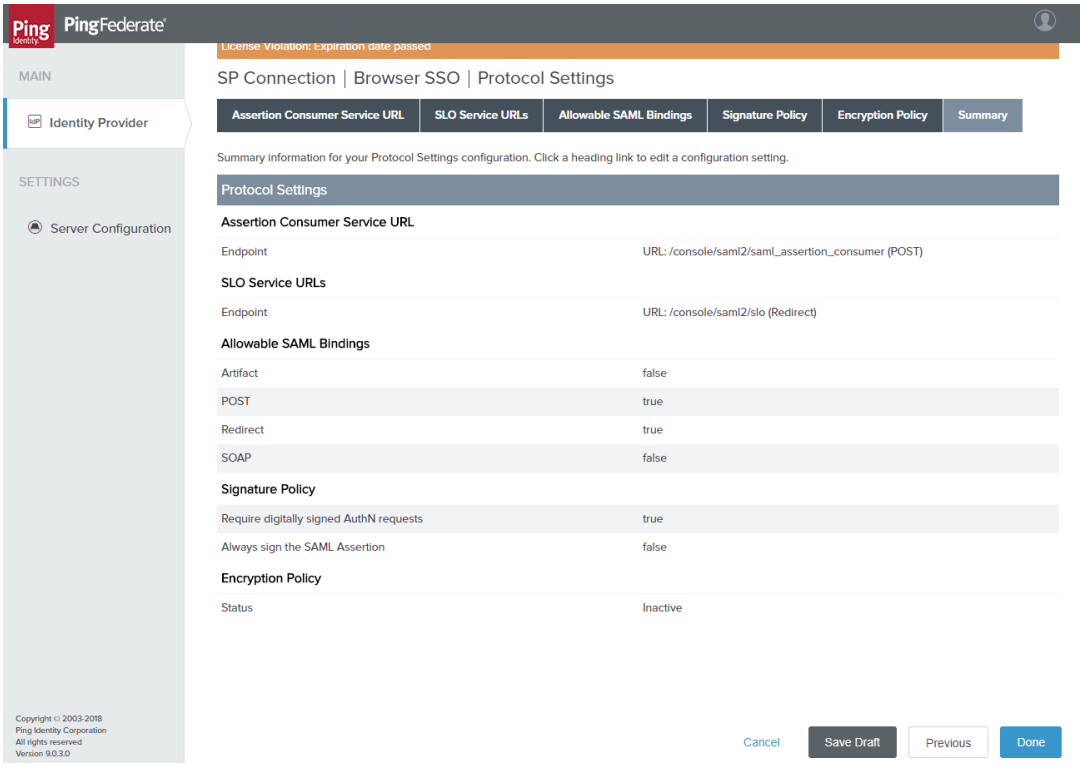
5 On the **Signature Policy** tab, select the **REQUIRE AUTHN REQUESTS TO BE SIGNED WHEN RECEIVED VIA THE POST OR REDIRECT BINDINGS** option and click **Next**.



6 On the **Encryption Policy** tab, select the **NONE** option and click **Next**.



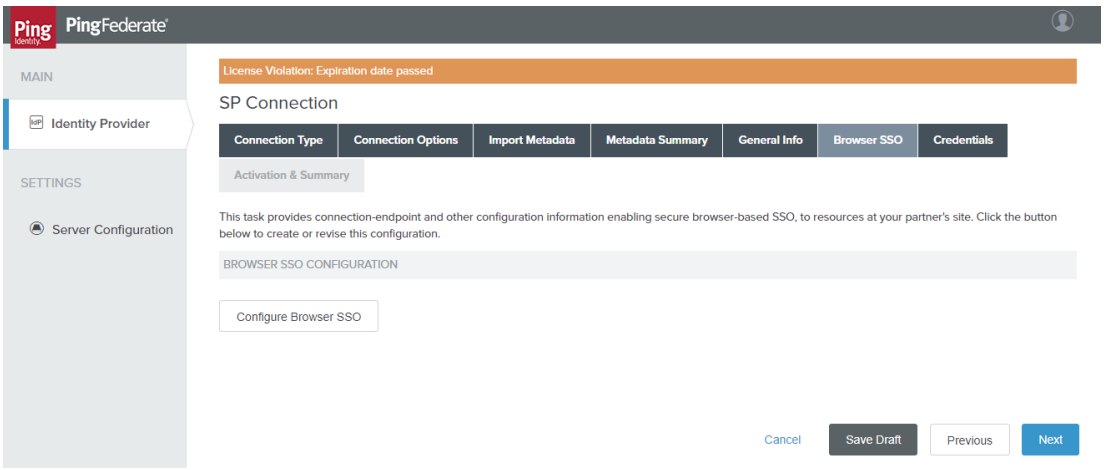
7 On the **Summary** tab, verify the summary and click **Done**.



8 On the **Protocol Settings** tab, click **Next**.

9 On the **Browser SSO Summary** tab, click **Done**.

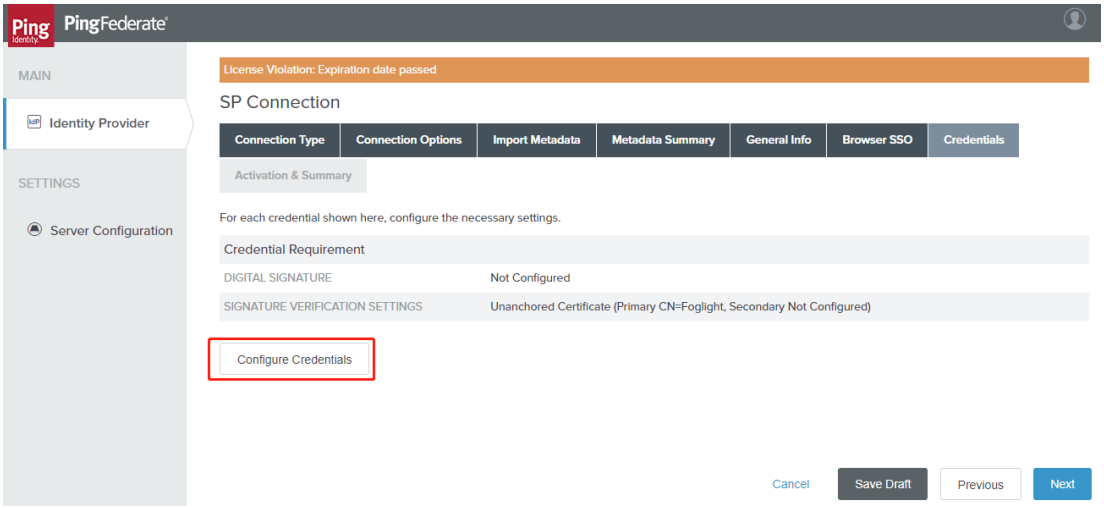
10 On the **Browser SSO** tab, click **Next**.



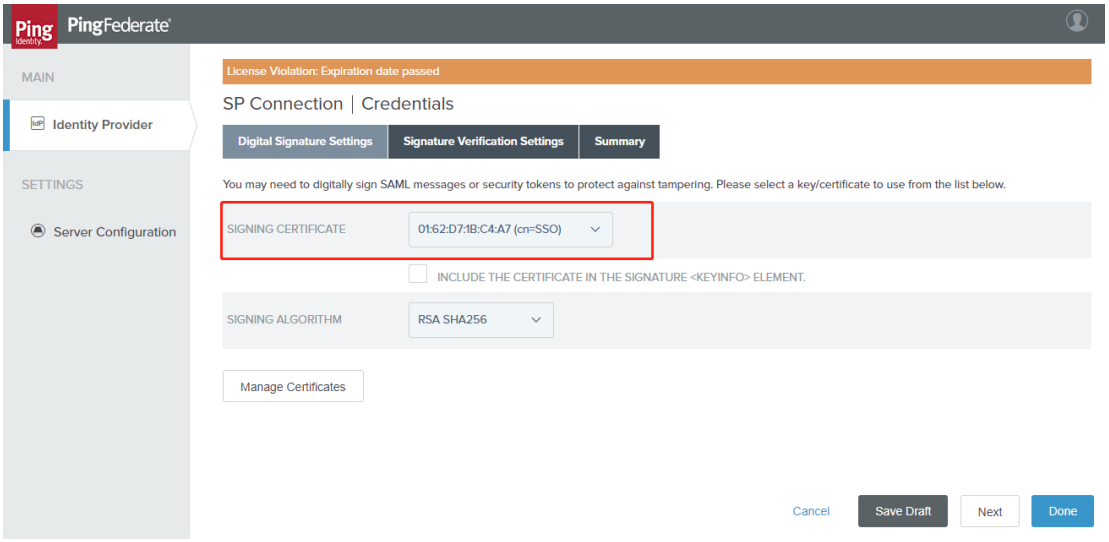
Step 5: Configuring Credentials

To configure credentials:

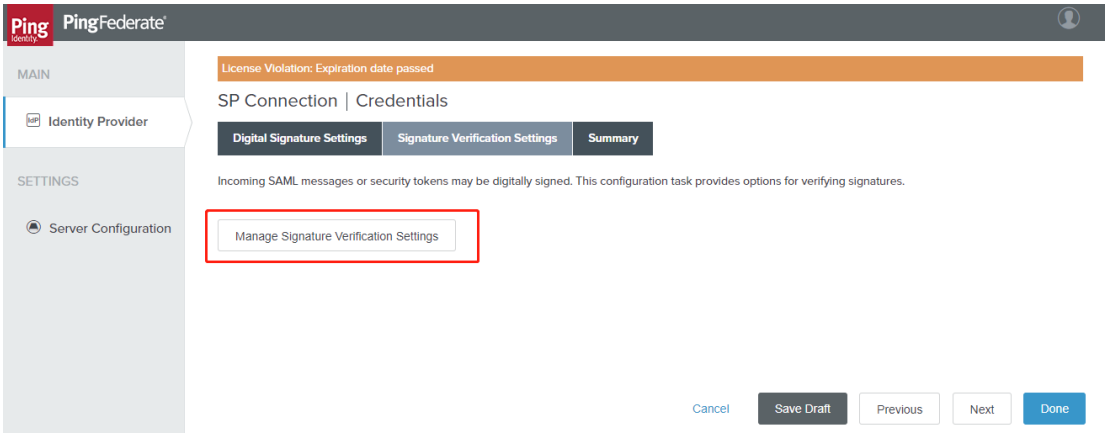
1 On the **Credentials** tab, click **Configure Credentials**.



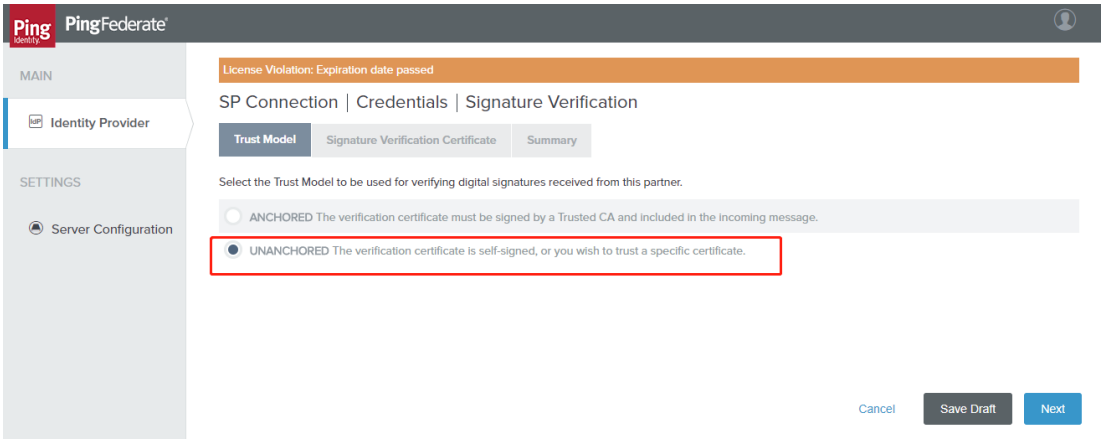
2 On the **Digital Signature Settings** tab, select the Signing Certificate to use the SSO service and click **Next**.



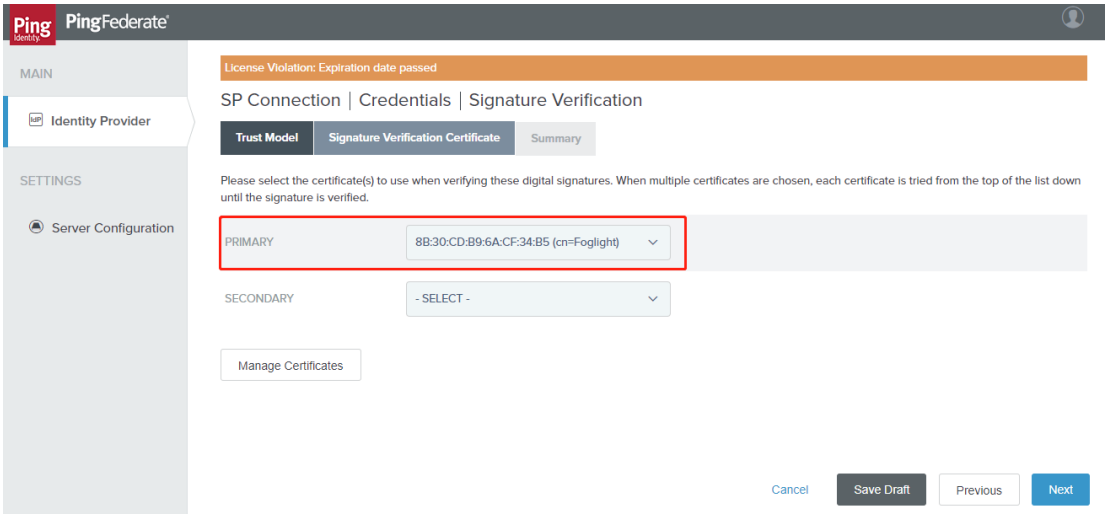
3 On the **Signature Verification Settings** tab, click **Manage Signature Verification Settings**.



4 On the **Trust Model** tab, select the **UNANCHORED** option and click **Next**.



5 On the **Signature Verification Certificate** tab, select the Foglight certificate that should have been imported, and then click **Next**.

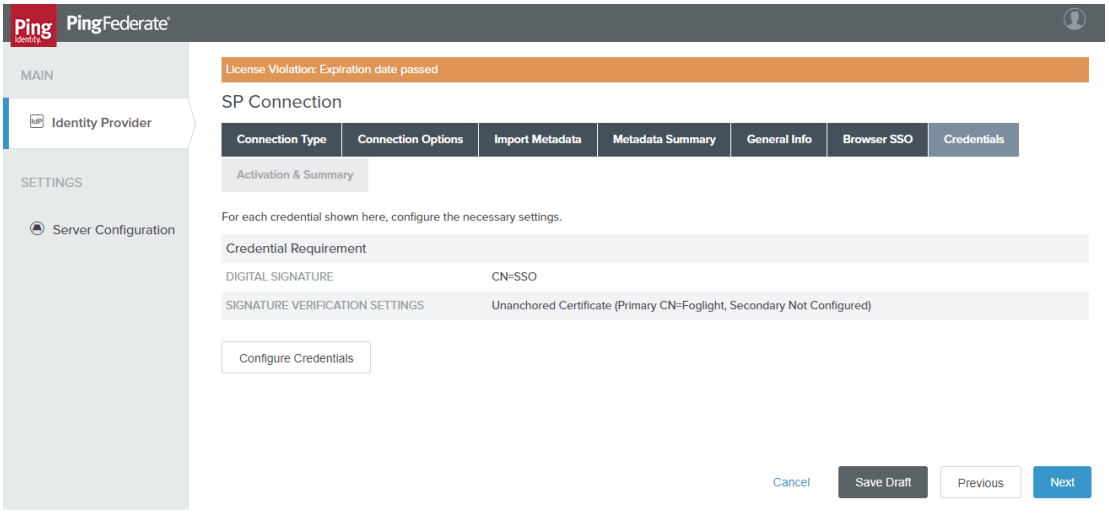


6 On the **Summary** tab, click **Done**.

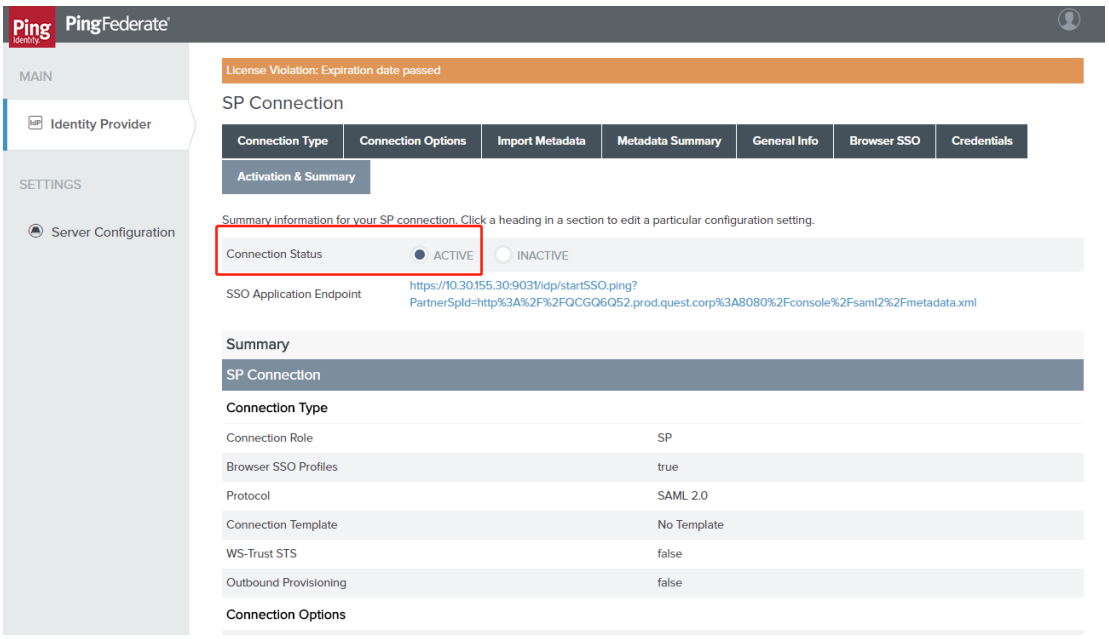
7 On the **Signature Verification Settings** tab, click **Next**.

8 On the **Credentials Summary** tab, click **Done**.

9 On the **Credentials** tab, click **Next**.



10 On the **Activation & Summary** tab, choose the **ACTIVE** option for the Connection Status. Verify the configurations and click **Save**.



Step 6: Setting up SAML in Foglight

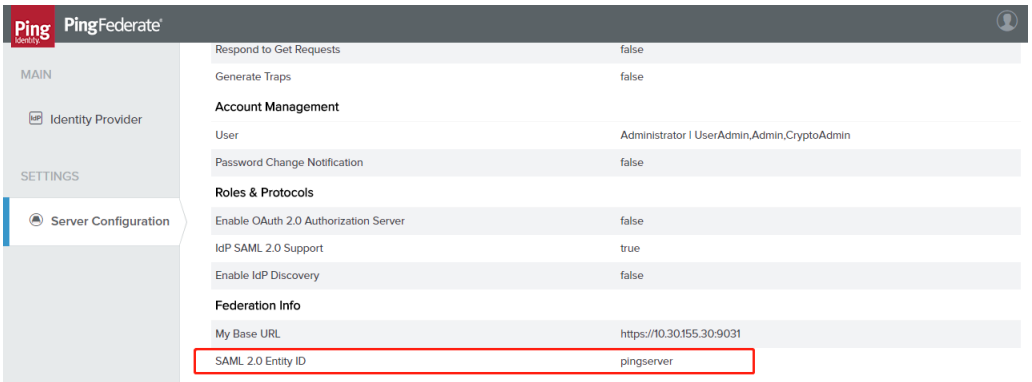
To set up SAML in the Foglight Management Server:

1 Log into the Foglight Management Server as a Security Administrator.

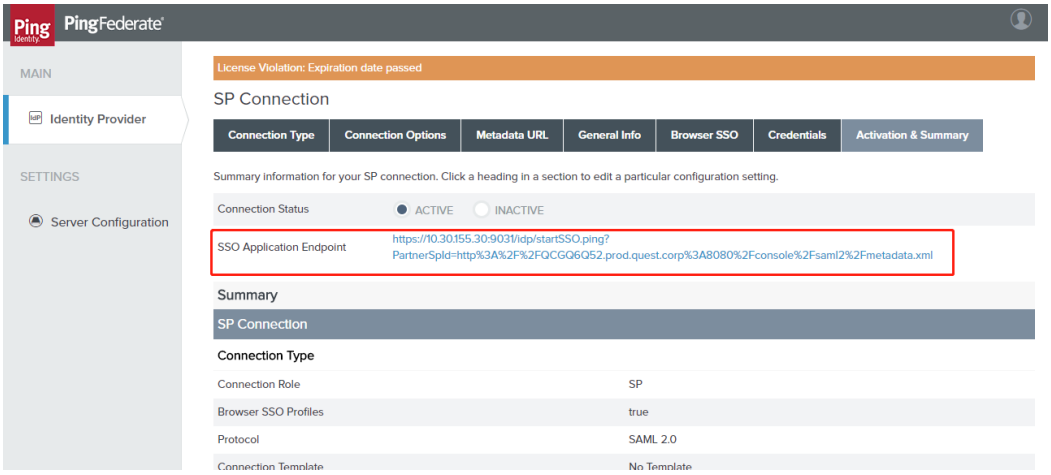
2 Under **Dashboards**, click **Administration** > **Users & Security**> **SAML 2.0 SSO**. The *SAML 2.0 SSO Configuration* dashboard appears.

3 Click **Edit Settings** and configure the SAML settings as below. You could get the actual values from the PingFederate server.

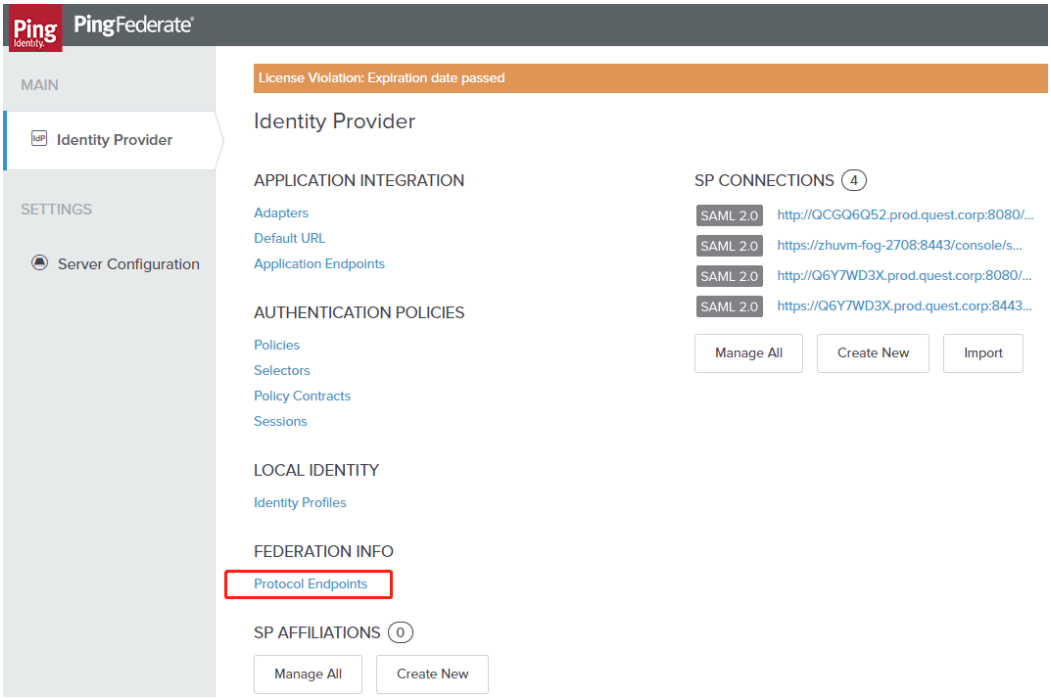
a *Identity Provider Entity ID*: You could get this value from PingFederate's **Server Settings**.



b *Login URL:* You could get this value from the SP Connection that you have configured on the PingFederate server.



c *Logout URL*: The value is https://<pingfederate_server>:<port>/idp/SLO.saml2. You could get the logout common postfix from PingFederate's **Protocol Endpoints**.

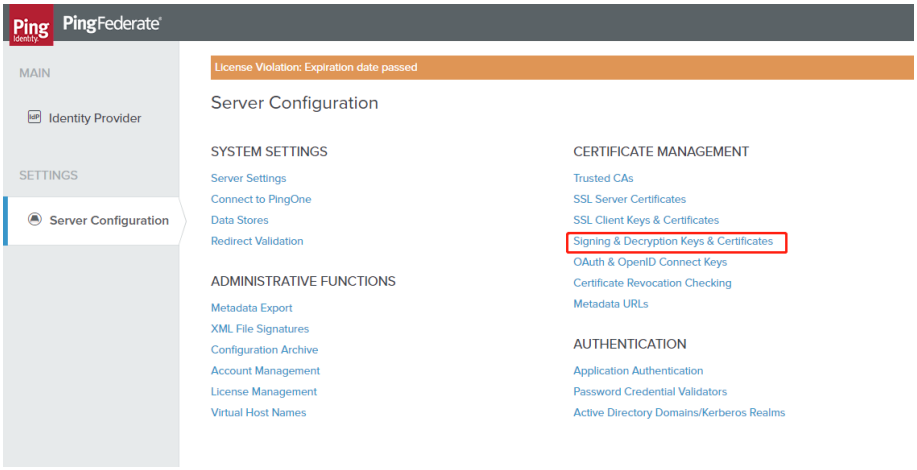


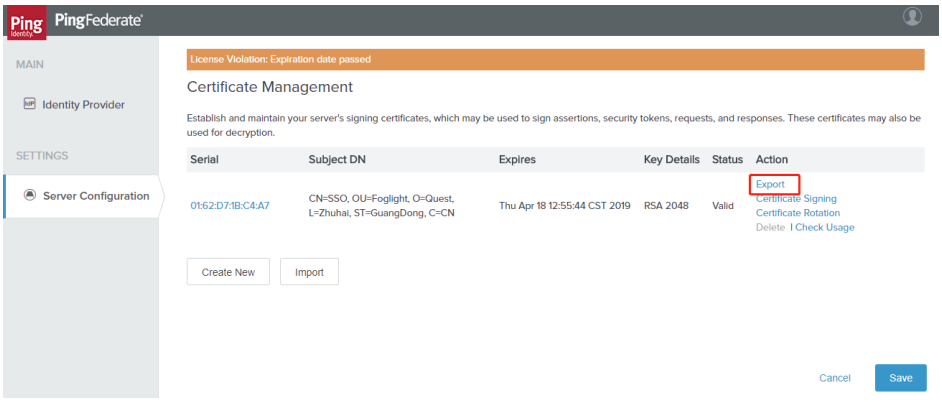
d *Attribute Key*: This is used to identity the attribute key of the assertion response. Take the below SAML 2.0 assertion response for example:

```
<samlp:Response xmlns:samlp="urn:oasis:names:tc:SAML:2.0:protocol" xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion"
  <saml:Issuer>http://idp.example.com/metadata.php</saml:Issuer>
  <samlp:Status>
    <samlp:StatusCode Value="urn:oasis:names:tc:SAML:2.0:status:Success"/>
  </samlp:Status>
  <saml:Assertion xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs="http://www.w3.org/2001/XMLSchema"
    <saml:Issuer>http://idp.example.com/metadata.php</saml:Issuer><ds:Signature xmlns:ds="http://www.w3.org/2000/09/
  <ds:SignedInfo><ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"/>
    <ds:SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1"/>
  <ds:Reference URI="#pfx8495b10f-2a17-5411-3a19-33bf6852f431"><ds:Transforms><ds:Transform Algorithm="http://www.w3
<ds:KeyInfo><ds:X509Data><ds:X509Certificate>MIICajCCAdOgAwIBAgIBADANBgkqhkiG9w0BAQ0FADBSMQswCQYDVQQGEwJ1czETMBEGA1UI
    <saml:Subject>
      <saml:NameID SPNameQualifier="http://sp.example.com/demo1/metadata.php" Format="urn:oasis:names:tc:SAML:2.0:na
      <saml:SubjectConfirmation Method="urn:oasis:names:tc:SAML:2.0:cm:bearer">
        <saml:SubjectConfirmationData NotOnOrAfter="2024-01-18T06:21:48Z" Recipient="http://sp.example.com/demo1/ind
      </saml:SubjectConfirmation>
    </saml:Subject>
    <saml:Conditions NotBefore="2014-07-17T01:01:18Z" NotOnOrAfter="2024-01-18T06:21:48Z">
      <saml:AudienceRestriction>
        <saml:Audience>http://sp.example.com/demo1/metadata.php</saml:Audience>
      </saml:AudienceRestriction>
    </saml:Conditions>
    <saml:AuthnStatement AuthnInstant="2014-07-17T01:01:48Z" SessionNotOnOrAfter="2024-07-17T09:01:48Z" SessionIndex
      <saml:AuthnContext>
        <saml:AuthnContextClassRef>urn:oasis:names:tc:SAML:2.0:ac:classes:Password</saml:AuthnContextClassRef>
      </saml:AuthnContext>
    </saml:AuthnStatement>
    <saml:AttributeStatement>
      <saml:Attribute Name="uid" NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic">
        <saml:AttributeValue xsi:type="xs:string">test</saml:AttributeValue>
      </saml:Attribute>
      <saml:Attribute Name="mail" NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic">
        <saml:AttributeValue xsi:type="xs:string">test@example.com</saml:AttributeValue>
      </saml:Attribute>
      <saml:Attribute Name="eduPersonAffiliation" NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:basic">
        <saml:AttributeValue xsi:type="xs:string">users</saml:AttributeValue>
        <saml:AttributeValue xsi:type="xs:string">examplerole1</saml:AttributeValue>
      </saml:Attribute>
    </saml:AttributeStatement>
  </saml:Assertion>
</samlp:Response>
```

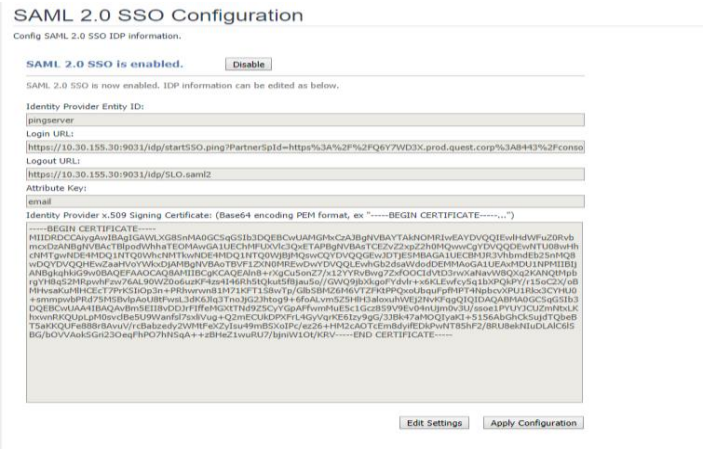
In the **saml:AttributeStatement** element, there are three **saml:Attribute** elements. Both **uid** and **mail** can be used to identify a user. In this sample response, either **uid** or **mail** can be used as the *Attribute Key*. Generally the IDP Server administrator knows details about this information. The Foglight Management Server tries to use several common keys, such as uid, email, mail, sAMAccountName and etc. Therefore if you are a Foglight administrator and have questions about this *Attribute Key*, reach out to your IDP server's administrator for detailed information.

e *Identity Provider x.509 Signing Certificate*: You could get this value from PingFederate's **Signing & Decryption Keys & Certificates**.





The following shows an example of SAML 2.0 SSO Configuration in PingFederate.



4 Click **Apply Configuration** to save the configuration.

Then configurations of integrating SAML 2.0 SSO with the Foglight Management Server in PingFederate are completed.

SAML 2.0 SSO Configuration
Config SAML 2.0 SSO IDP information.
SAML 2.0 SSO is enabled.
Disable
SAML 2.0 SSO is now enabled. IDP information can be edited as below.
Identity Provider Entity ID:
pingserver
Login URL:
https://10.30.155.30:9031/idp/startSSO.ping?PartnerSpId=http%3A%2F%2FQCGQ6Q52.prod.quest.corp%3A8080%2Fconsole
Logout URL:
https://10.30.155.30:9031/idp/SLO.saml2
Attribute Key:
email
Identity Provider x.509 Signing Certificate: (Base64 encoding PEM format, ex "-----BEGIN CERTIFICATE-----...")
-----BEGIN CERTIFICATE-----
MIIDRDCCAiygAwIBAgIGAWLXG8SnMA0GCSqGSIb3DQEBCwUAMGMxCzAJBgNVBAYTAkNOMRIwEAYD
VQQIEwlHdWFuZ0RvbmcxDzANBgNVBAcTBlpodWhhaTEOMAwGA1UEChMFUXVlc3QxETAPBgNVBAsT
CEZvZ2xpZ2h0MQwwCgYDVQQDEwNTU08wHhcNMTgwNDE4MDQ1NTQ0WhcNMTkwNDE4MDQ1NTQ0WjBj
MQswCQYDVQQGEwJDTjESMBAGA1UECBMJR3VhbmdEb25nMQ8wDQYDVQQHEwZaaHVoYWkxDjAMBgNV
BAoTBVF1ZXN0MREwDwYDVQQLEwhGb2dsaWdodDEfMA0GA1UEAxMGU1NPMIIBIjANBgkqhkiG9w0B
AQEFAAOCAQ8AMIIBCgKCAQEAln8+rXgCu5onZ7/x12YYRvBwg7ZxfOOCIdVtD3rwXaNavW8QXq2K
ANQtMpbrgYH8qS2MRpwhFzw76AL90WZ0o6uzKF4zs4I46RhStQkut5f8jau5o//GWQ9jbXkgoFYd
vlr+x6KLEwfcy5q1bXPQkPY/r15oC2X/oBMHvsaKuMlHCEcT7PrKSIlOp3n+PRhwrwn81M71KFT1
S8wTp/GlbSBMZ6M6VTZFKtPPQxoUbquFpfMPT4NpbcvXPU1Rkx3CYHU0+smmpwbPRd75MSBvlpAo
U8tFwsL3dK6Jlq3TnojjGZJhtog9+6foALvm5Z5HH3aloxuhWEj2NvKFqgQIQIDAQABMA0GCSqG
SIb3DQEBCwUAA4IBAQAvBm5EIBvDDJrFlffeMGXtTN6925CyYGpAFfwmMuE5c1Gcz8S9V9Ev04n
Ujm0v3U/ssoe1PYUY3CUZmNtxLKhxwnRKQUpLpM0svclBe5U9WanfsI7sxlVug+Q2mECUkDPXFr
L4GyVqrKE6Izy9gG/3JBk47aMOQIyaKI+5156AbGhCkSujdTQbeBT5aKKQUFe888r8AvuV/rcBab
zedy2WMtFeXZyIsu49mBSXoIPc/ez26+HM2cAOTcEm8dyifEDkPwNT85hF2/8RU8ekNIuDLAlC6l
SBG/bOVVAokSGri23OeqFhPO7hN5qA++zBHeZ1wuRU7/bjniW1Ot/KRV
-----END CERTIFICATE-----
Cancel
Apply Configuration

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- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product.