

Configuring SAML single sign-on  
authentication for Quest® QoreStor™

## Technical White Paper

Quest Engineering  
February 2022



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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.

Setting up SAML single sign-on authentication for Quest QoreStor

Updated – February 27, 2022

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# Executive summary

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This white paper provides information about how to set up SAML single sign-on authentication for QoreStor. This document is a quick reference guide and includes the three supported identity providers.

For additional information, see the QoreStor documentation and other data management application best practices whitepapers at:

<http://support.quest.com/qorestor>

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# Setting up SAML in an identity provider

The following chapter describes how to configure SAML 2.0 with QoreStor based on your identity provider.

## Understanding the SAML 2.0 enterprise application

Before you can establish SAML authentication with QoreStor, you must install the SAML 2.0 application in an identity provider (IdP). QoreStor supports the following IdPs:

- Azure Active Directory
- Okta
- OneLogin

## Limitations

The SAML authentication integration with QoreStor includes the following limitations:

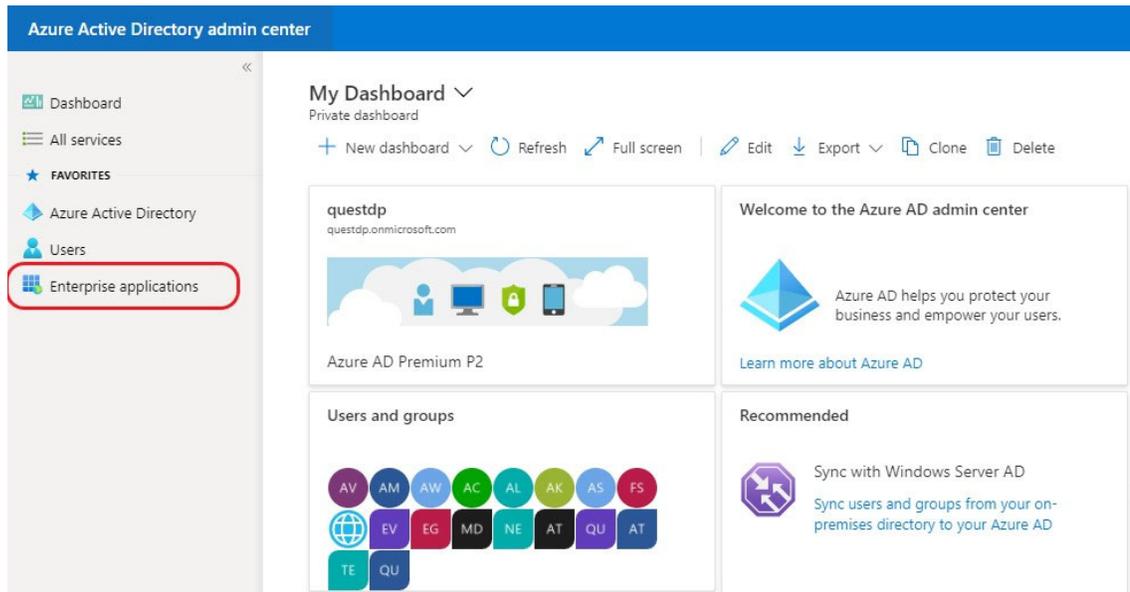
- SAML works only when accessing QoreStor through FQDN, not with an IP address
- Single log-out (SLO) is not supported.
- Firefox is not supported.
- To prevent login failures, the system clock of the machine where QoreStor is installed must be synchronized with the IdP clock.
- Only users are supported. QoreStor does not support IdP roles and groups.
- QoreStor does not support IdP-initiated SSO. You must initiate the login from QoreStor.

# Configuring SAML in Azure Active Directory

## To configure SAML in Azure Active Directory

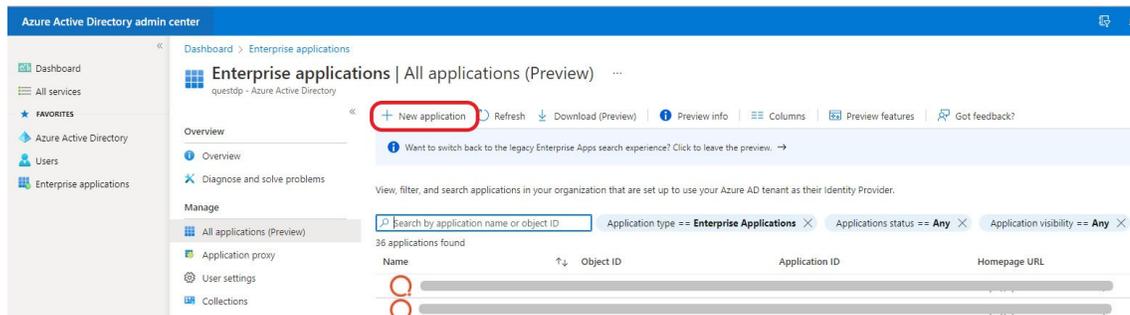
- 1 From the Azure Active Directory (AD) user interface (UI), in the left navigation, click **Enterprise applications**.

Figure: Azure AD – Enterprise applications



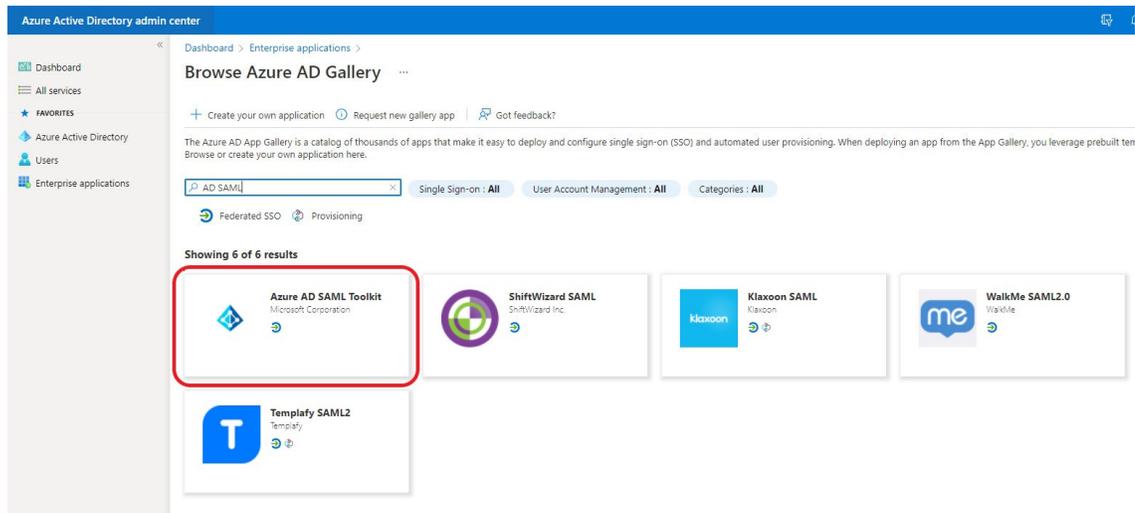
- 2 On the Enterprise applications page, click **New application**.

Figure: Azure AD – New application



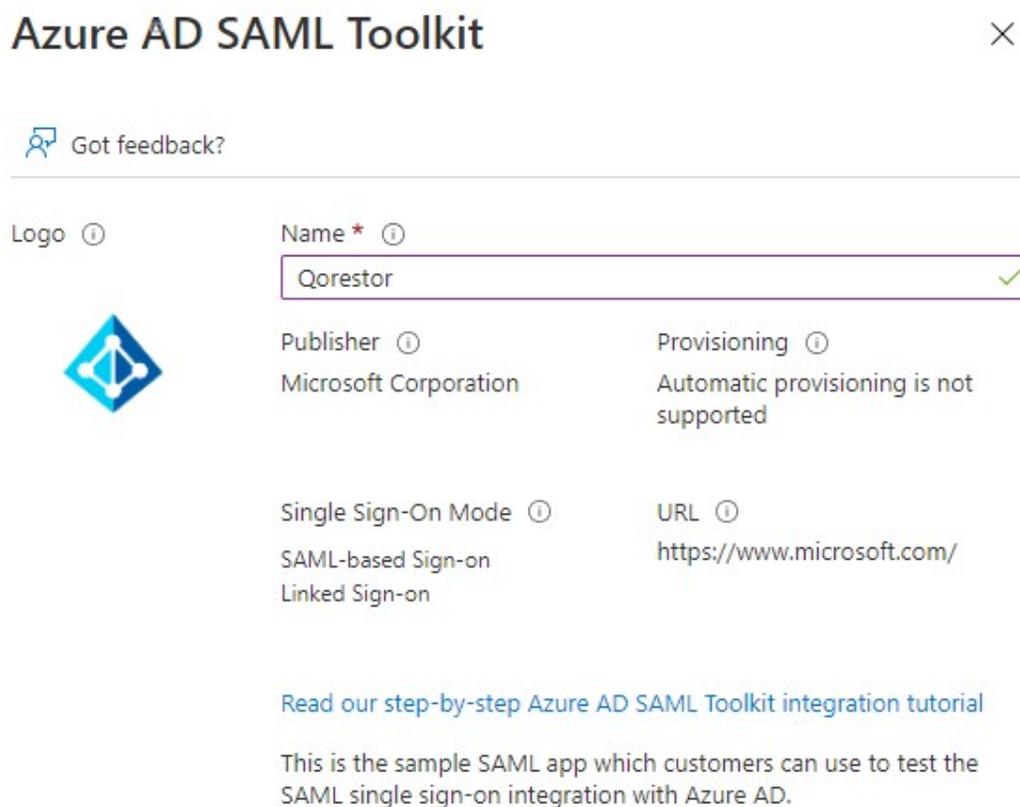
- 3 In the Azure AD Gallery, search for **AD SAML**, and then click **Azure AD SAML Toolkit**.

Figure: Azure AD Gallery



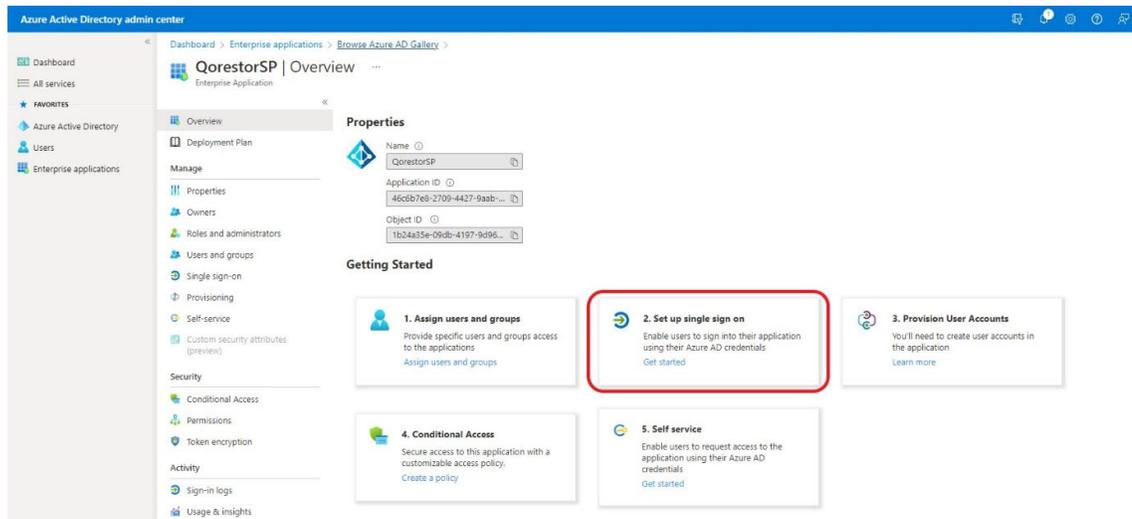
- 8 In the Azure AD SAML Toolkit, enter a name for the configuration, such as the hostname of the QoreStor server.

Figure: Azure AD SAML Toolkit



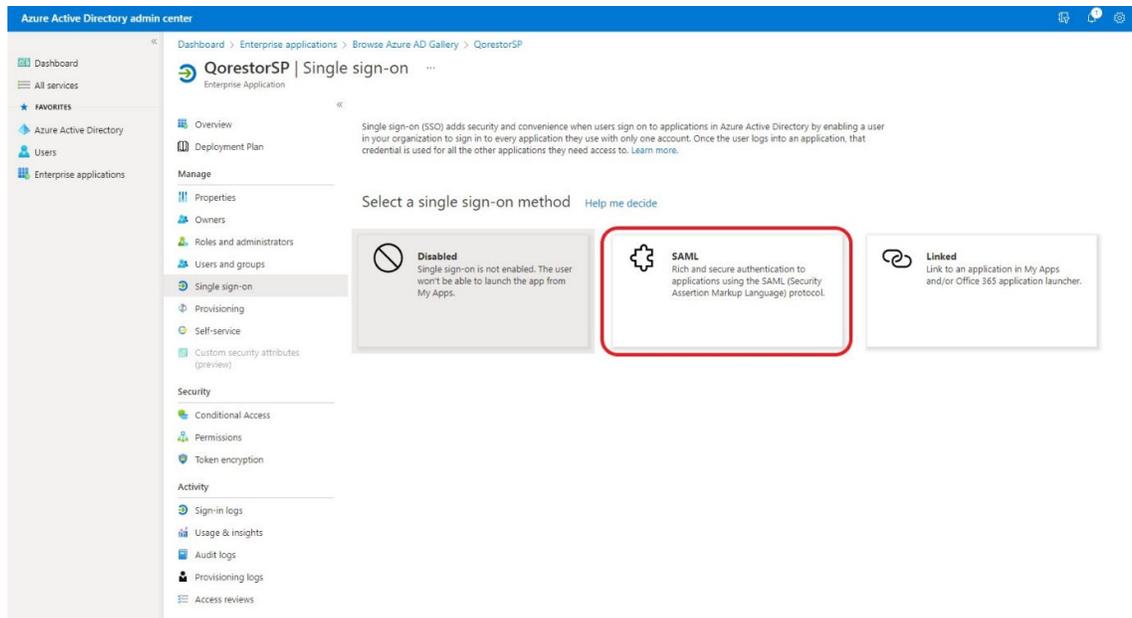
- 9 On the Overview page, under Getting Started, click **Set up single sign on**.

Figure: SAML Overview page



10 On the Single sign-on page, under Select a single sign-on method, click **SAML**.

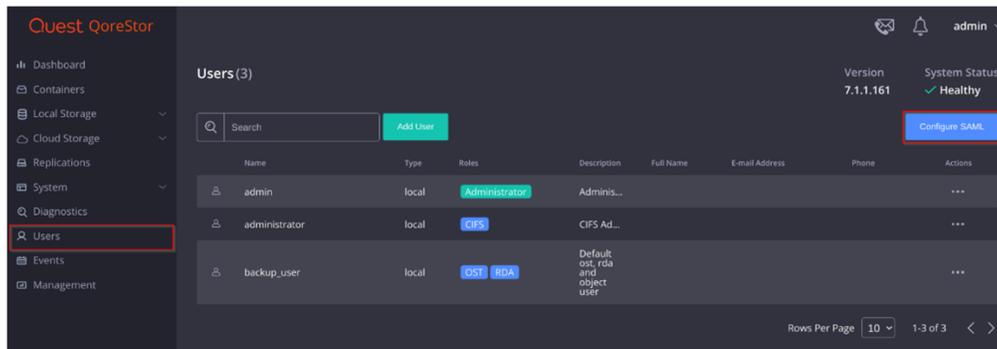
Figure: Single sign-on page



8 Go to the Qorestor UI and, in the left navigation, click **Users**.

9 On the Users page, click **Configure SAML**.

Figure: QoreStor Users page

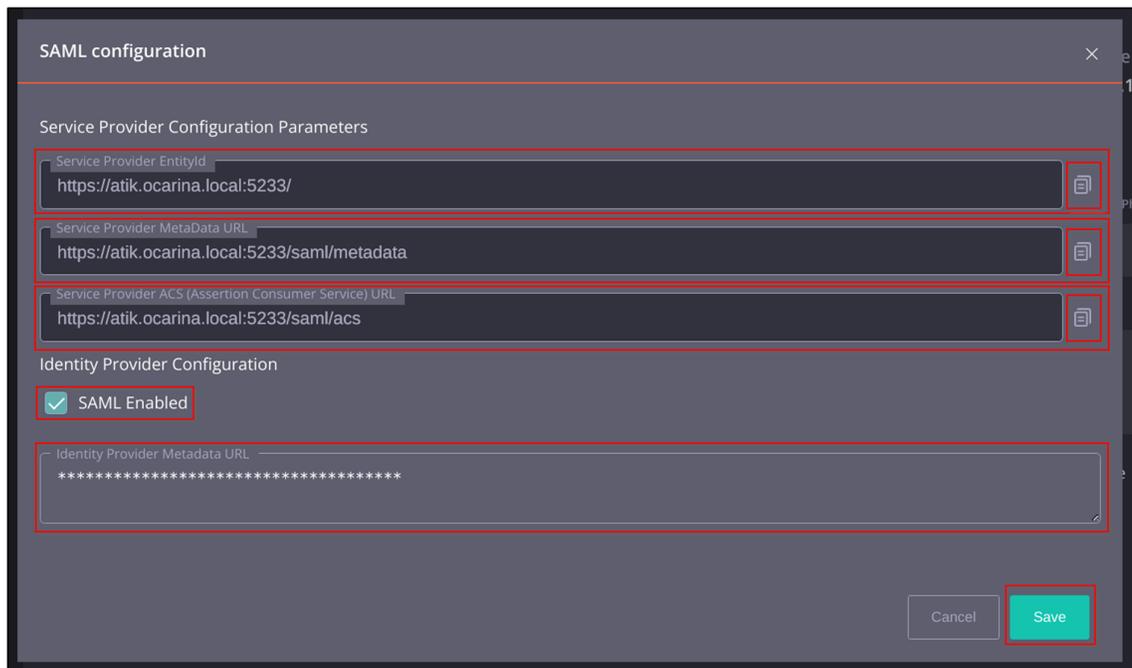


The SAML configuration window opens with the Service Provider Configuration Parameters pre-populated.

10 In the SAML configuration window, copy the following URLs:

- **Service Provider EntityId**
- **Service Provider MetaData URL**
- **Service Provider ACS (Assertion Consumer Service) URL**

Figure: SAML configuration window

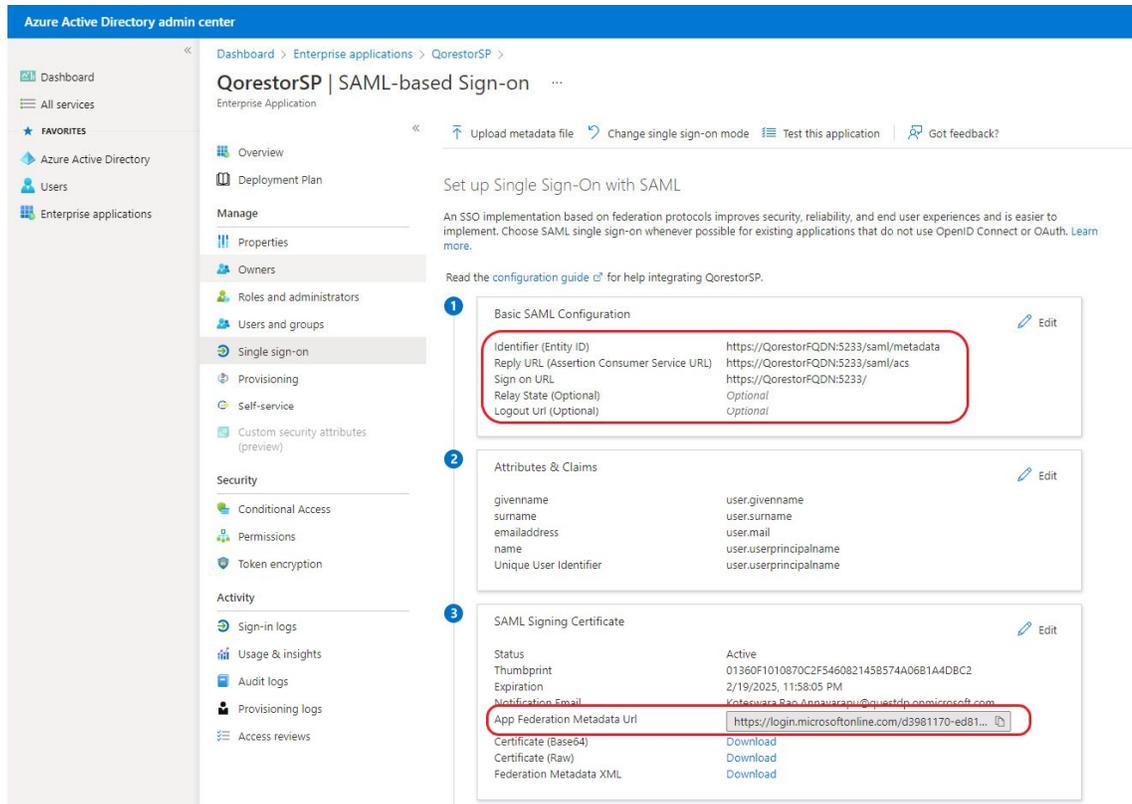


11 Return to the Azure AD UI and, on the Set up Single Sign-On with SAML page, complete the following actions:

- In the Basic SAML Configuration section, click **Edit** and enter the following details you obtained from the QoreStor UI:
  - For **Identifier (Entity ID)**, enter the **Service Provider EntityId**.

- For **Reply URL (Assertion Consumer Service URL)**, enter the **Service Provider MetaData URL**.
- For **Sign on URL**, enter the **Service Provider ACS (Assertion Consumer Service) URL**.
- For **Relay State (Optional)** and **Logout Url (Optional)**, leave them blank.
- In the SAML Signing Certificate section, copy the **App Federation Metadata Url** link.

Figure: Set up Single Sign-On with SAML page



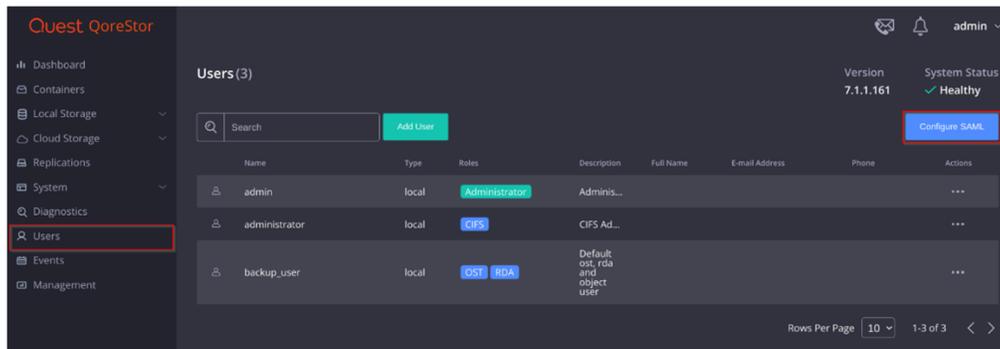
11 To add user identities to the SAML application in Azure AD, see Microsoft Azure Active Directory documentation.

12 To add users to the SAML integration in QoreStor, return to the QoreStor UI.

13 In the left navigation, click **Users**.

14 On the Users page, click **Configure SAML**.

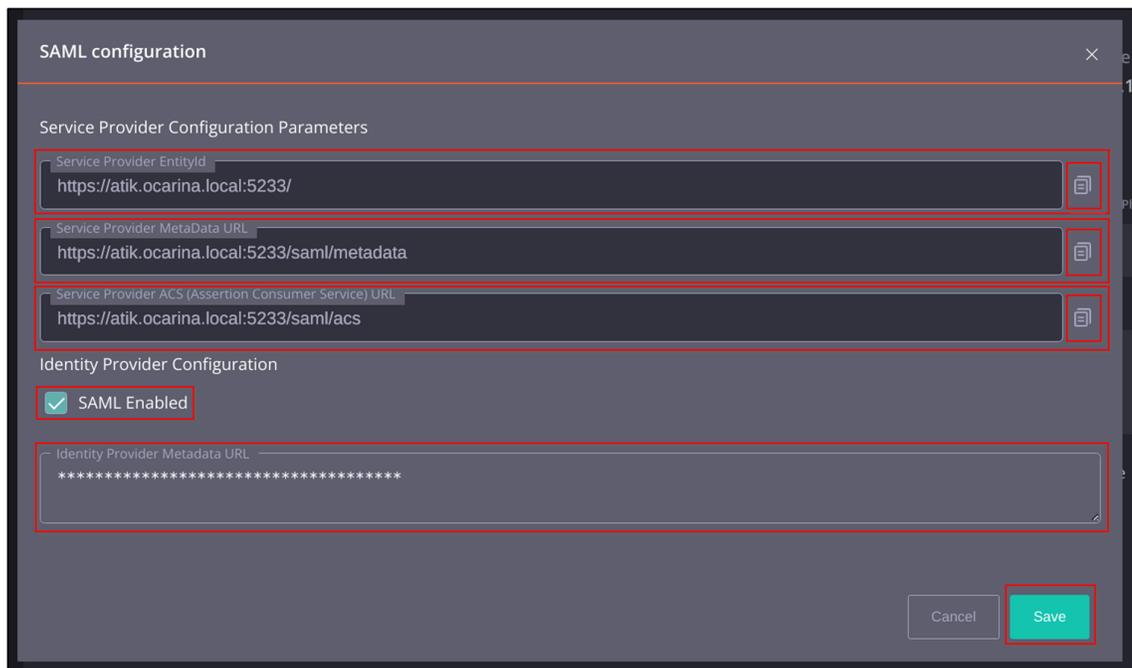
Figure: QoreStor Users page



The SAML configuration window opens with the Service Provider Configuration Parameters pre-populated.

- 15 In the SAML configuration window, in the **Identity Provider Metadata URL** text box, paste the App Federation Metadata URL that you copied in Step 7b, and then click **Save**.

Figure: SAML configuration window



**i** **NOTE:** Any user identities that you added to the SAML application in Azure AD, you must also add to QoreStor. For more information, see the “Registering an SSO user with the QoreStor Server” in the *QoreStor User Guide*.

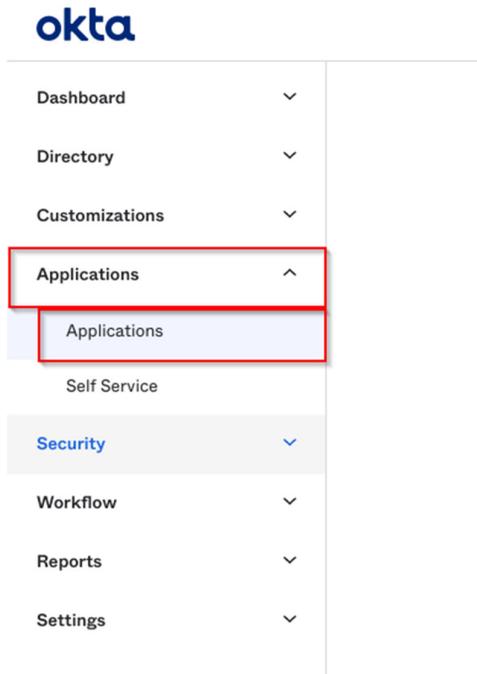
- 17 Restart the ocaui service.

# Configuring SAML in Okta

## To configure SAML in Okta

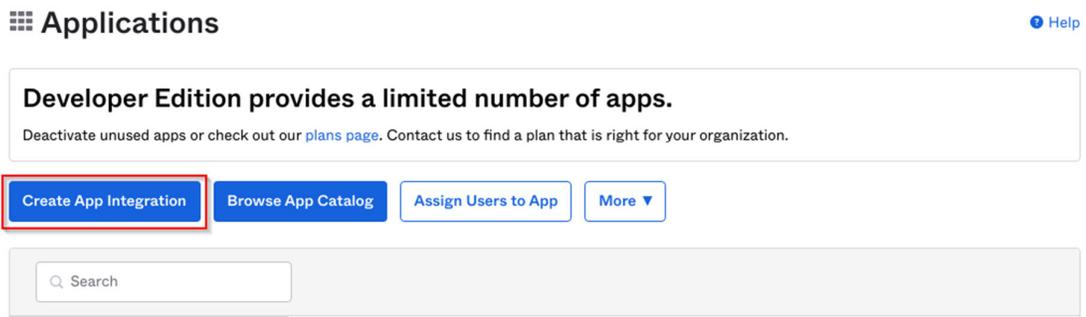
- 1 In the Okta UI, in the left navigation menu, expand the **Applications** menu, and then click **Applications**.

Figure: Okta Applications menu



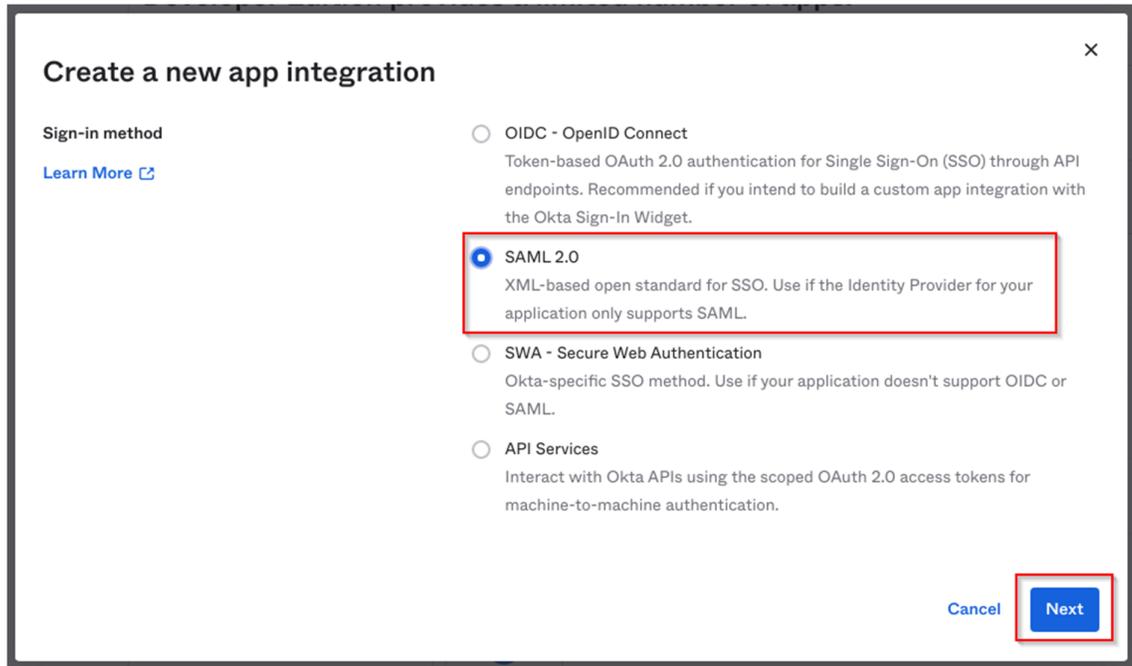
- 2 On the Applications page, click **Create App Integration**.

Figure: Okta Application page



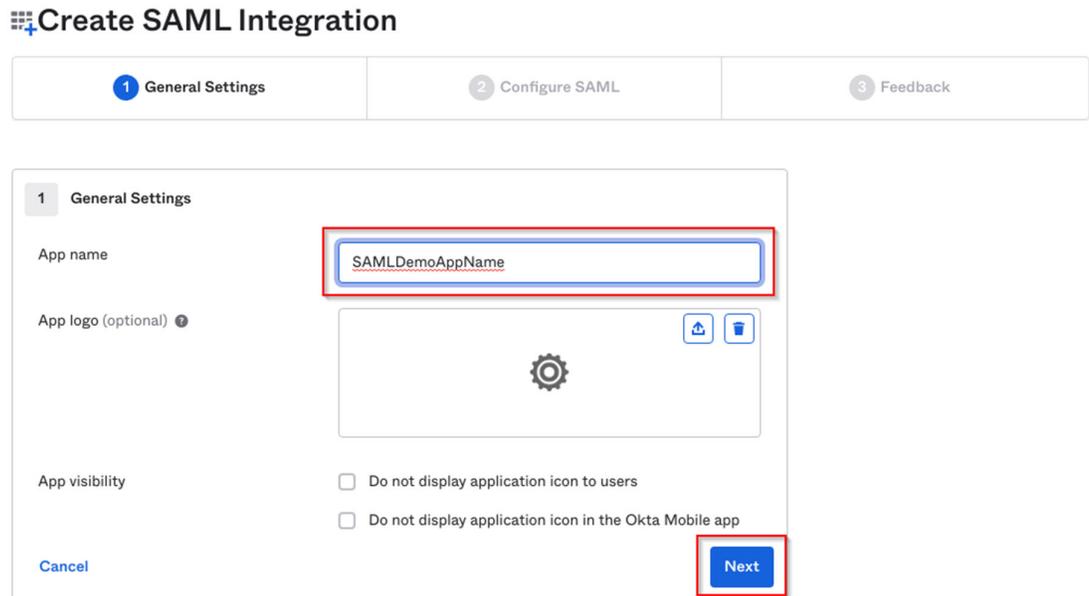
- 3 In the Create a new app integration window, select **SAML 2.0**, and then click **Next**.

Figure: Okta Create a new app integration window – SAML 2.0



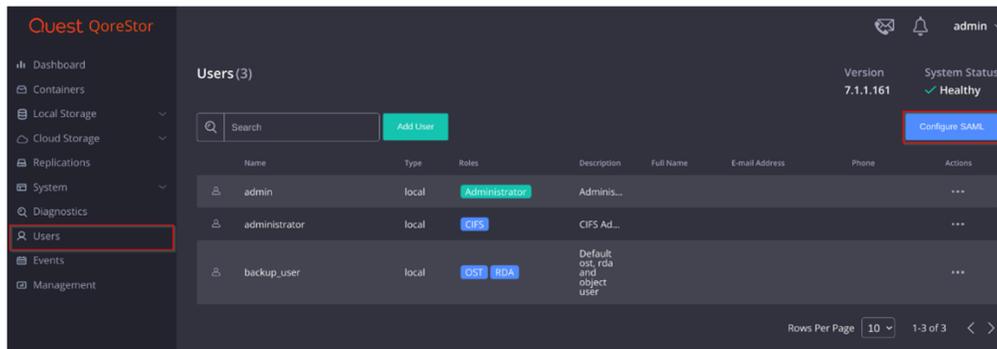
- 4 On the Create SAML Integration page, on the General Settings tab, enter an **App name** for the integration, such as the hostname of the QoreStor Server, and then click **Next**.

Figure: Create SAML Integration - General Settings tab



- 5 Go to the QoreStor UI and, in the left navigation, click **Users**.
- 6 On the Users page, click **Configure SAML**.

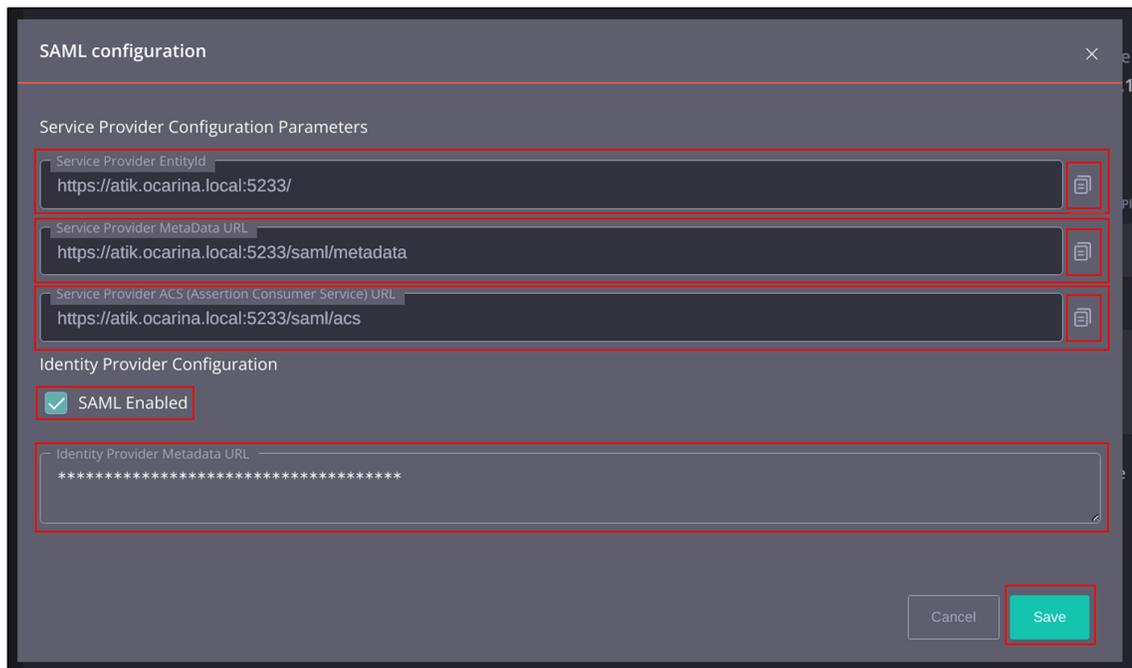
Figure: QoreStor Users page



The SAML configuration window opens with the Service Provider Configuration Parameters pre-populated.

- 7 In the SAML configuration window, copy the following URLs:
  - **Service Provider EntityId**
  - **Service Provider MetaData URL**
  - **Service Provider ACS (Assertion Consumer Service) URL**

Figure: SAML configuration window



- 8 Return to the Okta UI and, on the SAML Settings page, enter the following details:
  - For **Single sign on URL**, enter the **Service Provider ACS (Assertion Consumer Service) URL**, and then select **Use this for Recipient URL and Destination URL**.
  - For **Audience URI (SP Entity ID)**, enter the **Service Provider MetaData URL**.
  - For **Name ID format**, select **EmailAddress**.

- For **Application username**, select **Email**.

Figure: Create SAML Integration – Configure SAML tab

### Create SAML Integration

1 General Settings    2 Configure SAML    3 Feedback

#### A SAML Settings

**General**

Single sign on URL ?   
 Use this for Recipient URL and Destination URL  
 Allow this app to request other SSO URLs

Audience URI (SP Entity ID) ?

Default RelayState ?   
If no value is set, a blank RelayState is sent

Name ID format ?

Application username ?

Update application username on

[Show Advanced Settings](#)

**What does this form do?**  
This form generates the XML needed for the app's SAML request.

**Where do I find the info this form needs?**  
The app you're trying to integrate with should have its own documentation on using SAML. You'll need to find that doc, and it should outline what information you need to specify in this form.

**Okta Certificate**  
Import the Okta certificate to your Identity Provider if required.

[Download Okta Certificate](#)

- 8 On the Feedback tab, select **I'm an Okta customer adding an internal app**, and then select **This is an internal app that we have created**.

Figure: Create SAML Integration – Feedback tab

## ☰ Create SAML Integration

1 General Settings

2 Configure SAML

3 Feedback

### 3 Help Okta Support understand how you configured this application

Are you a customer or partner?

I'm an Okta customer adding an internal app

I'm a software vendor. I'd like to integrate my app with Okta

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**i** The optional questions below assist Okta Support in understanding your app integration.

App type ⌵

This is an internal app that we have created

[Previous](#) [Finish](#)

**Why are you asking me this?**

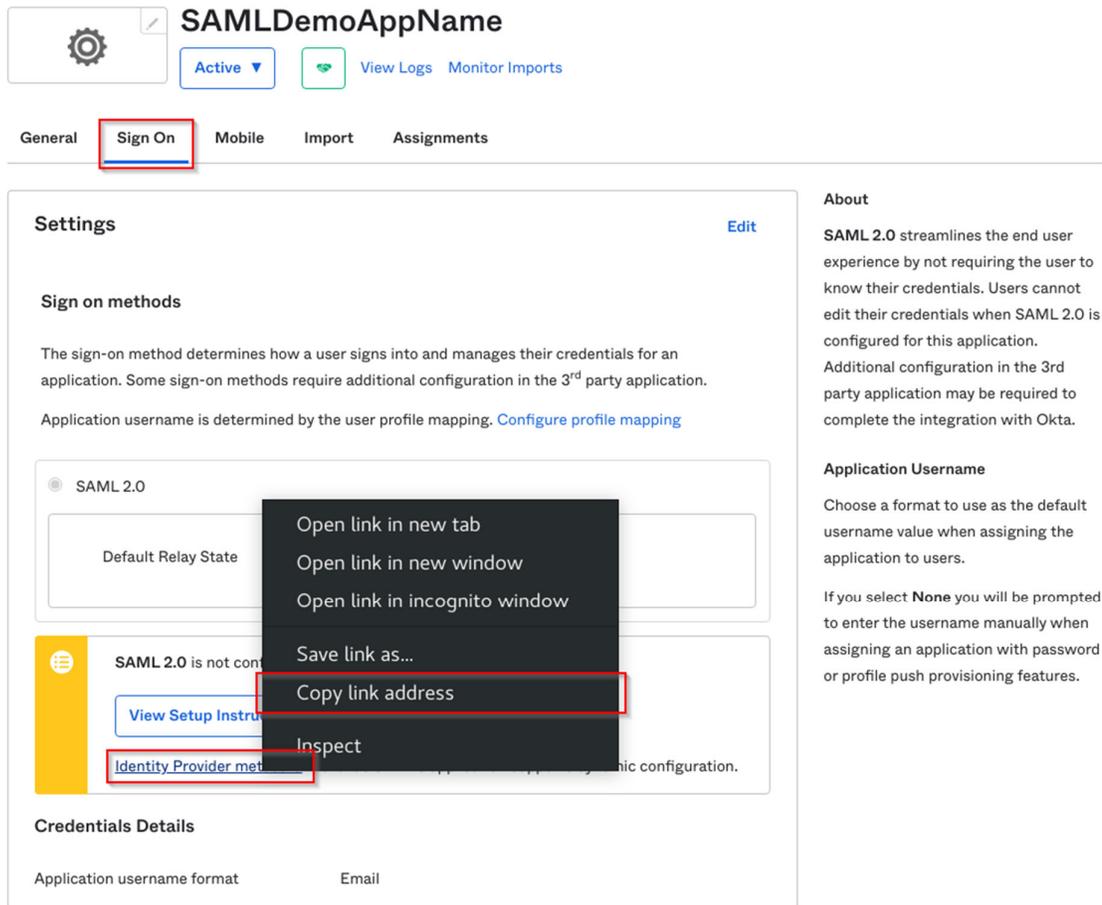
This form provides Okta Support with useful background information about your app. Thank you for your help—we appreciate it.

9 Click **Finish**.

The UI opens the page for the SAML app integration.

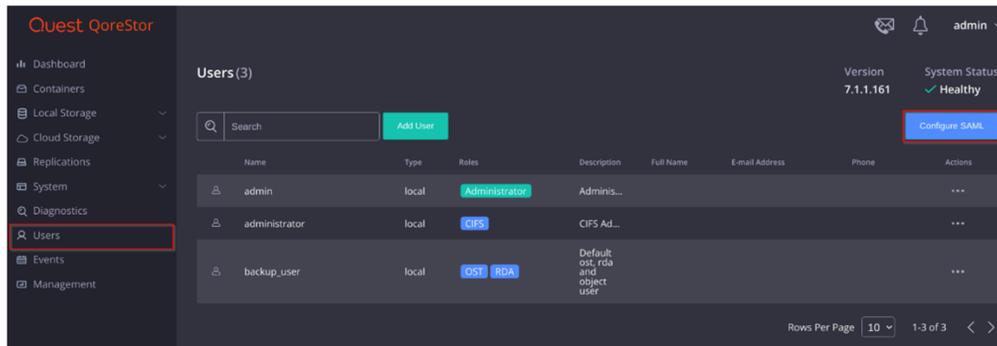
10 On the SAML integration page, go to the **Sign On** tab, and then right-click **Identity Provider metadata** and select **Copy link address**.

Figure: SAML app integration IdP metadata



- 11 To add user identities to the SAML application in Okta, see Okta documentation.
- 12 To add users to QoreStor, return to the QoreStor UI and, in the left navigation, click **Users**.
- 13 On the Users page, click **Configure SAML**.

Figure: QoreStor Users page



The SAML configuration window opens with the Service Provider Configuration Parameters pre-populated.

- 14 In the SAML configuration window, in the **Identity Provider Metadata URL** text box, paste the Identity Provider metadata link that you copied in Step 8, and then click **Save**.

**Figure: SAML configuration window**



**i** **NOTE:** Any user identities that you added to the SAML application in Azure AD, you must also add to QoreStor. For more information, see the “Registering an SSO user with the QoreStor Server” in the *QoreStor User Guide*.

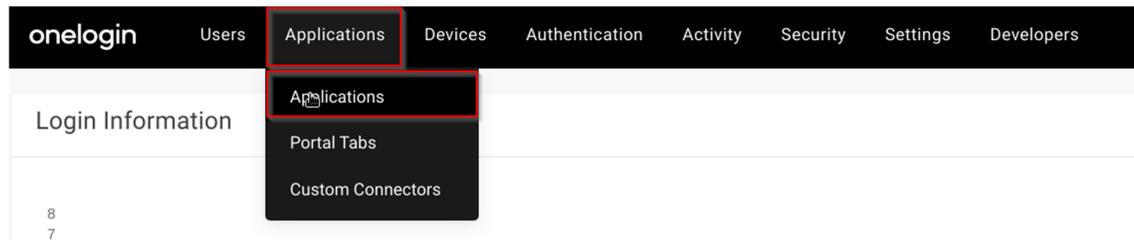
- 15 Restart the ocaui service.

# Configuring SAML in OneLogin

## *To configure SAML in OneLogin*

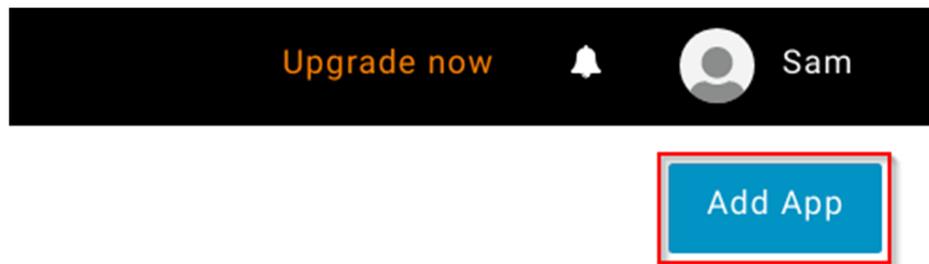
- 1 In the OneLogin UI, in the **Applications** menu, click **Applications**.

Figure: OneLogin Applications



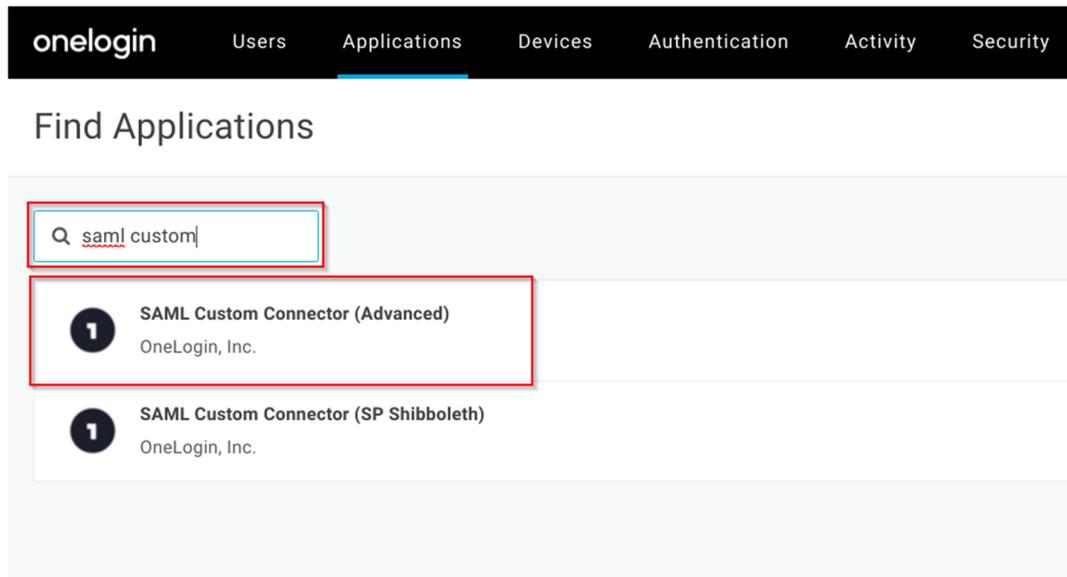
- 2 On the Applications page, click **Add App**.

Figure: OneLogin Add App



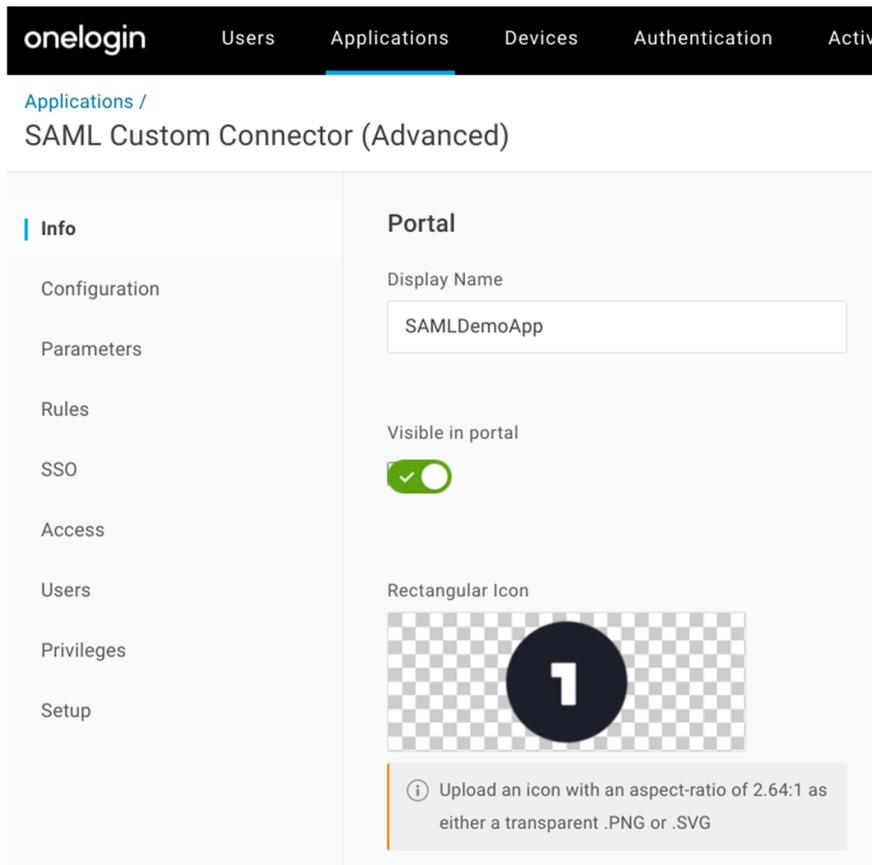
- 3 On the Find Applications page, search for **saml custom**, and then click **SAML Custom Connector (Advanced)**.

Figure: Find Applications page – SAML application



- 4 On the Info page of SAML Custom Connector (Advanced), enter a **Display Name** for the application integration, such as the hostname of the QoreStor Server, and then select **Visible in portal**.

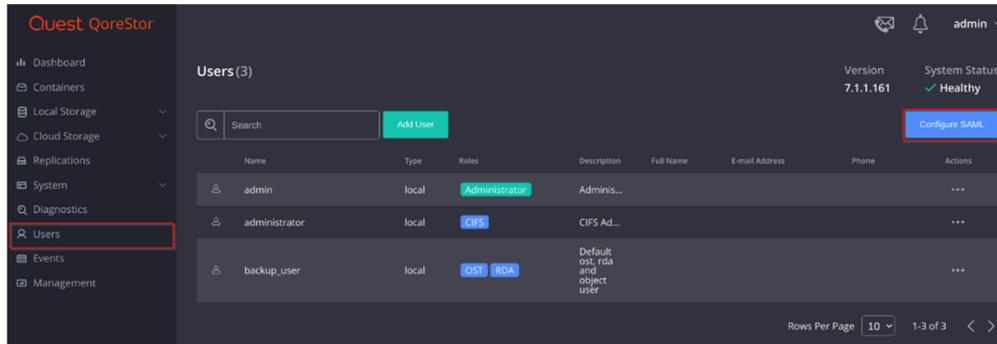
Figure: SAML Custom Connector (Advanced) – Info page



15 Go to the QoreStor UI and, in the left navigation, click **Users**.

16 On the Users page, click **Configure SAML**.

Figure: QoreStor Users page



The SAML configuration window opens with the Service Provider Configuration Parameters pre-populated.

17 In the SAML configuration window, copy the following URLs:

- **Service Provider EntityId**
- **Service Provider MetaData URL**
- **Service Provider ACS (Assertion Consumer Service) URL**

Figure: SAML configuration window

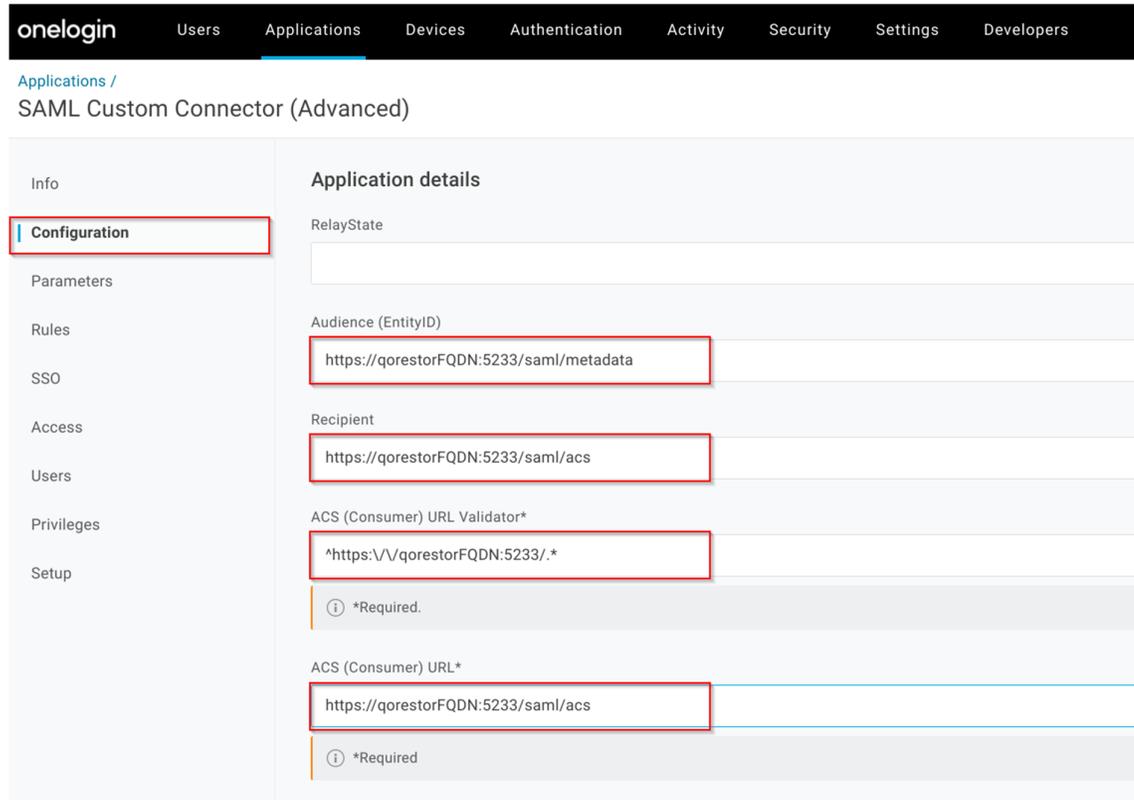


9 Return to the OneLogin UI and, on the Configuration page, enter the following details:

- For **Audience (EntityID)**, enter the **Service Provider MetaData URL**.

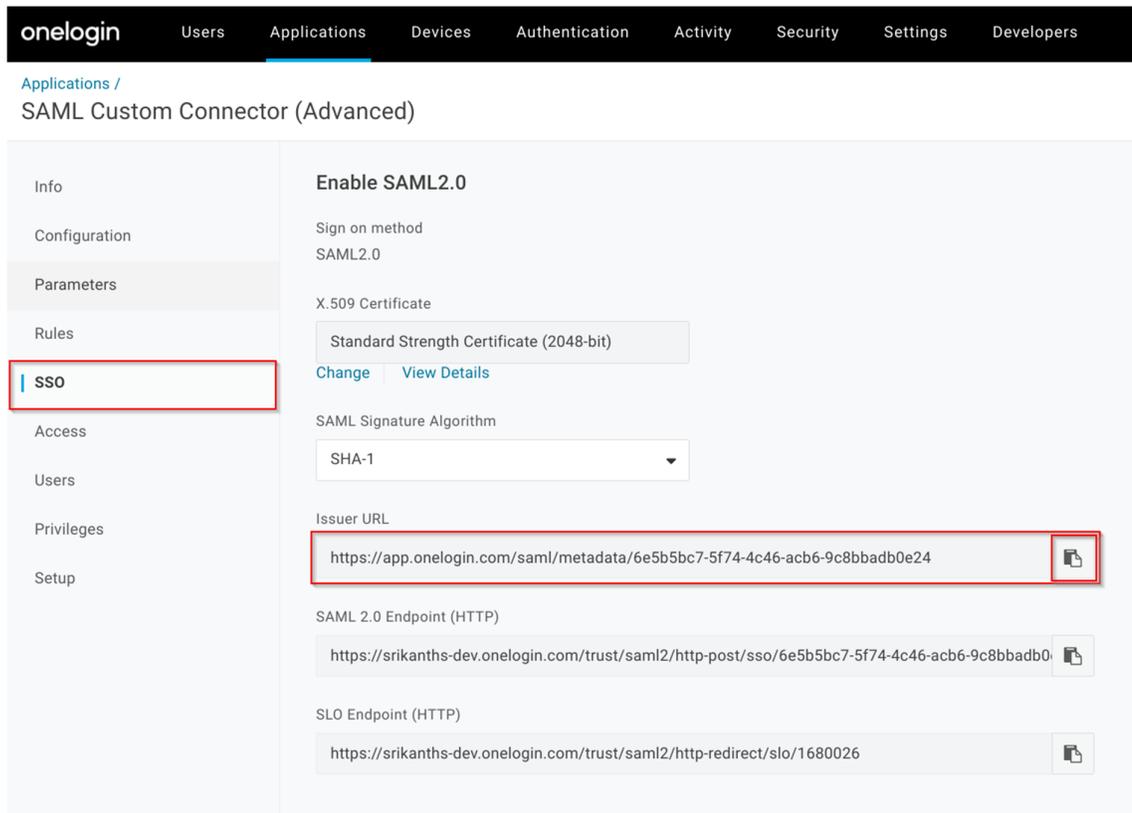
- For **Recipient**, enter the **Service Provider ACS (Assertion Consumer Service) URL**.
- For **ACS (Consumer) URL Validator\***, enter string in the following format:  
`^https: \ / \ /hostname_of_qorestor_server.domainname_of_qorestor_server:5233/.*`
- For **ACS (Consumer) URL\***, enter the **Service Provider EntityId**.

Figure: SAML Custom Connector (Advanced) - Configuration page



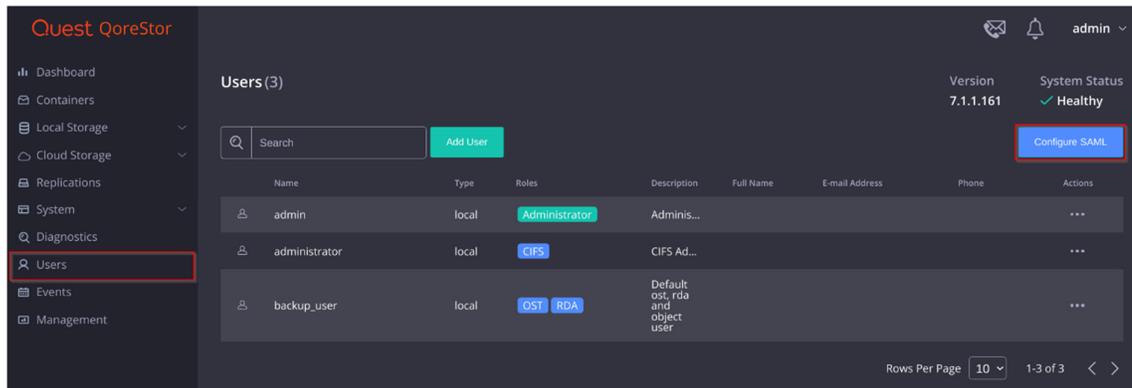
- 5 On the SSO page, to copy the **Issuer URL**, click the icon on the right side of the URL.

Figure: SAML Custom Connector (Advanced) – SSO page



- 6 Click **Save**.
- 7 To add user identities to the SAML application in OneLogin, see OneLogin documentation.
- 8 To add users to QoreStor, return to the QoreStor UI and, in the left navigation, click **Users**.
- 9 On the Users page, click **Configure SAML**.

Figure: QoreStor Users page



The SAML configuration window opens with the Service Provider Configuration Parameters pre-populated.

- 10 In the SAML configuration window, in the **Identity Provider Metadata URL** text box, paste the Issuer URL that you copied in Step 6, and then click **Save**.

**Figure: SAML configuration window**



**i** **NOTE:** Any user identities that you added to the SAML application in Azure AD, you must also add to QoreStor. For more information, see the “Registering an SSO user with the QoreStor Server” in the *QoreStor User Guide*.

- 11 Restart the ocaui service.

# Managing SAML in the QoreStor UI

For information about managing the SAML integration and managing SAML users, see the *QoreStor User Guide*.