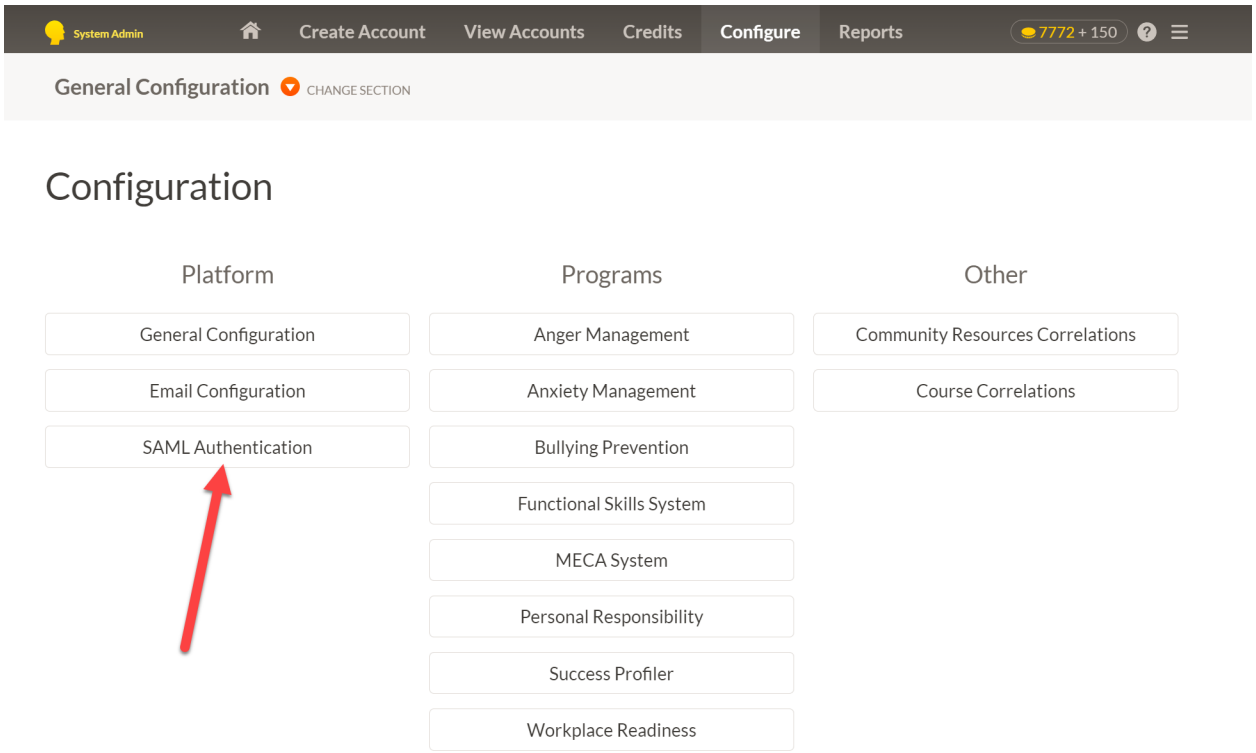
# How to setup Microsoft Azure SAML2 SSO

In order to use our SAML SSO integration, you will first need to reach out to The Conover Company and request access to this feature.

Once enabled, you will have access to a Configuration Option.



When you select the option, all of the information you need to create the SAML2 connection will be present on the screen.

System Admin | Create Account | View Accounts | Credits | Configure | Reports | 7772 + 150

SAML Authentication

# Editing SAML configuration

## Instructions

1. Log into your Identity Provider (IdP) and create a new SAML app.
2. Your IdP will require several configuration options. The table below lists the values you need to enter into your IdP.

| | |
|---|---|
| Reply URL / Assertion / Destination/ Recipient URL | `https://staging.conovercompany.com/users/saml/auth` |
| Audience URL | `https://staging.conovercompany.com/users/saml/metadata` |
| Sign on URL | `https://staging.conovercompany.com/users/saml/auth` |
| Relay State | `https://staging.conovercompany.com/` |
| Name ID / Application Username / Unique User Identifier | `EmailAddress` |
| Certificate fingerprint encoding algorithm | SHA256 |
| SSO Bookmark Link<br>Visiting this link will initiate the sign-in flow with your Identity Provider | `https://staging.conovercompany.com/conover/auth/saml` |

3. Identity Providers create a certificate for every application. We need a **certificate fingerprint** encoded with `SHA256` algorithm. If the identity provider doesn't provide such fingerprint, use OpenSSL command line tools to generate it:
   `openssl x509 -text -noout -in /path/to/certificate.cert -fingerprint -sha256`
   The certificate fingerprint looks like this: `F1:20:A9:91:A8:ED:F2:7E:EC:1B...`

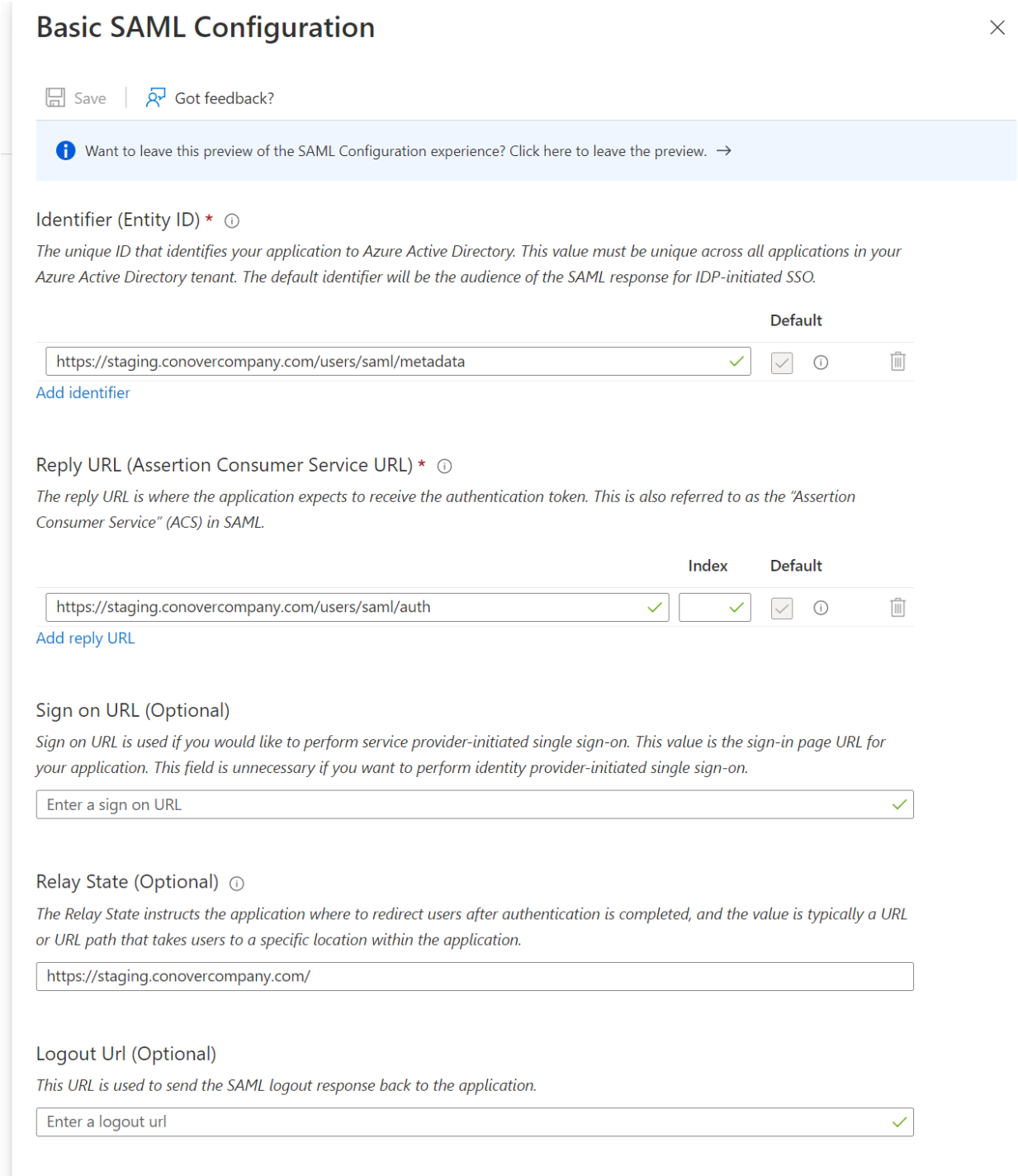
SSO target URL / Login URL * https://login.microsoftonline.com/a9c9b6f1-823f-4d7c-9442-dfdd1f2eb75c/saml2

Certificate fingerprint (SHA256) * 9C:19:CD:5E:D6:EE:D7:77:01:6A:CE:20:DD:AC:7B:BC:44:2B:D9:35:CD:39:61:1B:A2:06:57:BD:A9:0F:A

IdP Issuer/Identifier URL * https://sts.windows.net/a9c9b6f1-823f-4d7c-9442-dfdd1f2eb75c/

Save SAML authentication settings

Here are some sample screens from our integration with Microsoft Azure so you can see where we put each URL.



Home > Default Directory | Enterprise applications > Enterprise applications | All applications > Conover Online Test | SAML-based Sign-on > SAML-based Sign-on >

## Attributes & Claims ...

+ Add new claim  + Add a group claim  Columns  Got feedback?

### Required claim

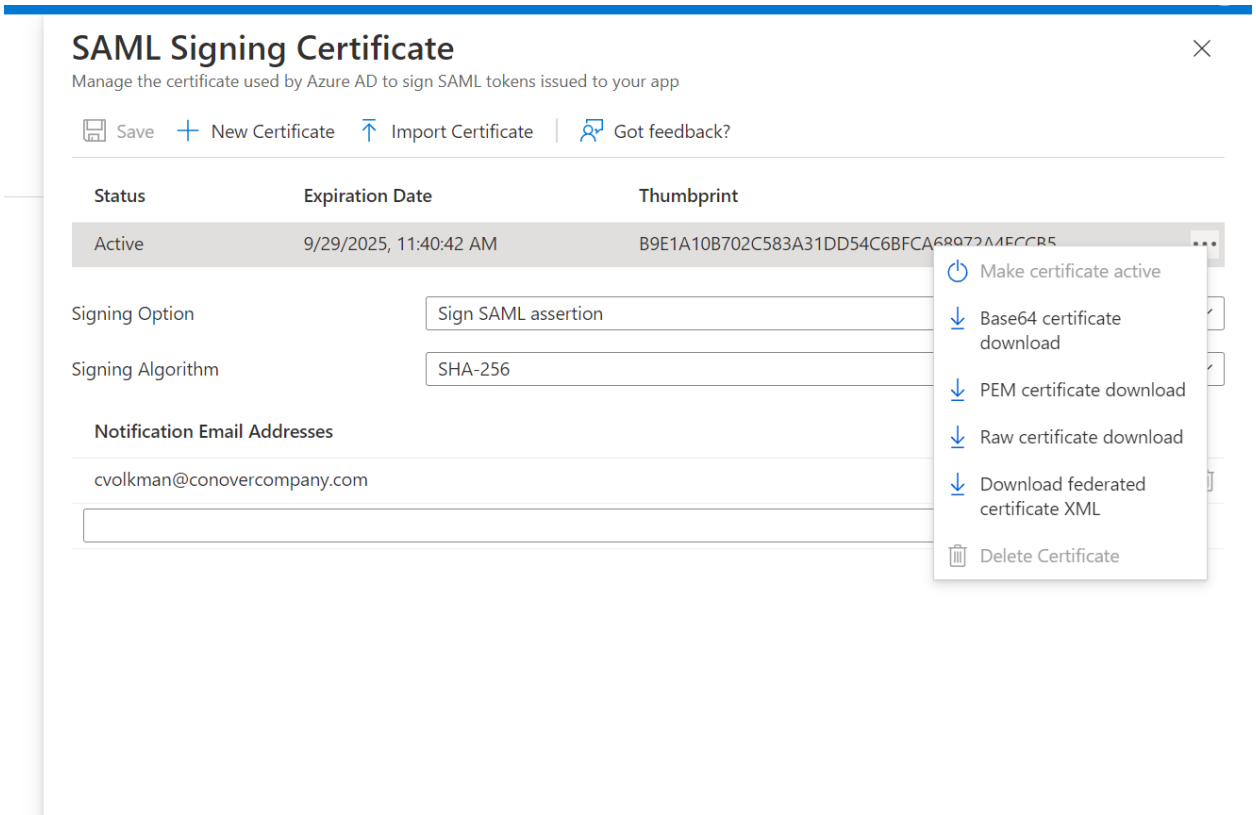
| Claim name | Value | |
|---|---|---|
| Unique User Identifier (Name ID) | user.mail [nameid-format:emailAddress] | ••• |

### Additional claims

| Claim name | Value | |
|---|---|---|
| http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailadd... | user.mail | ••• |
| http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname | user.givenname | ••• |
| http://schemas.xmlsoap.org/ws/2005/05/identity/claims/name | user.userprincipalname | ••• |
| http://schemas.xmlsoap.org/ws/2005/05/identity/claims/surname | user.surname | ••• |

Advanced settings (Preview)

We require the email address to be sent as the Unique User Identifier. We were forced to edit the value to make sure only the email address was sent. This was probably due to us using a trial version of Azure that was not completely setup with our domain name.




There is an issue with the way Azure generates is thumbprints. Do not use Azure's SHA256 thumbprint. What you need to do is download the PEM certificate and generate your own SHA256 thumbprint.

You can either use OpenSSL Command Line
openssl x509 -text -noout -in /path/to/certificate.cert -fingerprint -sha256

Or this website can also help you generate the proper thumbprint.
https://www.samltool.com/fingerprint.php

The certificate fingerprint looks like this: F1:20:A9:91:A8:ED:F2:7E:EC:1B...

Home > Default Directory | Enterprise applications > Enterprise applications | All applications > Conover Online Test >

# Conover Online Test | SAML-based Sign-on

Enterprise Application

- Overview
- Deployment Plan
- Diagnose and solve problems

**Manage**

- Properties
- Owners
- Roles and administrators
- Users and groups
- Single sign-on
- Provisioning
- Application proxy
- Self-service
- Custom security attributes (preview)

**Security**

- Conditional Access
- Permissions
- Token encryption

**Activity**

- Sign-in logs
- Usage & insights
- Audit logs
- Provisioning logs
- Access reviews

**Troubleshooting + Support**

- Virtual assistant (Preview)
- New support request

Upload metadata file | Change single sign-on mode | Test this application | Got feedback?

**1 Basic SAML Configuration** — Edit

| | |
|---|---|
| Identifier (Entity ID) | https://staging.conovercompany.com/users/saml/metadata |
| Reply URL (Assertion Consumer Service URL) | https://staging.conovercompany.com/users/saml/auth |
| Sign on URL | *Optional* |
| Relay State (Optional) | https://staging.conovercompany.com/ |
| Logout Url (Optional) | *Optional* |

**2 Attributes & Claims** — Edit

| | |
|---|---|
| givenname | user.givenname |
| surname | user.surname |
| emailaddress | user.mail |
| name | user.userprincipalname |
| Unique User Identifier | user.mail |

**3 SAML Certificates**

**Token signing certificate** — Edit

| | |
|---|---|
| Status | Active |
| Thumbprint | B9E1A10B702C583A31DD54C6BFCA68972A4ECCB5 |
| Expiration | 9/29/2025, 11:40:42 AM |
| Notification Email | cvolkman@conovercompany.com |
| App Federation Metadata Url | https://login.microsoftonline.com/a9c9b6f1-823f-... |
| Certificate (Base64) | Download |
| Certificate (Raw) | Download |
| Federation Metadata XML | Download |

**Verification certificates (optional) (Preview)** — Edit

| | |
|---|---|
| Required | No |
| Active | 0 |
| Expired | 0 |

**4 Set up Conover Online Test**

You'll need to configure the application to link with Azure AD.

| | |
|---|---|
| Login URL | https://login.microsoftonline.com/a9c9b6f1-823f-... |
| Azure AD Identifier | https://sts.windows.net/a9c9b6f1-823f-4d7c-9442... |
| Logout URL | https://login.microsoftonline.com/a9c9b6f1-823f-4d |

**5 Test single sign-on with Conover Online Test**

Test to see if single sign-on is working. Users will need to be added to Users and groups before they can sign in.

Test

Once all of the options are filled in, the information that you need to insert into Conover Online will appear in setup 4.