Microsoft Entra ID SSO & SCIM Guide

Getting Started

Accessing your user-based license

You can find your new SSO/SCIM User Licensing subscription in My Account:

- Navigate to www.snapgene.com/account
- Log in with your existing credentials
- From the header drop down, select your user based subscription

Preparing SnapGene

In order to follow the below steps to enable your SSO/SCIM configuration, you will need to be using at least version 8.0 (or 8.1 for Ubuntu) of SnapGene, and have deactivated your existing SnapGene activation.

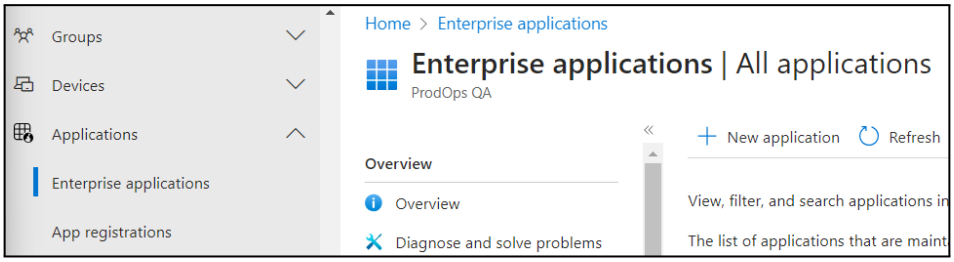
- To download the latest version, visit our Updates page, or update via the in-app updates feature
- Deactivate your current license by following **Help -> Manage License...**
- Let the SnapGene team know if your deactivation limit needs to be extended
- After deactivation, SnapGene should display the activation screen, or reopen in Viewer mode. You are now ready to apply your SSO and/or SCIM configuration following the steps below.

Microsoft Entra ID Configuration

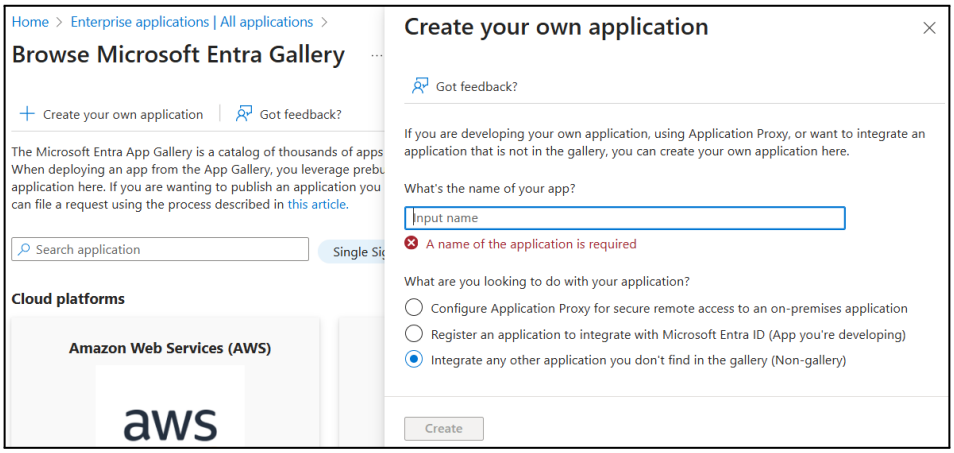
To use Microsoft Entra ID as your vendor, please follow the steps below to configure your application. The first two sections detail instructions for setting up SnapGene as an SSO application in Entra ID, while the third configures SCIM for identity management.

Creating an Application in Microsoft Entra ID

1. From the **Applications** side menu, select **Enterprise applications**. From here, select **New application**:

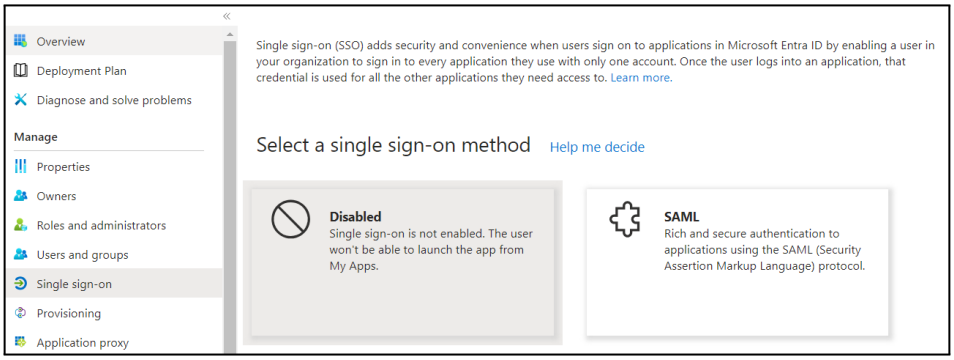


2. Select **Create your own application**. Enter your application name e.g. “SnapGene”, select the **Non-gallery** application option, and click **Create**:

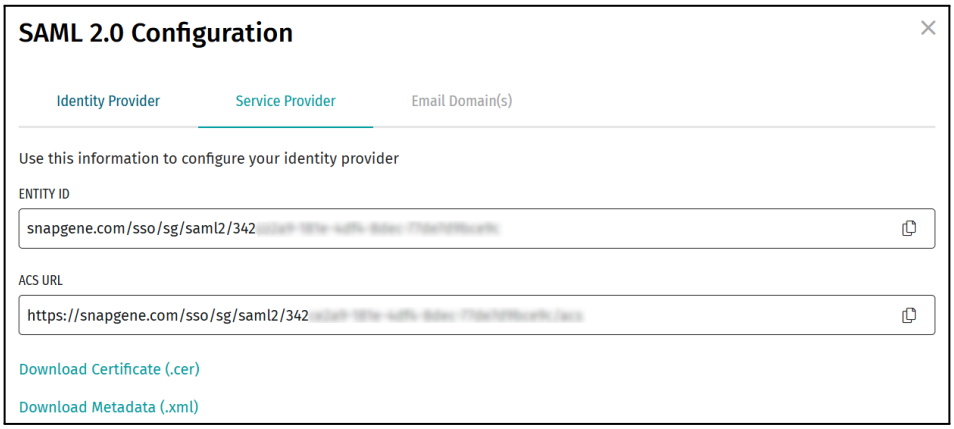


Single sign-on (SSO) Configuration

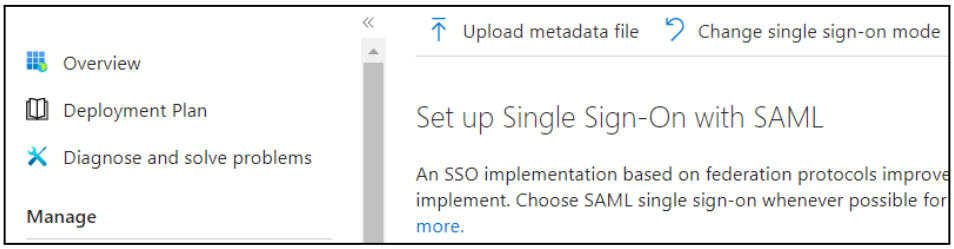
Once created, follow the **Manage -> Single sign-on** menu, then select **SAML** as your single sign-on method. Before continuing here, you will need to configure SnapGene's My Account, and use information from here to configure Entra ID.

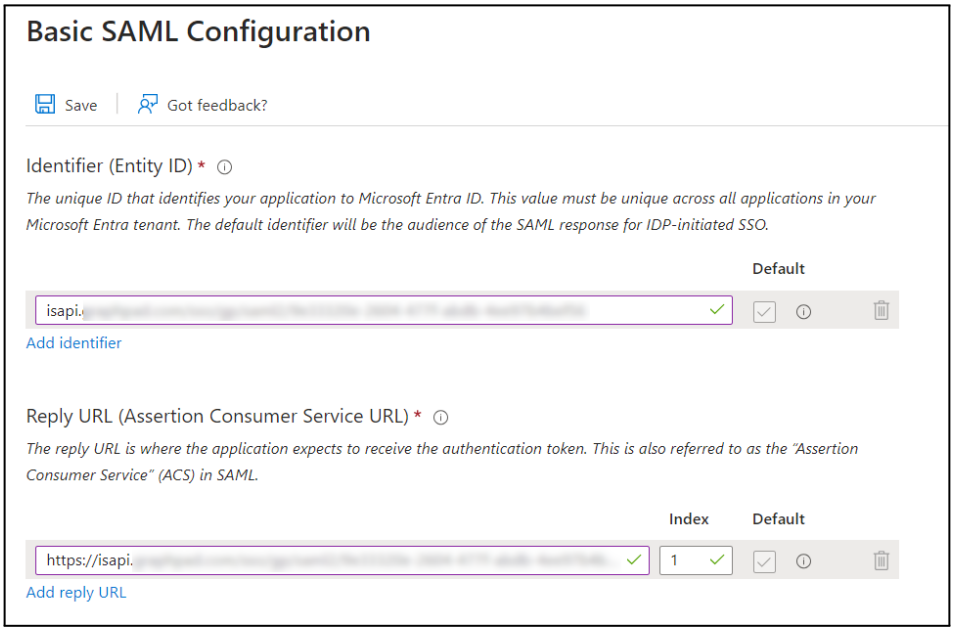


1. From My Account, select **Manage Seats**, then **Authentication**
2. Add a SAML2 **ID Provider**
3. Switch to the **Service Provider** tab and download the **Metadata** XML file. If the file opens in your browser rather than downloading, copy the XML data to a new file and save this as "metadata.xml"

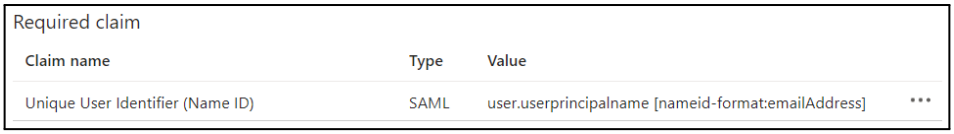


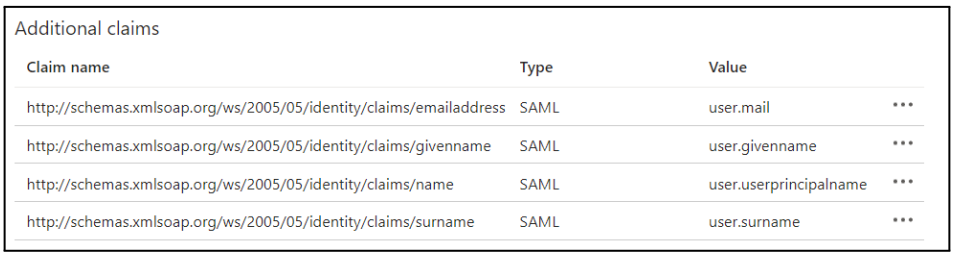
4. Returning to Entra ID, select **Upload metadata file** and provide the above file. This will load the Entity ID and ACS URL seen in the above screenshot of My Account. Click Save:



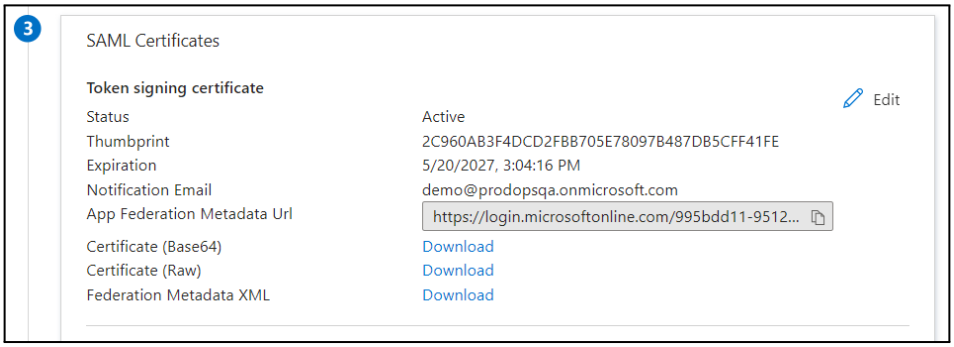


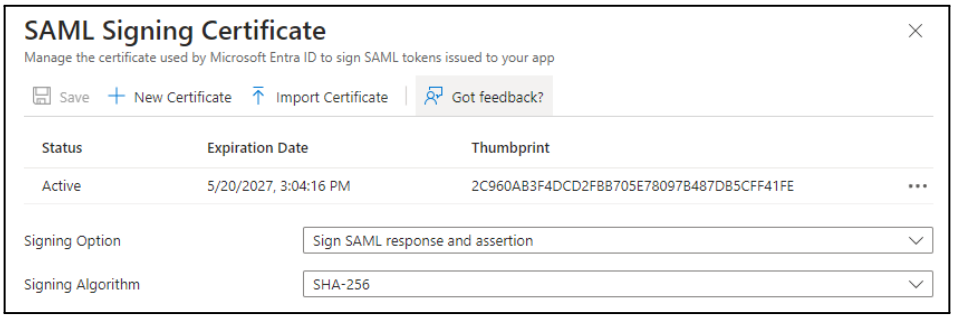
5. Edit the **(2) Attributes & Claims** section. Verify that the claims are configured as below and update as necessary.
   Note: the Identifier Claim must use the email address. This can be done by either specifying a Value of "user.mail", or as per below if email is your default identifier.
   It is necessary that the email address used is consistent with the unique identifier. If aliasing between the email address and another identifier, please update the identifier claim here as necessary to use the email address of the invited user:



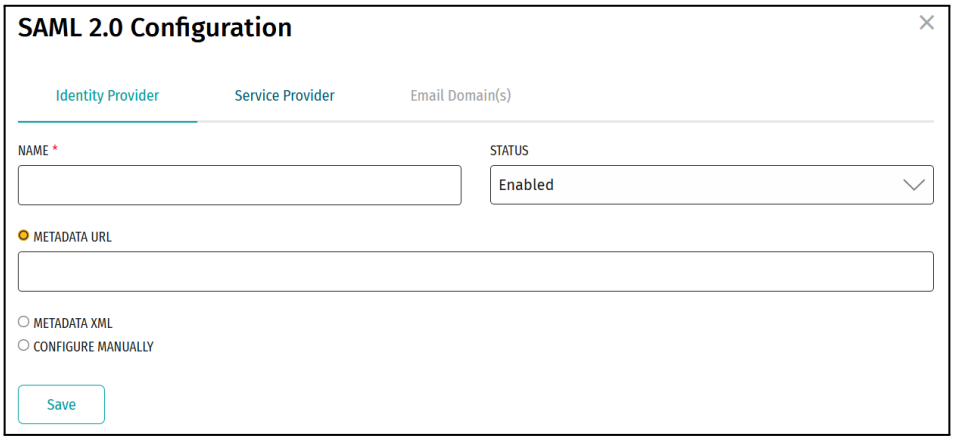


6. Edit the **(3) SAML Certificates** section to use **Sign SAML response and assertion** as the **Signing Option**. Click **Save**:

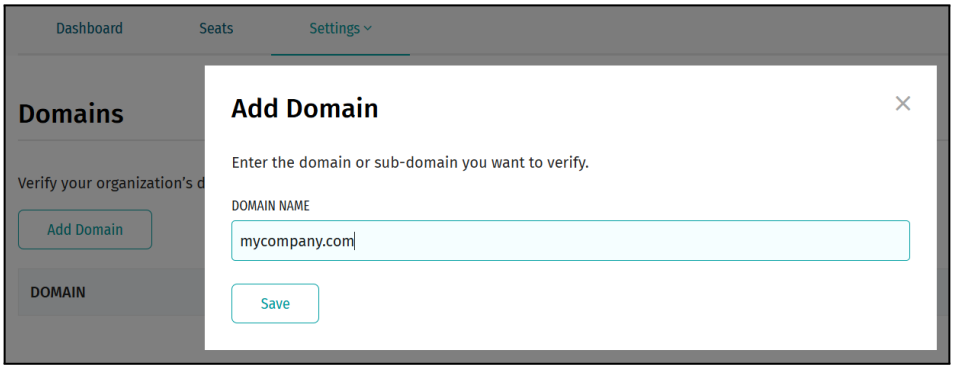




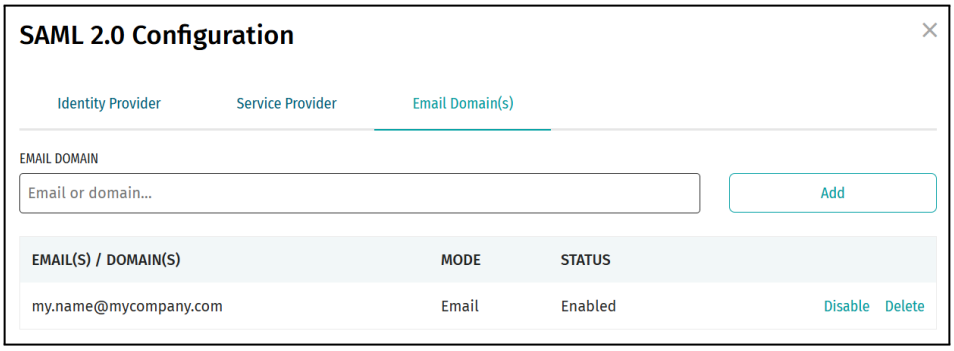
7. From the same **(3) SAML Certificates** section shown above, copy the **App Federation Metadata URL**
8. Return to My Account and switch to the **Identity Provider** tab. Enter a name e.g. “Entra ID”, and paste in the Metadata URL from Entra ID. Click **Save**:



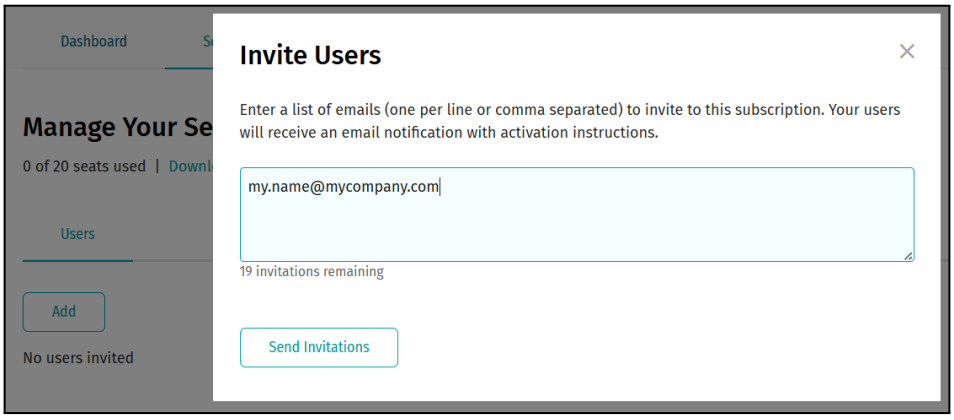
9. Navigate to the **Domains** tab and add the email domain(s) that you wish to be able to use with SSO. Click **Save**:



10. You will need to verify ownership of this domain. Click **View** and follow the on-screen instructions to verify this, either by HTML file or DNS TXT record.
11. Once verified, return to the **Authentication** tab, and use the **Email Domain(s)** SAML tab to provide email addresses and/or email domains SSO access to SnapGene. **First, test SSO access with a single email address by adding that email address in full:**

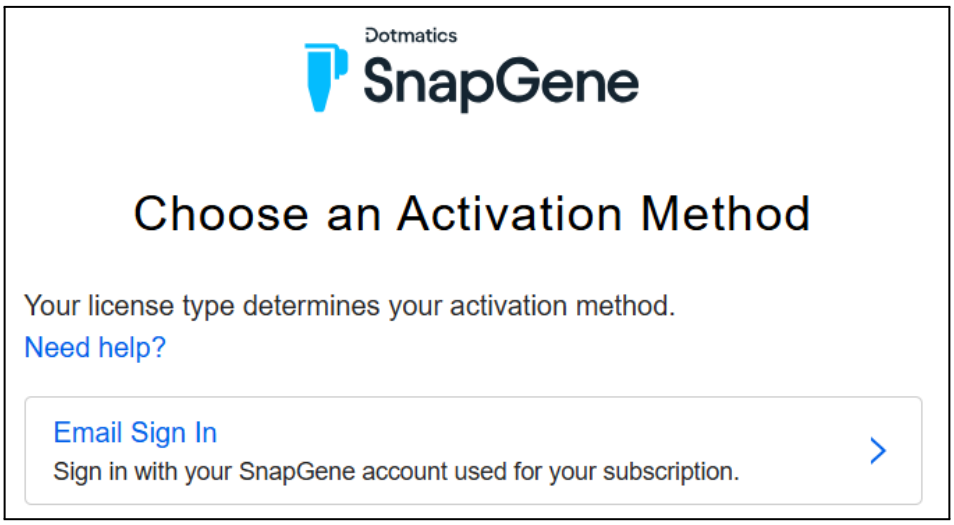


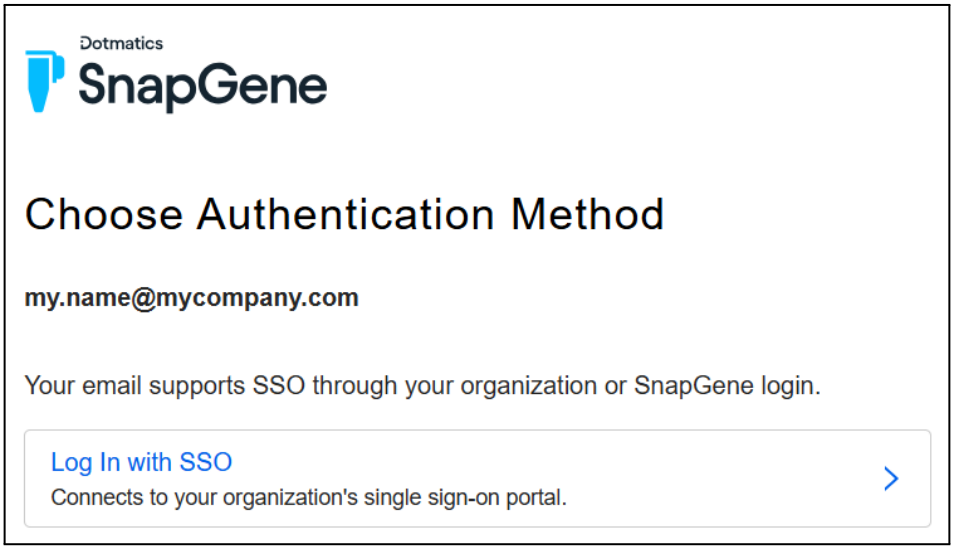
12. If you are using Entra ID only for SSO, and not SCIM, you will need to invite these user(s) under the **Users** tab in My Account. Otherwise, SCIM users will be provisioned from Entra ID in the SCIM configuration section later in this guide.

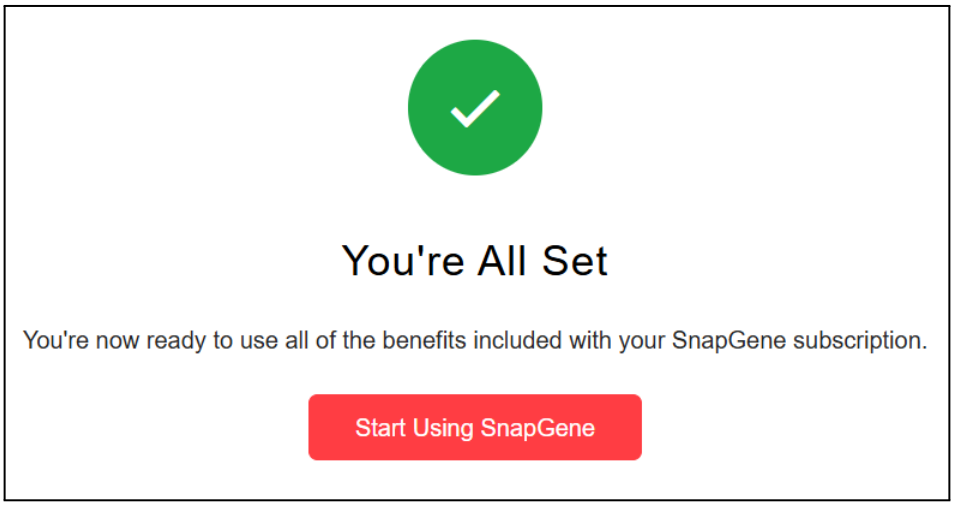


13. If this user does not yet exist in Entra ID, create them in Entra ID now.
    From Entra ID, assign this user to your application from the Applications menu.
    If you are also configuring SCIM, then this process will instead be done later after provisioning has been configured (see the SCIM section of this guide for provisioning users).

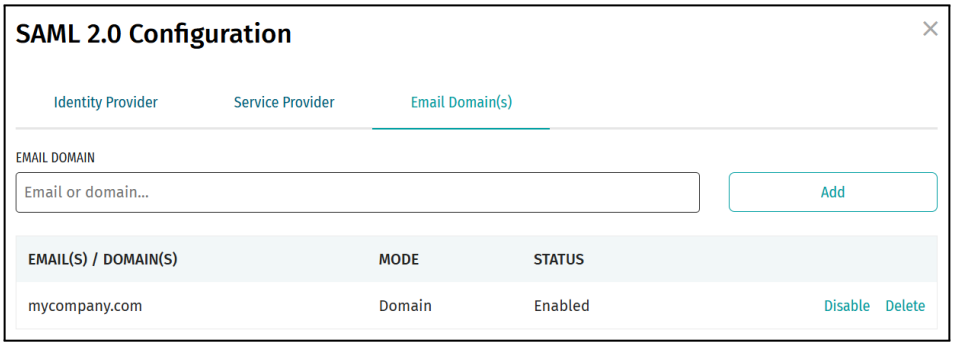
14. In the SnapGene application, activate your software, selecting the **Email Sign In** option. Continue through the screens, selecting **Log In with SSO** as your authentication method:





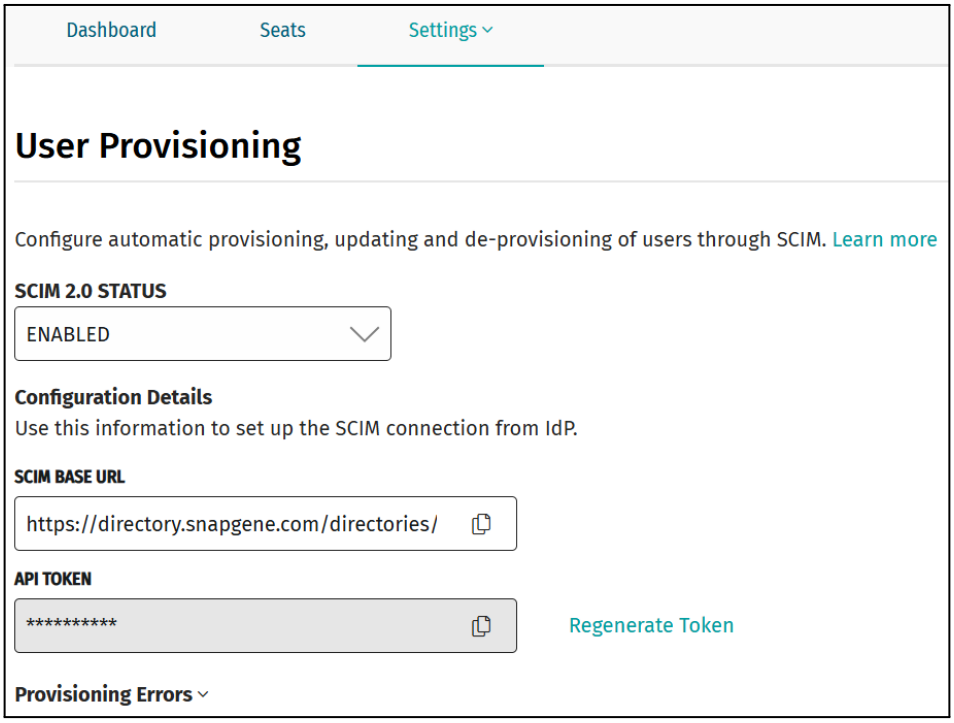


15. Once you have verified that SnapGene activates with this method, and are ready to enable SSO for your entire domain, add the email domain(s) that you wish to use with SSO. Also add the other users in both the **Users** tab of My Account, and in Entra ID as you have above:

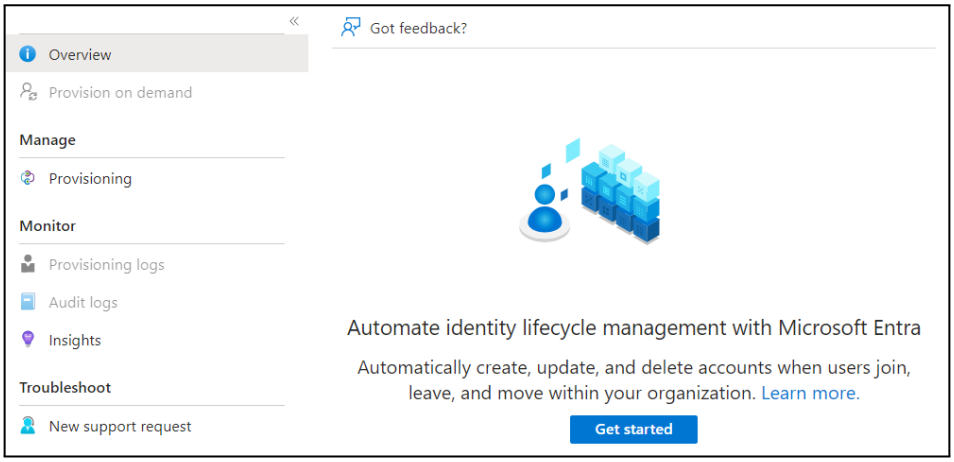


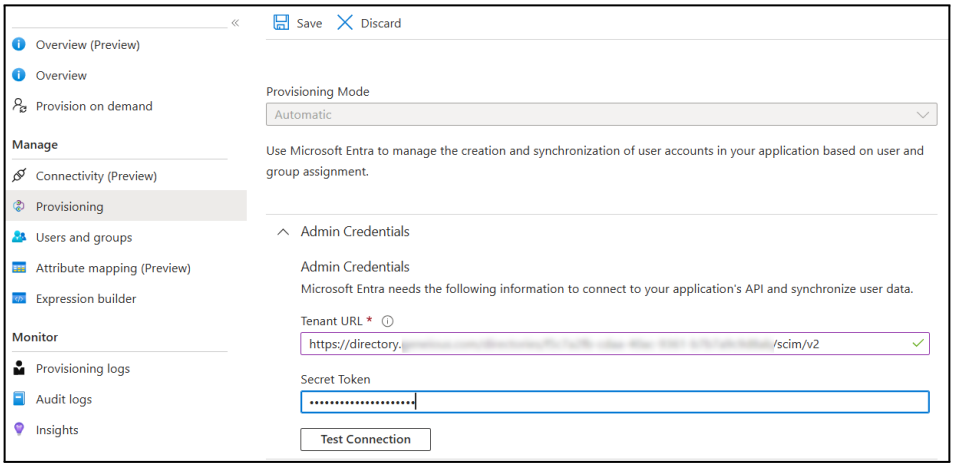
SCIM Identity Management Configuration

1. To configure SCIM, you will first need to retrieve your SnapGene connection details from My Account
    1. From My Account, select **Manage Seats**, then **User Provisioning**
    2. Enable SCIM 2.0 and keep your **SCIM Base URL** and **API Token** handy for the next step:

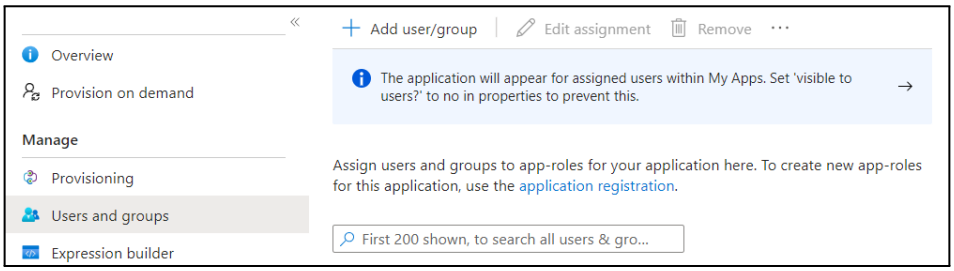


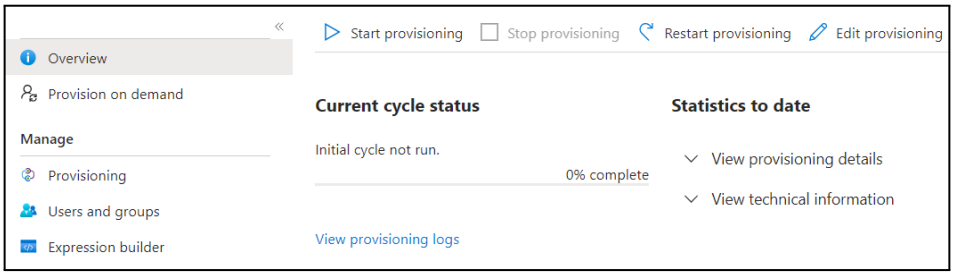
2. Then in the **Provisioning** menu of your Entra ID **Enterprise application**:
    1. Select **Get started**
    2. Select **Automatic** as your **Provisioning Mode**
    3. Add your **SCIM Base URL** and **API Token Key**, copied from My Account, as the **Tenant URL** and **Secret Token**, respectively
    4. Click **Test Connection**
    5. Click **Save**

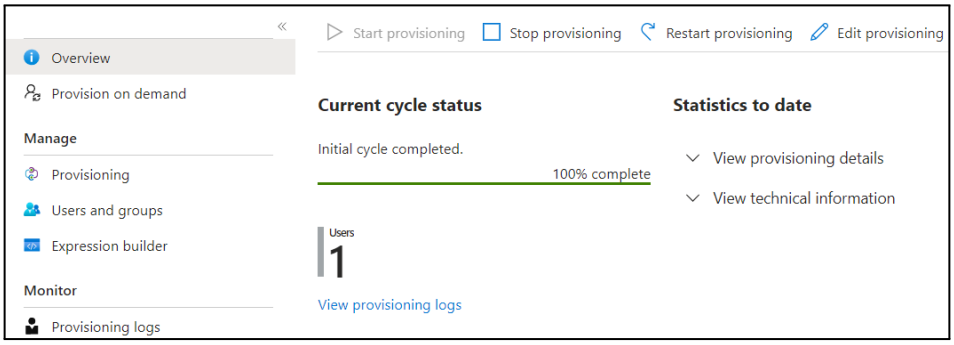




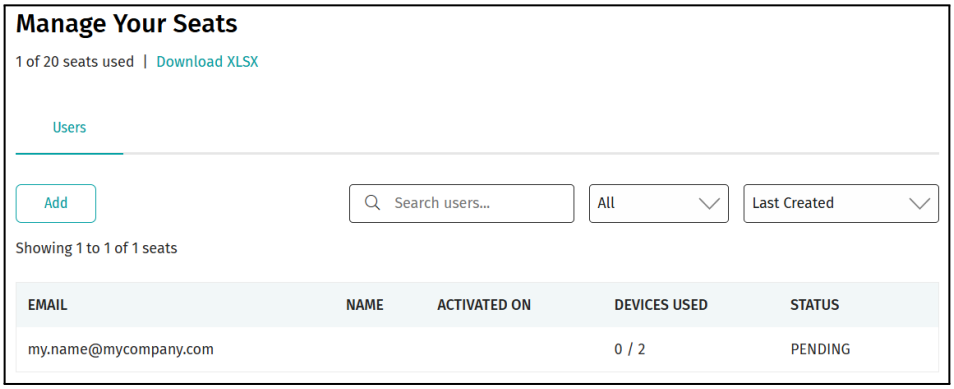
3. You have now successfully configured your user provisioning connection between Entra ID and SnapGene. You can now provision users from Entra ID into SnapGene by
    1. Returning to the **Provisioning** menu
    2. Select **User and groups**
    3. Click **Add user/group**
    4. **Select** and **Assign** those users/groups
    5. Return to the **Overview** of the **Provisioning** menu and click **Start provisioning**
    6. Click **Refresh** in the top right to see the provisioning complete



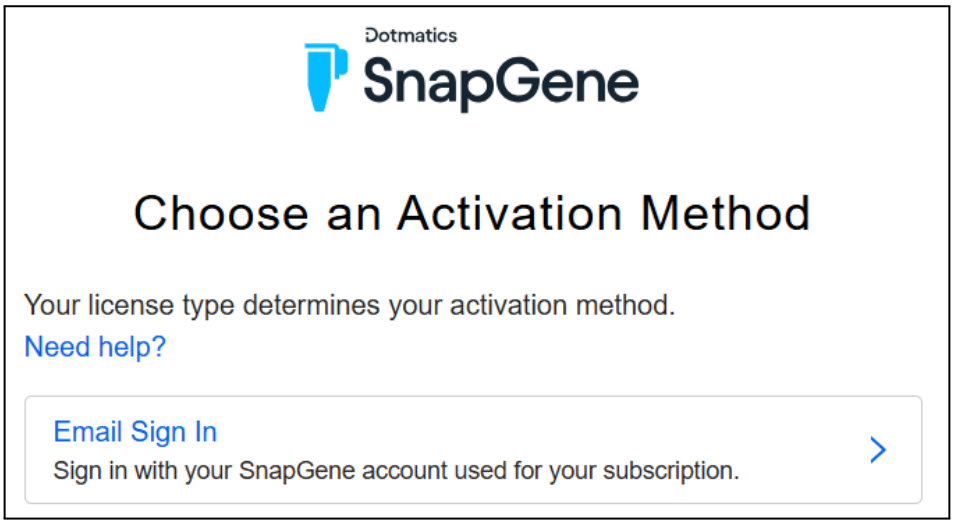


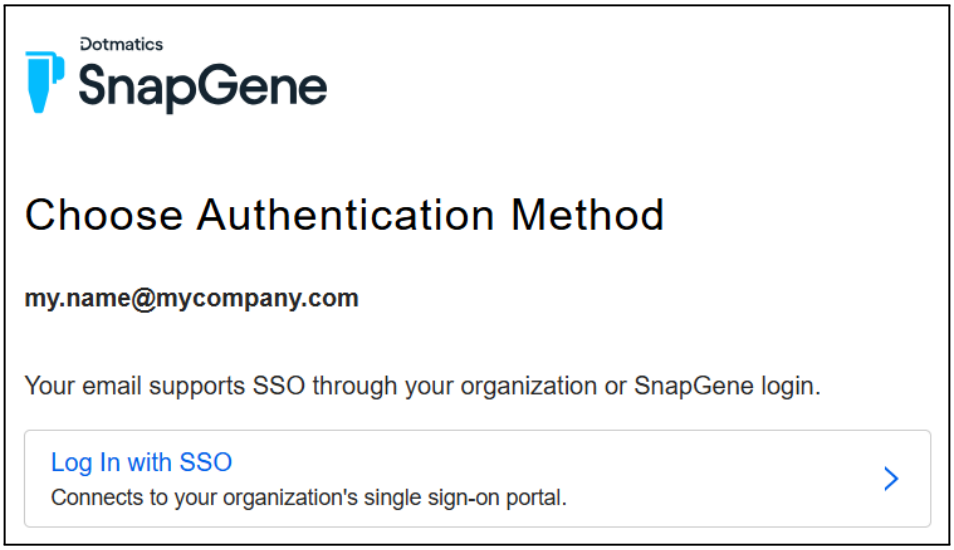


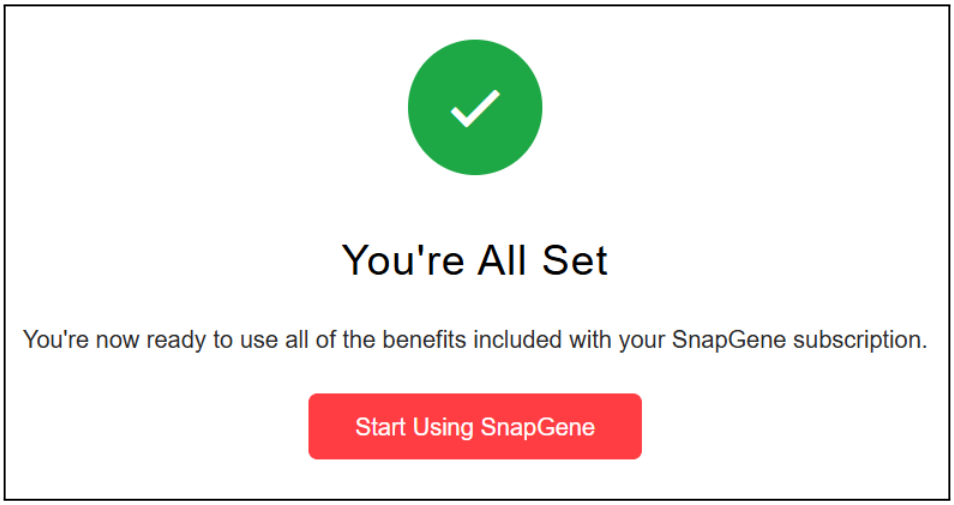
4. Returning to My Account after provisioning is complete will show the end user(s) ready to activate SnapGene in the **Seats** tab - please reload the page:



5. In the SnapGene application, activate your software, selecting the **Email Sign In** option. Continue through the screens, selecting **Log In with SSO** as your authentication method:



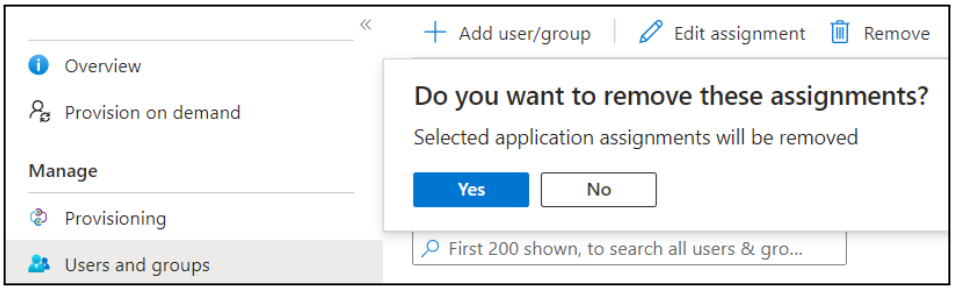




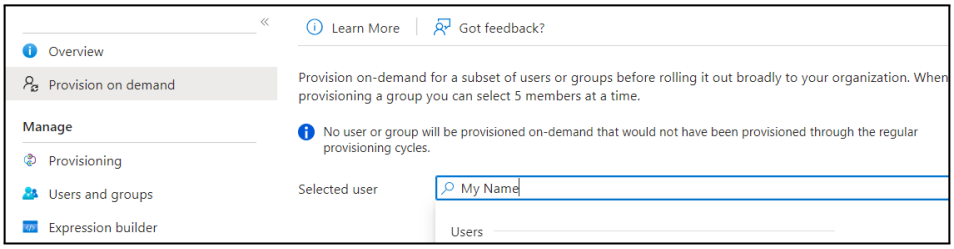
Revoke User

To revoke a user via Entra ID:

1. In the **Users and groups** menu within your **Enterprise application**, select the user and click **Remove** and **Yes** to remove the assignment. Alternatively, remove the group, or the user from the group, if you have assigned a group to the application instead:



2. Then from the **Provision on demand** menu, search for and select that same user, and click **Provision**:



3. Return to My Account and refresh the page. That user will now be removed from the **Users** list
4. Finally, in SnapGene, follow the **Help -> About SnapGene** menu. Here you will be notified that the activation has been revoked.