ExtremeCloud IQ v25.9.0 SSO Integration Guide

Configuring Self-Service SAML SSO with Microsoft Entra ID and Okta

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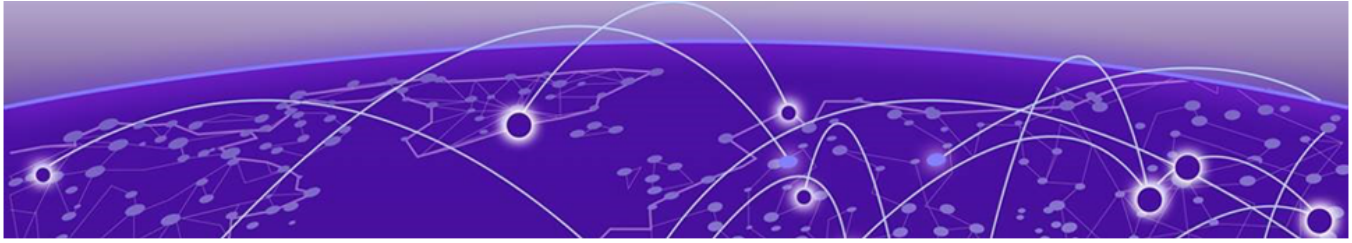

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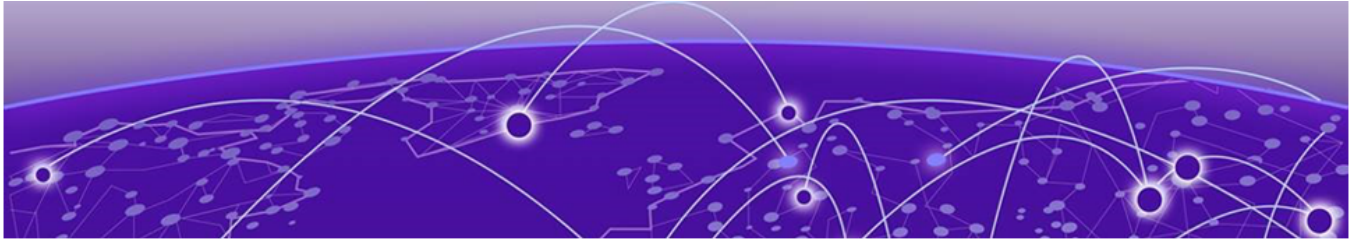

Abstract

This Integration Guide for ExtremeCloud IQ version 25.9.0 provides in-depth technical instructions for configuring Self-Service SAML Single Sign-On (SSO) within the platform. Designed for system administrators, it covers integration with external Identity Providers (IdPs) such as Microsoft Entra ID (formerly Azure Active Directory) and Okta. Topics include the creation of enterprise applications, detailed user and group assignments, and advanced user attribute mapping for role-based access. Key steps involve exporting and importing Service Provider (SP) metadata, configuring SAML attributes, and conducting SP- and IdP-initiated login tests. Advanced sections focus on security group-to-role mapping and certificate management, along with future considerations for enhancing security through improved certificate handling. Technical details emphasize secure, scalable authentication workflows, complemented by troubleshooting guidance for seamless SSO integration with external IdP systems.

Preface

Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.

Text Conventions

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	Important	Important features or instructions
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Table 2: Text

Convention	Description
`screen displays`	This typeface indicates command syntax, or represents information as it is displayed on the screen.
The words *enter* and *type*	When you see the word *enter* in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says *type*.
Key names	Key names are written in boldface, for example **Ctrl** or **Esc**. If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press **Ctrl**+**Alt**+**Del**
Words in italicized type	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
italic text	Italic text indicates variable content.
`[ ]`	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
`{ x | y | z }`	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x | **y**	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, such as passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, *member*[*member*...].
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

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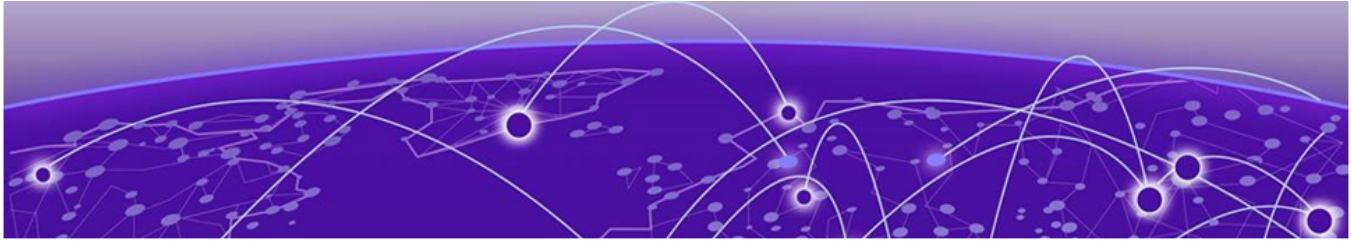

Integration Overview

This guide details the process for integrating Self-Service Single Sign-On (SSO) within , allowing administrators to log in using credentials from select Identify Providers, such as Microsoft Entra ID (formerly Azure Active Directory) and Okta.

This guide provides comprehensive steps including: creating enterprise applications in the IdP, assigning users and groups, importing IdP metadata, mapping groups to roles in ExtremeCloud IQ, exporting and importing Service Provider (SP) metadata, and conducting both SP- and IdP-initiated tests. The guide also includes notes on administrative roles, account creation, location assignments, and planned future features for managing SSO configurations and certificates. This integration framework supports a seamless authentication process, enhancing security and user management in ExtremeCloud IQ.

Related Links

Integration with Okta on page 18

Integration with Microsoft Entra ID

Step 1 — Create a New Enterprise Application in Entra ID

1. From the Azure Portal, under **Azure services**, select **Enterprise applications**.
2. From **Enterprise Applications**, select **New application** > **Create your own application**.

   The **Create your own application** dialog displays.
3. Provide the application name, select **Integrate any other application you don't find in the gallery (Non-Gallery)**, and then select **Create**.

   The application **Overview** page opens.

Related Links

Step 2 — Assign Users and Groups in Entra ID on page 10

Step 2 — Assign Users and Groups in Entra ID

Important
ExtremeCloud IQ uses group membership information provided by the IdP to assign roles through its RBAC implementation. The IdP must be configured to send group membership claims to ExtremeCloud IQ during authentication.

Add the group objects to map to the Role Based Access Controls in ExtremeCloud IQ.

1. From the application **Overview** page, select **Assign Users and Groups**, and then select **Add user/group**.

   The **Add Assignment** page opens.

2. From the left pane, select the link under **Users and groups**.

   Azure displays the ExtremeCloud IQ required user group.
3. Select the check box for each ExtremeCloud IQ required user group, and then click **Select**.

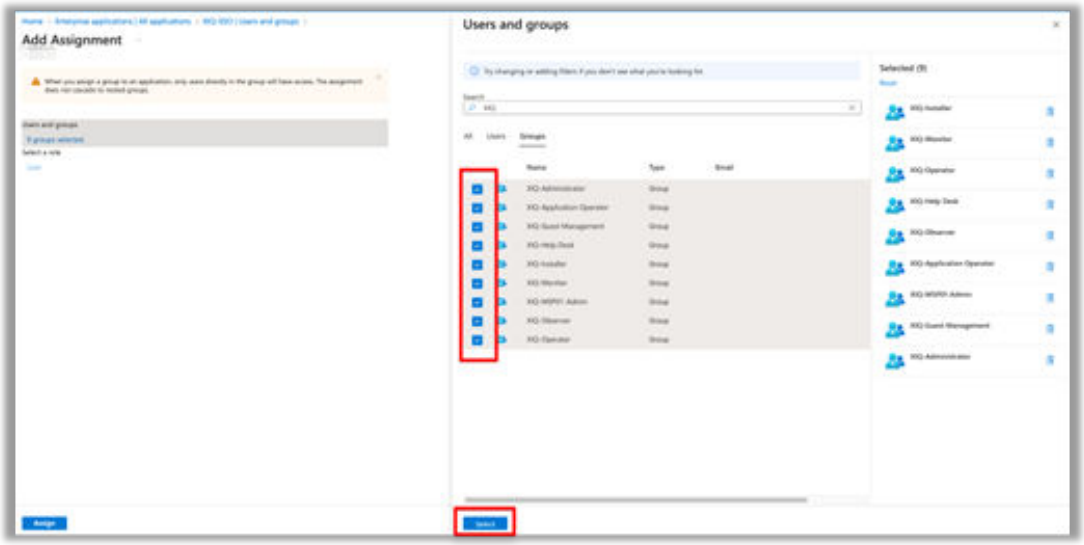

Figure 1: Azure - Assigning ExtremeCloud IQ User Groups to an Azure User Role

4. Select **Assign**.

   The selected groups are mapped to the selected role. Azure displays the selected groups on the **Users and Groups** page.

Note
Only users assigned to the defined groups have access to the defined roles in ExtremeCloud IQ.

Related Links

Step 3 — Select SAML as the Single Sign-On Method in Entra ID on page 11

Step 3 — Select SAML as the Single Sign-On Method in Entra ID

Use this task to select the SAML protocol method for Single Sign-On.

1. From the application **Overview** page, navigate to **Manage** > **Single sign-on**, and then select **Get Started**.
2. Select the **SAML** single sign-on method.
3. On the **Set Up Single Sign-On with SAML** page, from the **Basic SAML Configuration** section, select **Edit**.
4. For **Identifier (Entity ID)**, select **Add identifier** and provide a temporary URL.

   For example: `https://temp_ID`
5. For **Reply URL (Assertion Consumer Service URL)**, select **Add reply URL** and add a temporary reply URL.

   For example: `https://temp_reply`

6. Select **Save**.

Related Links

Step 4 — Import Entra ID Metadata to ExtremeCloud IQ on page 12

Step 4 — Import Entra ID Metadata to ExtremeCloud IQ

To see the Enable SSO Global Settings option, log in to ExtremeCloud IQ using the Global Data Center (GDC) SSO URL. For example, `https://extremecloudiq.com`.

Note
Single Sign-on integration can only be configured by ExtremeCloud IQ users with Administrator permissions in their home account (VIQ). External administrators cannot access the SSO configuration page when administering other customer accounts. An External Administrator is an administrative user whose identity and authentication are managed by an external identity provider rather than being created directly in ExtremeCloud IQ.

1. From ExtremeCloud IQ, go to **Global Settings** > **Enable Single Sign On (SSO)**.
2. Select **Add Identity Provider**.
3. Select **Microsoft Entra ID (Azure AD)**.
4. Enter the Fully Qualified **Domain** name of the Azure Tenant and optional **Description**.

   Note
   You can only define a single domain name per IdP Profile. If your IdP supports multiple domains, you must create a separate IdP Profile for each domain. For example, user `gradya@testdomain.onmicrosoft.com` cannot log in when the IdP profile specifies `onmicrosoft.com`.

5. Select **Continue**.
6. Select the preferred method of entering the IdP Metadata.

   Note
   Select **Import From URL** to import the data from the App Federation Metadata URL.

7. From the Azure Enterprise Application, scroll down to Section 3: SAML Certificates, and select the **App Federation Metadata Url** copy to clipboard icon.

   

8. In ExtremeCloud IQ, paste the URL string into the **IdP Metadata URL** field, and then select **Import**.

   After importing, the fields in the **IdP Connection** tab display automatically including the Verification Certificate.

9. Select **Continue**.

Related Links

Step 5 — Map ExtremeCloud IQ User Profile Attributes to SAML Attributes for Entra ID on page 13

Step 5 — Map ExtremeCloud IQ User Profile Attributes to SAML Attributes for Entra ID

In ExtremeCloud IQ, from the **Attribute Mapping** tab, you must map the appropriate **User Profile Attributes** to the **SAML Attributes** sent from the IdP. These strings must be created and in sync with both IdP and SP. The following SAML Attributes are required for Entra ID Single Sign-On:

- First Name
- Last Name
- Email
- Group

Note
To generate the SP Metadata required to complete the IdP SAML configuration, the SAML strings cannot be configured on the IdP until the ExtremeCloud IQ workflow is completed. You must complete the ExtremeCloud IQ workflow first. If you do not know the SAML Attribute Strings, add place holder data to save and complete the configuration.

The following table includes the required strings for integration with Microsoft Entra ID.

Table 4: ExtremeCloud IQ - Required Strings for Microsoft Entra

User Profile Attribute	SAML Attribute
First Name	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname
Last Name	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/surname
Email	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/email
Group	http://schemas.microsoft.com/ws/2008/06/identity/claims/groups

Related Links

Step 6 — Map ExtremeCloud IQ Group to Roles for Entra ID on page 13

Step 6 — Map ExtremeCloud IQ Group to Roles for Entra ID

ExtremeCloud IQ roles must be mapped based on the user group membership that is created in Entra ID to enforce authorization.

As an example, the following groups created in Entra ID, map to ExtremeCloud IQ roles. Users added to these groups are assigned the corresponding role.

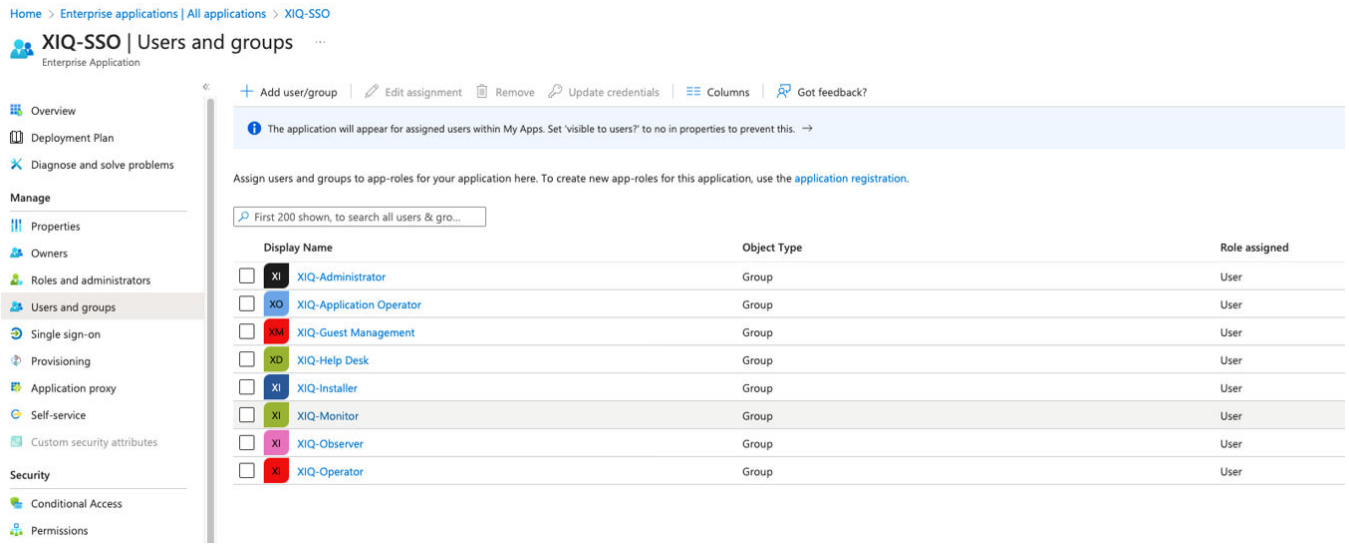

Figure 2: Azure - ExtremeCloud IQ User Groups Displayed in Azure

1. In ExtremeCloud IQ, go to **Global Settings** > **Enable Single Sign On (SSO)**.
2. Select **Attribute Mapping**.
3. Select **+ Add a group name mapping**.
4. Enter the exact group name from Entra ID (for example, XIQ-Operator), and then select **Operator** from the **Select an ExtremeCloud IQ group** list.
5. Build and order the rules based on First Match.

   To reorder the rules, select the icon.

   Note
   If a user is successfully authenticated but is not a member of a defined group, you have the option to deny the user login or you can specify a default catchall Role in which to place the user. For example, **Monitor Only**.

6. Select **Save and Finish** to complete the ExtremeCloud IQ workflow.

   Important
   The Operator, Monitor, Help Desk, Installer, or Observer RBAC roles require the definition of one or more sites to gain visibility over managed devices. In the rule definition for those roles, specify one or more sites in the rules. Failure to do so will lead to the administrator being unable to view any devices after login. Administrator and Guest Management roles do not leverage sites, and will ignore any site definition in the rule.

Related Links

Step 7 — Map Entra ID Security Groups to ExtremeCloud IQ Roles on page 14

Step 7 — Map Entra ID Security Groups to ExtremeCloud IQ Roles

Configure the SAML attribute strings required to map the Entra ID security groups to the ExtremeCloud IQ Role-Based Access Control (RBAC) roles for authorization.

This step includes manually adding the additional Attributes/Claims required in the Entra ID Enterprise Application to map user accounts to ExtremeCloud IQ RBAC roles.

1. In the Microsoft Azure application, in Section 2: **Attributes & Claims**, select **Edit**.
2. Perform the following steps to adjust the default claims:
   a. Under **Required claim**, select the **Unique User Identifier (Name ID)** row, change the **Source attribute** field to `user.mail`, and then select **Save**.
   b. Under **Additional claims**, from the **http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress** row, select the 3-dot menu, select **Delete**, and then select **OK**.
   c. Select **Add a group claim**, and then select **Groups assigned to the application**. Under **Source attribute**, select one of the following options, and then select **Save**:
      - If your Entra ID instance is cloud-only, select **Cloud-only group display names**.
      - If your Entra ID instance is hybrid-cloud and on premises, select **sAMAccountName**.
   d. Under **Additional claims**, select the **http://schemas.xmlsoap.org/ws/2005/05/identity/claims/name** row, change the **Name** field to `email`, and then select **Save**.

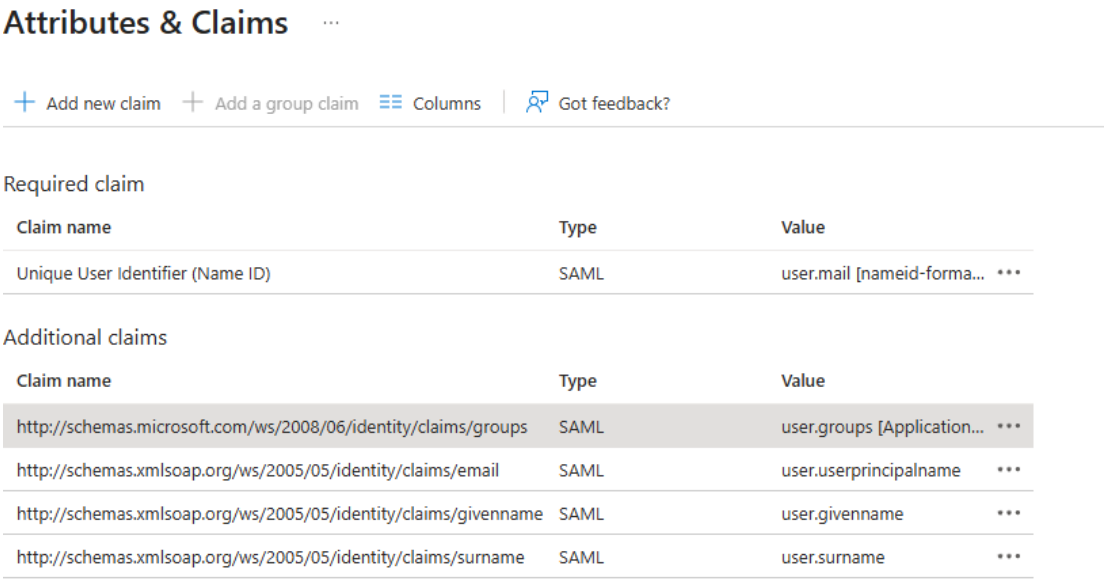

Figure 3: Attribute & Claims Configuration with Updated Default Claims

3. Perform the following steps to add a group claim:
   a. Select **Add a group claim**.
   b. Select **Groups assigned to the application**.
   c. From the **Source attribute** list, select **Cloud-only group display names**.

Related Links

Step 8 — Export SP Metadata and Import into Entra ID on page 16

Step 8 — Export SP Metadata and Import into Entra ID

After saving the completed **Add IdP Workflow** in ExtremeCloud IQ, export the SP metadata and import the data into the IdP to complete the configuration.

1. In ExtremeCloud IQ, go to the main **Single Sign On** page, select ⋮, and then select **Edit** to update the saved IdP configuration.
2. Select the **ExtremeCloud (SP) Connection** tab, and then select **Download SP Metadata**.

   Download and keep the .xml file.
3. In the Microsoft Azure, on the **SAML-based Sign-on** page, select **Upload metadata file**, navigate to the saved exported file from ExtremeCloud IQ, and then select **Add**.
4. Confirm that the imported data is correct, and then select **Save**.

Note
When prompted to test the application, select **No I'll test later**.

Related Links

Step 9 — Entra ID Test - IdP Initiated on page 16

Step 9 — Entra ID Test - IdP Initiated

After the integration is complete, test the application.

Use this task to start an IdP initiated test.

1. Go to the Azure main Single Sign On page for the XIQ-SSO application.
2. Scroll down to the **Test single sign-on with XIQ-SSO** section, and then select **Test**.
3. Select **Test sign in**, and then sign in to the Microsoft Login Portal.

   After a successful login, you are redirected to the ExtremeCloud IQ default view. The ExtremeCloud IQ Audit Logs include the login action.

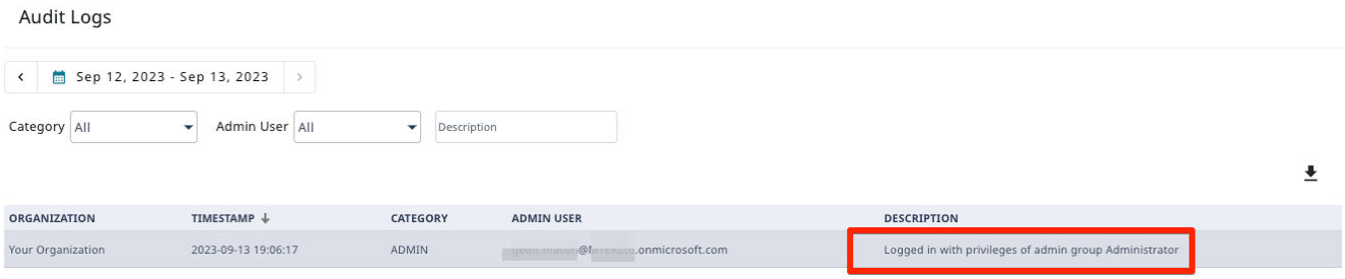

Figure 4: ExtremeCloud IQ Audit Logs

Related Links

Step 10 — Entra ID Test - SP Initiated on page 17

Step 10 — Entra ID Test - SP Initiated

Use this task to log in to ExtremeCloud IQ through SP initiated.

1. Browse to the **GDC Login** page `https://extremecloudiq.com`, and then select the **SSO** icon.
2. Enter the email address of the IdP account and complete the IdP login process.

   The browser is redirected to the Microsoft Login Portal. After a successful sign in, the browser redirects to the ExtremeCloud IQ default view. The ExtremeCloud IQ Audit Logs include the login action.

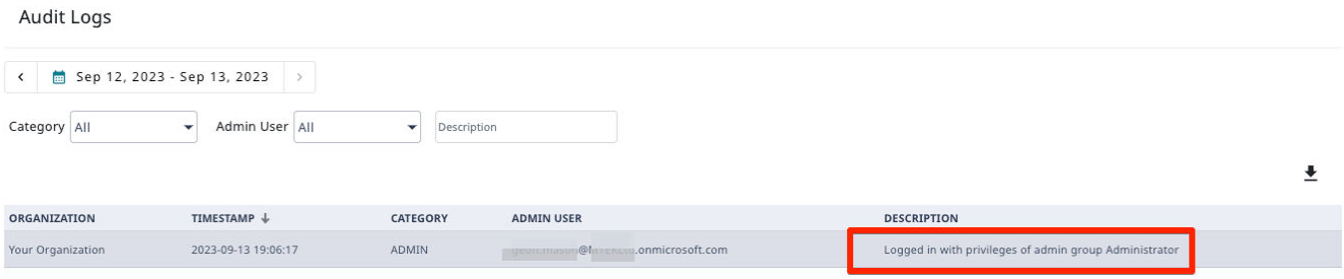

Figure 5: ExtremeCloud IQ Audit Logs

Integration with Okta

Step 1 — Navigate to the Okta Admin Portal

Use this task to navigate to the Admin Portal (Okta).

1. Browse to `https://login.okta.com`, and then log in to your Okta Organization with an account with the necessary Administrator permissions to create user, groups, SAML applications, and Authentication Policies.
2. From the Okta Dashboard page, select **Admin**.

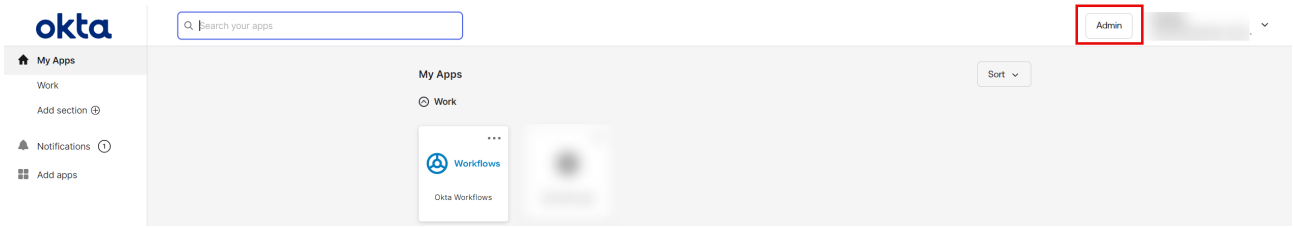

Figure 6: Okta - Dashboard and Link to the Admin Portal

Related Links

Step 2 — Create a New SAML Application and Define User Group Mappings in Okta on page 19

Step 2 — Create a New SAML Application and Define User Group Mappings in Okta

Note
You must create the user groups in the IdP before you can map the user roles in .

1. From Okta, navigate to **Applications** > **Applications**, and then select **Create App Integration**.
2. Select **SAML 2.0**, and then select **Next**.
3. Enter an **App name**, and then select **Next**.
4. In the **SAML Settings** section, enter temporary URLs as a placeholder that will be updated later for the following fields:
   - **Single sign-on URL**: `https://replaceme`
   - **Audience URI (SP Entity ID)**: `https://replaceme`
5. Scroll down to the **Attribute Statements** section.
6. Set **Name** to `user.email` and the corresponding **Value** to `user.email`, and then select **Add Another**.
7. Set **Name** to `user.firstName` and the corresponding **Value** to `user.firstName`, and then select **Add Another**.
8. Set **Name** to `user.lastname` and the corresponding **Value** to `user.lastname`.
9. Scroll down to the **Group Attributes** section:
   a. Set **Name** to `user.group`.
   b. Set the corresponding **Filter** to `Matches regex`, and then set the **Value** to `.*` (a period followed by an asterisk).
10. Select **Next**.
11. On the **Help Okta Support understand how you configured this application** page, set **App Type**, and then select **This is an internal app that we have created**.
12. Select **Finish**.

Related Links

Step 3 — Assign Users and Groups in Okta on page 19

Step 3 — Assign Users and Groups in Okta

Your new application is now created, and we will assign users and groups to be able to use the application.

1. From within your new application, select the **Assignments** tab.
2. Select **Assign**, and then select **Assign to Groups**.

3. For each group you want to permit authentication to with SSO login, select **Assign** next to the Group Name.

Note
For each group that you permit, ensure the Group is set to **Assigned**.

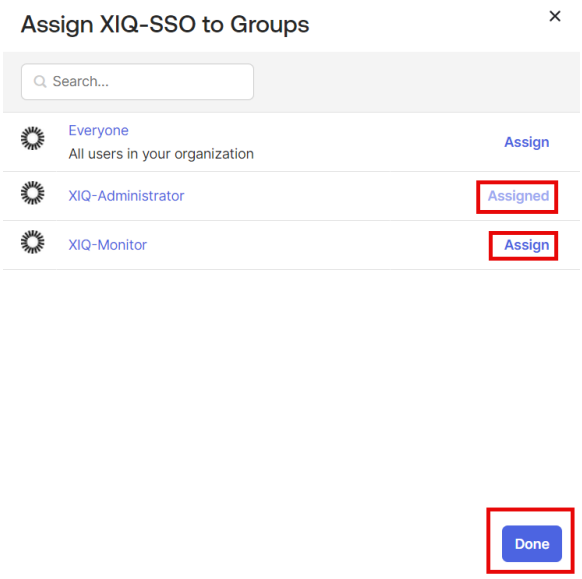

Figure 7: Okta - Group Assignment Continued

4. Select **Done**.

Related Links

Step 4 — Create New Password Authentication Policy in Okta on page 20

Step 4 — Create New Password Authentication Policy in Okta

When a user logs in to using SSO with Okta, the user must follow the rules defined in the Okta Authentication Policy. You can assign your new SAML application to use one of Okta's out-of-the box Authentication policies. By default, your SAML application uses the **Any Two Factors** Authentication Policy, which has been successfully tested with .

Use this task to create and assign a new Password-only Authentication Policy, which can be used with if you do not need Okta to enforce Multi-Factor Authentication.

1. From the **Navigation Pane**, go to **Security** > **Authentication Policies**, and then select **Add a policy**.
2. Enter a **Name**, and then select **Save**.

   You will be directed to the Rules tab of your new Authentication Policy, where we will modify the rules associated with the existing Catch-all Rule policy.
3. For the **Catch-all Rule**, select **Actions**, and then select **Edit**.
4. Scroll down to the **Then** section, for **AND User must authenticate with**, select **Password** from the list.

5. For **Prompt for authentication**, select **Every time user signs in to resource**.
6. Select **Save**.
7. Select the **Applications** tab, and then select **Add app**.
8. Find the SAML Application you created in Step 2, and then select **Add** for the associated row.
9. Select **Done** to close the app assignment dialog box.

Related Links

Step 5 — Export Metadata for your Okta SAML Application on page 21

Step 5 — Export Metadata for your Okta SAML Application

1. From the **Navigation Bar**, go to **Applications** > **Applications**.
2. Select the SAML Application you created in Step 2, and then select the **Sign On** tab.
3. In the **Metadata Details** section, you will see the **Metadata URL**. Select **Copy** and retain the URL for use in the next step.

Related Links

Step 6 — For Okta: Create IdP Profile, Import Metadata, and Edit Settings in ExtremeCloud IQ on page 21

Step 6 — For Okta: Create IdP Profile, Import Metadata, and Edit Settings in ExtremeCloud IQ

To see the Enable SSO Global Settings option, log in to ExtremeCloud IQ using the SSO URL, `https://extremecloudiq.com`.

Note
Single Sign-on integration can only be configured by ExtremeCloud IQ users with Administrator permissions in their home account (VIQ). External administrators cannot access the SSO configuration page when administering other customer accounts.

1. In , select your name in the top right corner, and then select **Global Settings**.
2. Select **Enable Single Sign On (SSO)**.
3. Select **Add IdP Profile**.
4. On the **Type** tab, select **Okta**.
5. On the **Profile** tab, enter the fully qualified **Domain** name for which you want to provide single-sign on, and then select **Continue**.

   Note
   You can only define a single domain name per integration. If your IdP supports multiple domains, you must create a separate IdP profile for each domain.

6. On the **IdP Connection** tab, select **Import from URL**.

7. In the **ISP Metadata URL** field, paste the URL captured in Step 5, and then select **Import**.

   After successful import, metadata from Okta displays.

   Note
   There might be some critical elements not included in the Okta metadata. If the SLO URL and SLO Response URL fields are blank, enter placeholder values in each field, which we can update in a subsequent step.

8. To supply the placeholder values, copy the **SSO URL** and paste the value into the **SLO URL** and **SLO Response URL** fields.
9. From the **Choose Certificates** list, ensure the certificate that was included in the Metadata import is selected, and then select **Continue**.

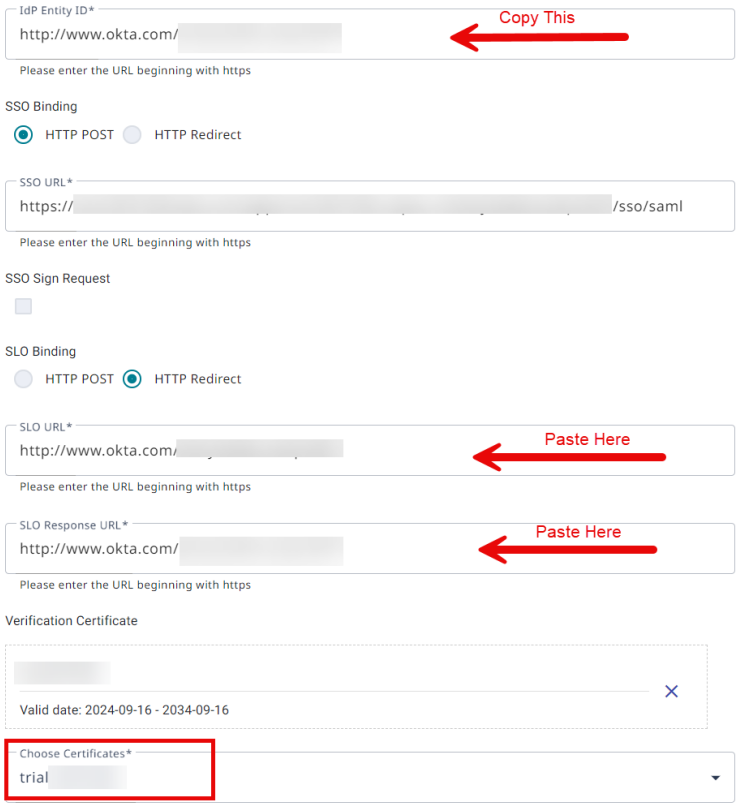

Figure 8: ExtremeCloud IQ - Placeholder Values for Single Logout

10. On the **Attribute Mapping** page, enter the following values:
    - **First Name**: `user.firstName`
    - **Last Name**: `user.lastName`
11. Select **Add a group name mapping** for each Okta group to map to an role.

12. In the **IdP group** field, enter the name of your Okta group, and then select the ExtremeCloud IQ role to map any users in the group.

    Add additional mappings as needed.

    Note
    Each of the values for First Name, Last Name, and Group Name are case sensitive. Ensure that what you enter here exactly matches the information in Okta. The list is applied from top to bottom, with the first match taking precedence. If a user belongs to multiple groups listed here, they will be assigned the XIQ role based on the order you specify.

13. Select a Default RBAC role assignment to assign a default permission for users that log into , but are not a member of an explicitly defined group.
    - If you select **Deny User Login**, a user that successfully logs into with their Okta credentials, but is not in an Okta group mapped to XIQ RBAC role, is denied access to the application.
    - If you select **Allow User Login and assign default user group**, a user that successfully logs into with their Okta credentials, but is not in an Okta group mapped to XIQ RBAC role, is mapped to the role defined here.
14. Select **Save & Finish**.

    Important
    The Operator, Monitor, Help Desk, Installer, or Observer RBAC roles require the definition of one or more sites to gain visibility over managed devices. In the rule definition for those roles, specify one or more sites in the rules. Failure to do so will lead to the administrator being unable to view any devices after login. Administrator and Guest Management roles do not leverage sites, and will ignore any site definition in the rule.

Related Links

Step 7 — Modify Okta SAML Application Metadata with ExtremeCloud IQ Settings on page 23

Step 7 — Modify Okta SAML Application Metadata with ExtremeCloud IQ Settings

For this step, we recommend having and Okta open in separate tabs, as you will select data from your new IdP profile in and copy it over to your SAML application in Okta.

1. In **Okta**:
   a. Browse to your Admin Portal, navigate to **Applications** > **Applications**, and then select your SAML application.
   b. From the **General** tab, scroll down to **SAML Settings**, and then select **Edit**.
   c. Select **Next**, and then select the **Configure SAML** tab.

2. In **ExtremeCloud IQ**:
   a. Navigate to **General Settings** > **Enable Single Sign-on**, in the row for your IdP profile completed in Step 6, select ⋮, and then select **Edit**.
   b. Select the **ExtremeCloud (SP) Connection** tab.
   c. Select **Download Certificate**, and save the file to your computer.
   d. Copy the **SP Entity ID** value from ExtremeCloud IQ and copy it to the **Audience URI (SP Entity ID)** field in Okta.
   e. Copy the **ACS URL** value from ExtremeCloud IQ and copy it to the **Single Sign-On URL** field in Okta.

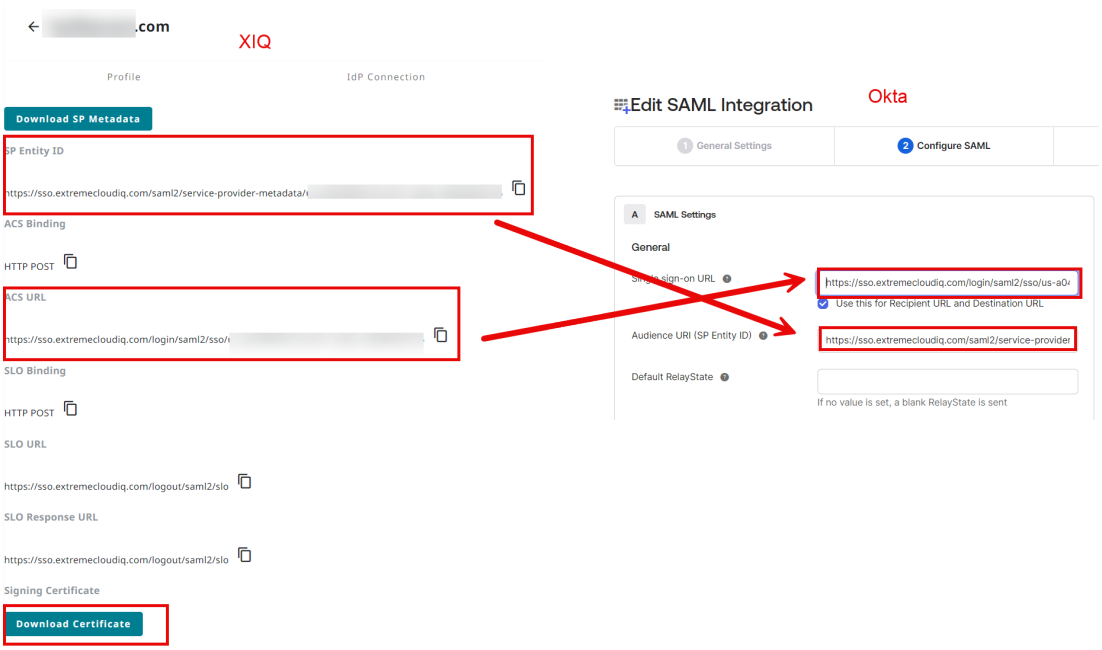

Figure 9: Okta - Replace Temporary Data for Single Sign-On URL and Audience URI

3. In Okta:
   a. Under **SAML Settings** > **General**, select **Show Advanced Settings**.
   b. For **Signature Certificate**, select **Browse files**.
   c. Select **All Files**, navigate to find the certificate file you downloaded in the previous step, select the certificate, and then select **Open** to upload the ExtremeCloud IQ certificate.
   d. Select **Enable Single Logout**.
   e. Copy the **SLO URL** value from **ExtremeCloud IQ** and copy it to the **Single Logout URL** field in Okta.

f. Copy the **SP Entity ID** value from **ExtremeCloud IQ** and copy it to the **SP Issuer** field in Okta.

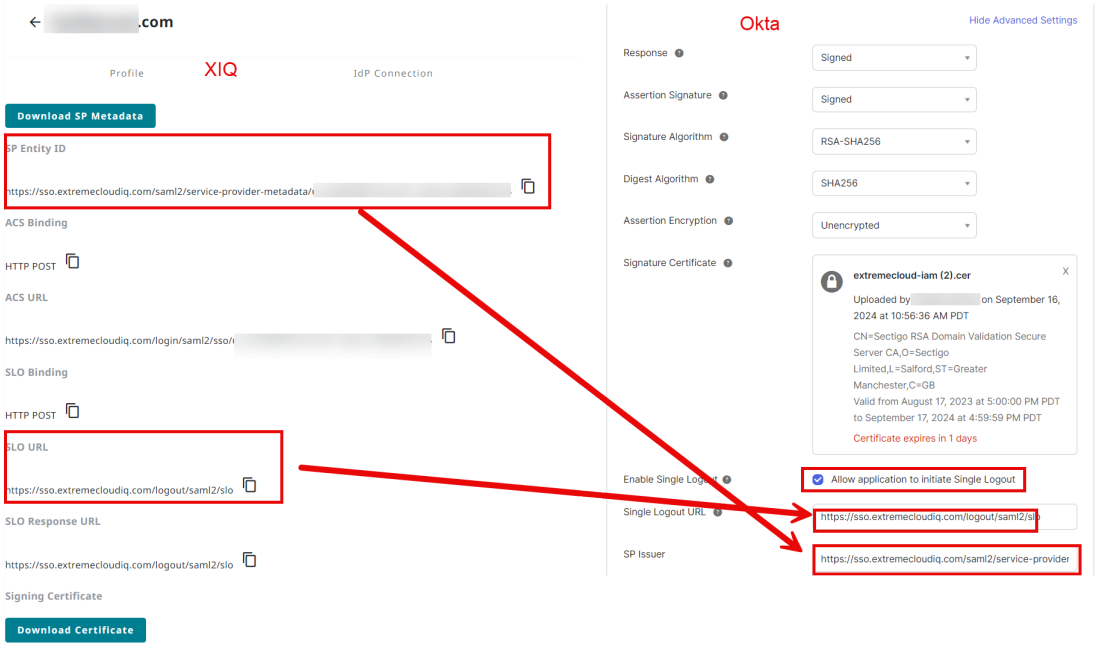

Figure 10: Okta - Single Logout Setting Definition

g. Select **Next**, and then select **Finish**. Click to view your SAML application again.
h. Select the **Sign On** tab, and in the **SAML 2.0** section, select **More Details**.
i. Next to the **Single Logout URL** field, select **Copy**.

   Use this URL to replace the placeholder text we submitted earlier.

4. In **ExtremeCloud IQ**:
   a. Return to the **IdP Connection** tab of your IdP profile and paste that value into the **SLO URL** and **SLO Response URL** fields, replacing your placeholder values.
   b. Select **Save**.

   The integration is now complete.

Related Links

Step 8 — Okta Test - IdP Initiated on page 25

Step 8 — Okta Test - IdP Initiated

After the integration is complete, test the application.

Use this task to start an IdP initiated test.

1. Log in to your Okta Organization at `https://login.okta.com` with a user account that has been granted access to the SAML application.
2. From the Okta Dashboard page, select your SAML application, and then from the right pane select **Launch App**.

   The browser redirects to the Okta Login Portal.

3. Enter your **Username** and **Password**, and then select **Verify**.

   After a successful login, you are redirected to the default view.

Related Links

Step 9 — Okta Test - SP Initiated on page 26

Step 9 — Okta Test - SP Initiated

Use this task to log in to through SP initiated.

1. Browse to the GDC Login page, and then select **SSO**.

   `https://extremecloudiq.com`

2. Enter the email address of the IdP account and complete the IdP login process.

   The browser is redirected to the Okta Login Portal. After a successful sign in, the browser redirects to the default view.

Notes and Caveats

- The first time an admin user logs in, ExtremeCloud IQ creates a corresponding entry in the ExtremeCloud IQ Accounts database for that VIQ (account) mapped to the appropriate role based on the mapping rules. An SSO-created account includes a blue flag that indicates the account is automatically created.

  For example, `test.user@company.onmicrosoft.com` is a member of the group mapped to the Operator Role, and ExtremeCloud IQ creates the Admin Account defined in the following figure.

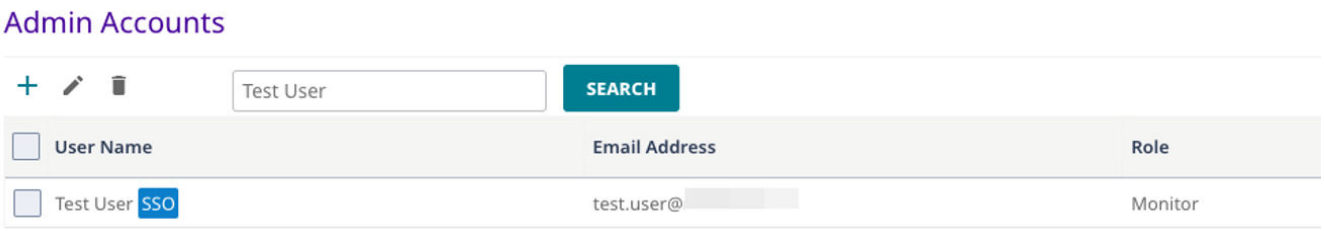

Figure 11: Admin Accounts List Shows User and Assigned Role

- The **Username** field is created only if the User object is provisioned with the First Name/Last Name field and the Attributes are added in ExtremeCloud IQ.
- The Operator, Monitor, Help Desk, Installer, or Observer RBAC roles require the definition of one or more sites to gain visibility over managed devices. In the rule definition for those roles, specify one or more sites in the rules. Failure to do so will lead to the administrator being unable to view any devices after login. Administrator and Guest Management roles do not leverage sites, and will ignore any site definition in the rule.
- Currently, you cannot link the same IdP domain to multiple VIQs. To leverage Self-Service SSO login across multiple VIQs, configure Self-Service SSO in just one VIQ. After the administrator logs in, they can use the existing external admin system to connect that account to additional VIQs.
- If individual IdP groups to RBAC roles are not defined, you must configure a Catchall group, and add all users who require access, along with the Catchall rule. Without this configuration, the user authentication will fail.
- Roles and sites defined via the RBAC rule assignment engine are only enforced at administrator's first login. Once the authorization account is created in ExtremeCloud IQ with role/site defined, a subsequent change of rule or site will not be enforced unless the ExtremeCloud IQ account is deleted, forcing creation of a new authorization account.
- Administrators with the **Guest Management RBAC** role must be a part of a Credential Distribution group to create and assign end-user credentials. When

adding administrators to the Credential Distribution group, use the saml.login formatted UserID for those logging in through Self-Service SSO, instead of the email address. Obtain the saml.login credential through the XAPI.

- ExtremeCloud IQ MFA (Multi-Factor Authentication) is not supported for use with Self-Service SSO login. Use the MFA features provided by your IdP instead.
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