

Sentry SSO with Meraki Dashboard

(This Article is under construnction)

(This integration has not been released yet)

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Setup Sentry Keys

Before you are able to create a Single Sign On configuration on Meraki, you will need to setup some Keys if you haven't previously. Please see a separate article: [HowToCreateKeysOnCmi](#). You will need the certificate from the View Keys menu option of Swivel Sentry. Download the Cert file and save it with the .crt extension name.

Enable SAML SSO in Meraki Dashboard

In Meraki Dashboard menu, go to Organization > Settings > SAML Configuration, enable SAML SSO and click "Add a SAML Idp"

The screenshot shows the Meraki Dashboard interface. On the left is a dark sidebar with the Cisco Meraki logo and a navigation menu. The 'Organization' section is highlighted in green. The main content area is titled 'SAML Configuration'. It features a 'SAML SSO' section with a dropdown menu set to 'SAML SSO enabled'. Below this are three input fields: 'Consumer URL' with the value 'https://n151.meraki.com/saml/login/K3Ld5', 'X.509 cert SHA1 fingerprint' with the value 'bc:84:73:d8:bd:2b:71:76:a1:01:b5:58:7b:63', and 'SLO logout URL (optional)' with the value 'https://<FQDN_OF_SENTRY_SERVER>:8443'. There is a green link 'Add a SAML IdP' and a section for 'Administration' at the bottom.

SAML SSO = select "SAML SSO enabled"

X.509 cert SHA1 fingerprint = open the saved certificate from sentry and get the fingerprint/thumbprint from the Details. The fingerprint needs to have colons on every two characters. ex: 00:11:22:33:44...

SLO logout URL (optional) = set the logout url: https://<FQDN_OF_SENTRY_SERVER>:8443/sentry/singlelogout

Add SAML administrator roles

Go to Organization > Administrators > SAML administrator roles

This section is used to assign permissions to user groups in Dashboard. When SAML users log-in, they will be granted whatever permissions have been assigned to the 'role' attribute included in the SAML token provided by the IdP.

You can create roles based on the username or other attributes of the user.

To create a new role, click Add SAML role and specify the role.

SAML administrator roles

[SAML login history](#) ›

Delete	Search SAML roles...
<input type="checkbox"/> Role 	Privilege 
<input type="checkbox"/> [REDACTED]_CUSTOMER	[REDACTED] (Monitor-only)
<input type="checkbox"/> [REDACTED]_ADMIN	[REDACTED] (Read)
<input type="checkbox"/> [REDACTED]	[REDACTED] (Monitor-only)

Create role

Role:

Organization access: None

Note: Only administrators with Organization access can edit and/or view configuration template networks.

Target

Access

[+ Add access privileges](#)

[privacy](#)

Close

Create role

Current session started: 28 minutes ago

Session has named to shards: 7/1, 212

Setup additional role attribute in Swivel Core (if needed)

If you want to use specific roles for the Meraki User roles, you can create the attribute in Swivel Core > Repository > Attributes

Name:	<input type="text" value="merakirole"/>
Phone Number?	<input type="text" value="No"/>
Sync Rule	<input type="text" value="Synchronised"/>
Add repository qualifier?	<input type="text" value="None"/>
Attribute:	
Local:	<input type="text" value="custom"/>
Idap:	<input type="text" value="merakiRole"/>

Setup Sentry Application

You can select Application Images in the left hand menu to upload the Meraki Dashboard logo. (Optional)



Open the Sentry SSO administration page and Click Applications in the left hand menu. To add a new Application definition for Meraki, click the SAML - Other select button.

SAML - Other	✓Select
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SAML Application



Note: The Endpoint URL is used only if the ACS (Assertion Consumer Service) is not supplied in the SAML (Security Assertion Markup Language) request.

Name

Meraki

Image

cisco-meraki-logo.png



Points

0

Portal URL

<https://n151.meraki.com/saml/login/K3Ld5b/SKpuNaPW8kLb>

Endpoint URL

Entity ID

<https://dashboard.meraki.com>

Federated Id

email

Name = Meraki (Arbitrary name for the application)

Image = the meraki logo

Points = the number of points the user needs to score from their Authentication Method in order to successfully authenticate to this Application

Portal URL = the Meraki Dashboard **Consumer URL** that is given when enabling SAML SSO

Entity ID = <https://dashboard.meraki.com>

Federated ID = email (That needs to match with the attributed defined on Swivel Core)

Save and click edit to be able to add SAML Assertion Attributes to the application. Add the two attributes required by Meraki:

<https://dashboard.meraki.com/saml/attributes/username> and <https://dashboard.meraki.com/saml/attributes/role>

SAML Application

Name	<input type="text" value="https://dashboard.meraki.com/saml/attributes/user"/>
Format	<input type="text"/>
Sentry Attribute	<input type="text" value="email"/>

SAML Application

Name

https://dashboard.meraki.com/saml/attributes/role

Format

Sentry Attribute

merakirole

Assertion Attributes

https://dashboard.meraki.com/saml/attributes/username

 Edit

 Delete

https://dashboard.meraki.com/saml/attributes/role

 Edit

 Delete

Add Attribute

Testing authentication to Meraki Dashboard via Swivel Sentry

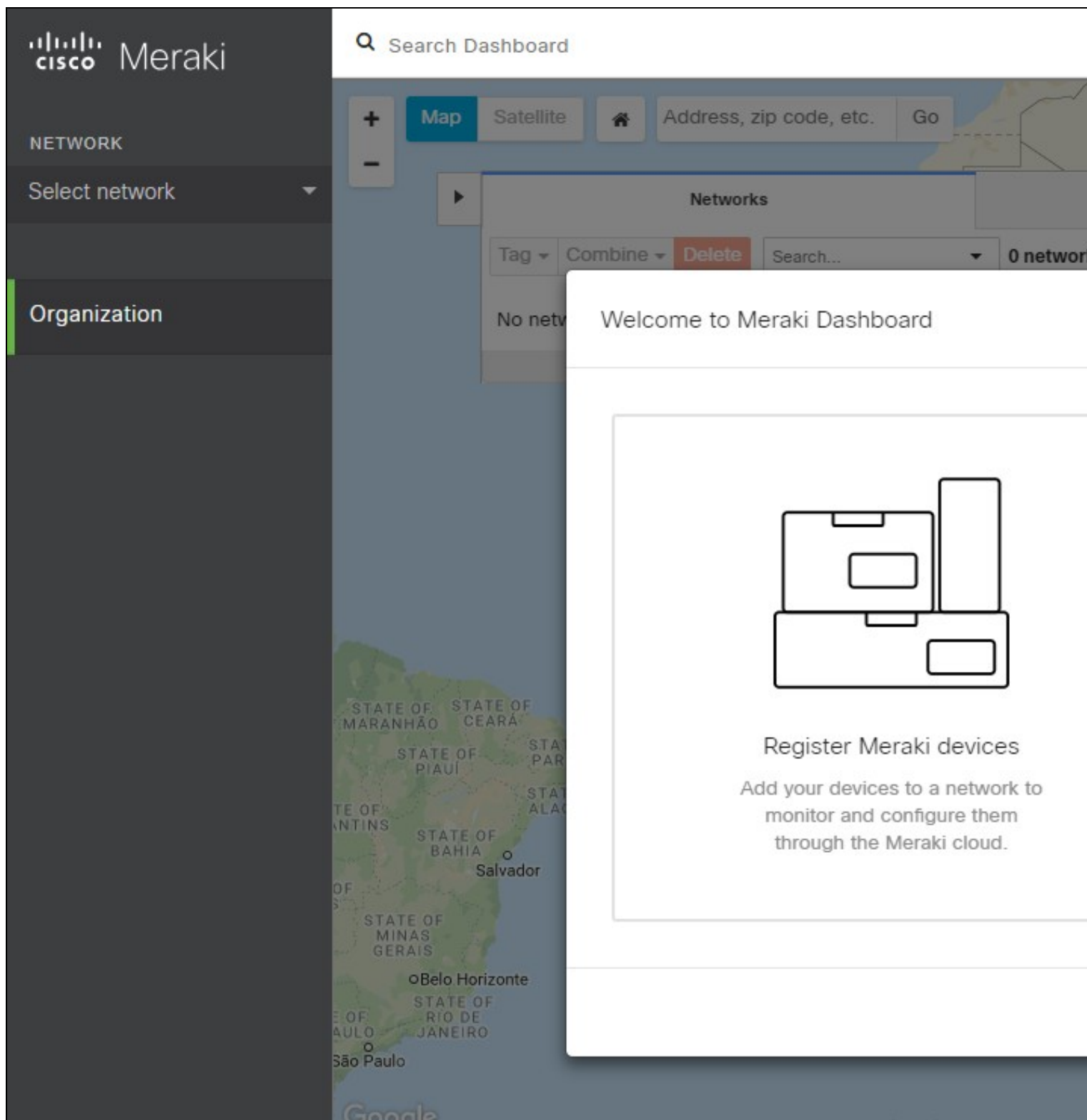
In the Sentry Start Page, select Meraki Dashboard and login.

The image shows a login interface for Cisco Meraki. At the top center is the Cisco Meraki logo, which consists of a circular icon with a stylized signal tower and the text "CISCO Meraki" below it. Below the logo is a white rectangular box containing a text input field with the placeholder text "Username". Underneath the input field are two purple rounded rectangular buttons: "Submit" on the left and "Clear" on the right. The entire interface is set against a background image of a modern building with many windows.



Submit **Clear**

If the login is successful, you will login to the Meraki Dashboard and will see on the top right the username that was specified in the user attribute



Troubleshooting

There are various logging components available for this particular integration which can aid in diagnosis at different points during authentication.

- The Swivel Core has a Log Viewer menu item which can reveal information concerning user status e.g. is the user locked, has a session been started for the image request;
- The Swivel Sentry has a View Log menu item which provides details about the SAML assertion and response received from Meraki and can be useful for comparison with the Meraki SAML Assertion Validator output;
- Meraki has a SAML login history which can provide diagnostics about the latest SAML authentication attempt. This can be particularly useful for verifying the SAML Attributes and various elements within the SAML assertion that takes place between the Swivel Sentry and Meraki. To get to the SAML Login history in Meraki select Organization -> Administrators -> SAML login history.

SAML administrator roles

[SAML login history](#) ›

Customer testing org SAML login history

‹ [Administrators](#)

Search... ▼

Status	Time ▼	Source IP	Username
✓	Nov 14 15:37:38 UTC	[REDACTED]	t.santos.meraki@swivelsecure.com
✓	Nov 14 15:19:44 UTC		t.santos.meraki@swivelsecure.com
✓	Nov 14 14:23:48 UTC		t.santos.meraki@swivelsecure.com
✓	Nov 14 12:29:54 UTC		t.santos.meraki@swivelsecure.com
✗	Nov 14 12:29:13 UTC	[REDACTED]	[REDACTED]
✗	Nov 14 12:28:11 UTC		[REDACTED]

It is crucial when troubleshooting, to pinpoint where the authentication is failing. For example, you may find that the Swivel Core logs show a successful authentication (which would indicate that the user has entered their Password and OTC correctly), but the Sentry logging or Meraki login history shows that there is a problem with the SAML assertion.

Two common issues which can be diagnosed with the validator are:

- Certificate or decryption issues;
 - ◆ Can Sentry find the Certificate locally, is it the correct one?
 - ◆ Has the correct Certificate Fingerprint been set in Meraki?
- Attributes mismatch.
 - ◆ Has the Role been created in Meraki Dashboard?
 - ◆ Does the Repository -> Attribute name being used actually map to a Repository attribute? Has a User Sync occurred in the Swivel Core since modifying this?