

PolicyHub[®] Configuring SCIM with Okta

Approval and Publication History

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General

SCIM Provisioning is a great way to connect an Identity Provider directly with PolicyHub in order to provision users and groups. This can be used instead of the standard Active Directory and CSV synchronization mechanisms or to supplement these feeds. This configuration guide provides information on how to enable SCIM provisioning with Okta.

SCIM Endpoint URL

The endpoint URL is the URL of the SCIM API specific to your PolicyHub instance. The endpoint URL is case insensitive. You will need this URL to enable provisioning with Okta.

The URL will be in following format:

<https://PolicyHub Instance URL/PolicyHubApi/ScimApi.svc/Scim/V2>

If you are unsure of this value or if you are unsure if this has been configured for your PolicyHub instance, then please contact our services team or your Mitrtech account manager.

NOTE: For the SCIM API to work for on-premise customers, SSL should must be enabled on the hosting server and should be accessible from public network.

Configure OKTA for SCIM

Requirements

To setup SCIM provisioning with OKTA, you need to have access to the OKTA Admin Console.

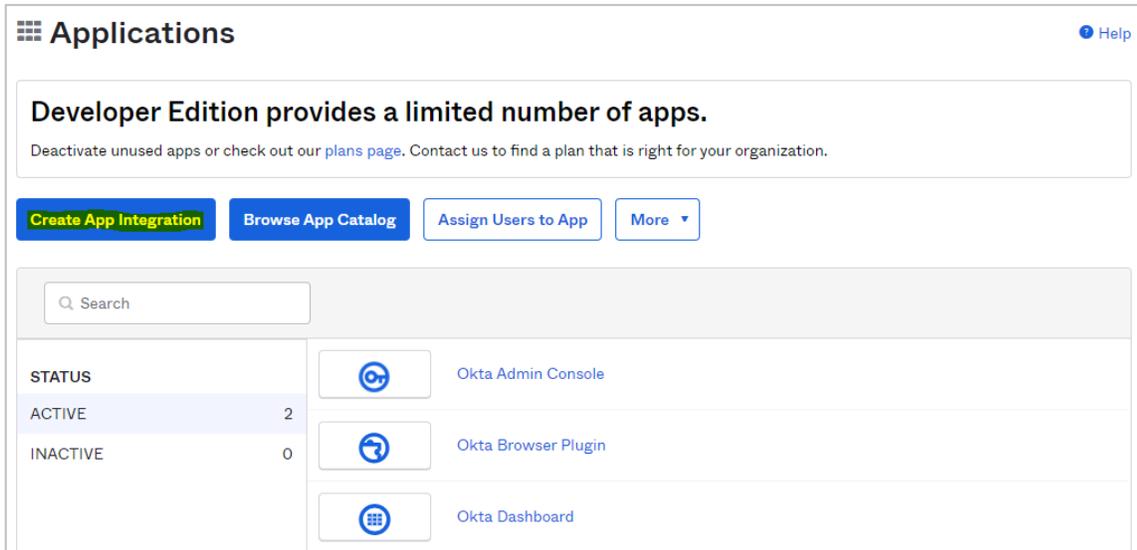
Bearer Token

Before you start integrating your Identity Provider with your PolicyHub SCIM API, you will need a secure token. It will be used to authenticate all requests coming from Okta. Please note that the PolicyHub SCIM API currently only supports **Bearer Tokens**.

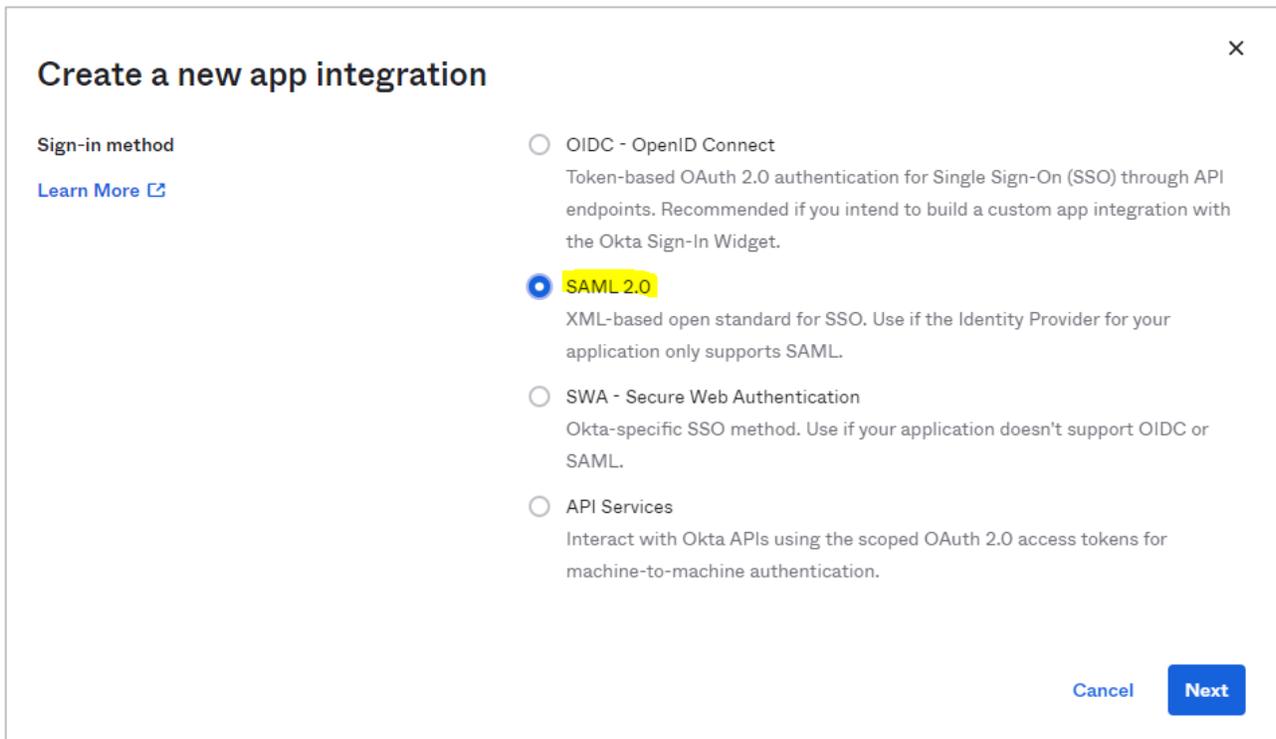
If you don't already have the authentication token for your PolicyHub instance, please contact a member of our services team or your Mitrtech account manager.

Create Application

Login to the OKTA Admin console and from the sidebar menu, click on the Application menu. You will see following screen.



Click on **Create App Integration**. A popup will appear. Select **SAML 2.0** radio button and click Next.



In the **General Settings** tab, enter the Application Name and click Next. The next screen will ask you to integrate SAML. SAML configuration is covered in a separate document. After configuring SAML, click Next.

Create SAML Integration

1 General Settings 2 **Configure SAML** 3 Feedback

A SAML Settings

1 We found some errors. Please review the form and make corrections.

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)

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.

Next in the Feedback tab, select I'm a software vendor. I'd like to integrate my app with OKTA. And then click Finish.

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

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.

Now the application is created, we can enable SCIM provisioning.

If you already have an application in OKTA, then you can jump into the [Enable SCIM Provisioning](#) section of this document.

Enable SCIM Provisioning

Once you have finished creating an application in OKTA, go to the Application menu and select PolicyHub. You will see something similar to this:

The screenshot shows the 'PolicyHub' application settings page in the 'General' tab. At the top, there is a gear icon, a status dropdown set to 'Active', and links for 'View Logs' and 'Monitor Imports'. Below this is an information banner with an 'i' icon and the text: 'Once you have a working SAML integration, submit it for Okta review to publish in the OAN.' The navigation tabs are 'General', 'Sign On', 'Mobile', 'Import', and 'Assignments', with 'General' being the active tab. The main content area is titled 'App Settings' and includes an 'Edit' button. The settings listed are:

- Application label: PolicyHub
- Application visibility:
 - Do not display application icon to users
 - Do not display application icon in the Okta Mobile app
- Provisioning: **Enable SCIM provisioning**
- Auto-launch: Auto-launch the app when user signs into Okta.
- Application notes for end users

From the **General** tab, click on the Edit button and select **Enable SCIM provisioning** and click Save. Once you have saved the **General** tab changes, you will see a new tab called **Provisioning**.

The screenshot shows the 'PolicyHub' application settings page in the 'Provisioning' tab. At the top, there is a gear icon, a status dropdown set to 'Active', and links for 'View Logs' and 'Monitor Imports'. Below this is an information banner with an 'i' icon and the text: 'Once you have a working SAML integration, submit it for Okta review to publish in the OAN.' A 'Submit your app for review' button is visible on the right side of the banner. The navigation tabs are 'General', 'Sign On', 'Mobile', 'Provisioning', 'Import', and 'Assignments', with 'Provisioning' being the active tab. The main content area is titled 'SCIM Connection' and includes an 'Edit' button. The settings listed are:

- SCIM version: 2.0
- SCIM connector base URL
- Unique identifier field for users
- Supported provisioning actions:
 - Import New Users and Profile Updates
 - Push New Users
 - Push Profile Updates
 - Push Groups
 - Import Groups
- Authentication Mode: Basic Auth

From here, you can configure the SCIM integration. Click on Edit and in the SCIM connector base URL enter the URL in this format:

<https://PolicyHub Instance URL/PolicyHubApi/ScimApi.svc/Scim/V2>

In the Unique identifier field for the user text box, enter **userName**. ('u' should be in lower case and 'N' should be in upper case). In Supported provisioning actions, select the first four checkboxes.

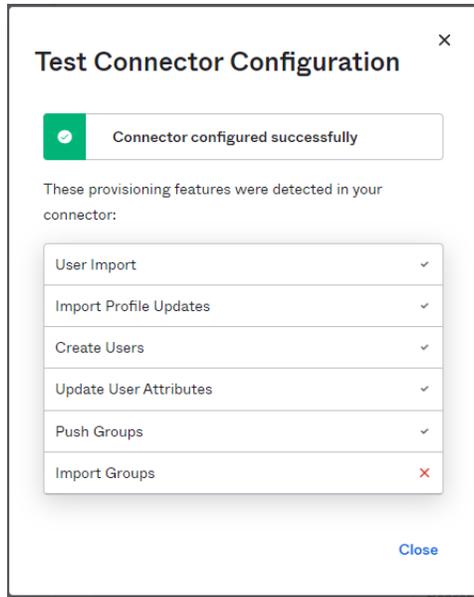
In the Authentication Mode dropdown, select HTTP Header and in the token text box enter the bearer token provided by Mitratesh and then click on Test Connection.

The screenshot displays the 'SCIM Connection' configuration page within the 'Provisioning' tab. The page includes a 'Settings' sidebar with 'Integration' selected. The main content area is titled 'SCIM Connection' and contains the following fields and options:

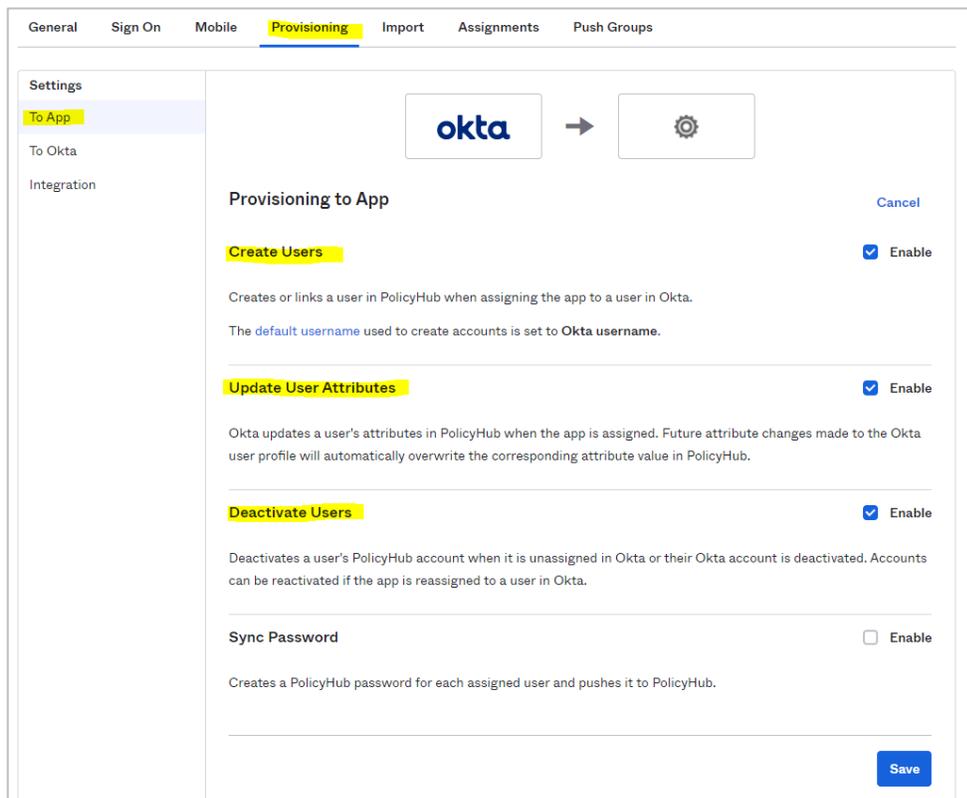
- SCIM version:** 2.0
- SCIM connector base URL:** <https://test.com/PolicyHubApi/ScimApi.svc/Scim/V2>
- Unique identifier field for users:** userName
- Supported provisioning actions:**
 - Import New Users and Profile Updates
 - Push New Users
 - Push Profile Updates
 - Push Groups
 - Import Groups
- Authentication Mode:** HTTP Header
- HTTP Header:**
 - Authorization:** Bearer [redacted token]

At the bottom of the configuration area, there is a button labeled 'Test Connector Configuration' which is highlighted with a yellow box. At the bottom right of the page, there are 'Save' and 'Cancel' buttons.

You will see the following message once the connection test is completed.



Now click on Save button. After you save you will see a new tab **To App** in panel on the left. Now you can set what operations you want to enable in SCIM. Select **Create Users**, **Update User Attributes** and **Deactivate Users** and then click **Save**.



Now you have enabled SCIM Provisioning for OKTA you can start adding users and groups.

Import Users & Groups

With simple steps, you can import users and groups in OKTA. Here is the link for [Getting Started: Users and Groups](#).

In PolicyHub, First Name, Last Name, Email and Login Name (Login ID/User ID) is mandatory. Before you assign a user to OKTA for provisioning, please make sure you have provided this 4 information in user details tab. If any user or group failed in provisioning, you can find the reason on OKTA Log. In below screenshot, you can see user **madhuri** is not added successfully. You can get exact error detail by clicking on the user from Assignments tab or from the Tasks panel from left sidebar you can see the complete error log.

PolicyHub Active [Icons] View Logs Monitor Imports

General Sign On Mobile Provisioning Import **Assignments** Push Groups

Assign Convert assignments Search... People

Filters	Person	Type
People	Anshu Sharma	Individual
Groups	Anshu.Sharma	
	Ajay Gupta ajay.gupta@hs.com	Group
	Vikash Gupta Mitrtech\Vikash.Gupta	Group
	Avni Gupta Avni.Gupta	Group
	! madhuri k madhuri@policyhubadfs.com	Group

Assigned Applications

! An error occurred while provisioning PolicyHub

Automatic provisioning of user madhuri k to app PolicyHub failed: Error while creating user madhuri@policyhubadfs.com: Conflict. Errors reported by remote server: **User already exists with same Login Name**. If you are using more than 1 IDP, then check if same user is present in both IDPs. Please fix this on the [Tasks Page](#)

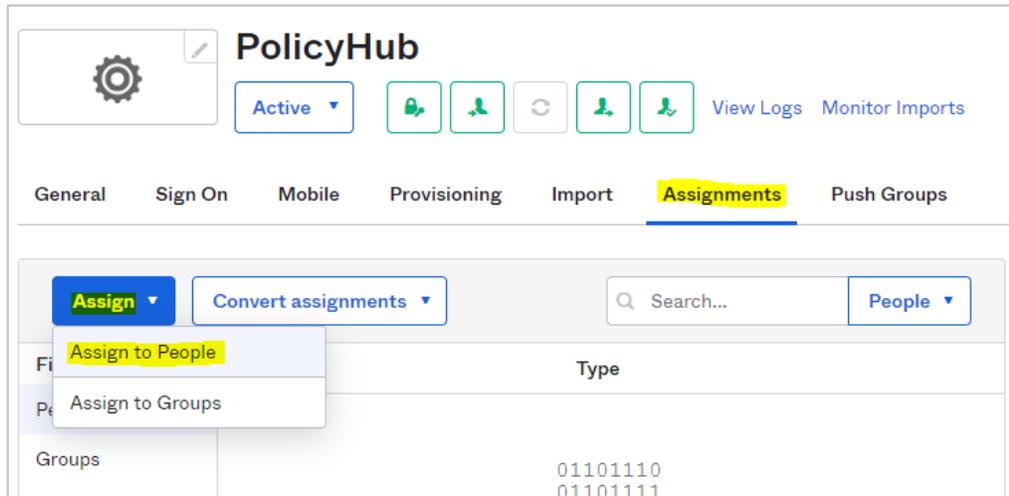
Assign Applications Search...

Application	Assignment & App Username
PolicyHub	Group Raipur madhuri@policyhubadfs.com

Perform User/Group Import

In OKTA, you can add Users or Groups separately in the application.

Next in this document we will cover how you can perform CRUD operations using OKTA and the PolicyHub SCIM API. Use following screen to perform User/Group related operations.



Add User

Click on the **Assign to People** dropdown item to select users that you want to assign to PolicyHub. A popup will appear from where you can select users. Make sure the user you are selecting is **Active** in OKTA and the fields First Name, Last Name, Email and Login Name (User ID / Login ID) are provided because these four fields are mandatory in PolicyHub.

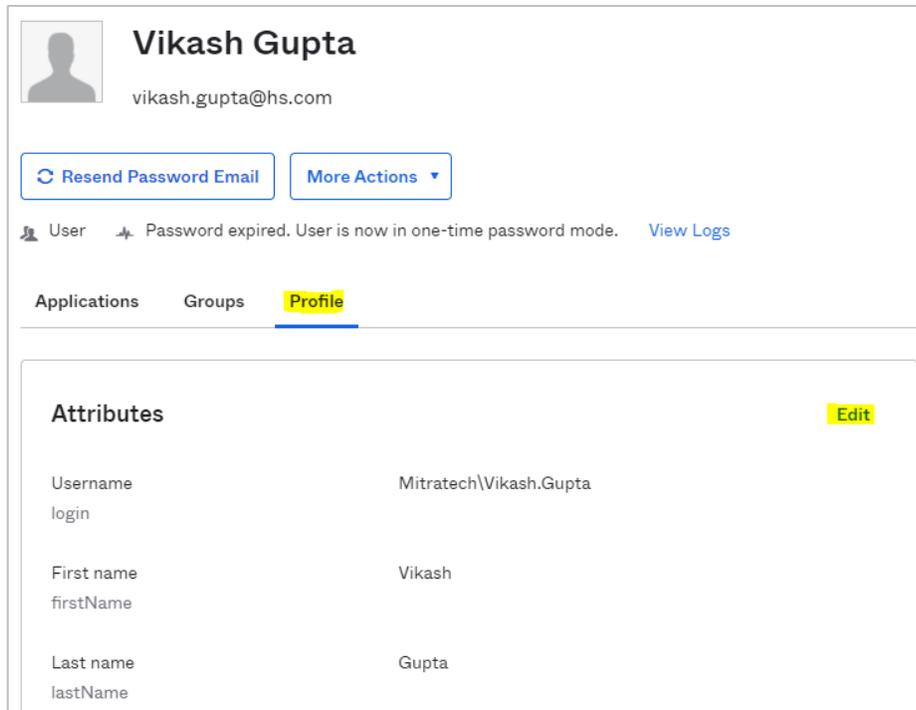
From the Directory => People page you will see the list of users who are not active. These inactive users will not be included in SCIM transactions by OKTA. All users that you want to synchronize with PolicyHub should be active.

Mohit Jha mohit@hs.com	mohit@hs.com	Staged Activate
Achal Jha achal@hs.com	achal@hs.com	Staged Activate
madhuri k madhuri@policyhubadfs.com	madhuri.k@test.com	Pending user action
Deepak Kumar deepak@hs.comm	deepak@hs.comm	Password expired

Limitation: There is no unique identifier exposed by OKTA through SCIM for a user, so if a login name gets reused, there is no way to determine if it is a new user or an existing user that was re-added. PolicyHub is configurable in how it handles this scenario, allowing the choice between always reactivating an existing user or always creating a new user, with the default being that a new user is always created. This is for safety reasons as we do not want to show the history of an old, deleted user for a new user that gets added with the same name.

Modify User

Go to Directory => People from the left sidebar menu and search for the user from the list that you want to edit. Select it and go to the Profile tab.



Vikash Gupta
vikash.gupta@hs.com

[Resend Password Email](#) [More Actions](#)

User Password expired. User is now in one-time password mode. [View Logs](#)

Applications Groups **Profile**

Attributes		Edit
Username login	Mitrtech\Vikash.Gupta	
First name firstName	Vikash	
Last name lastName	Gupta	

It's important not to edit the **Login Name** for a user. This is used to uniquely identify a user and if it is changed, then the existing user will no longer be updated with any changes from Okta and no new user will be provisioned with the same name. If this happens then the only way to continue synchronizing the user is to change the login name back again.

In many organizations the login name is consists of a combination of first name and surname and so this is a field subject to change for example when an employee gets married. In cases like this it's important to have a process around how this is handled from an IT perspective as this is beyond the control of PolicyHub and its SCIM integration with Okta.

Important: There is an issue which we've observed while editing a user. When you edit the email ID and click save then the username also get updated automatically with the email ID. In order to prevent this user from being decoupled, please make sure that after editing the email ID, that there is no change to the username. In this does change, then you will need to change it back in order to continue synchronizing the user with PolicyHub

Delete User

There are two options to remove a user from PolicyHub. Either you can unassign a user from OKTA or you can Deactivate/Delete the user from OKTA.

If you are using the unassign option, then the user will be removed from PolicyHub if the user is only in one group, but if they are in other groups as well, then they will not be removed from PolicyHub.

Add Group

There are two tabs for groups provisioning. 'Assignment', which can be used to assign a group to the application but will not push groups to PolicyHub.

The other option is 'Push Groups', which can be used to push the group to PolicyHub.

You can push groups directly to PolicyHub without using the 'Assignment' tab but the benefit of using the 'Assignment' tab is that on assigning a group, all the users assigned to the group will be created in PolicyHub automatically (but not the group itself).

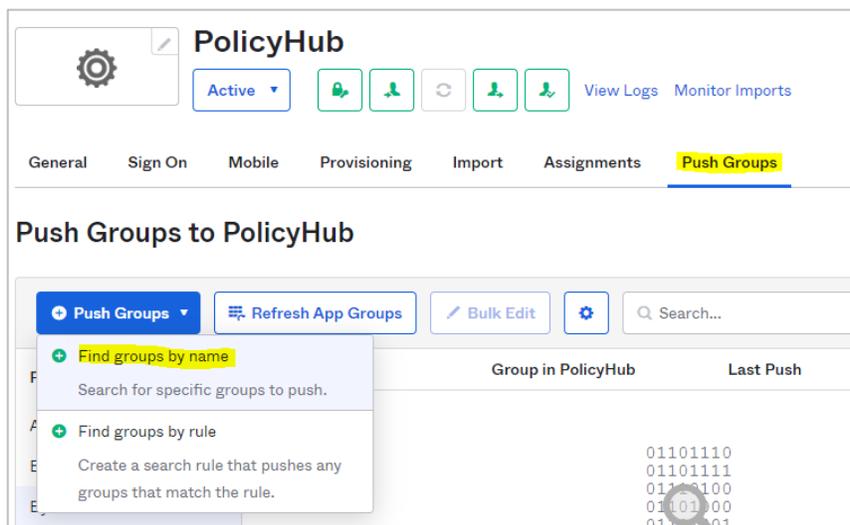
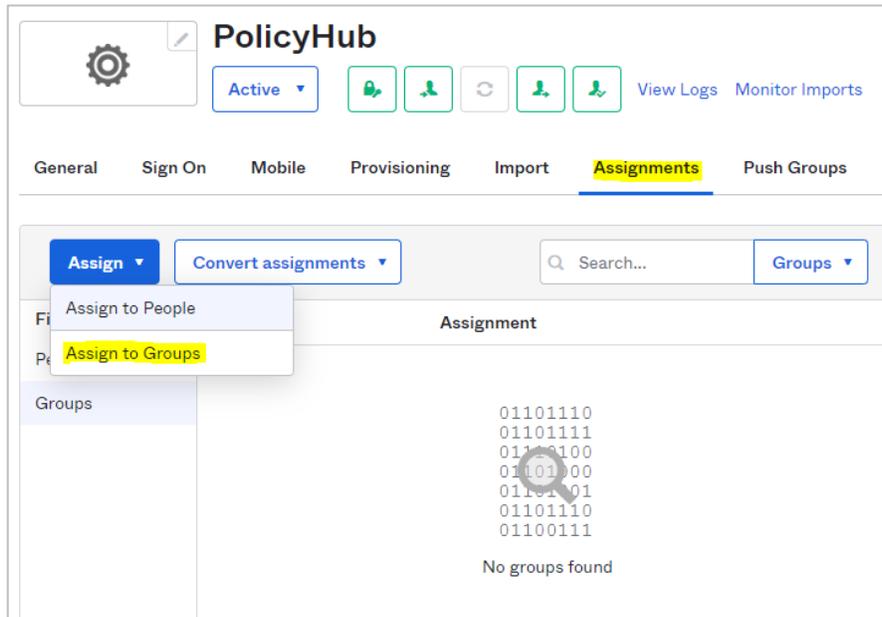
If you only use 'Push Groups' then the group will be created but not the users. In this scenario, you would have to link the users manually in the application.

For example, if Group-A has 3 users and if you push the group then the group will be created in PolicyHub but there will be no user inside it.

If you use the Assignment tab to add the group, then first it will push all the users belonging to that group automatically to PolicyHub. Next, you just need to add the group in the Push Groups tab.

Using these 2 simple steps will import the group as well as the users. If you later add or remove a user from the group, then it will be synchronized with PolicyHub automatically.

In summary, the recommended way to synchronize groups with PolicyHub is firstly to assign the group from Assignments tab and then use the Push Groups tab to push the group.



Search for a group by name and click Save. All the users linked to the group and the group itself will be imported to PolicyHub.

LIMITATION:

- OKTA does not support group hierarchy and so all groups will appear as top-level root groups in PolicyHub. This can make it challenging when targeting specific groups during the publication process.

Modify Group

Go to Directory => Group from the left sidebar menu and search for a group from the list that you want to edit. Select it and go to the Profile tab. You can now change the group name. From the People tab in the same page, you can add or remove members from a Group.

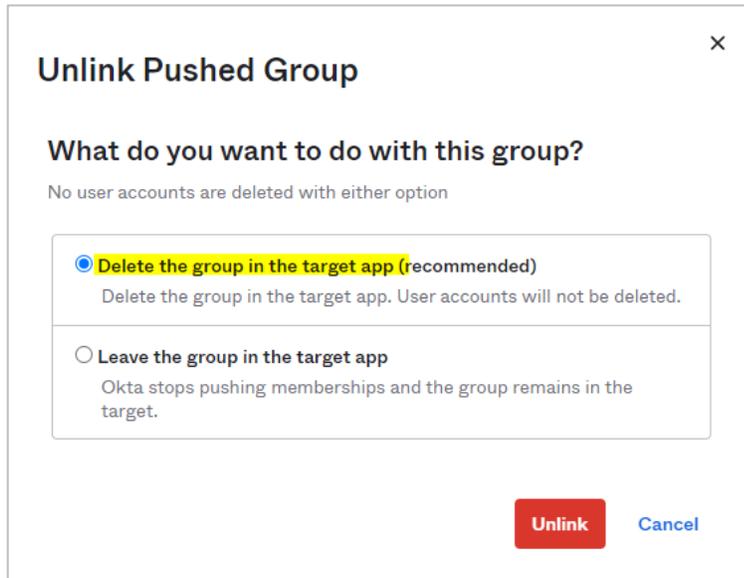
Delete a Group

To delete a group, you have two options

1. You can go to Push Groups tab where you will find an option to remove the group from the OKTA Application. Select **Delete the group in the target app (recommended)**. This will unlink the group from the application in OKTA and will remove the group from PolicyHub.

The screenshot shows the PolicyHub interface for managing pushed groups. At the top, there's a navigation bar with tabs: General, Sign On, Mobile, Provisioning, Import, Assignments, and Push Groups (highlighted). Below this is the 'Push Groups to PolicyHub' section, which includes a search bar and several action buttons: Push Groups, Refresh App Groups, Bulk Edit, and a settings icon. The main content is a table with the following columns: Pushed Groups, Group in Okta, Group in PolicyHub, Last Push, and Push Status. A dropdown menu is open over the 'Group Raipur' entry, showing two options: 'Deactivate group push' and 'Unlink pushed group' (highlighted in yellow). The 'Unlink pushed group' option includes a description: 'Stop pushing group memberships and optionally delete the pushed group.'

Pushed Groups	Group in Okta	Group in PolicyHub	Last Push	Push Status
All	Group Raipur No description	Group Raipur No description	Feb 3, 2022 12:15:11 AM	Active



2. Go to Directory => Groups and select the group that you want to delete. From the Actions dropdown, click Delete.



Recommendation

Always assign a group before a push. If you don't, then sometimes it will be difficult to find out why some users are not getting added to a group even though the group is active and present in PolicyHub.

Troubleshooting

In the event of any mismatch between user and group mappings, go to the 'Assignment' tab and check if the group is present or not. If not, then assign it and then go to 'Push Groups' and from the Push Status dropdown, click 'Push Now'.

PolicyHub

Active | View Logs | Monitor Imports

General | Sign On | Mobile | Provisioning | Import | **Assignments** | Push Groups

Assign | Convert assignments | Search... | People

Assign to People
Assign to Groups

Type
Group

PolicyHub

Active | View Logs | Monitor Imports

General | Sign On | Mobile | Provisioning | Import | Assignments | **Push Groups**

Push Groups to PolicyHub

Push Groups | Refresh App Groups | Bulk Edit | Search...

Pushed Groups	Group in Okta	Group in PolicyHub	Last Push	Push Status
All	Group A1 No description	Group A1 No description	Jan 11, 2022 6:41:48 AM	Active
Errors	Group OKTAa No description	Group OKTAa No description	Jan 14, 2022 2:13:05 AM	Active
By name	Group Raipur No description	Group Raipur No description		
By rule	Group Ranchi No description	Group Ranchi No description		
	GroupOkta No description	GroupOkta No description		

- Deactivate group push
Stop pushing group memberships.
Existing memberships are unaffected.
- Unlink pushed group
Stop pushing group memberships and optionally delete the pushed group.
- Push now
Push this group's memberships to PolicyHub



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