



Okta Integration Guide

Using Okta with Google Cloud Platform

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Table of Contents

Table of Contents	1
Integration Overview	2
Using Okta with Google Cloud Platform	2
Set Up	2
Set up a G Suite instance	2
Set up a GCP instance	2
Connect Okta to your G Suite instance	3
Testing the Set Up	4
Create a new user in Okta	4
Create a new group in Okta	4
Assign the new user to the new group	4
Assign the G Suite application to the group	4
Test the end-user login (G Suite)	4
Assign role(s) to user (GCP)	5
Test the end-user login (GCP)	5

Integration Overview

Using Okta with Google Cloud Platform

Okta integrates with Google Cloud Platform so that GCP users can SSO from Okta into their GCP accounts with the same security and ease-of-use that they get when they SSO from Okta into their G Suite accounts. GCP administrators can use Okta to automatically create and deactivate GCP users (and their licenses), and also use GCP IAM to assign roles to groups imported from Okta.

If you want, you can follow along with the setup instructions below using a basic G Suite instance, a free trial instance of GCP, and a [free trial edition](#) of Okta (please note that this setup will not work with the developer edition of Okta).

Set Up

The essential steps to connecting your Okta instance with your GCP instance are:

1. Set up a G Suite instance
 - a. G Suite essential acts as GCP's identity layer in this federation scenario.
2. Set up a GCP instance
 - a. Set up the GCP instance with the same organization and domain that you set up with G Suite
3. Connect Okta to your G Suite instance
 - a. Okta has step-by-step instructions in the Okta UI to connect to G Suite
 - b. SSO: enable Okta users to SSO into G Suite and GCP
 - c. Provisioning: allow Okta to create (and deactivate) users (and licenses) in G Suite and GCP
 - d. Push groups: allow Okta to create groups in G Suite and GCP

Set up a G Suite instance

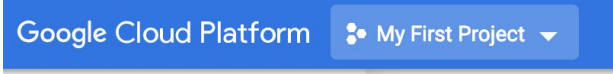
Set up a G Suite instance; a trial instance is fine.

Make sure you verify the domain that is associated with the G Suite instance.

Make sure that API Access is enabled for G Suite: **Security > API Reference > API Access**

Set up a GCP instance

Set up a GCP instance, using the same super-admin account that you used in setting up G Suite. Make sure that you have an "organization" associated with your GCP instance. To see if you have an organization associated with your GCP instance, click on the Projects drop-down list at the top of the panel:



You should see a “Select From” drop-down with your domain name:



If you don’t see the “Select from” drop-down and your domain, then you do not yet have an organization associated with your GCP account.

If you’ve just spun up this instance or are using a free trial, make sure that you have upgraded the free trial:

- There is usually a banner at the top of the GCP admin panel letting you know that you have \$300 in free credit for 12 months. Click on “upgrade” to enable this.
- You may need to log out and log back in after you upgrade for the change to take effect.

You may need to assign an “Organization administrator” role to a user in the tenant. Google does not recommend making the G Suite super admin also the GCP super admin, but for PoC purposes, this is fine. Follow the instructions [here](#) to assign the organization administrator role.

Connect Okta to your G Suite instance

In your Okta tenant, go to Applications->Applications and click “Add Application”.

Search for “G Suite”.

Follow the setup wizard in the Okta UI to enable SSO to G Suite.

Choose SAML 2.0 as your Sign-On Method, and click View Setup Instructions to set up G Suite.

Note: the Single Sign-On setup screen in Google can be erratic. You may need to refresh the page and re-enter the Okta settings on the page until you get to a screen that allows you to click “I understand and agree”.

After you have set up SSO, click on the Provisioning tab to set up Provisioning to G Suite.

Follow the on-screen instructions; accept all of the defaults.

Testing the Set Up

Create a new user in Okta

For the user's login/email, make sure you use the same domain that you used in setting up G Suite.

Create a new group in Okta

Application assignments are usually done through groups in Okta, so create a new group in Okta: "devops"

Assign the new user to the new group

In the group screen, click "Manage People"

Assign the G Suite application to the group

In the group screen, click "Manage Apps"

Choose the G Suite application.

When you click the Assign button, you will be presented with options to set up specific settings for this group's relationship with G Suite.

Leave all settings as-is.

Click "Save and Go back" and then "Done".

Make sure you do not see any errors.

At this point, the new user that you have created in Okta has been created in G Suite as well, and is also visible to GCP.

Test the end-user login (G Suite)

Log in to your Okta instance as the new user.

You should see your G Suite applications.

Click on a G Suite application (Drive, for example).

Google may present you with a license agreement.

Google may prompt you to verify an SMS message.

You should be able to see the new user's G Drive.

Assign role(s) to user (GCP)

Users in G Suite are not immediately visible in GCP. As an admin, you must explicitly assign a role to the user to enable them to really do anything (though they will be able to authenticate in GCP without you doing anything).

To assign a role (and/or project) to a user, log in to your GCP console as an admin and click "IAM & admin".

Click "Add" at the top of the screen to add a user.

In the "New members" box, start typing the email address of one of your G Suite users. GCP will find the user.

Assign a role to the user.

Test the end-user login (GCP)

Open a new incognito window and go to an address like the following:

<https://www.google.com/a/atkobiz.com/ServiceLogin?continue=https://console.cloud.google.com>

where you replace "atkobiz.com" with your own domain.

Log in as the new user and you will see that you are part of your GCP domain.