ZSCALER AND IBM VERIFY SSO DEPLOYMENT GUIDE

JULY 2021, VERSION 2.0

BUSINESS DEVELOPMENT GUIDE

Contents

Terms and Acronyms

The following table defines abbreviations used in this deployment guide. When applicable, a Request for Change (RFC) is included in the Definition column for your reference.

Acronym	Definition
CA	Central Authority (Zscaler)
CSV	Comma-Separated Values
DPD	Dead Peer Detection (RFC 3706)
GRE	Generic Routing Encapsulation (RFC2890)
IKE	Internet Key Exchange (RFC2409)
IPSec	Internet Protocol Security (RFC2411)
PFS	Perfect Forward Secrecy
PSK	Pre-Shared Key
SSL	Secure Socket Layer (RFC6101)
XFF	X-Forwarded-For (RFC7239)
ZIA	Zscaler Internet Access (Zscaler)
ZPA	Zscaler Private Access (Zscaler)

Trademark Notice

About This Document

Zscaler Overview

Zscaler (NASDAQ: ZS) enables the world's leading organizations to securely transform their networks and applications for a mobile and cloud-first world. Zscaler Internet Access (ZIA) and Zscaler Private Access (ZPA) services create fast, secure connections between users and applications, regardless of device, location, or network. Zscaler delivers its services 100% in the cloud and offers the simplicity, enhanced security, and improved user experience that traditional appliances or hybrid solutions can't match. Used in more than 185 countries, Zscaler operates a massive, global cloud security platform that protects thousands of enterprises and government agencies from cyberattacks and data loss. To learn more, see Zscaler's website or follow Zscaler on Twitter @zscaler.

IBM Overview

IBM (NYSE: IBM) looks to be a part of every aspect of an enterprise's IT needs. The company primarily sells software, IT services, consulting, and hardware. IBM operates in 175 countries and employs approximately 350,000 people. The company has a robust roster of 80,000 business partners to service 5,200 clients—which includes 95% of all Fortune 500. While IBM is a B2B company, IBM's outward impact is substantial. For example, IBM manages 90% of all credit card transactions globally and is responsible for 50% of all wireless connections in the world. To learn more, refer to the IBM Security Verify website.

Audience

This guide is for network administrators, endpoint and IT administrators, and security analysts responsible for deploying, monitoring, and managing enterprise security systems. For additional product and company resources, refer to:

- Zscaler Resources
- IBM Resources
- Appendix A: Requesting Zscaler Support

Software Versions

This document was authored using the latest version of Zscaler's software.

Request for Comments

- **For Prospects and Customers**: Zscaler values reader opinions and experiences. Contact partner-doc-support@zscaler.com to offer feedback or corrections for this guide.
- **For Zscaler Employees**: Contact z-bd-sa@zscaler.com to reach the team that validated and authored the integrations in this document.

Zscaler and IBM Introduction

This section contains overviews of the Zscaler and IBM applications described in this deployment guide.

⚠ If you are using this guide to implement a solution at a government agency, some of the content might be different for your deployment. Efforts are made throughout the guide to note where government agencies might need different parameters or input. If you have questions, please contact your Zscaler Account team.

ZIA Overview

ZIA is a secure internet and web gateway delivered as a service from the cloud. Think of it as a secure internet on-ramp—all you do is make Zscaler your next hop to the internet via one of the following methods:

- Setting up a tunnel (GRE or IPSec) to the closest Zscaler data center (for offices).
- Forwarding traffic via our lightweight Zscaler Client Connector or PAC file (for mobile employees).

No matter where users connect—a coffee shop in Milan, a hotel in Hong Kong, or a VDI instance in South Korea—they get identical protection. ZIA sits between your users and the internet and inspects every transaction inline across multiple security techniques (even within SSL).

You get full protection from web and internet threats. The Zscaler cloud platform supports Cloud Firewall, IPS, Sandboxing, DLP, and Browser Isolation, allowing you to start with the services you need now and activate others as your needs grow.

ZPA Overview

ZPA is a cloud service that provides secure remote access to internal applications running on a cloud or data center using a Zero Trust framework. With ZPA, applications are never exposed to the internet, making them completely invisible to unauthorized users. The service enables the applications to connect to users via inside-out connectivity rather than extending the network to them.

ZPA provides a simple, secure, and effective way to access internal applications. Access is based on policies created by the IT administrator within the ZPA Admin Portal and hosted within the Zscaler cloud. On each user device, software called Zscaler Client Connector is installed. Zscaler Client Connector ensures the user's device posture and extends a secure microtunnel out to the Zscaler cloud when a user attempts to access an internal application.

Zscaler Resources

The following table contains links to Zscaler resources based on general topic areas.

Name and Link	Description
ZIA Help Portal	Help articles for ZIA.
Zscaler Tools	Troubleshooting, security and analytics, and browser extensions that help Zscaler determine your security needs.
Zscaler Training and Certification	Training designed to help you maximize Zscaler products.
Submit a Zscaler Support Ticket	Zscaler Support portal for submitting requests and issues.
ZPA Help Portal	Help articles for ZPA.

The following table contains links to Zscaler resources for government agencies.

Name and Link	Description
ZIA Help Portal	Help articles for ZIA.
Zscaler Tools	Troubleshooting, security and analytics, and browser extensions that help Zscaler determine your security needs.
Zscaler Training and Certification	Training designed to help you maximize Zscaler products.
Submit a Zscaler Support Ticket	Zscaler Support portal for submitting requests and issues.
ZPA Help Portal	Help articles for ZPA.

IBM Security Verify Overview

Organizations need unified identity repositories and policies to deliver cloud transformation and IT modernization, while enabling a remote workforce and increasing user productivity and security. Simultaneously as consumers pivot faster to digital channels, these same organizations need to provide a consistent, secure, and frictionless experience across channels to their prospects, customers, and citizens.

IBM Security Verify protects users and applications both inside and outside the enterprise, while enabling technical agility and operational efficiency as a cloud-native solution. Beyond single-sign on and multifactor authentication, IBM Security Verify is a modernized, modular IDaaS that provides deep AI-powered context for risk-based authentication and adaptive access decisions, guided experiences for developer time-to-value and comprehensive cloud IAM capabilities. From privacy and consent management to holistic risk detection and identity analytics, IBM Security Verify centralizes workforce and consumer IAM for any hybrid cloud deployment.

IBM Resources

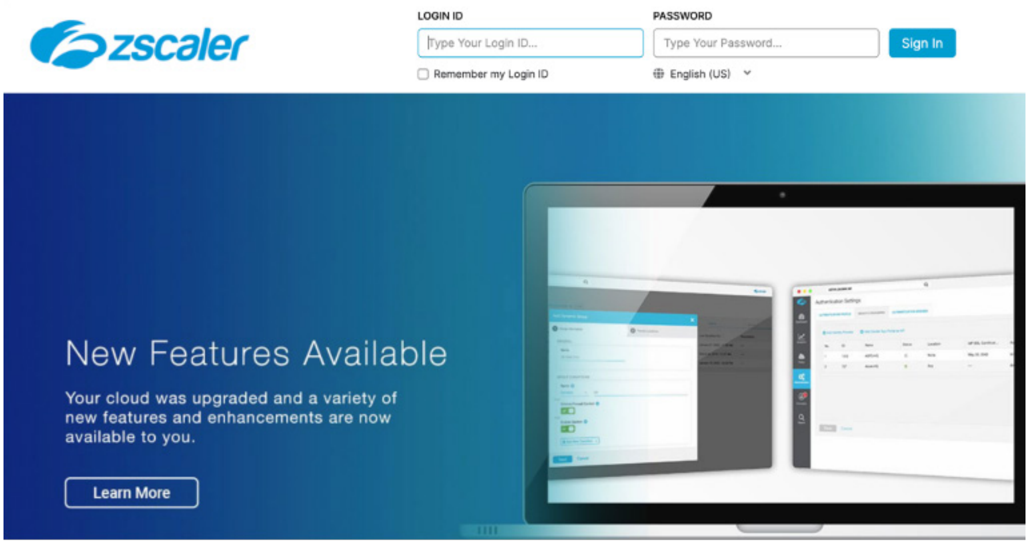
The following table contains links to IBM support resources.

Name and Link	Description
IBM Security Verify product documentation	Online help for IBM Security Verify.
IBM Security Verify developer guides	Online help for IBM developers.
IBM Community Forum	IBM community forum webpages.
IBM Support	IBM support portal for submitting requests and issues.

ZIA Configuration

To allow user provisioning in IBM Security Verify, follow these steps to generate the SCIM URL and token.

1. Log in as an admin user to your ZIA Admin Portal using the following URL: https://admin.zscalerbeta.net



Your cloud was upgraded and a variety of new features and enhancements are now available to you.

Figure 1. Login to ZIA Admin Portal

2. Go to **Administration** > **Authentication** > **Authentication Settings**.

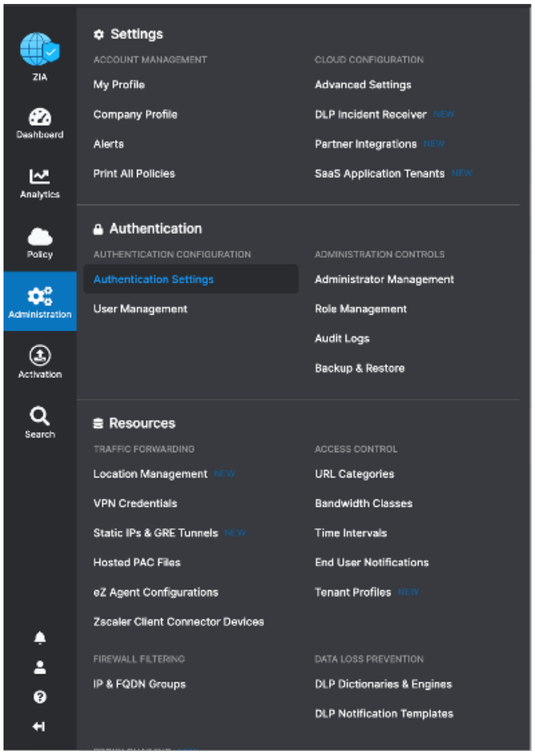
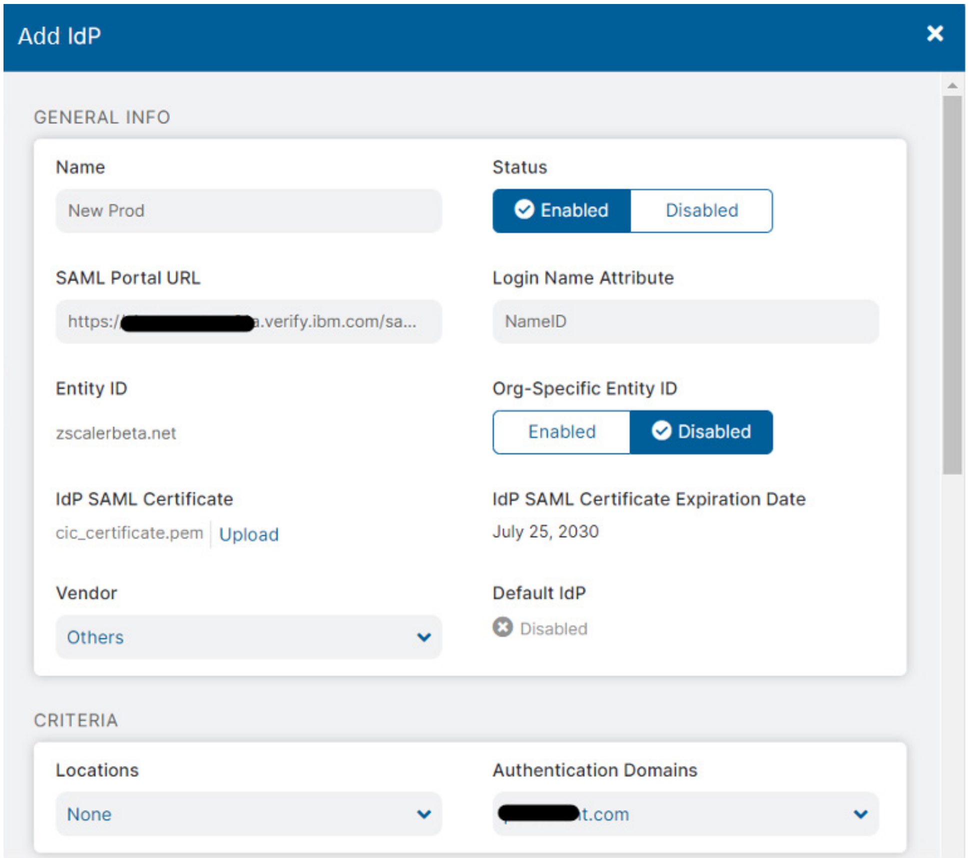


Figure 2. ZIA authentication settings

3. For the **Authentication Type** field, select **SAML**.
4. Click **Open Identity Providers**. The **Identity Providers** tab is displayed.
5. Click **Add IdP** (or select the identity provider that you want to modify and click the Edit icon).
6. Provide the following details in the **Add IdP** window:
   a. For the **General Info** section, specify the following settings:
      i. **Name**: Provide a name for your identity provider configuration.
      ii. **Status**: Select **Enabled**.
      iii. **SAML Portal URL**: `https://xxxxx.verify.ibm.com/saml/sps/saml20ip/saml20/login`
      iv. **Login Name Attribute**: Provide the login name attribute as **NameID**.
      v. **Entity ID**: The name of the Zscaler cloud.
      vi. **Org-Specific Entity ID**: Enable if you have more than one organization instance on the same Zscaler cloud.
      vii. **IdP SAML Certificate**: Upload the certificate which you can download from IBM Security Verify.
      viii. **Vendor**: Select **Others**.

   b. For the **Criteria** section, specify the following settings:
      i. **Locations**: Select a value from the drop-down menu based on your requirements.
      ii. **Authentication Domains**: Select a value from the drop-down menu based on your requirements.



Add IdP ✕

GENERAL INFO

Name: New Prod

Status: ● Enabled | Disabled

SAML Portal URL: https:/[redacted].verify.ibm.com/sa...

Login Name Attribute: NameID

Entity ID: zscalerbeta.net

Org-Specific Entity ID: Enabled | ● Disabled

IdP SAML Certificate: cic_certificate.pem | Upload

IdP SAML Certificate Expiration Date: July 25, 2030

Vendor: Others

Default IdP: ☒ Disabled

CRITERIA

Locations: None

Authentication Domains: [redacted].com

Figure 3. Add IdP window

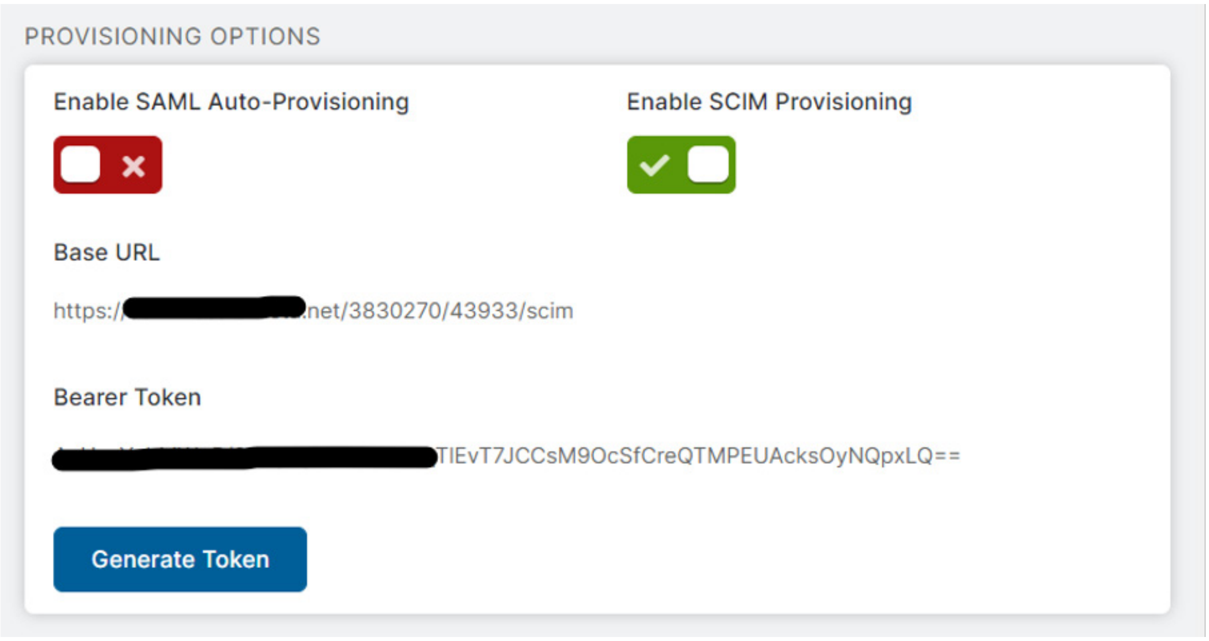
   c. In the **Provisioning Options** section:

i. **Enable SAML Auto-Provisioning**: Disabled.

ii. **Enable SCIM Provisioning**: Enabled.

iii. Copy the **Base URL**.

iv. Click **Generate Token** to create a bearer token, and copy it.



PROVISIONING OPTIONS

Enable SAML Auto-Provisioning ✗

Enable SCIM Provisioning ✓

Base URL

https:/[redacted]net/3830270/43933/scim

Bearer Token

[redacted]TIEvT7JCCsM9OcSfCreQTMPEUAcksOyNQpxLQ==

Figure 4. Provisioning options

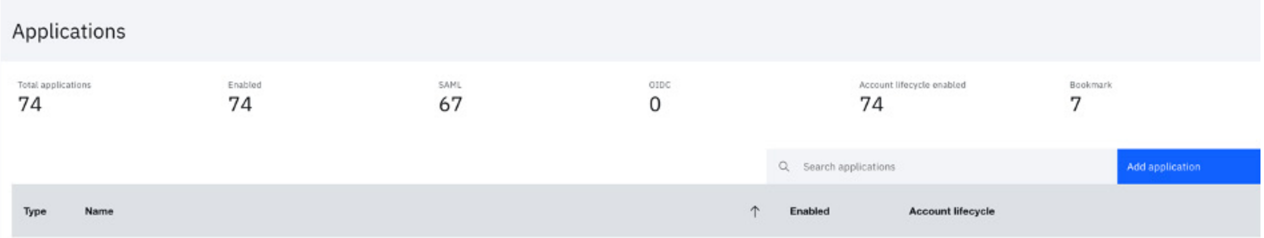
7. Click **Save**.
8. In order to apply the new changes, logout from the ZIA Admin Portal. Changes won't start until you logout.

Configure Zscaler Application in IBM Security Verify

The following sections describe configuring Zscaler in the IBM Security Verify application.

Create or Update Zscaler Application

1. Login to IBM Security Verify as a tenant admin.
2. Go to **Applications** page, then click **Add application**.

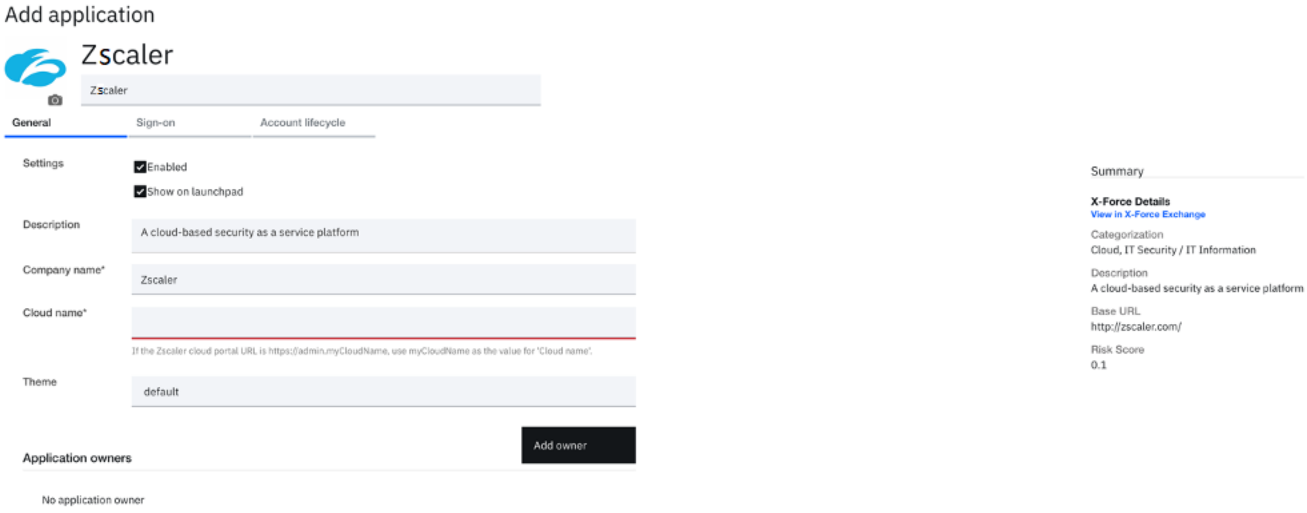


Applications

Total applications	Enabled	SAML	OIDC	Account lifecycle enabled	Bookmark
74	74	67	0	74	7

Figure 5. IBM Security Verify Applications

3. On the **Select Application Type** dialog, enter `Zscaler` into the search box.
4. When displayed, select the Zscaler application and then click **Add application**.
5. On the **Add Application** page, leave Zscaler as the **Company name**.
6. Enter the Zscaler cloud portal name (it is part of the URL: `https://admin.<myCloudName>`) as the value for **Cloud name**.



Add application

Zscaler

Zscaler

Settings ☑ Enabled ☑ Show on launchpad

Description: A cloud-based security as a service platform

Company name*: Zscaler

Cloud name*:

If the Zscaler cloud portal URL is https://admin.myCloudName, use myCloudName as the value for 'Cloud name'.

Theme: default

Application owners

No application owner

Summary

X-Force Details
View in X-Force Exchange

Categorization
Cloud, IT Security / IT Information

Description
A cloud-based security as a service platform

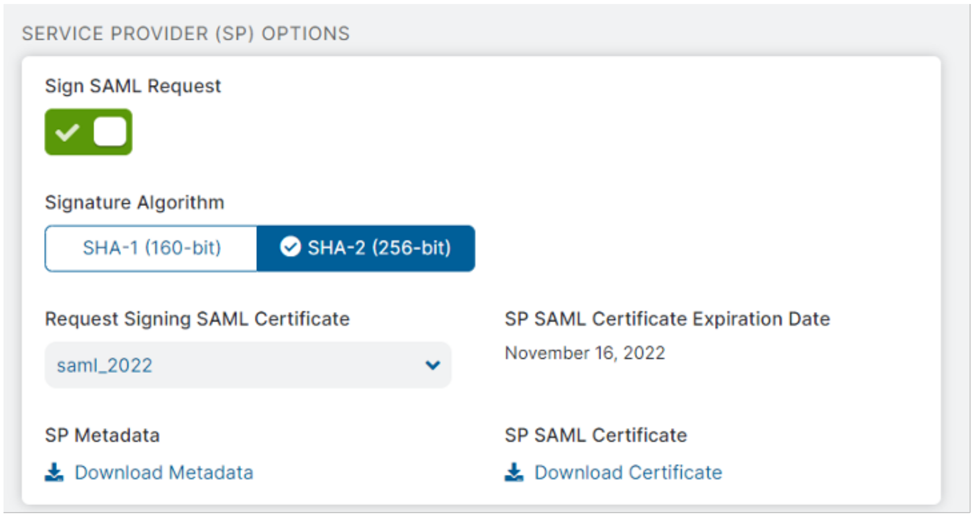
Base URL
http://zscaler.com/

Risk Score
0.1

Figure 6. Zscaler application

Configure Sign-On

1. Go to the Zscaler **Sign-on** tab. Follow the on-screen instructions.
2. In another browser, login to your Zscaler account as an admin user. The URL varies depending on your Zscaler cloud, but looks like: `https://admin.<Zscaler Cloud>`.
3. For the **Authentication Type** field, click **Open Identity Providers**. The **Identity Providers** tab is displayed.
4. Select the previously created identity provider and click the **Edit** icon.
5. For the **Service Provider (SP) Options** section, specify the following settings:
    a. **Sign SAML Request**: Enable this option (If you want to sign the SAML request).
    b. **Signature Algorithm**: Select SHA-2 (256-bit).
    c. **Request Signing SAML Certificate**: Select a certificate from the drop-down based on your requirements.
    d. **SP Metadata**: Click this to download Zscaler metadata.
    e. **SP SAML Certificate**: If Sign SAML Request is enabled, click this to download Zscaler certificate.



SERVICE PROVIDER (SP) OPTIONS

Sign SAML Request: ✓ (enabled)

Signature Algorithm: SHA-1 (160-bit) | ✓ SHA-2 (256-bit)

Request Signing SAML Certificate: saml_2022

SP SAML Certificate Expiration Date: November 16, 2022

SP Metadata: Download Metadata

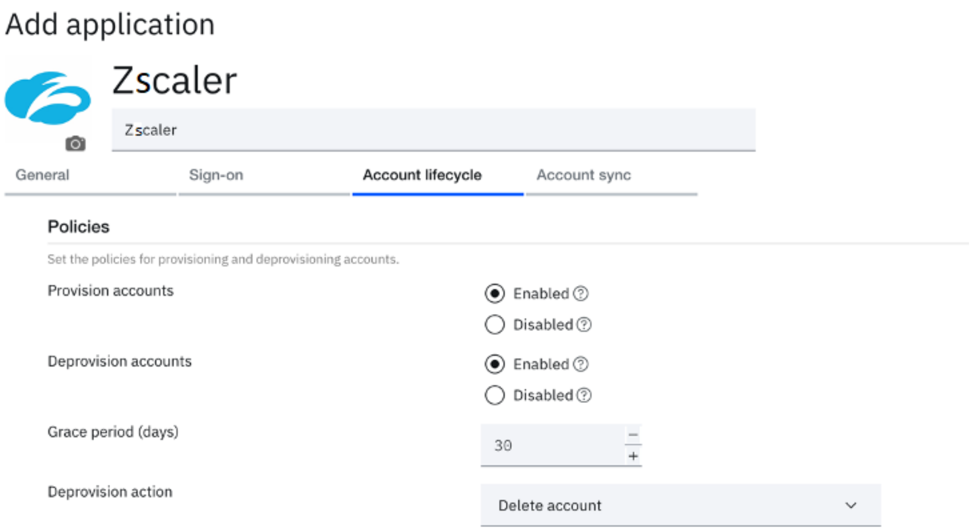
SP SAML Certificate: Download Certificate

Figure 7. Service Provider options

6. In order to apply the new changes, logout from ZIA Admin Portal. Changes won't apply until you logout.

Configure Account Lifecycle

1. Go to the Zscaler **Account lifecycle** tab.
2. Enable the provisioning and deprovisioning. Zscaler allows **Suspend account** and **Delete account** (with a **Grace period**) as a **Deprovision action**.



Add application

Zscaler

Zscaler

Policies

Set the policies for provisioning and deprovisioning accounts.

Provision accounts: ● Enabled ○ Disabled

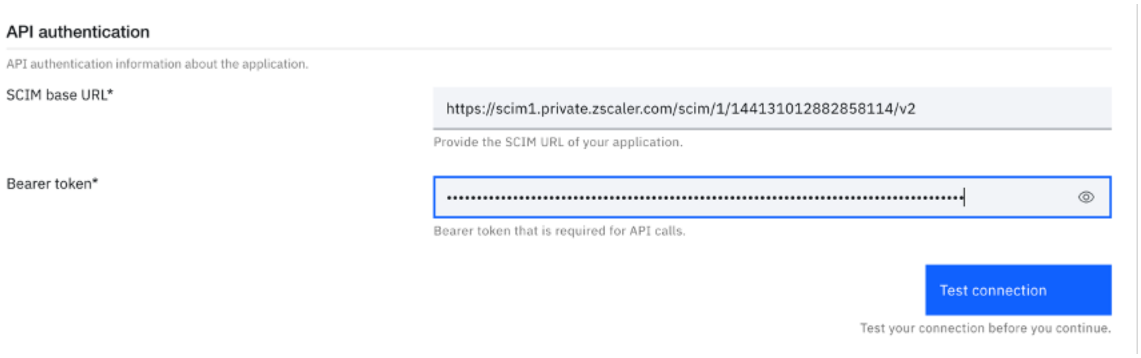
Deprovision accounts: ● Enabled ○ Disabled

Grace period (days): 30

Deprovision action: Delete account

Figure 8. Zscaler policies

3. Scroll down to the **API authentication** section.
4. In the **SCIM base URL** field, enter the SCIM URL that you generated earlier.
5. In the **Bearer token** field, enter the token that you generated earlier.



API authentication

API authentication information about the application.

SCIM base URL*: https://scim1.private.zscaler.com/scim/1/144131012882858114/v2

Provide the SCIM URL of your application.

Bearer token*: ••

Bearer token that is required for API calls.

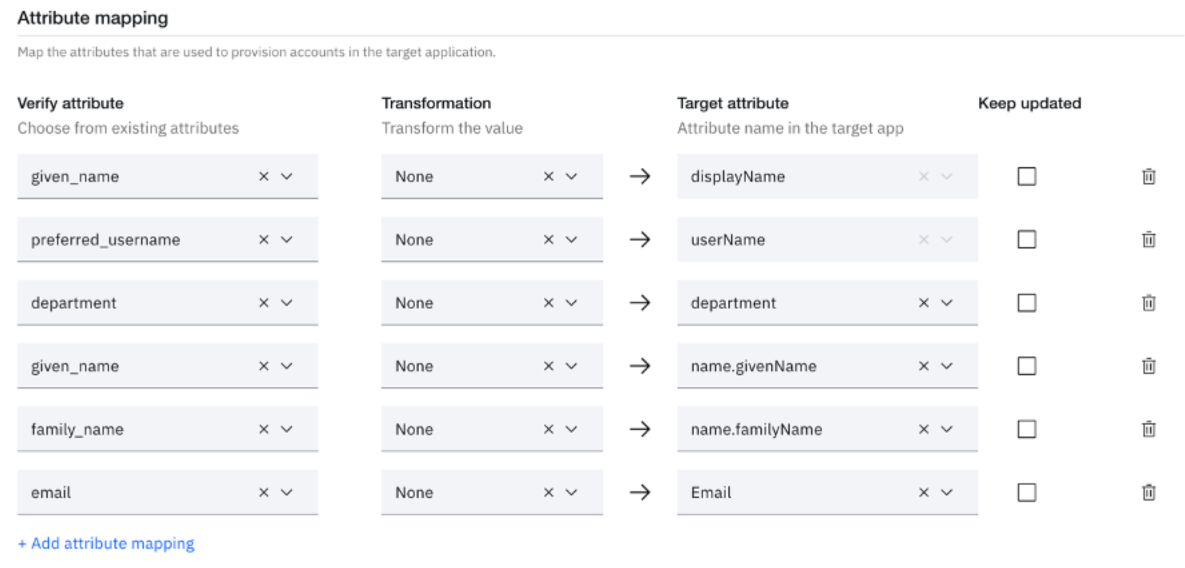
Test your connection before you continue.

Figure 9. API authentication

6. Click **Test connection** to confirm the settings.
7. Confirm that connection successful message is shown. If not, verify that **SCIM base URL** and **Bearer token** are entered correctly.

8. Scroll down to the **API Attribute mapping** section and set the following:
   a. **given_name** = displayName
   b. **preferred_username** = userName
   c. **given_name** = name.givenName
   d. **family_name** = name.familyName
   e. **email** = Email

   Leave the other attributes as-is.



Attribute mapping

Map the attributes that are used to provision accounts in the target application.

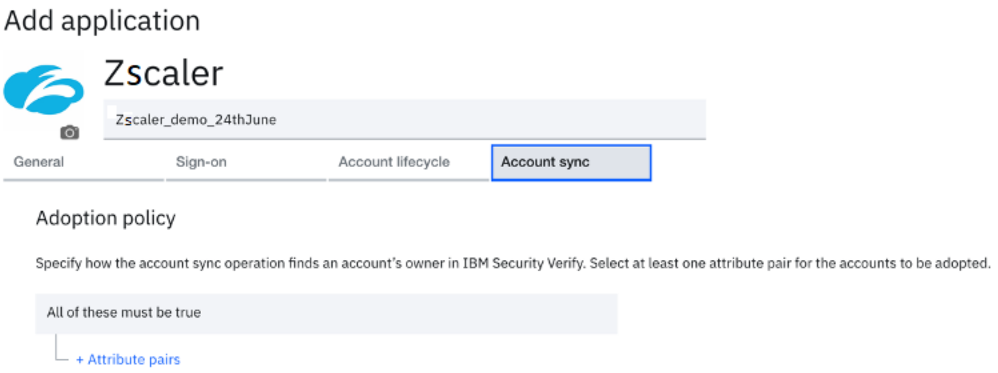
Verify attribute Choose from existing attributes	Transformation Transform the value		Target attribute Attribute name in the target app	Keep updated
given_name	None	→	displayName	□
preferred_username	None	→	userName	□
department	None	→	department	□
given_name	None	→	name.givenName	□
family_name	None	→	name.familyName	□
email	None	→	Email	□

Figure 10. Zscaler attribute mapping

9. Click **Save**.

Define Adoption Policy for Account Synchronization

As the Zscaler connection is successfully tested, you must define the adoption policy in order to synchronize the accounts with IBM Security Verify. In order to define the adoption policy, click the Account sync tab from the details of the Zscaler application.



Add application

Zscaler

Zscaler_demo_24thJune

Adoption policy

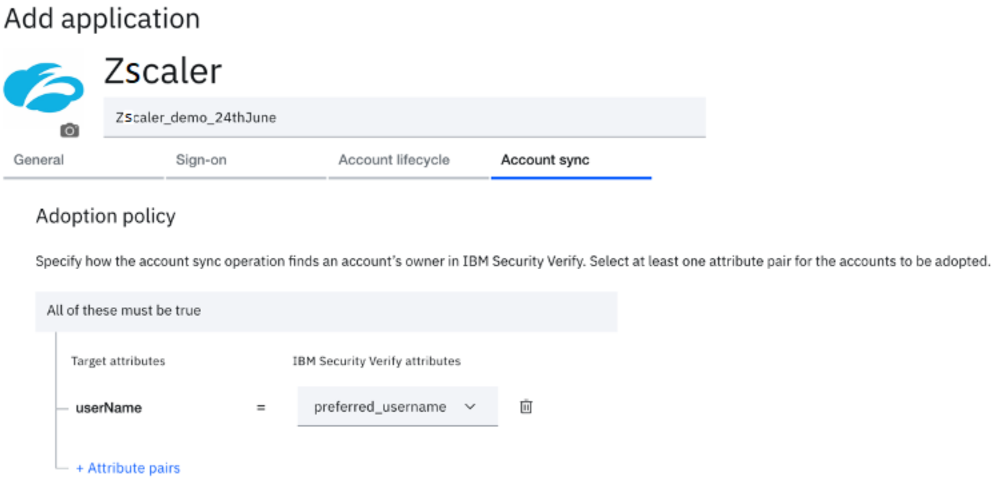
Specify how the account sync operation finds an account's owner in IBM Security Verify. Select at least one attribute pair for the accounts to be adopted.

All of these must be true

Figure 11. Account sync tab

1. Click **+ Attribute pairs** to add the attribute rule to match the users from Zscaler with the existing users in IBM Security Verify. Define the rules as:

```
userName = preferred_username
```



Add application

Zscaler

Zscaler_demo_24thJune

Adoption policy

Specify how the account sync operation finds an account's owner in IBM Security Verify. Select at least one attribute pair for the accounts to be adopted.

All of these must be true

Target attributes		IBM Security Verify attributes
userName	=	preferred_username

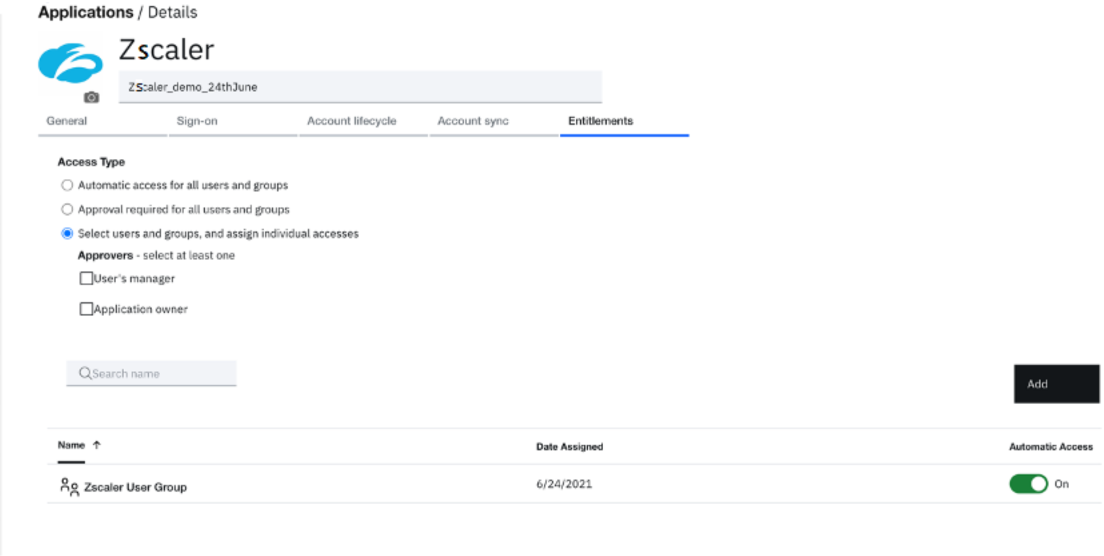
Figure 12. Zscaler Add Application window

2. Click **Save**.

Define Entitlements for the Application

Define the entitlement for users and groups that should get access to this application. When you saved application, the **Entitlements** tab displays:

1. On the **Entitlements** tab, select the radio button for **Select Users and Groups**, **and assign individual accesses**.
2. Click **Add**.



Applications / Details

Zscaler

Zscaler_demo_24thJune

Access Type

○ Automatic access for all users and groups

○ Approval required for all users and groups

● Select users and groups, and assign individual accesses

Approvers - select at least one

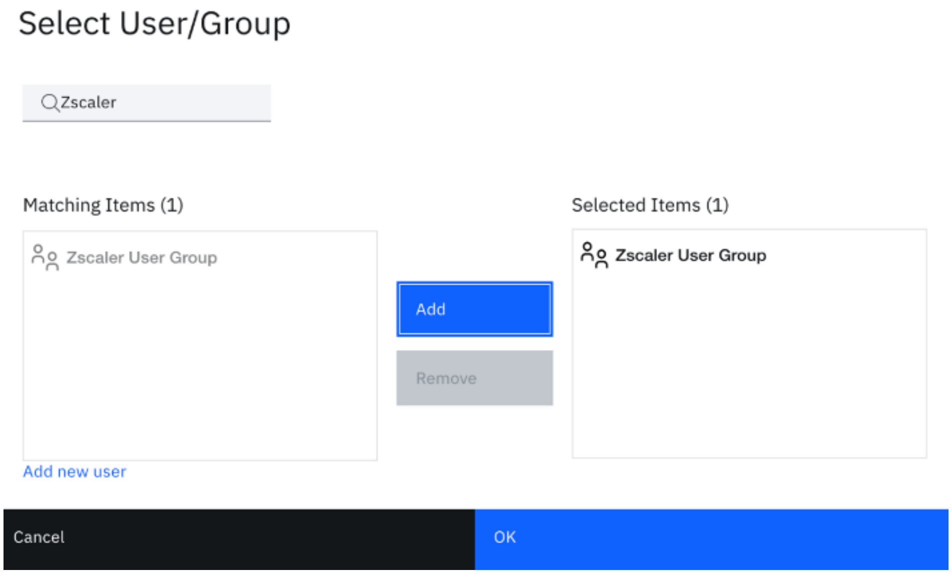
□ User's manager

□ Application owner

Name ↑	Date Assigned	Automatic Access
Zscaler User Group	6/24/2021	On

Figure 13. Zscaler Applications/Details window

3. On the **Select User/Group** dialog, search for `Zscaler User Group` (this group must have been already created by admin).
4. Select **Zscaler User Group** and click **Add**.
5. Click **OK**.



Select User/Group

Zscaler

Matching Items (1)

Zscaler User Group

Selected Items (1)

Zscaler User Group

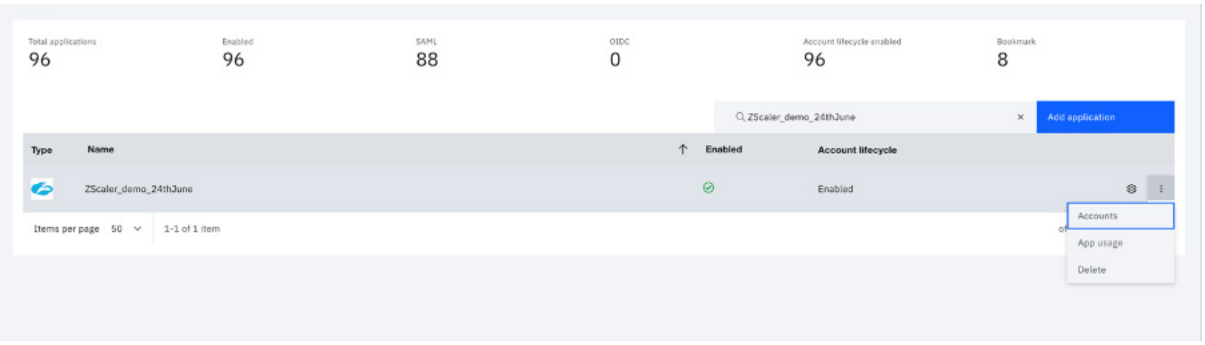
Figure 14. Select User/Group dialog

Zscaler Provisioning Use Cases

After the **Zscaler application** is successfully configured, the tenant admin can synchronize the **Zscaler account data** with IBM Security Verify.

Account Synchronization with Zscaler

1. Login to IBM Security Verify as tenant admin.
2. From the admin console, go to **Applications**.
3. Select **Accounts** from the three dot action menu for the Zscaler application.



Total applications	Enabled	SAML	OIDC	Account lifecycle enabled	Bookmark
96	96	88	0	96	8

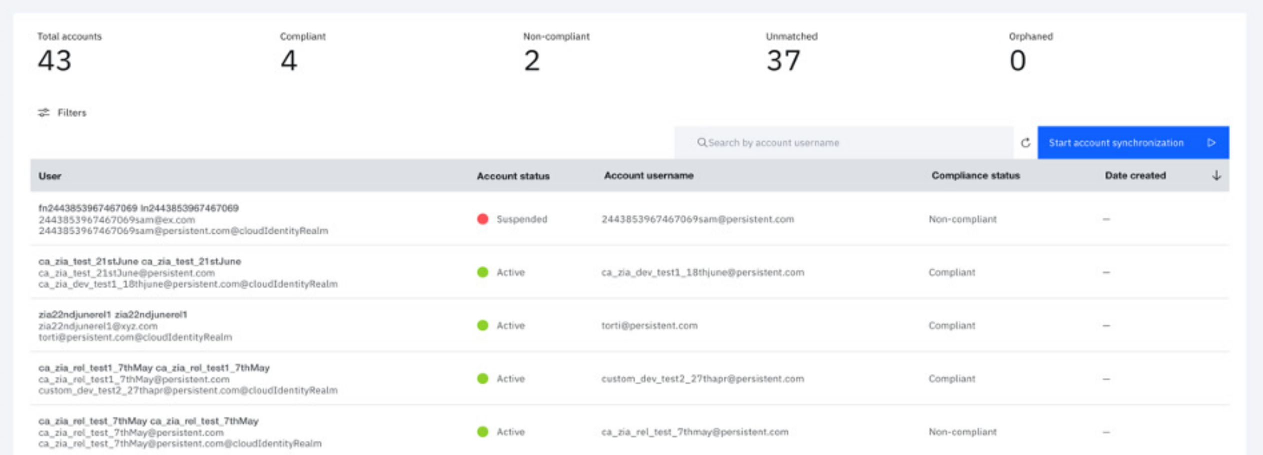
Q ZScaler_demo_24thJune ×

Type	Name	Enabled	Account lifecycle
	ZScaler_demo_24thJune	✓	Enabled

Items per page 50 1-1 of 1 item

Figure 15. IBM Security Verify accounts

4. Click **Start account synchronization**.

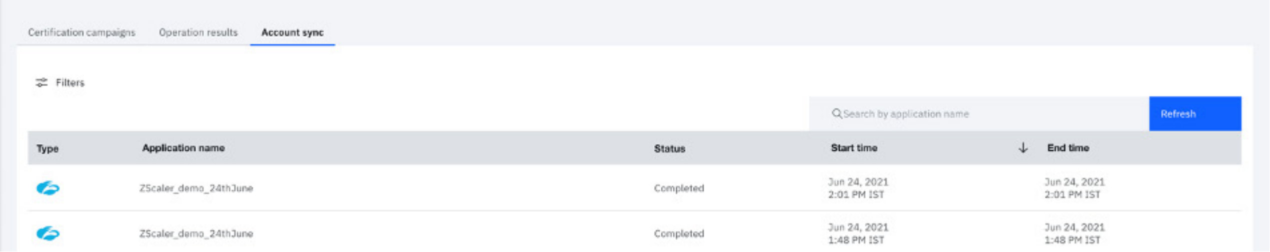


Total accounts	Compliant	Non-compliant	Unmatched	Orphaned
43	4	2	37	0

User	Account status	Account username	Compliance status	Date created
fn2443853967467069 ln2443853967467069 2443853967467069sam@ex.com 2443853967467069sam@persistent.com@cloudIdentityRealm	🟥 Suspended	2443853967467069sam@persistent.com	Non-compliant	–
ca_zia_test_21stJune ca_zia_test_21stJune ca_zia_test_21stJune@persistent.com ca_zia_dev_test1_18thjune@persistent.com@cloudIdentityRealm	🟩 Active	ca_zia_dev_test1_18thjune@persistent.com	Compliant	–
zia22ndjunerel1 zia22ndjunerel1 zia22ndjunerel1@xyz.com torti@persistent.com@cloudIdentityRealm	🟩 Active	torti@persistent.com	Compliant	–
ca_zia_rel_test1_7thMay ca_zia_rel_test1_7thMay ca_zia_rel_test1_7thMay@persistent.com custom_dev_test2_27thapr@persistent.com@cloudIdentityRealm	🟩 Active	custom_dev_test2_27thapr@persistent.com	Compliant	–
ca_zia_rel_test_7thMay ca_zia_rel_test_7thMay ca_zia_rel_test_7thMay@persistent.com ca_zia_rel_test_7thMay@persistent.com@cloudIdentityRealm	🟩 Active	ca_zia_rel_test_7thmay@persistent.com	Non-compliant	–

Figure 16. Start account synchronization

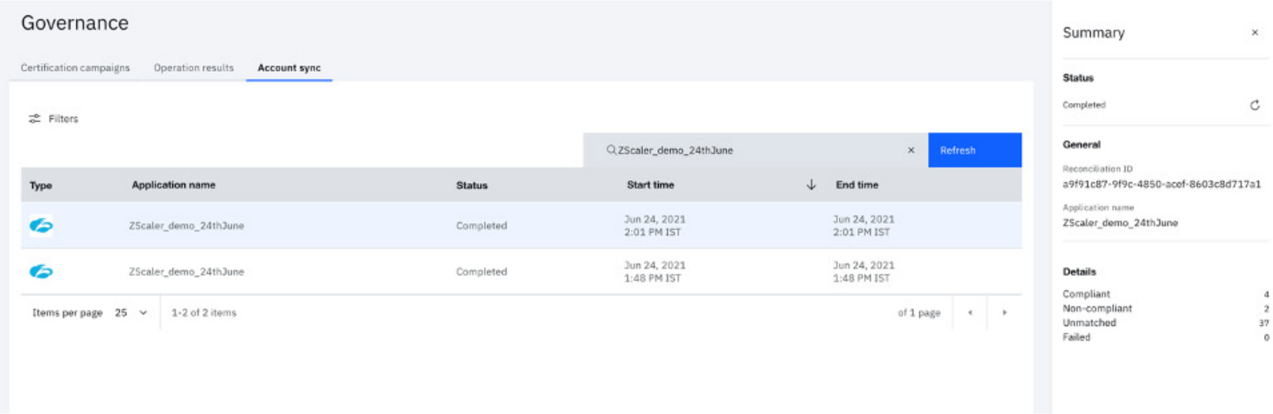
5. In order to monitor the account synchronization, go to the **Governance** menu and click the **Account sync** tab



Type	Application name	Status	Start time	End time
	ZScaler_demo_24thJune	Completed	Jun 24, 2021 2:01 PM IST	Jun 24, 2021 2:01 PM IST
	ZScaler_demo_24thJune	Completed	Jun 24, 2021 1:48 PM IST	Jun 24, 2021 1:48 PM IST

Figure 17. Account sync tab

6. Click the row on which you must see the details. The account sync details are opened in the right-side pane and provide the summary of various accounts fetched from the Zscaler.



Type	Application name	Status	Start time	End time
	ZScaler_demo_24thJune	Completed	Jun 24, 2021 2:01 PM IST	Jun 24, 2021 2:01 PM IST
	ZScaler_demo_24thJune	Completed	Jun 24, 2021 1:48 PM IST	Jun 24, 2021 1:48 PM IST

Summary

Status

Completed

General

Reconciliation ID
a9f91c87-9f9c-4850-acef-8603c8d717a1

Application name
ZScaler_demo_24thJune

Details

Compliant	4
Non-compliant	2
Unmatched	37
Failed	0

Figure 18. Account details

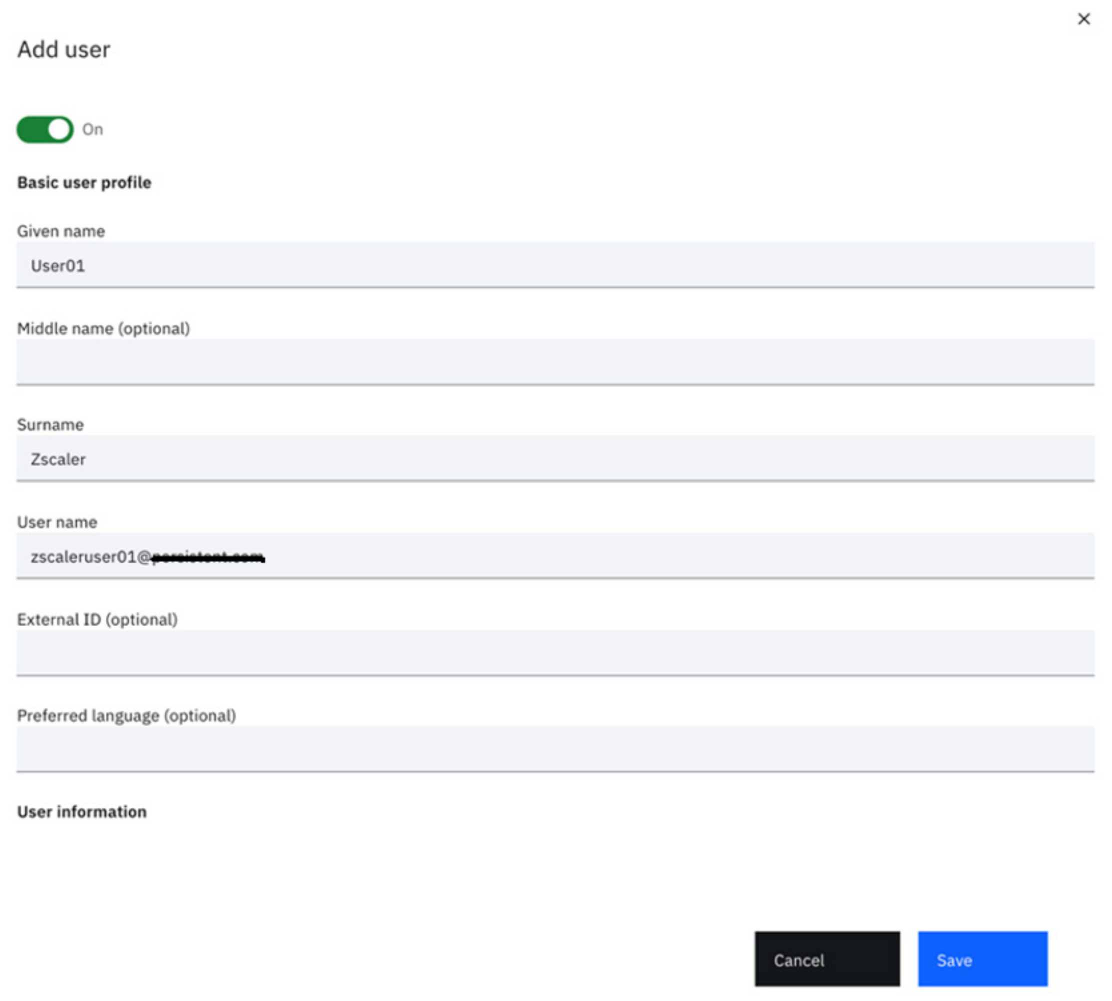
Account sync rule: Accounts are matched on the attributes mapping defined in the Define Adoption Policy for Account Synchronization of the application window. So, the admin must define attribute mapping carefully.

New User Provisioning to Zscaler

Create a new user in IBM Security Verify and make sure they can log in.

Create New User

1. Login to IBM Security Verify tenant as an administrative user.
2. From the admin console, go to **Users & groups**.
3. Click **Add user**.
4. Create a user. You can create any user you like (as long as it doesn't clash with existing ones). For example:
    - **Identity Source**: Cloud Directory.
    - **User name**: zscaleruser01@ex.com (use the domain name that is registered or associated with the Zscaler identity provider).
    - **Given name**: `User01`.
    - **Surname**: `Zscaler`.
    - **Email**: a valid email address.



Add user

On

Basic user profile

Given name: User01

Middle name (optional):

Surname: Zscaler

User name: zscaleruser01@[redacted]

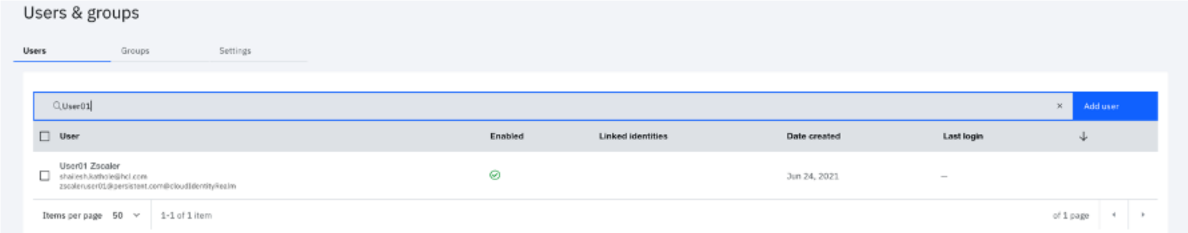
External ID (optional):

Preferred language (optional):

User information

Figure 19. Add user dialog

5. Click **Save**, which creates the user and displays the new user in the Users table.



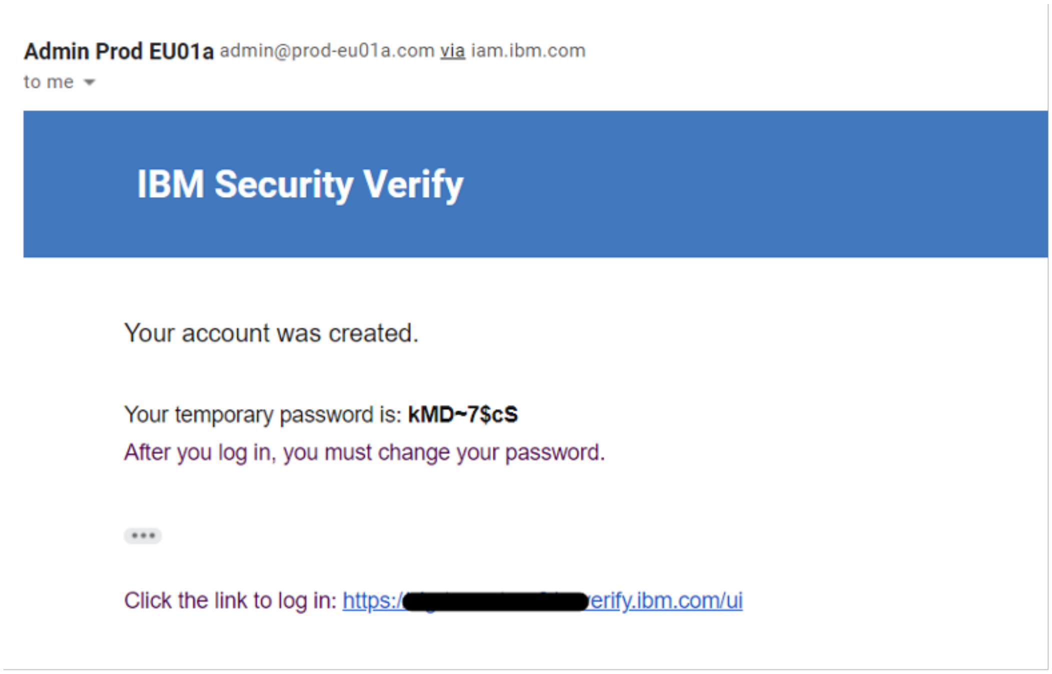
Users & groups

User	Enabled	Linked identities	Date created	Last login
User01 Zscaler shailesh.kathole@hcl.com zscaleruser01@persistent.com@cloudIdentityRealm	✓		Jun 24, 2021	–

Figure 20. New user

Test that the New User Can Login

The new user gets the initial password via email. Go to your email client of the newly created user and look for an email indicating a user has been created.



Admin Prod EU01a admin@prod-eu01a.com via iam.ibm.com
to me

IBM Security Verify

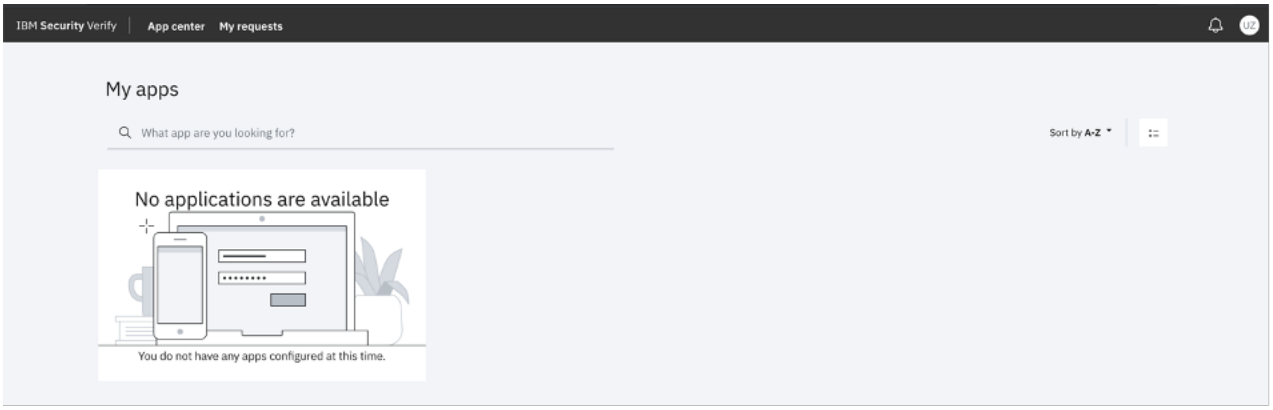
Your account was created.

Your temporary password is: **kMD~7$cS**
After you log in, you must change your password.

Click the link to log in: https://[redacted]erify.ibm.com/ui

Figure 21. New user email

1. Open a new browser session, copy the link from the email, and log in with the username and password from the email.
2. When prompted, enter a **New password** and **Confirm password**, then click **Change Password**.
3. Validate that the user has access to the IBM Security Verify launchpad.



No applications are available

You do not have any apps configured at this time.

Figure 22. New user in IBM Security Verify

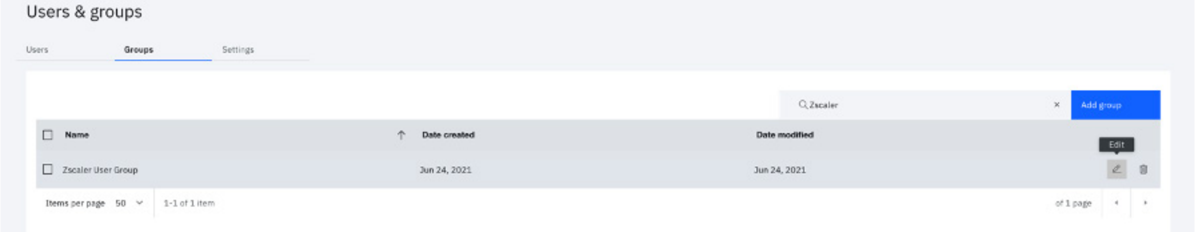
Provisioning Use Case

You have entitled the **Zscaler User Group** with **Automatic access** for the Zscaler application. In order to provision a new Zscaler account for a newly created user, add the new user as a member of the **Zscaler User Group**. Adding a user to this group triggers the automatic provisioning for the Zscaler account.

Add User to Group

Return to the IBM Security Verify admin console as the admin user. You might still have the window open from previous steps.

1. Go to the **Users & groups** section and click the **Groups** tab.
2. Hover over the **Zscaler User Group** and click the **Edit** icon.



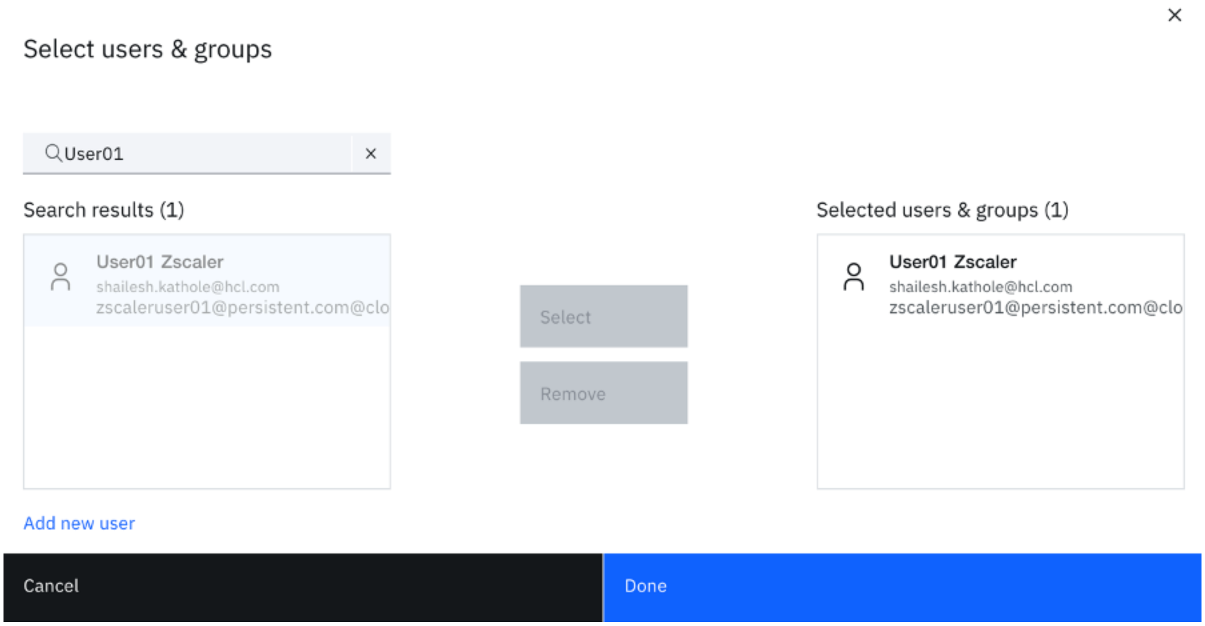
Name	Date created	Date modified
Zscaler User Group	Jun 24, 2021	Jun 24, 2021

Items per page 50 1-1 of 1 item of 1 page

Figure 23. IBM Security Verify Users & groups screen

3. Click **Add** beside **Group Members**.
4. Search for the name of the new user.

5. Choose the listed user and click **Select**. This moves the user to **Selected users & groups**.



Select users & groups

User01

Search results (1)

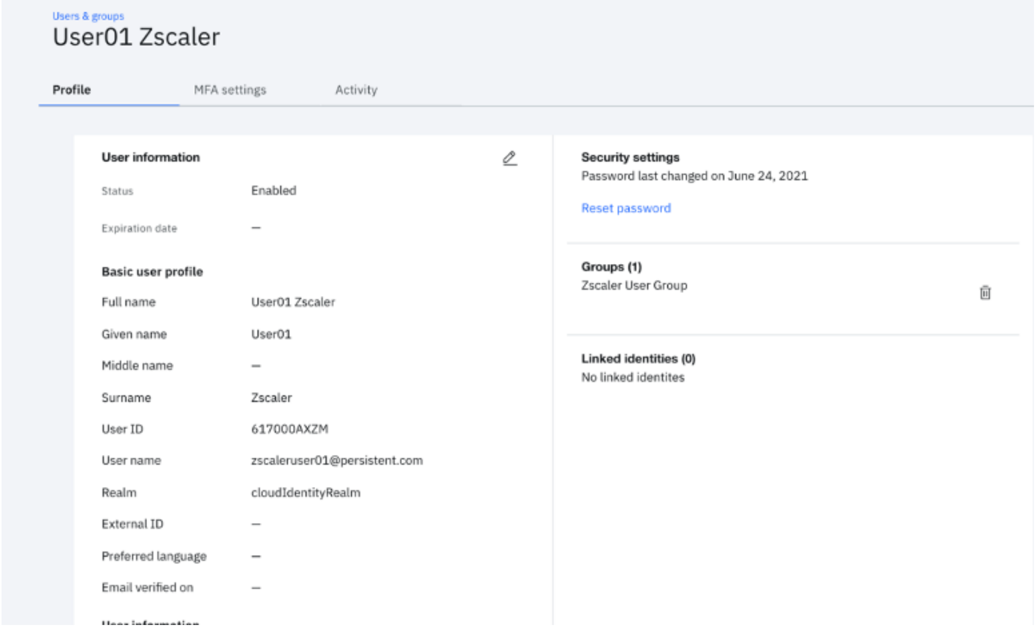
User01 Zscaler
shailesh.kathole@hcl.com
zscaleruser01@persistent.com@clo

Selected users & groups (1)

User01 Zscaler
shailesh.kathole@hcl.com
zscaleruser01@persistent.com@clo

Figure 24. Select users & groups screen

6. Click **Done**, then **Save** on the **Edit Group** dialog.
7. Return to the **Users** tab, hover over your new user and click the **User Details** icon on the right side.
8. Confirm the new user is in the **Zscaler User Group** under **Groups**.



User01 Zscaler

User information

Status: Enabled
Expiration date: –

Basic user profile

Full name: User01 Zscaler
Given name: User01
Middle name: –
Surname: Zscaler
User ID: 617000AXZM
User name: zscaleruser01@persistent.com
Realm: cloudIdentityRealm
External ID: –
Preferred language: –
Email verified on: –

Security settings
Password last changed on June 24, 2021

Groups (1)
Zscaler User Group

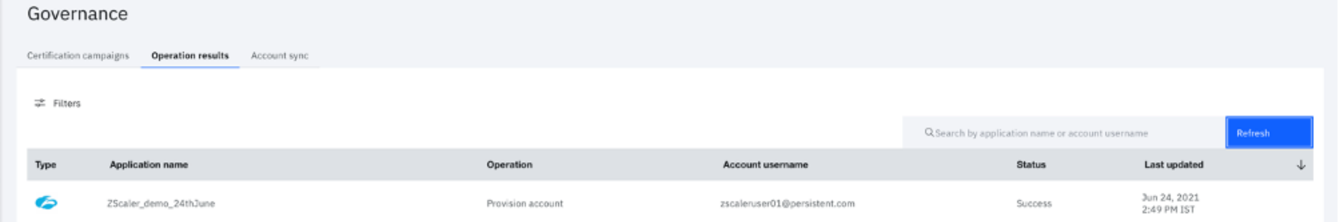
Linked identities (0)
No linked identites

Figure 25. IBM Security Verify user details

Check that the User is Provisioned to Zscaler

Now that the user is added to the **Zscaler User Group**, Zscaler's automatic user provisioning is triggered by IBM Security Verify.

1. From the admin console, go to **Governance** > **Operation results** tab.



Type	Application name	Operation	Account username	Status	Last updated
	ZScaler_demo_24thJune	Provision account	zscaleruser01@persistent.com	Success	Jun 24, 2021 2:49 PM IST

Figure 26. Operations results tab

2. Validate the new user provisioning by logging in to the ZIA Admin Portal. Go to **Administration** > **Authentication** > **User Management**.

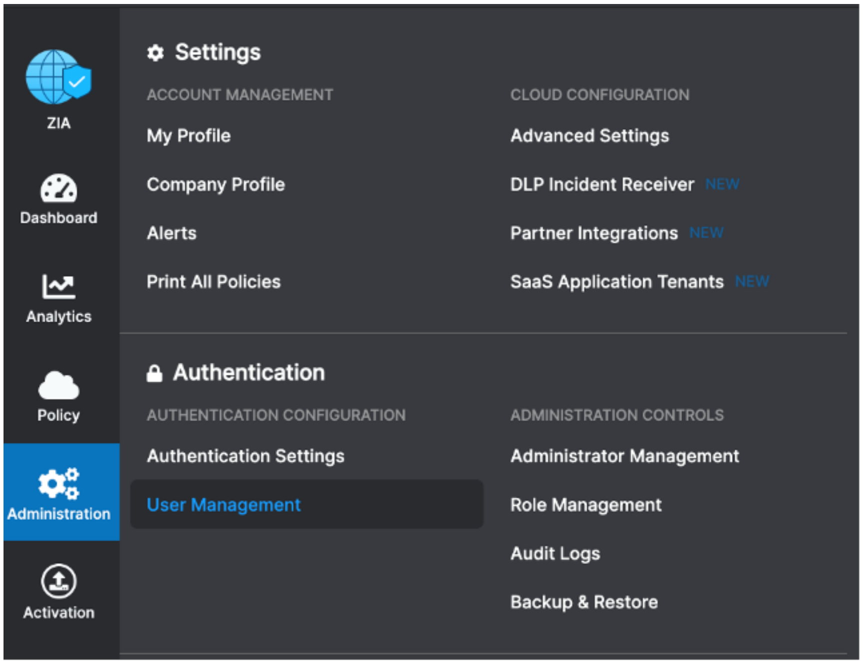
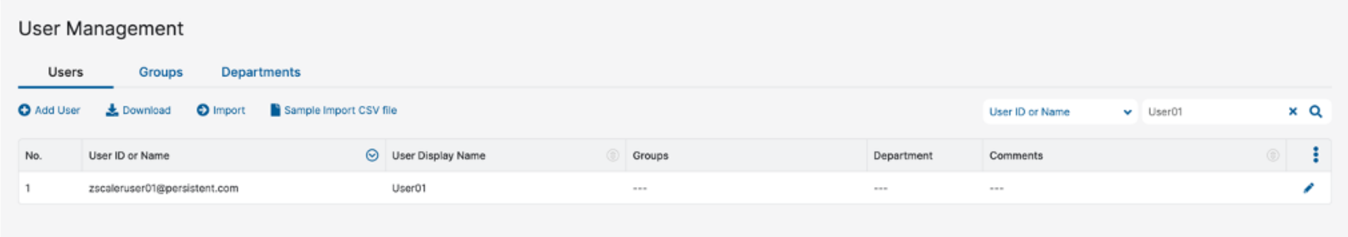


Figure 27. ZIA User Management

3. Look for the newly provisioned user.



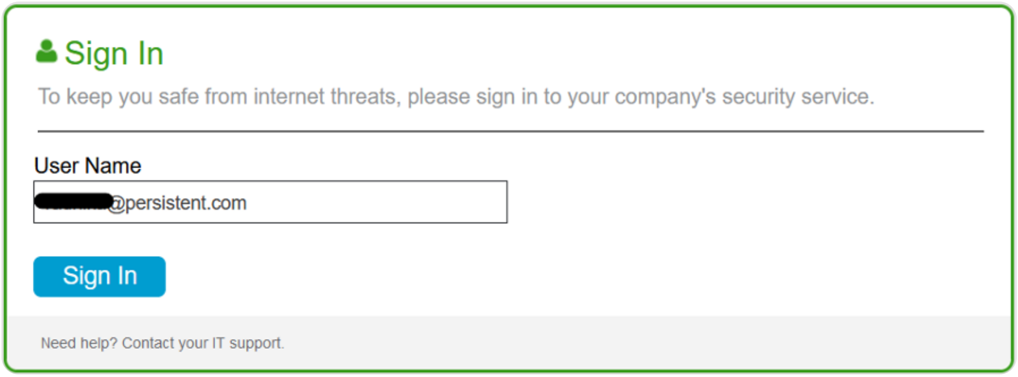
No.	User ID or Name	User Display Name	Groups	Department	Comments
1	zscaleruser01@persistent.com	User01	---	---	---

Figure 28. Newly provisioned user

4. Validate the user details such as:
   - The new user is listed in Zscaler with the correct user name.
   - Other user attributes are created per attribute mapping rules.

Check New User Can Access Zscaler via SSO

1. Access the SP init URL to Zscaler (`http://gateway.your.domain/test`).
2. Enter the **User Name**.



Sign In

To keep you safe from internet threats, please sign in to your company's security service.

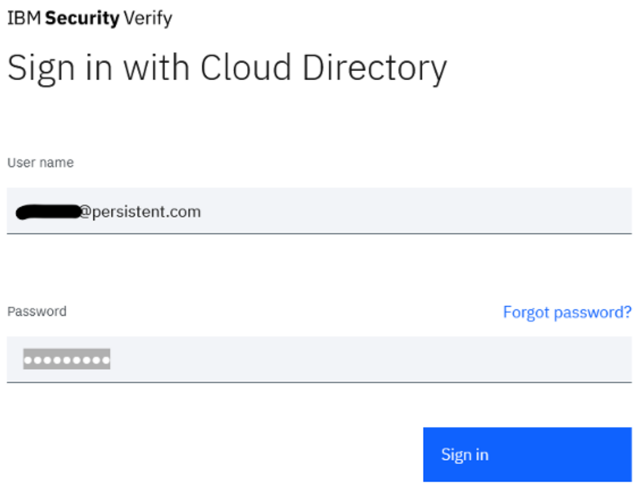
User Name

[redacted]@persistent.com

Need help? Contact your IT support.

Figure 29. Zscaler gateway login

3. Validate that user is redirected to IBM Security Verify for SSO.
4. Provide the **User name** and **Password**.



IBM **Security** Verify

Sign in with Cloud Directory

User name

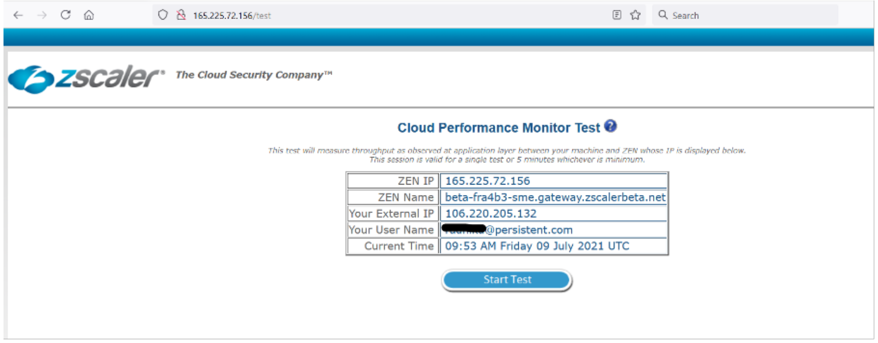
[redacted]@persistent.com

Password

•••••••••

Figure 30. IBM Security Verify admin credentials

5. Verify that the user has access to Zscaler.



165.225.72.156/test

Cloud Performance Monitor Test

This test will measure throughput as observed at application layer between your machine and ZEN whose IP is displayed below.
This session is valid for a single test or 5 minutes whichever is minimum.

ZEN IP	165.225.72.156
ZEN Name	beta-fra4b3-sme.gateway.zscalerbeta.net
Your External IP	106.220.205.132
Your User Name	[redacted]@persistent.com
Current Time	09:53 AM Friday 09 July 2021 UTC

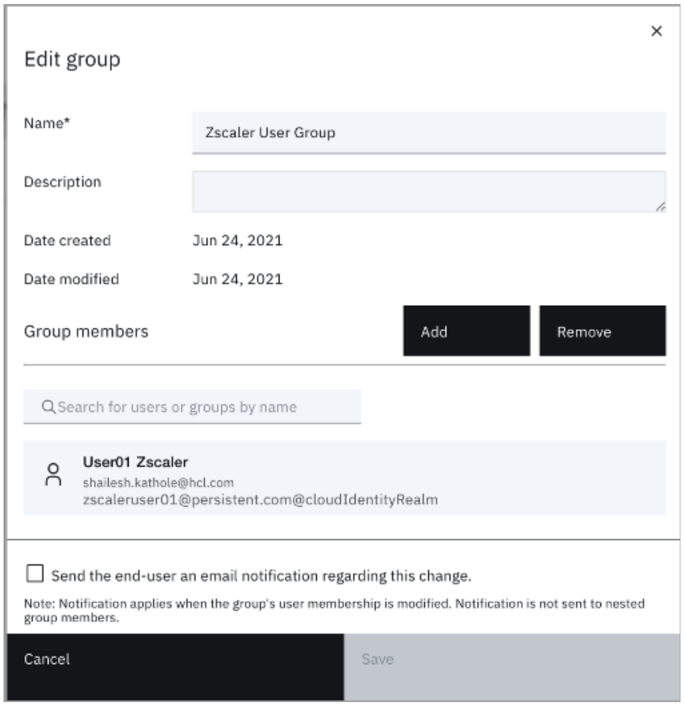
Figure 31. Zscaler monitor test

Deprovisioning Use Case

Test deprovisioning the user from Zscaler.

Remove User from Zscaler User Group

1. Return to the IBM Security Verify admin console.
2. Go to **Users & groups** and select the **Groups** tab.
3. Edit the **Zscaler User Group**.
4. Select the newly added user and click **Remove**.



Edit group

Name* Zscaler User Group

Description

Date created Jun 24, 2021

Date modified Jun 24, 2021

Group members

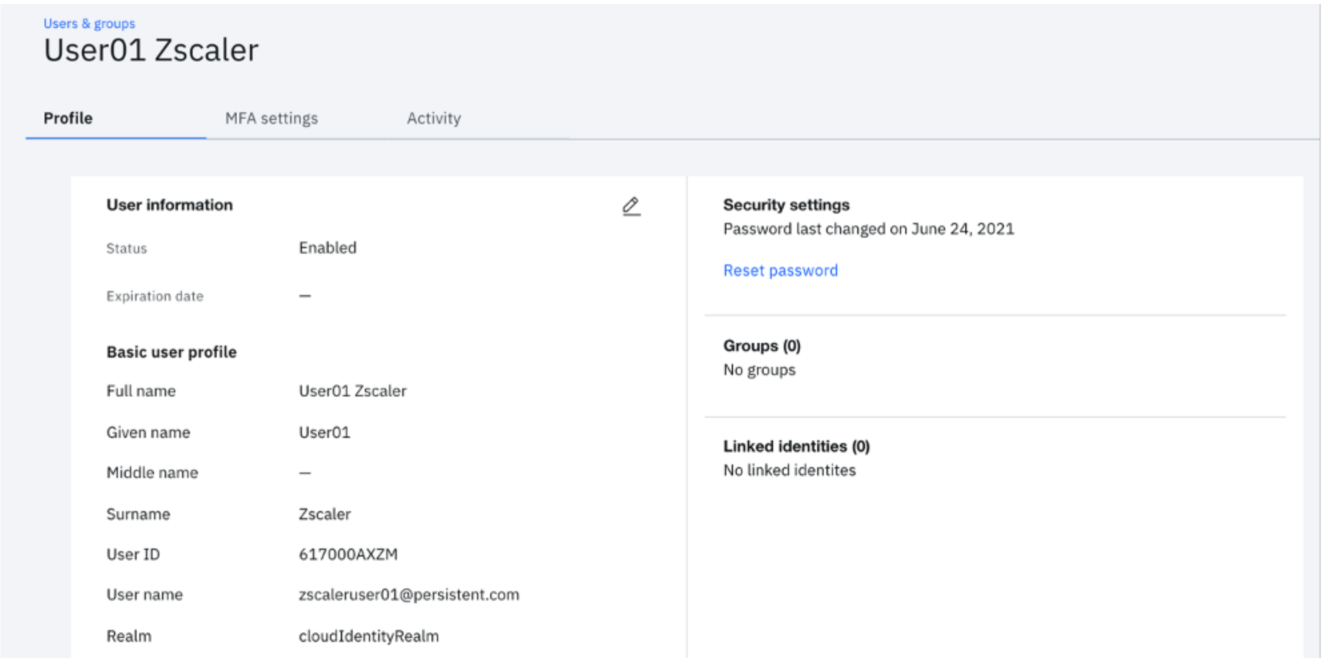
User01 Zscaler
shailesh.kathole@hcl.com
zscaleruser01@persistent.com@cloudIdentityRealm

□ Send the end-user an email notification regarding this change.

Note: Notification applies when the group's user membership is modified. Notification is not sent to nested group members.

Figure 32. IBM Security Verify Edit Group screen

5. Click **Save**.
6. Review the user details in the **Users** tab. Confirm that no groups are listed in the **Groups** section.



User01 Zscaler

User information

Status	Enabled
Expiration date	—

Basic user profile

Full name	User01 Zscaler
Given name	User01
Middle name	—
Surname	Zscaler
User ID	617000AXZM
User name	zscaleruser01@persistent.com
Realm	cloudIdentityRealm

Security settings

Password last changed on June 24, 2021

Groups (0)

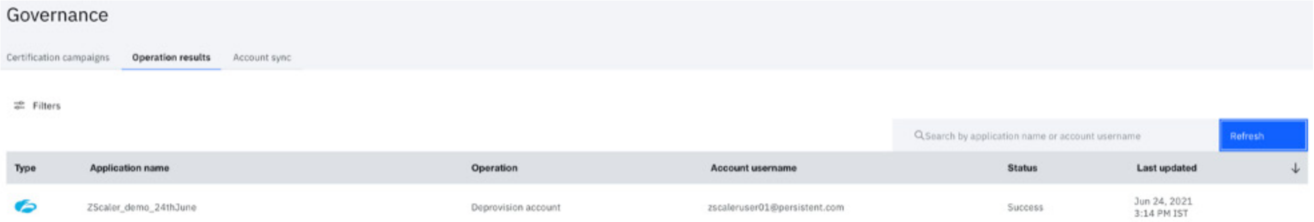
No groups

Linked identities (0)

No linked identites

Figure 33. Users & Groups user details

The admin can monitor the user deprovisioning task by selecting the **Governance** > **Operation results** tab.

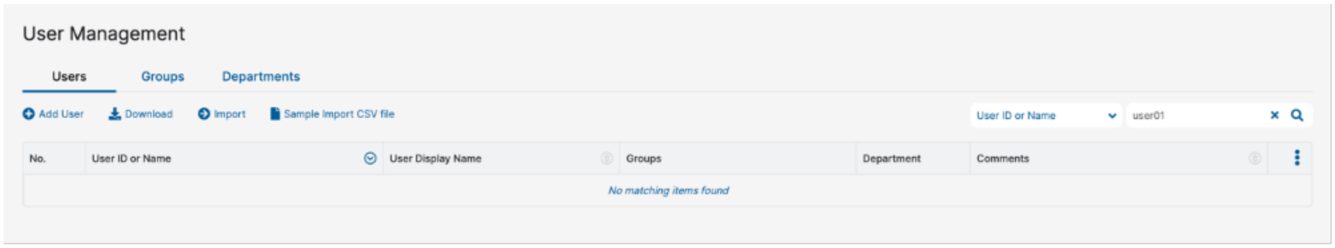


Type	Application name	Operation	Account username	Status	Last updated
	ZScaler_demo_24thJune	Deprovision account	zscaleruser01@persistent.com	Success	Jun 24, 2021 3:14 PM IST

Figure 34. Operations results tab

Check that the user has been removed from Zscaler:

1. Return to the ZIA Admin Portal and search the **User ID** or **Name**.
2. Verify that no users are listed.



User ID or Name: user01

No.	User ID or Name	User Display Name	Groups	Department	Comments
No matching items found					

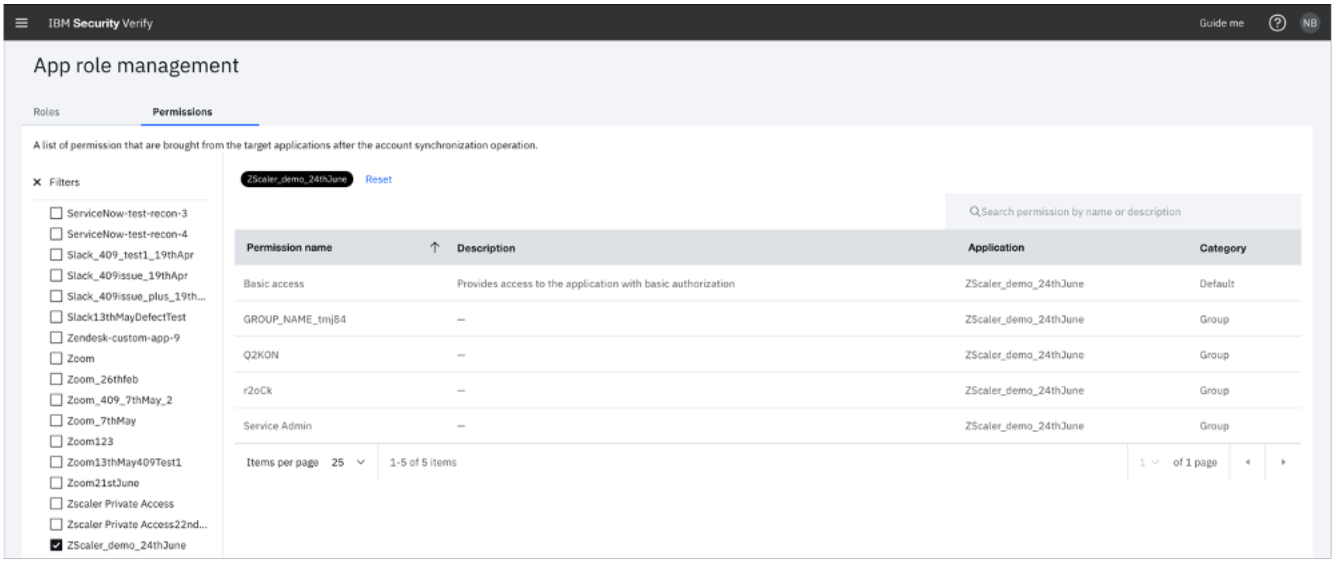
Figure 35. User Management tab

Zscaler App Role Management Use Cases

Permission is managed through App Role Management where you can add a user to Zscaler groups. These groups are fetched during account synchronization.

Assign User to the Zscaler Group Through Permissions

1. Login to IBM Security Verify as a tenant admin.
2. From the admin console, go to **App Role Management** > **Permissions**.
3. Filter your created Zscaler application and check the Zscaler groups.



App role management

A list of permission that are brought from the target applications after the account synchronization operation.

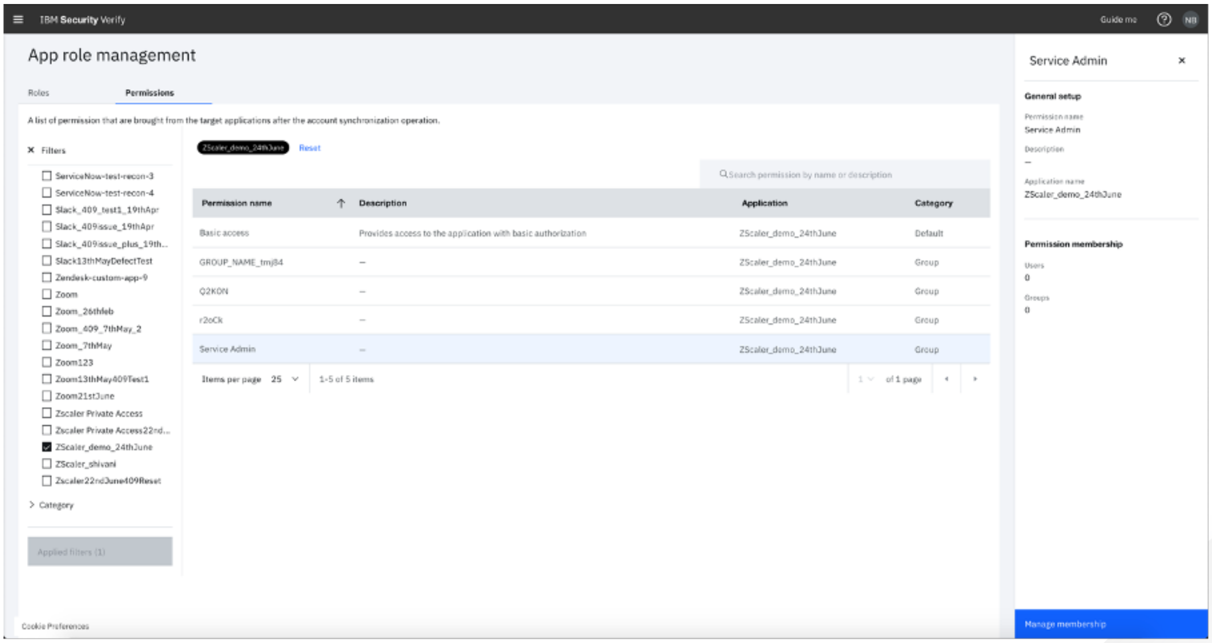
- □ ServiceNow-test-recon-3
- □ ServiceNow-test-recon-4
- □ Slack_409_test1_19thApr
- □ Slack_409issue_19thApr
- □ Slack_409issue_plus_19th...
- □ Slack13thMayDefectTest
- □ Zendesk-custom-app-9
- □ Zoom
- □ Zoom_26thfeb
- □ Zoom_409_7thMay_2
- □ Zoom_7thMay
- □ Zoom123
- □ Zoom13thMay409Test1
- □ Zoom21stJune
- □ Zscaler Private Access
- □ Zscaler Private Access22nd...
- ☑ ZScaler_demo_24thJune

Permission name ↑	Description	Application	Category
Basic access	Provides access to the application with basic authorization	ZScaler_demo_24thJune	Default
GROUP_NAME_tmj84	–	ZScaler_demo_24thJune	Group
Q2KON	–	ZScaler_demo_24thJune	Group
r2oCk	–	ZScaler_demo_24thJune	Group
Service Admin	–	ZScaler_demo_24thJune	Group

Items per page 25 1-5 of 5 items 1 of 1 page

Figure 36. App role management

4. Click any of the groups and click **Manage membership**.



App role management

A list of permission that are brought from the target applications after the account synchronization operation.

- □ ServiceNow-test-recon-3
- □ ServiceNow-test-recon-4
- □ Slack_409_test1_19thApr
- □ Slack_409issue_19thApr
- □ Slack_409issue_plus_19th...
- □ Slack13thMayDefectTest
- □ Zendesk-custom-app-9
- □ Zoom
- □ Zoom_26thfeb
- □ Zoom_409_7thMay_2
- □ Zoom_7thMay
- □ Zoom123
- □ Zoom13thMay409Test1
- □ Zoom21stJune
- □ Zscaler Private Access
- □ Zscaler Private Access22nd...
- ☑ ZScaler_demo_24thJune
- □ ZScaler_shivani
- □ Zscaler22ndJune409Reset

Permission name ↑	Description	Application	Category
Basic access	Provides access to the application with basic authorization	ZScaler_demo_24thJune	Default
GROUP_NAME_tmj84	–	ZScaler_demo_24thJune	Group
Q2KON	–	ZScaler_demo_24thJune	Group
r2oCk	–	ZScaler_demo_24thJune	Group
Service Admin	–	ZScaler_demo_24thJune	Group

Items per page 25 1-5 of 5 items 1 of 1 page

Service Admin

General setup

Permission name
Service Admin

Description
–

Application name
ZScaler_demo_24thJune

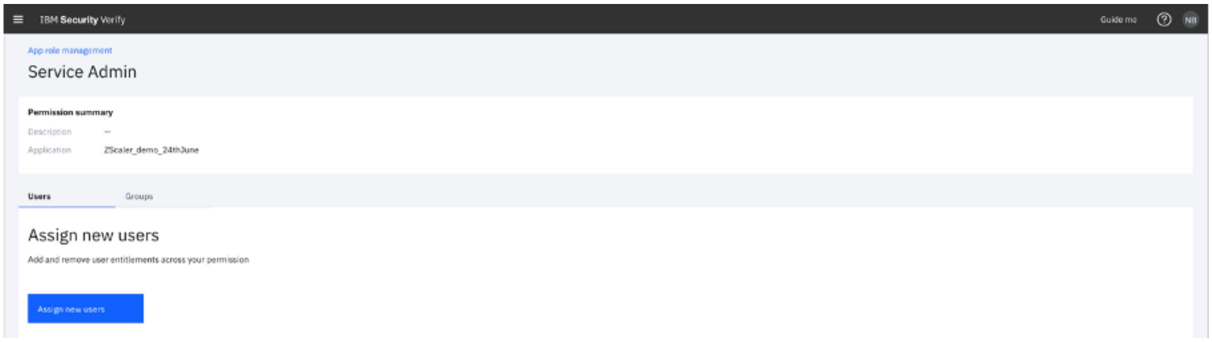
Permission membership

Users
0

Groups
0

Figure 37. Manage groups

5. Click **Assign new users**.



Service Admin

Permission summary

Description —

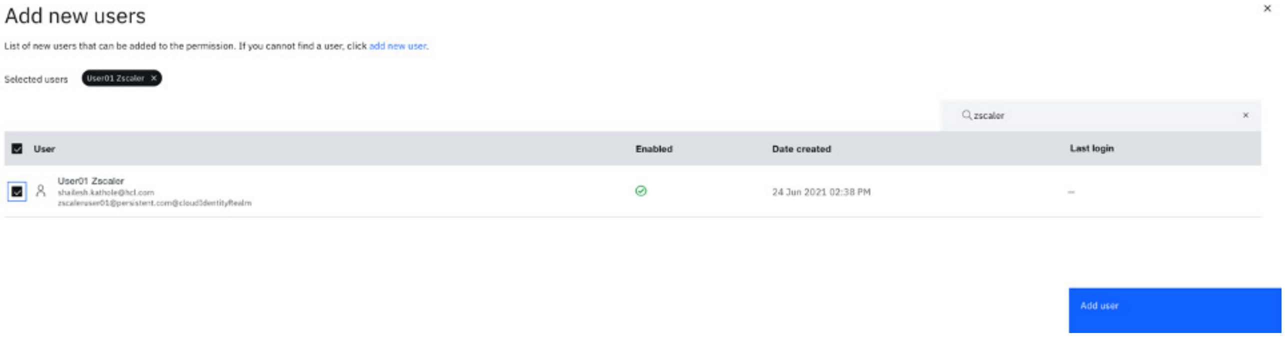
Application ZScaler_demo_24thJune

Assign new users

Add and remove user entitlements across your permission

Figure 38. Assign new users

6. Search by the user name, select the user, and click **Add User**.



Add new users

List of new users that can be added to the permission. If you cannot find a user, click add new user.

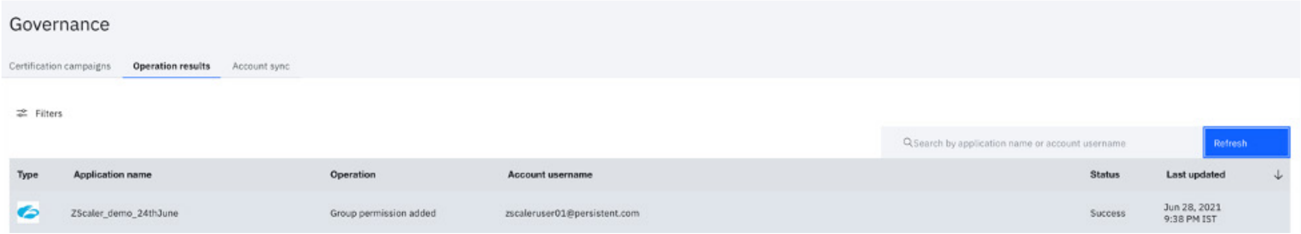
Selected users User01 Zscaler

zscaler

☑ User	Enabled	Date created	Last login
☑ User01 Zscaler shailesh.kathole@hcl.com zscaleruser01@persistent.com@cloudIdentityRealm	✓	24 Jun 2021 02:38 PM	–

Figure 39. Add user

7. Monitor the group permission by going to the **Governance** > **Operation results** tab.



Governance

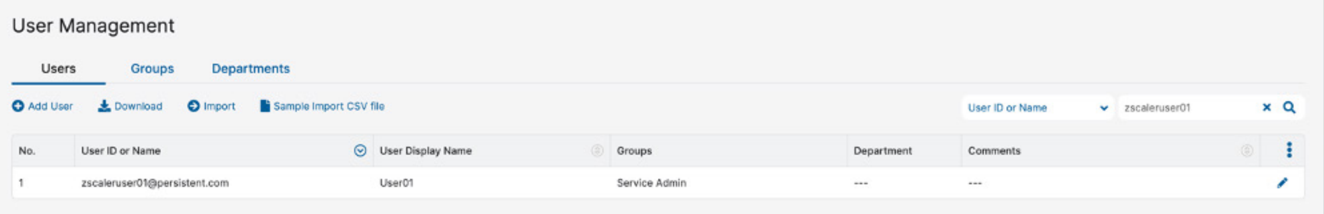
Search by application name or account username

Type	Application name	Operation	Account username	Status	Last updated
	ZScaler_demo_24thJune	Group permission added	zscaleruser01@persistent.com	Success	Jun 28, 2021 9:38 PM IST

Figure 40. Operations results tab

Check that the User is Added to the Zscaler Group from Zscaler

1. Return to the Zscaler application and search the user name (`zscaleruser01`).
2. Ensure that the user has been added to the **Groups** column.



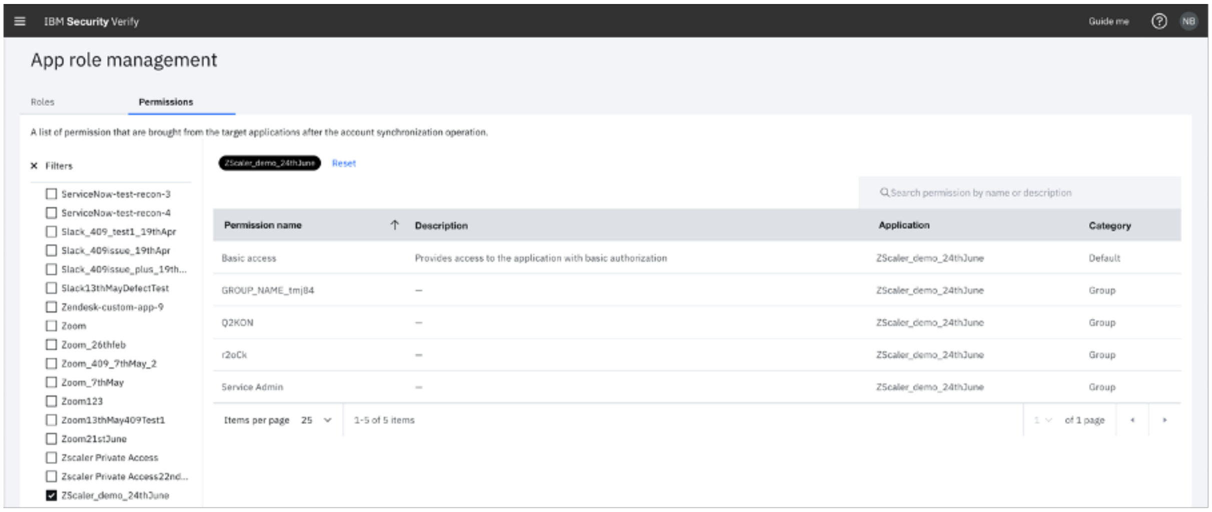
No.	User ID or Name	User Display Name	Groups	Department	Comments
1	zscaleruser01@persistent.com	User01	Service Admin	---	---

Figure 41. User groups

Remove User from the Zscaler Group Through Permissions

When a user is revoked from a Zscaler group, the user is also deprovisioned from the Zscaler application:

1. Login to IBM Security Verify as a tenant admin.
2. From the admin console, go to **App Role Management** > **Permissions**.
3. Filter your created Zscaler application and check the Zscaler groups.



A list of permission that are brought from the target applications after the account synchronization operation.

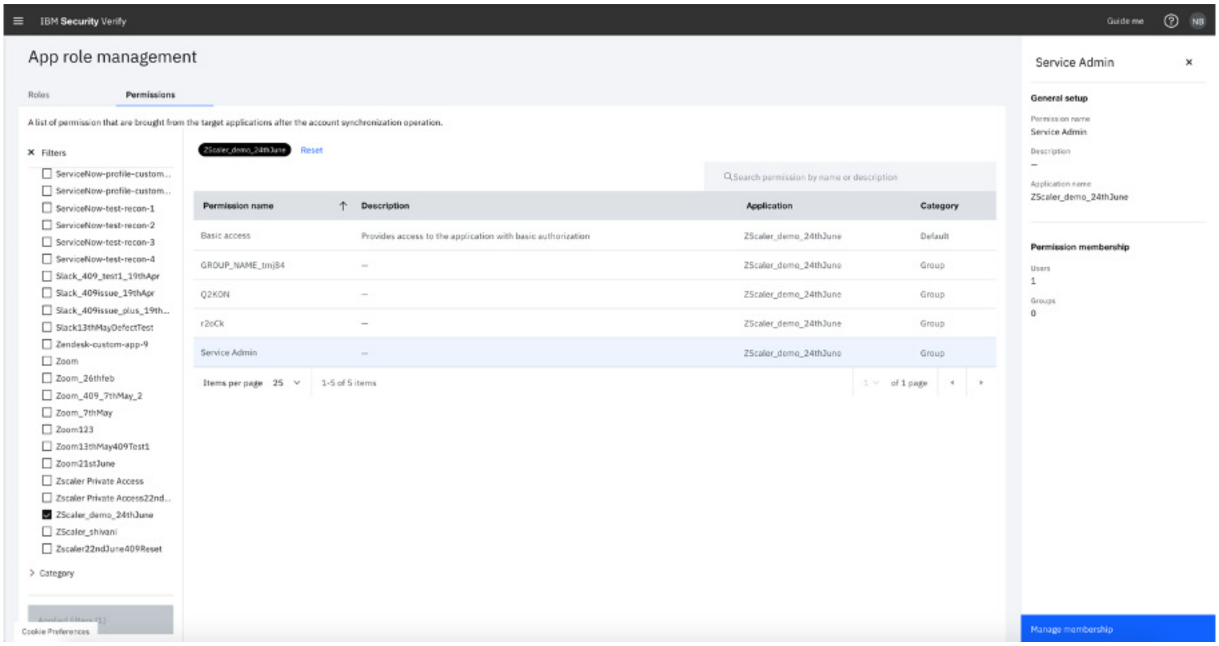
- ☐ ServiceNow-test-recon-3
- ☐ ServiceNow-test-recon-4
- ☐ Slack_409_test1_19thApr
- ☐ Slack_409issue_19thApr
- ☐ Slack_409issue_plus_19th...
- ☐ Slack13thMayDefectTest
- ☐ Zendesk-custom-app-9
- ☐ Zoom
- ☐ Zoom_26thfeb
- ☐ Zoom_409_7thMay_2
- ☐ Zoom_7thMay
- ☐ Zoom123
- ☐ Zoom13thMay409Test1
- ☐ Zoom21stJune
- ☐ Zscaler Private Access
- ☐ Zscaler Private Access22nd...
- ☑ ZScaler_demo_24thJune

Permission name ↑	Description	Application	Category
Basic access	Provides access to the application with basic authorization	ZScaler_demo_24thJune	Default
GROUP_NAME_tmj84	–	ZScaler_demo_24thJune	Group
Q2KON	–	ZScaler_demo_24thJune	Group
r2oCk	–	ZScaler_demo_24thJune	Group
Service Admin	–	ZScaler_demo_24thJune	Group

Items per page 25 1-5 of 5 items 1 of 1 page

Figure 42. Zscaler groups

4. Click any of the group and click **Manage membership**.



App role management

A list of permission that are brought from the target applications after the account synchronization operation.

- ☐ ServiceNow-profile-custom...
- ☐ ServiceNow-profile-custom...
- ☐ ServiceNow-test-recon-1
- ☐ ServiceNow-test-recon-2
- ☐ ServiceNow-test-recon-3
- ☐ ServiceNow-test-recon-4
- ☐ Slack_409_test1_19thApr
- ☐ Slack_409issue_19thApr
- ☐ Slack_409issue_plus_19th...
- ☐ Slack13thMayDefectTest
- ☐ Zendesk-custom-app-9
- ☐ Zoom
- ☐ Zoom_26thfeb
- ☐ Zoom_409_7thMay_2
- ☐ Zoom_7thMay
- ☐ Zoom123
- ☐ Zoom13thMay409Test1
- ☐ Zoom21stJune
- ☐ Zscaler Private Access
- ☐ Zscaler Private Access22nd...
- ☑ ZScaler_demo_24thJune
- ☐ ZScaler_shivani
- ☐ Zscaler22ndJune409Reset

Permission name	Description	Application	Category
Basic access	Provides access to the application with basic authorization	ZScaler_demo_24thJune	Default
GROUP_NAME_tmj84	–	ZScaler_demo_24thJune	Group
Q2KON	–	ZScaler_demo_24thJune	Group
r2oCk	–	ZScaler_demo_24thJune	Group
Service Admin	–	ZScaler_demo_24thJune	Group

Service Admin

General setup

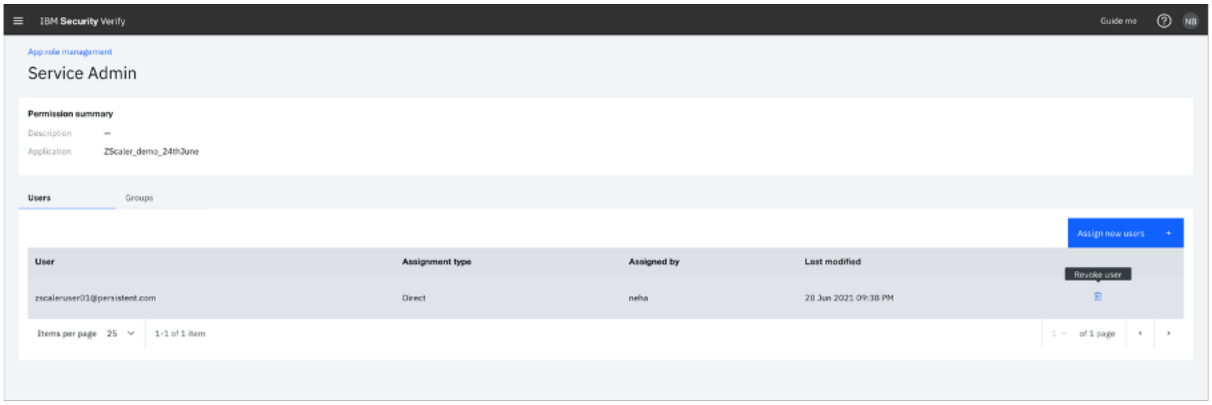
Permission name: Service Admin
Description: –
Application name: ZScaler_demo_24thJune

Permission membership

Users: 1
Groups: 0

Figure 43. Manage membership

5. Hover over the user whose permission you want to remove and click the **Delete** icon.



Service Admin

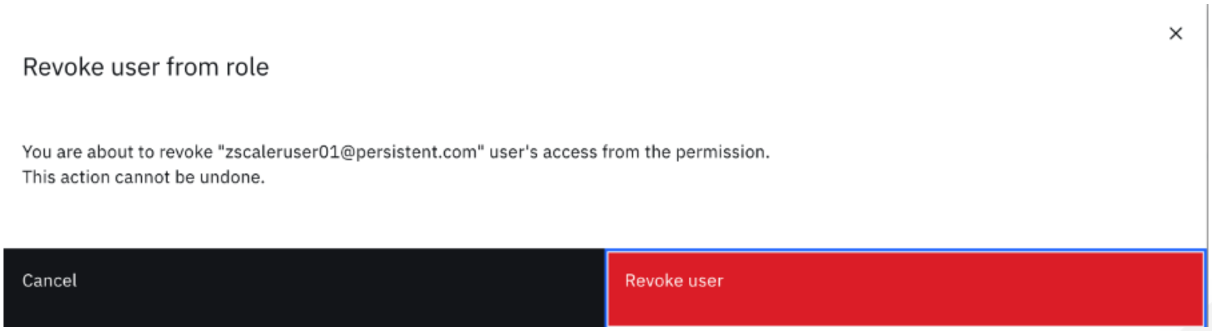
Permission summary

Description: –
Application: ZScaler_demo_24thJune

User	Assignment type	Assigned by	Last modified
zscaleruser01@persistent.com	Direct	neha	28 Jun 2021 09:38 PM

Figure 44. Revoke user

6. Confirm by clicking **Revoke user**.

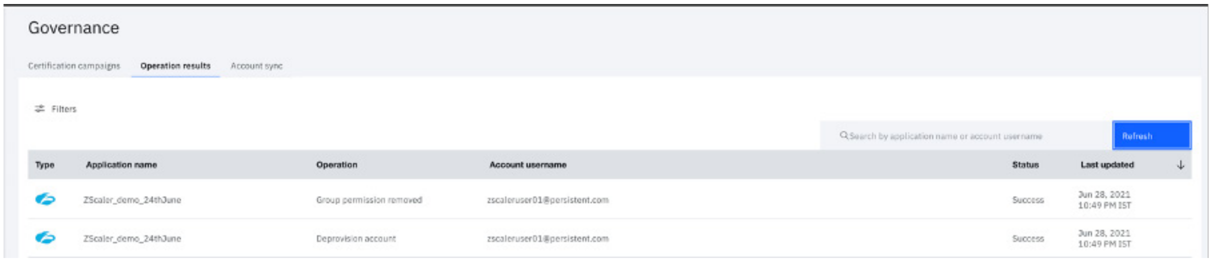


Revoke user from role

You are about to revoke "zscaleruser01@persistent.com" user's access from the permission.
This action cannot be undone.

Figure 45. Confirm revoke user

7. Monitor the group permission by going to **Governance** > **Operation results**.



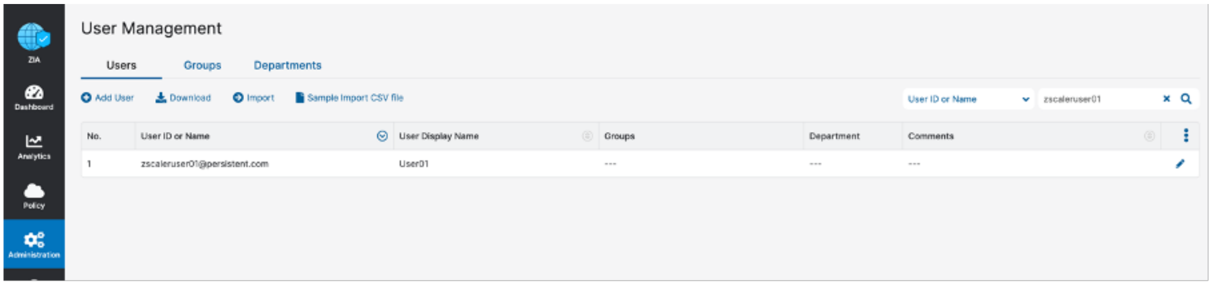
Type	Application name	Operation	Account username	Status	Last updated
	ZScaler_demo_24thJune	Group permission removed	zscaleruser01@persistent.com	Success	Jun 28, 2021 10:49 PM IST
	ZScaler_demo_24thJune	Deprovision account	zscaleruser01@persistent.com	Success	Jun 28, 2021 10:49 PM IST

Figure 46. Review group permissions removed

If your Zscaler application deprovision action is set to **Delete**, then the user is deleted.

Check that the User is Removed from the Zscaler Group

1. Return to the ZIA Admin Portal and search by the **User ID** or **Name**.
2. Verify that no groups are listed in the **Groups** column.



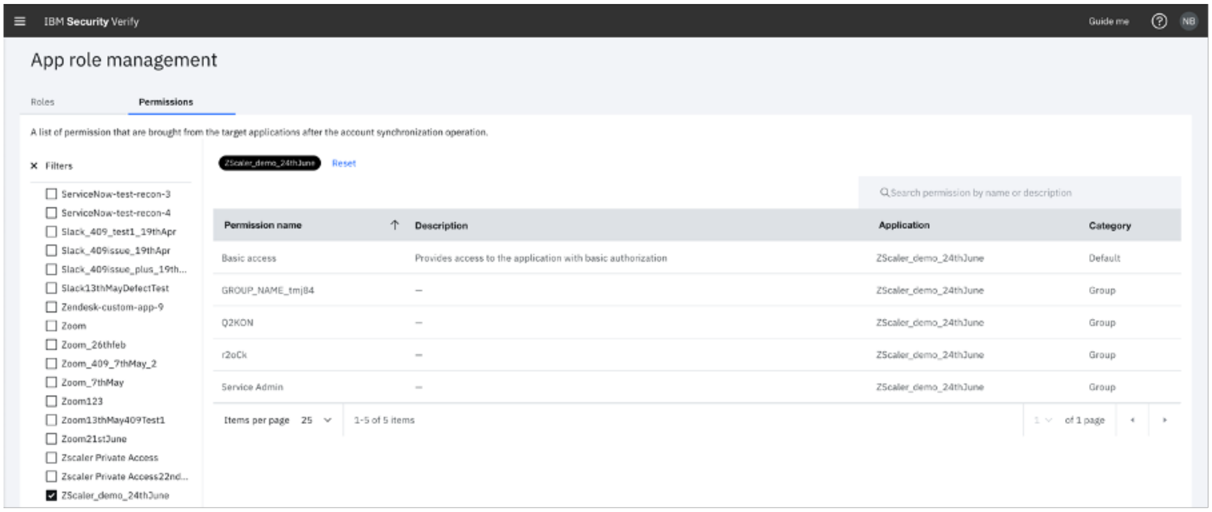
No.	User ID or Name	User Display Name	Groups	Department	Comments
1	zscaleruser01@persistent.com	User01	---	---	---

Figure 47. Groups column

Provision a New User and Assign to a Zscaler Group Through Permissions

You can also provision a new from to Zscaler through App Role management.

1. Login to IBM Security Verify as a tenant admin.
2. From the admin console, go to **App Role Management** > **Permissions**.
3. Filter your created Zscaler application and check the Zscaler groups.



App role management

A list of permission that are brought from the target applications after the account synchronization operation.

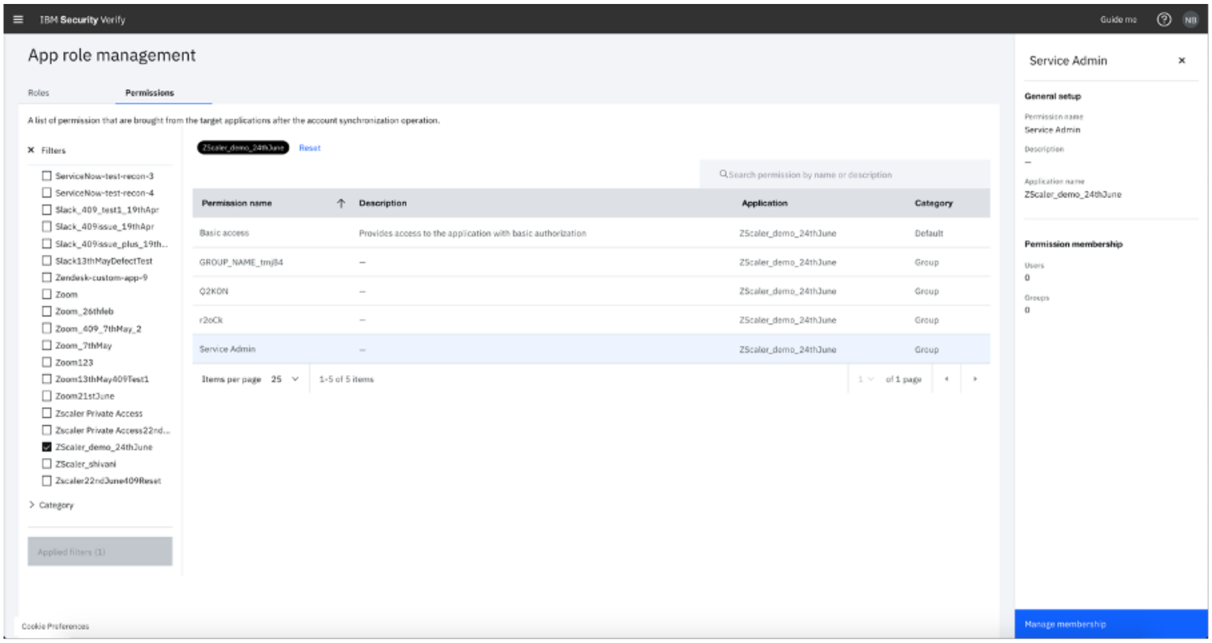
☐ ServiceNow-test-recon-3
☐ ServiceNow-test-recon-4
☐ Slack_409_test1_19thApr
☐ Slack_409issue_19thApr
☐ Slack_409issue_plus_19th...
☐ Slack13thMayDefectTest
☐ Zendesk-custom-app-9
☐ Zoom
☐ Zoom_26thfeb
☐ Zoom_409_7thMay_2
☐ Zoom_7thMay
☐ Zoom123
☐ Zoom13thMay409Test1
☐ Zoom21stJune
☐ Zscaler Private Access
☐ Zscaler Private Access22nd...
☑ ZScaler_demo_24thJune

Permission name ↑	Description	Application	Category
Basic access	Provides access to the application with basic authorization	ZScaler_demo_24thJune	Default
GROUP_NAME_tmjB4	–	ZScaler_demo_24thJune	Group
Q2KON	–	ZScaler_demo_24thJune	Group
r2oCk	–	ZScaler_demo_24thJune	Group
Service Admin	–	ZScaler_demo_24thJune	Group

Items per page 25 | 1-5 of 5 items | 1 of 1 page

Figure 48. Groups

4. Click any of the groups and click **Manage membership**.



App role management

A list of permission that are brought from the target applications after the account synchronization operation.

☐ ServiceNow-test-recon-3
☐ ServiceNow-test-recon-4
☐ Slack_409_test1_19thApr
☐ Slack_409issue_19thApr
☐ Slack_409issue_plus_19th...
☐ Slack13thMayDefectTest
☐ Zendesk-custom-app-9
☐ Zoom
☐ Zoom_26thfeb
☐ Zoom_409_7thMay_2
☐ Zoom_7thMay
☐ Zoom123
☐ Zoom13thMay409Test1
☐ Zoom21stJune
☐ Zscaler Private Access
☐ Zscaler Private Access22nd...
☑ ZScaler_demo_24thJune
☐ ZScaler_shivani
☐ Zscaler22ndJune409Reset

Permission name ↑	Description	Application	Category
Basic access	Provides access to the application with basic authorization	ZScaler_demo_24thJune	Default
GROUP_NAME_tmjB4	–	ZScaler_demo_24thJune	Group
Q2KON	–	ZScaler_demo_24thJune	Group
r2oCk	–	ZScaler_demo_24thJune	Group
Service Admin	–	ZScaler_demo_24thJune	Group

Items per page 25 | 1-5 of 5 items | 1 of 1 page

Service Admin

General setup

Permission name
Service Admin

Description
–

Application name
ZScaler_demo_24thJune

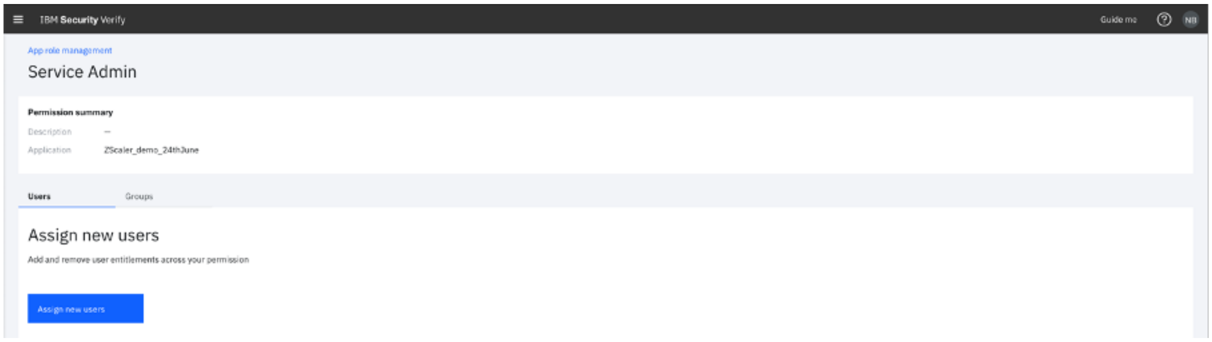
Permission membership

Users
0

Groups
0

Figure 49. Manage group membership

5. Click **Assign new user**.



Service Admin

Permission summary

Description —

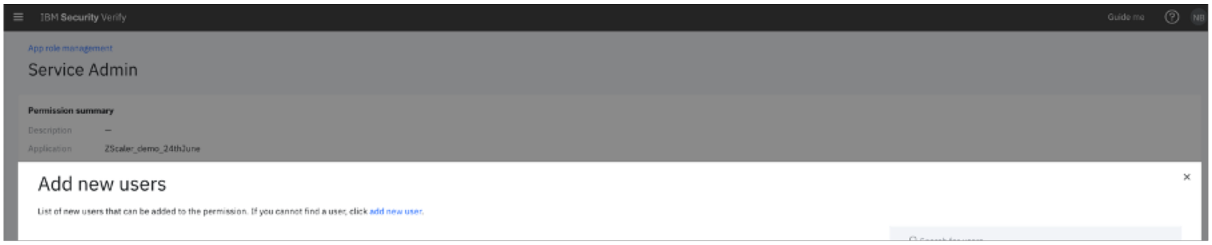
Application ZScaler_demo_24thJune

Assign new users

Add and remove user entitlements across your permission

Figure 50. Assign new user

6. Click the **add new user** link. This navigates to the **Users & Groups**.



Service Admin

Permission summary

Description —

Application ZScaler_demo_24thJune

Add new users

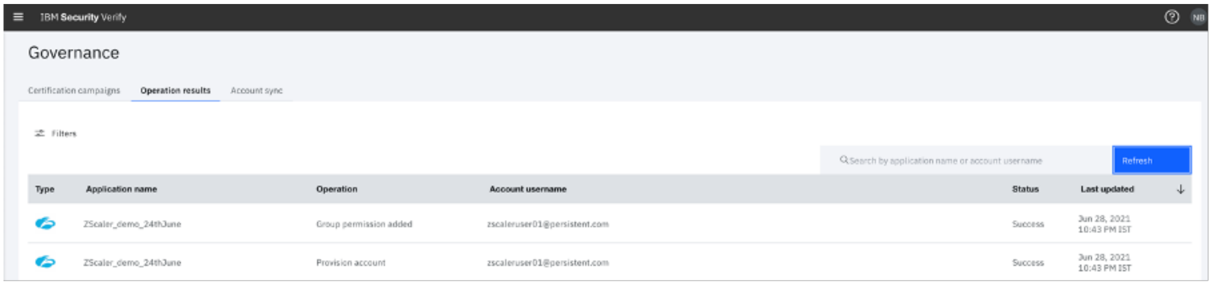
List of new users that can be added to the permission. If you cannot find a user, click add new user.

Figure 51. Add new users

7. Add a new user. To learn more, see [New User Provisioning to Zscaler]().
8. After the user is created, follow the same steps under [Add the User to the Zscaler Group through Roles]() section.

You can monitor the group permission.

1. From the admin console, go to **Governance** > **Operation results**.



Governance

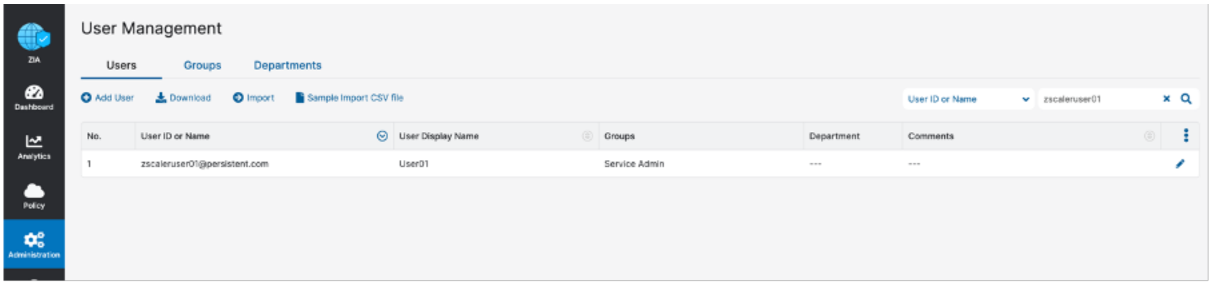
Type	Application name	Operation	Account username	Status	Last updated
	ZScaler_demo_24thJune	Group permission added	zscaleruser01@persistent.com	Success	Jun 28, 2021 10:43 PM IST
	ZScaler_demo_24thJune	Provision account	zscaleruser01@persistent.com	Success	Jun 28, 2021 10:43 PM IST

Figure 52. Operations results

2. Provision the user account before adding the group permission when you create a new user.
3. Assign the new user to a group through App Role Management.

Check that the User is Added to the Zscaler Group from Zscaler

1. Return to the ZIA Admin Portal and search by the **User ID** or **Name**.
2. Ensure that the user is added to the Zscaler group in the **Groups** column.



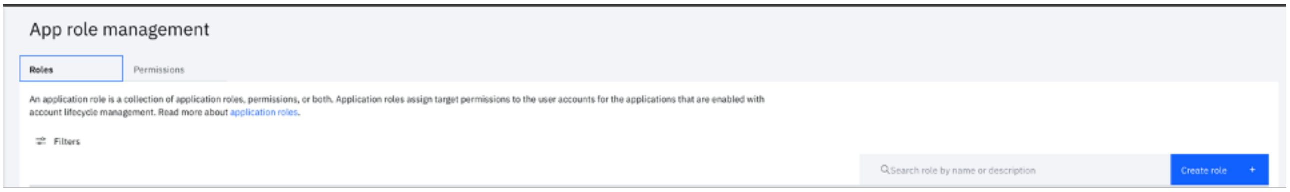
No.	User ID or Name	User Display Name	Groups	Department	Comments
1	zscaleruser01@persistent.com	User01	Service Admin	---	---

Figure 53. Groups column

Add the User to the Zscaler Group through Roles

You can assign Zscaler groups to the user accounts for the Zscaler application that are enabled with account lifecycle management.

1. Login to IBM Security Verify as a tenant admin.
2. From the admin console, go to **App Role Management** > **Roles**.
3. Click **Create role**.

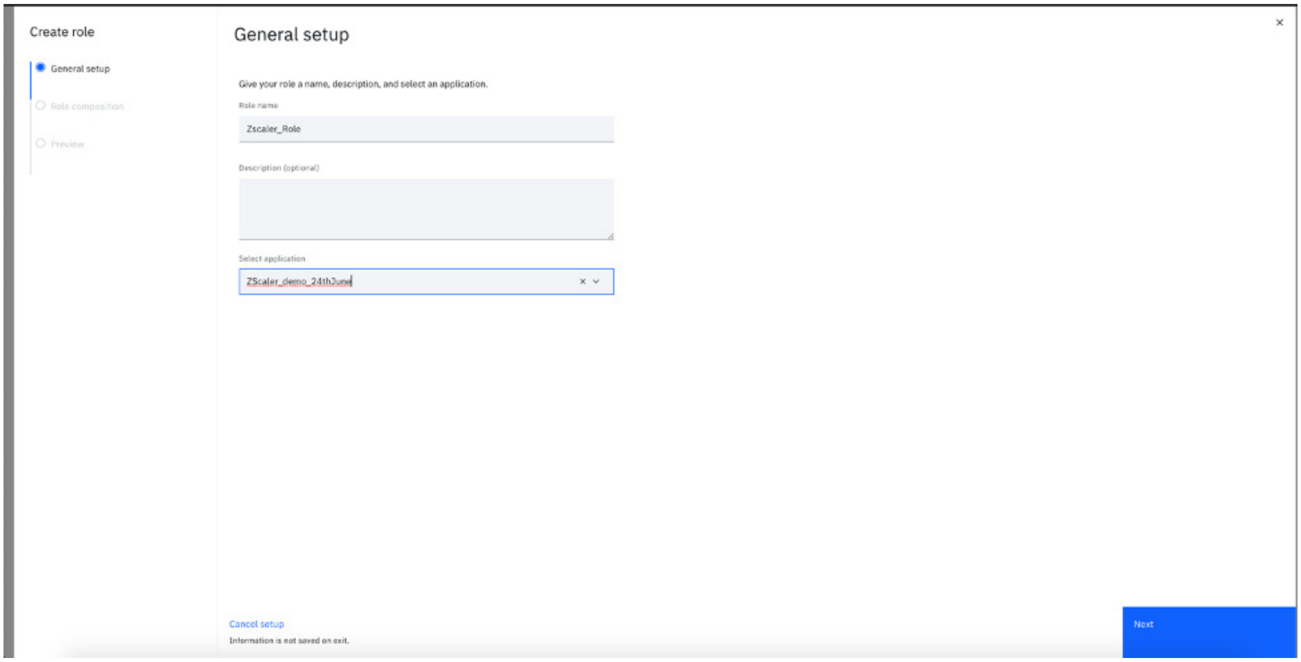


An application role is a collection of application roles, permissions, or both. Application roles assign target permissions to the user accounts for the applications that are enabled with account lifecycle management. Read more about application roles.

Figure 54. App role management

4. Add the following details:
   - **Role name**: Enter `Zscaler_Role`.
   - **Description**: (Optional) Add a meaningful description.
   - **Select application**: Select the Zscaler application.

5. Click **Next**.



General setup

Give your role a name, description, and select an application.

Role name: Zscaler_Role

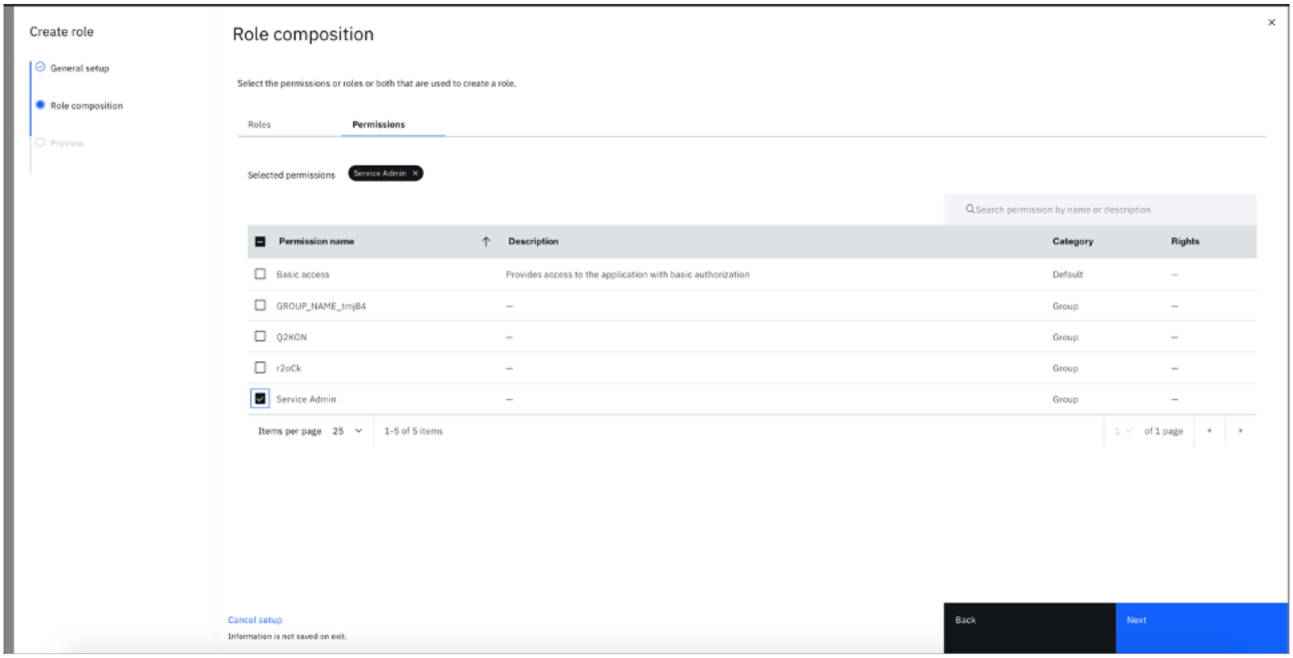
Description (optional):

Select application: ZScaler_demo_24thJune

Information is not saved on exit.

Figure 55. General setup

6. Go to the **Permissions** tab, select the group, and click **Next**.



Role composition

Select the permissions or roles or both that are used to create a role.

Selected permissions: Service Admin ×

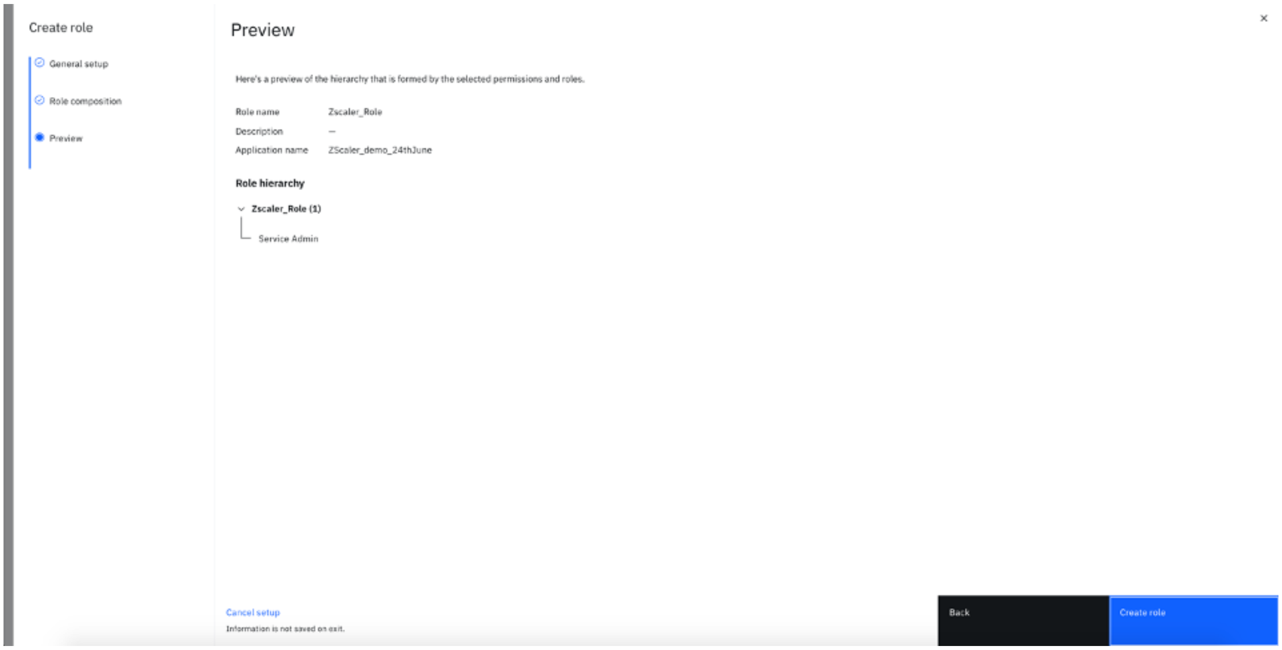
■	Permission name	Description	Category	Rights
□	Basic access	Provides access to the application with basic authorization	Default	–
□	GROUP_NAME_tmj84	–	Group	–
□	Q2KON	–	Group	–
□	r2oCk	–	Group	–
☑	Service Admin	–	Group	–

Items per page 25 | 1-5 of 5 items | 1 of 1 page

Information is not saved on exit.

Figure 56. Role composition

7. Click **Next**.



Create role

- General setup
- Role composition
- Preview

Preview

Here's a preview of the hierarchy that is formed by the selected permissions and roles.

Role name Zscaler_Role

Description –

Application name ZScaler_demo_24thJune

Role hierarchy

Zscaler_Role (1)

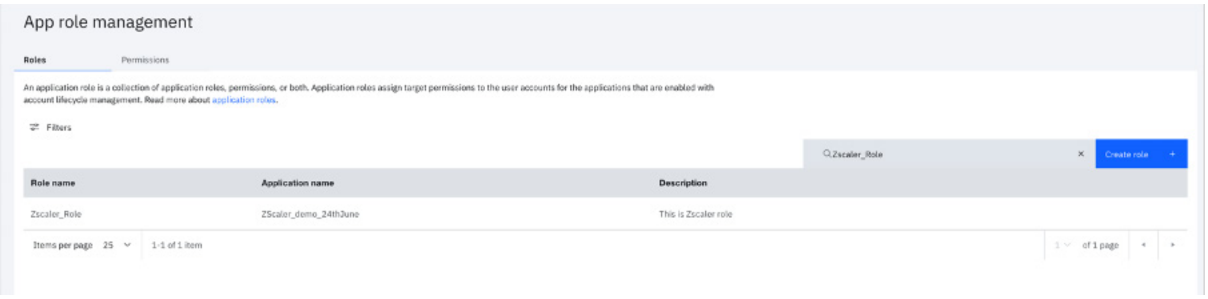
Service Admin

Cancel setup

Information is not saved on exit.

Figure 57. Role preview

8. Click **Create Role**.
9. Search for the **Role Name**.



App role management

An application role is a collection of application roles, permissions, or both. Application roles assign target permissions to the user accounts for the applications that are enabled with account lifecycle management. Read more about application roles.

Role name	Application name	Description
Zscaler_Role	ZScaler_demo_24thJune	This is Zscaler role

Figure 58. Role name search

10. In order to Manage membership, click the created Role and follow the same steps as mentioned in the [Assign User to the Zscaler Group Through Permissions] section or [Provision a New User and Assign to a Zscaler Group Through Permissions].

ZPA Configuration

IBM Security Verify provides support for single sign-on (SSO), multifactor authentication (MFA), adaptive access, and account lifecycle management for several applications out of the box. This document provides instructions for configuring IBM Security Verify with ZPA as an application leveraging these capabilities.

Before you begin

Make sure to have a ZPA account with administrator access.

Zscaler Configuration

To allow Single Sign-on and user provisioning for the ZPA application:

1. Log in as an admin user to your ZPA Admin Portal account.

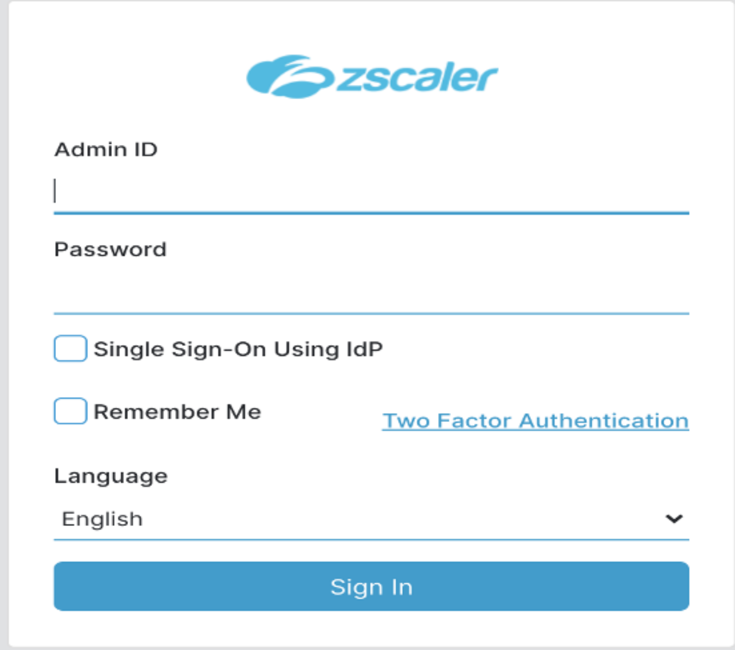


Figure 59. ZPA log in

2. Go to **Administration** > **IdP Configuration**.

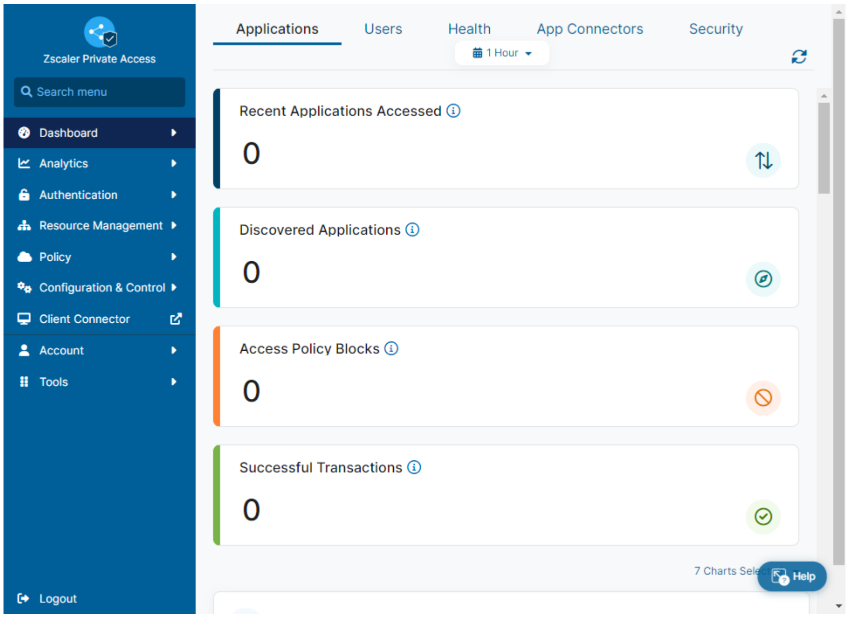
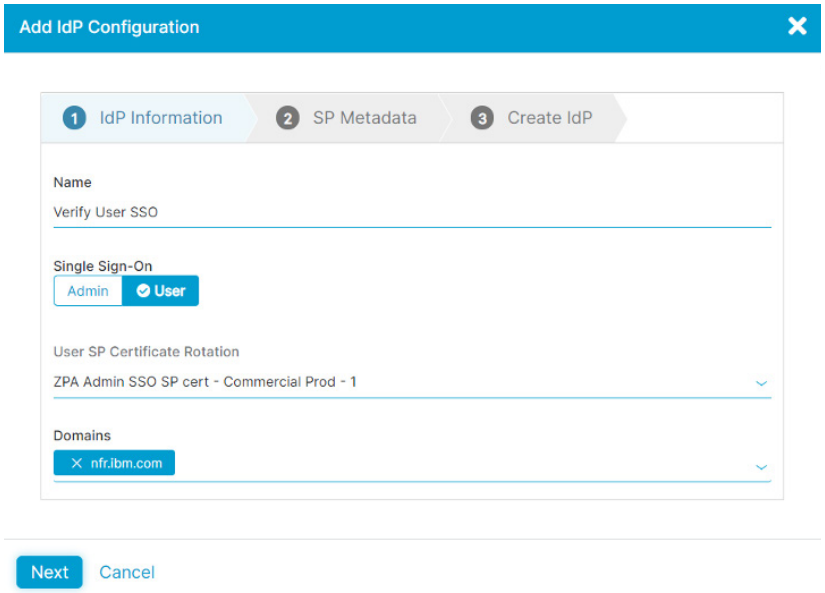


Figure 60. IdP configuration

3. Click **Add IdP Configuration**.
4. Enter a **Name**
5. Select **User** for **Single Sign-on**.
6. Select **User SP Certificate Rotation** from the available list.
7. Select the domains from the available list.



Name: Verify User SSO

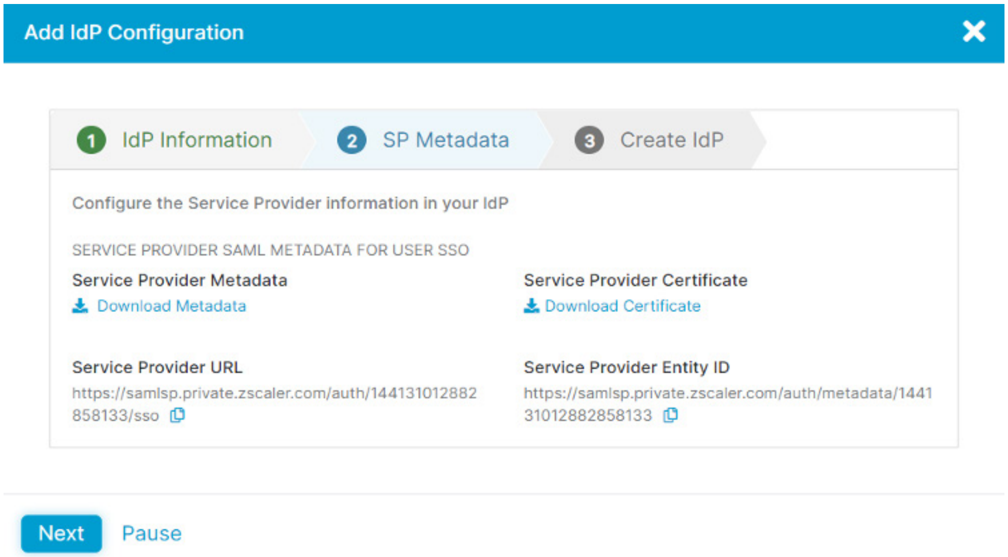
Single Sign-On: Admin [✓ User]

User SP Certificate Rotation: ZPA Admin SSO SP cert - Commercial Prod - 1

Domains: nfr.ibm.com

Figure 61. Add IdP Configuration

8. Click **Next**. The **SP Metadata** tab is displayed.
9. Download **Service Provider Metadata** and **Service Provider Certificate**.
10. The **Service Provider URL** is displayed. Copy this URL (which is inserted in the **Assertion Consumer Service URL** text field of the ZPA application configuration in IBM Security Verify).
11. The **Service Provider Entity ID** is displayed. Copy this ID (which is inserted in the **Provider ID** text field of ZPA application configuration in IBM Security Verify).



Configure the Service Provider information in your IdP

SERVICE PROVIDER SAML METADATA FOR USER SSO

Service Provider Metadata
Download Metadata

Service Provider Certificate
Download Certificate

Service Provider URL
https://samlsp.private.zscaler.com/auth/144131012882858133/sso

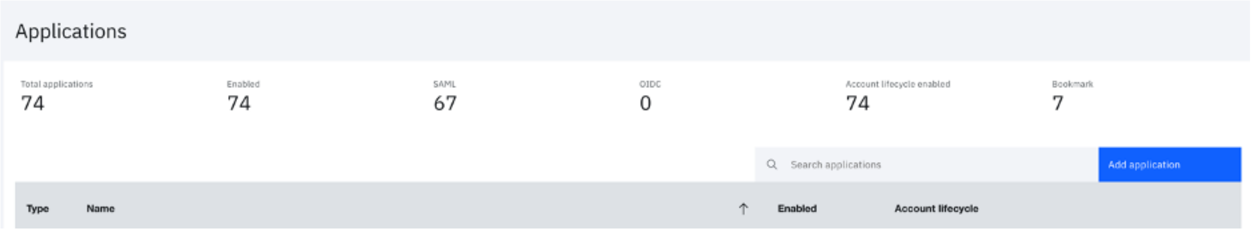
Service Provider Entity ID
https://samlsp.private.zscaler.com/auth/metadata/144131012882858133

Figure 62. Add IdP Configuration

12. Click **Next**. The **Create IdP** section is displayed.
13. Open a new browser to gather some details.

IBM Security Verify Zscaler Application Configuration

1. In the new browser, login to IBM Security Verify as tenant admin.
2. From the admin console, go to the **Applications** page.
3. Click **Add application**.

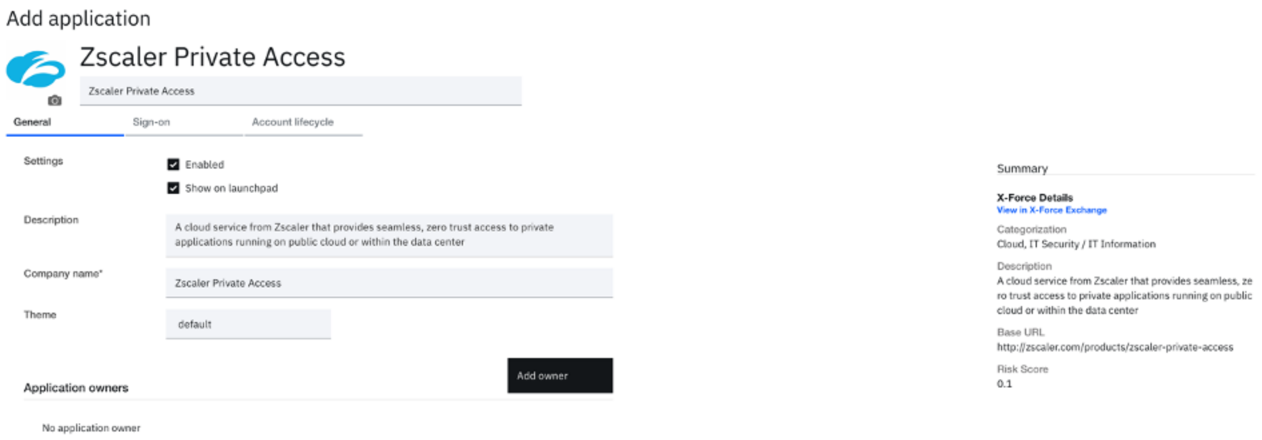


Total applications	Enabled	SAML	OIDC	Account lifecycle enabled	Bookmark
74	74	67	0	74	7

Type	Name	Enabled	Account lifecycle

Figure 63. Applications page

4. On the **Select Application Type** dialog, enter `Zscaler Private Access` into the search box.
5. Select the ZPA application when it displays and then click **Add application**.
6. On the **Add Application** page, provide `Zscaler Private Access` as the **Company name**.



Add application

Zscaler Private Access

Zscaler Private Access

Settings
☑ Enabled
☑ Show on launchpad

Description: A cloud service from Zscaler that provides seamless, zero trust access to private applications running on public cloud or within the data center

Company name*: Zscaler Private Access

Theme: default

Application owners

No application owner

Summary

X-Force Details
View in X-Force Exchange

Categorization
Cloud, IT Security / IT Information

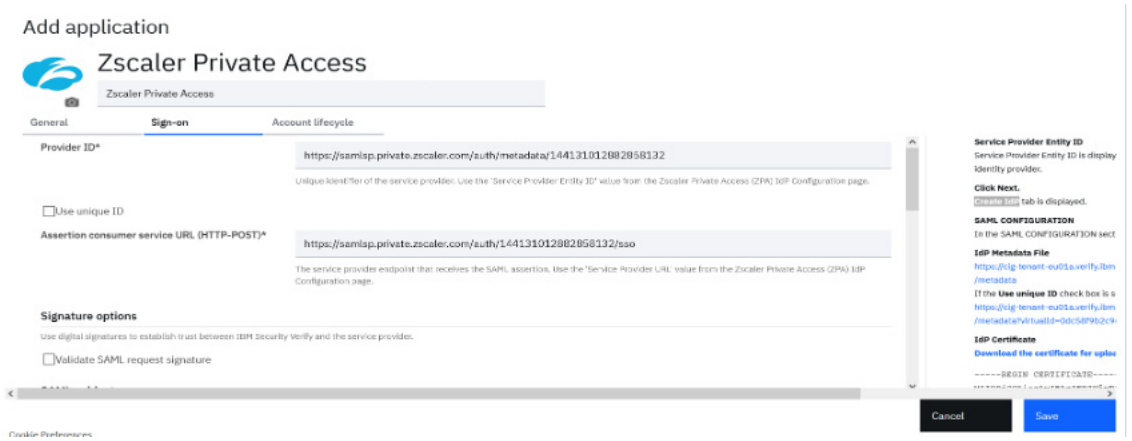
Description
A cloud service from Zscaler that provides seamless, zero trust access to private applications running on public cloud or within the data center

Base URL
http://zscaler.com/products/zscaler-private-access

Risk Score
0.1

Figure 64. Add Application dialog

7. Click the **Sign-on** tab.
8. Follow the instructions displayed in right-side pane.



Add application

Zscaler Private Access

Zscaler Private Access

Provider ID*: https://samlsp.private.zscaler.com/auth/metadata/144131012882858132

Unique identifier of the service provider. Use the 'Service Provider Entity ID' value from the Zscaler Private Access (ZPA) IdP Configuration page.

□ Use unique ID

Assertion consumer service URL (HTTP-POST)*: https://samlsp.private.zscaler.com/auth/144131012882858132/sso

The service provider endpoint that receives the SAML assertion. Use the 'Service Provider URL' value from the Zscaler Private Access (ZPA) IdP Configuration page.

Signature options

Use digital signatures to establish trust between IBM Security Verify and the service provider.

□ Validate SAML request signature

Service Provider Entity ID
Service Provider Entity ID is display
identity provider.

Click Next.
Create IdP tab is displayed.

SAML CONFIGURATION
In the SAML CONFIGURATION sect

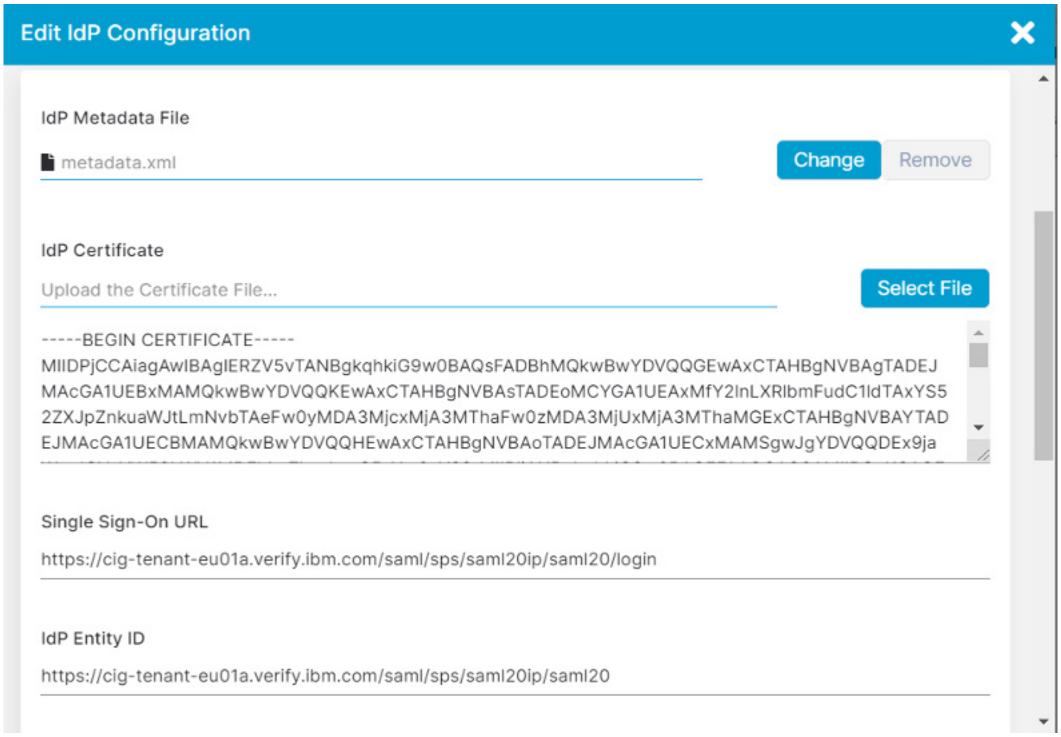
IdP Metadata File
https://cig-tenant-eu01a.verify.ibm
/metadata
If the **Use unique ID** check box is s
https://cig-tenant-eu01a.verify.ibm
/metadata?virtualId=0dc58f9b2c9

IdP Certificate
Download the certificate for uploa

-----BEGIN CERTIFICATE-----

Figure 65. ZPA Add application

9. Update the **Assertion Consumer Service URL** text field with the **Service Provider URL** copied from Zscaler.
10. Update the **Provider ID** text field with the **Service Provider Entity ID** copied from Zscaler.
11. In the **Instructions** pane, go to the **SAML CONFIGURATION** section and download the IdP Metadata file.
12. Save the application configuration in IBM Security Verify.
13. Return to the ZPA Admin Portal and upload the downloaded IdP Metadata in the **IdP Certificate** section of the **Edit IdP Configuration** window.



IdP Metadata File

metadata.xml

IdP Certificate

Upload the Certificate File...

```
-----BEGIN CERTIFICATE-----
MIIDPjCCAiagAwIBAgIERZV5vTANBgkqhkiG9w0BAQsFADBhMQkwBwYDVQQGEwAxCTAHBgNVBAgTADEJ
MAcGA1UEBxMAMQkwBwYDVQQKEwAxCTAHBgNVBAsTADEoMCYGA1UEAxMfY2lnLXRlbmFudC1ldTAxYS5
2ZXJpZnkuaWJtLmNvbTAeFw0yMDA3MjcxMjA3MThaFw0zMDA3MjUxMjA3MThaMGExCTAHBgNVBAYTAD
EJMAcGA1UECBMAMQkwBwYDVQQHEwAxCTAHBgNVBAoTADEJMAcGA1UECxMAMSgwJgYDVQQDEx9ja
```

Single Sign-On URL

https://cig-tenant-eu01a.verify.ibm.com/saml/sps/saml20ip/saml20/login

IdP Entity ID

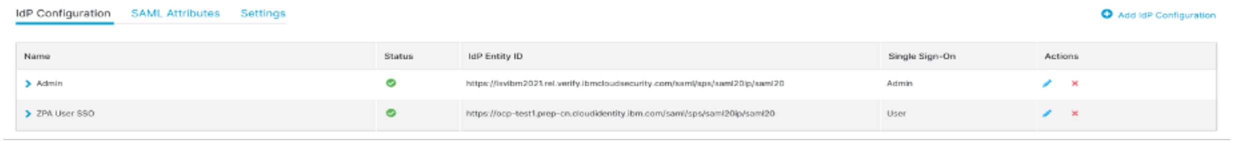
https://cig-tenant-eu01a.verify.ibm.com/saml/sps/saml20ip/saml20

Figure 66. Edit IdP Configuration

14. Set **Status** as **Enabled**.
15. Set **SAML Attributes for Policy** as **Enabled**.
16. **Save** the configuration.

Enable SCIM Configuration for Zscaler

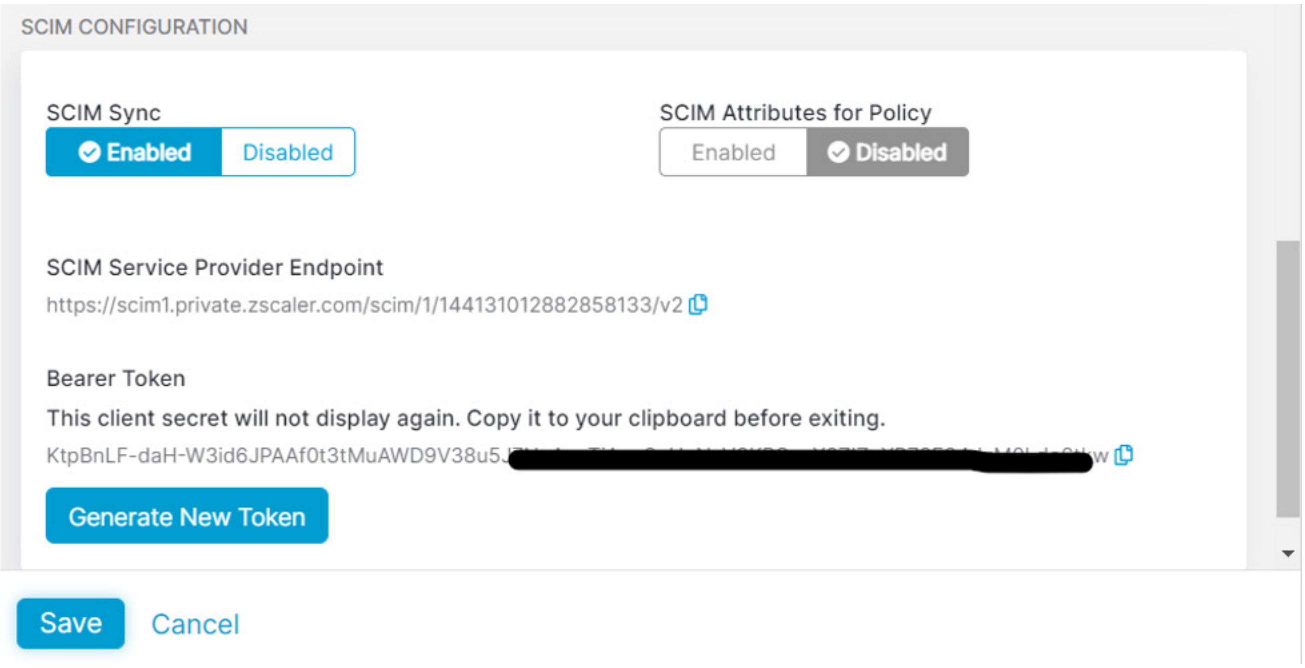
1. Log in as an admin user to your ZPA Admin Portal (continue to use an existing session if not logged out).
2. From the admin console, go to **Administration** > **IdP Configuration**.
3. Edit the IdP configuration created earlier.



Name	Status	IdP Entity ID	Single Sign-On	Actions
> Admin	✓	https://isvibm2021.rel.verify.ibmcloudsecurity.com/saml/sps/saml20ip/saml20	Admin	✎ ✕
> ZPA User SSO	✓	https://ocp-test1.prep-cn.cloudidentity.ibm.com/saml/sps/saml20ip/saml20	User	✎ ✕

Figure 67. IdP Configuration

4. In the **Edit IdP Configuration** window, select **Enabled** for **SCIM Sync**.
5. Copy the **SCIM Service Provider Endpoint**.
6. Click **Generate New Token** to create a bearer token and copy it.
7. Click **Save**.



SCIM CONFIGURATION

SCIM Sync: ● Enabled ○ Disabled

SCIM Attributes for Policy: ○ Enabled ● Disabled

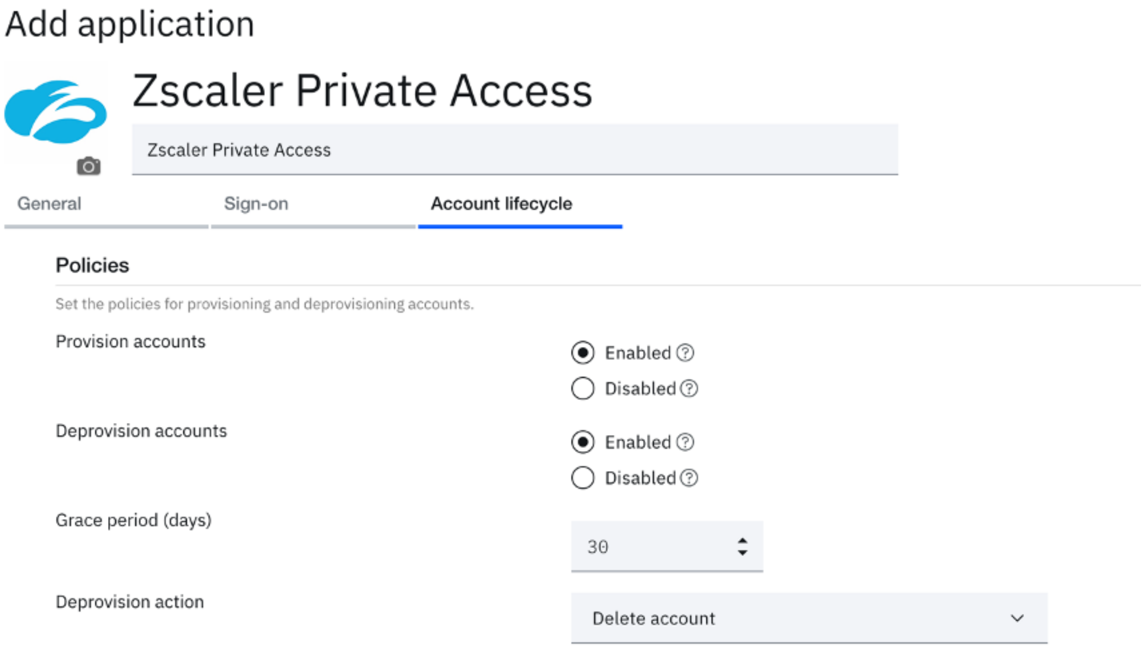
SCIM Service Provider Endpoint
https://scim1.private.zscaler.com/scim/1/144131012882858133/v2

Bearer Token
This client secret will not display again. Copy it to your clipboard before exiting.
KtpBnLF-daH-W3id6JPAAf0t3tMuAWD9V38u5[redacted]w

Figure 68. SCIM configuration

Enable Lifecycle for Zscaler Application

1. Login to IBM Security Verify as tenant admin (continue to use the existing session if not logged out).
2. From the admin console, go to **Applications** page.
3. Select the **Zscaler Private Access** application.
4. Go to the **Account lifecycle** tab.
5. Enable the **Provision accounts** and **Deprovision accounts**. ZPA allows **Suspend account** or **Delete account** (with a **Grace Period**) as a **Deprovision** action.



Add application

Zscaler Private Access

Zscaler Private Access

Policies

Set the policies for provisioning and deprovisioning accounts.

Provision accounts
● Enabled
○ Disabled

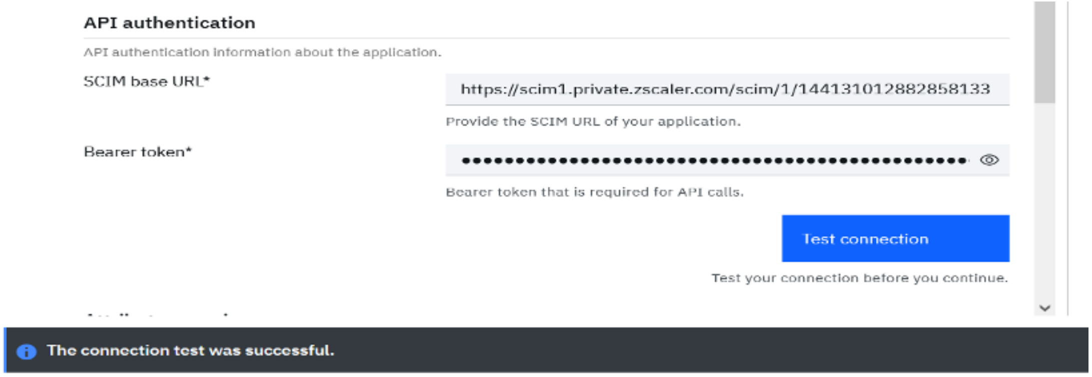
Deprovision accounts
● Enabled
○ Disabled

Grace period (days): 30

Deprovision action: Delete account

Figure 69. Add application

6. Scroll down to the **API Authentication** section.
7. In the **SCIM base URL** field, enter the **SCIM Service Provider Endpoint** URL copied from Zscaler.
8. In the **Bearer token**, enter the token copied from Zscaler.
9. Click **Test connection** to confirm the settings.



API authentication

API authentication information about the application.

SCIM base URL*: https://scim1.private.zscaler.com/scim/1/144131012882858133

Provide the SCIM URL of your application.

Bearer token*: ••

Bearer token that is required for API calls.

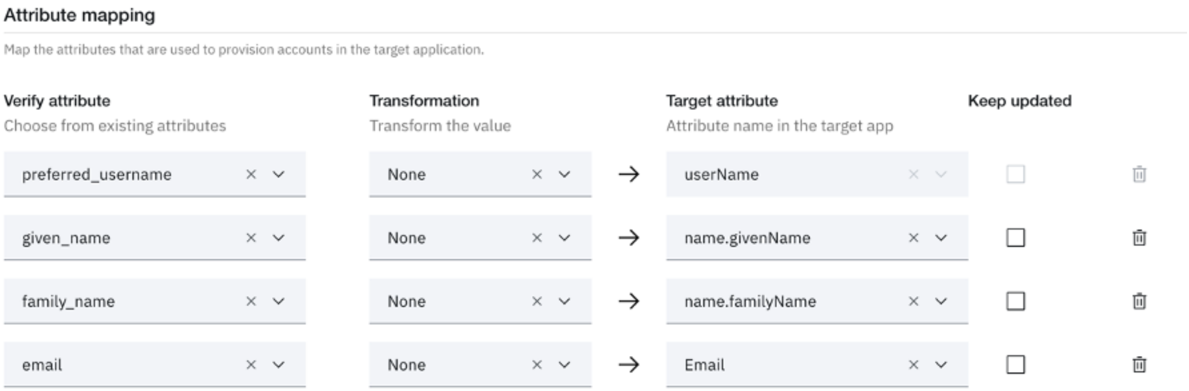
Test your connection before you continue.

The connection test was successful.

Figure 70. API authentication

10. Confirm that connection successful message is shown. If not, verify that the **SCIM Base URL** and **Bearer Token** are entered correctly.
11. Scroll down to the **API Attribute Mappings** section and set the following:
    - **preferred_username** = userName
    - **given_name** = name.givenName
    - **family_name** = name.familyName
    - **email** = Email

    Leave the other mappings as-is.



Attribute mapping

Map the attributes that are used to provision accounts in the target application.

Verify attribute Choose from existing attributes	Transformation Transform the value		Target attribute Attribute name in the target app	Keep updated
preferred_username	None	→	userName	□
given_name	None	→	name.givenName	□
family_name	None	→	name.familyName	□
email	None	→	Email	□

Figure 71. Attribute mapping

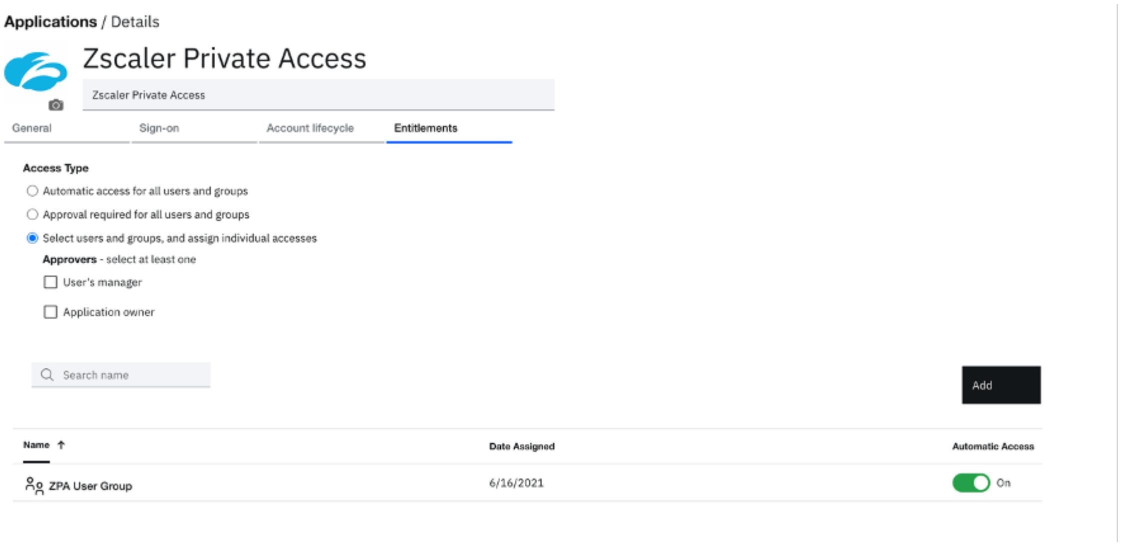
12. Click **Save**.

Define Entitlements for Application

Define the entitlement for users and groups to get access to this application.

When you save the application, the **Entitlements** tab is displayed.

1. On the **Entitlements** tab, make sure to choose **Select users and groups, and the assign individual accesses**.
2. Click **Add**.



Applications / Details

Zscaler Private Access

Zscaler Private Access

Access Type

○ Automatic access for all users and groups

○ Approval required for all users and groups

● Select users and groups, and assign individual accesses

Approvers - select at least one

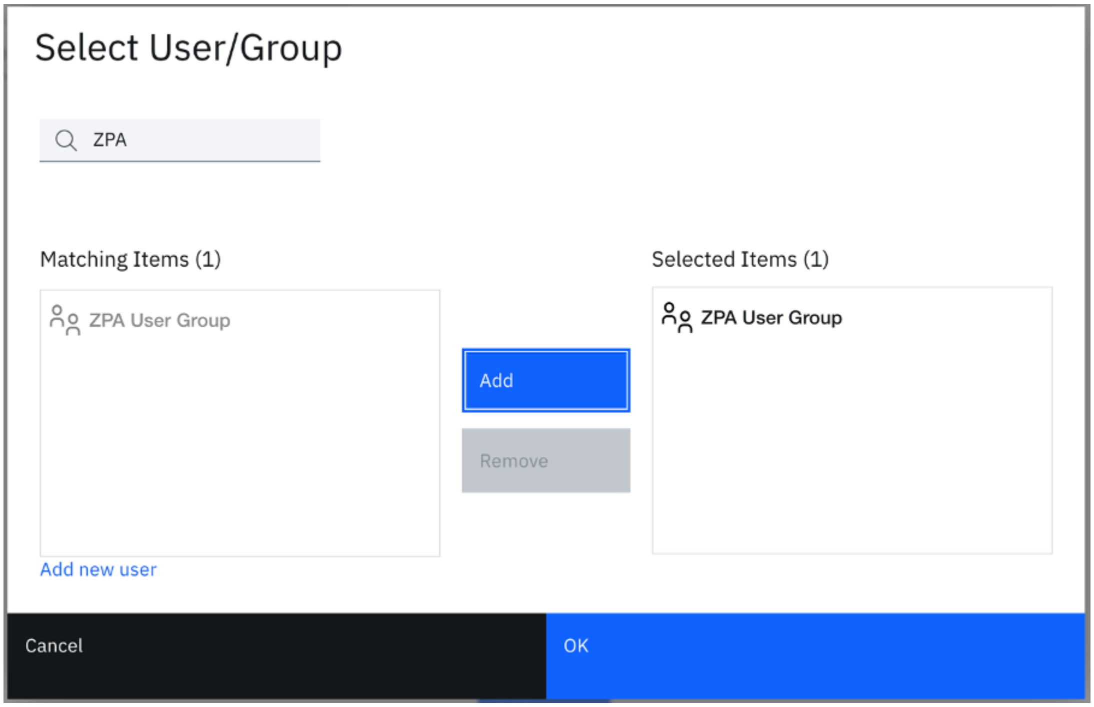
□ User's manager

□ Application owner

Name ↑	Date Assigned	Automatic Access
ZPA User Group	6/16/2021	On

Figure 72. Application details

3. On the **Select User/Group** dialog, search for, select, and add **ZPA User Group** (this group must have been already created by admin).
4. Click **OK** to close the dialog.



Select User/Group

ZPA

Matching Items (1)

ZPA User Group

Selected Items (1)

ZPA User Group

Figure 73. Select User/Group

5. Click **Save** to save application changes.

Zscaler Provisioning Use Cases

After ZPA is successfully configured, the tenant admin can provision user accounts.

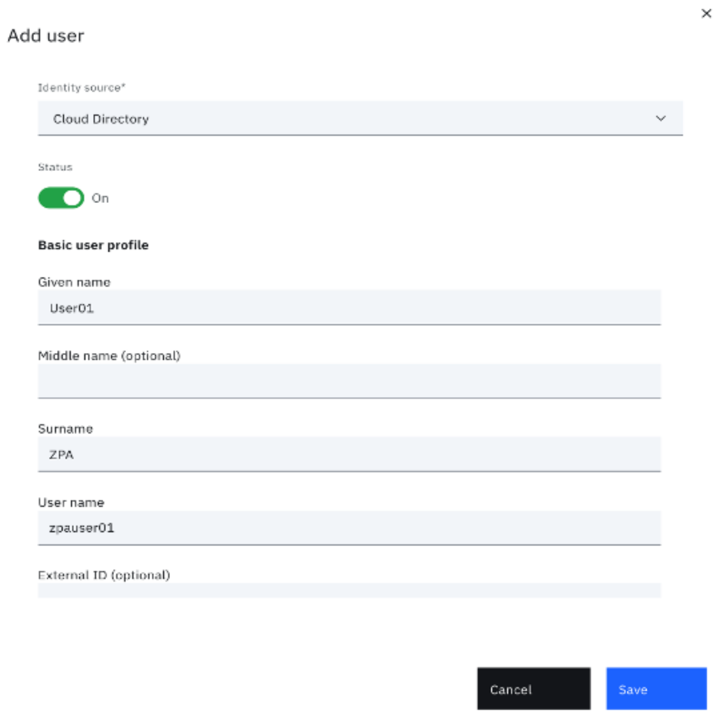
IBM Security Verify does not support account synchronization with ZPA.

New User Provisioning to Zscaler

Create a new user in IBM Security Verify and make sure they can log in.

Create New User

1. Login to the IBM Security Verify tenant as an administrative user.
2. Go to **Users & groups**.
3. Click **Add user**.
4. Create a user. You can create any user you like (as long as it doesn't clash with existing ones). For example:
   - **Identity Source**: Select **Cloud Directory**.
   - **User name**: `zpauser01`
   - **Given name**: `User01`
   - **Surname**: `ZPA`
   - **Email**: Enter a valid email address



Add user

Identity source*
Cloud Directory

Status
On

Basic user profile

Given name
User01

Middle name (optional)

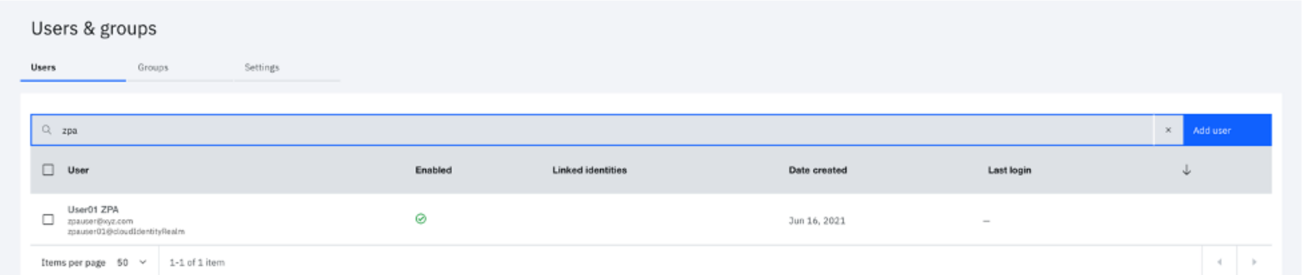
Surname
ZPA

User name
zpauser01

External ID (optional)

Figure 74. Add user

5. Click **Save** to create the user.



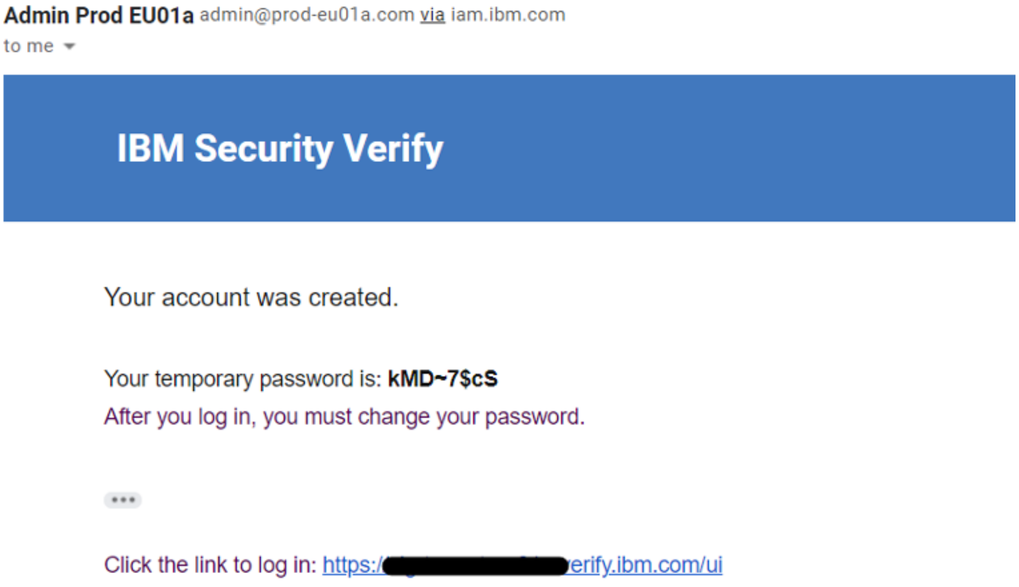
☐ User	Enabled	Linked identities	Date created	Last login
☐ User01 ZPA zpauser@xyz.com zpauser01@cloudIdentityRealm	✓		Jun 16, 2021	–

Figure 75. Users & groups

The new user is created and listed in the **Users** table.

Test that the New User Can Login

The new user gets the initial password via email. Go to your email client of the newly created user and look for a confirmation email.



Admin Prod EU01a admin@prod-eu01a.com via iam.ibm.com
to me

IBM Security Verify

Your account was created.

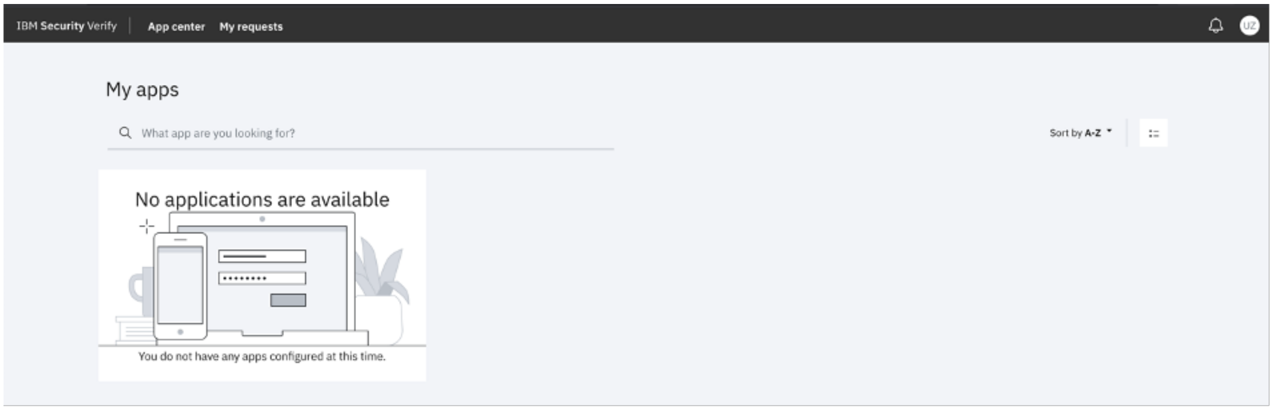
Your temporary password is: **kMD~7$cS**
After you log in, you must change your password.

Click the link to log in: https:/[redacted]erify.ibm.com/ui

Figure 76. Confirmation email

1. Open a new browser session, copy the link from the email and log in with the username and password from the email.
2. When prompted, enter a **New password**, **Confirm password**, and click **Change Password**.

3. Validate that user is able to access the IBM Security Verify launchpad.



No applications are available

You do not have any apps configured at this time.

Figure 77. My apps

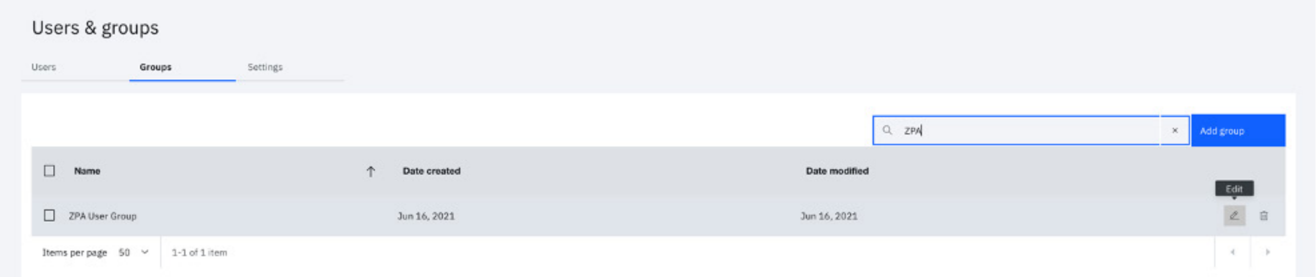
Provisioning Use Case

You have entitled the **Zscaler User Group** with `Automatic access` for the ZPA application. In order to provision a new Zscaler account for a newly created user, make the new user a member of the **ZPA User Group**. This triggers the automatic provisioning for the ZPA account.

Add the User to Group

Return to the IBM Security Verify admin console as the admin user.

1. Access the **Users & groups** section and click the **Groups** tab.
2. Hover over the **ZPA User Group** and click the **Edit** icon.

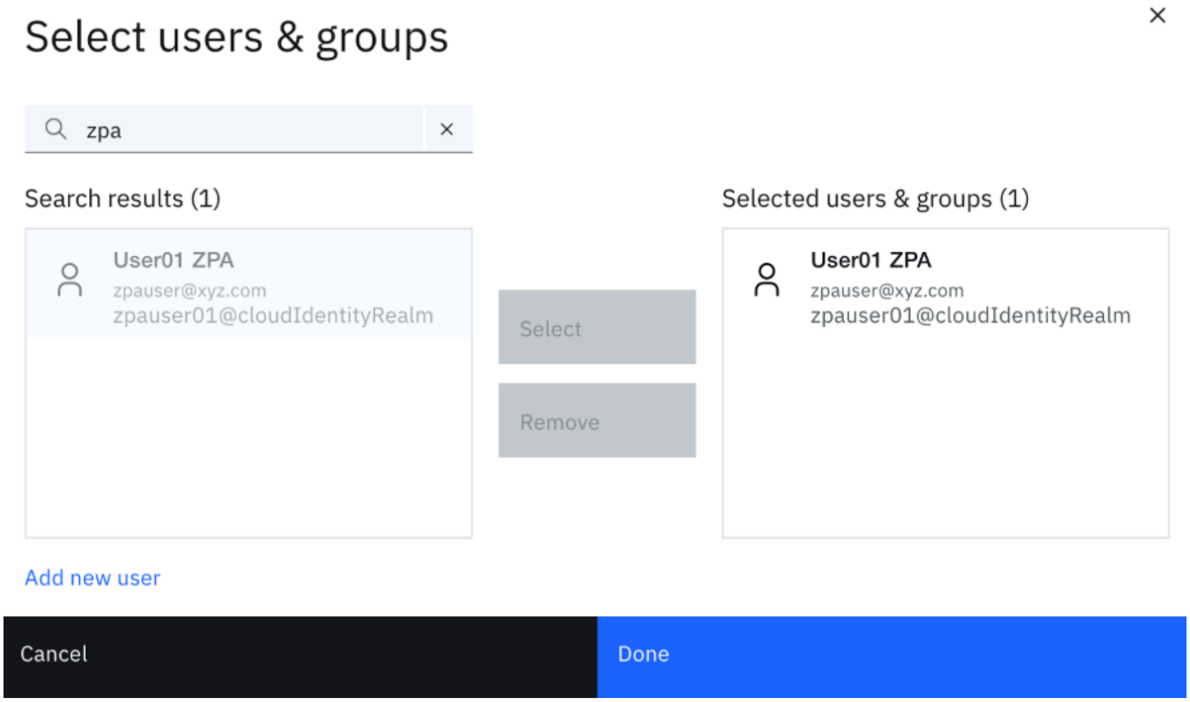


Name	Date created	Date modified
ZPA User Group	Jun 16, 2021	Jun 16, 2021

Figure 78. Users & groups

3. Click **Add** beside **Group Members**.
4. Search for the name of the new user that is listed in the **Search results**.

5. Choose the listed user and click **Select**. This moves the user to **Selected users & groups**.



Select users & groups

zpa

Search results (1)

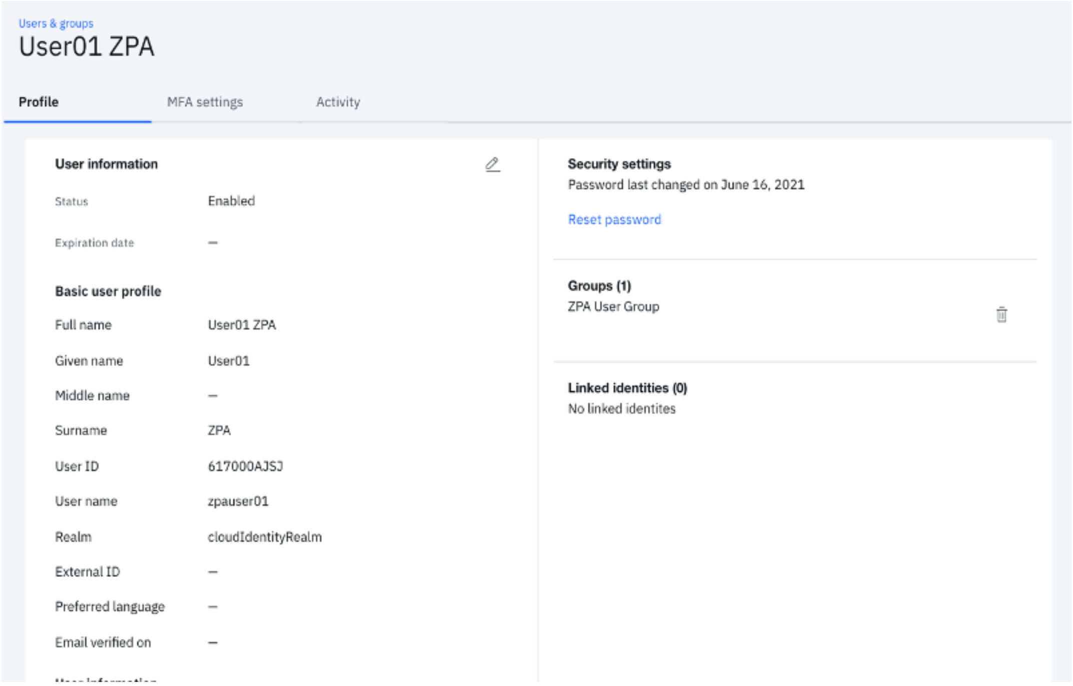
User01 ZPA
zpauser@xyz.com
zpauser01@cloudIdentityRealm

Selected users & groups (1)

User01 ZPA
zpauser@xyz.com
zpauser01@cloudIdentityRealm

Figure 79. Select users & groups

6. Click **Done**, then **Save** on the **Edit Group** dialog.
7. Return to the **Users** tab, hover over your new user, and click the **User Details** icon on the right side.
8. Confirm the new user is in the **ZPA User Group**.



User01 ZPA

User information

Status	Enabled
Expiration date	–

Basic user profile

Full name	User01 ZPA
Given name	User01
Middle name	–
Surname	ZPA
User ID	617000AJSJ
User name	zpauser01
Realm	cloudIdentityRealm
External ID	–
Preferred language	–
Email verified on	–

Security settings
Password last changed on June 16, 2021

Groups (1)
ZPA User Group

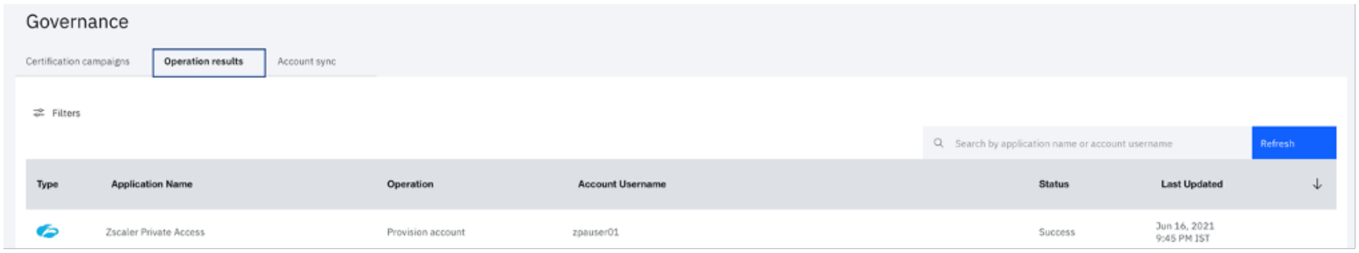
Linked identities (0)
No linked identites

Figure 80. Users & groups

Check that the User is Provisioned to ZPA

Adding the user to the **ZPA User Group** automatically triggers Zscaler user provisioning by IBM Security Verify.

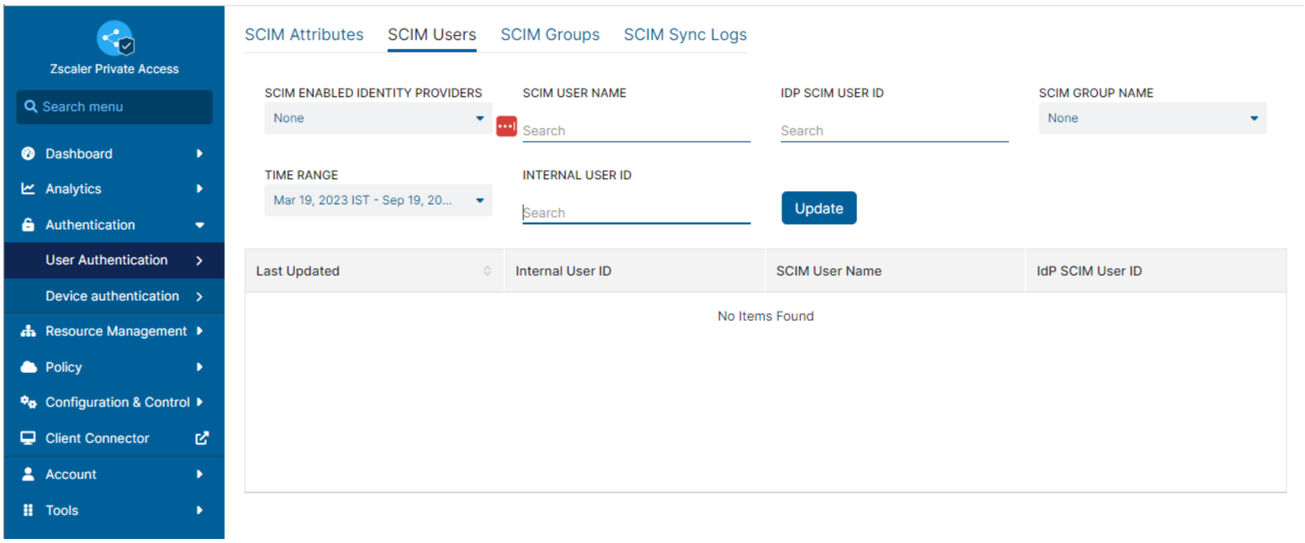
1. From the admin console, go to **Governance** > **Operation** results tab.



Type	Application Name	Operation	Account Username	Status	Last Updated
	Zscaler Private Access	Provision account	zpauser01	Success	Jun 16, 2021 9:45 PM IST

Figure 81. Governance

2. Also validate the new user provisioning by logging in the ZPA Admin Portal. Go to **Authentication** > **User Authentication** > **SCIM Users**.

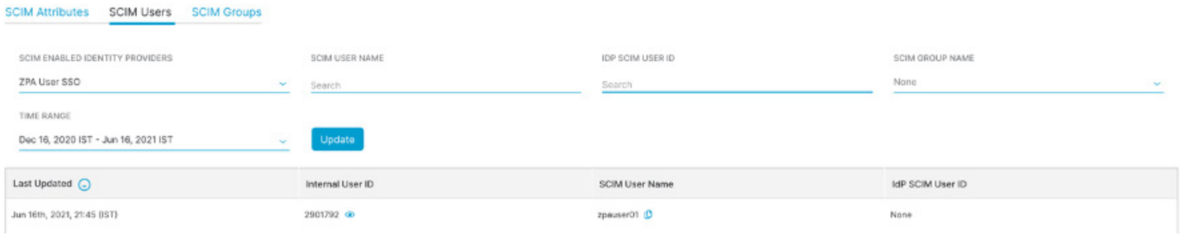


SCIM ENABLED IDENTITY PROVIDERS: None
SCIM USER NAME: Search
IDP SCIM USER ID: Search
SCIM GROUP NAME: None
TIME RANGE: Mar 19, 2023 IST - Sep 19, 20...
INTERNAL USER ID: Search

Last Updated	Internal User ID	SCIM User Name	IdP SCIM User ID
No Items Found			

Figure 82. SCIM Users in the ZPA Admin Portal

3. Look for newly provisioned user.



SCIM ENABLED IDENTITY PROVIDERS: ZPA User SSO
SCIM USER NAME: Search
IDP SCIM USER ID: Search
SCIM GROUP NAME: None
TIME RANGE: Dec 16, 2020 IST - Jun 16, 2021 IST

Last Updated	Internal User ID	SCIM User Name	IdP SCIM User ID
Jun 16th, 2021, 21:45 (IST)	2901792	zpauser01	None

Figure 83. SCIM Users tab

4. Validate the user details such as:
   - The new user is listed in ZPA and the user name is correct.
   - Other user attributes are created per attribute mapping rules.

Check that the New User Can Access Zscaler via SSO

For service provider-initiated SSO, use the Zscaler Client Connector.

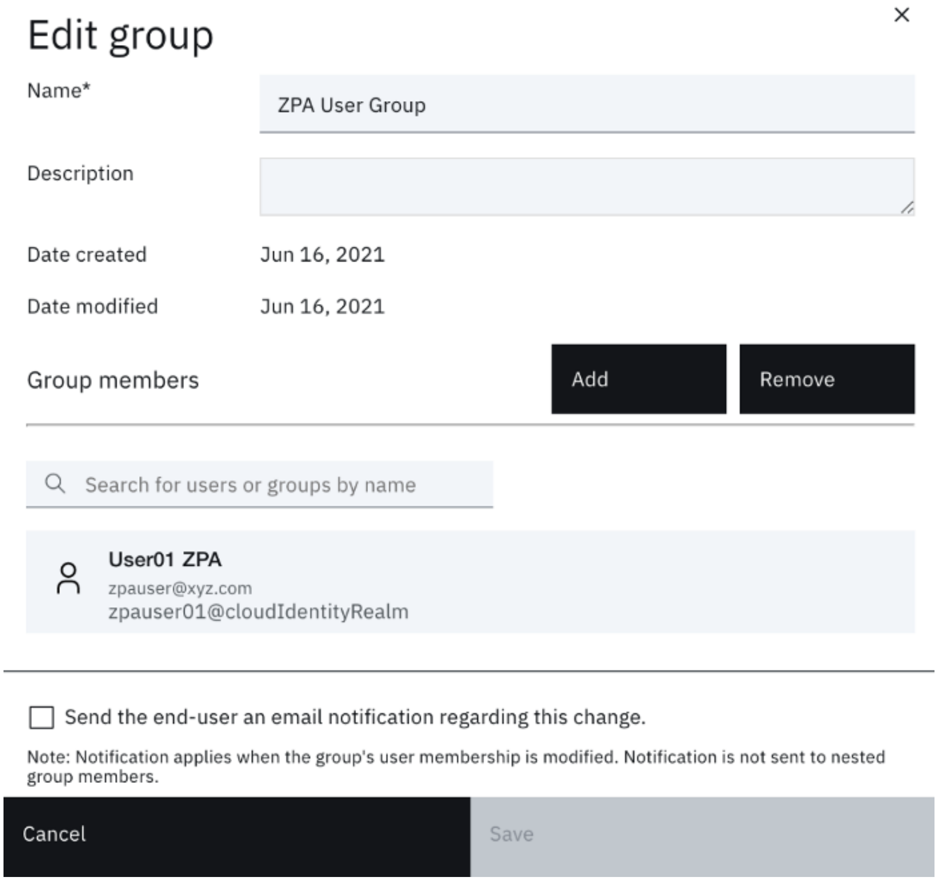
ZPA does not support identity provider-initiated SSO.

Deprovisioning Use Case

Test deprovisioning the user from ZPA.

Remove User from ZPA User Group

1. Return to the IBM Security Verify admin console as a user.
2. Go to **Users & groups** and click the **Groups** tab.
3. Edit the **ZPA User Group**.
4. Select the newly added user and click **Remove**.



Edit group

Name*: ZPA User Group

Description:

Date created: Jun 16, 2021

Date modified: Jun 16, 2021

Group members

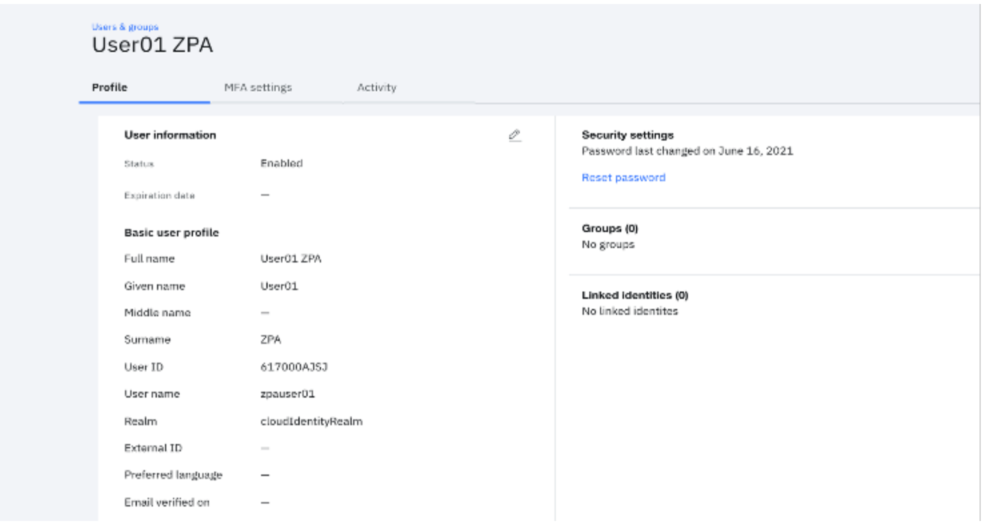
User01 ZPA
zpauser@xyz.com
zpauser01@cloudIdentityRealm

☐ Send the end-user an email notification regarding this change.

Note: Notification applies when the group's user membership is modified. Notification is not sent to nested group members.

Figure 84. Edit group

5. Click **Save**.
6. As before, check the details of the user in the **Users** tab. Ensure no groups are listed in **Groups** section.



User01 ZPA

User information

Status	Enabled
Expiration date	–

Basic user profile

Full name	User01 ZPA
Given name	User01
Middle name	–
Surname	ZPA
User ID	617000AJSJ
User name	zpauser01
Realm	cloudIdentityRealm
External ID	–
Preferred language	–
Email verified on	–

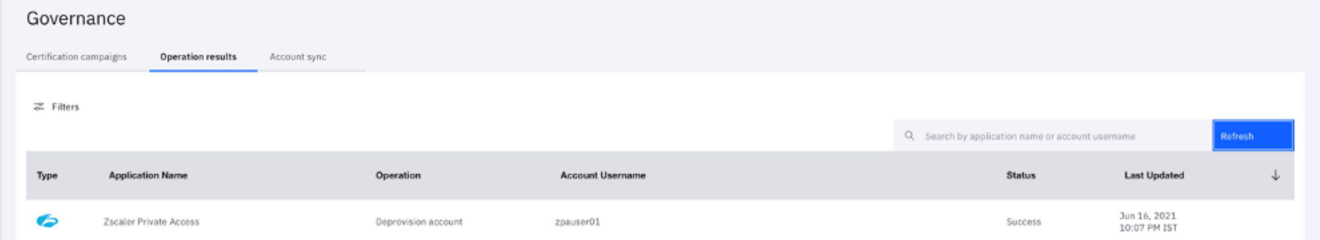
Security settings
Password last changed on June 16, 2021

Groups (0)
No groups

Linked identities (0)
No linked identites

Figure 85. Users & groups

7. Monitor the user deprovisioning task by going to **Governance** > **Operation results**.



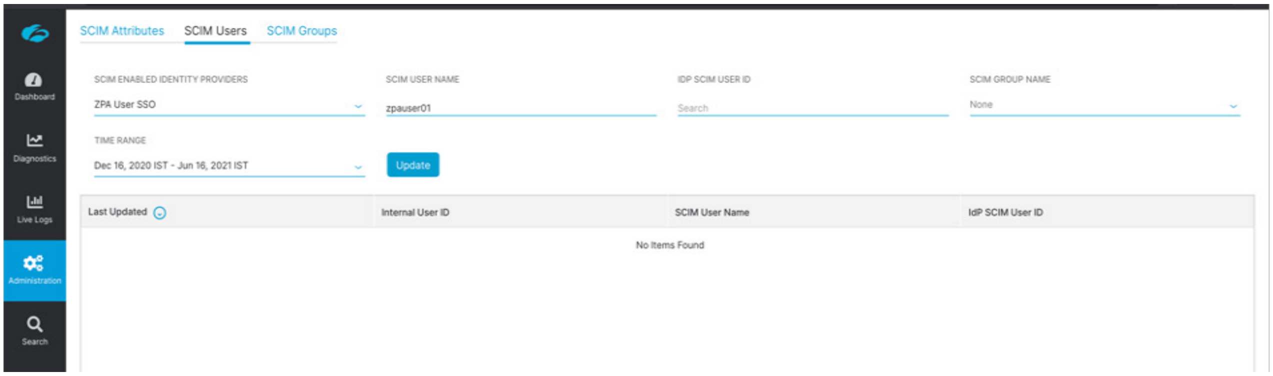
Governance

Type	Application Name	Operation	Account Username	Status	Last Updated
	Zscaler Private Access	Deprovision account	zpauser01	Success	Jun 16, 2021 10:07 PM IST

Figure 86. Governance

Check that the User is Removed from ZPA

1. Return to ZPA Admin Portal and search for the **SCIM User Name**.
2. Check that no users are listed.



SCIM ENABLED IDENTITY PROVIDERS: ZPA User SSO
SCIM USER NAME: zpauser01
IDP SCIM USER ID: Search
SCIM GROUP NAME: None
TIME RANGE: Dec 16, 2020 IST - Jun 16, 2021 IST

Last Updated	Internal User ID	SCIM User Name	IdP SCIM User ID
		No Items Found	

Figure 87. SCIM Users tab

Appendix A: Requesting Zscaler Support

You might need Zscaler Support for provisioning certain services, or to help troubleshoot configuration and service issues. Zscaler Support is available 24/7/365.

To contact Zscaler Support:

1. Go to **Administration** > **Settings** > and then click **Company Profile**.

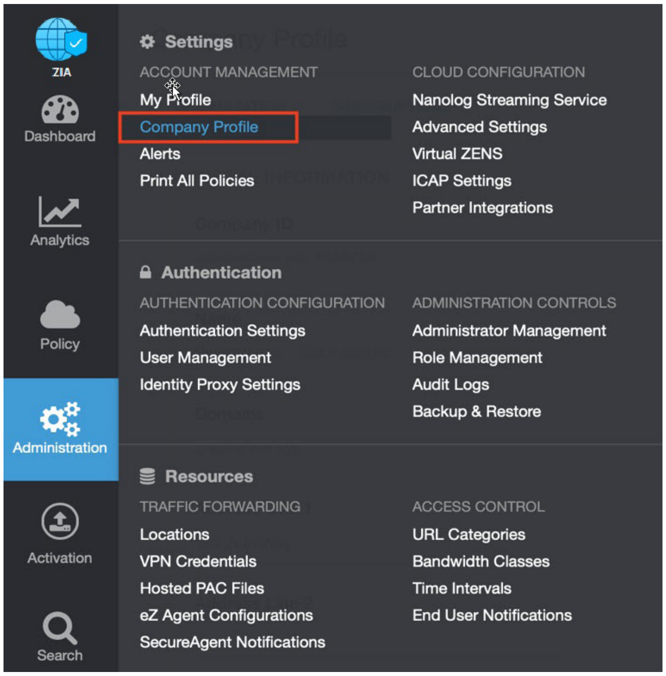
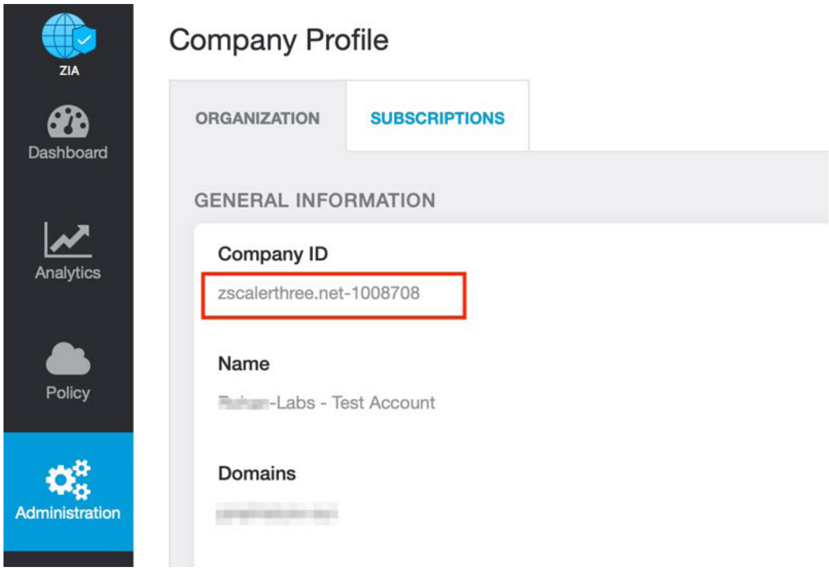


Figure 88. Collecting details to open support case with Zscaler TAC

2. Copy the Company ID.



Company ID
zscalerthree.net-1008708

Name
[redacted]-Labs - Test Account

Domains
[redacted]

Figure 89. Company ID

3. Now that you have your company ID, you can open a support ticket. Go to to **Dashboard** > **Support** > **Submit a Ticket**.

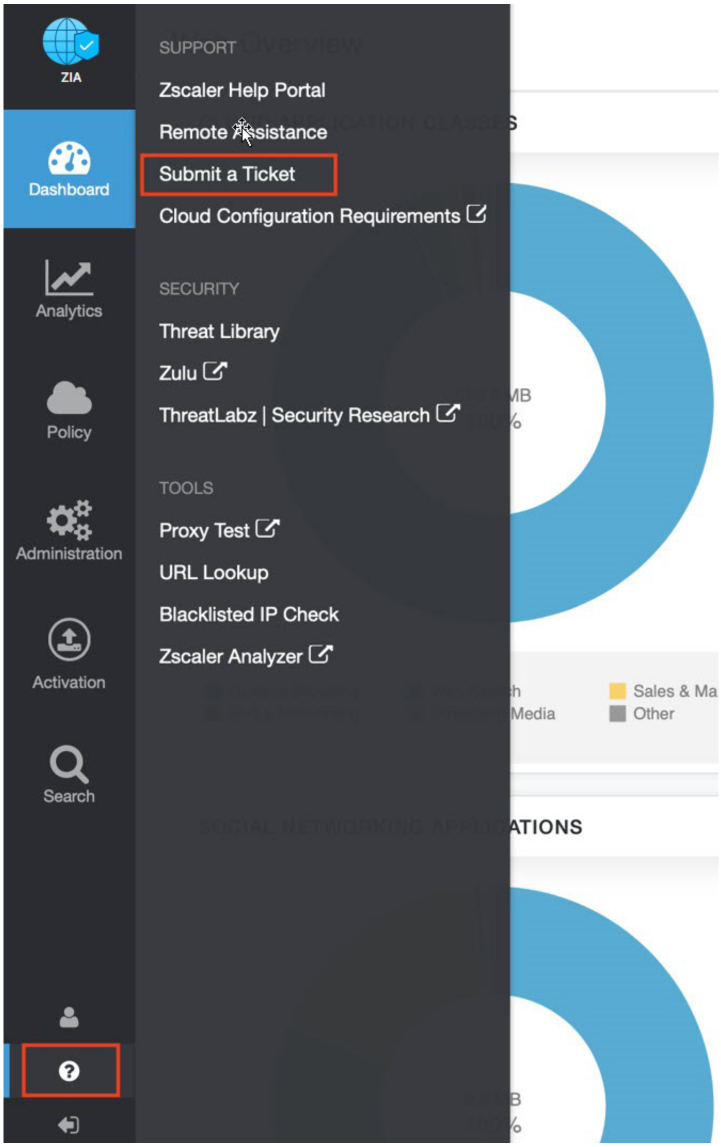


Figure 90. Submit the ticket