



# ZSCALER AND BEYOND IDENTITY DEPLOYMENT GUIDE

# **Contents**

Terms and Acronyms	4
About This Document	5
Zscaler Overview	5
Beyond Identity Overview	5
Audience	5
Software Versions	5
Request for Comments	5
Zscaler and Beyond Identity Introduction	6
ZIA Overview	6
ZPA Overview	6
Zscaler Resources	6
Beyond Identity Overview	7
Beyond Identity Resources	7
Introduction	8
Notes	8
Prerequisites	8
ZPA Admin Authentication Configuration	9
ZPA User Authentication Configuration	13
ZIA User Authentication Configuration	17
Zscaler Client Configuration to Enable API Access	21
Beyond Identity Console Configuration for Zscaler API Access	22

Appendix A: Requesting Zscaler Support	
Save Company ID	24
Enter Support Section	25

# **Terms and Acronyms**

The following table defines acronyms 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
DLP	Data Loss Prevention
DNS	Domain Name Service
DPD	Dead Peer Detection (RFC 3706)
GRE	Generic Routing Encapsulation (RFC2890)
ICMP	Internet Control Message Protocol
IKE	Internet Key Exchange (RFC2409)
IPS	Intrusion Prevention System
IPSec	Internet Protocol Security (RFC2411)
NFC	Near-Field Communication
PFS	Perfect Forward Secrecy
PSK	Pre-Share Key
SCIM	System for Cross-domain Identity Management
SIM	Security Information Management
SSL	Secure Socket Layer (RFC6101)
SSO	Single Sign-On
TLS	Transport Layer Security
TPM	Trusted Platform Module
VDI	Virtual Desktop Infrastructure
XFF	X-Forwarded-For (RFC7239)
ZCP	Zscaler Cloud Protection
ZDX	Zscaler Digital Experience
ZIA	Zscaler Internet Access (Zscaler)
ZPA	Zscaler Private Access (Zscaler)

## **About This Document**

The following sections describe the organizations and requirements of this deployment guide.

#### **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. Its flagship 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. For more information, see Zscaler's website or follow Zscaler on Twitter @zscaler.

## **Beyond Identity Overview**

Beyond Identity is changing how the world logs in with an invisible, unphishable Multi-Factor Authentication MFA platform that provides the secure and frictionless authentication. They stop ransomware and account takeover attacks to improve the user experience. Beyond Identity's state-of-the-art platform eliminates passwords and other phishable factors, enabling organizations to confidently validate users' identities. The solution ensures users log in from authorized devices, and that every device meets the security policy requirements during login and continuously after that. Beyond Identity empowers zero trust by cryptographically binding the user's identity to their devices and analyzing hundreds of risk signals on an ongoing basis. The company's advanced risk policy engine enables organizations to implement foundationally secure authentication and use risk signals for protection, rather than just for detection and response. For more information, see Beyond Identity's 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, see:

- Appendix A: Requesting Zscaler Support
- · Zscaler Resources
- Beyond Identity Resources

#### **Software Versions**

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

## **Request for Comments**

- For prospects and customers: Zscaler values reader opinions and experiences. Contact <a href="mailto:partner-doc-support@zscaler.com">partner-doc-support@zscaler.com</a> to offer feedback or corrections for this guide.
- For Zscaler employees: Contact <u>z-bd-sa@zscaler.com</u> to reach the team that validated and authored the
  integrations in this document.

## **Zscaler and Beyond Identity Introduction**

Overviews of the Zscaler and Beyond Identity applications are described in this section.

#### **ZIA Overview**

ZIA is a secure internet and web gateway delivered as a service from the cloud. Think of ZIA as a secure internet on-ramp—just 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 Virtual Desktop Infrastructure (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 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	Definition
ZIA Help Portal	Help articles for ZIA.
ZPA Help Portal	Help articles for ZPA.
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.

## **Beyond Identity Overview**

Beyond Identity Secure Workforce provides a passwordless authentication solution and leverages X.509 certificates without the need for a certificate authority or any certificate management. It extends the chain of trust established by Transport Layer Security (TLS) to users and their devices.

Using X.509 certificates and public-private key pairs is more secure than other authentication methods. A password, passphrase, and PIN use a shared secret—data that's stored in a database that might be vulnerable to compromise. Hardware keys have known security issues with Bluetooth and Near-Field Communication (NFC). They also lack a comprehensive, granular device security posture.

In addition to the vulnerabilities mentioned, Multi-Factor Authentication (MFA) increases exposure through Security Information Management (SIM) hacking, malware, and notification flooding. However, with X.509 and TLS technologies, the private key is securely stored in the Trusted Platform Management (TPM) of a personal device. The private key cannot be removed or viewed by anyone—not even the user.

Some organizations have legacy systems that still require users to have a password in the directory. You can use passwordless authentication for these systems, too. In the Beyond Identity console, you can set up an access policy so that no one can use a password to login. If an attacker attempts to access systems with a stolen password, an alarm is set off and the attacker is denied access.

## **Beyond Identity Resources**

The following table contains links to Beyond Identity support resources.

Name	Definition
<b>Beyond Identity Documentation</b>	Help articles for Beyond Identity solutions.
Beyond Identity Support	Request Beyond Identity customer support.
<b>Beyond Identity Slack Community</b>	Beyond Identity Slack community.

## Introduction

This guide provides information on how to:

- · Set up Beyond Identity as a passwordless authentication solution for your ZIA and ZPA services.
- · Set up Beyond Identity to enforce corporate Zero Trust policies by using Zscaler Client Connector API.

#### **Notes**

- For passwordless authentication, the customer might decide to integrate Zscaler with Beyond Identity, either directly or via their existing SSO. This document describes the direct integration between Zscaler and Beyond Identity. For integration via SSO, contact Beyond Identity.
  - Zscaler's direct integration with Beyond Identity is applicable to Zscaler Client Connector for ZIA and ZPA Admin Portal. You do not integrate Beyond Identity with ZIA Admin Portal because ZIA Admin Portal does not support SP-initiated SAML flow, and Beyond Identity does not support IdP-initiated SAML flow.
- Both ZIA and ZPA provisioning is supported with SCIM supported directory or SSO while supporting Authentication directly with Beyond Identity as the IdP.

## **Prerequisites**

Ensure that you have the following:

- · A Zscaler account with "Super" admin privileges to configure SAML IdP.
- Zscaler Client Connector API enabled for your tenant (mobileadmin.<Zscaler cloud>.net). Look for Administration tab and "Public API" on the left-hand menu.

# **ZPA Admin Authentication Configuration**

To configure Beyond Identity as the IdP for ZPA Admin Login, complete the following steps. Then, enable Beyond Identity for Admin Login to ZPA Admin Portal.

- 1. Sign into the ZPA Admin Portal as Administrator.
- 2. Select Administration > IdP Configuration.

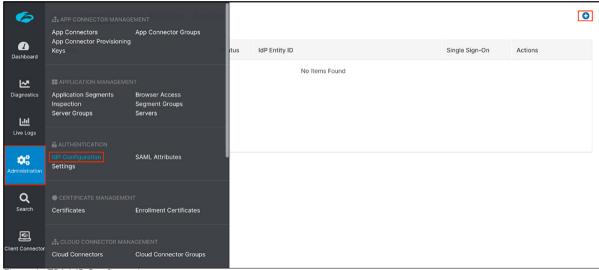


Figure 1. ZPA IdP Configuration

- 3. On the IdP Configuration tab, select the Add icon to add an IdP Configuration.
- 4. In the IdP Information tab, provide following Information.
  - · Name: Type Beyond Identity Admin SSO.
  - · Single Sign-on: Select Admin.
  - Select the correct certificate for the Admin SP Certificate Rotation.
  - **Domains**: Select the appropriate domain from the drop-down menu.
- 5. Click Next.

- 6. On the SP Metadata tab, download the Service Provider Metadata.
- 7. Click Next.

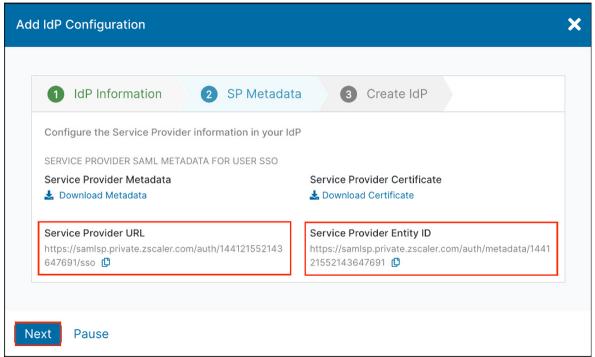


Figure 2. ZPA Add IdP Configuration

- 8. After logging into Beyond Identity Admin Console, select Integrations > SAML > SAML Connections.
- 9. Select **Add SAML Connection** and update the fields as follows:
  - a. Upload the SP Metadata .xml file (downloaded in an earlier step).
  - b. Name: Type Zscaler Private Access Admin SSO.
- 10. Click Save Changes.

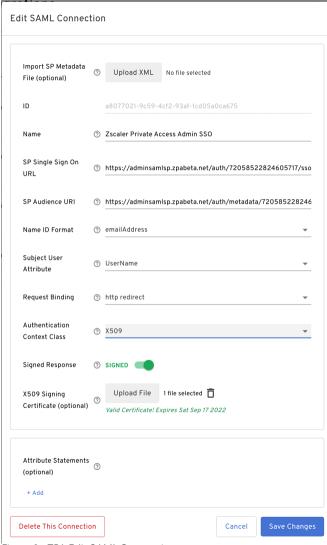


Figure 3. ZPA Edit SAML Connection

- 11. Note the following fields from the recently created SAML connection. They are required in the next step.
  - · IdP ID: (Beyond Identity Connection ID).
  - IdP Single Sign-On URL: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso
  - · IdP Issuer: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso/metadata.xml
- 12. Download the IdP Signature Certificate.
- 13. Switching back to ZPA Admin Portal, on the IdP Configuration tab, configure following fields:
  - · IdP Certificate: (downloaded in an earlier step).
  - Single Sign-On URL: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso (noted in an earlier step).
  - · IdP Entity ID: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso/metadata.xml (noted in an earlier step).
  - · Status: Enabled.
  - · HTTP-Redirect: Enabled.
  - · ZPA (SAML) Request: Signed.
- 14. Click Save.

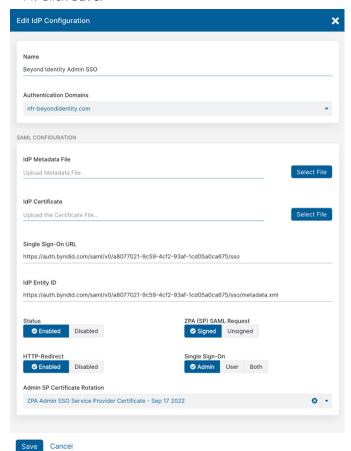


Figure 4. ZPA Edit IdP Configuration

# **ZPA User Authentication Configuration**

To configure Beyond Identity as the IdP for ZPA User Login, complete the following steps. Then enable Beyond Identity for User Login to the ZPA Client Connector.

- 1. Sign into the ZPA Admin Portal as Administrator.
- 2. Select Administration > IdP Configuration.

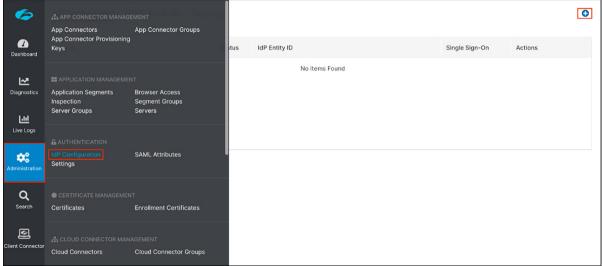


Figure 5. ZPA IdP Configuration

3. On the IdP Configuration tab, select the Add icon to add an IdP Configuration.

- 4. In the **IdP Information** tab, provide following Information.
  - a. Name: Type Beyond Identity User SSO.
  - b. Single Sign-on: Select User.
  - c. Select the correct certificate for the User SP Certificate Rotation.
  - d. **Domains**: Select the appropriate domain from the drop-down menu.
- 5. Click Next.
- 6. On the SP Metadata tab, download the Service Provider Metadata.
- 7. Click Next.

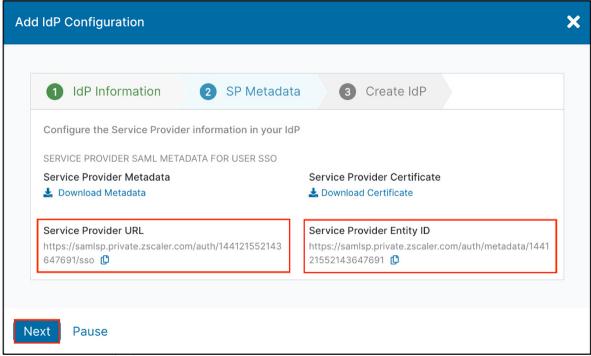


Figure 6. ZPA Add IdP Configuration

- 8. After logging into Beyond Identity Admin Console, navigate to Integrations > SAML > SAML Connections.
- 9. Click Add SAML Connection and update the following fields:
  - · Upload the SP Metadata .xml file (downloaded in step 6).
  - · Name: Enter Zscaler Private Access User SSO.
- 10. Click Save Changes.

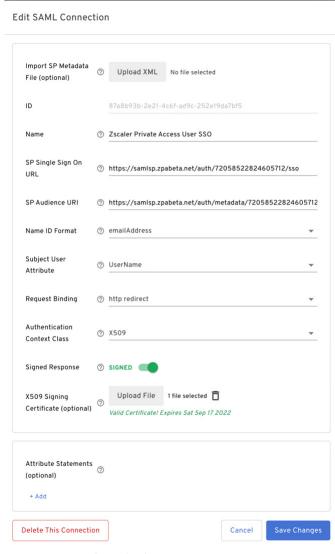


Figure 7. ZPA Edit SAML Configuration

- 11. Note the following fields from the recently created SAML Connection. They are required in the next step.
  - a. IdP Id: (Beyond Identity Connection ID).
  - b. IdP Single Sign-On URL: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso
  - c. IdP Issuer: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso/metadata.xml
  - d. Download the IdP Signature Certificate.

- 12. Return to the ZPA Admin Portal, on the IdP Configuration tab, configure following fields.
  - a. IdP Certificate: (Downloaded in the previous step).
  - b. Single Sign-On URL: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso (noted in the previous step).
  - c. IdP Entity ID: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso/metadata.xml (noted in the previous step).
  - d. Status: Enabled.
  - e. HTTP-Redirect: Enabled.
  - f. ZPA (SAML) Request: Signed.
  - g. SCIM Sync: Disabled.
  - h. SCIM Attributes for Policy: Disabled.
- 13. Click Save.

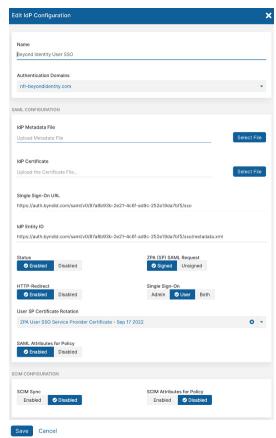


Figure 8. ZPA Edit IdP Configuration

# **ZIA User Authentication Configuration**

To configure Beyond Identity as the IdP for ZIA User Login, complete the following steps. Then enable Beyond Identity for User Login to ZIA Client Connector.

- 1. Sign into the ZIA Admin Portal as an Administrator.
- 2. Select Administration > Authentication Settings.

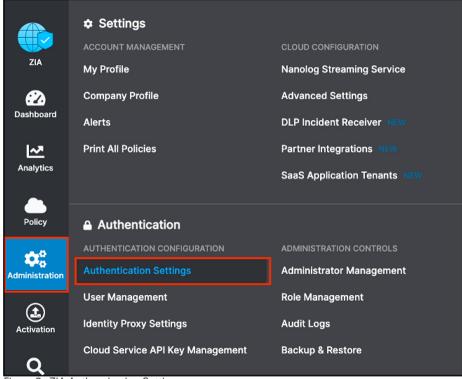


Figure 9. ZIA Authentication Settings

3. Select the **Identity Providers** tab.

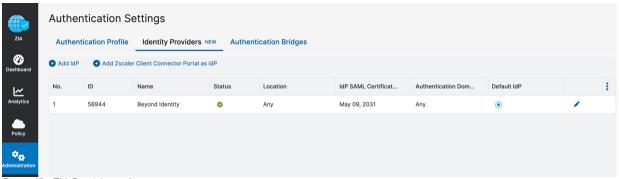


Figure 10. ZIA Providers tab

- 4. Click Add IdP.
- 5. Download the SP Metadata file and save it to use in the next step.
- 6. Log on to the Beyond Identity Admin Console, and navigate to Integrations > SAML > SAML Connections.

- 7. Click **Add SAML Connection** and update the following fields:
  - a. Upload the SP Metadata .xml file downloaded in an earlier step.
  - b. Name: Enter Zscaler Internet Access User SSO.
  - c. Click Save Changes.

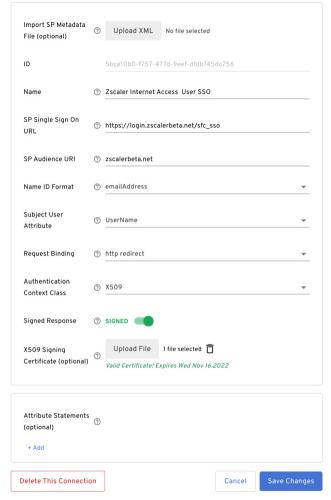


Figure 11. Edit SAML Configuration for users

- 8. Note the following fields from the recently created SAML Connection. They are required in the next step.
  - a. IdP Id: (Beyond Identity Connection ID).
  - b. IdP Single Sign-On URL: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso
  - c. IdP Issuer: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso/metadata.xml
  - d. Download the IdP Signature Certificate.

- 9. Return to the ZIA Admin Portal, on the IdP Configuration tab, configure following fields:
  - a. IdP SAML Certificate: Upload (downloaded in the previous step).
  - b. SAML Portal URL: https://auth.byndid.com/saml/v0/<BI-Connection-ID>/sso (noted in the previous step).
  - c. Status: Enabled.
  - d. Login Name Attribute: NamelD.
  - e. Vendor: Others.
  - f. Sign SAML Request: Disable.
  - g. HTTP-Redirect: Enabled.
  - h. Enable SAML Auto Provisioning: Disable.
  - i. Enable SCIM Provisioning: Disable.
- 10. Click Save.

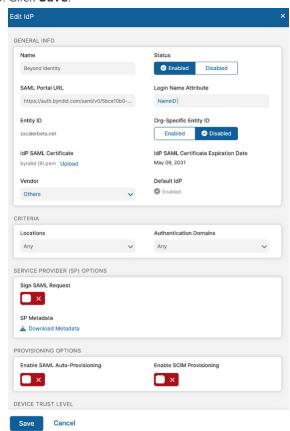


Figure 12. Edit IdP for users

- 11. To enable the SAML configuration on the **Authentication Settings** page, select the **Authentication Profile** tab.
- 12. Select **SAML** as the **Authentication type**.
- 13. Click **Save**, then **Activate** the configuration.

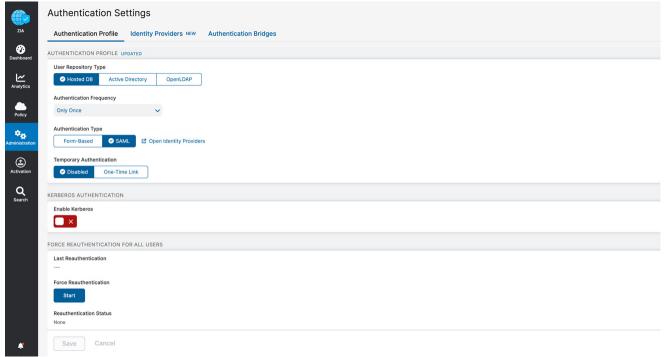


Figure 13. ZIA Save the configuration

# **Zscaler Client Configuration to Enable API Access**

This section describes changes required on Zscaler Client Connector I to enable API access.

- 1. In the ZIA or ZPA Admin Portal, sign into the Zscaler Client Connector in the left-hand navigation.
- 2. Click Administration and look for Public API in the left-hand navigation.

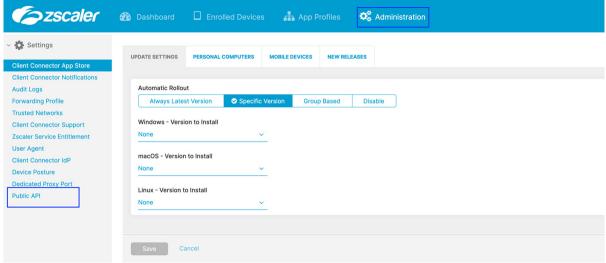


Figure 14. Public API in Client Connector

- 3. Select Public API and click Add API Key. Enter the following:
  - Name: Enter Beyond Identity.
  - Status: Enabled.
  - Role: Write.
  - Session Validity Interval in seconds: Enter 31540000 (Approx. 1 year).
- 4. Click Save.

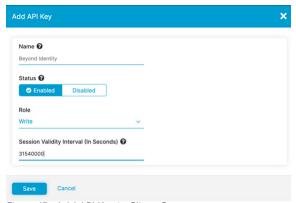


Figure 15. Add API Key in Client Connector

- 5. Note the following fields.
  - · Client Secret
  - Client ID.

# **Beyond Identity Console Configuration for Zscaler API Access**

Beyond Identity supports continuous authentication and monitors device security posture even when the user is not actively trying to authenticate. Beyond Identity uses Zscaler Client Connector API to force reauthentication of the Zscaler Client Connector in case the device security posture does not meet enterprise policies.

- 1. Maker sure you have the Client ID, Client Secret, and Zscaler Client Connector URL before proceeding with the next steps of configuring Beyond Identity Integration with the Zscaler cloud.
- 2. Log in to the Beyond Identity Admin Console and navigate to Integrations > End Point Management > Zscaler > Edit Zscaler.

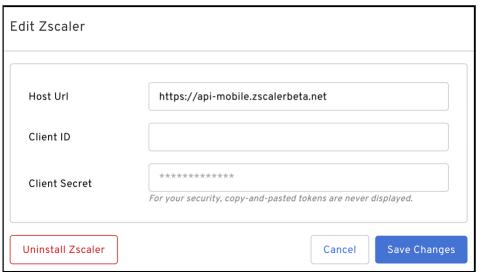


Figure 16. Edit Zscaler in Beyond Identity

- 3. Add a new rule in the policy to force remove an authenticated device. During the test phase:
  - · Create a test group.
  - · Add a single user to the test group.
  - Create a **Deny Rule** to deny authentication and invoke Zscaler Force Remove Device API.
  - Add a custom notification: Enter Zscaler Client Connector will be logged out soon!!!.
- 4. Click Add.

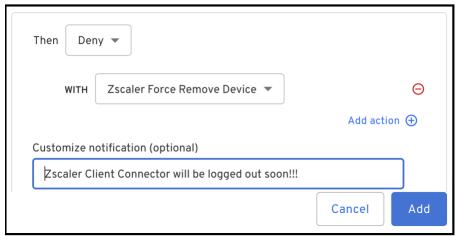


Figure 17. Add new rule in Beyond Identity

- 5. Change the rule order as needed.
- 6. Log in to Zscaler Client Connector using the test user.
- 7. Publish the policy:
  - · Authenticate to any application using Beyond Identity and verify that the authentication meets the criteria to trigger the Deny rule.
  - $\cdot$  This displays the custom notification and the Zscaler Client Connector logs out in about three minutes.
- 8. Configure the policy to target all the users.

# **Appendix A: Requesting Zscaler Support**

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

To contact Zscaler Support, select Administration > Settings > Company Profile.

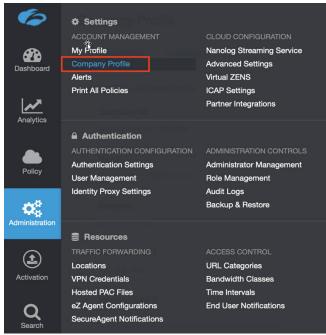


Figure 18. Collecting details to open support case with Zscaler TAC

## Save Company ID

Copy your Company ID.

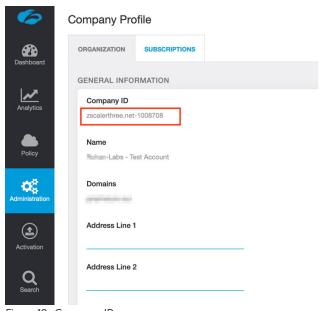


Figure 19. Company ID

## **Enter Support Section**

With your company ID information, you can open a support ticket. Navigate to **Dashboard > Support > Submit a Ticket**.

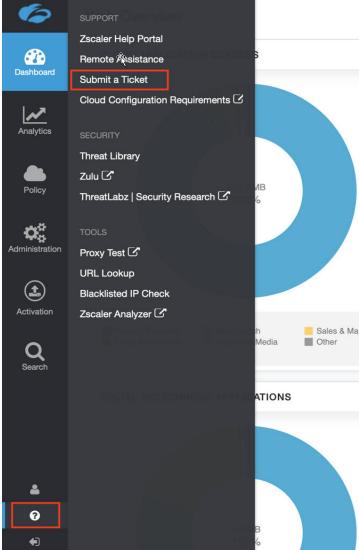


Figure 20. Submit a Ticket