zscaler™

Redefine access to internal applications with Zscaler Private Access

It's time to embrace **zero trust network access** (**ZTNA**).

Digital transformation within the enterprise

The adoption of cloud, driven in large part by IT leaders looking to maximize value, is one of the largest transformations IT has ever seen. Now, internal applications that once ran solely in the data center, are being migrated to Azure, AWS, and Google Cloud Platform. Users are accessing internal applications from their favorite cafés and on multiple devices, expecting a seamless, cloud-like experience each time.

So why do enterprises still rely on incumbent technology that depends on the use of appliances anchored to the data center? It's simply because there's been no viable alternative. Until now.

Network-centric approaches break cloud and mobility

For 30 years enterprises used network-centric technology, meant to connect users to networks, as a means of limiting connectivity to apps. This worked well enough when there was a perimeter, but now we live in a perimeter-less world with apps running on cloud and users working from anywhere.

Backhauling traffic through a gateway is suboptimal. VPN concentrators sit at the edge of the network listening for inbounds pings, which expose it to internet-based attacks. DDoS and load balancers are piled up within inbound gateways as a result. ACLs and FW policies must be created, managed and maintained. Plus, the entire time the network remains at risk.


Public Cloud

Microsoft Azure
aws
Google Cloud Platform

Global Load Balancing
Distributed Denial of Service Protection
External Firewall / Intrusion Prevention
VPN Concentrator
Internal Firewall
Internal Load Balancer

Mobile user

Site-to-site VPN

Top challenges of incumbent solutions

1 Poor user experience
2 Network complexity
3 Expensive to manage and scale
4 Users are on the network
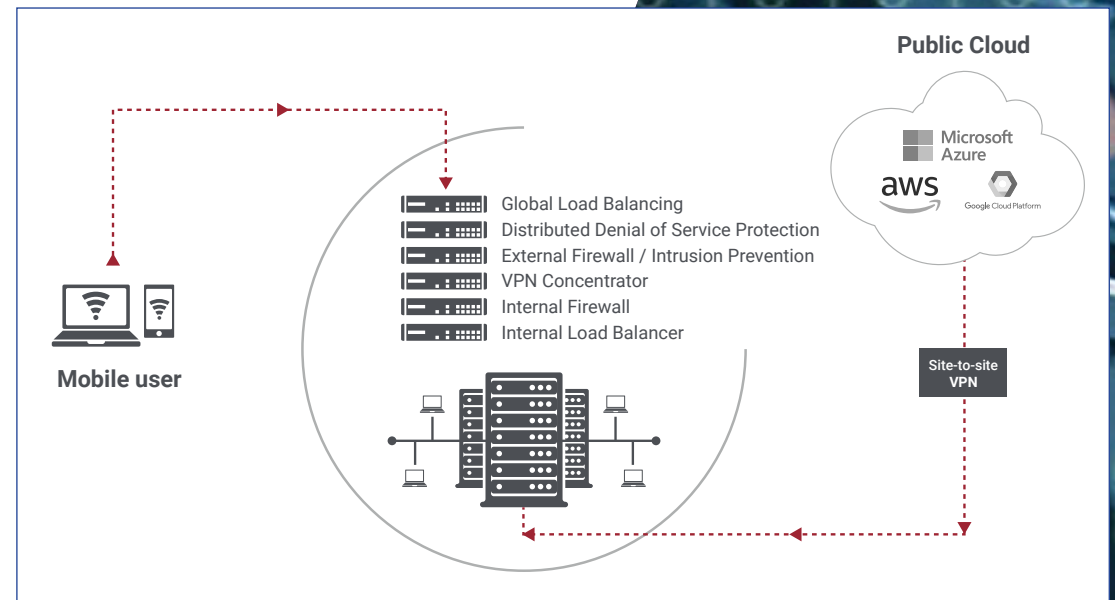
Three areas of enterprise transformation drive the need for cloud-based security.

Incumbent application access technologies fail to enable enterprises to realize the benefits of cloud and mobility. Conversely, cloud-based security solutions were built to enable this new enterprise landscape.
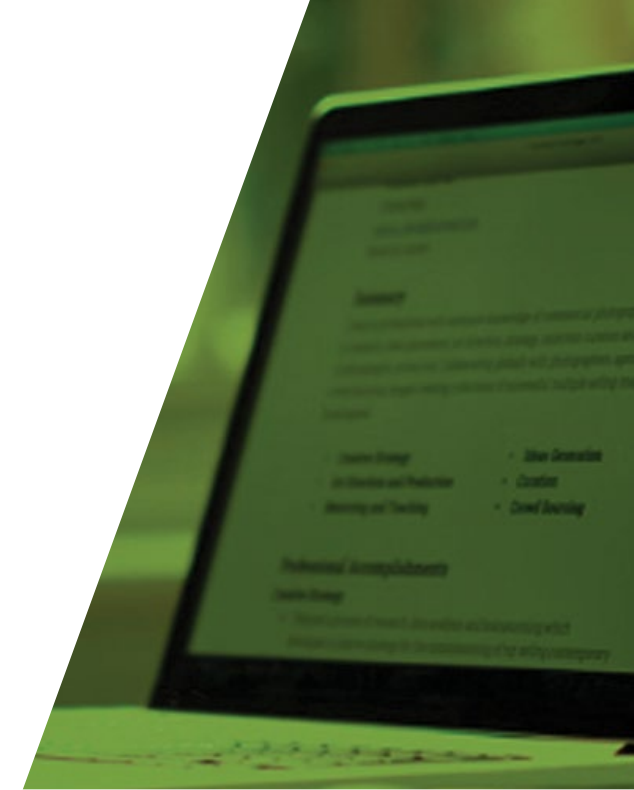
App Location
Applications that once ran only in the data center are now being migrated to cloud service providers.

Network
High costs and latency cause enterprises to rethink methods for connecting mobile users to apps.

Security
Security focus has shifted from protecting the network to protecting users and apps.

Data Center » **Cloud**

Hub & Spoke » **Direct-to-Cloud**

Castle & Moat » **User-to-App Policies**
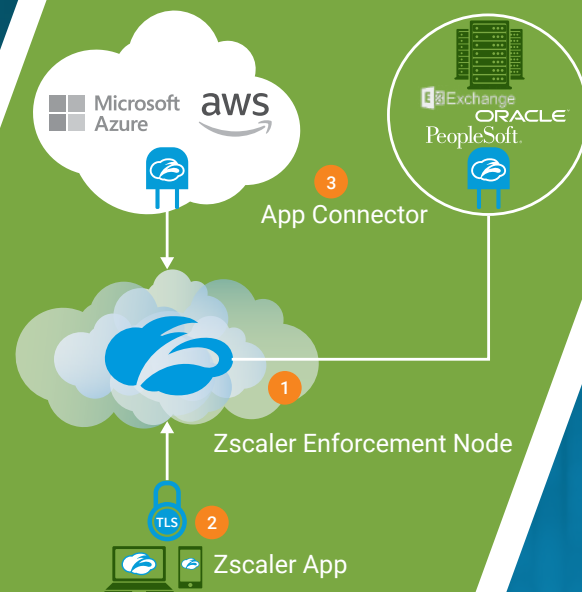
SAP
PeopleSoft
ORACLE

Decouple application access from the network with ZTNA

Zero trust network access (ZTNA), also known as a software defined perimeter, is a cloud-based service designed to provide secure remote access to applications whether they're housed in the data center or hosted in a cloud. ZTNA differs from existing solutions because it allows users to access applications without accessing the network. In essence, it creates a secure segment of one between the authenticated user and a specific app using the internet.

① **Application access no longer requires network access**

② **IP addresses are never exposed to the internet**

③ **Segmented access to apps via TLS tunnels**

④ **Granular visibility into apps and user activity**

Zscaler Private Access uses ZTNA to redefine application access

Zscaler Private Access™ (ZPA™) provides secure connectivity to private apps running across any hybrid or multi-cloud environment. The service uses the Zscaler™ cloud and its software-defined architecture to deliver a seamless user experience and in-depth security.

Microsoft Azure

aws

Exchange
ORACLE
PeopleSoft.

3 App Connector

1 Zscaler Enforcement Node

TLS

2 Zscaler App

1 Zscaler Enforcement Node
- Hosted in cloud
- Used for authentication
- Customizable by admins
- Brokers a secure connection between Z App and App Connector

2 Zscaler App
- Mobile client installed on devices
- Requests access to an app

3 App Connector
- Sits in front of apps in Azure, AWS, and other public cloud services
- Listens for access requests to apps
- No inbound connections

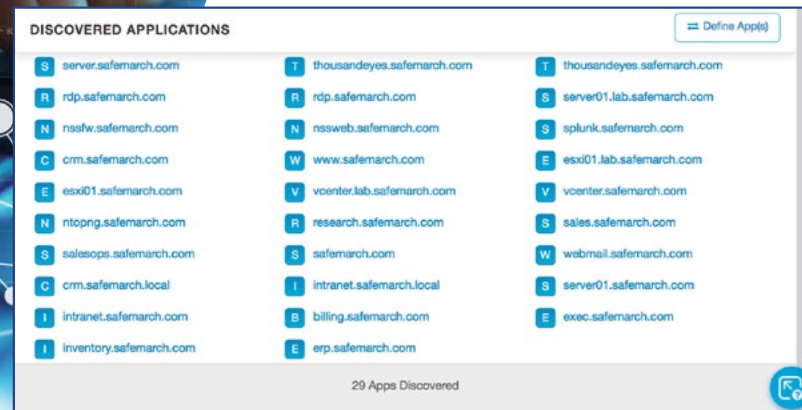# Fast, frictionless, and secure access across any environment

With ZPA, users access apps running on public cloud the same way they access apps in the data center.

By working closely with IaaS platforms like AWS and Azure, we make it simpler to connect users to apps in the cloud. ZPA is a single, integrated platform that enterprises can leverage across their hybrid and multi-cloud environments, and the service works in tandem with direct access solutions like AWS Direct Connect and Azure ExpressRoute. In the end, users get the experience they want, and the organization gets the speed, scale, and security it requires.
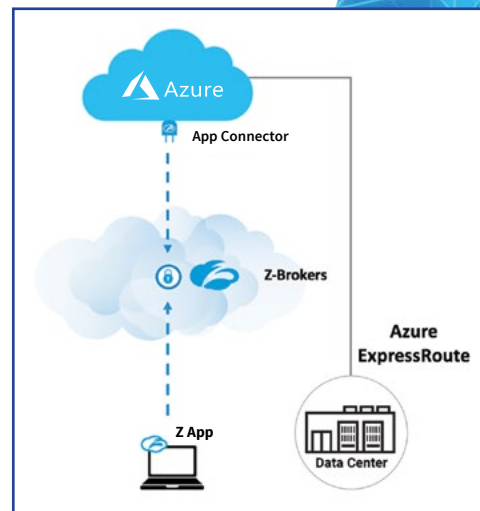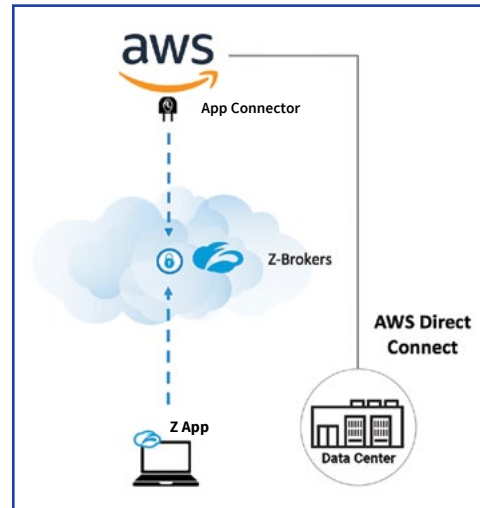
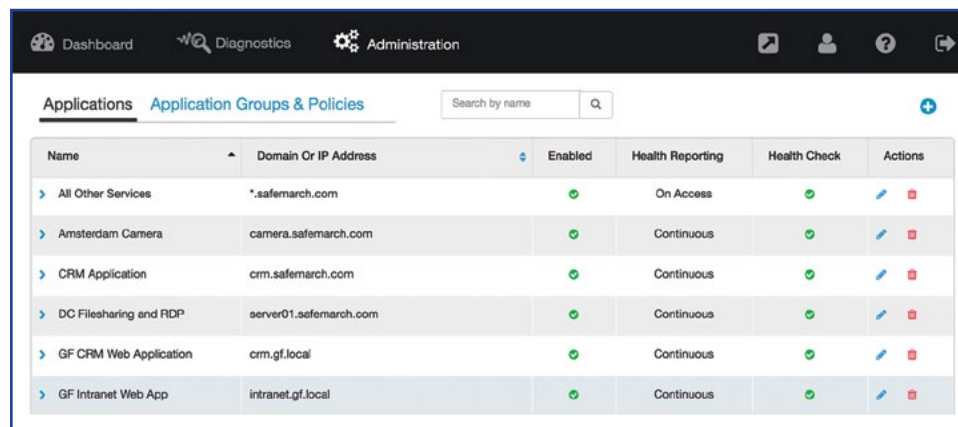# Discover new applications and protect your environment

With the adoption of cloud, having visibility into the applications running in your environment has become even more important than before. Zscaler Private Access allows admins to identify previously undiscovered applications being used within their environments, and then apply granular, policy-based access controls to reduce shadow IT.

DISCOVERED APPLICATIONS		⇄ Define App(s)
S server.safemarch.com	T thousandeyes.safemarch.com	T thousandeyes.safemarch.com
R rdp.safemarch.com	R rdp.safemarch.com	S server01.lab.safemarch.com
N nssfw.safemarch.com	N nssweb.safemarch.com	S splunk.safemarch.com
C crm.safemarch.com	W www.safemarch.com	E esxi01.lab.safemarch.com
E esxi01.safemarch.com	V vcenter.lab.safemarch.com	V vcenter.safemarch.com
N ntopng.safemarch.com	R research.safemarch.com	S sales.safemarch.com
S salesops.safemarch.com	S safemarch.com	W webmail.safemarch.com
C crm.safemarch.local	I intranet.safemarch.local	S server01.safemarch.com
I intranet.safemarch.com	B billing.safemarch.com	E exec.safemarch.com
I inventory.safemarch.com	E erp.safemarch.com	
	29 Apps Discovered	

1. **Discover** new applications
2. **Identify** which users are accessing them
3. **Define** policies for access
4. **Reduce** attack surface

Use policy-based access to simplify transformation

The simplicity of the cloud is now at the fingertips of IT administrators. ZPA allows admins to create custom policies on a per-app, per-user basis, at a global scale. Instead of having to go through the process of network segmentation, which can be complex, admins can use policies to segment access based on applications. This ensures that the enterprise remains in control, even in the midst of a changing IT environment.

1. **Create** and define custom policies
2. **Set** permission levels for users
3. **Apply** permissions to specific apps
4. **Manage** and update policies

Key benefits of ZPA and its ZTNA architecture

As enterprises embrace ZPA, they discover a range of advantages for users as well as security and cost benefits.

"We were able to implement a zero trust model [with Zscaler Private Access]...We have implemented our solution so as to reduce our attack surface and replaced traditional approaches with this modern, secure, cloud-first implementation."

- Tony Fergusson
Security Architect
MAN Energy Solutions

Experience
- Fast, direct access to apps
- No need to fire up a VPN
- Cloud-like user experience

Security
- Users are never placed on-net
- App segmentation for granular security
- Greater visibility into user activity

Value
- No hardware appliances
- Less inbound service spend
- Reduced bandwidth use

Simplicity
- 100% software and cloud based
- No network segmentation required
- Consistent access across all apps and devices

Top use cases for ZPA

The best security solutions are enablers of enterprise initiatives, not barriers. Zscaler Private Access allows enterprises to evolve without having to deal with network and security complexity. Whether digitally transforming or simply replacing incumbent technology, ZPA is being used in a variety of common enterprise initiatives.

Transformation

SECURE CLOUD ACCESS
ZPA provides secure connectivity to private apps running across any hybrid or multi-cloud environment.

ACCELERATE IT INTEGRATION DURING M&A
As enterprises merge, ZPA provides secure access without the need to converge networks and IP addresses.

SECURE THIRD-PARTY ACCESS
ZPA creates a secure segment of one between a third-party user and a specific app.

Replacement

ALTERNATIVE TO VPN
The ZPA cloud service seamlessly connects remote users to internal apps without VPN or placing users on the internal network.

Learn more about
Zscaler Private Access

Visit our ZPA website page
zscaler.com/products/zscaler-private-access

Take ZPA for a free test drive
Try ZPA Interactive **zscaler.com/zpa-interactive**

zscaler.com