Enabling the secure transformation to the cloud

It’s no longer a question of *if*. It’s a question of *how*.

Here’s how.
Welcome to the era of cloud and mobility

Your applications are moving to the cloud — Salesforce, Office 365, AWS, and Azure — but your security appliances are still sitting on-premises, protecting your corporate network.

“It’s obvious that legacy IT security methods focused on protecting the perimeter are inadequate. Just read any paper. Elvis has left the building — and so have your users, devices, and applications.”

Larry Biagini
Chief Technology Evangelist, Zscaler
former CIO and Chief Technology Officer, GE
The evolution of IT security

1 | Network
A security perimeter was established to protect the network. The data center was the center of gravity and all traffic was backhauled.

2 | Internet
Outbound Internet and inbound VPN gateways were built to provide Internet access and give mobile users access to the network.

3 | Cloud
The threat landscape changed and more appliances were deployed to protect the network. But the cloud was the new center of gravity and the Internet the new network — connecting users to apps.

The Internet is the new network™
If you no longer control the network, how can you protect users and applications?
To secure this new world of IT, you simply need a new approach

One that transforms the way applications are accessed and security controls are enforced. Zscaler provides an architectural approach to secure IT transformation, in which software-defined policies, not networks, securely connect the right user to the right app or service.

**FROM**

**Hub & spoke architecture**
- Secure the network to protect users and apps
- Internal app access requires network access
- All users must be on the network for protection
- Internet traffic must be backhauled for protection

**TO**

**Cloud-enabled architecture**
- Software-defined policies connect users to apps, not networks
- Access policies determine which apps are visible and which are dark
- On-net or off-net, the protection is identical
- Secure local Internet breakouts
The Zscaler™ platform: a new approach to application access and security

Fast and secure policy-based access that connects the right user to the right service or application. The Zscaler platform is designed to replace your appliances at the inbound and outbound gateways.

Zscaler Internet Access™ provides secure access to the open Internet and SaaS apps, no matter where users connect. It provides inline inspection of all traffic to ensure that nothing bad comes in and nothing good leaves.

Zscaler Private Access™ delivers a completely new way to provide access to internal applications, whether they reside in the data center or cloud, without a VPN. It enables secure application access without network access — and without exposing apps to the Internet.

The notion of protecting the network is no longer relevant. You need to protect your users and your apps.
Enabling secure network transformation
By making Zscaler Internet Access your default route to the Internet, you will provide all users, everywhere, with identical protection. Zscaler sits between your users and the Internet, inspecting every byte of traffic inline, applying multiple security techniques for the highest level of protection.

What sets Zscaler security apart?
- Full inline content inspection
- Native SSL inspection
- Cloud intelligence
- Real-time threat correlation
- 60+ industry threat feeds

The Zscaler architecture is the best approach for secure SD-WAN and Office 365 deployments

The Zscaler cloud optimizes traffic flows by allowing secure, direct connections to the Internet over broadband and reserving MPLS for data center traffic.
Eliminates the appliance mess and provides the highest level of security

Zscaler Internet Access moves the entire security stack to the cloud with integrated security services that correlate data instantly for the highest level of protection. The Zscaler cloud was built from the ground up for comprehensive security and low latency. And due to its elastic scale, customers can add users and activate services almost instantly.

### Zscaler purpose-built cloud security platform

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<th>Access Control</th>
<th>Threat Prevention</th>
<th>Data Protection</th>
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<td>Cloud Firewall</td>
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<td>DNS Filtering</td>
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**Global visibility**

Zscaler offers global visibility, in near real time, into all users, locations, services, and applications, as well as threats blocked and attempted communications to C&Cs from any botnet-infected machines.

**Powered by patented technologies**

<table>
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<tr>
<th>SSMA™</th>
<th>ByteScan™</th>
<th>PageRisk™</th>
<th>Nanolog™</th>
<th>PolicyNow™</th>
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<tr>
<td>All security engines fire with each content scan; only microsecond delay</td>
<td>Each outbound and inbound byte scanned; native SSL scanning</td>
<td>Risk of each web page element computed dynamically</td>
<td>50:1 compression of logs with real-time global log consolidation</td>
<td>Policies follow the user for the same on-net, off-net protection</td>
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**Built on a global, multi-tenant cloud architecture**
Enabling secure application transformation
Application access has traditionally required network access — and bringing users on the network always introduces risk. Zscaler has introduced a new approach to internal application access that connects a named user to a named app.

WITH ZSCALER PRIVATE ACCESS
Users are never on the corporate network which minimizes your attack surface
Apps are invisible, never exposed to the Internet and internal apps cannot be discovered or exploited
The Internet becomes a secure network without a VPN and third parties can’t intercept data
You can segment apps without network segmentation lateral movement is impossible
Internal apps can easily be moved to Azure or AWS private apps are accessible without VPN infrastructure

HOW ZPA™ WORKS IN FOUR SIMPLE STEPS
1. User requests access to an app (SAP)
2. Policy determines if access is permitted (SAP)
3. If authorized, the Zscaler cloud initiates outbound connections between Client Connector and App Connector
4. Connections are stitched together in the Zscaler cloud

HOW LEADING ORGANIZATIONS ARE USING ZSCALER PRIVATE ACCESS
SECURE PARTNER ACCESS
Grant partners access to only a server in the data center, not the network
M&As / DIVESTITURES
Provide named users access to named apps without merging networks
ACCESS TO INTERNAL APPS
Provide secure access to private apps without deploying appliances
VPN REPLACEMENT
Policies connect users to specific apps; they’re never brought on the network and apps are never exposed to the Internet
The world’s largest security cloud

The Zscaler platform was built in the cloud, for the cloud. We knew that service-chaining boxes together could never serve customers on a global scale, so we designed our platform and security services from scratch. Zscaler and its engineering team have been granted scores of patents for architectural innovations.

150+ DATA CENTERS
6 CONTINENTS
The Zscaler cloud encompasses data centers around the world, with peering in the major exchanges that make up the Internet backbone.

120 BILLION+ REQUESTS/DAY AT PEAK PERIODS
100 MILLION+ THREATS DETECTED/DAY

THE CLOUD EFFECT
If a threat is detected anywhere, customers are protected everywhere. Our volume and our threat-sharing partnerships contribute to 120,000 unique security updates/day. Can your appliance do that?
Zscaler is trusted by G2000 leaders

How a bank weathered a CryptoLocker run

Before Zscaler
- 1,352 CryptoLocker emails arrived over six hours
- 114 blocked by legacy controls
- 9 employees clicked the link
- 6,500 file shares destroyed

After Zscaler
- 5,405 infected emails arrived over six hours
- 169 blocked by legacy controls
- 11 employees clicked the link
- 0 infections

How a customer deployed Office 365 across hundreds of locations

A highly distributed organization migrating its users to Office 365 was experiencing significant WAN congestion and Office 365 sessions were overwhelming its firewalls. With Zscaler, the company was able to deliver a great Office 365 experience across 650 locations. And Zscaler made it easy to prioritize Office 365 traffic over recreational or less critical traffic.

“We have over 350,000 employees in 192 countries in 2,200 offices being secured by Zscaler.”

Frederik Janssen, Global Head of IT Infrastructure
Secure IT transformation is here

Zscaler Internet Access enables secure network transformation from hub-and-spoke to cloud-enabled with local Internet breakouts.

Zscaler Private Access enables secure application transformation, from network-based access to policy-based access, where users are never on the network.

Together, they enable you to embrace the era of productivity and agility enabled by the cloud.

Three simple steps to secure IT transformation

1 | Secure
Up-level security now; make Zscaler your next hop to the Internet; no infrastructure changes

2 | Simplify
Phase out point products; reduce costs and management overhead

3 | Transform
Enable local breakouts for Internet traffic to deliver a better, more secure user experience
No matter where you are now in your journey, the transformation has begun, and it’s enabled by Zscaler.

About Zscaler
Zscaler was founded in 2008 on a simple but powerful concept: as applications move to the cloud, security needs to move there as well. Today, we are helping thousands of global organizations transform into cloud-enabled operations.

Contact Zscaler if you’re
• Moving to Office 365
• Securing a distributed and mobile workforce
• Moving apps to Azure or AWS
• Securing an SD-WAN transformation
• Driving toward a cloud-first strategy

www.zscaler.com