SOLUTION BRIEF

zentry security

Zero Trust Application Access

Background

In today's modern enterprise, the traditional perimeter security model using firewalls and virtual private networks (VPN) is insufficient to handle the challenges brought on by cloud migration and mobile computing. An ever-expanding number of cloud apps and mobile devices results in a larger attack surface, not to mention that security breaches caused by malicious insiders are on the rise. The assumption that internal networks are safe and everything inside the perimeter can be trusted does not hold anymore. A new solution is needed – replacing VPNs and traditional perimeters with a zero trust solution that modernizes and streamlines access.

Challenges

01 Misplaced Trust in the Network Perimeter

The 'castle and moat' perimeter security model is problematic. When the perimeter is breached by phishing, malware or man-in-the-middle attacks, external malicious attackers can move laterally in internal networks and steal confidential data. Malicious insiders are another major reason for security breaches; studies have shown that insider threats are becoming more frequent, and the cost of insider attacks keeps rising.

02 An Expanded Attack Surface

Today's mobile workforce requires anytime, anywhere access from any device. Users work at the office, from home and on-the-go and can no longer be defined in terms of local or remote. Applications and resources are deployed and distributed across on-premises and cloud environments. The attack surface for enterprise IT has increased significantly due to the growth in mobility and cloud computing. Traditional VPNs, viewed as an extension of network perimeter, also expand the attack surface by proliferating network layer tunnels.

03 Traditional VPN

Legacy remote access solutions typically require a monolithic gateway and heavy VPN client software. Layer-3 VPN connectivity allows full network access rather than least privilege access to applications and resources, and therefore results in security vulnerabilities due to attack, lateral movement and data leakage. Lost laptops with data downloaded via VPN can cause data leakage as well. In addition, VPN client software installation, configuration, upgrade, and troubleshooting often imposes a heavy burden on users and administrators..

Solution Overview

Zentry is a next-generation secure access solution based on 'never trust, always verify' zero trust principles. It provides identity-aware, policy-based secure access to applications and resources located on-premises or in the cloud, and eliminates the excessive trust placed on networks and locations by traditional enterprise security models. All access to applications and resources is fully authenticated, authorized and encrypted based on user identity and access control policies. As a result, users can access applications and resources from anywhere, on any device, using only an HTML5 browser or a lightweight client.

How It Works

01 Remote Working

Zentry's zero trust application access solution helps enterprises enable next-generation secure access for remote working, replacing traditional VPN with enhanced security, improved productivity and ease-of-use.

02 Resource Protection

The solution protects internet-facing websites and applications from unrestricted user access by enforcing user authentication, authorization and access control policies, as well as safeguards for enterprise digital assets.

03 Migration to Zero Trust

Use Zentry's zero trust application access solution as a starting point for zero trust migration. To enable enhanced productivity while protecting your most valuable systems and data, start a project with a selected scope. Prioritize the use case requirements, analyze the workflow and quickly build a new identity-aware, policy-based secure application access solution that allows internal applications to face towards the internet for anytime, anywhere access with consistent security and a streamlined user experience.

Highlights

- Support managed devices with a client and unmanged devices with clientless access via a browser
- Pre-authentication device validation performed upon end-user access request
- User identification (AAA or SAML) with single sign-on (SSO) and multi-factor authentication (MFA)
- Self-service portal, users can publish and manage applications, desktops and resources
- Supports public, internal and legacy Web applications
- Supports physical and virtual desktops for Windows (RDP), Linux (VNC) and Mac (VNC)
- High-performance access gateways front-end applications and resources at scale
- Policy engine governs fine-grained access control to all applications and resources
- End-to-end encryption using TLS
- Visibility through reporting, analytics and extensive visualization

Benefits

Ease-of-Use

- Clientless option
- Anytime, anywhere, any device
- Consistent user experience for local and remote access
- SSO minimizes repeat authentication
- Self-service portal with centralized view for all Web apps, physical and virtual desktops and resources

Security

- Device validation
- SSO reduces chance of stolen credentials
- MFA for complete user validation
- Fine-grained access control policy engine
- End-to-end encryption with TLS
- Consistent secure access to apps and resources across on-premises and cloud environments

Performance

- High-performance access gateway and policy engine
- Scalable, reliable, modular architecture
- Load balancing
- High-performance SSL/TLS
- TPS and throughput
- Low latency

Reduce IT Burden & Minimize TCO

- Cloud-based
- Self-service portal
- Policy-based authorization
- Reporting and visualization
- Flexible, agile and easy to manage

Regulation & Compliance

- MFA
- TLS
- Reporting and analytics
- Logs

Zentry Security provides next-generation secure access solutions that improve security, productivity, visibility, and usability. Zentry empowers modern enterprises by delivering zero trust secure access from any device to any application or resource located on-premises or in the cloud.

Learn more at **www.zentrysecurity.com**

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