Moving Beyond The Perimeter

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We no longer need to debate the need for change
Users & Apps Have Left The Building

- Complex
- Slow
- High Risk
The Network Perimeter Is No Longer Defensible

**Traditional Trust Model**

- **Internet**
  - **External User**
  - **Firewall**
  - **Web Servers**
  - **HWLB**
  - **LDS**
  - **Index, Query, Application, Central Administration Servers**

- **Outer DMZ**
  - **Firewall**
  - **Front End**

- **Perimeter Network**
  - **Firewall**
  - **LDS**
  - **(Domain Bound Servers)**

- **Inner DMZ**
  - **Firewall**
  - **LDS**
  - **Internal Network**
    - **Active Directory**
    - **SQL Server**
    - **Internal User**
  - **Index, Query, Application, Central Administration Servers**

- **Intranet**
  - **Internal Network**
  - **Web Servers**
  - **HWLB**
  - **LDS**
  - **Index, Query, Application, Central Administration Servers**

**Not Trusted**

**Trusted**
“...the idea of a corporate perimeter becomes quaint—even dangerous."

Excerpt from Forrester’s *Future-Proof your Digital Business with Zero Trust Security*
Trust In The Corporate Network Is Not Inherent

Zero Trust Model

Not Trusted

Not Trusted

Internet

External User

Firewall

443

53 and 443

Web Servers

Perimeter Network

(Domain Bound Servers)

Inner DMZ

External DMZ

Index, Query, Application, Central Administration Servers

Firewall

LDS

LDS

Active Directory

Internal Network

Internal User

SQL Server

Intranet

Index, Query, Application, Central Administration Servers

HWLB

Not Trusted

Not Trusted

Internal Network

Perimeter Network

Intranet

External Network

Evil Twin

Public Network

Private Network

Default Trust Model

Not Trusted

Not Trusted
Zero Trust Security & Google BeyondCorp

A new approach to China

January 12, 2010

Like many other well-known organizations, we face cyber attacks of varying degrees on a regular basis. In mid-December, we detected a highly sophisticated and targeted attack on our corporate infrastructure originating from China that resulted in the theft of intellectual property from Google. However, it soon became clear that what at first appeared to be solely a security incident—albeit a significant one—was something quite different.

aka Operation Aurora

Seven year BeyondCorp mission (2011-2017)
To have every employee work from untrusted networks without a VPN

BeyondCorp's realization

WALLS DON'T WORK
It’s time to move security controls to the Edge
Traditional Access vs Zero Trust
The Enterprise Reality
Adaptive Access & Threat Protection

One edge platform to secure all enterprise apps & users

Identity Aware Proxy
- Identity, single sign-on & multi-factor authentication
- Inline app access, app performance & app security

Secure Internet Gateway
- Malware, phishing & DNS-based data exfiltration protection with inline payload analysis
Where can this take us?

- **Internet** is the corporate network
- **Every office** is a hotspot
- **All apps** feel like SaaS apps
Moving Beyond Perimeter Security

A comprehensive & achievable roadmap to less risk

akamai.com/zerotrust
Thank you