

# Reinventing the Network Security Market

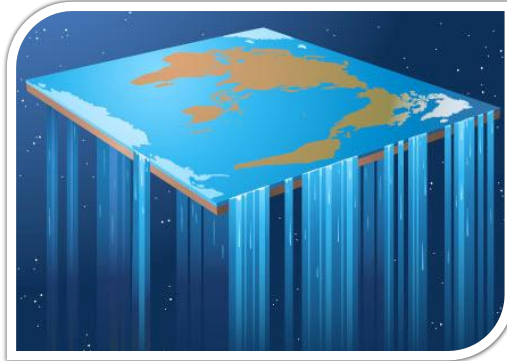
*Nir Zuk*  
Founder and CTO



## About the Speaker

- 2005-today Founder and CTO at Palo Alto Networks
  - Next Generation Firewall
- 2002-2005 CTO at NetScreen/Juniper
- 2000-2002 Founder and CTO at OneSecure
  - World's first Network IPS
- 1994-1999 Principal Engineer at Check Point Software

## The Internet World Anno 1995



- Virtually no application traffic, no known threats
- Simple assumptions worked; HTTP traffic = browsing
- Firewalls were born to keep simple traffic from coming in or going out; in 15 years time it became a \$5B industry

## The Internet World Anno 2010



- Many applications; many more threats
- Applications are evasive and are the #1 threat vector
- Traditional firewalls are defenseless and offer no protection to enterprises

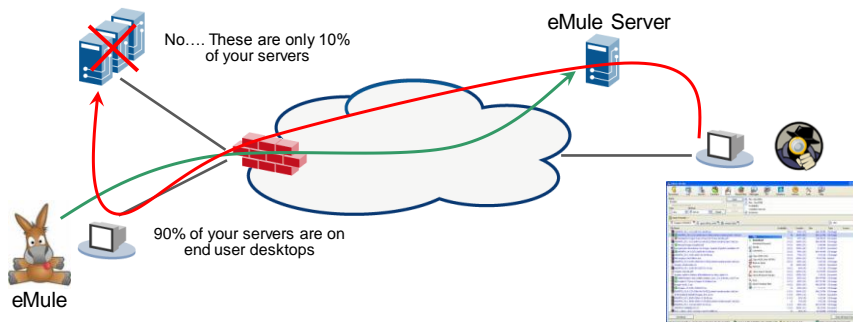
## The IT Diaspora Is Upon Us

- Your own applications are leaving the network...
  - And many applications that aren't yours enter your network
- Users are leaving the network...
  - Yet need to be governed by enterprise policies
- Infrastructure is leaving the premises...
  - But before it does, it is collapsing onto itself

In this scenario, how does network security evolve?

## Is The Firewall Doing Its Job?

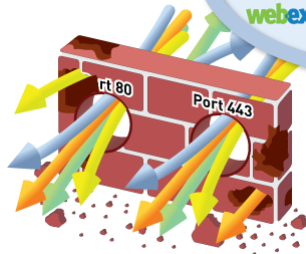
- Let's look at a typical enterprise server



# Applications Have Changed; Firewalls Have Not

The gateway at the trust border is the right place to enforce policy control

- Sees all traffic
- Defines trust boundary

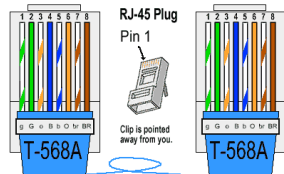


BUT...applications have changed  
 Ports ≠ Applications  
 IP Addresses ≠ Users  
 Packets ≠ Content

This was the original problem we set out to solve.



# A Faster, Cheaper, Better Firewall...



System Architecture



HA System



## How Do You Manage Applications?

### Conventional Wisdom

Make security decisions  
based on:

- ✓ Network ports
- ✓ Network protocols
- ✓ Network addresses

### Disruptive Thinking

Make security decisions  
based on:

- ✓ Applications
- ✓ Users
- ✓ Content

## How Do You Disrupt Security Thinking?

### Conventional Wisdom



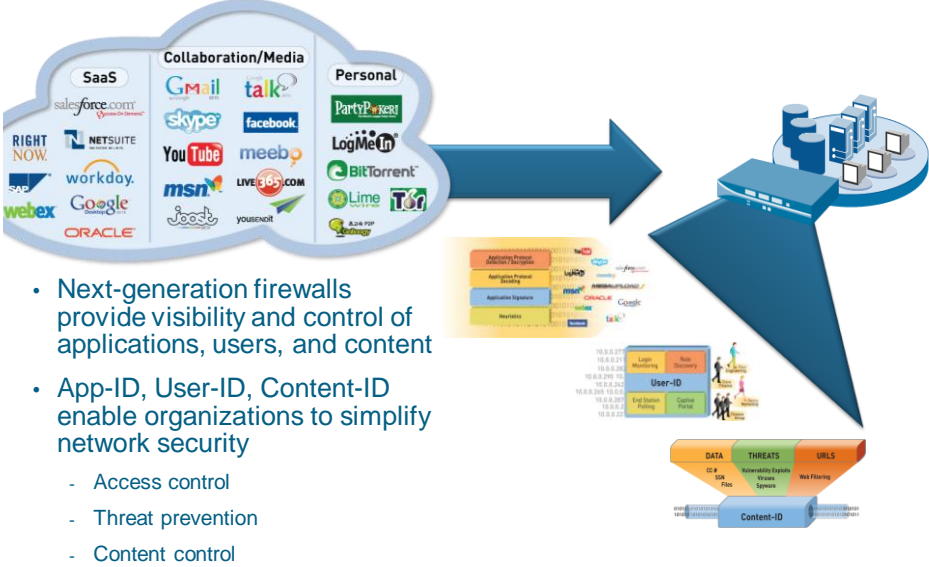
✓ Block ... or not

### Disruptive Thinking



✓ Control

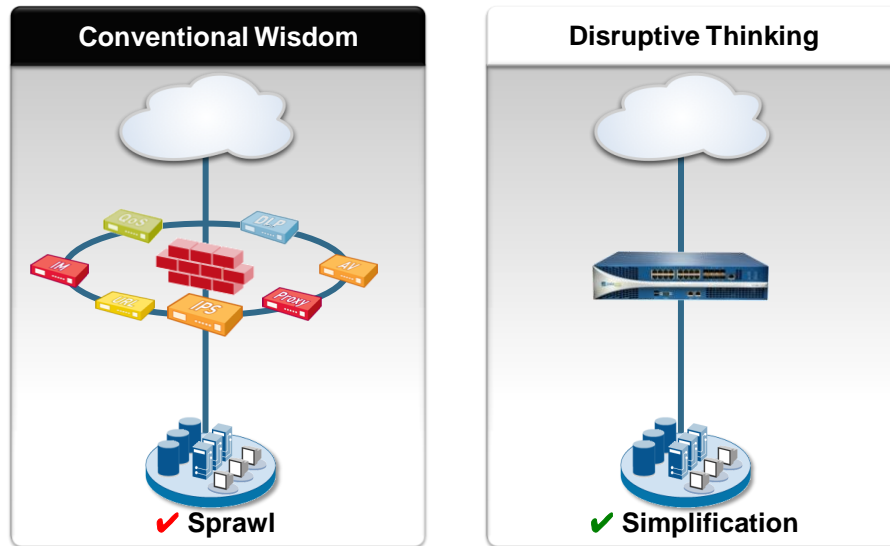
# The Result: Smart Enablement



# The Traditional Approach to Network Security



## How Do You Change The Architecture?



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## Re-Inventing The Firewall

- Identify applications regardless of port, protocol, evasive tactic or SSL
- Identify users regardless of IP address
- Identify what users are doing with applications
- Log and control based on application, user and function
- Protect in real-time against threats embedded across applications
- Run as fast, cost as much as a traditional firewall



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# How Do You Protect Mobile Users?

**Conventional Wisdom**

Pick from 3 impossible scenarios:

- ✓ Haul back all traffic
- ✓ Install software on PCs
- ✓ Proxies in the cloud

**Disruptive Thinking**

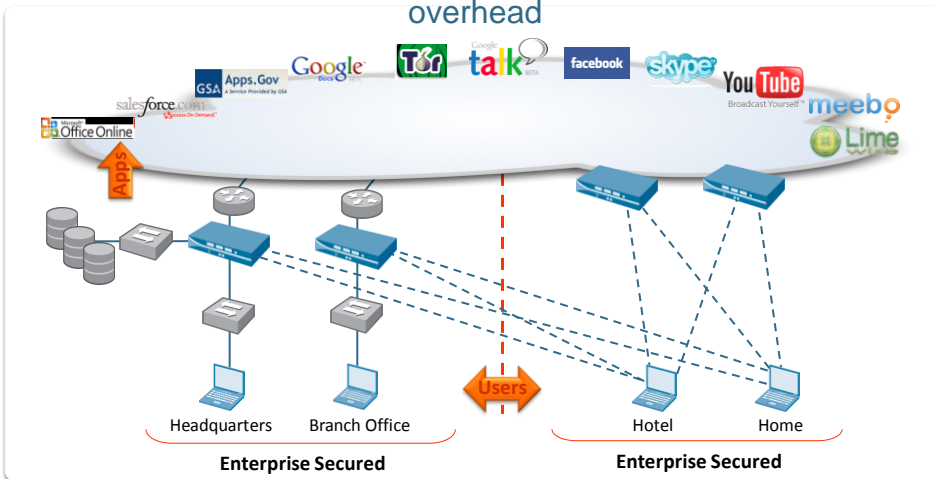
Expand the role of the firewall:

- ✓ Make the mobile device be on-network at all times
- ✓ Virtual cloud
- ✓ Next-generation firewall



# The Same Visibility And Control For All Users

GlobalProtect™ enables organizations to apply their network security policies to mobile users with no administrative overhead





## Tackling Virtualization

### Conventional Wisdom

- ✓ Run a software-based port-blocking firewall inside the VMs

### Disruptive Thinking

- ✓ Run a next-generation firewall at super high speed

## Securing In The Cloud

### Conventional Wisdom



### Disruptive Thinking

- ✓ Protect the user access
- ✓ Elastic next-generation firewall “fabric”

## Tackling Advanced Persistent Threats

### Conventional Wisdom

- ✓ Scan for threats at the point of entry – network or PC

### Disruptive Thinking

- ✓ Scan all traffic leaving the network for suspicious activity, destinations, and patterns at super high speed

## The Network Security Disruption Is Working

Founded in 2005; selling since 2007

2,300+ enterprise customers

7,000+ enterprise firewalls installed

App-ID™ : 1,100+ applications

\$65M in funding

\$100M+ in bookings run-rate

Cash-flow positive operations

Doubling our business in 2011

## Thank You!



the network **security** company™