Cisco Self Defending Network

Integrated Network Security
George Chopin – Security Business Development Manager, CISSP
The Network as a Strategic Asset

- Customers
- Partners
- Suppliers
- Employees
- Small/Medium Businesses
- Corporate Enterprises

Financial Performance
Reduce Operational Costs
Improve Productivity
Enter New Markets

Issue:
How do you validate trust and identity?
How do you ensure for compliance to your security policies?
The burden on IT security is growing exponentially

**Executives**

Regulation, Reputation, Audit, Compliance, Cost Control, etc.

**End Users**

Worms, Viruses, Spyware, Adware, Identity Theft, etc.

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Key Issues Facing Customers Today

SIMPLIFICATION
- Scale
- Cost
- Staffing
- Integration

APPLICATION AND SERVICE OPTIMIZATION
- Enablers
- Awareness
- App management
- Performance/optimization
- Resilience

SECURITY
- Threats
- Theft
- Loss
- Response time

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Self Defending Networks

From Point Products to Holistic System

Security as an Option
- Very complex environment
- Higher integration cost
- Security risks not mitigated
- Lower reliability

Security, INTEGRAL to the System
- Reduced complexity
- Easier deployment and management
- Security risks effectively mitigated
- Lower TCO
The network system, at all points of access and authentication, must provide strong defense while helping to enforce policy compliance.
Security is a Top Cisco Priority

- Responding to our customers
- Cisco Invests 30% of Security Revenue back into R&D ($300M+)
- Security is now a $1B+ business for Cisco
- Six security acquisitions in past two years
- Cisco has captured #1 market position for VPN, Firewall and Intrusion Detection (source: Infonetics Research)
- 1,100 new employees hired last fiscal quarter focused primarily around advanced technologies

“Our goal is to minimize risk while maximizing productivity opportunities through integrated network security solutions.”

- John Chambers
Self-Defending Network

1. Point Products  ➔ Integrated Security

2. Disparate Security Services  ➔ Collaborative Security Systems

3. Reactive Security  ➔ Adaptive Security
Security Solutions Network Evolution

Network Integration delivers increased customer value

Uni-purpose Products
- Firewall
- IDS/IPS
- DDoS
- Wireless AP

Network Integrated Security Solutions
- Core Switch Security Modules
- Branch Router IOS Security
- Structured Wireless Aware Network (SWAN)
Branch Security

*The branch must be as secure as HQ!*

New Integrated Services Routers
*1800, 2800 & 3800*

- Policy enforcement (NAC)
- Firewall (IOS FW)
- Intrusion Detection (IOS IDS)
- Encryption (IPSEC)
- Site to Site & Remote VPN
- Secure Wireless
# Cisco Adaptive Security Appliance (ASA)

## Convergence of Robust, Market-Proven Technologies

**Market-Proven Technologies**

- **Firewall Technology**
  - Cisco PIX

- **IPS Technology**
  - Cisco IPS

- **NW-AV Technology**
  - Cisco IPS, AV

- **VPN Technology**
  - Cisco VPN 3000

- **Network Intelligence**
  - Cisco Network Services

**Adaptive Threat Defense, Secure Connectivity**

- **App Inspection, Use Enforcement, Web Control Application Security**

- **Malware/Content Defense, Anomaly Detection Anti-X Defenses**

- **Traffic/Admission Control, Proactive Response Network Containment & Control**

- **Secure Connectivity IPSec & SSL VPN**
A sound security policy is the best first line of defense

Are you actually doing what your security policy states you will do?

Auditors expect enforcement and network-wide consistency

Your customers assume enforcement

Due diligence requires enforcement
Cisco Network Admission Control: Collaborative Security for Defense & Policy Enforcement

Client attempts connection

- Access granted
- Access denied
- Quarantine remediation

Authentication and policy check of client

Corporate Net

Quarantine VLAN

Remediation

NAC Framework
Current NAC Program Participants
Adaptive Threat Defense in Action

- Access Control, Packet Inspection
- Defense Intelligence, Content Inspection, Virus Mitigation
- Identity, Virtualization, QoS Segmentation, Traffic Visibility

- App Inspection, Use Enforcement, Web Control
  - Application Security

- Malware/Content Defense, Anomaly Detection
  - Anti-X Defenses

- Traffic/Admission Control, Proactive Response
  - Containment & Control

- Wireless LAN Solutions Engine
  - Cisco Router
  - VPN
  - CSA
  - Catalyst
  - PIX
  - Identity-Based Networking
  - Cisco IPS
  - CSA
  - Quarantine VLAN
CDW & Cisco
Helping Our Customers Build
Secure Intelligent Systems

CDW – Uniquely positioned to provide extensive security solutions for businesses of all sizes

Cisco – Building the Self Defending Network through a secure intelligent information architecture

CDW + Cisco – Comprehensive security approach based on the right solutions and services at the right price.