Cisco ASA 5500 Series Enterprise Editions Solution Overview

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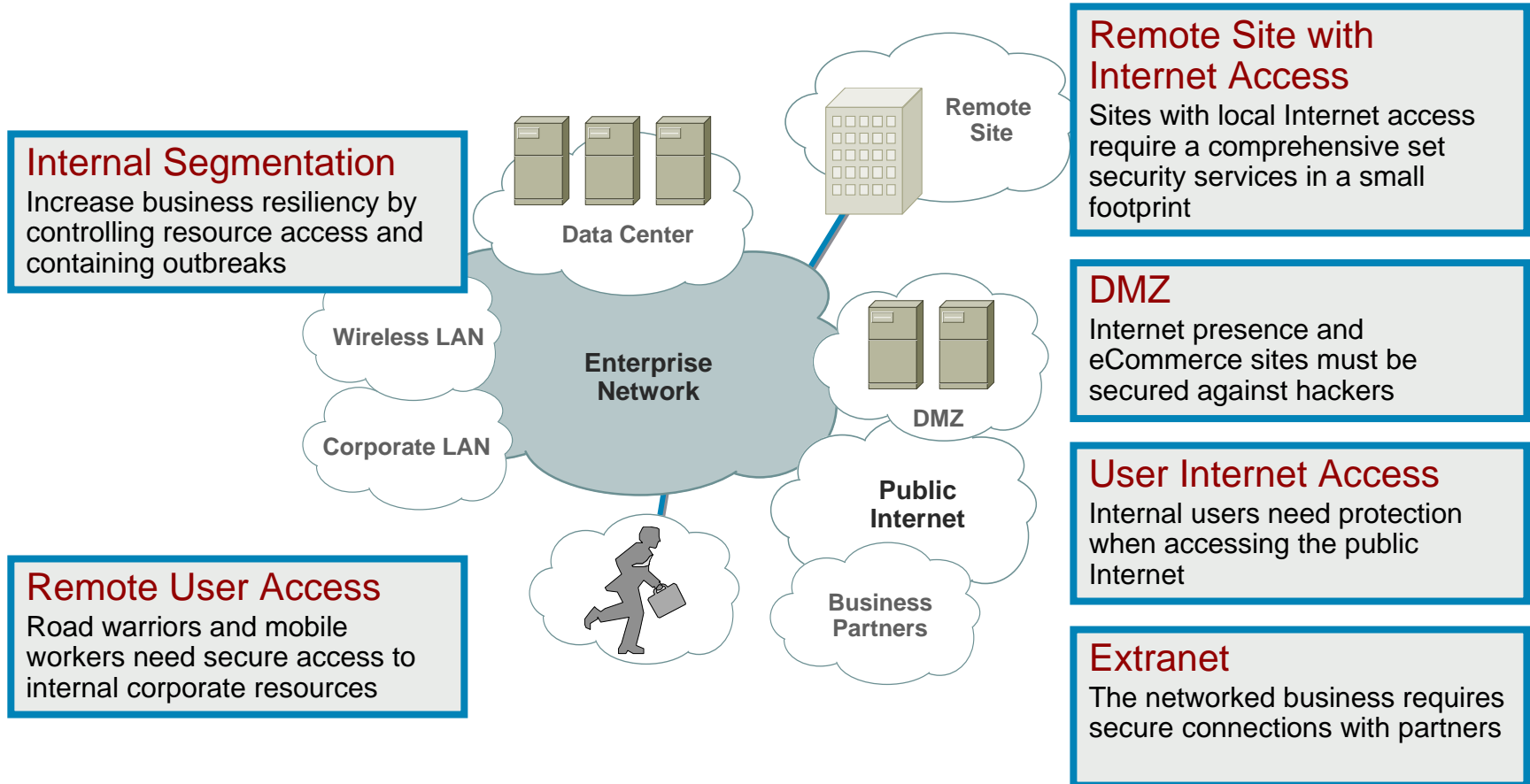**Systems Engineer**

Atlantic Canada Team

Business and Technology Trends

- Security requirements are evolving.

- Networks are getting faster and in turn supporting more users, applications and protocols

- Pervasive security is mission-critical, as vulnerabilities and those who would exploit them increase in number

- Organizations are moving toward converged platforms for increased security, improved productivity and lower costs
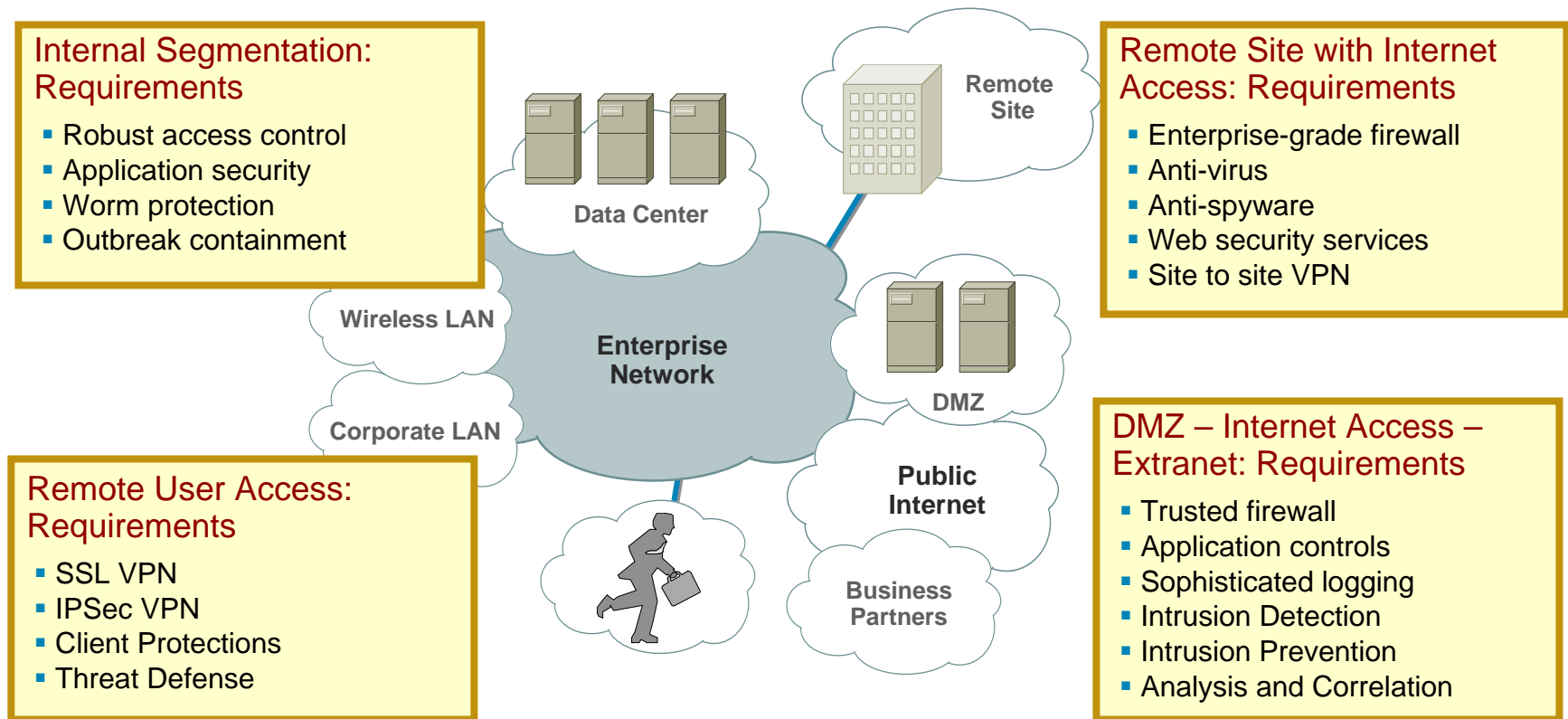
The Need for a New Paradigm
Enterprise Security Business Needs Evolving

Internal Segmentation
Increase business resiliency by controlling resource access and containing outbreaks

Remote User Access
Road warriors and mobile workers need secure access to internal corporate resources

Data Center

Wireless LAN

Corporate LAN

Enterprise Network

Remote Site

DMZ

Public Internet

Business Partners

Remote Site with Internet Access
Sites with local Internet access require a comprehensive set security services in a small footprint

DMZ
Internet presence and eCommerce sites must be secured against hackers

User Internet Access
Internal users need protection when accessing the public Internet

Extranet
The networked business requires secure connections with partners

> **Multiple Environments, each with specific business drivers and organizational needs**

Meeting Needs Requires Many Services
Complex Location-specific Requirements

Internal Segmentation: Requirements

- Robust access control
- Application security
- Worm protection
- Outbreak containment

Data Center

Wireless LAN

Corporate LAN

Enterprise Network

Remote Site

DMZ

Public Internet

Business Partners

Remote Site with Internet Access: Requirements

- Enterprise-grade firewall
- Anti-virus
- Anti-spyware
- Web security services
- Site to site VPN

Remote User Access: Requirements

- SSL VPN
- IPSec VPN
- Client Protections
- Threat Defense

DMZ – Internet Access – Extranet: Requirements

- Trusted firewall
- Application controls
- Sophisticated logging
- Intrusion Detection
- Intrusion Prevention
- Analysis and Correlation

Operational Inefficiencies from Multiple Platforms and Consoles

May Require Compromise on Protection

Complex Design and Configuration

A New Paradigm for Network Security

The Cisco ASA 5500 Series
Cisco's Premier Security Appliance Family

Bringing Modularity to Network Security	**A Comprehensive Portfolio of Services**	**Next Generation of Network Security**
In the tradition of Cisco routers and switches, a standard platform that can adapt and grow	Deploy what you need, wherever you need it	Migration destination for users of PIX® 500 Series and VPN 3000 Series of Security Appliances

ASA 5500 Series Enterprise Editions

Cisco ASA 5500 Firewall Edition

Cisco ASA 5500 VPN Edition

Cisco ASA 5500 IPS Edition

Cisco ASA 5500 Anti-X Edition

A Family of Tailored Packages for Location Specific Needs

- Enables standardization on the ASA 5500 series platform to reduce costs in management, training, and sparing
- Superior protection by providing the right services for the right location
- Simplifies design and deployment by providing pre-packaged location-specific security solutions

Cisco ASA 5500 Series Firewall Edition

World-class Application Security Services
Enables businesses to deploy new applications securely, while protecting valuable assets from unauthorized access

Flexible, Reliable Deployment Options
Provides wide range of services such as transparent firewall, virtualization, intelligent network integration, and award-winning resiliency

Comprehensive Management Solutions Lower Operational Costs
Flexible centralized management solutions provide full featured provisioning and monitoring services

Cisco ASA 5500 Firewall Edition

Cisco ASA 5500 Series Firewall Edition:
Trusted technology from the most deployed firewall: Cisco PIX

Virtualized Services and Transparent Operation

- Adds support for security contexts (virtual firewalls) to lower operational costs

    Enables device consolidation and segmentation and Supports separated policies and administration

- Introduces transparent firewall capabilities for rapid deployment of security

    Drops into existing networks without need for readdressing the network

    Simplifies deployments of internal firewalling
    and security zoning—new applications

Dept/Cust 1   Dept/Cust 2   Dept/Cust 3
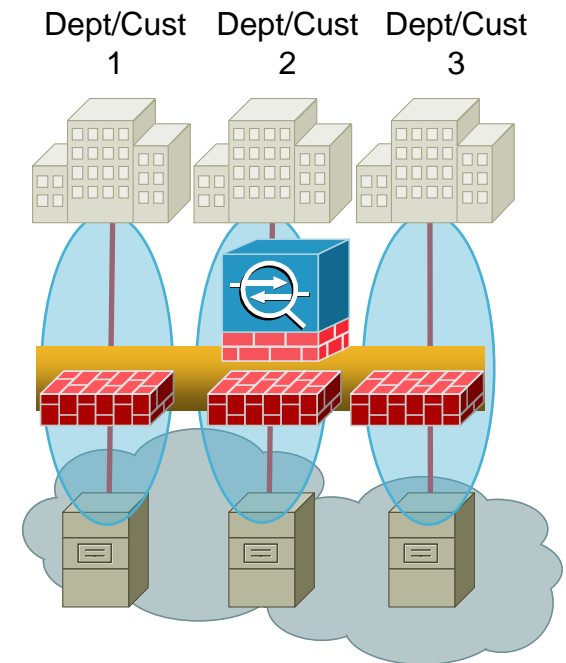
Transparent Firewall and IPS

Existing Network
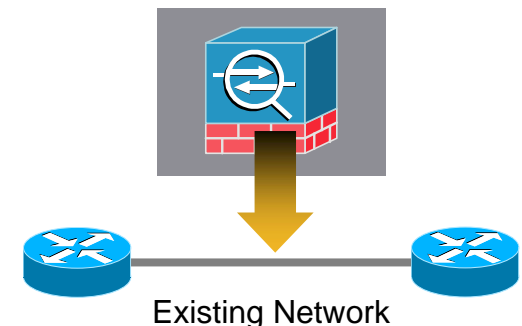
Cisco ASA 5500 Series IPS Edition

Control Access to Critical Assets
Firewall access control and application policy enforcement provide authenticated access to critical resources

Accurate, Multi-vector Threat Prevention
Achieves maximum attack identification via multiple analysis techniques and technologies

Complete Incident Life-cycle Management
Complete solution covering Management, Monitoring, Incident Response, and Outbreak Prevention

Cisco ASA 5500 IPS Edition

Cisco ASA 5500 Series IPS Edition:
Protecting Critical Information Assets and Infrastructure

Cisco ASA 5500 Series Anti-X Edition

Enterprise-grade Firewall
Built on industry's most trusted and deployed Cisco PIX ® firewall technology for solid access and policy control

High-quality Malware Protection
Based on Trend Micro's time tested and market proven technology and business processes for uncompromising security

Cisco ASA 5500 Anti-X Edition

Unified Security and Content Control
Provides everything you need for small office, remote office and kiosks in a single device

Cisco ASA 5500 Series Anti-X Edition:
Protecting Clients Using the Public Internet

Cisco ASA 5500 Series VPN Edition

VPN for Any Deployment Environment
Clientless and full network VPN access delivers unsurpassed customizability for diverse requirements

Threat Protected VPN
Integrated endpoint and network security technologies ensure the VPN is not a conduit for damaging security threats
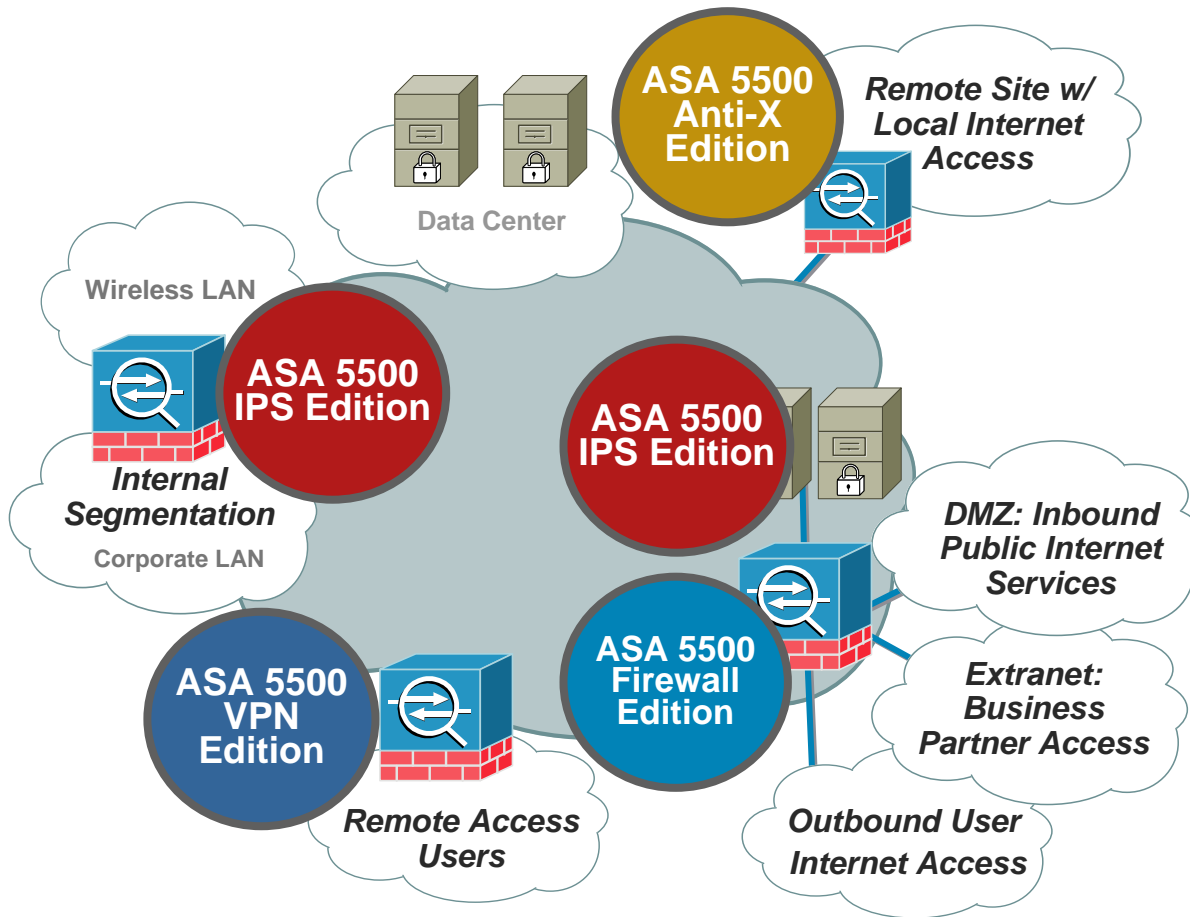
Making VPNs More Cost Effective
Integrated load balancing, network intelligence and security reduces the number of devices required to scale and secure the VPN

Cisco ASA 5500 VPN Edition

Cisco ASA 5500 Series VPN Edition:
Scalable, Secure SSL and IPSec VPN Remote Access

ASA 5500 Series Enterprise Editions
Tailored Packages to Location Specific Needs

ASA 5500 Anti-X Edition

Remote Site w/ Local Internet Access

Data Center

Wireless LAN

ASA 5500 IPS Edition

ASA 5500 IPS Edition

Internal Segmentation

Corporate LAN

DMZ: Inbound Public Internet Services

ASA 5500 VPN Edition

ASA 5500 Firewall Edition

Extranet: Business Partner Access

Remote Access Users

Outbound User Internet Access

FIREWALL Edition
Robust access and policy enforcement with rich application protections based on Cisco PIX® Firewall.

IPS Edition
Protect servers and critical assets from hackers and network worms with Intrusion Prevention, worm protection and firewall services

ANTI-X Edition
Protect users from Internet threats and connect remote sites securely with Anti-X, firewall and VPN services

VPN Edition
Unified SSL & IPSec Remote Access Services with Unified Threat Management

Cisco ASA 5500 Series Product Lineup
Solutions Ranging from SMB to Large Enterprise
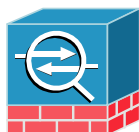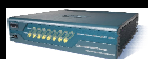
	Cisco ASA 5505	Cisco ASA 5510	Cisco ASA 5520	Cisco ASA 5540	Cisco ASA 5550
Target Market	Teleworker / Branch Office / SMB	SMB and SME	Enterprise	Medium Enterprise	Large Enterprise
List Price (CDN$)	Starting at $702	Starting at $4,124	Starting at $9,434	Starting at $20,054	Starting at $23,594
Performance **Max Firewall** **Max Firewall + IPS** **Max IPSec VPN** **Max IPSec/SSL VPN Peers**	150 Mbps Future 100 Mbps 25/25	300 Mbps 300 Mbps 170 Mbps 250/250	450 Mbps 375 Mbps 225 Mbps 750/750	650 Mbps 450 Mbps 325 Mbps 5000/2500	1.2 Gbps N/A 425 Mbps 5000/5000
Platform Capabilities **Max Firewall Conns** **Max Conns/Second** **Packets/Second (64 byte)** **Base I/O** **VLANs Supported** **HA Supported**	10,000/25,000 3,000 85,000 8-port FE switch 3/20 (trunk) Stateless A/S (Sec Plus)	50,000/130,000 6,000 190,000 5 FE 50/100 A/A and A/S (Sec Plus)	280,000 9,000 320,000 4 GE + 1 FE 150 A/A and A/S	400,000 20,000 500,000 4 GE + 1 FE 200 A/A and A/S	650,000 28,000 600,000 8 GE + 1 FE 250 A/A and A/S

Wide-Range of Cisco ASA 5500 Series Security Service Modules (SSMs)

IPS Security Services Module (AIP SSM)

- Provides **full-featured IPS and IDS services** for protection of critical network assets
- Available in two models: SSM-10 and SSM-20
- Delivers up to 450 Mbps of IPS throughput
- Has thumbscrews for easy insertion/removal
- 10/100/1000 out-of-band management port
- Supported on ASA 5510, 5520 and 5540

Anti-X Security Services Module (CSC SSM)

- Provides **full-featured Anti-X services** (anti-virus, anti-spyware, anti-spam, anti-phishing, URL filtering, and more)
- Available in two models SSM-10 and SSM-20
- Anti-virus and anti-spyware services licensed by number of users, others optional add-on
- Supported on ASA 5510, 5520 and 5540

4-Port GE Services Module (4GE SSM)

- I/O module offers **four copper 10/100/1000 ports** in addition to **four SFP ports** for improved flexibility and network segmentation
- Customers can use up-to four ports total out of these eight ports, with the ability to mix and match copper and optical GE ports
- Supported on ASA 5510, 5520 and 5540

Cisco Adaptive Security Device Manager

- **Simplified security deployment and configuration via easy to use wizards and management tools, specially designed for today's SMB administrator**

- **Enhance operational efficiency via business class policy enforcement tools**

- **Ensure business continuity via real time status and event monitoring, and reporting tools**

- **Policy refinement and improved troubleshooting**

Complete Enterprise Architecture

CS-Manager

CONFIGURATION PROVISIONING

CS-MARS

MONITORING ANALYSIS MITIGATION

ASA 5500 Anti-X Edition

ASA IPS Edition

Internal Segmentation

- **Visualization tools to facilitate deployment, configuration, and maintenance**
- **Common policy view for the enterprise**
- **Network-wide view of topology and context**
- **Valuable analysis and reports**

Managing ASA in the Enterprise: Provisioning Large Scale Deployments

CISCO SECURITY MANAGER

Enables Management of an Integrated Security Fabric

- Domain-based Policy Enforcement for End-to-End Management

- Scalable, Distributed Deployment

- Flexible modes for Efficient day-to-day policy administration

- Simultaneous management of ASA 5500 series and existing Cisco security solutions

CONFIGURATION PROVISIONING

MONITORING ANALYSIS MITIGATION

SELF-DEFENDING NETWORK FABRIC

Managing ASA in the Enterprise: Threat Management

CISCO SECURITY MARS

Higher Network Availability Through Faster Threat Mitigation

- Rapid threat identification

- Topology awareness for focused mitigation

- Data correlation for advanced protection

- Eases migration through multi-vendor support

Migrating to the ASA 5500 Series

- Cisco has an ASA Migration Sales program in place for customers to transition from the PIX and VPN 3000 series appliances.

- Published End Dates - Cisco PIX 500 series

    PIX 506 - End of Support as of May 2007- replaced with 506E

    PIX 515 - End Of Support as of April 2007 – replaced with 515E

    PIX 520 – End of Support as of June 2006

- Published End Dates - Cisco VPN 3000 series

    End Of Sale Date is August 2007

    Applies to VPN3002, 3005, 3015, 3020, 3030. 3060 and 3080

- The ASA5505 has been positioned as the replacement to the VPN3002 hardware client.

Cisco ASA 5500 Series in Summary

Cisco ASA 5500 Series Adding Value to the Business

- **Superior protection** through location-specific security

- **Decreases operational costs** by standardizing on one family

- **Simplifies design and management**

- Part of a greater whole— **Cisco Self-Defending Network**