



Firewall and IPS

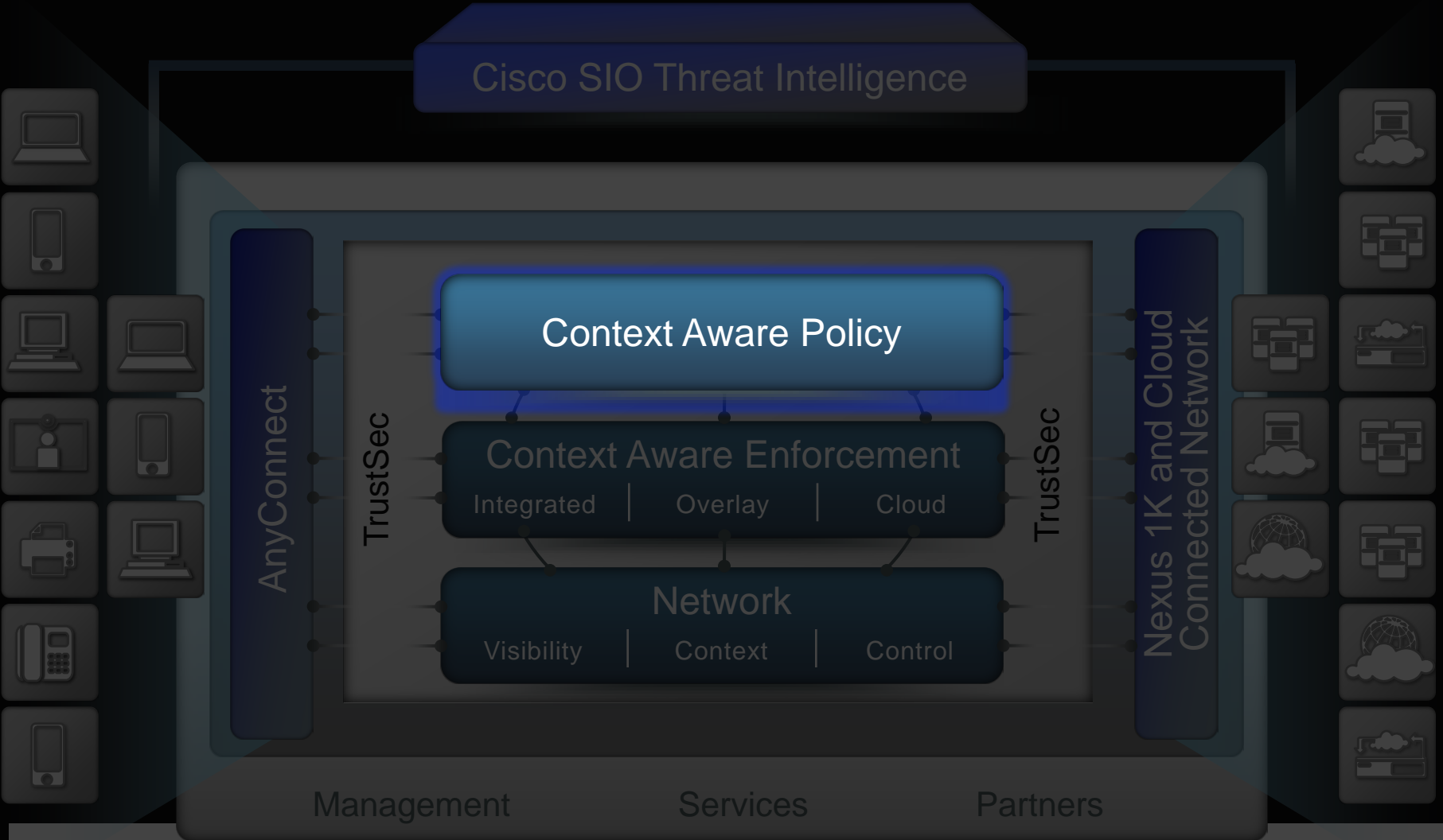
Abdullah Ahmed
Regional Security Consultant

Cisco Systems

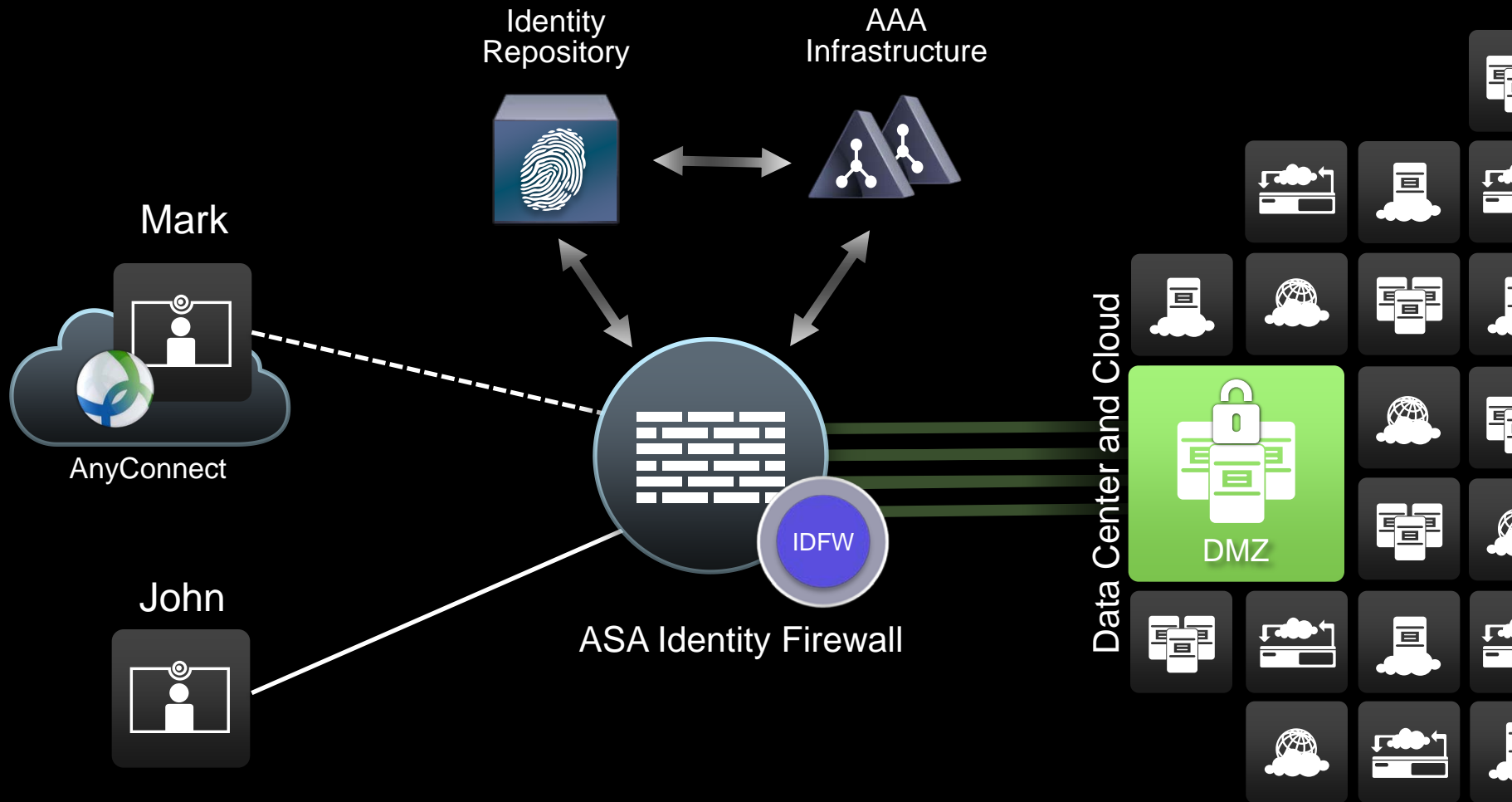
Cisco SecureX Architecture



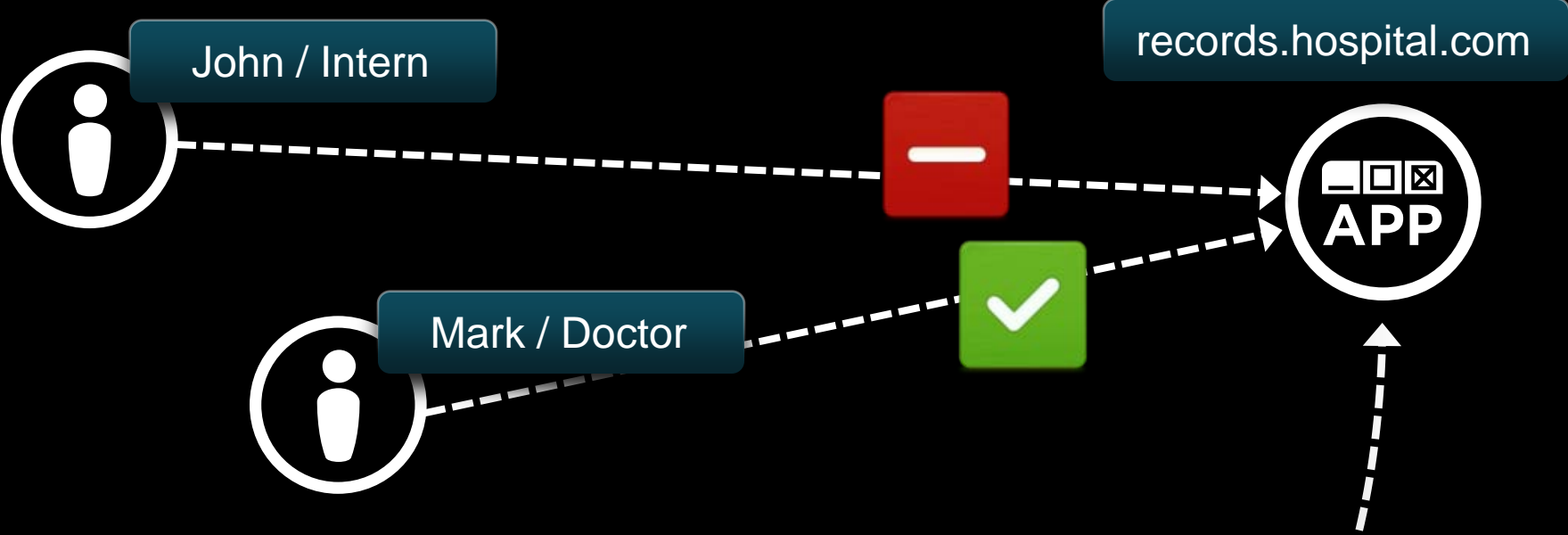
Cisco SecureX Architecture



Context Aware Policy

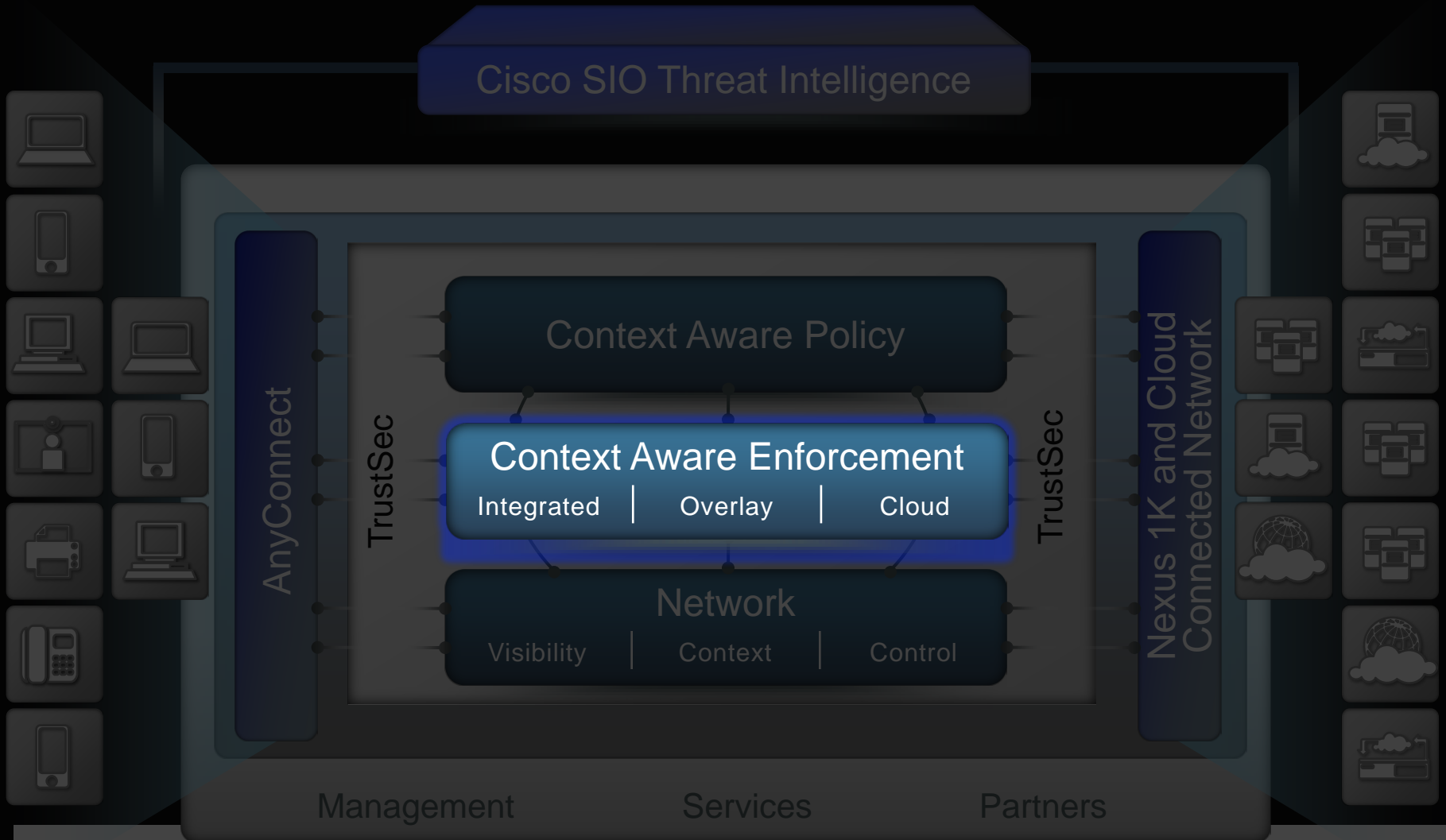


Context Aware Policy in Action

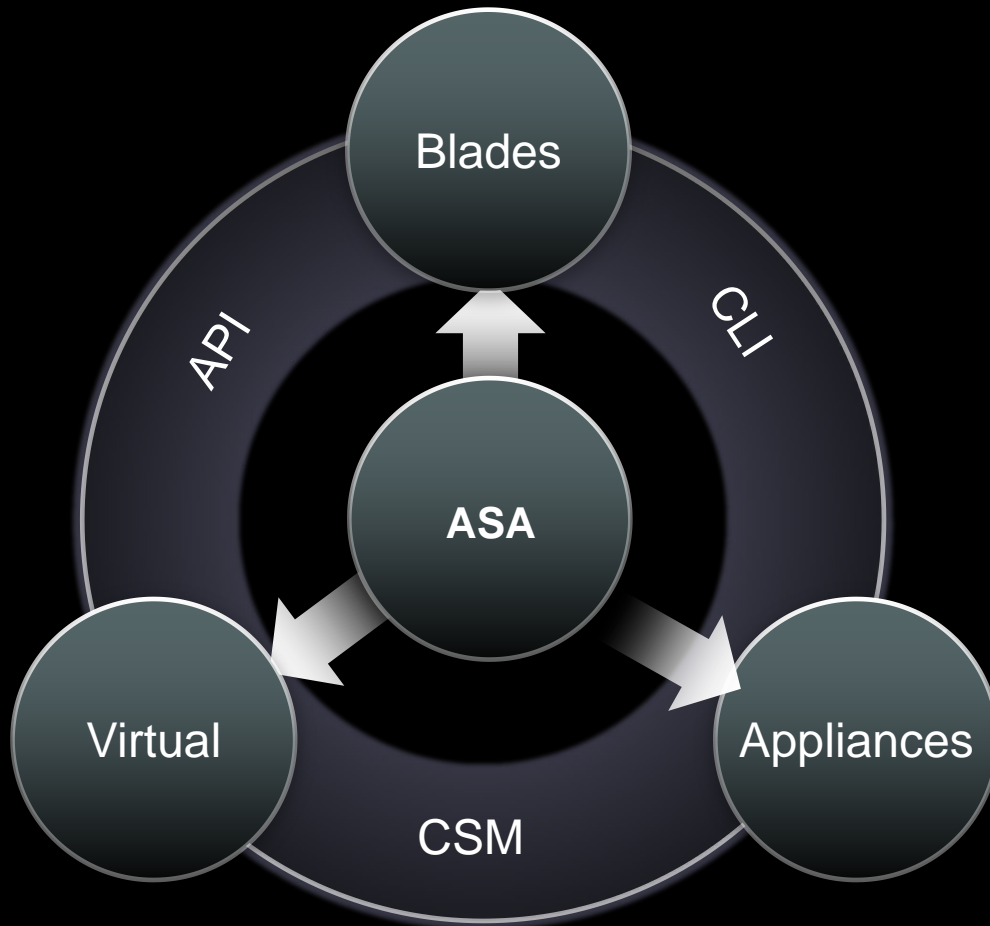


#	Enabled	Source	User	Destination	Service	Action	Hits
1	<input checked="" type="checkbox"/>	LAN	Group - Intern	Outlook	IP ip	Permit	52
2	<input checked="" type="checkbox"/>	LAN	Group - Doctor	Outlook PatientDB	IP ip	Permit	31
3	<input checked="" type="checkbox"/>	any	Mark - Doctor	any	IP ip	Permit	0

Cisco SecureX Architecture



Context Aware Enforcement



Single code base for all deployments

All managed in the same way with the same tools

Securing Across The Fabric

Overlay

INTEGRATED

CLOUD



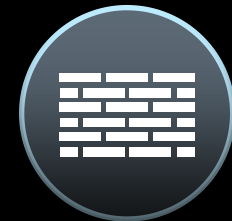
ASA Appliance



ASA SM for Catalyst
6500



VSG

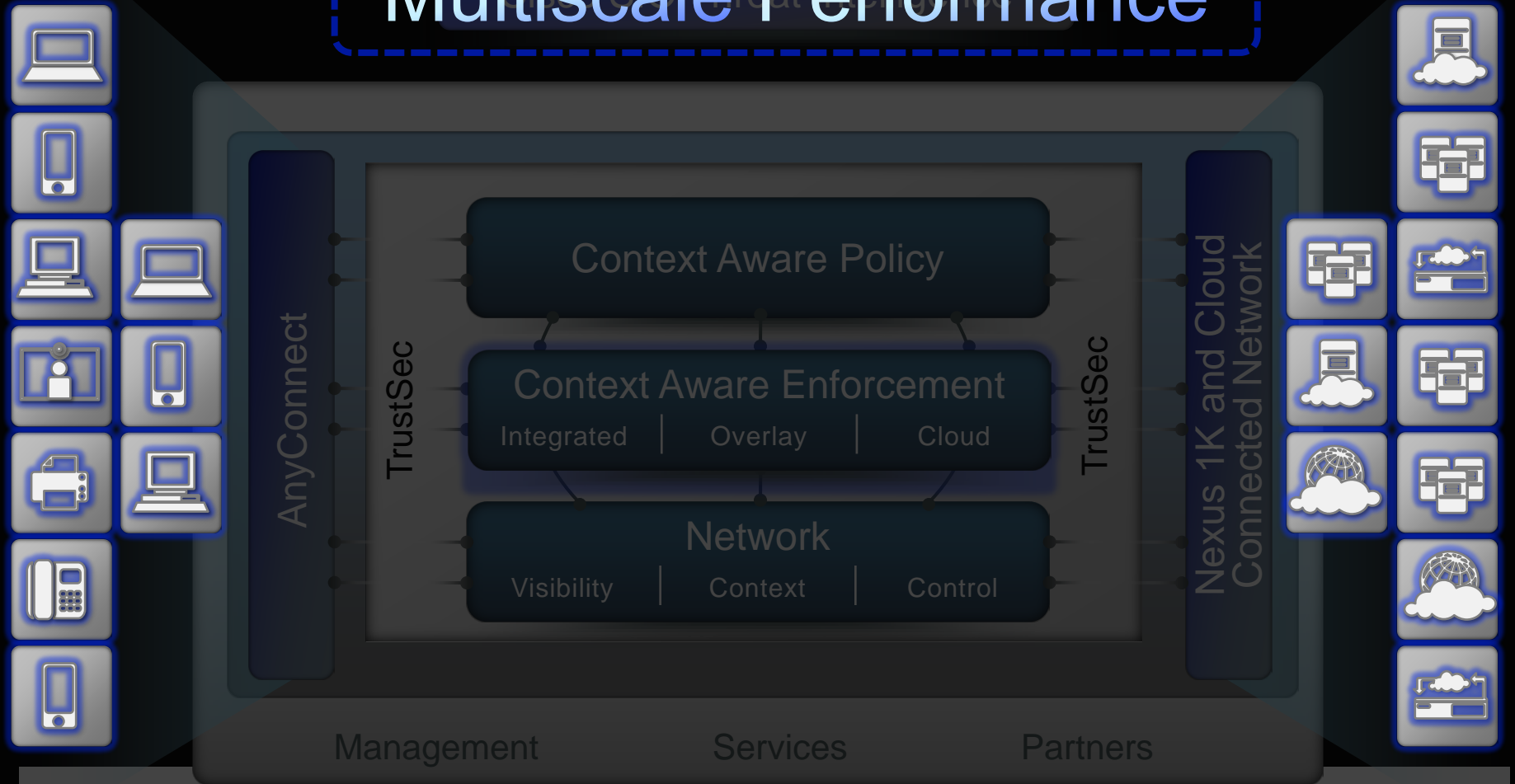


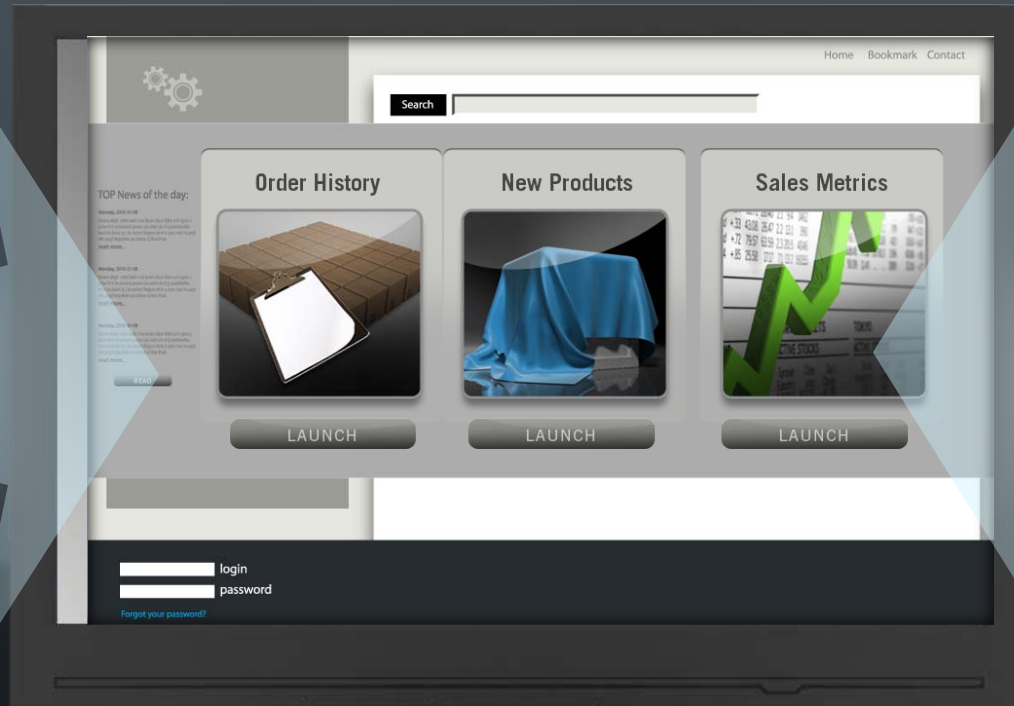
ASA 1000V*

* Roadmap

Cisco SecureX Architecture

Multiscale Performance







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Order History

TOP News of the day:

Monday, 2010-01-08
Tuesday, 2010-01-08
Wednesday, 2010-01-08

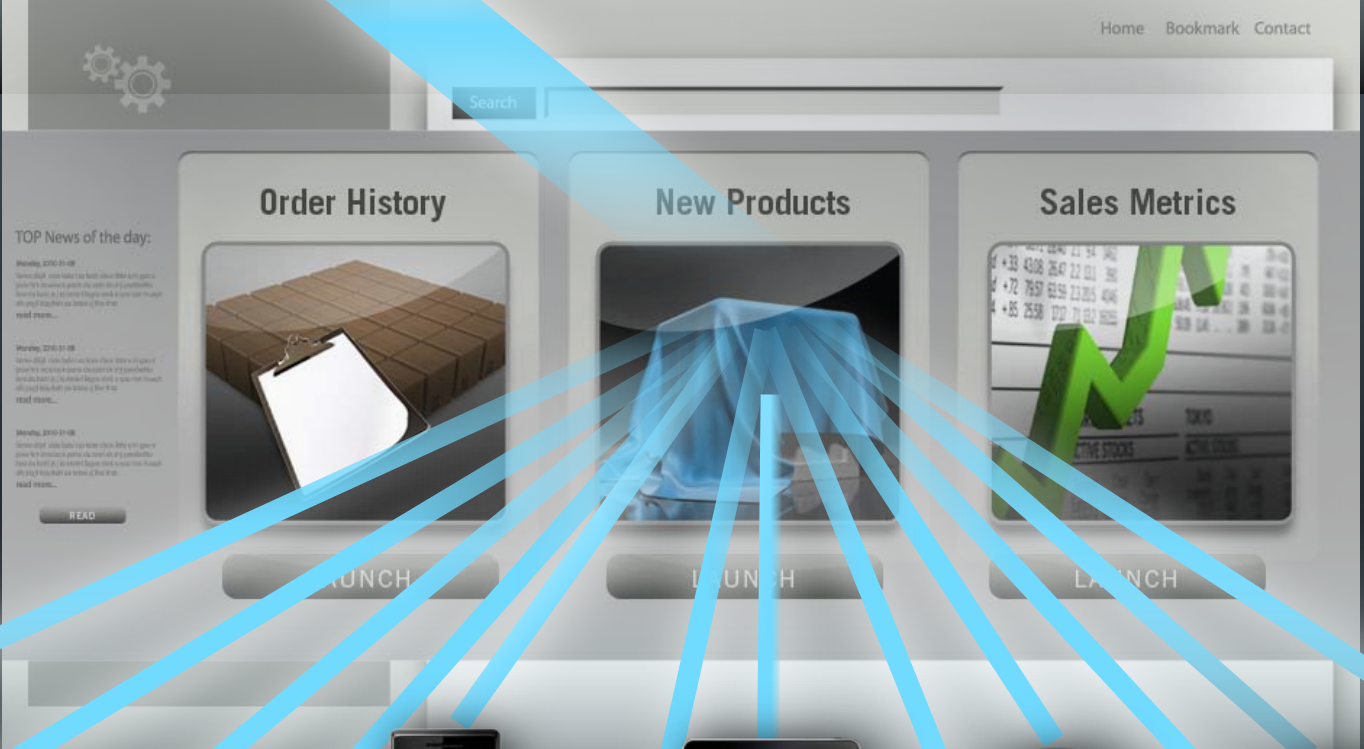
Order History

New Products

Sales Metrics

LAUNCH LAUNCH LAUNCH

login
password
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THROUGHPUT



OF CONCURRENT CONNECTIONS



CONNECTIONS PER SECOND



Power & Space



THROUGHPUT



OF CONCURRENT
CONNECTIONS



CONNECTIONS
PER SECOND



ASA 5585-X MultiScale™ Performance

20 Million Connections

Abundance of
Concurrent Sessions



700,000 CPS
Rapid Connections
per Second



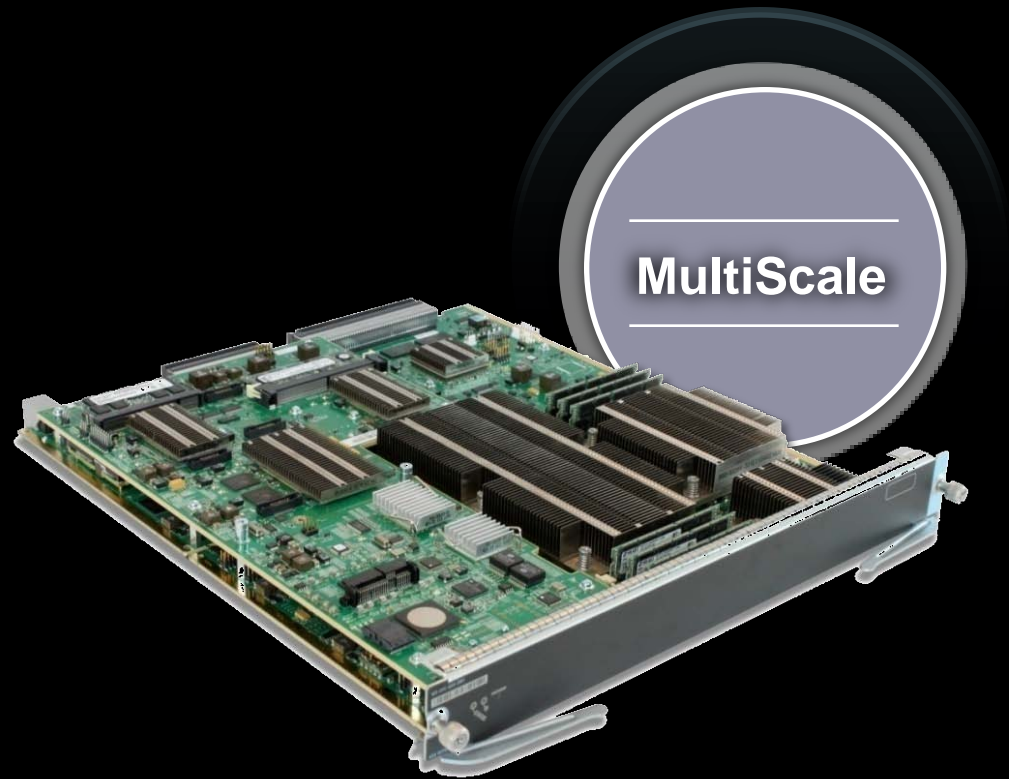
Multiple Security Services
FW, IPS, Remote Access

Multiple Technology Span
and Deployment Scenarios
**Broad Client OS,
Platform Support**

Accelerated Throughput
**80 Gbps Firewall or
40 Gbps FW + 10 Gbps IPS**

Cisco ASA SM For Catalyst 6500

- Cisco ASA 5585-X as Blade
- Cisco ASA security blade for the Catalyst 6500
- Places security directly into the datacenter backbone
- Simplified installation and greater flexibility



Introducing the High Performance, Multi-Service ASA 5585-X

Marketing Leading Firewall, IPS and VPN Services

MultiScale™ Performance

- Provides up to 35 Gbps of firewall throughput
- Extends firewall and IPS throughput to 10 Gbps
- Scales up to 10,000 users of remote access VPN

Investment Protection

- Scalable chassis that grows with your business

Industry-Leading Multi-Service Security

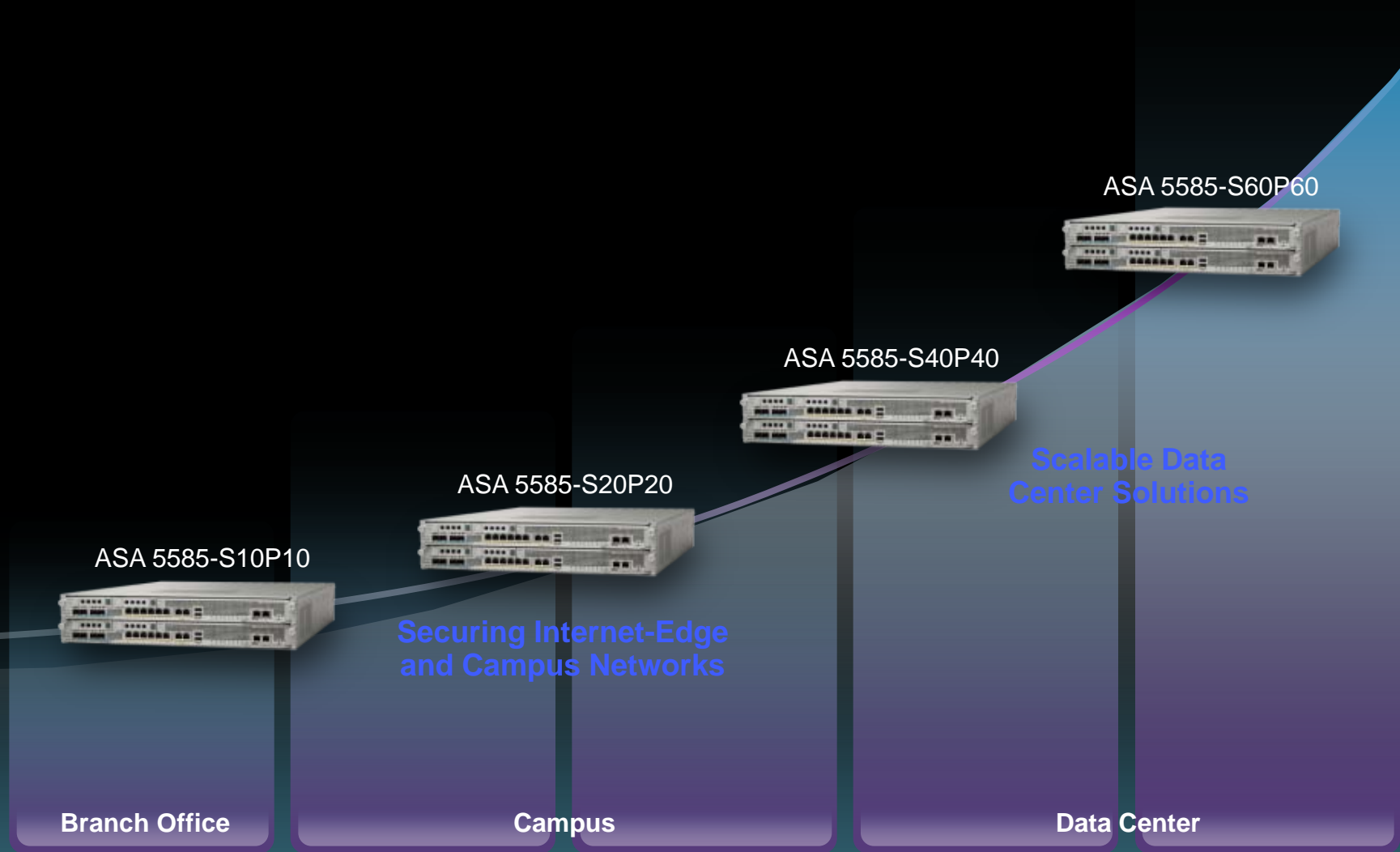
- Advanced threat protection with Botnet Traffic Filtering and hardware-accelerated IPS with Global Correlation
- Leading-edge remote access with Cisco AnyConnect™
- Built upon 15 years of security innovation



Raising the Bar for Firewall,
IPS, and VPN Capabilities

Cisco ASA 5585-X Appliance Portfolio

Performance, Scalability, Adaptivity

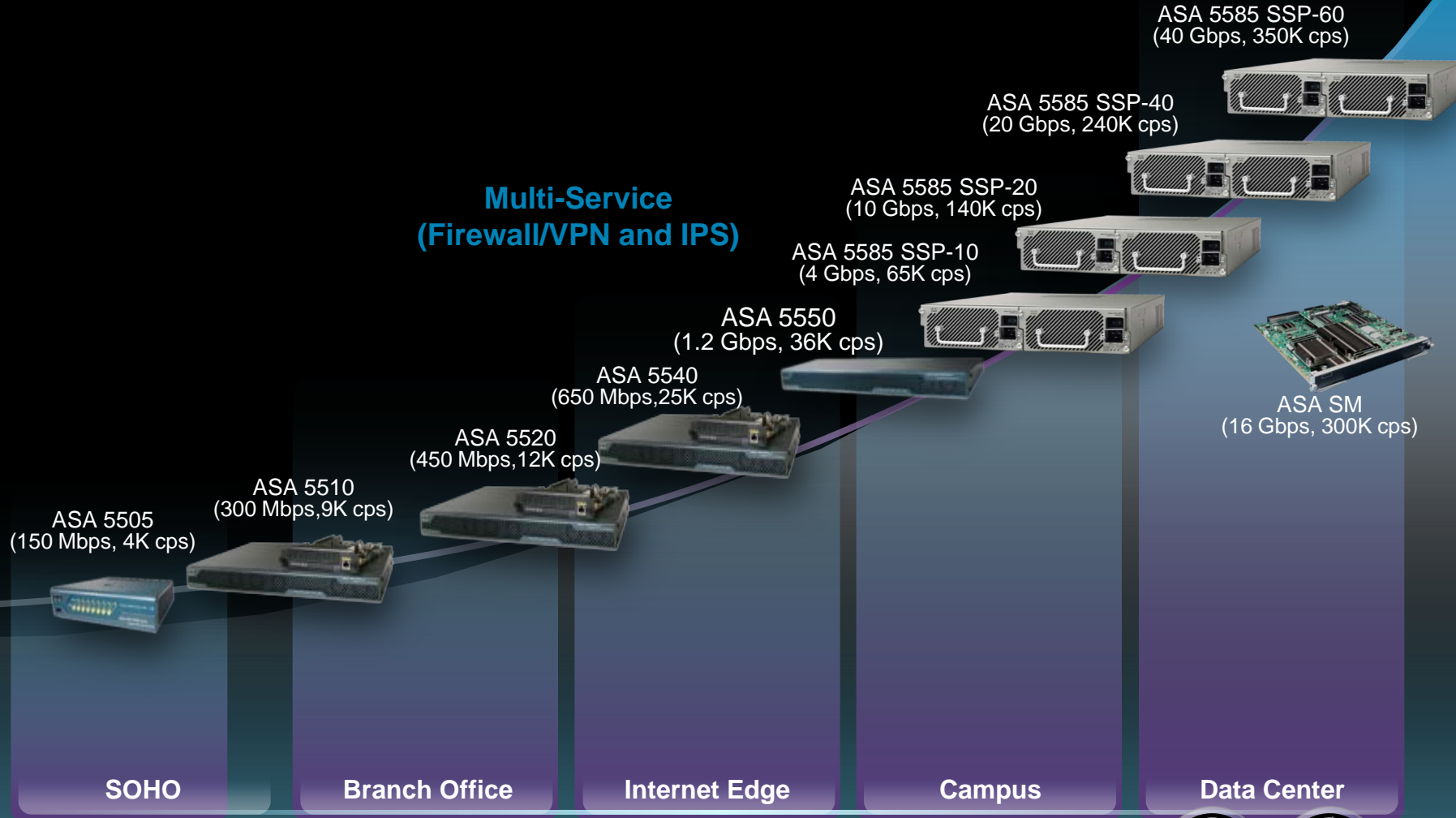


Enhancing the Customer Experience

Platform Choices

Performance and Scalability

Multi-Service (Firewall/VPN and IPS)



Cisco ASA 5500 Series High-End Lineup Solutions



Network Location	Internet Edge/ Campus ASA 5585 SSP-10	Internet Edge/ Campus ASA 5585 SSP-20	Campus/ Data Center ASA 5585 SSP-40	Data Center ASA 5585 SSP-60
Performance				
Max Firewall	4 Gbps	10 Gbps	20 Gbps	35 Gbps
Max IPS	2 Gbps	3 Gbps	5 Gbps	10 Gbps
Max IPSec VPN	1 Gbps	2 Gbps	3 Gbps	5 Gbps
Max IPSec/SSL VPN Peers	5000	10,000	10,000	10,000
Platform Capabilities				
Max Firewall Conns	750,000	1,000,000	2,000,000	2,000,000
Max Conns/Second	50,000	125,000	200,000	350,000
Packets/Second (64 byte)	1,500,000	3,000,000	5,000,000	9,000,000
Base I/O	8 GE + 2 10 GE	8 GE + 2 10 GE	6 GE + 4 10GE	6 GE + 4 10GE
Max I/O	16 GE + 4 10 GE	16 GE + 4 10 GE	12 GE + 8 10GE	12 GE + 8 10GE
VLANs Supported	250	250	250	250
HA Supported	A/A and A/S	A/A and A/S	A/A and A/S	A/A and A/S

High Performance Multi-Service Cisco ASA 5585-X Series

Under the Covers

2 RU Chassis

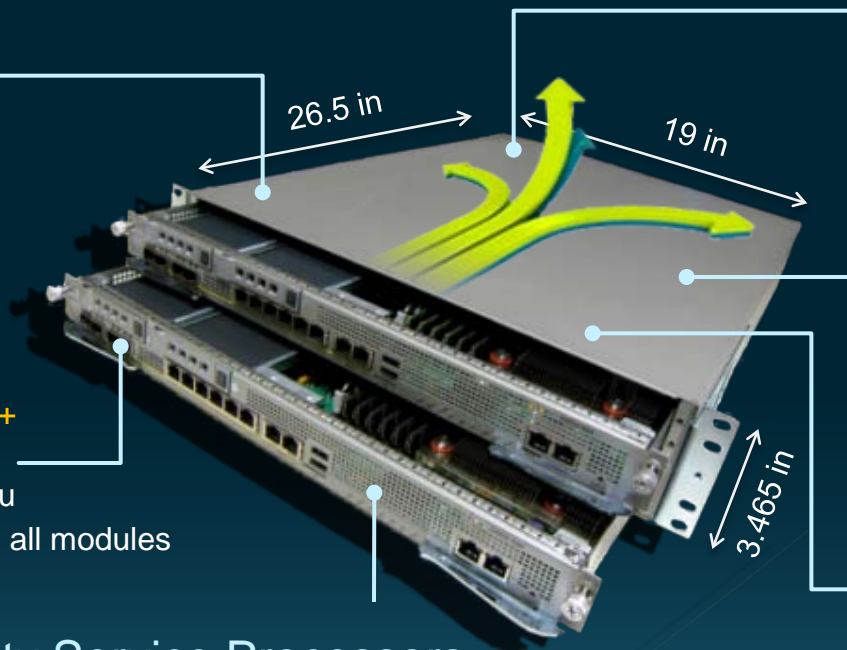
- 2 x full-slot modules
- 1 x full-slot + 2 x half-slot modules
- OIR capable

GE Ports

- Up to 8 x 10G SFP+ with OIR support
- Up to 16 x 1GbE Cu
- SFP/SFP+ slots on all modules

Security Service Processors

- Multi-services capable
- Dedicated 64bit multi-core processors
- Future-proof hardware



Redundant Hot Swappable Power Supply Units

- Front to back air flow

Multi Gigabit Fabric

- Passive backplane
- Module to module communications
- Packet prioritization and shaping

eUSB

- 2 GB internal
- Convenience storage
- Security credentials

ASA 5585-X Firewall/VPN Module Hardware Comparison



ASA 5585-X

	ASA SSP-10	ASA SSP-20	ASA SSP-40	ASA SSP-60
Multi Core Processors	Yes	Yes	Yes (Dual CPU)	Yes (Dual CPU)
Maximum Memory	6 GB	12 GB	12 GB	24 GB
Maximum Storage	2 GB eUSB	2 GB eUSB	2 GB eUSB	2 GB eUSB
Ports	2 x SFP+ 8 x 1GbE Cu 2 x 1GbE Cu Mgmt	2 x SFP+ 8 x 1GbE Cu 2 x 1GbE Cu Mgmt	4 x SFP+ 6 x 1GbE Cu 2 x 1GbE Cu Mgmt	4 x SFP+ 6 x 1GbE Cu 2 x 1GbE Cu Mgmt
Crypto Chipset	Yes	Yes	Yes	Yes

ASA 5585-X IPS Module Hardware Comparison



ASA 5585-X

	IPS SSP-10	IPS SSP-20	IPS SSP-40	IPS SSP-60
Processor	Yes	Yes	Yes (Dual CPU)	Yes (Dual CPU)
Maximum Memory	6 GB	12 GB	24 GB	48 GB
Maximum Storage	2 GB eUSB	2 GB eUSB	2 GB eUSB	2 GB eUSB
Ports	2 x SFP+ 8 x 1GbE Cu 2 x 1GbE Cu Mgmt	2 x SFP+ 8 x 1GbE Cu 2 x 1GbE Cu Mgmt	4 x SFP+ 6 x 1GbE Cu 2 x 1GbE Cu Mgmt	4 x SFP+ 6 x 1GbE Cu 2 x 1GbE Cu Mgmt

High Availability

Hardware

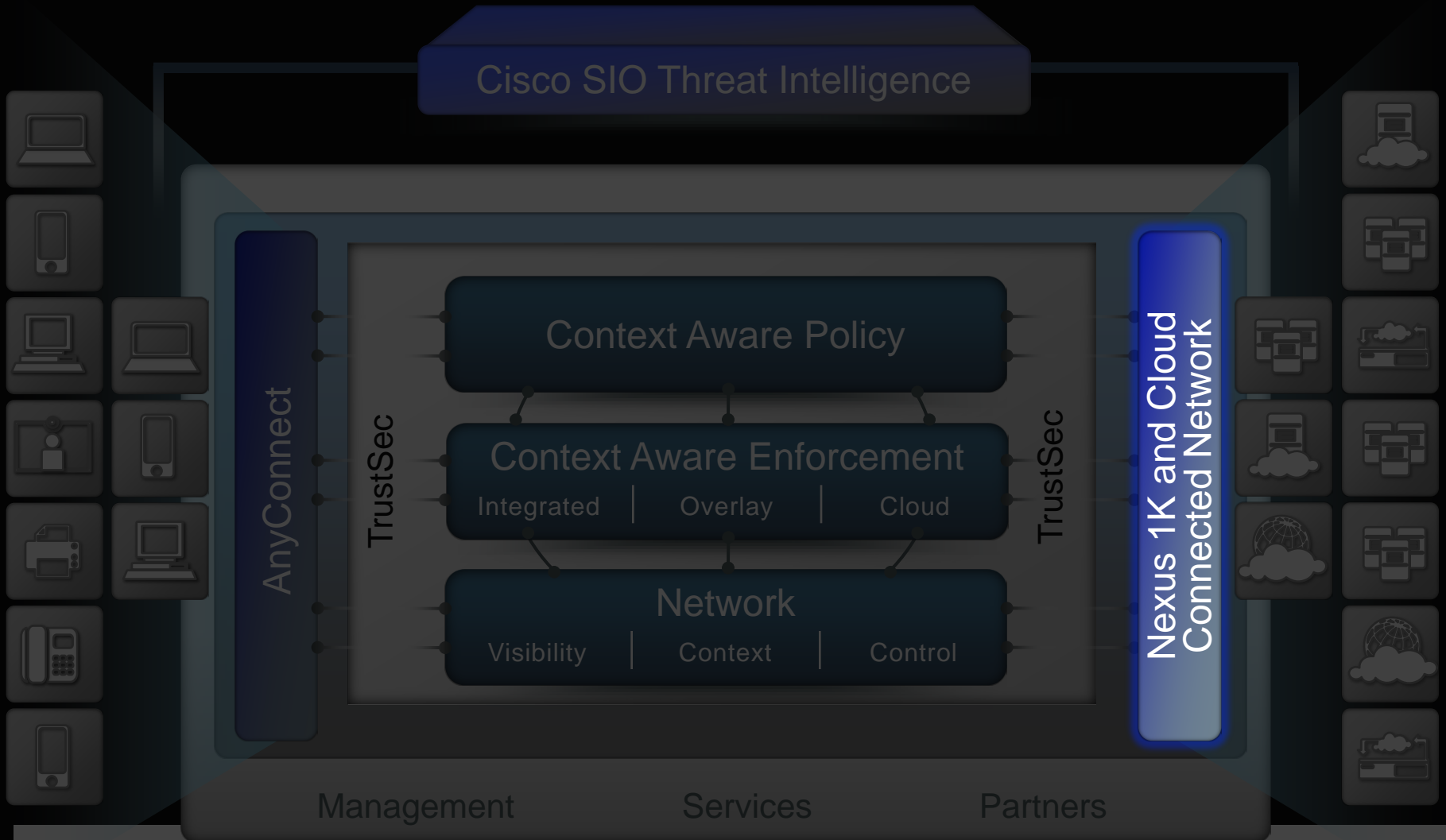
- Redundant hot-swappable power supplies
- OIR capable SFP/SFP+ modules

Software

- Firewall A/S and A/A support
- IPS fail-open and fail-close support



Cisco SecureX Architecture



Virtual Security: Evolving Security Concerns

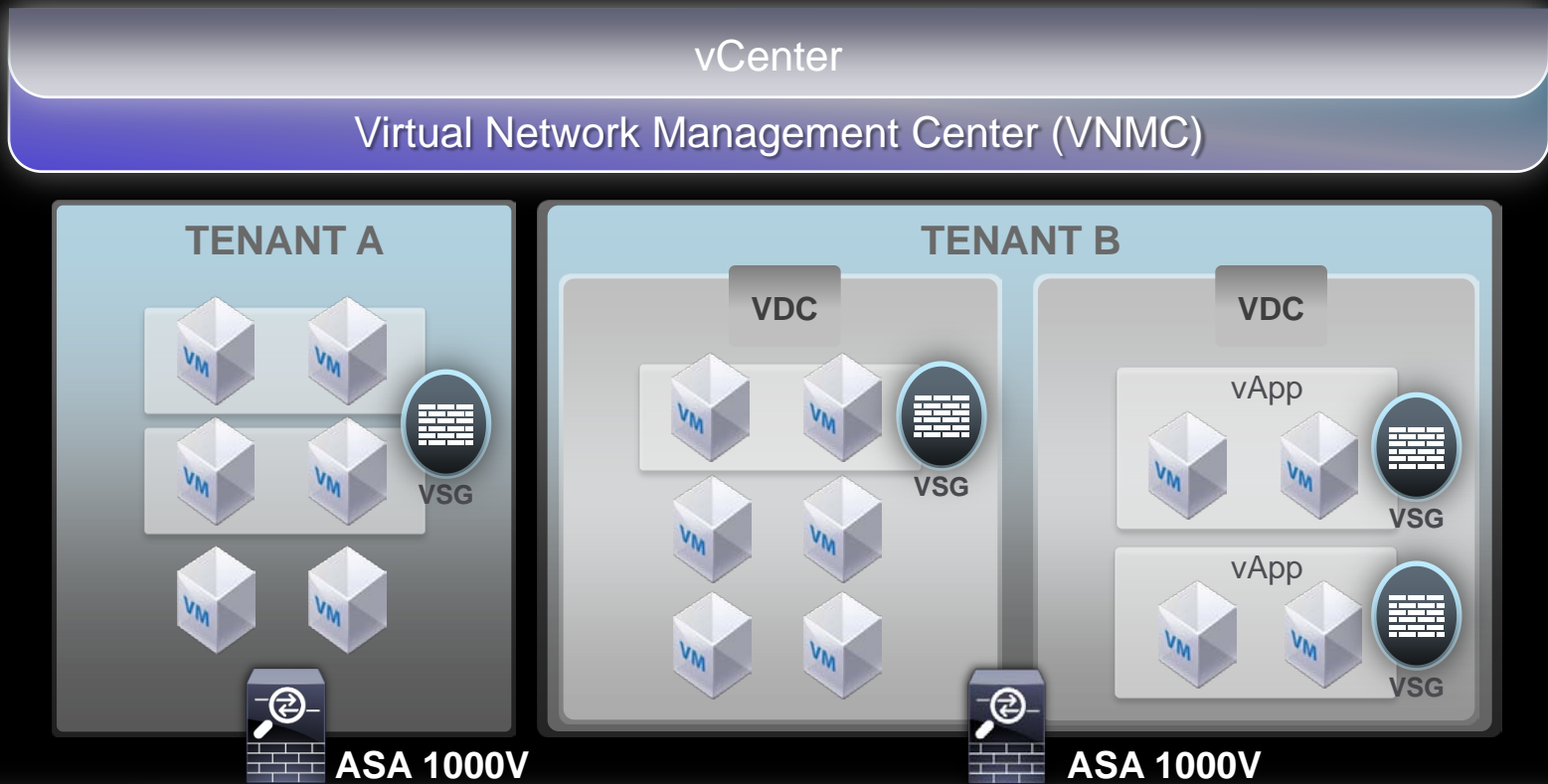
Hybrid security solutions

Feature consistency across physical and virtual security solutions

Single manager across hybrid portfolio (simplicity)

Extend role based management to virtual world

ASA 1000V: Cisco's Cloud Firewall

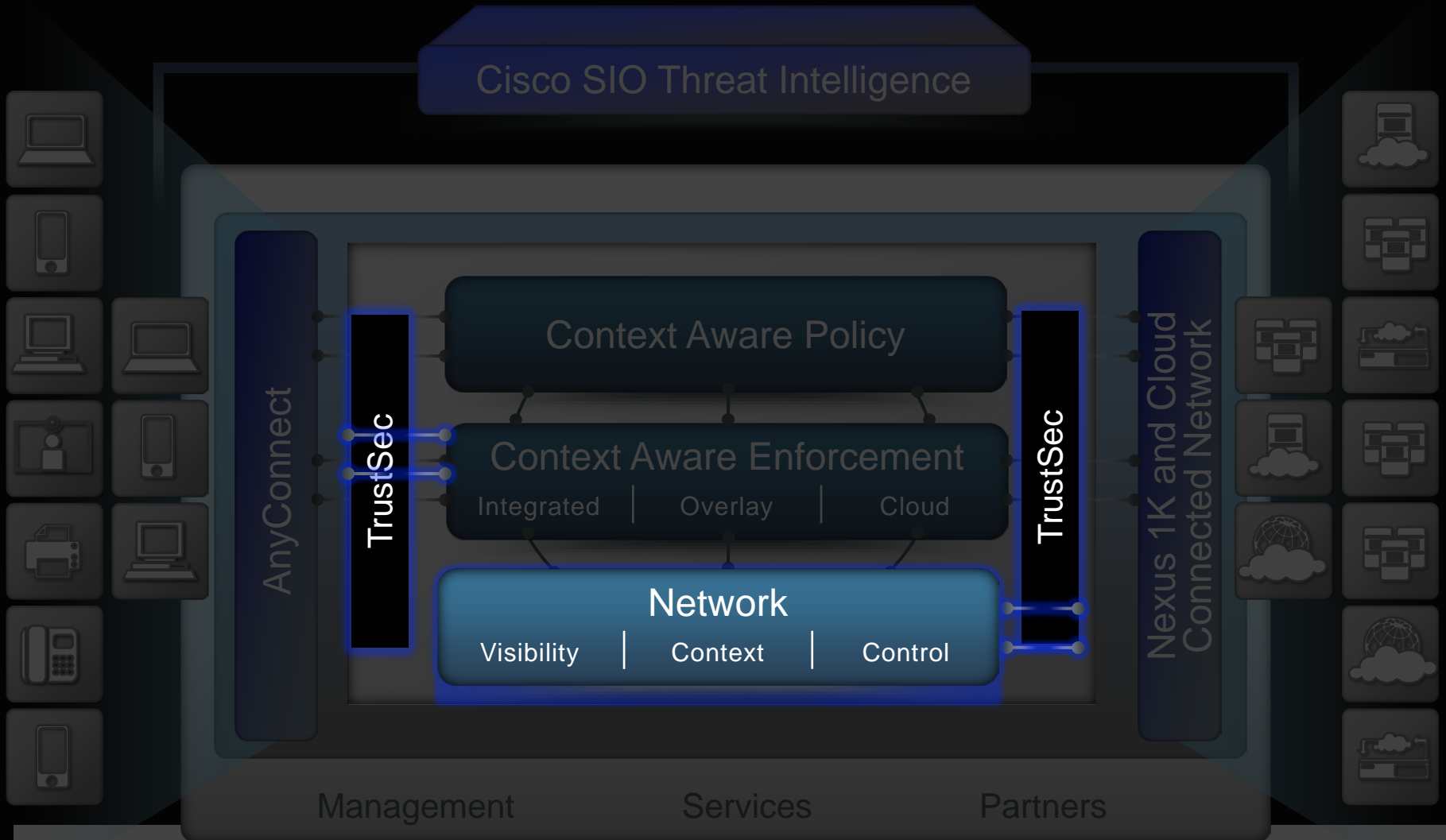


Hypervisor

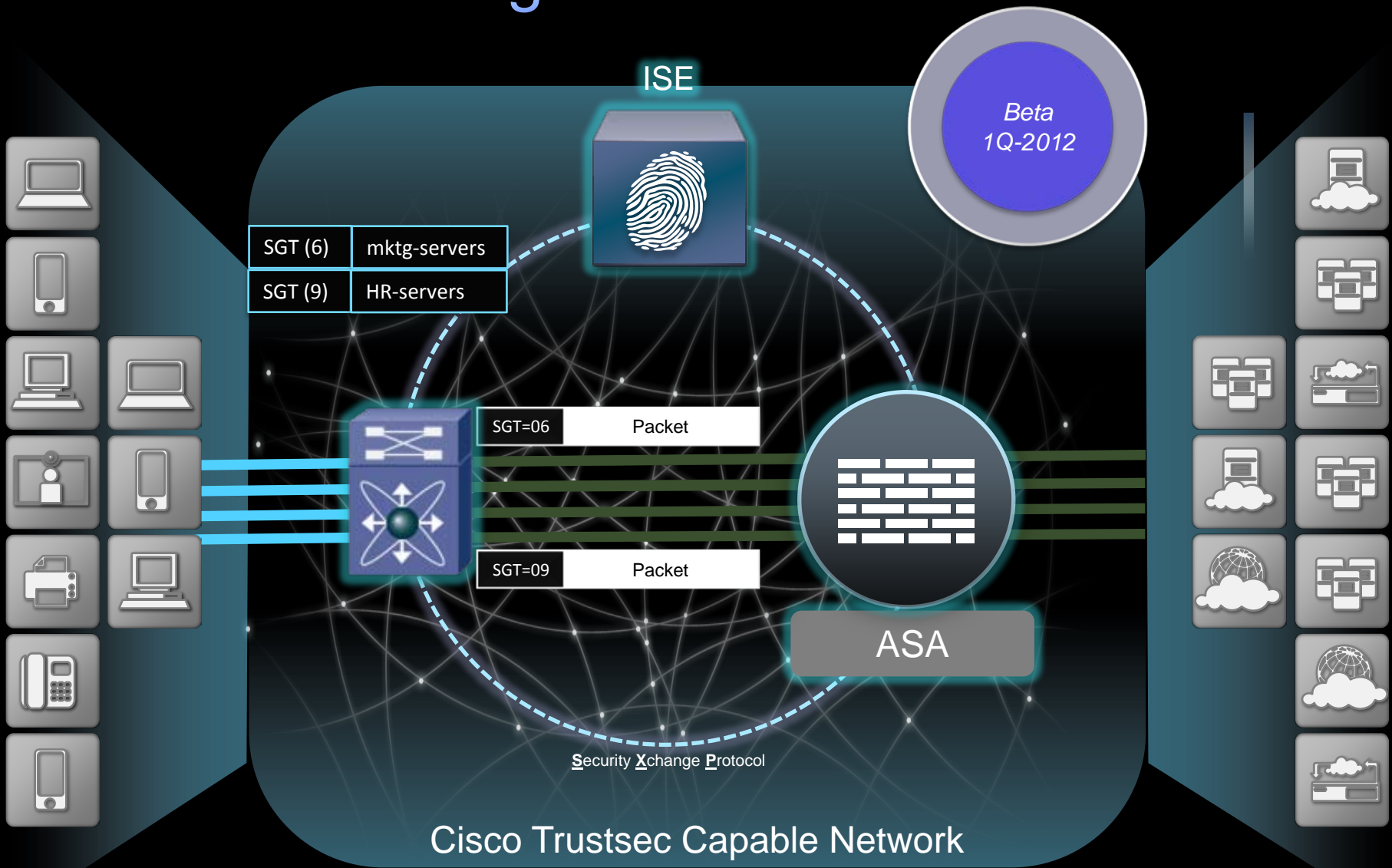
Nexus1000V

vPath

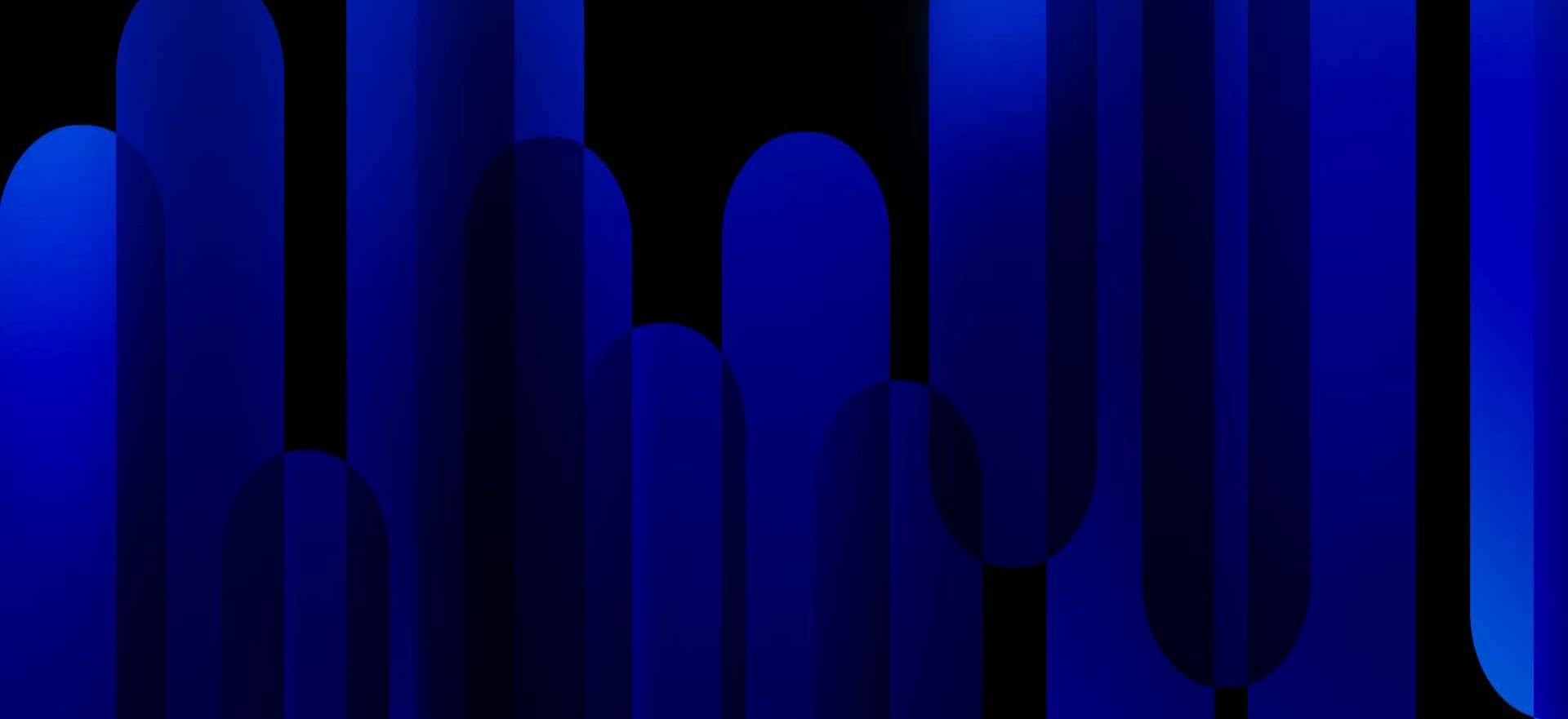
Cisco SecureX Architecture



ASA-Trustsec Integration



Cisco Trustsec Capable Network



IPS

Why Do Customers Need an IPS?

Compliance Mandates

- PCI Compliance (Retail); HIPAA (Healthcare); Sarbanes-Oxley/GLBA (Finance)
- Fines for noncompliance

Application and Infrastructure Availability

- Minimize risk of security breach
- Minimize downtime due to security breach
- Reduced patch deployment urgency

Data Loss Prevention

- Protection of sensitive or confidential information
- Tarnished reputation from security compromises

Cisco SecureX Architecture



Security Intelligence Operations



SensorBase

4 TB

DATA RECEIVED PER DAY

35%

WORLDWIDE TRAFFIC

Threat Operations Center

\$100M

SPENT IN DYNAMIC RESEARCH
AND DEVELOPMENT

500

ENGINEERS, TECHNICIANS
AND RESEARCHERS

Dynamic Updates

8M

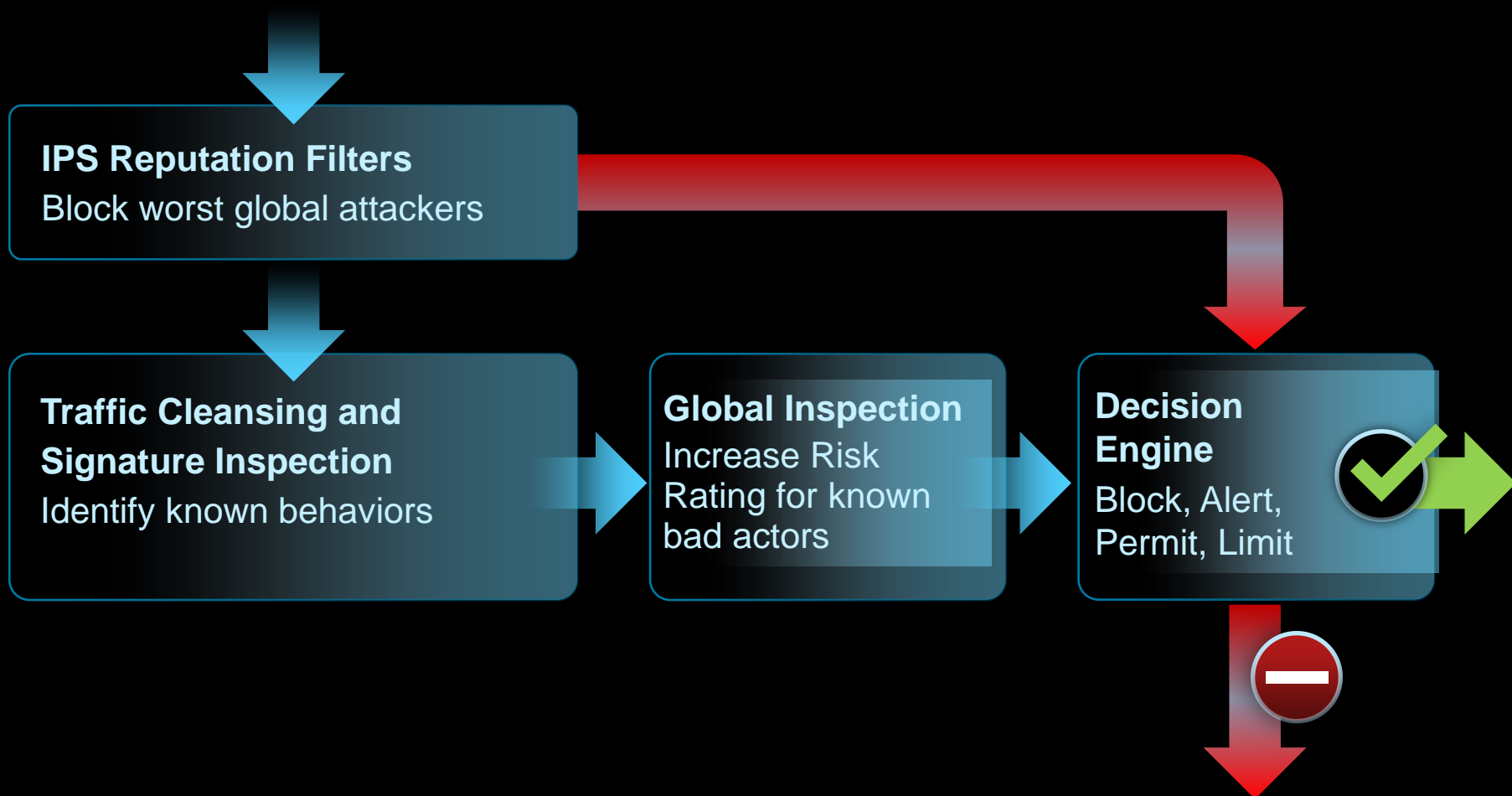
RULE UPDATES

6,500+

SIGNATURES

Cisco IPS Global Correlation

Innovations in Threat Management



Cisco IPS Defense InDepth

Innovations in Threat Management

Cisco SIO

↻ IPS

Attackers

REPUTATION
FILTER

GLOBAL CORRELATION
INSPECTION

Attacks

TRAFFIC
CLEANSING

SIGNATURE
TECHNOLOGY



Data Center



Campus



Perimeter

Comprehensive Security - Guaranteed



100% of Cisco Security advisories

100% of Microsoft Security Bulletins

100% of Critical Enterprise App Vulnerabilities

100% in 24 Hours

90% in 90 Minutes (Cisco, Microsoft)

Botnet Traffic Filter

