

EMEA PARTNER CONFERENCE

IDEAS/Connected
Spain // May 9-11, 2016

#JuniperIDEAS



DC Solutions

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Comparing vSRX with cSRX

	vSRX	cSRX
Use-Cases	Integrated routing, security, NAT, VPN, high performance	L4-L7 Security Services (FW, IPS, AppSecure), low footprint
vCPU Requirement	Statically reserve 2 vCPUs	<ul style="list-style-type: none">• No static reservation required• Workload-based resource utilization
Memory Requirement	4GB	100MB
Boot-up Times	~7 minutes	Less than a second
Image Size	3GB	<150MB

Disclaimer

This statement of product direction sets forth Juniper Networks' current intention and is subject to change at any time without notice. No purchases are contingent upon Juniper Networks delivering any feature or functionality depicted on this statement.

DC Architectures



Juniper Switches Support Diverse Architectures

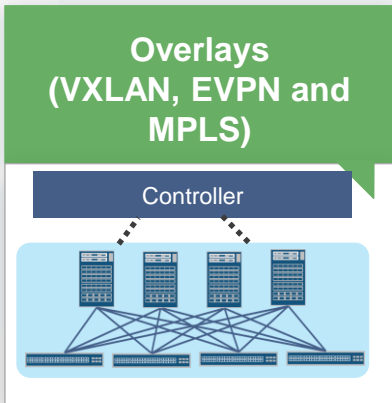
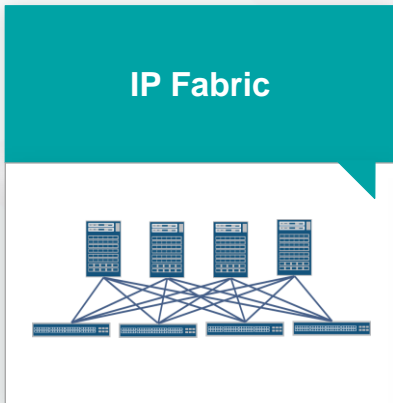
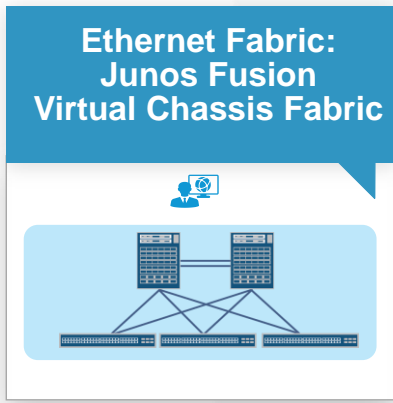
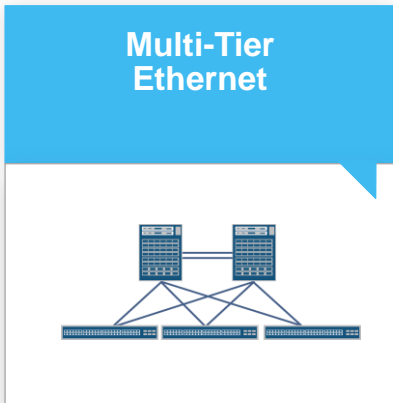
Network Ops



DevOps



IT/Cloud Ops



Common Building Block



QFX10K
Spine Switches



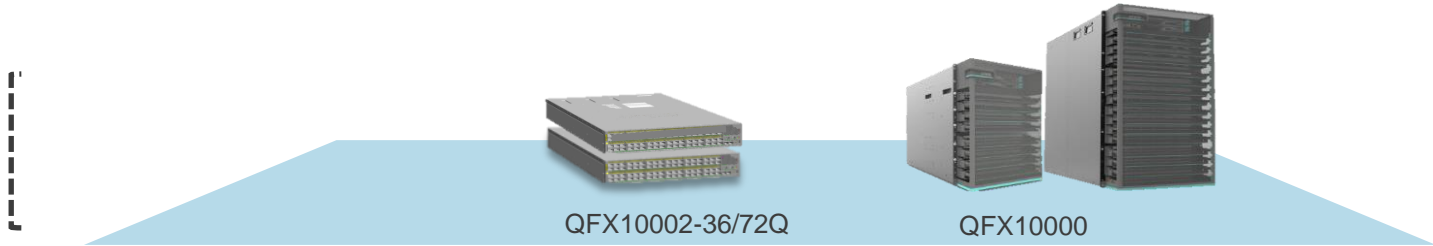
QFX5K Spine/Leaves Switches

Industry Leading Portfolio for the DC

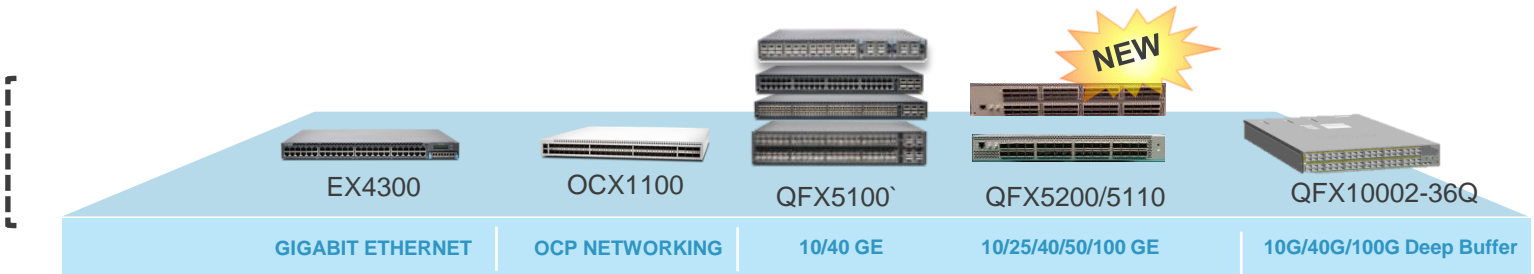
DC EDGE



SPINE
FABRIC
DCI



LEAF



QFX 51xx Update



QFX5100 Family – Currently Shipping with Trident 2 Silicon



QFX5100-48S

48 x 10GbE / 1GbE + 6 x 40GbE
1.44 Tbps / 1.08 Bpps



QFX5100-48T

48 x 10GbE / 1GbE + 6 x 40GbE
1.44 Tbps / 1.08 Bpps



QFX5100-96S

96 x 10GbE / 1GbE + 8 x 40GbE
2.56 Tbps / 1.44 Bpps



QFX5100-24Q

24 x 40GbE + 2 slots each 4 x 40GbE
2.56 Tbps / 1.44 Bpps



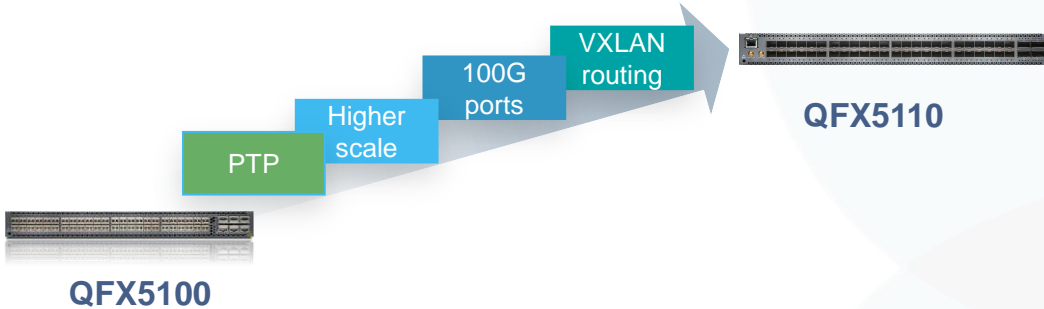
QFX5100-24Q-AA

24 x 40GbE + Module slot for single double wide
FPGA or 2 QIC modules
2.56 Tbps / 1.44 Bpps



QFX5110

QFX5110 –Why we built it?



- QFX5100 is the current 10G/40G DC switch in the portfolio
- Wide spread adoption of the overlay technologies
- 100G access to aggregation as 40G server attach gains traction
- QFX5110 will provide 10G/40G for server attach
- Inline VXLAN routing at the TOR level now possible with the QFX5110 due to the Trident2+ capabilities
- 4x100G ports for uplink from leaf to spine or spine to core
- Improved scale for VRF, MPLS labels, ACL and port buffer

	QFX5100	QFX5110
Inter VXLAN routing	No	Yes
100G ports	No	4
Ingress filters	4k*	16k*
VRF	1k	4k
MPLS Labels	16k	32k
Port buffers	12MB	16MB
PTP connectors	No	Yes

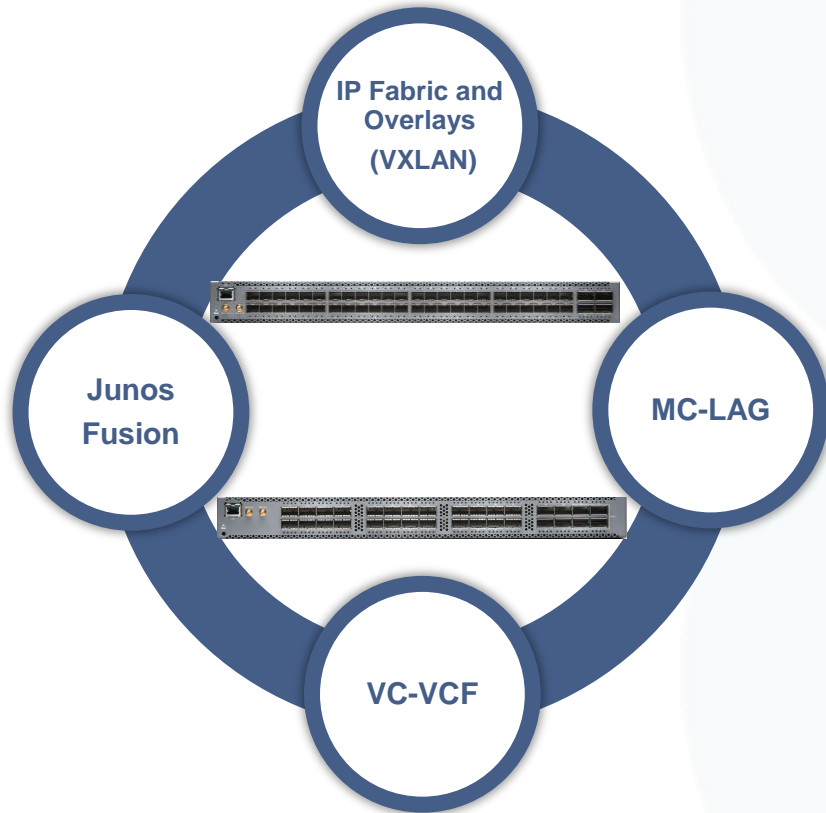
* HW capable

QFX5110 Data Center Switches -Overview



	QFX5110-48S	QFX5110-32Q
Size, RU	1	1
Switch Throughput	880Gbps	1.28Tbps
10GbE* (Breakout Cable, QFSP+)	64	104
40GbE (QSFP+)	4	32
100GbE (QSFP28)	4	4
PTP	Built-in	Built-in
Fans	5 x AFO/AFI	5 x AFO/AFI
Power Supplies	2 x 650W 1+1 Redundancy	2 x 650W ea 1+1 Redundancy

QFX5110 – Where will it fit?

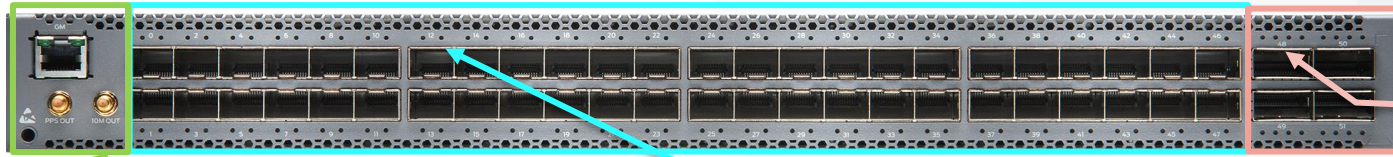


- Will support Multicast/VXLAN, OVSDB/VXLAN and EVPN/VXLAN
- MC-LAG
- Standalone and Mixed mode VC/VCF
- Satellite device for Junos Fusion



Hardware and Software Overview

QFX5110-48S



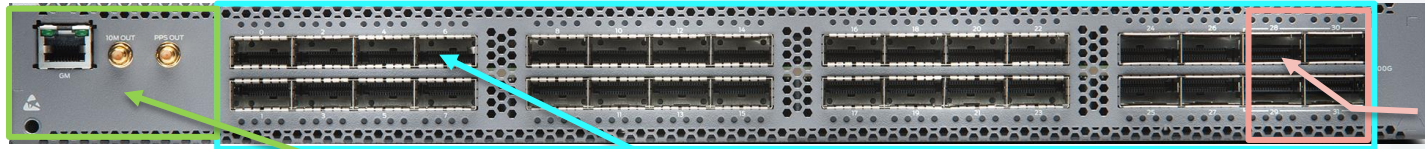
- 4x 40/100G ports

- 48x 10G ports
- PTP connectors: GbE port for Grand Master connectivity + 2 SMB connectors for PPS (Pulse per second) and 10MHz clock output



- Dual PSU with 1+1 redundancy with AC & DC option
- 5 Fan FRUs with n+1 redundancy
- 1 RJ45 and 2 SFP Management ports
- 1x USB 2.0
- 1x RS-232 Console port

QFX5110-32Q



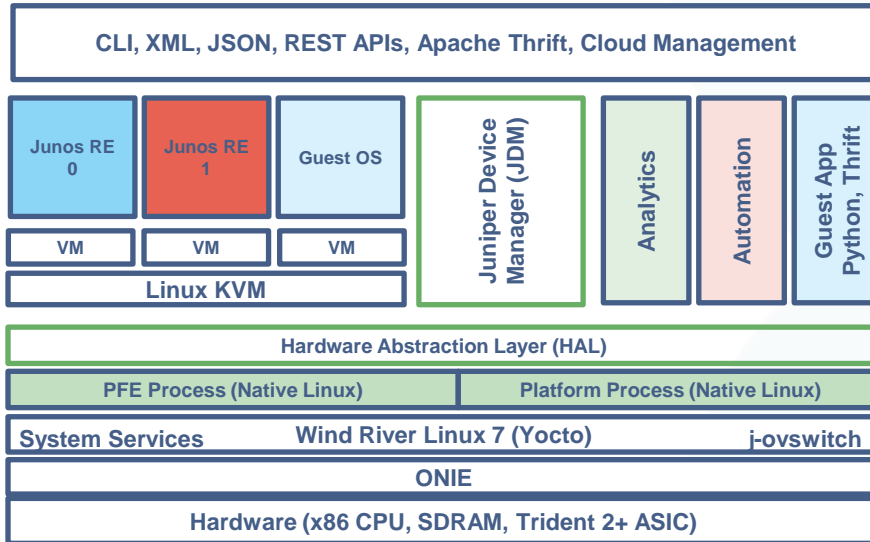
• 4x 100G ports

- 32x 40G ports
- PTP connectors: GbE port for Grand Master connectivity + 2 SMB connectors for PPS (Pulse per second) and 10MHz clock output



- Dual PSU with 1+1 redundancy with AC & DC option
- 5 Fan FRUs with n+1 redundancy
- 1 RJ45 and 2 SFP Management ports
- 1x USB 2.0
- 1x RS-232 Console port

QFX5110 –Software Architecture



- Guest VM and container support
- PFE and Platform process separated from JUNOS
- Multicore CPU for improved performance
- RPM packaging for upgrades

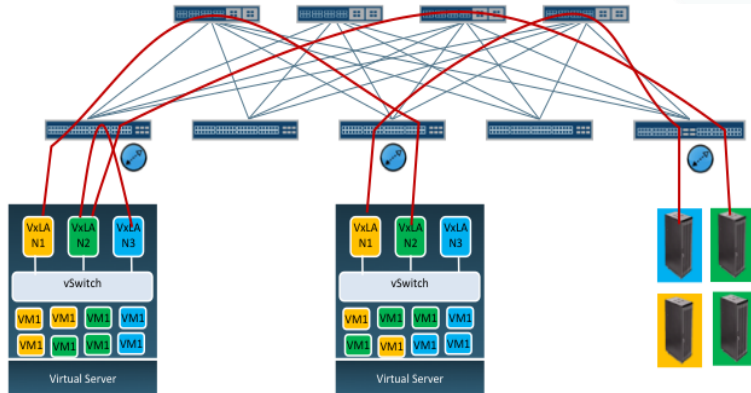


Use Cases

QFX5110 –Use Case

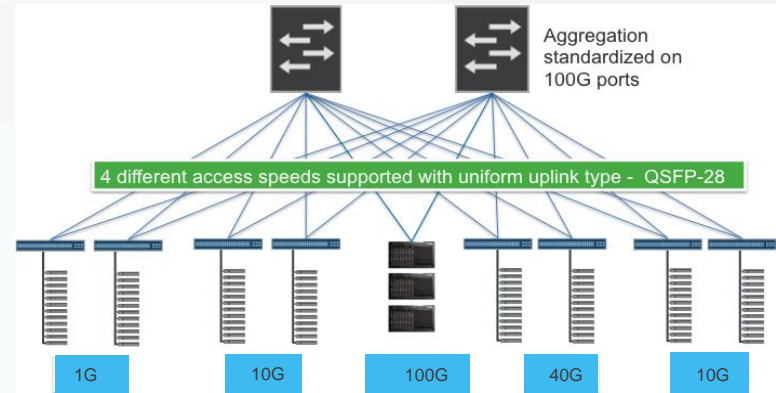
Overlay Tunnel Routing

- VXLAN Routing in and out of tunnel
- Efficient for East-West traffic
- Translation from overlay encapsulation to L2/L3 VPNs at aggregation layer



100G Uplinks

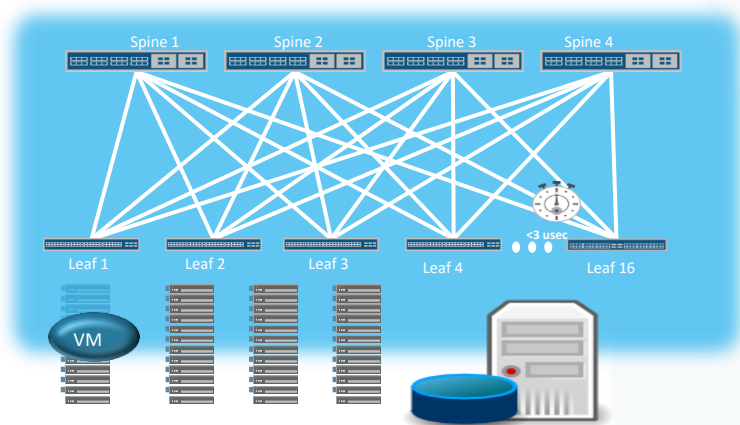
- Standardized 100G uplinks for 40G and 10G ToRs
- Multi-speed ports



QFX5110 –Use Case (Contd..)

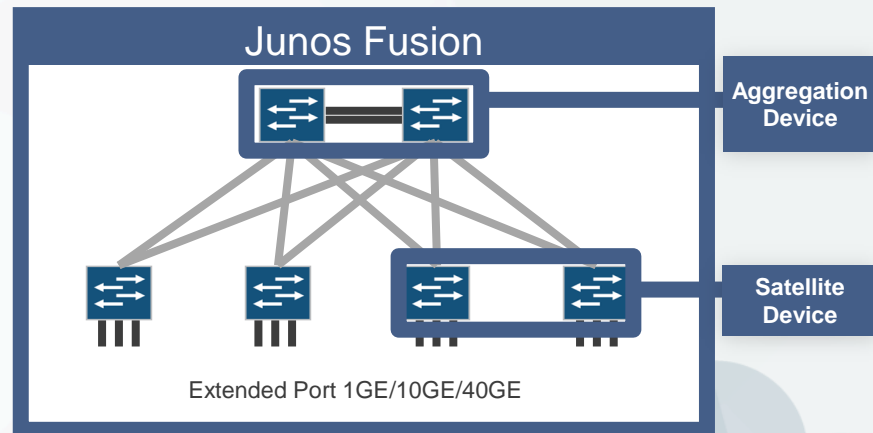
Virtual Chassis Fabric

- Single Managed device
- Resilient control and data planes
- Device auto-discovery
- Auto-provisioning of devices

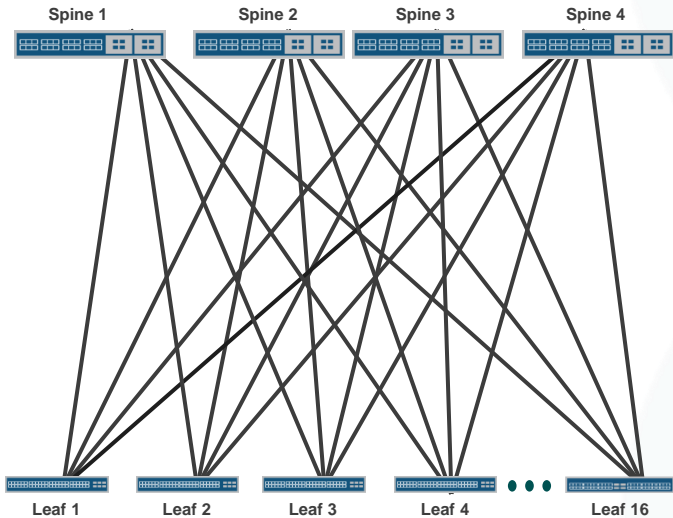


JUNOS Fusion

- QFX10k as the aggregation device
- QFX5110 will plug in as the satellite device
- Simplified management



QFX5110 – Role in VCF

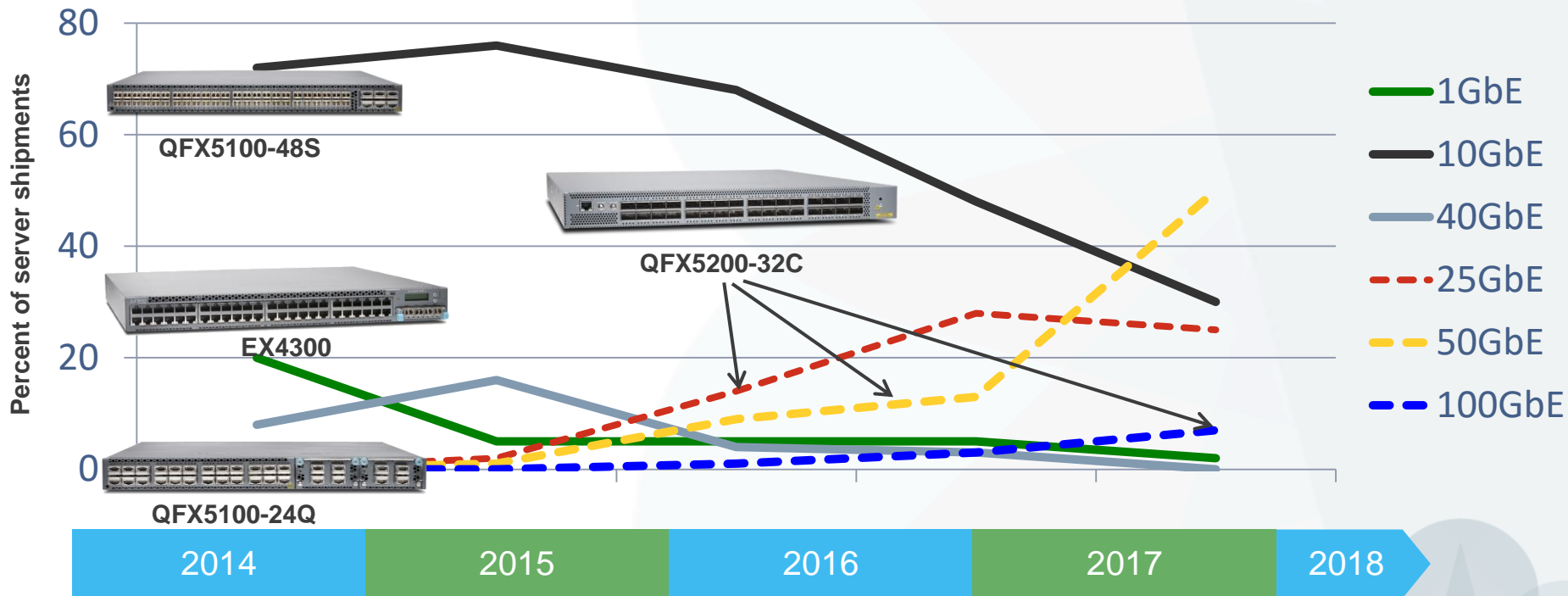


- QFX5110-32Q to operate in Spine/RE role
- Can be mixed with QFX5100 in a spine/RE role
- QFX5110-48S to be used as leaf/LC role
- Can be mixed with QFX5100 and EX4300 in leaf/LC role



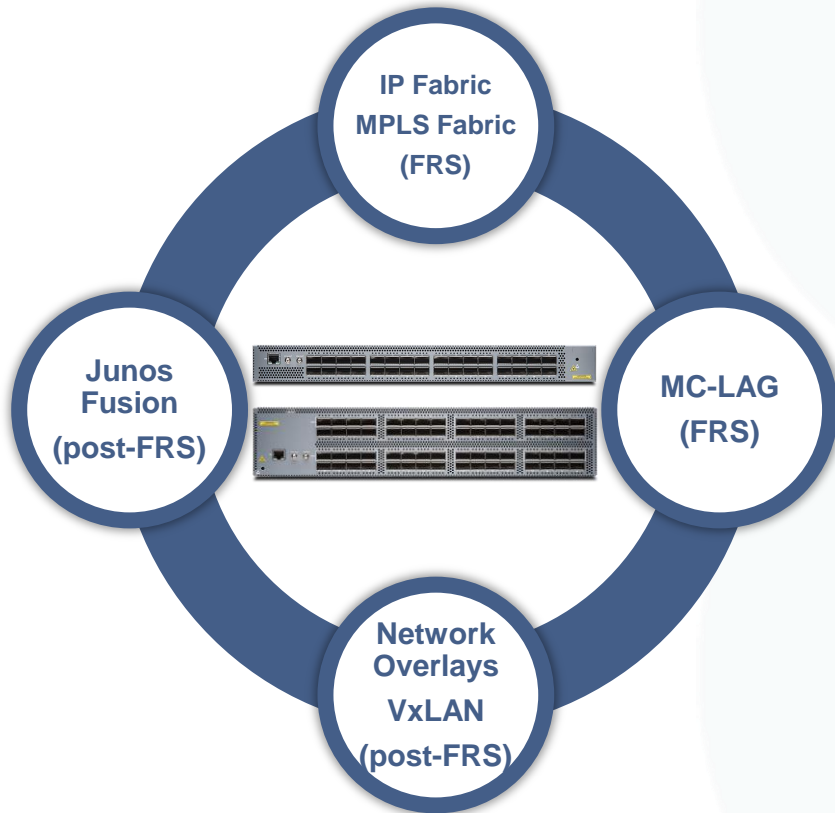
QFX5200 Family

Cloud Speed Adoption



Source: Dell'Oro 2015

QFX5200



Problem

- Coping up with change in server access technology
- Investment protection & SDN adoption
- Applications driving architecture diversity
- Increasing operations complexity & cost

Solution

- Choice of 10GbE, 25GbE, 40GbE, 50GbE, 100GbE
- VXLAN L2 gateway, OVSDB and EVPN
- ISSU (post-FRS) & automation integration

Benefits

- Future proof and investment protection
- Open & standards based for multi-vendor network
- ZTP for simplified operation
- ISSU (post-FRS) with less than one second traffic impact during network software upgrades, upgrade time changed from 5-15 minutes to seconds
- OpenFlow (post-FRS)

NG Fixed 40GbE/100GbE Data Center Leaf/ Spine Switches Summary



QFX5200-32C



QFX5200-64Q

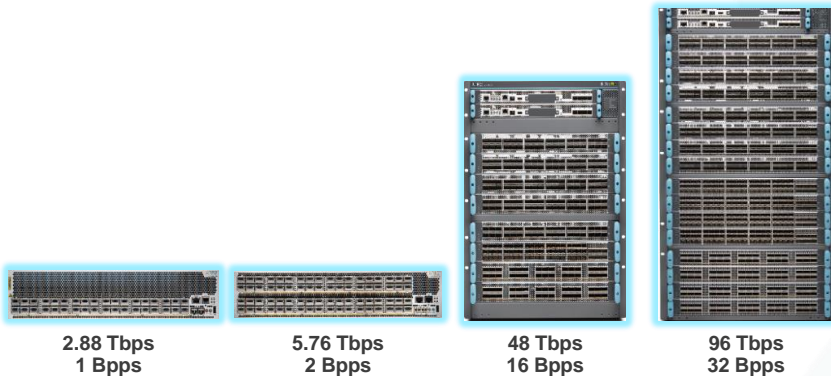
Size, RU	1	2
Switch Throughput	3.2Tbps	3.2Tbps
25GbE (Breakout Cable, QSFP28)	128	128
10GbE* (Breakout Cable, QFSP+)	128	128
40GbE (QSFP+)	32	64
50GbE (Breakout Cable, QSFP28)	64	64
100GbE (QSFP28)	32	32
PTP	Built-in	Built-in
Power Supplies	850W each	1600W each

*Port speeds < 10G are not supported



QFX10000 Family

QFX10K: Next Gen Spine with Multi-Vector Scaling



Industry Leading 100G Density
at 480 100G ports

Multi-Vector Scaling on all dimensions
(Buffer, IP etc.)

Market Trends & Customer Careabouts

- Physical and logical scale for cloud networks
- Transition to 100GbE
- Transition to SDN infrastructure
- Increasing operational complexity and cost

Solution

- Most scalable spine and core switch
- 10GbE, 40GbE and 100GbE (400GbE ready)
- Integrated high scale physical and virtual networking
- Integrated network and systems automation (Junos Fusion and DevOps)

Benefits

- Multi dimensional scale (bandwidth, hosts, buffer, filters)
- Overlay networking with standard protocols : VXLAN, EVPN, OVSDB
- Integrated precision telemetry and network analytics
- Carrier grade reliability and in service software upgrade

Q5 Silicon – Delivering Multi-Vector Scale



**Purpose-Built Silicon
delivering multi-vector
scale for the data center**

500G Full Duplex ASIC (1 Tbps)

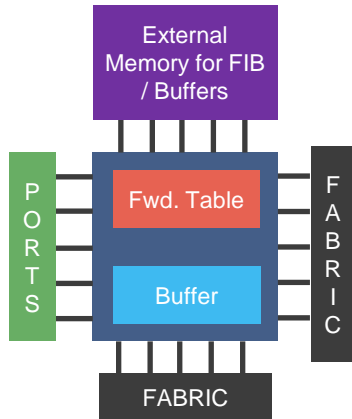
Up to 100ms of buffering per port

Feature Rich (MPLS, VxLAN Routing
etc.)

High Logical Scale
(2M host routes, 1M IPv4 / IPv6 etc.)



Choices in Chip Design



External Memory for Buffer/Forwarding Tables

- External memory for larger forwarding tables and buffers
- Typical of fixed and modular systems
- Fabric for efficient cell based forwarding

Chips

Broadcom Arad/Jericho chipsets

Juniper Q5 – Powers the QFX10K and PTX

Q5 delivers multi-vector scale better than comparable products in the market

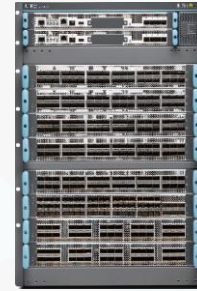
QFX1000 – Product Summary



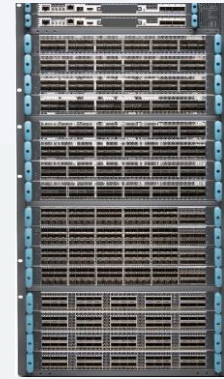
36X40GE
12X100GE
144X10GE



72X40GE
24X100GE
288X10GE



288X40GE
240X100GE
1152X10GE



576X40GE
480X100GE
2304X10GE

	QFX10002-36Q	QFX10002-72Q	QFX10008	QFX10016
MAC	256K	512K	1M	1M
FIB	512K LPM Routes (256K IPv4/256K IPv6)			
ACL	64K			
Latency	2.5us-5us			
Delay Bandwidth Buffer/Packet Buffer	12GB	24GB	Upto 12GB/LC	Upto 12GB/LC

A person is shown from the back, wearing a white VR headset. Their hands are holding the VR controllers. The image has a blue tint and a semi-transparent dark grey box on the left side containing the text "Data Center Fabrics".

Data Center Fabrics

Diverse Network Architectures

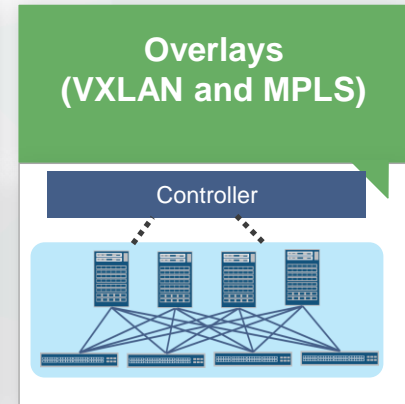
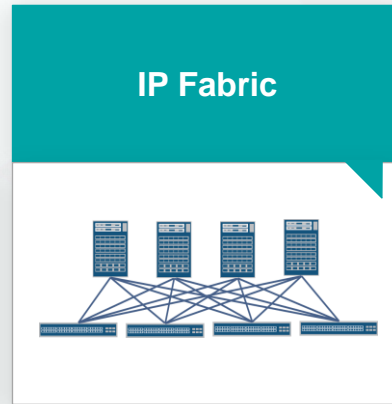
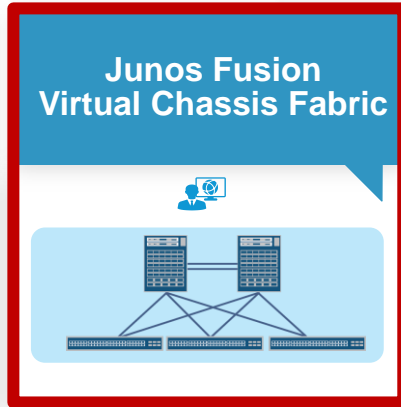
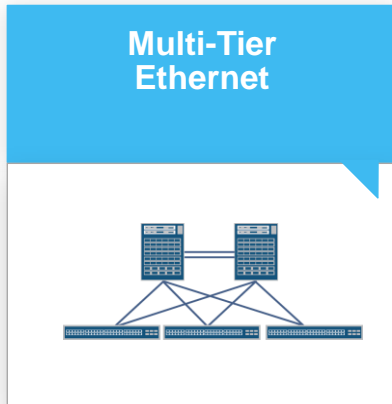
Network Ops



DevOps



IT/Cloud Ops



Common Building Block



QFX10000 Spine Switches



QFX5K Leaf Switches



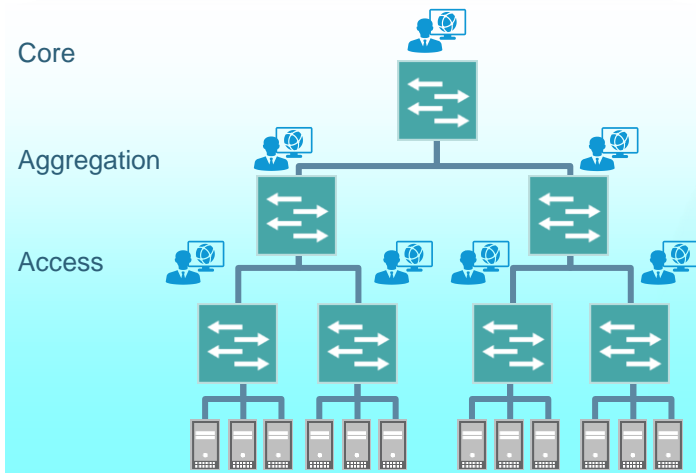
Virtual Chassis Fabric

Simplified operation



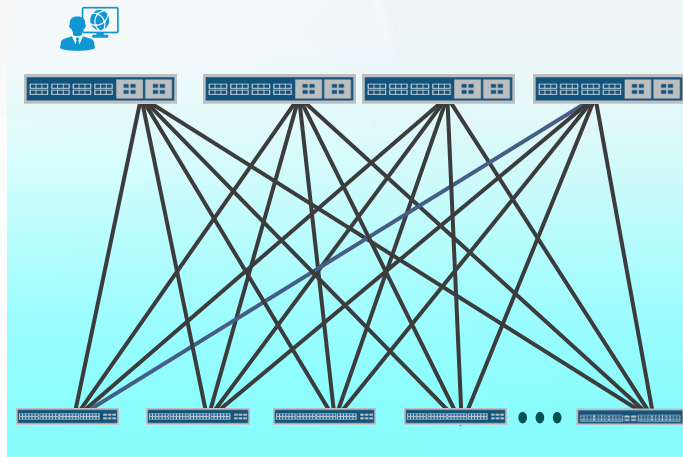
Complex Operations

Too many switches to manage
Various management tools

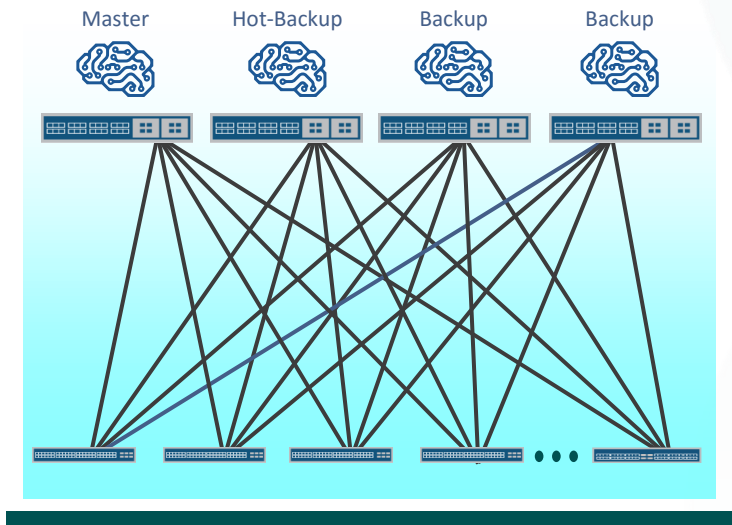


Simple Operations

"1" Switch to manage
Plug-n-play



Easy Button: Virtual Chassis Fabric



Single Switch to Manage

Scalable to 28 Leaf nodes and 4 Spine Nodes

Plug N Play Operations

Build In Resiliency at all layers

VCF Building blocks

10/40GE spine nodes



QFX5100-48S(10GE)



QFX5100-24Q(40GE)



QFX5110-32Q

ROADMAP

1/10/40GE leaf nodes



QFX3500(10GE)



QFX5100-24Q(40GE)



QFX3600(40GE)



QFX5100-48S/T Fiber /Copper(10GE)



EX4300 (1GE)



QFX5100-96S(10GE)



QFX5110-48S



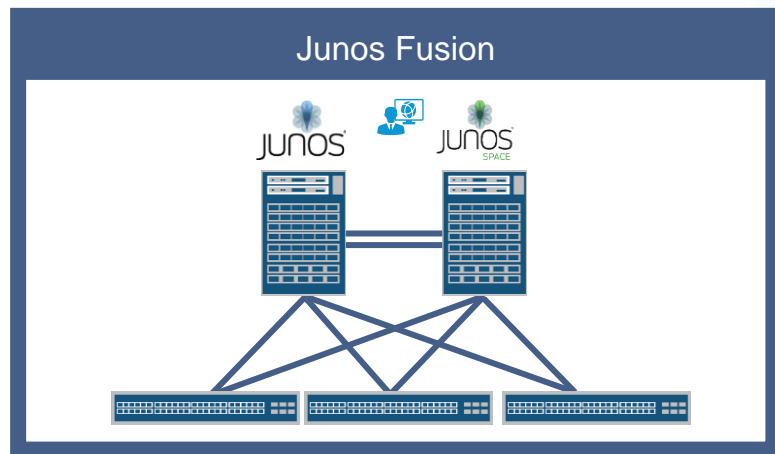
QFX5110-32Q

ROADMAP



Junos Fusion

What is Junos Fusion?



Data center networking with simplified management at scale

Resilient

Plug-and-play provisioning

Built on open protocols (802.1BR)

Scale to 128 Racks

Supported Aggregation and Satellite Devices

AGGREGATION DEVICES



QFX10000 series
MX series

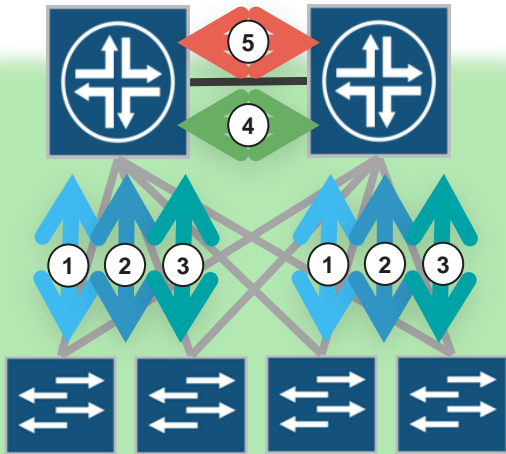
SATELLITE DEVICE



QFX510 (10GE/40GE)

EX4300 Copper (1GE)

Internal control protocols between AD and SD



1 LLDP | Devices **discovery and auto provisioning**

2 802.1BR+ | Satellites management for all **traffic related** aspects (config / statistics / ports state)

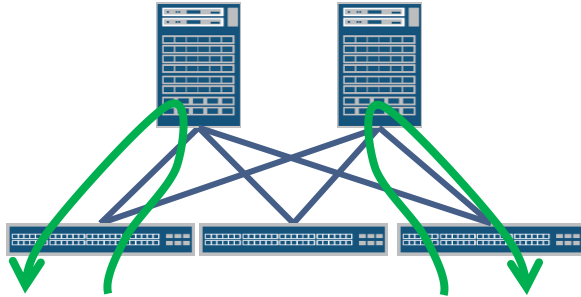
3 json-rpc | Satellites management for **non-traffic related** aspects (chassis, environment, upgrade ..)

4 Netconf | **Configuration synchronization** between Aggregation devices

5 ICCP | **LAG synchronization** between Aggregation devices (MC-LAG)

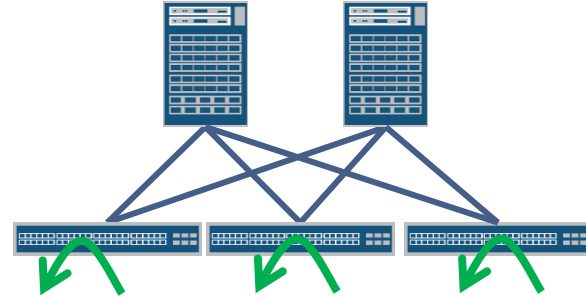
Modes of Operation

EXTENDED



- All traffic is forwarded to Aggregation Device for lookup

LOCAL SWITCHING



- For local destinations , traffic is switched on LFE locally



IP Fabrics and Overlay

Diverse Network Architectures

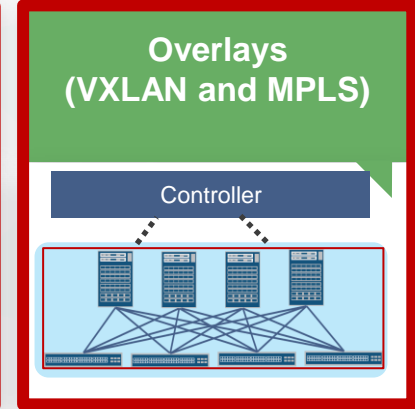
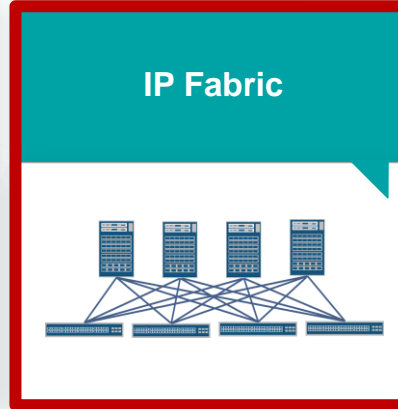
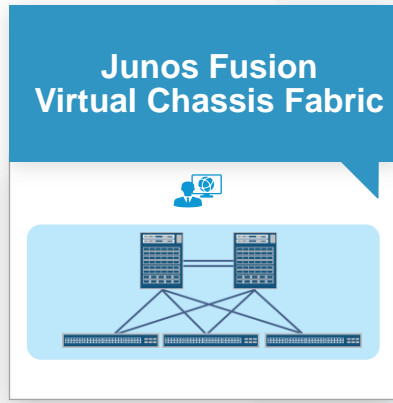
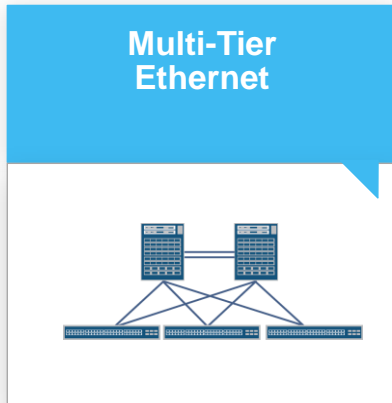
Network Ops



DevOps



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Common Building Block

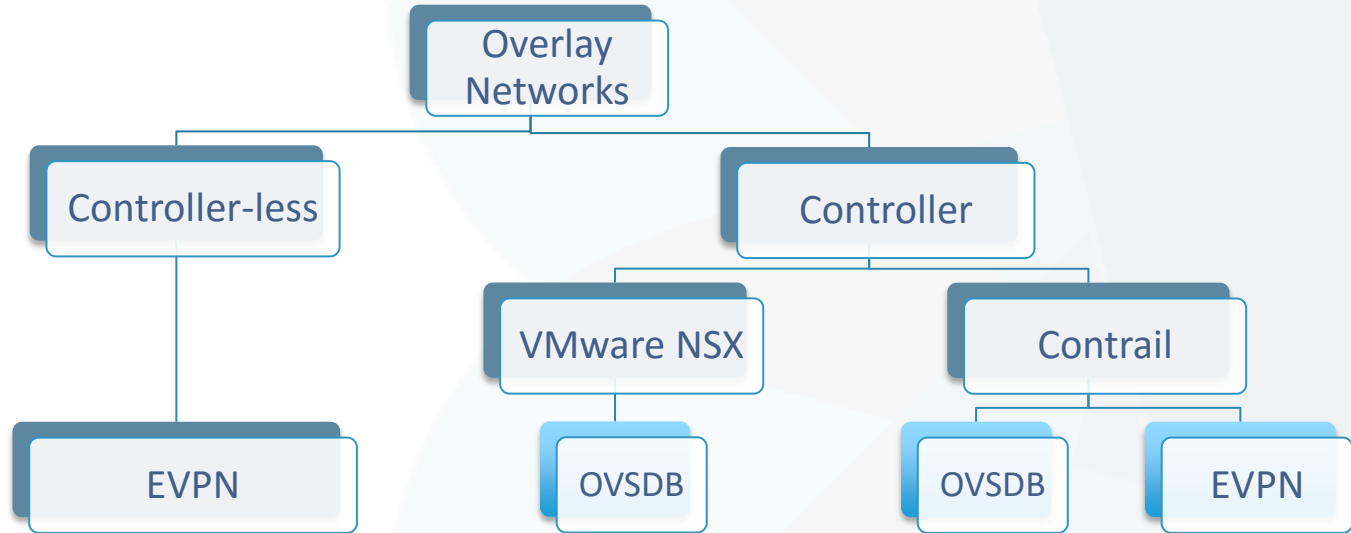


QFX10000 40G/100G
Switches



QFX5100 10G/40G Switches

VxLAN Overlays options



Overlay networks starts on the TOR
Complete independence from type of Hypervisor

Overlay networks starts in the Hypervisor
VTEPs in underlay to bridge/route between virtualized and non-virtualized

DCI Optical Solution Win big with Juniper+BTI

James Clegg – EMEA Sales Director (Optical Product Line) : jclegg@juniper.net +44 7887 628002

Chris Cousins – EMEA Technical Director (Optical Product Line) : ccousins@juniper.net +44 7974 249885

DCI Use Cases

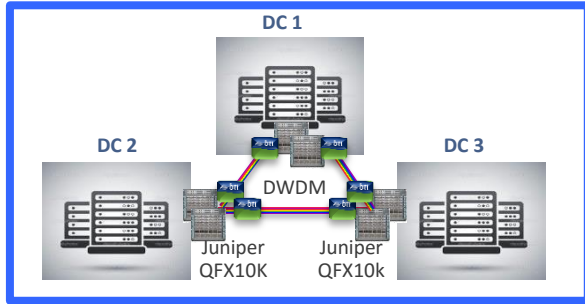
BTI proNX Management Software



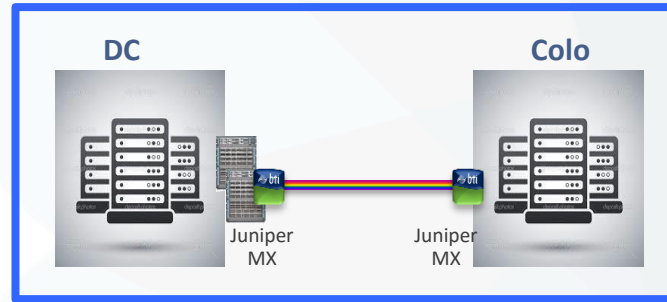
SNMP
/NETCONF

Network
Director

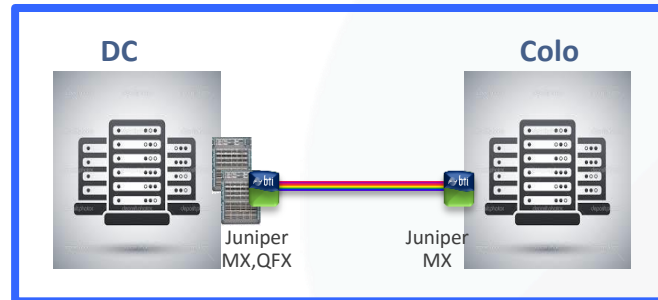
DC to DC P-to-P/Mesh



Peering /Colo



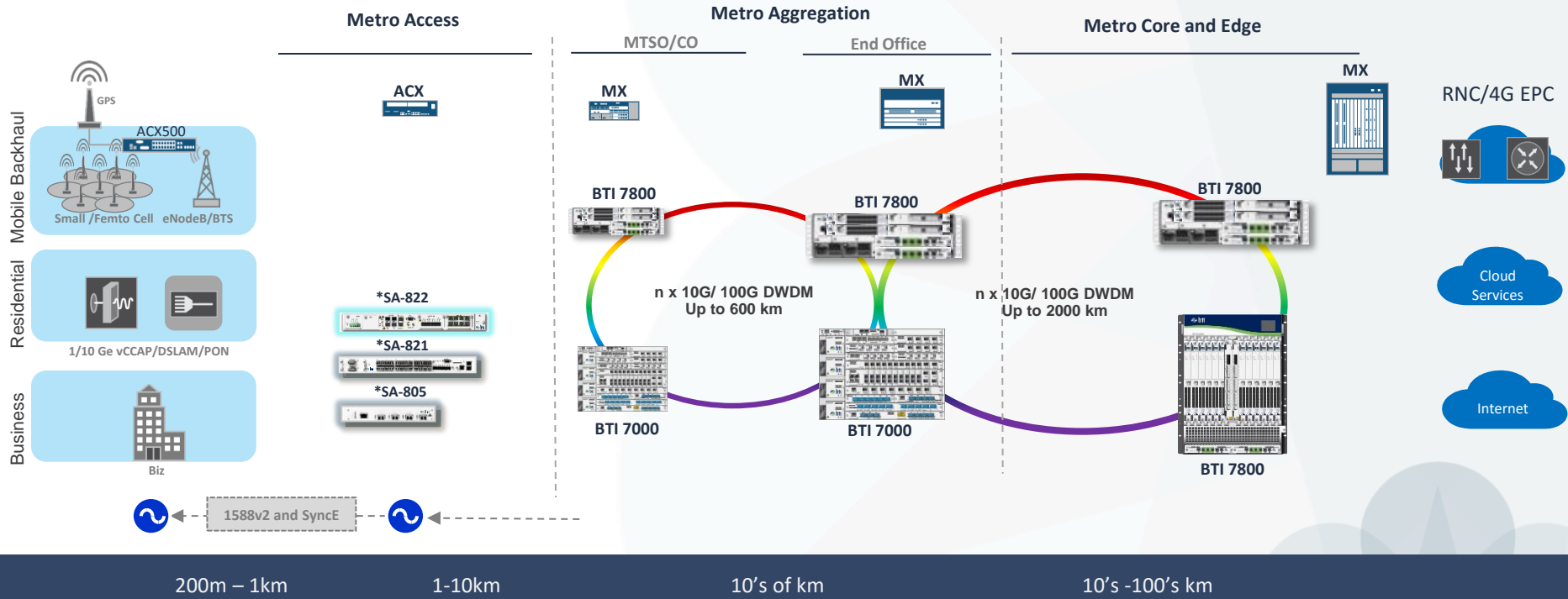
Cloud/Metro Connect



Access and Aggregation Architecture

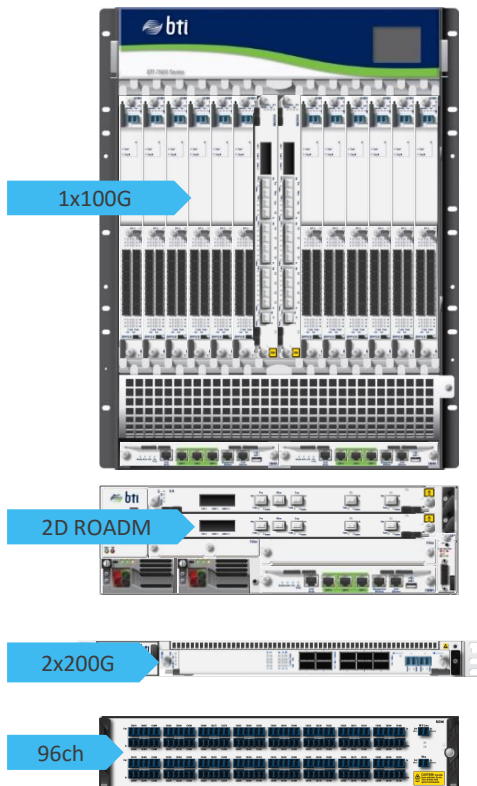


JUNOS SPACE / PSM



BTI 7800 Series Optical Layer

Coherent Optimized Toolkit of Amplifiers, ROADMs, Muxes and OPS's



ROADM

2 Degrees, 96 channels
ROADM on a blade architecture
Switchable gain stage
Coherent optimized control system

Amplifier

In-line amplifier
Pre/post amplifier
Plug & play control system

Mux

96 Channel, 50GHz, 2RU
40 Channel, 100GHz, 2RU

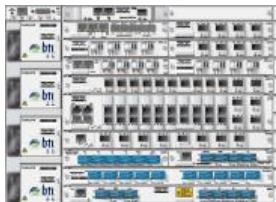
Protection Switch

Integrated 4 port
Standalone 2 – 8 port, 1RU
Client, OCh, OMS, OTS protection

BTI 7000 Series Optical Layer Overview

Metro Area Integrated transport solutions

BTI 7200 (7RU, 20 Service Slots)



BTI 7060 (2RU, 5 Service Slots)



BTI 7020 – (1RU, 2 Service Slots) Passive

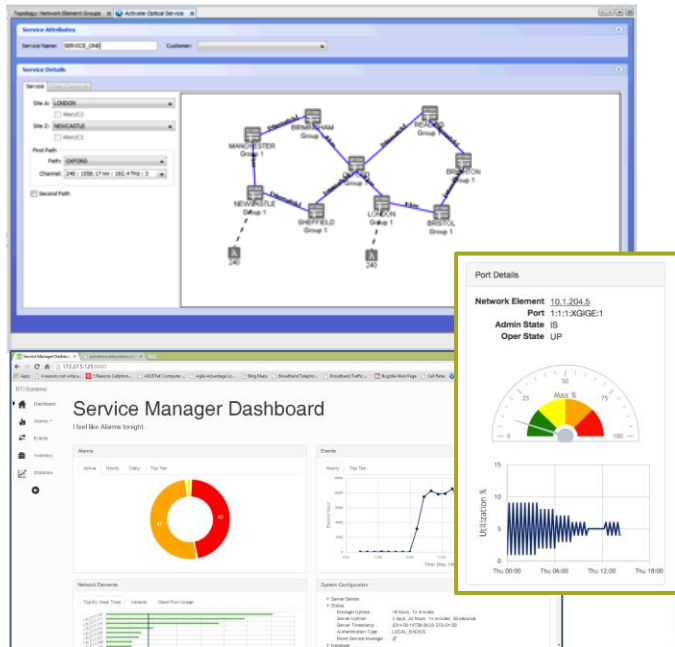


- Scalable from 6 to 60 service slots
- Common software & management system

Transponders		2.5G and 10G Wave Services
Muxponders		Sub Wavelength Services
ROADM		2 Degree, 40 channel 4 Degree, 40 channel 4 Degree, 96 channel
Optical		Nx 8 channel 40 channel 96 channel
Ethernet		Metro-E Infrastructure Ethernet Business Services Mobile Backhaul

Juniper proNX Service Manager (PSM)

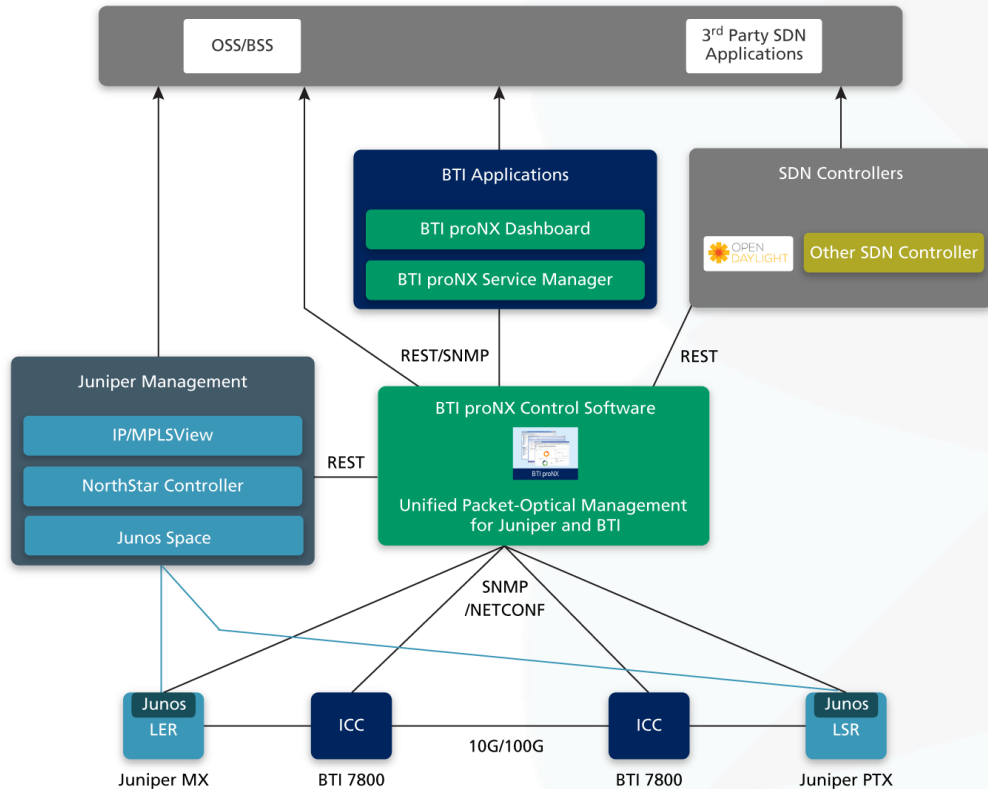
Complexity to Simplicity



- Point and click A-to-Z provisioning
 - Accelerate: Fast time to revenue
 - Simplify: Rapid training of operations personnel to provision services
 - Standardize: Elimination of costly errors
- Service Discovery & Visualization
 - Simplify: Understand what composes a service with “at a glance” visualization
- Service Troubleshooting
 - Enhanced knowledge = rapid response
 - Customer to service mapping

Integrated JNPR Solution Architecture

Simplifies Operations With Open Connections To Back Office/ OSS/ SDN



- Extends BTI proNX Service Manager features to JNPR PTX/MX devices
- Full FCAPS & end-to-end optical provisioning
- Seamless and efficient user experience
- Open interfaces for flexible integration with OSS/BSS applications
- Flexible integration with SDN architectures
- Leverages existing Junos management interfaces



Questions ?



Thank you

EMEA PARTNER CONFERENCE

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Spain // May 9-11, 2016

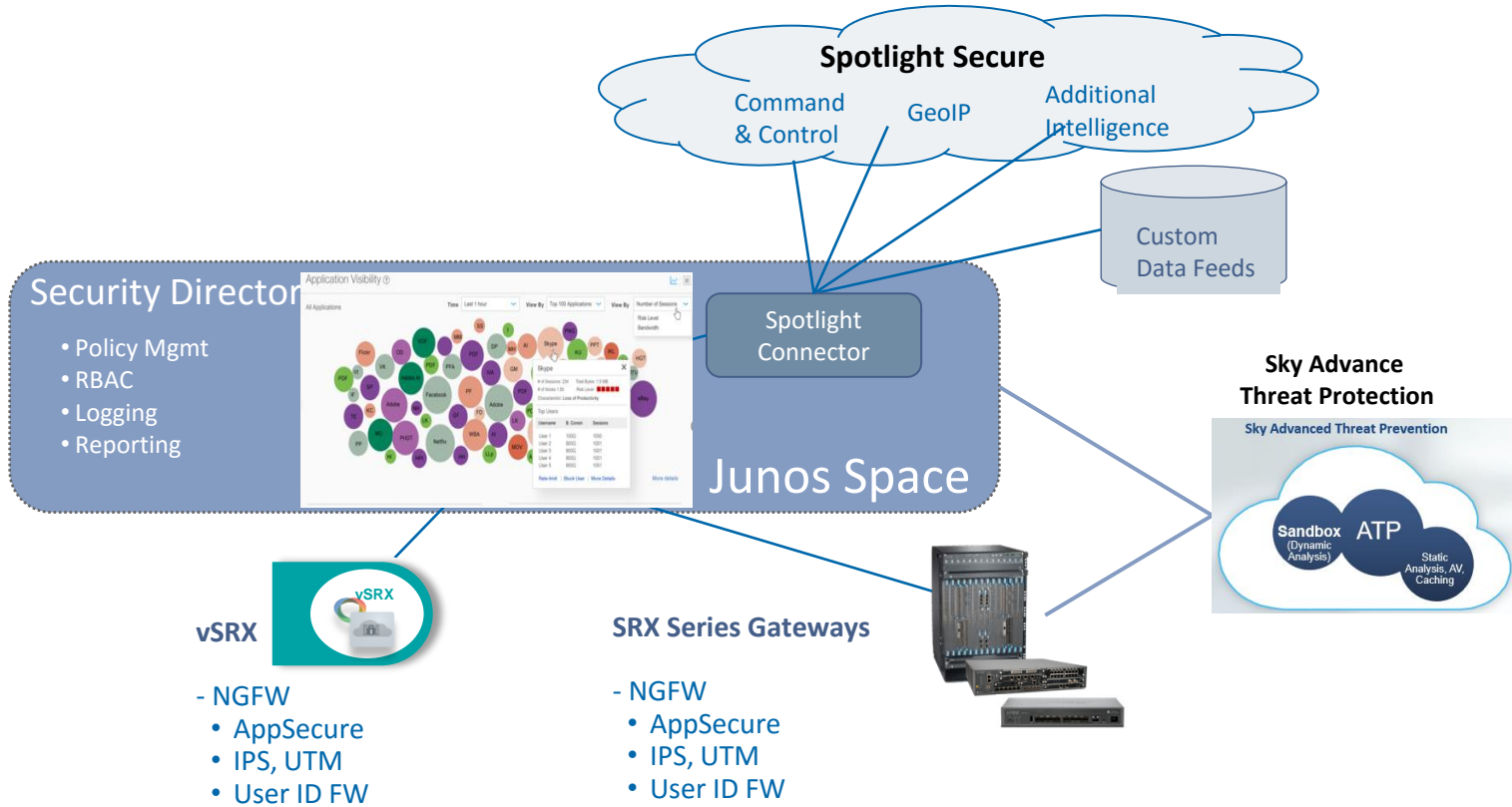
#JuniperIDEAS



Security

Ricardo Perez – Consulting SE

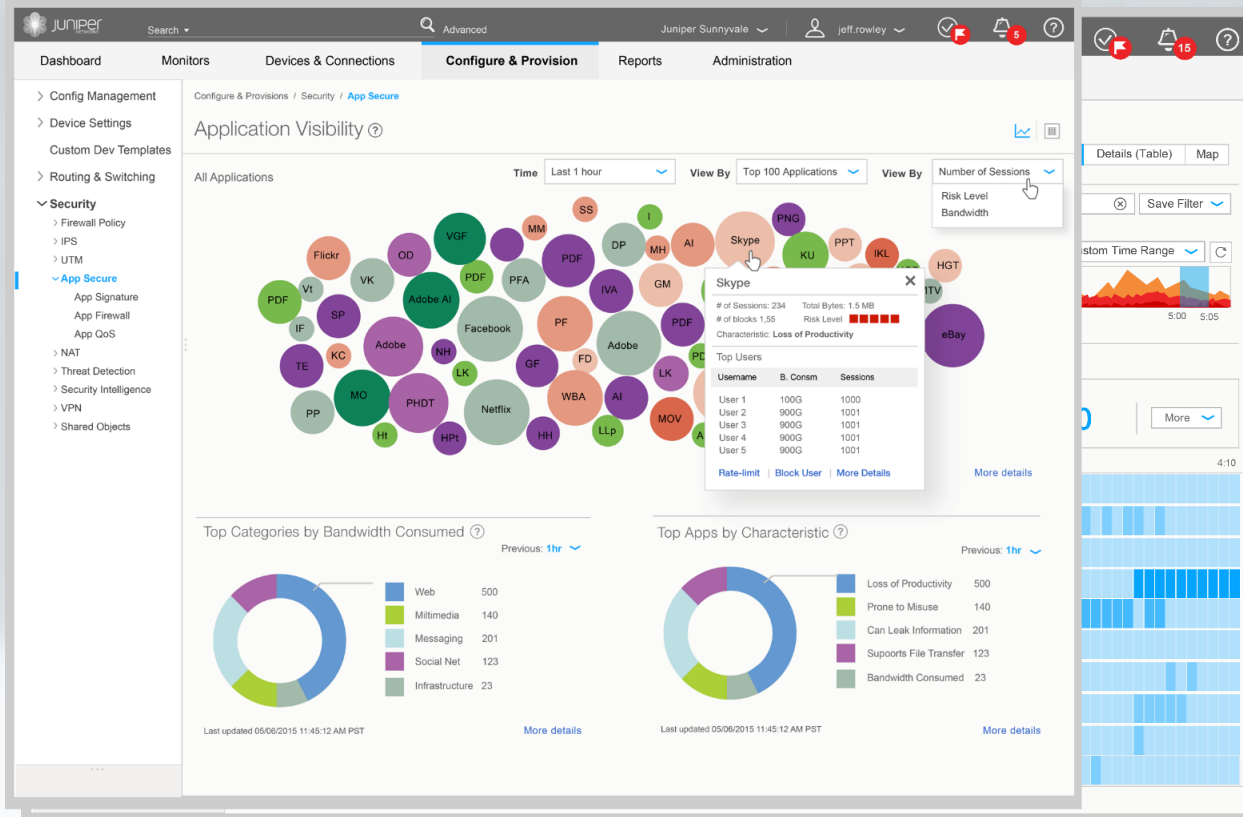
Juniper Security Solution



A person in a white shirt and tie is looking at a smartphone. The image has a blue overlay on the left side. The text "New Management – Security Director" is written in white on a dark blue background.

New Management – Security Director

Newly Enhanced Security Director



Dashboard

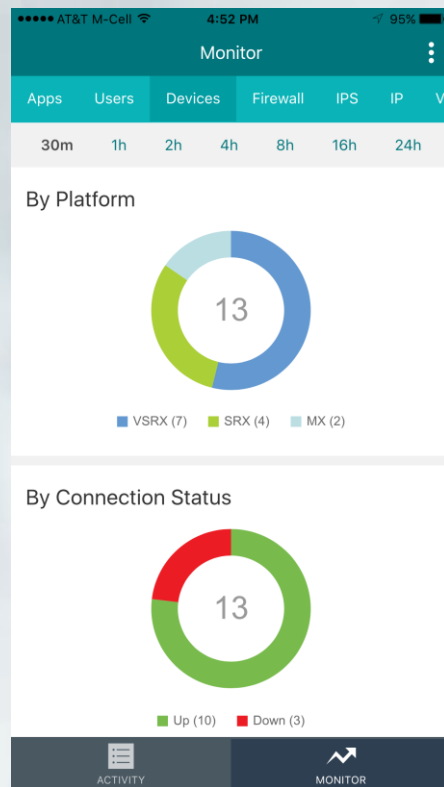
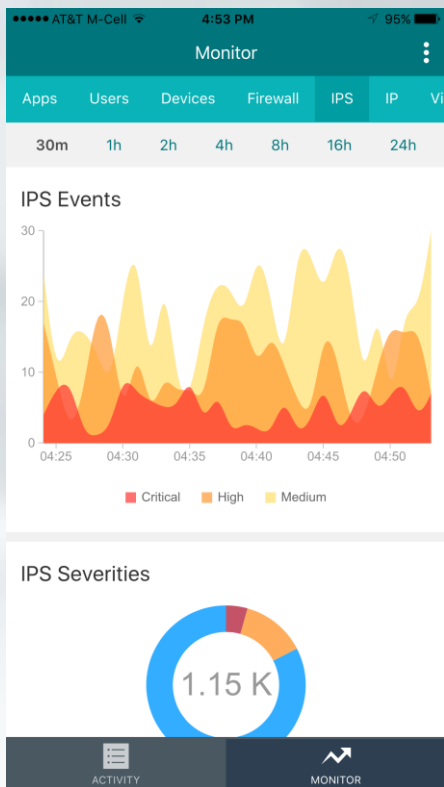
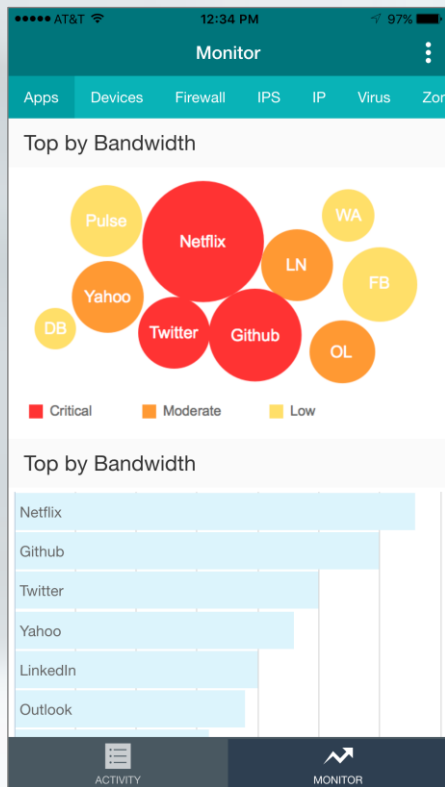
Firewall Policy

Threat Map

Events and Logs

Application Visibility

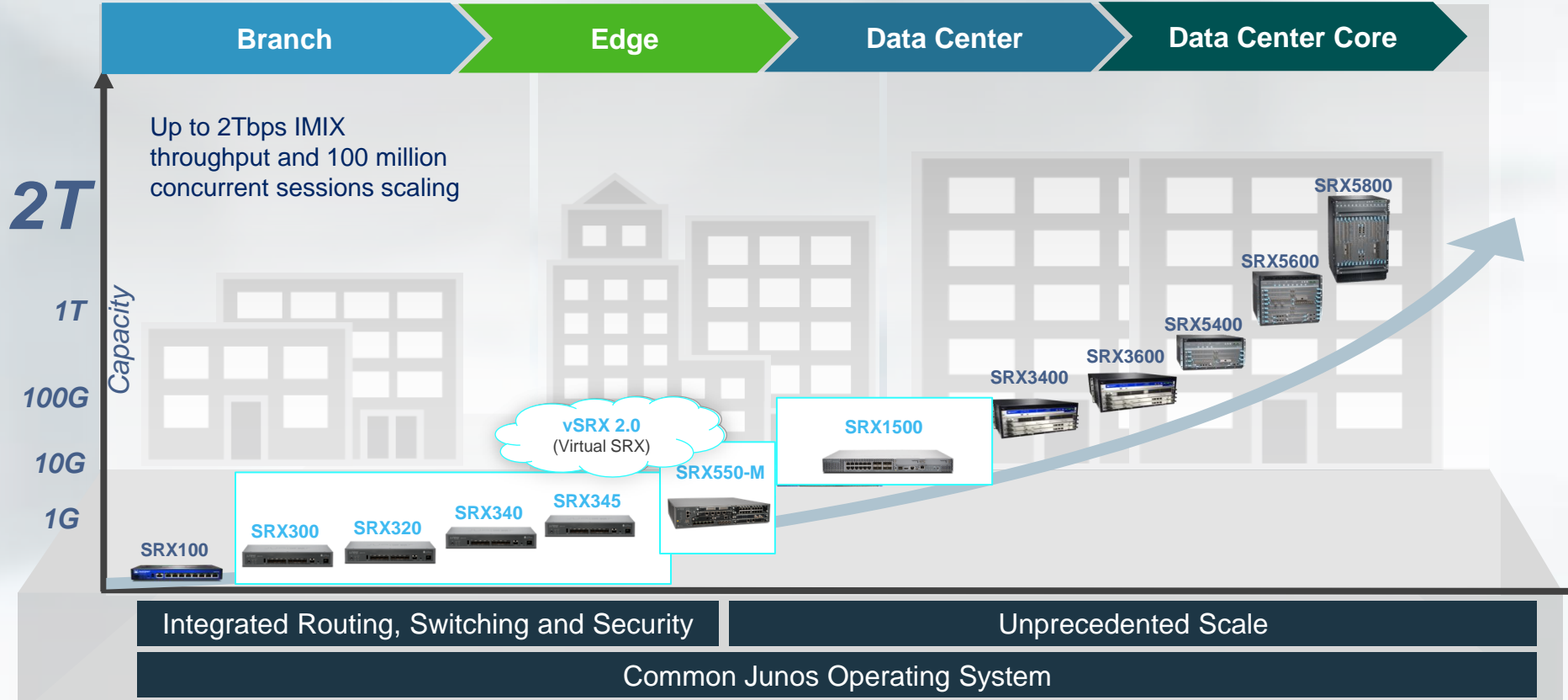
Security Director Rocks your Phone!




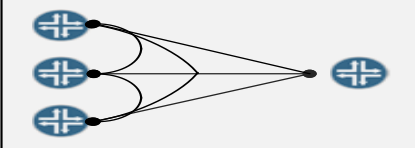
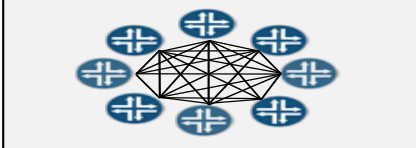
New Next-Generation Firewalls



The Right Fit - SRX Series Product Line



Rich VPN Solutions for Secure Connected Branch

Use Case	Auto VPN	Auto + AD VPN	Group VPN
<p>Network Topology</p>			
<p>Tunnel Technology</p>	<ul style="list-style-type: none"> • Tunnel Based VPN • St0 P2P with Traffic Selector • St0 P2MP with Routing • IKEv1 and IKEv2 	<ul style="list-style-type: none"> • On Demand Spoke to Spoke • Dynamic Any-to-Any • Dynamic Spoke to Spoke Tunnel • IKEv2 	<ul style="list-style-type: none"> • Any-to-Any • Full Mesh • Tunnel-less VPN • Group Protection • IKEV1
<p>Traffic Steering</p>	<ul style="list-style-type: none"> • Traffic Selector with Static Routes – Higher scalability • Dynamic Routing 	<ul style="list-style-type: none"> • Traffic Selector with Static Routes – Higher scalability • Dynamic Routing - OSPF 	<ul style="list-style-type: none"> • No overlay routing • Advance QoS for encrypted traffic
<p>Failover Redundancy</p>	<ul style="list-style-type: none"> • Cluster Hub/Spoke • Active-Passive • Active-Backup 	<ul style="list-style-type: none"> • Cluster Hub • Cluster Spokes (Hierarchy) 	<ul style="list-style-type: none"> • Server Cluster for Key Server protection • Up to 4 server in the same cluster.
<p>Performance / Scalability</p>	<ul style="list-style-type: none"> • Up to 1 Gbps / 3 Gbps and 2000 Tunnel - SRX1500 • 15K Tunnel with TS 	<ul style="list-style-type: none"> • 256 shortcut tunnels- SRX550M • 512 shortcut tunnels - SRX650 and above 	<ul style="list-style-type: none"> • 4000 group members per server • 16K per cluster

NSS Report 2016

Product	NSS Exploit Library Block Rate ²	NSS-Tested Throughput	3-Year TCO (List Price)	3-Year TCO (Street Price)
Juniper Networks SRX5400E JUNOS Software Release [12.3X48]	98.9%	4,138 Mbps	\$391,656	\$164,292
	Firewall Policy Enforcement	Application Control	Evasions	Stability and Reliability
	PASS	PASS	PASS	PASS

Figure 1 – Overall Test Results

Product	NSS Exploit Library Block Rate ²	NSS-Tested Throughput	3-Year TCO (List Price)	3-Year TCO (Street Price)
Palo Alto Networks PA-7050 v6.0.11-h1	95.8%	42,324 Mbps	\$1,256,000	\$1,004,920
	Firewall Policy Enforcement	Application Control	Evasions	Stability and Reliability
	PASS	PASS	PASS	PASS

<https://www.paloaltonetworks.com/resources/techbriefs/nss-labs-2016-ngfw-test-report>

SRX3XX and SRX1500 **New** Pricing Model

Previous Model – 1 SKU



HARDWARE + Software
1 SKU (Perpetual)



Support SKU - optional

New Model – 2 SKU's



HARDWARE
(NO Software Included)
1 SKU (Perpetual)

Support SKU - optional



SOFTWARE – **Mandatory**
Junos Software Package
1 SKU - Perpetual or Subscription

SW Support SKU - optional

SRX3XX Series Software Purchase Process

Step 1 – Select Option A or B

Option A: Juniper Secure Branch (JSB)

Foundation
L2 Switching
L3 Routing, Multicast, BGP
Overlay, Monitoring,
Multi Node,
Firewall,
IPSec VPN
Automation

Perpetual :
e.g. SRX345-JSB
Subscription :
e.g. SRX345-JSB-1

Option B Juniper Secure Edge (JSE)

All from Juniper Secure Branch (JSB)
+
MPLS, L2 VPN, L3 VPN
Application Security

Perpetual :
e.g. SRX345-JSE
Subscription :
e.g. SRX345-JSE-1

Step 2 – Add Additional Features to Option A or B

Intrusion Prevention

Application Security
IPS

Subscription :
e.g. SRX345-IPS-1

Content Security

Application Security
IPS
+
UTM (AV, URLF, AS)

Subscription :
e.g. SRX345-CS-BUN-1

1 and 3 year subscription licenses made available for JSE, IPS and CS-BUN SKUs

SRX1500 Series Software Bundles

Step 1

Juniper Secure Edge (JSE)

Foundation
L2 Switching
L3 Routing, Multicast, BGP,
MPLS, L2 VPN, L3 VPN
Overlay, Monitoring,
Multi Node,
Firewall, IPsec VPN
Application Security
Automation

Perpetual :
SRX1500-JSE
Subscription :
SRX1500-JSE-1

Step 2 – Add Additional Features

Intrusion Prevention

IPS

Subscription :
SRX1500-IPS-1

Content Security

IPS
UTM (AV, URLF, AS)

Subscription :
SRX1500-CS-BUN-1

Adv Threat Protection

Sky ATP
Spotlight Secure

Subscription :
SRX1500-ATP-1
SRX1500-CC-1

1 and 3 year subscription licenses made available for JSE, IPS and CS-BUN SKUs

Juniper Configurator & Quote Tool

The Juniper Configurator facilitates the creation of Juniper configurations for your Customers.

[HERE](#)

Step 1: Select Platform

The screenshot shows the 'JUNIPER CONFIGURATOR TOOL' interface. The 'Platform' dropdown menu is open, showing options: ACX1000, ACX2000, ACX4000, ACX500, ACX5000, Advanced Services, App & Sub Awareness, AppSecure, AX, Branch FW - SSG20, and Branch FW - SSG5. The 'Product Type' dropdown is also visible with the option '--- Select Product Type ---' selected.

Step 2: Select Product Type

The screenshot shows the 'Search Product Catalog' section. The 'Platform' is set to 'SRX300'. The 'Product Type' dropdown menu is open, showing options: --- Select Product Type ---, Chassis, Accessories, J-Care Services, J-Partner Services, Software, and Spares.

Step 3: Add to new proposal

The screenshot shows the 'Add to New Proposal' button highlighted with a red box. Below it, a table lists products with 'SRX300' selected in the checkbox column.

Part #	Product Description	Product Ca
<input checked="" type="checkbox"/>	SRX300	SRX300 Services Gatew... Firewall/IP
<input type="checkbox"/>	SRX320	SRX320 Services Gatew... Firewall/IP

Step 4: Click on the product name for more options

The screenshot shows the 'Proposal: Proposal462016 (#462016)' interface. The 'Proposal462016' tab is highlighted with a red box. Below it, the 'Export' button is highlighted with a red box. A red arrow points from the 'Export' button to the text 'You can export'. The 'Configurator' section shows a tree view of the configuration, including 'SRX300' and 'Software'.

You can export

Qty	Part #	Description	EOL Date	List Price (USD)
1	SRX300-JSB	SRX300 Juniper Secure Branch ...		400.00
0	SRX300-JSE	SRX300 Juniper Secure Edge So...		900.00

A person wearing a white dress shirt and a dark tie is looking down at a smartphone held in their hands. The image has a blue color overlay. A dark grey rectangular box is positioned on the left side of the image, containing the text 'vSRX' in white.

vSRX

vSRX – Industry's Fastest Virtual Firewall

vSRX

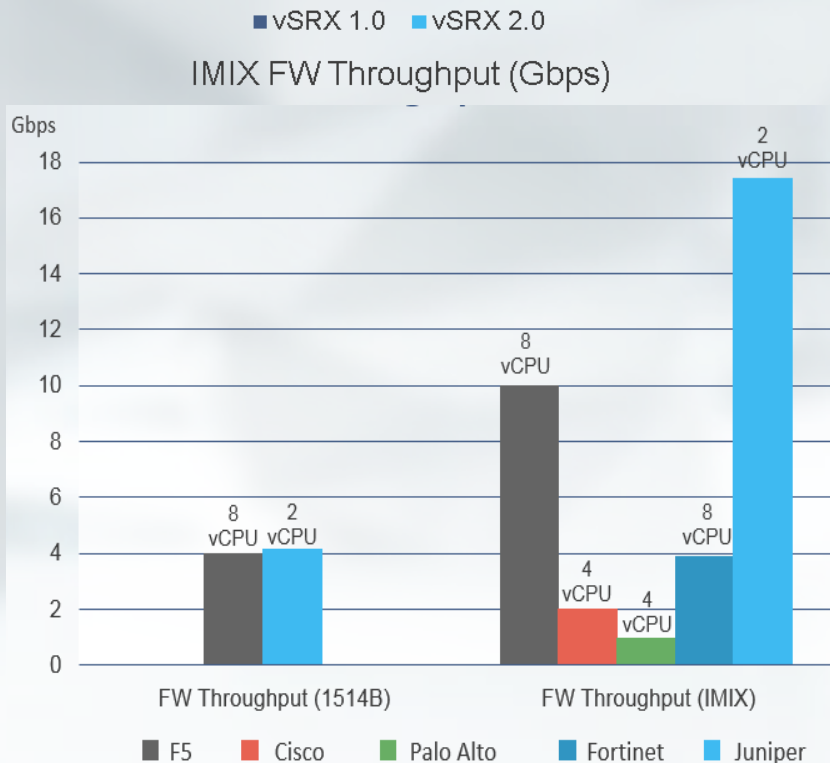


17G FW Large packet, 4G FW IMIX

2 vCPU (cores), Lowest TCO

Highest Perf/Core

vSRX 2.0 - The Industry's Fastest and Most Efficient Virtual Firewall Now Shipping



Industry's Highest Efficiency per Core

- 17Gbps large packet FW performance and 4Gbps IMIX
- Highest performance – and lowest TCO – per core
- 4x performance boost over vSRX 1.0!

Rich Routing & Network Capabilities

- VPN connectivity and routing features in a flexible virtual machine format based on proven Junos OS foundation
- Full HA, dedicated management interface

Advanced Security Services

- Integrated UTM including IPS, Full Anti-virus, Anti-spam, Web-filtering, Content filtering and AppSecure
- Managed by Junos Space Security Director

vSRX Packages

Features included in Secure Cloud Connect (SCC) SKU	Features included in Standard (STD) SKU	Features included in AppSecure (ASEC-B) Bundle SKU	Features included in Content Security (CS-B) Bundle SKU
<ul style="list-style-type: none"> • IPSec VPN – Site to Site VPN • NAT • Class of Service (CoS) • Routing services – BGP, OSPF, DHCP, Jflow, IPv4 & IPv6 • Foundation – static routing, management (Jweb, CLI, & NetConf), On-Box logging, Diagnostics • Software platform – KVM, Openstack, ESXi 6.0, vCloud Air, Contrail <p>Package offered as perpetual and subscription license</p>	<ul style="list-style-type: none"> • Core Security – FW, ALGs, Screens, UserFW • IPSec VPN – Site to Site VPN, • Overlay services – GRE, MPLS, IP Tunneling • NAT • Class of Service (CoS) • Multicast services – IP Multicast (PIM, IGMP) • Routing services – BGP, OSPF, DHCP, Jflow, IPv4 & IPv6 • High Availability • Foundation – static routing, management (Jweb, CLI, & NetConf), On-Box logging, Diagnostics • Software platform – KVM, Openstack, ESXi 6.0, vCloud Air, Contrail <p>Package offered as perpetual and subscription license</p>	<p>Standard SKU (STD) features plus following</p> <ul style="list-style-type: none"> • IPS • App-Secure: <ul style="list-style-type: none"> • App-ID • App-FW • App-QoS • App-Track <p>Package offered as subscription license only</p>	<p>App-Secure (ASEC-B) SKU features plus following</p> <ul style="list-style-type: none"> • Anti Virus • Web Filtering • Anti Spam • Content Filtering <p>Package offered as subscription license only</p>

vSRX 10M and 100M New List Pricing

Total throughput per instance (Upto)	STD (Current)		
	Perpetual	1Year Subscription	3 Year Subscription
10M	\$1,500	\$600	\$1,600
100M	\$3,000	\$1,200	\$3,200
1G	\$4,200	\$1,600	\$4,300
2G	\$6,720	\$2,600	\$7,000
4G	\$10,800	\$4,200	\$11,300

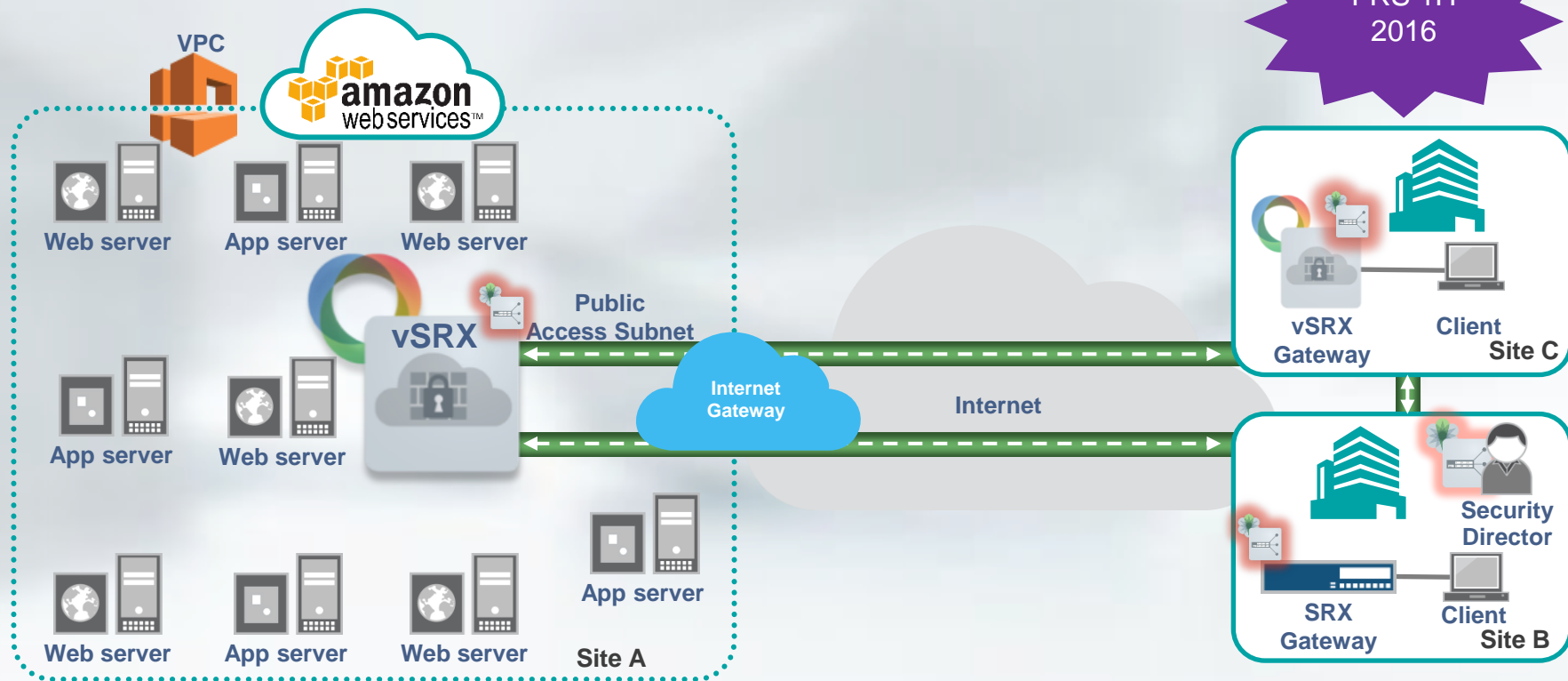
Total throughput per instance (Upto)	STD (New)		
	Perpetual	1Year Subscription	3 Year Subscription
10M	\$225	\$135	\$370
100M	\$450	\$265	\$880
1G	\$4,200	\$1,600	\$4,300
2G	\$6,720	\$2,600	\$7,000
4G	\$10,800	\$4,200	\$11,300

- **New 10M and 100M pricing in May/June price-list, use new pricing now if needed**
- **Perpetual SKU: Support Additional @22% of List**
- **Subscription SKU: 1Year and 3Year subscription SKU includes maintenance/upgrade**

vSRX on AWS

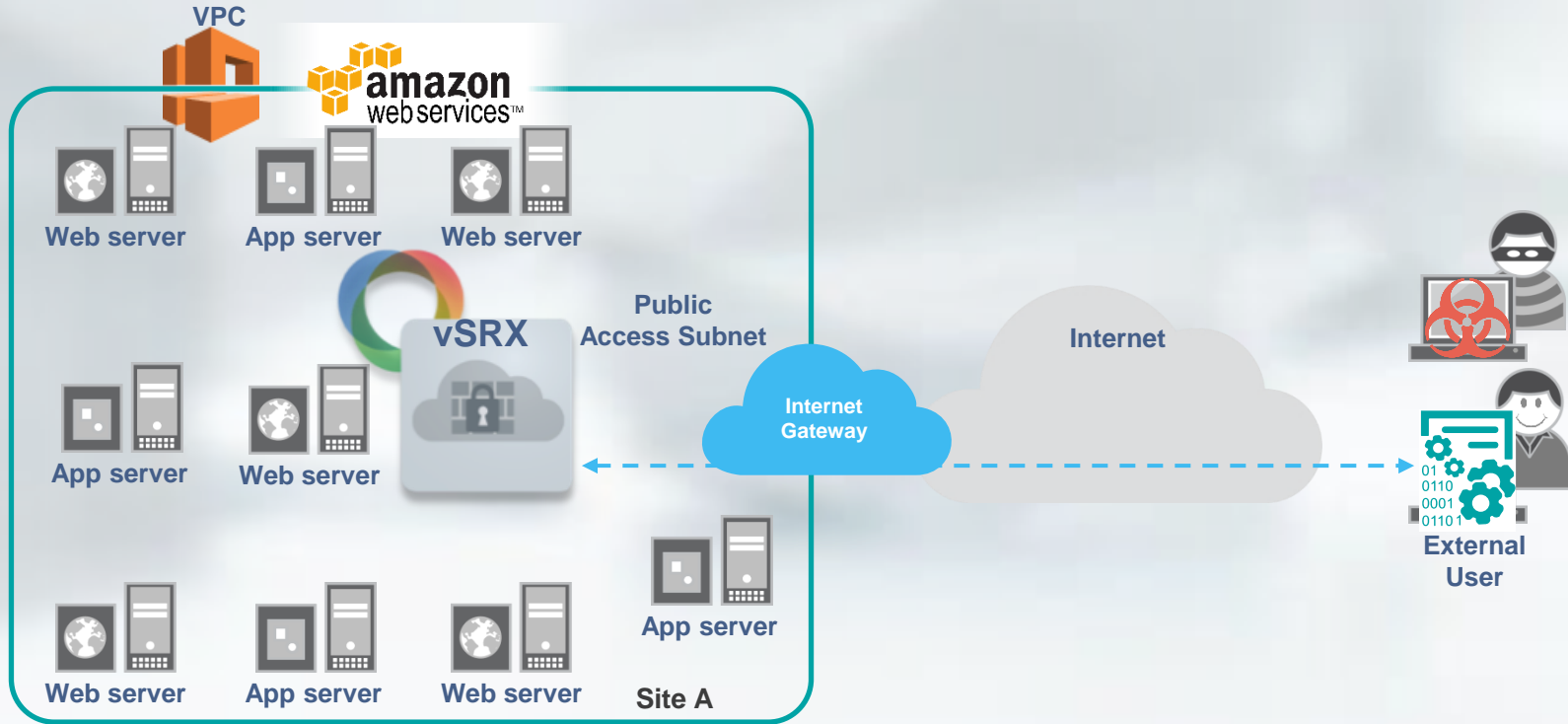
AWS: Securing Connectivity To the Public Cloud

FRS 1H
2016



Security Director – Single Pane of Glass Management

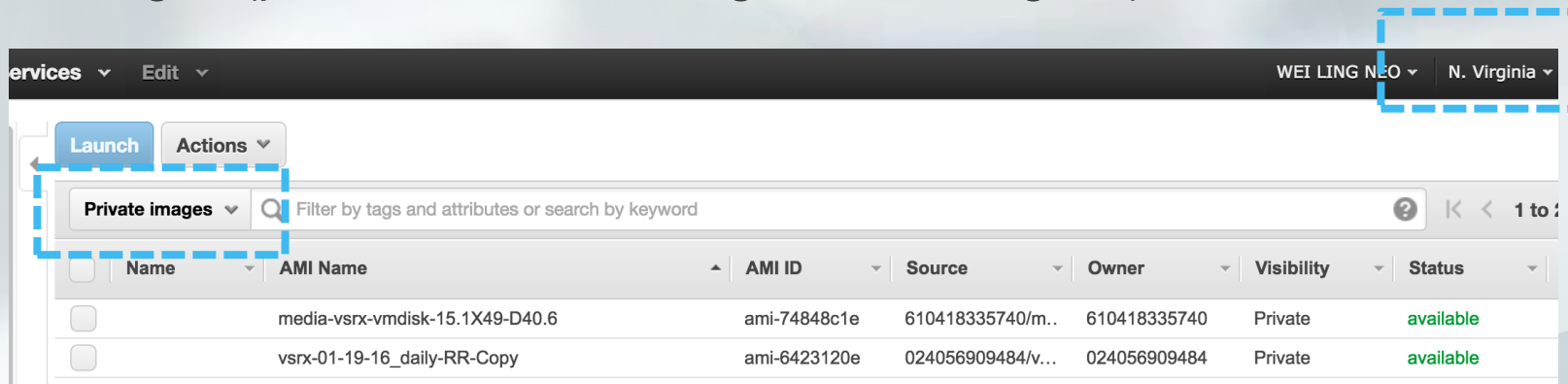
vSRX as NGFW Security Gateway Protecting Cloud Applications



Getting started with AWS

Where to get the AMI before we post it on the Marketplace?

- email vsrx-aws-beta to request an AMI with your Amazon account number
- once the AMI has been shared, you can find it under EC2 -> Private images (please make sure region is N. Virginia)



The screenshot shows the AWS Management Console interface. At the top right, the user is identified as 'WEI LING NEO' and the region is set to 'N. Virginia'. Below this, there are 'Launch' and 'Actions' buttons. A search bar is present with the text 'Filter by tags and attributes or search by keyword'. Below the search bar is a table of Private images. The table has columns for Name, AMI Name, AMI ID, Source, Owner, Visibility, and Status. Two images are listed: 'media-vsrx-vmdisk-15.1X49-D40.6' and 'vsrx-01-19-16_daily-RR-Copy', both with a status of 'available'.

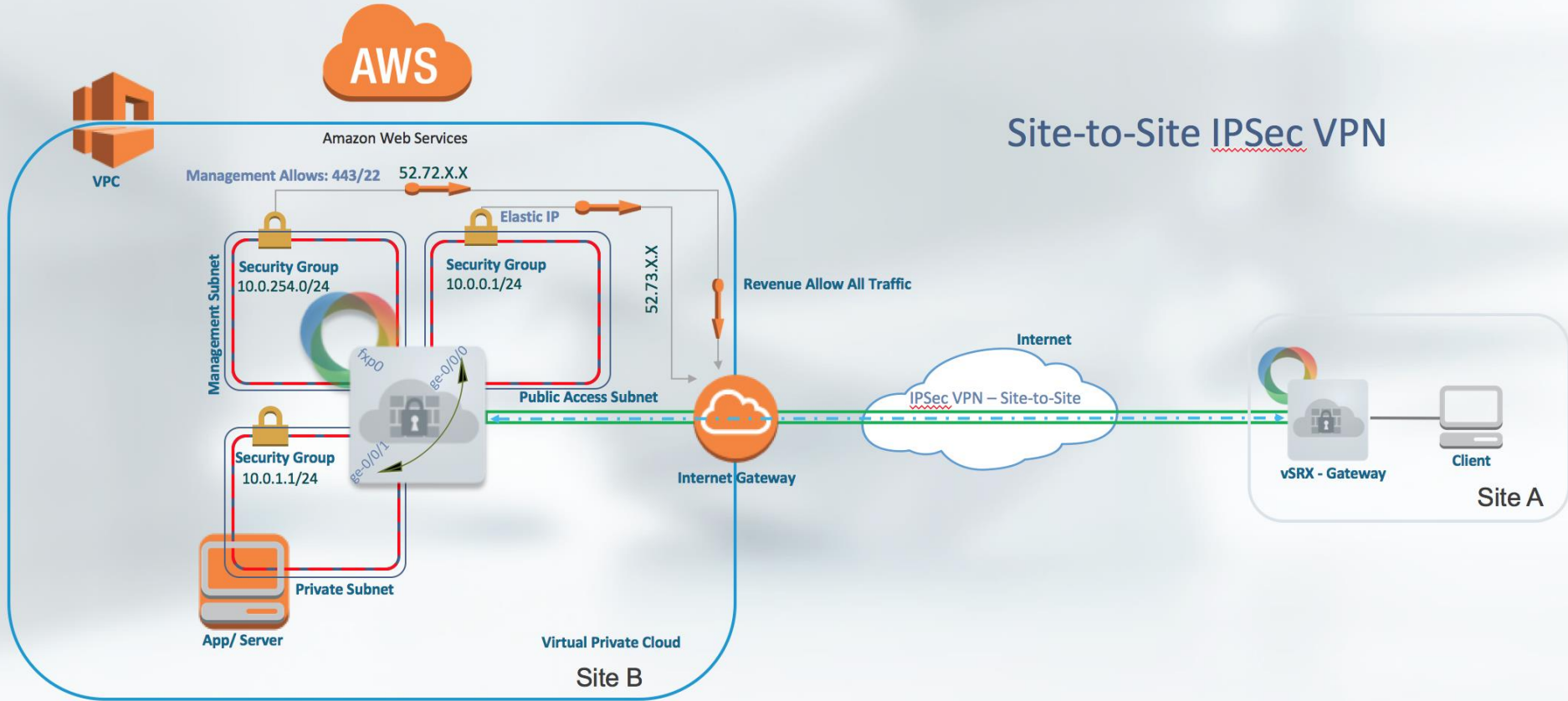
Name	AMI Name	AMI ID	Source	Owner	Visibility	Status
	media-vsrx-vmdisk-15.1X49-D40.6	ami-74848c1e	610418335740/m..	610418335740	Private	available
	vsrx-01-19-16_daily-RR-Copy	ami-6423120e	024056909484/v...	024056909484	Private	available

Getting started with AWS

What's next?

- <https://juniper.gosavo.com/Document/Document.aspx?id=38533424&view=>

AWS Demo



Site-to-Site IPsec VPN

Sky Advanced Threat Prevention

Cloud-based Anti-Malware Solution for Zero Day
Threats



Sky Advanced Threat Prevention

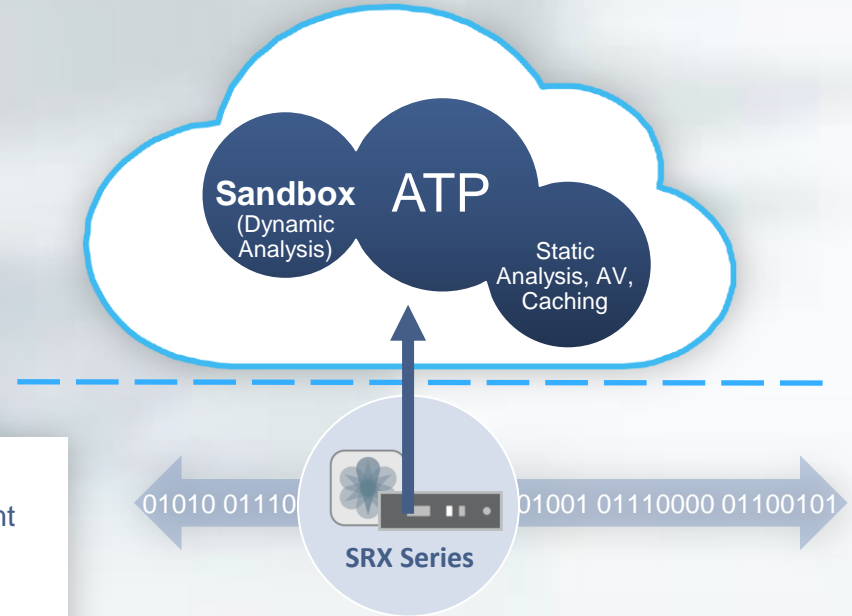
Threat Defense and Intelligence

- Cloud-based, network sandbox
- Integrated in SRX for inline detection and blocking
- Protects against unknown and zero day network threats

Key Differentiators:

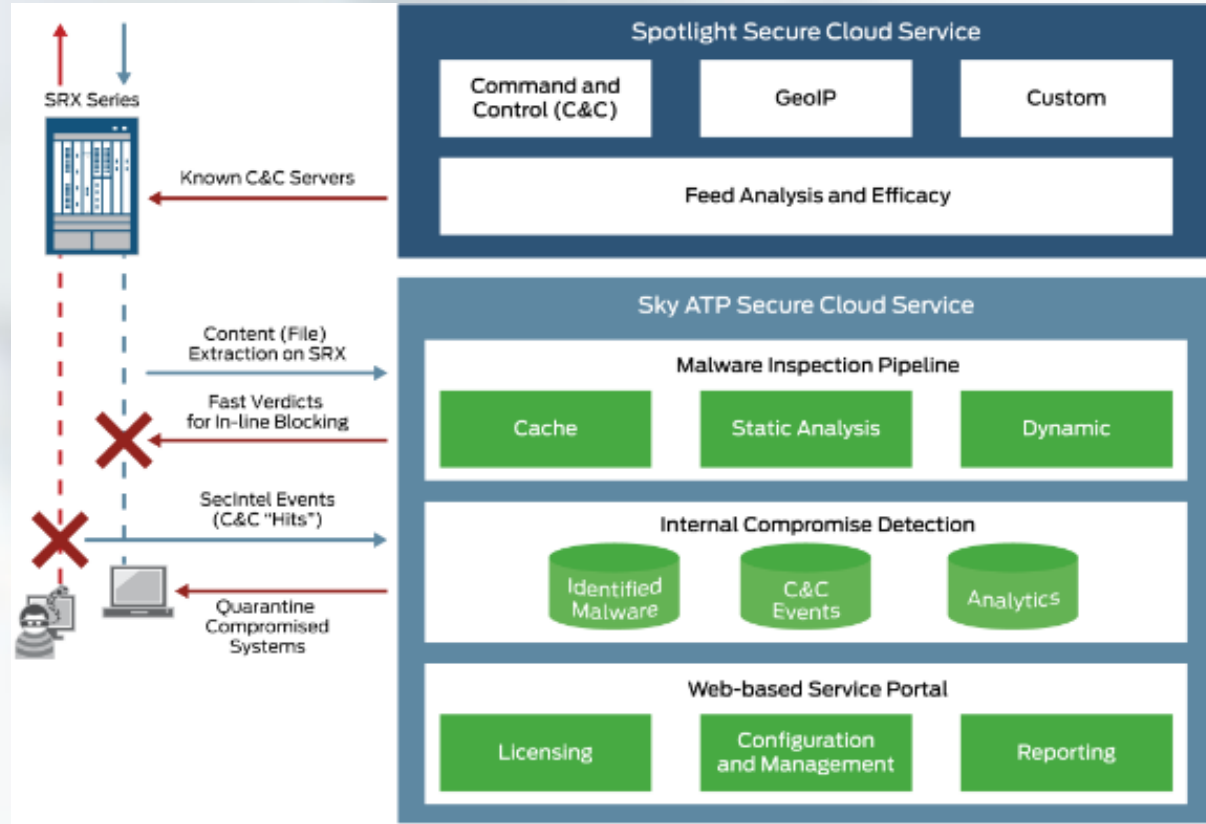
- Bi-directional integration and communication with Spotlight Secure delivers wealth of threat data for analytics and network wide remediation
- Utilization of techniques beyond sandboxing to expose evasive malware

Sky Advanced Threat Prevention



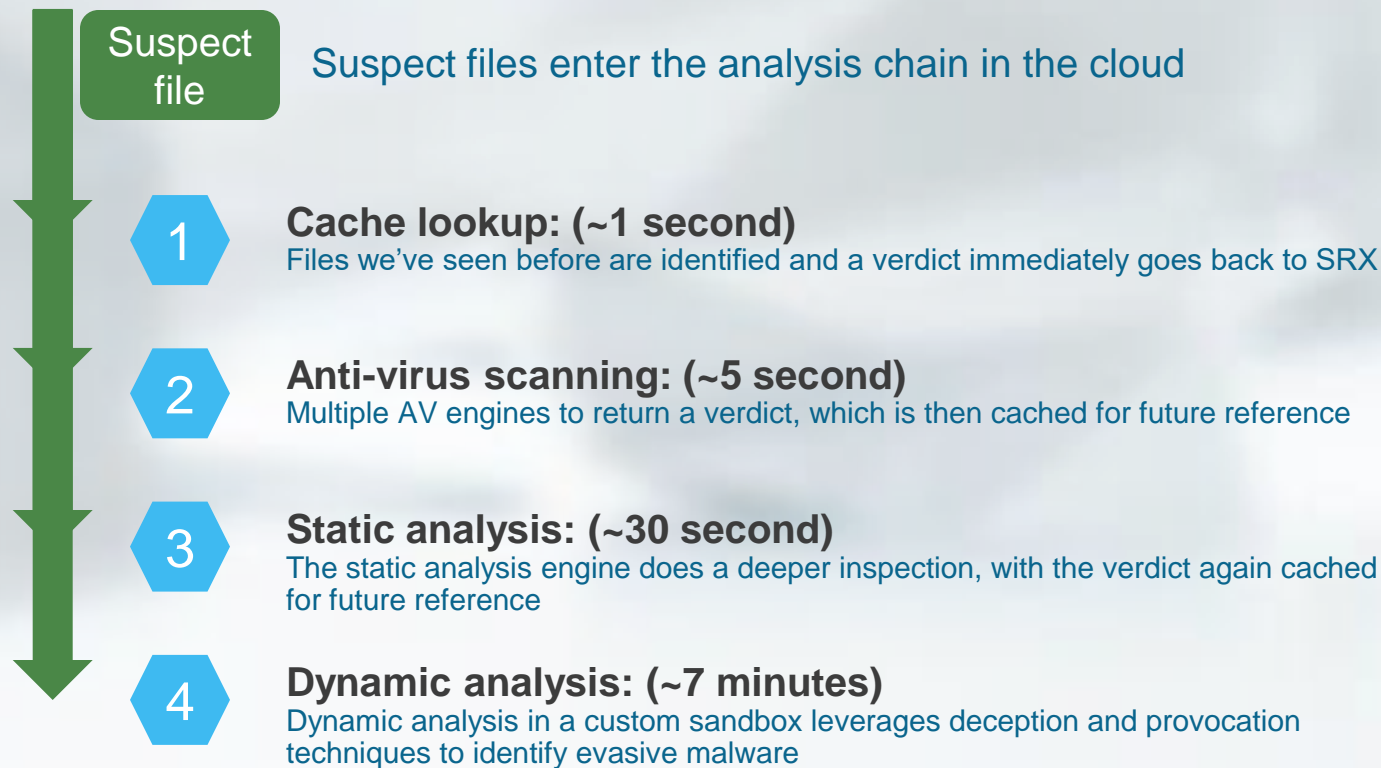
Sky ATP

1. SRX extracts potentially malicious objects and files
2. SRX sends potentially malicious content to ATP in the cloud
3. ATP performs static and dynamic analysis
4. ATP provides malware results and C&C server data to the SRX
5. SRX blocks known malicious file downloads and outbound C&C traffic



The ATP verdict chain

Staged analysis: combining rapid response and deep analysis



Sky Advanced Threat Prevention

The screenshot displays the Sky ATP dashboard interface. At the top, there is a navigation bar with tabs for Dashboard, Monitor, Devices, Configure, and Administration. The main content area is titled "Sky ATP" and contains several widgets:

- Source Locations C&C Server & Malware:** A world map showing threat source locations.
- Hosts Top Compromised:** A table listing the top 8 compromised hosts.
- Malware Top Identified:** A bar chart showing the top identified malware.
- File Categories Top Infected:** A bar chart showing the top infected file categories.
- File Categories Top Scanned:** A bar chart showing the top scanned file categories.
- Top Compromised Hosts Table:**

Host	Threat Lvl	Blocked Status	State of Investigation
1 192.168.239.99	10	Blocked	Open
2 192.168.239.74	10	Blocked	Open
3 192.168.237.1	10	Blocked	Open
4 192.168.238.138	10	Blocked	Open
5 192.168.238.39	10	Blocked	Open
6 192.168.235.159	10	Blocked	Open
7 192.168.234.152	10	Blocked	Open
8 192.168.188.249	10	Blocked	Open
- Top Infected File Categories:** A horizontal bar chart showing the number of infected files for categories like executable, library, document, pdf, and archive.
- C&C Server and Malware Source Locations:** A world map showing the geographic distribution of C&C servers and malware sources, color-coded by threat count.

Sky Advanced Threat Prevention Licensing Model*

Hosted in AWS, Subscription Service

Threat Prevention Services Packaged with SRX

- Embedded in SRX
 - Content extraction
 - Inline Blocking
 - Command & Control (C&C)
- Cloud
 - Content Inspection
 - ATP Management

Sky Advanced Threat Prevention Free Service with SRX


- Limited file types (EXE)
- Inline Malware Blocking
- Basic Protection (A/V, Static Analysis)
- Basic Reporting

Sky Advanced Threat Prevention Premium Service with SRX

Free Service +

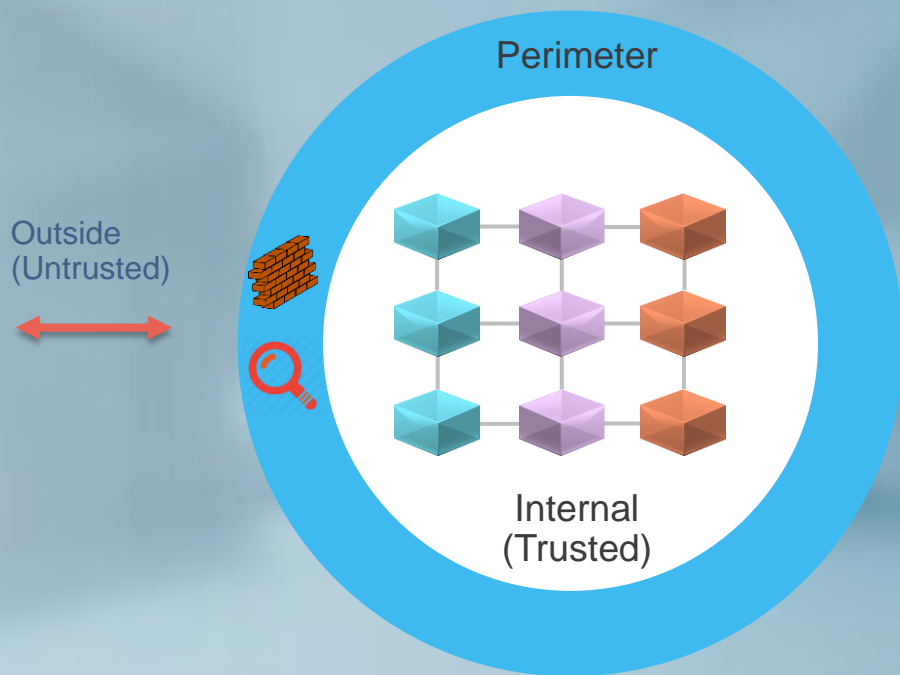
- Expanded file support (DOC, PDF, ...)
- Sandbox w/complete inspection
- Full C&C protection
- Rich reporting, Analytics
- Quarantine/Enforcement

* **Preliminary – subject to change**

A person wearing a white lab coat is holding a smartphone. The image is overlaid with a semi-transparent blue filter. On the left side, there is a dark grey rectangular box containing white text. The text reads "Looking ahead: SDSN and roadmap".

Looking ahead:
SDSN and roadmap

Perimeter Oriented Security not enough



THREAT SOPHISTICATION

- Zero day attacks
- Advanced, persistent, targeted attacks
- Adaptive malware



CLOUD

- Virtualization and SDN
- Applications, data, management in the cloud
- Application proliferation

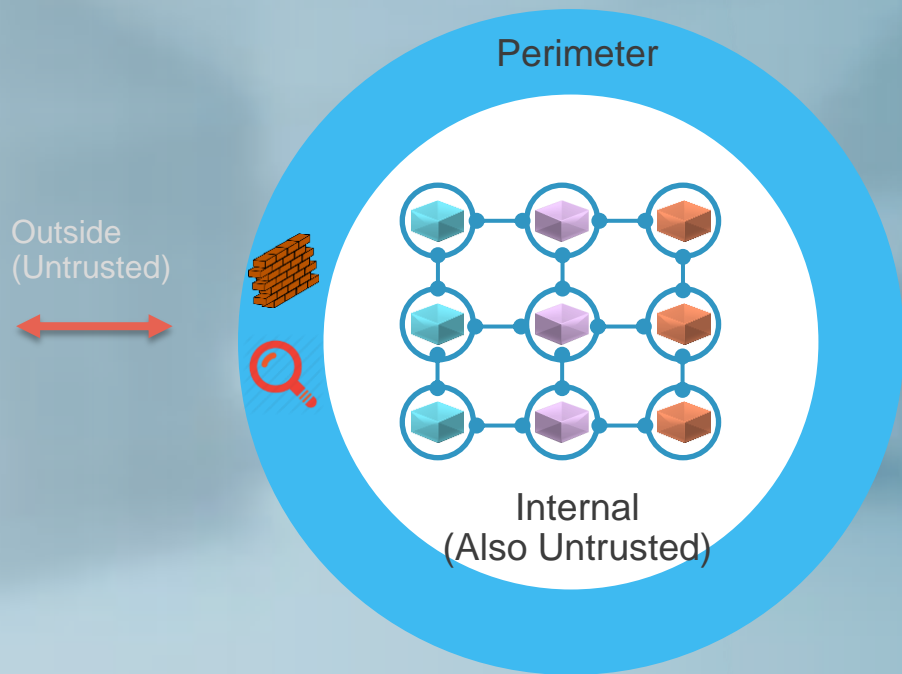


INFRASTRUCTURE

- Hybrid cloud deployments growing
- Device proliferation and BYOD
- IoT and big data everywhere

Software Defined Secure Network

Delivers Zero Trust Security Model



Secure Network



Simplified Security Policy

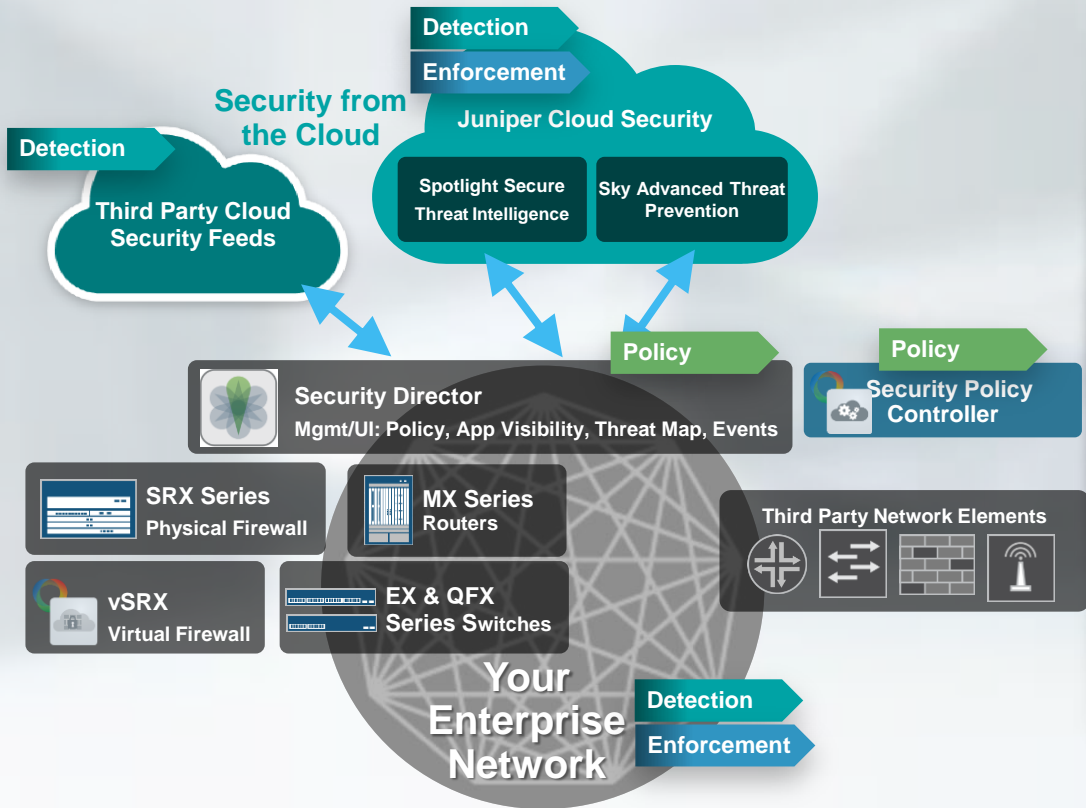


Block Lateral Threat Propagation



Comprehensive Visibility

Software Defined Secure Network Juniper Building Blocks



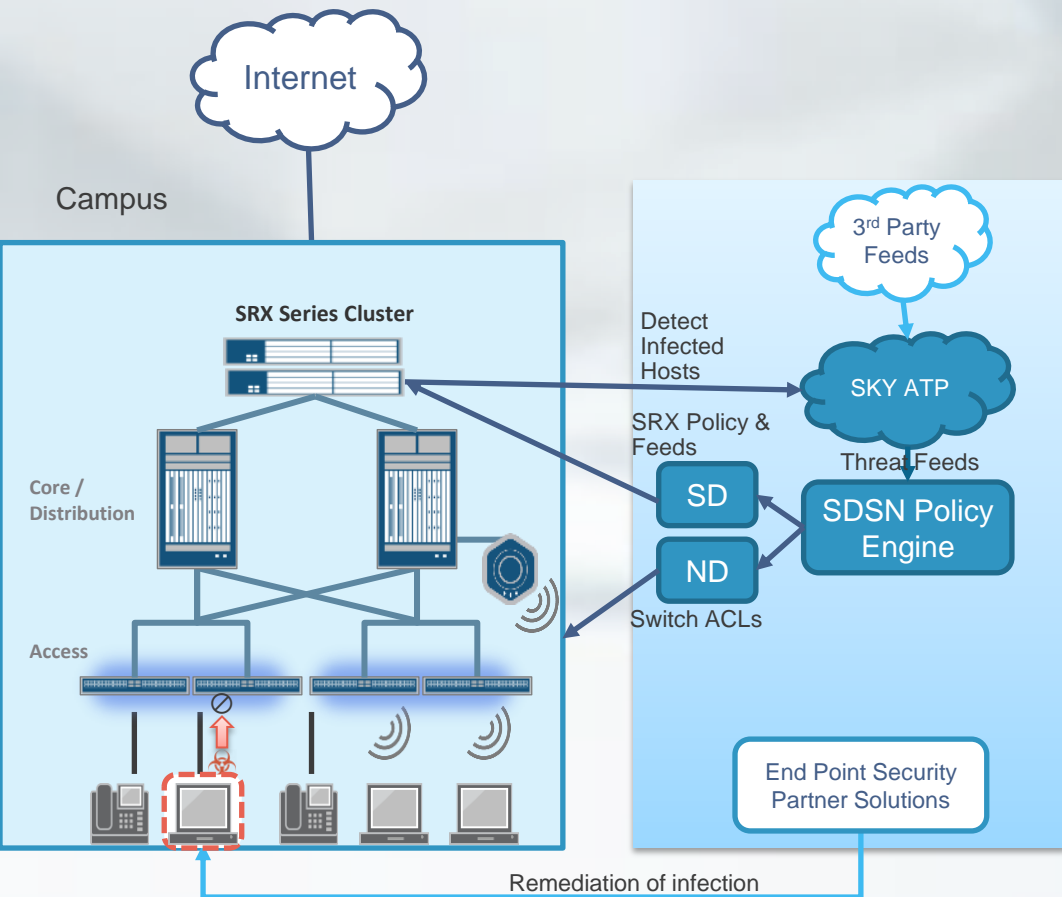
Comprehensive suite of products: **Centralize and automate security**

Instant threat intelligence and detection

Dynamically adapting policy, deployed in real-time

Consistent firewall capabilities – physical and virtual

Campus Network: Infected Host Workflow



Policy

- Policy defined in Policy Engine
 - *"Infected Hosts with Threat_Level > 8 should be quarantined"*

Detection

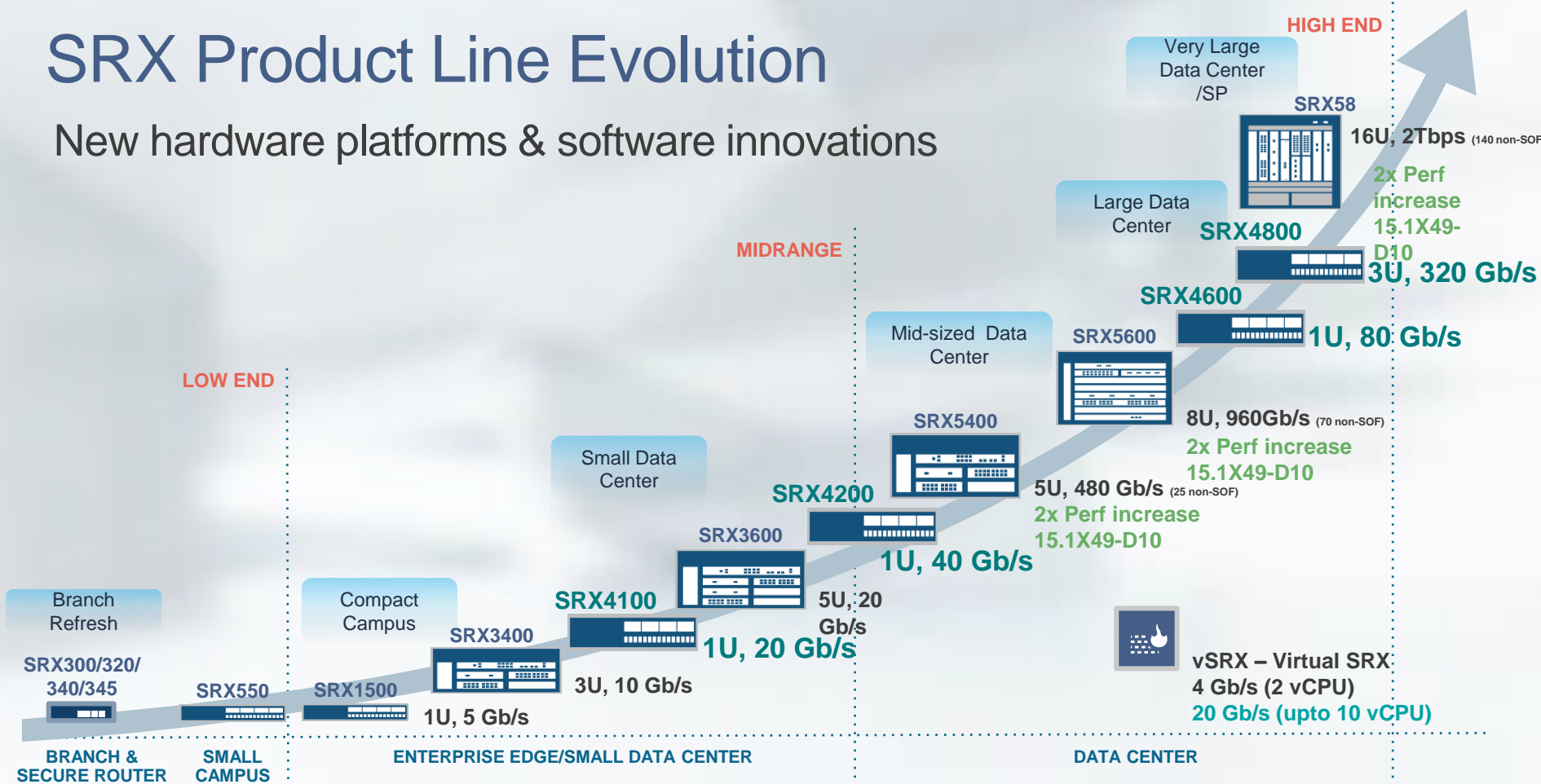
- Sky Infected Host feed
 - Using 3rd party (e.g: Attivo, Vectra), and
 - SRX data to Sky

Enforcement

- Access and aggregation switches quarantine infected host

SRX Product Line Evolution

New hardware platforms & software innovations



NDA: Juniper Networks Company Confidential

All performance estimates are IMIX

Winning with Juniper Security

Scale and Performance

Competitive price/performance from branch to data center to mobile core

Efficacy

Best IPS performance*, dynamic enforcement, open intelligence platform, advanced threat prevention

Virtualization

Virtualized security with consistent, comprehensive policy across virtual and physical infrastructure

Management and Policy

On-premises, centralized manageability; redesigned user interface and usability, intuitive, customizable

*Get details at <http://forums.juniper.net/t5/Security-Now/7-617-Tests-Later-and-Juniper-s-Firewall-Stops-Threats-Faster/ba-p/270404>

Thank you