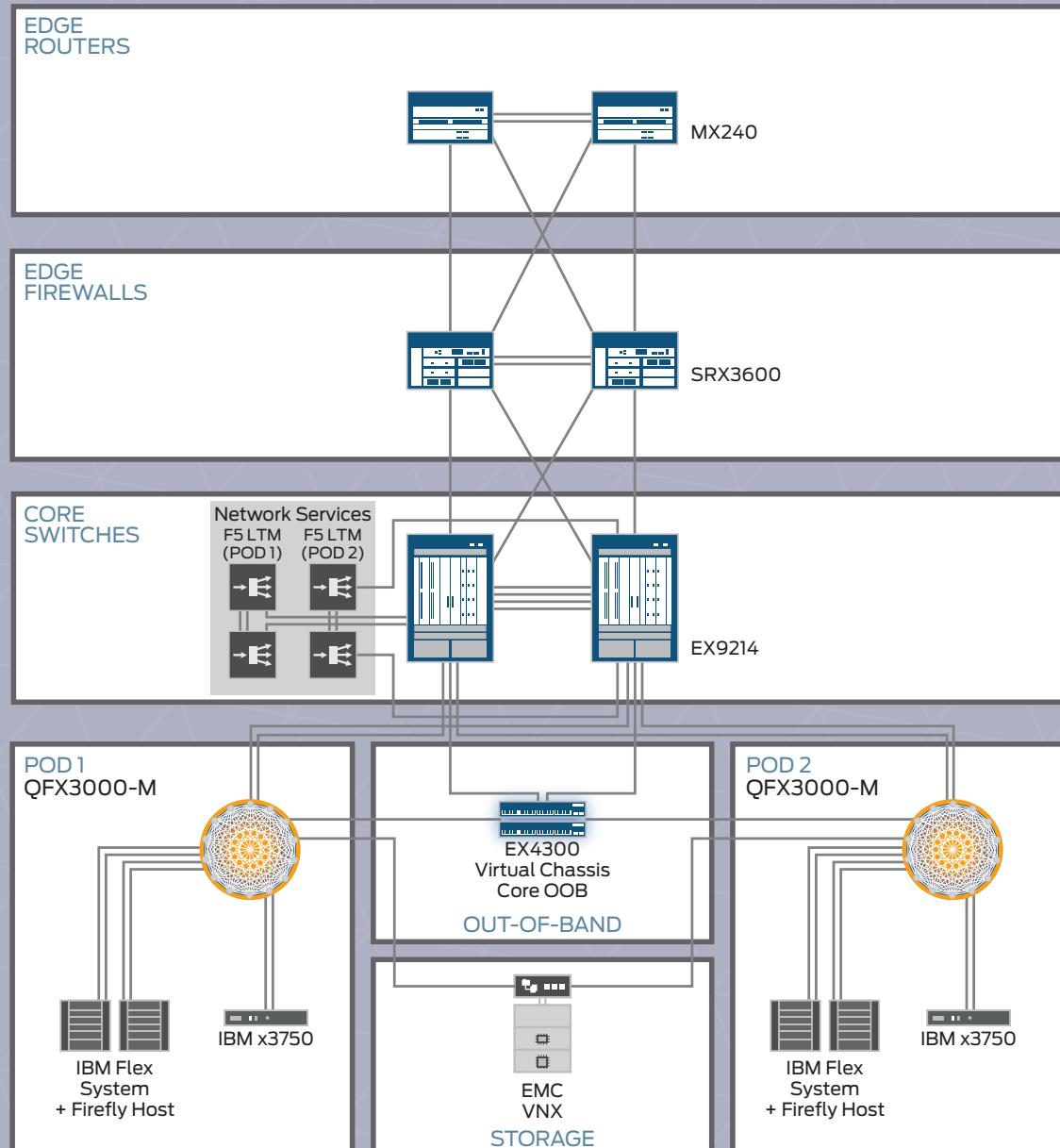


MetaFabric™ Architectures

1.0 – Virtualized IT Data Center

Design and implement an IT data center that supports a virtualized environment to run business-critical applications



Simple

The MetaFabric Architecture 1.0 solution uses two QFabric systems and each QFabric system acts like a single, large switch requiring only one management IP address for sixteen racks of equipment. In effect, management tasks are reduced by over 90%.

Open

Juniper Networks devices use standards-based Layer 3 protocols and interact with VMware vCenter APIs. In addition, this solution includes interoperability with ecosystem partners such as VMware, EMC, IBM, and F5 Networks.

Smart

In this solution, smart workload mobility with automated orchestration and template-based provisioning is provided by using Junos® Space Network Director.

MetaFabric Architecture 1.0 Solution Design Highlights

Feature	Implementation
Compute and Virtualization	IBM Flex System Servers, VMware vSphere 5.1, vCenter
Core and Edge Network	MX240 Routers, EX9214 Switches
Access and Aggregation	QFX3000-M QFabric System
Layer 2 and Layer 3 Protocols	OSPF, BGP, IRB, and VLANs
Storage	EMC VNX5500 Unified Storage
Applications	Microsoft SharePoint, Microsoft Exchange, and WikiMedia Run at Scale
High Availability	Nonstop Software Upgrade, In-service Software Upgrade, SRX JSRP Cluster, MC-LAG Active/Active with VRRP
Class of Service	Lossless Ethernet, End-to-end Application Class of Service
Security	SRX3600, Firefly Host
Remote Access	Junos Pulse Gateway SA
Network Management	Junos Space Network Director 1.5, Security Director
Out-of-band Management Network	EX4300 Virtual Chassis
Application Load Balancer	F5 LTM Load Balancer

MetaFabric Architecture 1.0 Sizing Options

Role	Small	Medium	Large
Edge	MX5/SRX1400	MX80/SRX3400	MX240/SRX3600
Core	QFX3600	QFX3000-M	EX9214
Aggregation			QFX3000-M (x6 PODs)
Access	QFX3500		
Port Density	336 Ports	768 Ports	4032 Ports

The growing popularity and adoption of switching fabrics, new protocols, automation, orchestration, security technologies, and software-defined networks (SDNs) are strong indicators of the need for a more agile network in the data center. Juniper Networks has applied its networking expertise to the problems of today's data centers to develop the MetaFabric Architecture—a combination of switching, routing, security, software, orchestration, and SDN, all working in conjunction with an open technology ecosystem to accelerate the deployment and delivery of applications for enterprises and service providers.

The MetaFabric Architecture addresses the problems common in today's data center by delivering a network and security architecture that accelerates time to value, while simultaneously increasing value over time.



DAY ONE POSTER

MetaFabric Architectures

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Juniper Networks
Information Experience (iX)