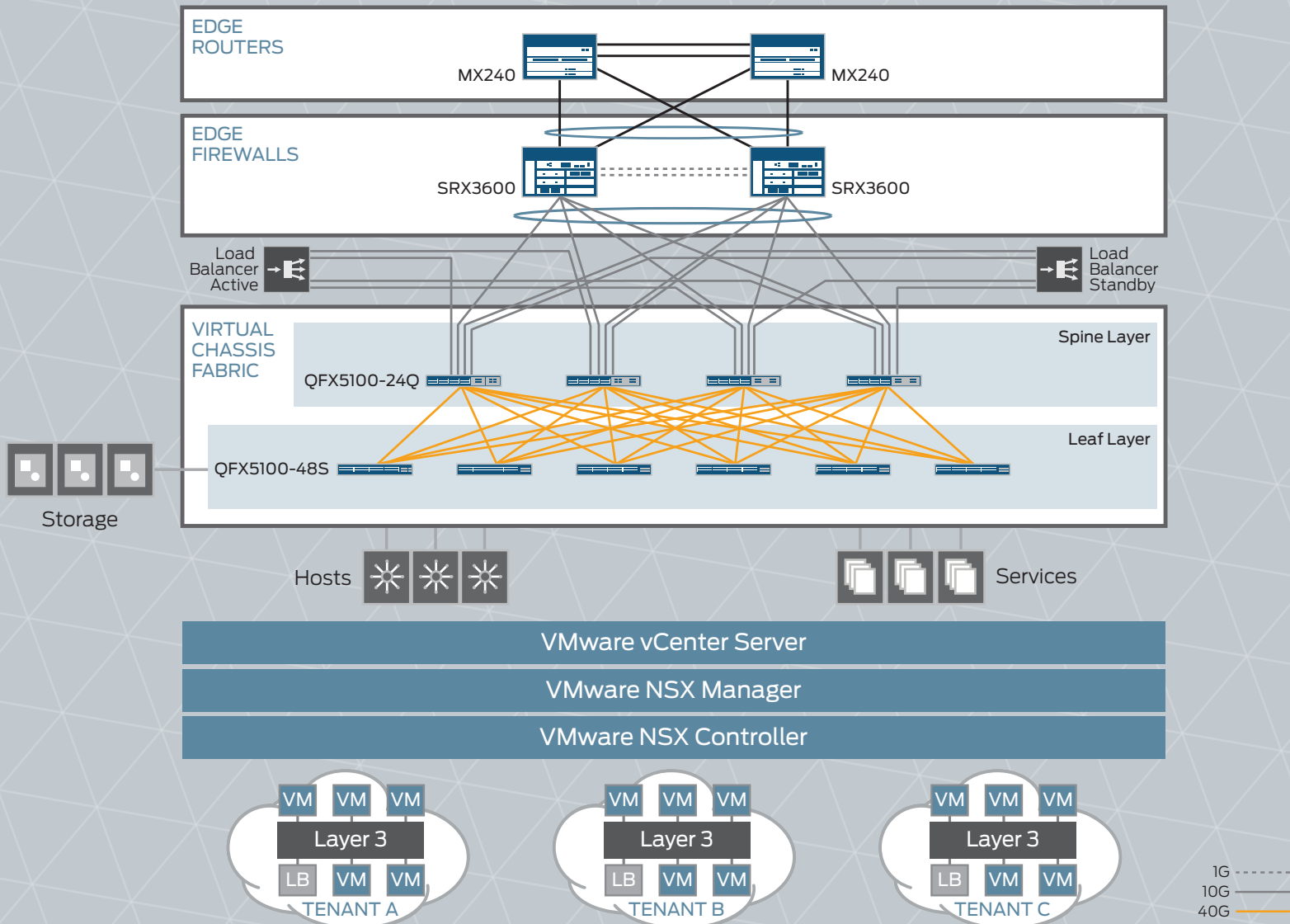


# MetaFabric™ Architectures

## 2.0 – Enterprise Private Cloud Data Center

Create an enterprise private cloud environment that provides a single point of control for both the physical and virtual components of the network

One benefit of a Virtual Chassis Fabric (VCF) is that there are no physical restrictions on where you can connect devices; you can use both the spine and leaf switches to connect servers, routers, or any other device. When creating a small to medium-sized data center, port flexibility creates a distinct advantage because a single fabric can connect all servers, storage, firewalls, and even the Internet and WAN.



### MetaFabric Architecture 2.0 Scale

- Four QFX5100-24Q switches used in a single-mode VCF spine layer
- End-to-end latency of 2.5 microseconds and 1.44 Tbps of forwarding capacity per switch
- Six QFX5100-48S switches used in a single-mode VCF leaf layer
- Line-rate performance of 10-Gigabit Ethernet and 40-Gigabit Ethernet

### What's Different in MetaFabric Architecture 2.0?

- Supports complete VMware NSX 6.1.0 Virtualization and a QFX5100-only VCF.
- Supports software-defined networking (SDN) with Virtual Extensible LAN (VXLAN) integration.
- Supports Fast Ethernet, Gigabit Ethernet, 10-Gigabit Ethernet, and 40-Gigabit Ethernet interfaces.
- Full Layer 2, Layer 3, and Multicast support.

### MetaFabric Architecture 2.0 Sizing Options

	Small	Medium	Large	Scale Out-6 PODs	Scale Out-12 PODs	Scale Out-32 PODs
Network Ports	96x10-Gigabit Ethernet	768x10-Gigabit Ethernet	1,344x10-Gigabit Ethernet	8,064x10-Gigabit Ethernet	21,504x10-Gigabit Ethernet	43,008x10-Gigabit Ethernet
Hosts	48	384	672	4032	10752	21504
Virtual Machines	4,800	38,400	67,200	403,200	1,075,200	2,150,400

Get the  
MetaFabric Architecture  
2.0 Network Configuration  
Example (NCE)

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- A single point of control for both the physical and virtual networking components of a network.
- Virtual Chassis Fabric is a plug-and-play Ethernet fabric technology, allowing you to combine a set of switches into a single logical switch.
  - VMware NSX for vSphere is an SDN solution that allows you to quickly create virtual networks that are multi-tier with segmentation and security policies.
  - Whether small or scaled-out, MetaFabric Architecture 2.0 is seamless and uses the same products and technologies: QFX5100 family switches and Virtual Chassis Fabric.
  - The VCF topology is a three-stage Clos architecture offering the best latency, performance, and scale. The QFX5100-24Q switch is commonly used as a *spine switch*, and the QFX5100-48S is commonly used as a *leaf switch*.

### DAY ONE POSTER

#### MetaFabric Architectures 2.0 – Enterprise Private Cloud Data Center

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