

SmartFabric Director 101

Simplifying management and increasing efficiency
across virtual and physical network environments

DELLTechnologies

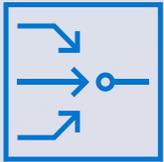


Virtual and Physical Networks All in One Place – Why Now?

The data center has dramatically changed.

Virtualization technologies across the data center help maximize the use of resources and stimulate rapid innovation by helping organizations achieve unprecedented levels of flexibility and efficiency.

But realizing the true benefits of SDDC can be challenging for several reasons:



Network
Complexity



Support for Business—
Critical Applications
and Workloads



Ensuring Workloads
Operate at Peak
Efficiency

Your network infrastructure needs to support the speed of your business with performance, stability, and scale from *both* a physical and virtual perspective.

Unified Networks Bring Benefits...and Challenges



Benefits

Enables organizations to embrace software-defined networking

Drives innovation by moving away from legacy hardware-bound technologies to modern, software-driven, open technologies



Challenges

Extensive, error-prone manual configuration of physical/virtual networks

Multiple management screens

Overprovisioning virtual networks without knowledge of sufficient networking capacity

Creation of areas of network congestion

The Solution: DELL EMC SmartFabric Director

Co-architected by Dell Technologies and VMware, SmartFabric Director helps organizations accelerate data center transformation through more agile central management across virtual and physical network infrastructures. Tight integration between Dell EMC SmartFabric Director and VMware vSphere and NSX-T ensures the seamless functioning of application workloads in a VMware software-defined data center.

vmware®

Visibility – The Key to Enabling Intent-Defined Networks

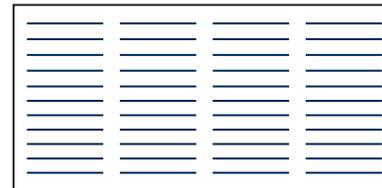
SmartFabric Director's intent-based configuration operates on user-defined intent for rapid auto-provisioning that eliminates manual errors:

- New network services can be brought up more quickly and efficiently
- Day-to-day operations of the physical and virtual layers of the core networks are synchronized
- Network managers no longer need to spend time correcting mistakes when deploying and managing virtual networks
- Valuable resources can be reallocated to business-critical initiatives

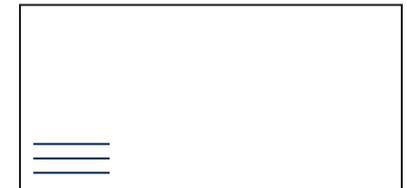
Dell EMC SmartFabric Director empowers network managers to make physical and virtual networks work together to support and accelerate business speed.

Simplified Physical Underlay Fabric Creation in a Few Clicks

Network managers can create a VMware-ready physical underlay in three simple steps, reducing network configuration steps by 98%. Compared to manual solutions, which can take a single person half of a full day to code and identify errors, SmartFabric Director enables IT to deploy a fully functional leaf-spine fabric in minutes – and operations are easily managed with a few clicks.



LINES OF CLI COMMANDS
**BEFORE SMARTFABRIC
DIRECTOR**



LINES OF CLI COMMANDS
**AFTER SMARTFABRIC
DIRECTOR**

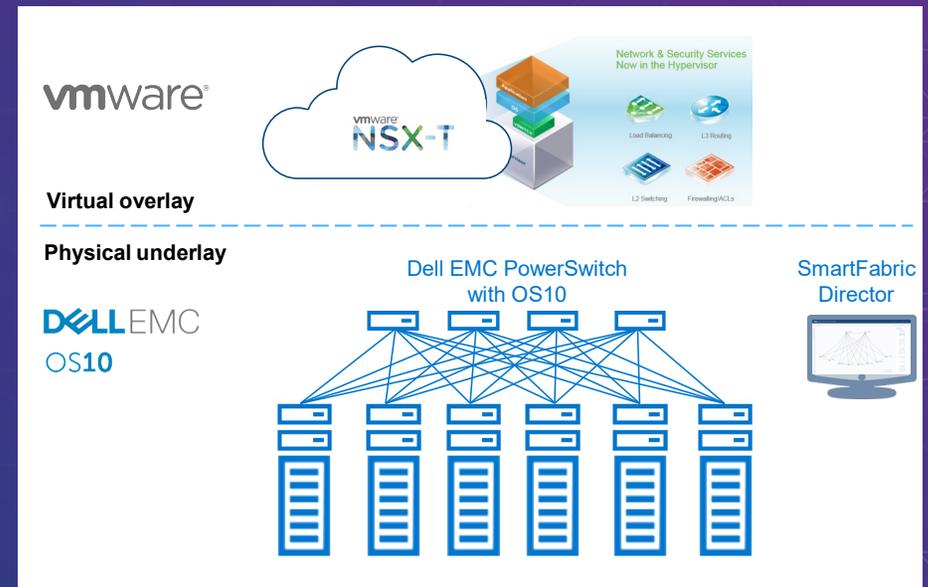
Visibility for Both Physical and Virtual Networks

Dell EMC SmartFabric Director empowers network managers to make physical and virtual networks work together to support and accelerate business speed.

- 1 Automate leaf-spine fabric.** With Dell EMC SmartFabric Director, fabric discovery is an ongoing process that ensures the fabric wiring is consistent with the user-defined intent for rapid auto-provisioning.
- 2 Unparalleled fabric visibility.** Comprehensive and highly intuitive visualization of fabric and events and telemetry information greatly simplifies the day-to-day operations of the fabric.
- 3 Improve fabric lifecycle management.** Automating the download, install and verification process ensures that fabric switches are upgraded with the right images.

SmartFabric Director integration with NSX-T and vCenter

- Dynamic provisioning of virtual LANs
- Auto-creation of Link Aggregation (LAGs)/port channels
- Auto-detecting add/remove of ESXi hosts
- Maximum transmission unit (MTU) consistency checks



Get Started

Dell Technologies and VMware are revolutionizing network infrastructure by automating everyday processes.

Ready to simplify management and increase efficiency across virtual and physical network environments? Dell EMC SmartFabric Director can help.

Learn more at dell.com/smartfabric-director

Resources



[Dell EMC SmartFabric Director Spec Sheet](#)



[Dell EMC SmartFabric Director 101 Overview Video](#)



[Blog: 5 Reasons Why You Should Simplify Management Across Both Virtual and Physical Networks Now](#)

