

## **Dell Technologies Networking**

# **Dell EMC SmartFabric Director**

Simplify management and increase efficiency across virtual and physical network environments

Accelerate IT transformation and agility by centralizing management of physical and virtual networks with the only fabric management platform co-engineered with VMware.

Modern applications are driving the need for greater agility from the data center to the edge. A software-defined data center strategy is key to ensuring a dynamic infrastructure that can support the shifting demands and priorities of businesses and the increasing complexity of applications. The move to a software-defined data center strategy requires virtualizing the network using an overlay technology to run on top of an underlay physical network for maximum flexibility and agility.

Unfortunately, legacy infrastructures were not designed to handle the massive amount of data and the accelerated pace of change in today's data centers as organizations build out virtual workloads on top of their physical underlay infrastructure. Rigid architectures built on proprietary software and hardware stacks require manual set up and scripting by specially trained IT personnel. This not only makes infrastructure management and orchestration time-consuming, but error-prone and costly as well.

Today's data center managers need a way to simplify operations of the data center underlay network infrastructure, and network managers need better network visibility and control across both physical and virtual environments.

## Dell EMC SmartFabric Director – Visibility for Both Physical and Virtual Networks

Dell EMC SmartFabric Director, co-engineered by Dell Technologies and VMware, helps organizations accelerate data center transformation with centralized management across virtual and physical network infrastructures. Automation eases the creation and production of an efficient fabric network while also verifying it will operate as intended without the need for manual intervention. Intent-based auto-provisioning and enhanced visibility and management between virtual and physical network environments ensure that day-to-day operations of the physical and virtual layers of the core networks are synchronized. In addition, simplified, unified management across physical and virtual networks frees network managers from relying on multiple management screens and cumbersome manual processes.

**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.

**Gain fabric visibility.** Comprehensive and highly intuitive visualization of the time-series data and other telemetry information greatly simplifies the day-to-day operations of the fabric.

**Improve fabric lifecycle management.** Automating the download, install and verify process ensures that fabric switches are upgraded with the right images.

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 Reduces Configuration Steps by 98%

Network managers can create a VMware-ready physical underlay in three simple steps, reducing network configuration steps by 98% on Dell EMC switches. Compared to manual solutions, which can take a single person half of an 8 hour working 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.

4 spine x 6 leaf fabric configuration using CLI			
Switch type	# of CLI to configure	# of switches	Total CLI
Spine switch	5615	4	2244
Leaf switch	228	16	3648
		Total	5892

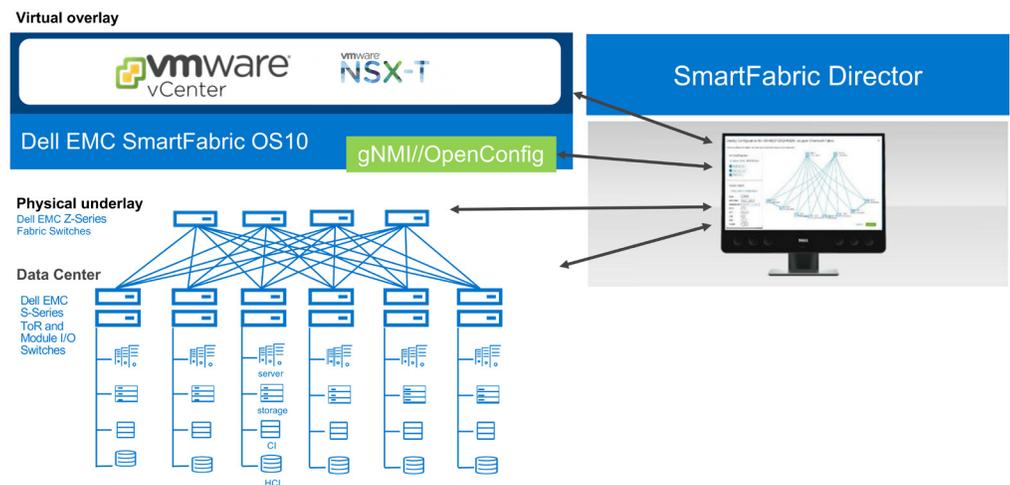
## Resources

- [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](#)

## Realize Measurable OpEx Savings

Dell EMC SmartFabric Director delivers measurable OpEx savings by eliminating manual errors and the need to troubleshoot misconfigurations. Increased visibility into the underlying physical network and its correlation with the supported virtual overlays ensures that network managers no longer need to spend time correcting mistakes when deploying and managing virtual networks – new network services can be brought up more quickly and efficiently, valuable resources can be reallocated to business-critical initiatives, and the business can move faster.

## Tying together the physical & virtual networks via tight integration with VMware vSphere and NSX-T



## The Only Fabric Management Platform Co-engineered with VMware

As the only fabric management platform co-developed with VMware, SmartFabric Director provides customers with a single, cohesive view across both physical and virtual environments for operations, management and troubleshooting. The co-engineered solution offers an integrated approach to control, visibility, and analytics, with orchestration tools from VMware and other third parties.

This innovative solution from Dell Technologies and VMware extends our shared vision of a software-defined data center by simplifying the definition, creation and deployment of data center fabrics.

## Summary

By enabling organizations to embrace software-defined networking, SmartFabric Director can realize the benefits of moving away from legacy hardware-bound technologies to modern, open technologies that are software-driven. With Dell EMC SmartFabric Director, Dell Technologies and VMware are revolutionizing network infrastructure by automating everyday processes.

Please visit [www.dell.com/smartfabric-director](http://www.dell.com/smartfabric-director) to learn more.

