Solution Brief

Streamline Networking and Security Management

Simplify and accelerate your transformation with VMware NSX on Dell EMC PowerEdge servers

To stay competitive, businesses aren't just thinking transformation, they're in the middle of it. While transformation looks different for every organization, many enterprises are landing on a hybrid cloud model, which delivers the advantages of the cloud along with greater security and control. We're also seeing that nearly two-thirds of cloud buyers want a solution that spans the data center, cloud and edge.¹

Admittedly, this is a daunting task, especially for IT teams trying to consistently and securely manage physical and virtual infrastructure in numerous clouds. Combine this with the rise in container usage by app developers, and IT is juggling even more — trying to find a way to bridge silos. What they really need is a solution that will streamline the management process across both hardware and software.

Building an agile network is a step in the right direction. Legacy network architectures, however, shoe-horn networking and security services into hardware and away from the application, which adds complexity and cost. Software-centric networking and security solutions, on the other hand, implement networking around the applications. This, in turn, speeds up network provisioning and application deployment. It extends networking and security services to wherever applications are run. Traffic flow is optimized, latency is reduced and application performance is vastly improved.

Move toward software-centric networking with VMware and Dell EMC

VMware® NSX® on powerful Dell EMC PowerEdge servers provide the modern technology, automation and security you're looking for. VMware NSX is a full-stack network virtualization and security platform that enables the virtual cloud network, a software-defined approach to networking that extends across data centers, clouds and application frameworks. Dell EMC PowerEdge servers — the bedrock of the modern data center — provide a proven foundation on which to run NSX and securely connect your hybrid cloud.



Quick time to value withPayback Period

<12 months²

¹ VMware, "Cloud Journey" study, 2018.

² Forrester Research, "The Total Economic Impact™ of VMware NSX," a commissioned study conducted by Forrester Consulting on behalf of VMware, May 2020.

\$ ROI of over 95%

including CapEx and OpEx savings through increased employee productivity, optimized resource utilization, full-stack network automation, and enhanced security posture.²

The value of VMware NSX

NSX decouples networking and security from the underlying hardware, bringing these functionalities closer to where your applications are running. This allows you to automate network policy and operations, offering the same agility, efficiency, and flexibility that was previously only achievable in public cloud environments.

Users can quickly create efficient cloud-scale networks with the Layer 2-to-Layer 7 NSX platform, leveraging best-in-class security for micro-segmentation and IDS/IPS, advanced load-balancing, and full-stack support for modern container-based applications. NSX platform capabilities can be extended with a broad ecosystem of third-party integrations ranging from next-generation firewalls to performance management solutions to build agile, and secure environments across clouds.

Enhancements in VMware NSX 3.0 further this end-to-end approach to application-driven networking and security. Highlights include:

- Simplified network configuration and management, visibility and control: NSX 3.0 enables cloud-scale networking and security with NSX Federation that allows you to deploy and manage policies consistently across infrastructure boundaries across clouds. It delivers true single-pane-of-glass capabilities while providing enhanced constructs for data path multi-tenancy, support for government clouds, Layer 3 EVPN and multi-VRF routing for multi-tenancy, and dynamic service chaining.
- Best-in-class Intrinsic Security: NSX 3.0 introduces NSX Distributed IDS/IPS, an advanced threat detection solution in the VMware service-defined firewall for protecting east-west traffic in hybrid data center architectures. This ultimately extends NSX's intrinsic security approach from every workload to data center, multi-cloud and edge. NSX also enables micro-segmentation to define security policies and controls for individual workloads and dynamic security groups.
- Networking and security for modern applications: As enterprises undergo application transformation as part of their digital transformation, more businesses are deploying containers and microservices with Kubernetes® becoming the de facto container orchestration platform.
 NSX 3.0 is designed-in as the default pod networking solution for vSphere® with Kubernetes³



Proven PowerEdge servers deliver a solid foundation

To get the most from virtualizing your networking and security functions with NSX, make sure it's running on a proven hardware foundation. Dell EMC rack, tower, and modular PowerEdge servers provide a scalable business architecture that enables you to maximize performance across a range of applications. Increase productivity by automating the entire server lifecycle from deployment to retirement with embedded intelligence. Protect your customers and your business with integrated security.

³ To take advantage of the Kubernetes features, customers must purchase VMware Cloud Foundation™ 4. vSphere with Kubernetes has a separate SKU and is offered as a term license.

Key advantage of running NSX on PowerEdge servers

- Confidently modernize IT with best-in-class hardware and software.
- Install your software-defined data center in days, rather than weeks.
- Seamlessly scale your infrastructure to meet dynamic and varying workload requirements with PowerEdge Scalable Business Architecture.
- Bridge the physical and virtual gap by automating and consolidating key PowerEdge server management tasks in the VMware vCenter[®] console with OpenManage Integration for VMware vCenter (OMIVV).

Modernize, automate and protect — from core to edge to cloud

The only constant in this world is change. While it would be nice if we could occasionally hit the pause button on evolving technology, that's not going to happen. What you can control, however, is making sure you have modern, agile and secure architecture to work with — one that takes your business into the future with confidence. Together, Dell EMC PowerEdge servers and VMware software provide the assurance you need. With over 18 years of joint innovation and 1,800+ individuals skilled in both technologies, we help you:

- Modernize Take control with capability to flexibly architect and scale your hybrid cloud strategy for today and tomorrow with industry-leading PowerEdge servers, HCI building blocks and virtualization solutions.
- Automate/empower Automate routine tasks, manage more easily and consistently, and empower IT to focus on strategic projects while enabling developers to boost productivity.
- Protect Fortify business operations with security from chip to server to virtual machine to cloud-native apps and containers, backed by industry-leading support from a single vendor.



Learn more about Dell and VMware solutions



Contact your Dell Technologies sales or channel representative for more information.



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