HOW TO SOLVE THE VIRTUAL + PHYSICAL NETWORK PUZZLE

vmware®

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Introduction

When it comes to managing, troubleshooting, and securing the network, many network administrators face a puzzling, and frustrating, visibility gap across the virtual and physical network. How can you ensure health and availability while also enhancing security and compliance? Improve troubleshooting and automate operations? And do all that while delivering faster time to value?

Get all the right pieces for intelligent operations for your software-defined data center with VMware vRealize® Network Insight™:

Security with
Micro-segmentation

End-to-end
troubleshooting

Compliance

Network health
and performance

360° visibility
and analytics

Best practices

Read on to discover how vRealize Network Insight and VMware NSX delivers converged visibility across virtual and physical networks, optimizes network performance, and ensures the health and availability of NSX deployments for fast time to value, ease of use, and lower TCO.
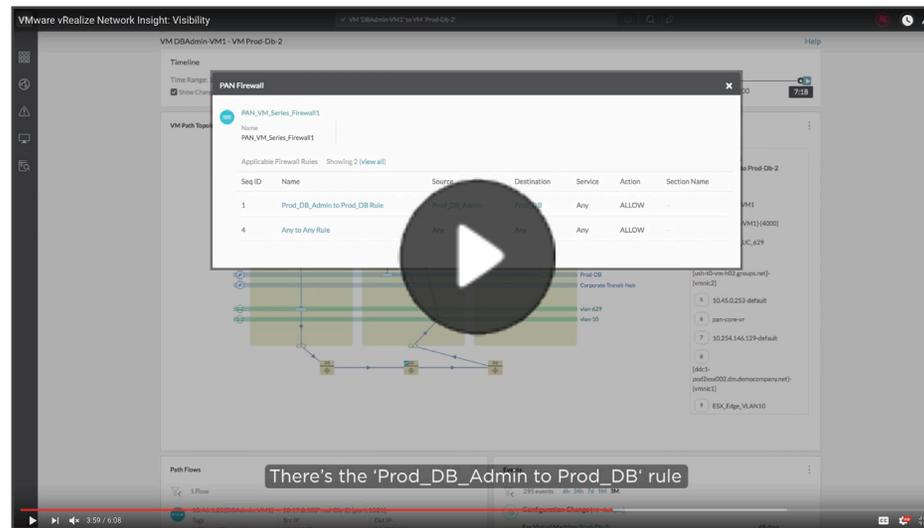
Use Cases

The following use cases highlight how you can increase SLAs, imrove IT agility, and reduce complexity in SDDC environments with vRealize Network Insight.

360° VISIBILITY

Optimize Network Performance with 360° Visibility & Analytics

vRealize Network Insight provides converged visibility across overlay and underlay, virtual and physical, and private and public cloud. By integrating deeply with virtual (NSX) and physical layers (physical switches, routers, firewalls), and connecting the dots between the two – across vendors and clouds –vRealize Network Insight enables troubleshooting and optimized performance for SDDC environments.
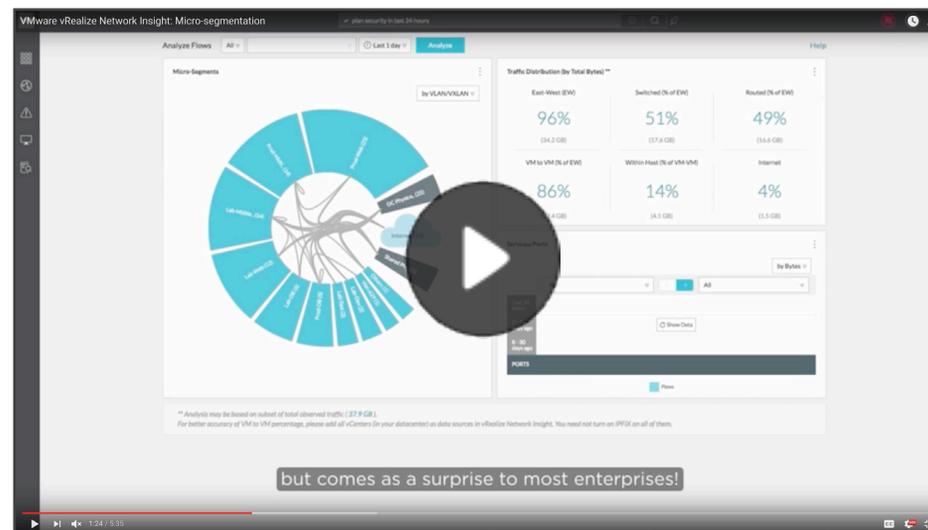

KEY BENEFITS

- *Virtual and physical network topology mapping*

- *Performance optimization across overlay and underlay*

- *Log Analytics provided by vRealize Log Insight for improved visibility*

Demo: Achieve 360° visibility across overlay and underlay, and troubleshoot and optimize network performance

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MICRO-SEGMENTATION PLANNING

Plan Micro-segmentation Deployment and Ensure Compliance

vRealize Network Insight takes the guesswork out of deploying micro-segmentation with comprehensive NetFlow assessment to model security groups and firewall rules, actionable recommendations for implementing micro-segmentation, and monitoring compliance postures over time. vRealize Network Insight can also help you improve performance and availability with converged visibility across physical and virtual networks.

By collecting and analyzing Network Flows in real time, and putting all the flows in the context of the VMs and applications that they are originating from or terminating to, users can easily understand who is talking to whom, what flows need to be allowed, and what can be blocked. As a result, vRealize Network Insight enables network administrators to develop a very accurate micro-segmentation model.

Demo: vRealize Network Insight flow analysis, micro-segmentation planning, firewall deployment, and compliance

KEY BENEFITS

- *Comprehensive NetFlow assessment and analysis to model security groups and firewall rules*

- *Recommendations to make micro-segmentation easier to deploy*

- *Continuously monitor and audit compliance postures of distributed firewalls over time*

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ADVANCED NSX OPERATIONS

Ensure Best Practices, Health and Availability of NSX Deployment

vRealize Network Insight simplifies NSX operations management with intuitive UI and natural language search to quickly pinpoint and troubleshoot issues, as well as best practices for deployment and compliance recommendations.

Using simple and widely-accepted networking and data center language, administrators and operators can easily manage and troubleshoot NSX without requiring additional training. The use of this common language model eliminates the siloed, domain-specific language traditionally present in IT organizations, and improves seamless management across roles – from networking and storage to virtualized infrastructure.

In addition, best practice checks guide users through VXLAN and firewall implementation and provide alerts for pitfalls in the design and implementation of NSX.

Demo: Monitor the health and availability of your NSX deployment
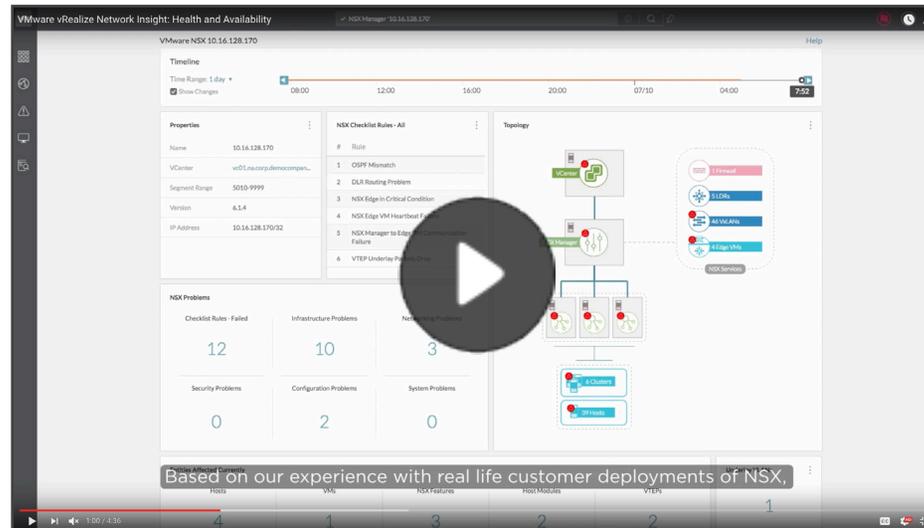
KEY BENEFITS

- *Intuitive UI, natural language search to quickly pinpoint issues*
- *Best practice deployment and compliance for NSX*
- *Log analytics for accelerated troubleshooting provided by vRealize Log Insight*

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Case Study

ENSURING A PERFECT FIT FOR CALIFORNIA DEPARTMENT OF WATER RESOURCES

The California Department of Water Resources (CDWR) is responsible for protecting, conserving, developing, and managing much of California's water supply, including the State Water Project which provides water for 25 million residents, farms, and businesses.

CHALLENGE

Lack of automation and agility led to high IT costs and an inability to support collaboration between key constituents.

This lack of automation impacted functions critical to CDWR's mission, such as the agility to deliver secure solutions to the business quickly with minimal customization, as well as adding to the total cost of owning and operating IT.

GOAL

A new network model capable of transforming the organization and enabling business.

CDWR wanted to move to a shared services and service provider model to become an effective "business enabling" IT organization.

> " We require an IT infrastructure that enables collaboration and access between all of our key constituents: government agencies, businesses and citizens."

- TONY MORSHED,
CHIEF TECHNOLOGY OFFICER

SOLUTION

Deploy a next-generation infrastructure to achieve and maintain the highest level of overall data center economics and performance.

CDWR planned, designed, and deployed a flexible data center architecture to optimize the network for applications and cloud access. As a result, they were able to reduce IT complexity, improve scalability, and increase agility, while strengthening its overall security posture.

By leveraging VMware vRealize Network Insight from the beginning, DCWR was able to effectively troubleshoot along the way, which has been an invaluable timesaver to network and other operations personnel. Additionally, because vRealize Network Insight is tightly integrated with VMware and other technology, including Cisco, Palo Alto Networks, Brocade and F5 technologies, it assisted in the move to a software-defined data center.

RESULTS

A highly automated, scalable and secure data center that is managed holistically.

Today the CDWR datacenter is highly automated, and the application delivery process has never been more agile or secure. Best of all, these goals were achieved while also reducing OpEx and TCO.

> "
> *We wanted to start our data center modernization project on the right footing when it came to risk free deployment and operations. We looked at a variety of products and selected VMware vRealize Network Insight to gain visibility across all layers from the start."*
>
> – TONY MORSHED, CHIEF TECHNOLOGY OFFICER

Next Steps

SOLVE YOUR VIRTUAL AND PHYSICAL INFRASTRUCTURE PUZZLE WITH VREALIZE NETWORK INSIGHT AND NSX

See how you can quickly and easily design and deploy micro-segmentation across the network with an intuitive and easy-to-use UI with natural language search. Optimize network performance and availability with visibility and analytics across virtual and physical networks. And get troubleshooting and operational views to quickly and confidently manage and scale VMware NSX deployments.

End to end troubleshooting

Best practices

Network health and performance

360° visibility and analytics

Compliance

Security with Micro-segmentation

GET STARTED TODAY

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