

Improving Network Operations with Automation Implementing VMware NSX with vRealize Automation

As network architects and administrators, it's easy to get tunnel vision when it comes to the health of your company's network. Concerns for performance, availability and security are always top of mind. But in reality, the network is a supporting infrastructure to the applications that empower the business to be productive, competitive, and gain and retain customers. Applications are at the heart of what you do. And you can benefit from considering a more application-centric view of your networking approach.

Network and Security for your Applications

VMware NSX enables companies to address networking demands at the application level, attaching security and network policies to workloads for a more flexible and granular implementation of your network using a software overlay. This software abstraction of your network away from the hardware layer brings you some valuable benefits, including:

Agility

The ability to implement network changes more quickly and accurately than can be done when provisioning physical networks

Flexibility

Network and security parameters are handled at the workload level, applications can move across data centers and to the cloud, without requiring physical network changes

Security

Network virtualization enables micro-segmentation – a more effective approach to security that monitors traffic as it flows between systems and workloads

Streamlining Network and Security Services

Applications need accurately configured network connectivity and security to ensure availability, scalability, and performance. To deliver these capabilities quickly and with minimal overhead, you need to automate more than just assigning IP addresses, DNS entries and vLANs to the virtual machines that host your applications. Through the use of VMware vRealize Automation with NSX, you can take your network automation to the next level, addressing:

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- **Connectivity** Provision connectivity through deployment of logical switches and routers for multi-tiered applications
- Security Securely deploy the application through intelligent placement of workloads in security groups, protected by firewall rules
- **Performance** Ensure application availability and performance through the use of load balancers so users will always have access to a highly responsive application

Deliver an App-Centric Network with vRealize Automation

vRealize Automation provisions, updates and decommissions network and security services with your virtualized applications. Network and security services are deployed in the context of the application or infrastructure - as part of the automated delivery of the application, consistent with its connectivity, security, and performance requirements.



vRealize Automation and NSX can be configured to consume existing networking and security services managed by the endpoint, or dynamically deploy services during machine provisioning, allowing you to automate otherwise manual tasks. Automation creates a standardized, repeatable process that:



- Accelerates application delivery by reducing time needed to perform tasks
- Improves consistency and reliability by avoiding errors introduced manually
- Reduces costs and improves productivity by eliminating manual tasks

Using vRealize Automation, it's also possible to enable self-service requests for application or infrastructure resources, reducing provisioning processes from taking days or weeks down to minutes – without compromise with setup.

The combined capabilities of vRealize Automation and NSX empower IT to fully automate the delivery of secure, scalable, high performing applications.

Getting to your Ideal Data Center End State

The Arraya Solutions Virtualization team can help your business determine if you can benefit from an automated network virtualization solution, making your networks application aware and automatically directing resources where needed most. Experience all the benefits of an intelligent, well run virtualized network through a partner with broad and deep experience planning, implementing and growing virtual networks. Arraya can handle all aspects of your NSX deployments start to finish, including automation and security.

Free Network Assessment

Sprawling networks and unclear perimeters can make it challenging to know everything that's in your environment. The structure and layout of your network must be evaluated to ensure availability, validate security and guarantee performance. Arraya is offering a FREE network assessment that will give you a holistic view of your network ecosystem, its security gaps, and where you could benefit from smart automation. We use an application-focused tool that provides comprehensive insights into network infrastructures, reducing the time required to plan and configure your virtual networks by up to 70%.

To start your free network assessment, email us at info@arrayasolutions.com

About Arraya Solutions

Arraya Solutions is a leading mid-Atlantic technology consulting firm and managed services provider, which can meet the needs of customers of all sizes, across a wide range of industries. At Arraya, we work with our customers, not for them, to develop and implement the best solutions to satisfy their particular business needs, objectives, and goals. In the process, we educate, engage, and empower IT departments and entire companies to succeed.