App Mobility & Disaster Recovery with NSX

Improve business agility and continuity

At a glance
Modern businesses require modern networks. A lack of app workload mobility creates networking efficiency and resilience gaps. VMware NSX enables software-defined network mobility and availability across racks, data centers, and regions to improve private cloud agility and resilience.

Key highlights
• **Simplify Migration Operations:** Increase mobility by modifying networking and security configurations without changing IP addressing or physical topology.
• **Enable Uniform Policies:** Define networking and security policies directly tied to the application lifecycle, minimizing re-configurations in both pre- and post-migration.
• **Lower Business Risk:** Enable high network availability based on Active-Active and Active-Standby disaster recovery configurations with centralized federated management.

Modern Cloud Environments Limit App Mobility
Business operations such as cloud migration, multi-data center pooling, data center capacity rebalancing, and data center migrations are inefficient and error-prone, and they lack the flexibility that modern cloud environments demand.

- **Agility:** Manual network migration processes are complex and time-consuming.
- **Availability:** Protecting critical business workloads from disruptive events can be slow and costly.
- **Operations:** Troubleshooting is complex when networks lack end-to-end visibility.
- **Scalability:** Hardware-dependent networks scale inefficiently, and configurations are often error-prone.

Data center modernization and hybrid cloud adoption projects benefit massively from a software-based approach to networking and security. VMware NSX’s programmatic provisioning, operational efficiency, and robust networking improve business agility and continuity within and across data centers and clouds.

NSX for App Mobility & Disaster Recovery
NSX helps customers establish an efficient cloud networking and security model to run applications across multiple data centers and clouds by employing a unique software network overlay approach.

NSX’s App Mobility extends networking and security policies across heterogeneous environments and application frameworks, data centers, and hybrid and public clouds. It enables high levels of security and efficiency for workload mobility that were previously impossible to achieve, both operationally and economically.

NSX supports disaster recovery architectures, enabling high availability for business-critical applications and allowing you to quickly scale networking, security, and load balancing capacity to meet changing demands. NSX networking makes it easier to consolidate data center resources, facilitating seamless pooling of unified networking and security infrastructure for applications running across multiple data centers and clouds.
Use cases (see figure 1)

Data Center Migration and Consolidation: Extend your networks across racks and across data centers to simplify application migration for data center evacuation, merging, pooling, and capacity-rebalancing – all via a single API call or a few clicks.

Capacity Rebalancing: Optimize data center utilization by dynamically moving workloads anywhere in the data center without complex re-routing, traffic engineering, security policy changes, or physical network constraints.

Disaster Recovery: Minimize business impact and maintain application availability by quickly enabling Active-Active and Active-Standby deployment models, using centralized federated management and simplified resource pooling.

Multi Data Center Pooling: Make it easy to extend your network across data centers regardless of location or distance. NSX Federation simplifies operations by creating a unified, seamless networking and security infrastructure for running applications across multiple data centers.

Learn more

Check out these resources to learn more about NSX. Reach out to your VMware sales representative for further details.

VMware NSX

Key Capabilities

Network Overlay Services

Create on-demand virtual networks with zero tickets and zero traffic re-engineering. Eliminate hardware and physical topology dependencies and simplify and accelerate workload movement while preserving existing IP and MAC address configurations and security postures.

Policy Consistency Across Sites

Tie networking and security policies to the migration lifecycle of each workload. Eliminate the need to re-configure your network and replicate security policies when moving workloads to new locations.

Automated Migration

Simplify operations, reduce errors, and accelerate migrations with NSX. Consolidation and migration processes can be minimized with easily repeatable processes, resulting in faster project ROI.

Centralized Control

Enable centralized policy management, consistent networking and security, policy configuration, and synchronized operational state and network visibility across data centers through a single pane of glass using NSX Federation.