

APPLICATION CONTINUITY WITH VMWARE NSX

The Digital Business, Always On

Across industries, the business landscape is changing at an accelerated pace. As a consequence, businesses are looking to leverage technology to differentiate, and end user expectations are hitting an all-time high. Recent public examples have shown that every minute an application, web site, or service is down, a business can lose a fortune from lost business, tainted reputation, and residual consequences. A 2016 report found the average cost of a data center outage to be \$740,357¹, while other public examples of outages have cost up to \$150 million². How can organizations use their existing infrastructure more intelligently to ensure that they can out-innovate competitors and that disruption to the end user does not happen? Can internal resources be leveraged together with public cloud services? What barriers are in the way?

Breaking Down Network Barriers

Organizations often host their applications today from a single data center or single public cloud provider. In the data center, compute and storage resources have been virtualized, flexible, and mobile for years, but in most cases manual network reconfiguration is still necessary in order to enable mobility between data center sites or the cloud. This bottleneck leaves much of the value of virtualization untapped. Network virtualization solves this problem and enables mobility between sites – without IP reconfiguration – by replicating network services in software, allowing for a host of new possibilities when it comes to resource planning and application continuity.

“The VMware NSX network virtualization platform seamlessly integrates cloud and on-premises resources. We found it significantly reduced the number of man-hours needed both to design cloud services for customers and to carry out the actual migration.”

KAHORU TSUDA
DIRECTOR, CLOUD SERVICES,
NTT COMMUNICATIONS CORPORATION

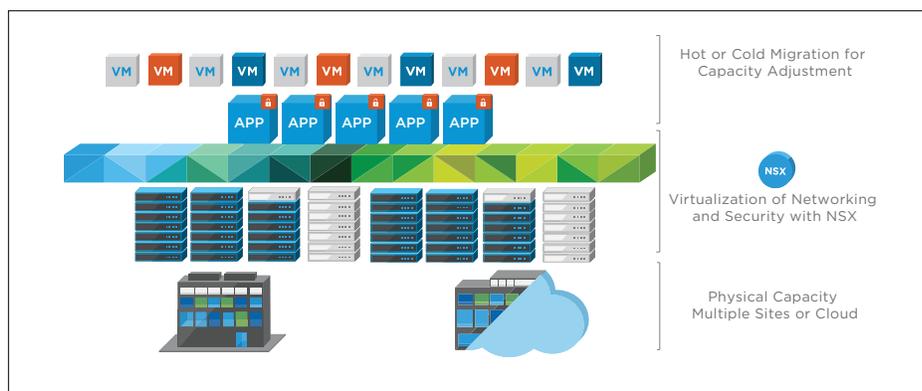


Figure 1. Extending the Network Across Sites

¹ “Cost of Data Center Outages,” Ponemon Institute, January 2016

² <http://money.cnn.com/2016/09/07/technology/delta-computer-outage-cost/>

KEY STATISTIC

54% of IT professionals project rapid growth in cloud services over the next 2 years. (Economist Intelligence Research, August 2016)

KEY POINTS

- Keeping data center locations and public cloud services in silos holds back businesses from effective digitization.
- Unnecessary manual processes prolong data center outages, resulting in significant and sometimes disastrous unplanned costs.
- VMware NSX® extends a consistent networking and security configuration across data centers and into the public cloud.

LEARN MORE

Find out more about VMware NSX by visiting <http://www.vmware.com/products/nsx.html>.

To purchase VMware NSX or any VMware product, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit <http://www.vmware.com/products>, or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the product documentation.

Disaster Recovery

The fact that disastrous events are infrequent – be they from weather events or from human error – is a double-edged sword. Of course, we don't want these events to ever happen, but they can, and their infrequency often means that our preparedness and recovery processes are not thoroughly tested. Outages seen in the news can serve as a wakeup call.

Today there are solutions for data center storage and workload recovery, but turning on backup sites often requires manual reconfiguration of network IP addresses on a per application basis. With the increasingly distributed nature of applications today, this can take hours or even days. VMware NSX prevents this step from being necessary. Virtualized network services can span across multiple data center sites and even the public cloud, drastically reducing outage time in the event of a disaster. This also means public cloud resources can now be used for disaster recovery, avoiding the need to build under-utilized infrastructure purely for recovery.

Data Center Pooling

With the rapid pace of change in business today, the picture of IT resources available to a business is increasingly in flux. From merger and acquisition activities, or from intentional geo redundancy planning, it is not uncommon for an IT organization to have multiple data center sites. Yet, too often is the network standing in the way of true workload mobility across locations. VMware NSX extends your network across sites, enabling seamless workload mobility. Businesses now have a whole new level of flexibility when planning consolidation activities, upgrade activities, disaster recovery, application level redundancy, and general elasticity by being able to use the infrastructure in their various sites as a single pool of resources with no IP reconfiguration required.

Cross-Cloud

The agility and elasticity of private and public cloud services is changing how IT operates and how businesses innovate, to their benefit. And yet, these various cloud resources are still typically treated as separate autonomous resources. Many enterprises don't even consider the benefits of leveraging the private and public cloud for a given application because it is not considered as an option due to the barriers that today's networking and security solutions inherently create.

IT organizations are looking for how to institutionalize the public cloud. Ideally, they could allow developers to use services from a private or public cloud, which are all serviced under a consistent networking platform and set of security policies. VMware NSX makes this possible by extending the same virtualized network and security platform that IT organizations use on their infrastructure, into the cloud, resulting in a single networking and security configuration for both private and public cloud resources. Businesses can now integrate the public cloud into their resource and disaster recovery planning rather than treating it as a separate island.

