NEWCLOUD DRIVES NEW BUSINESS OPPORTUNITIES WHILE SAVING TIME, COSTS AND RESOURCES WITH VMWARE NSX

INDUSTRY
MANAGED SERVICES PROVIDER

LOCATION
HEADQUARTERS: ENGLEWOOD, CO

DATA CENTERS:
• PHOENIX, AZ
• LOS ANGELES, CA
• SAN FRANCISCO, CA
• DENVER, CO
• ENGLEWOOD, CO
• ATLANTA, GA
• CHICAGO, IL
• NEW YORK, NY
• COLUMBUS, OH
• DALLAS, TX
• DÜSSELDORF, GERMANY
• FRANKFURT, GERMANY

KEY CHALLENGES
Create new business opportunities with the ability to provide DR between data centers, reduce costs, and increase agility

SOLUTION
VMware NSX Enterprise Edition

For more than ten years, NewCloud Networks has been helping customers navigate the difficult choices and challenges that can come with trusting critical data and systems to an IT partner. NewCloud's intelligently architected cloud platform and expert engineers seamlessly integrate solutions to deliver unparalleled services across its cloud hubs located in the US and Germany.

In addition to providing public, private, and hybrid cloud hosting options, NewCloud offers cloud backup, cloud disaster recovery, desktop as a service, cloud-hosted PBX, and a full suite of managed infrastructure and application services. As a VMware-focused service provider, most of NewCloud's customers are currently relying on VMware solutions and looking to NewCloud to extend their premises into NewCloud data centers.

The Challenge

NewCloud was experiencing underlying network infrastructure challenges associated with its disaster recovery (DR) services. The inability to stretch L2 domains between data centers was limiting the company's ability to provide DR without re-IPing customers' servers. NewCloud wanted to be able to offer a solution that would make it easier to deploy DR services that could exist on the same L2 domain even if a customer has applications with hard-coded IP addresses.

In addition, NewCloud Networks saw an opportunity to reduce the man hours associated with provisioning customers. At the time, technicians were spending hours researching issues before they could provide a solution. By standardizing provisioning, NewCloud could not only realize the benefits of improved efficiencies, it could also reallocate those resources to more value-added customer services.

The Solution

Today, because of key NSX features provided by VMware, rather than getting into the backend infrastructure or physical networking devices to stretch out vLANs for individual customers, NSX has provided the segmentation and overlay needed to help provision more customers using a standardized approach.

From a customer perspective, NSX is now used for L2 stretching and to avoid re-IPing. If one side fails over, the other side can be brought up much faster because of the way it is stretched, versus re-IPing and redoing the DNS.

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KRIS HOGABOOM
SENIOR VICE PRESIDENT,
SOLUTIONS ARCHITECTURE

BUSINESS BENEFITS

- Reduced time to provision from 48 hours to 15 minutes

- Reduced customer onboarding by four hours per customer

- Reduced number of support personnel needed to support more customers by 3 FTEs

- $200,000 savings per data center via reduction of hardware

- Standardization enables segmented customers that can be duplicated

- Frees up engineering resources with automation, enabling them to provide value-added support to customers

- Simplifies, secures and supports more agile scalable DR services

VMWARE FOOTPRINT
- VMware NSX Enterprise
- VMware ESXi
- VMware vCenter
- VMware vCloud Director
- VMware vCloud Availability for vCloud Director
- VMware Horizon View

"We use Trend Micro Deep Security, which integrates directly into NSX to do offloading so VMs aren't running their own IPS engines and anti-virus engines. It's actually running on guest VMs and communicating through NSX," says Justin Keller, Senior Architect at NewCloud Networks.

NSX embeds security functions right into the hypervisor. It delivers micro-segmentation and granular security to the individual workload, enabling a fundamentally more secure data center. Security policies travel with the workloads, independent of where workloads are in the network topology.

Business Results and Benefits

"NSX has enabled NewCloud to be more agile and flexible because we are no longer constrained by hardware or the features that traditional networking architecture support," explains Kris Hogaboom, Senior Vice President, Solutions Architecture. "We can deliver whatever a customer wants from a networking perspective."

Once NSX was deployed, NewCloud Networks immediately realized the benefits of treating the physical network as a pool of transport capacity, with network and security services attached to workloads using a policy-driven approach. NSX enables the creation of entire networks in software and embeds them in the hypervisor layer, abstracted from the underlying physical hardware. All network components can be provisioned in minutes. In addition to reducing operational costs, NewCloud has realized $200,000 savings per data center by overlaying feature sets on NSX rather than purchasing underlying hardware such as switches and routers.

"Before NSX our engineers had to touch multiple switches, change trunk vLANs and add networks to vSphere and then import them into vCloud," says Keller. "NSX has dramatically impacted the time to provision customers. It used to take us somewhere in the range of 48 hours to provision a customer and now it takes 15 minutes."

The added simplification enabled by NSX has also impacted NewCloud in several ways. First, simplified troubleshooting has enabled NewCloud engineers to provide a heightened level of support to customers by reducing the time to resolve issues — which contributes to increased customer satisfaction. At the same time, NSX has simplified disaster recovery planning because NewCloud programmers don't need to spend hours hunting down hard-coded IP addresses and then changing them to new ones. With NSX, that's been eliminated. Finally, the productivity enhancements resulting from NSX have enabled NewCloud to continue growing its customer base without having to increase the resources needed to support them.

"The productivity enhancements and reduction in hours spent troubleshooting have allowed us to right-size our organization to best serve our customers," explains Hogaboom. "Fewer people to support more customers brings tremendous value to our business."

Although it varies by customer, NewCloud has also taken hours off recovery time objectives (RTOs) for disaster recovery because there is no re-IPing and re-registering in the case of an outage. NSX abstracts networking from the underlying hardware and attaches networking and security policies to their associated workloads. Applications and data can reside and be accessible anywhere, and workloads can be moved from one data center to another, or deployed into a hybrid cloud environment.

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Looking Ahead

The increased simplicity and efficiency provided by NSX has supported NewCloud Networks' business growth, including the addition of larger enterprise customers.

"Before NSX and its feature sets, we wouldn't be able to deliver the level of service and scale needed to support large enterprise customers — hardware would make it prohibitively expensive," concludes Hogaboom. "Being able to leverage a virtualized environment means that we can save money on hardware and successfully meet the needs of larger enterprise customers without having to expend capital on hardware."

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