EXPEDIENT DRIVES GROWTH AND SPEEDS THE DELIVERY OF NEW DR SERVICES WITH VMWARE NSX® ENTERPRISE EDITION

INDUSTRY
MANAGED SERVICES PROVIDER

LOCATION
HEADQUARTERS: PITTSBURGH, PA

DATA CENTER LOCATIONS:

• BOSTON
• BALTIMORE
• CLEVELAND
• COLUMBUS
• INDIANAPOLIS
• MEMPHIS
• PITTSBURGH

KEY CHALLENGES
Offer resilient and agile DRaaS across Expedient and customer data centers via the public Internet

SOLUTION
VMware NSX® Enterprise Edition

Expedient combines data centers, network access and managed services to deliver information technology infrastructure as a service (IaaS) solutions. Since first launching virtualized disaster recovery (DR) services in 2011, Expedient customer needs evolved as cloud adoption increased. The company recognized that delivering disaster recovery as a service (DRaaS) could enable customers to utilize DR on-demand with an automated, self-service solution. In addition to moving from CAPEX to an OPEX model, DRaaS frees Enterprise customers to focus on their own strategic business imperatives.

Today, with more than 1,600 customers and 4,000+ replicated VMs in eleven data centers, Expedient enables DRaaS at predictable costs with the recovery point objectives (RPO) and recovery time objectives (RTO) required by customers.

The Challenge

With analysts predicting continued growth for DR services year over year, Expedient saw an opportunity to leverage its Push Button DR offering to include customers outside the four walls of its data centers.

"We were offering disaster recovery services but it was only inside of our data center," explains Jon Rosenson, Senior Vice President, Strategic Initiatives. "We knew that there are many customers still relying on their own data centers, whether that's due to security and compliance concerns or location requirements due to latency. We wanted to ensure that we could work with those customers and give them the same functionality we were giving customers inside our data centers."

The complexity of maintaining real-time replication for all enterprise workload configurations is a significant challenge for IT professionals who must establish and maintain disaster recovery and business continuity strategies. In particular, the components of networking present specific security, automation and service resiliency challenges across public networks. Expanding its DRaaS offering to customers, regardless of whether they relied upon Expedient's data centers or their own, required a solution that could deliver these capabilities while scaling as needs grow.

The Solution

Expedient evaluated different network technologies and identified NSX® Enterprise network virtualization platform as the ideal solution because it provided two very specific features – Layer 2 VPN and Egress optimization. Before deploying NSX, Expedient used a hardware-based SDN solution that required hardware at all locations. Although this approach might scale in traditional enterprise environments, it quickly fails as customers utilize public clouds.

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JOHN WHITE,
VICE PRESIDENT,
PRODUCT STRATEGY

BUSINESS BENEFITS

• 35% of new sales driven by public/ private cloud DR service

• 10X growth in average deal size from new revenue opportunities with larger customers

• Reduced time to deliver network configuration for DR service from 2 hours to 15 minutes

• RTO decreased from 4 hours to 15 minutes

• Frees up engineering resources with automation

• More secure, agile and scalable DR services

VMWARE FOOTPRINT
• VMware NSX Enterprise
• VMware vSphere
• VMware vCenter
• VMware vRealize Automation
• VMware Site Recovery Manager

"When we designed our NSX solution we wanted to break away from the requirement of private lines for replication," says John White, Vice President, Product Strategy. "Private lines are expensive, take a long time to provision, and are not as available as traditional public Internet. Using L2VPN and Egress Optimization with NSX, we were able to build a robust network solution that allows our customers to take advantage of a multi-cloud distributed network to run their workloads from essentially anywhere."

By taking advantage of multiple paths to ensure the lowest latency possible, Egress Optimization prevents infrastructure traffic associated with host communication from interfering with user requests and vice versa. Traffic conditions are monitored and the best path is chosen for optimal performance regardless of application location.

NSX allows Expedient to extend its network between sites and enables customers to move workloads without changing Internet Protocol (IP) addresses. With NSX in place, vMotion is used to migrate database servers to other sites while keeping applications up and running. This gives infrastructure engineers tremendous flexibility and ensures that end users have access to the resources they need.

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The new public and private DRaaS cloud solution creates a hybrid network mesh that— when combined with dynamic routing protocols—allows for the re-use of public IP subnets in an alternative geographic location after a disaster is declared. With NSX Enterprise, all DRaaS customers simply hit a single button and move everything over to a secondary site, regardless of where the data center is located.

"When there is a threat of disaster, or one occurs, organizations need to think about relocating people, protecting physical assets, and even ensuring people's families are safe," points out Rosenson. "With NSX, our DRaaS can relieve one area of concern with the push of a button, ensuring fail over of sites and giving customers the time and resources they need to focus on other challenges."

Business Results and Benefits

DRaaS is an excellent entry point for new customers as well as an upsell for existing ones, which created new revenue opportunities for Expedient – today its public/private cloud DR service accounts for 35% of new sales. With the ability to provide a more agile and scalable service, NSX has enabled access to larger companies who need to shift infrastructure and rollout applications quickly. In fact, Expedient has experienced 10X growth in its average deal size from new opportunities with large customers.

Regardless of size, all DRaaS customers benefit from NSX's ability to replicate all components of IT infrastructure and reduce recovery time objectives (RTO), which have gone from four hours to fifteen minutes.

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"Many of our customers are realizing sub-one minute RPO, depending on the network and change rate," says Rosenson. "We have customers who once needed at least four hours to complete a recovery process for an environment of fewer than 50 VMs, today we're able to do that in less than fifteen minutes."

NSX has reduced Expedient's time to deliver services via automation, but the consistency it creates for the environment is equally important. Prior to NSX, provisioning was a time consuming activity for engineers, and not the best use of these valuable resources. NSX eliminates the need for engineers to be onsite running command line scripts to build out the network. Freeing up these engineers creates the opportunity to deploy resources further up the stack and engage in more complex customer challenges that benefit from greater expertise, such as migrations.

The speed and agility enabled by NSX Enterprise and a connection to the public cloud also means that Expedient isn't tied to a network carrier, which could take up to six months to spin up a circuit.

"Utilizing the Internet to connect to the public cloud gives us the ability to operate our services anywhere, in any location," explains Rosenson. "In the future, customers will be taking advantage of hybrid clouds, and through NSX, we can be the facilitator of those multiple environments, which creates new growth opportunities for our business. With NSX providing that layer it can be any cloud one day – it's the ultimate in mobility for our customers."

Looking Ahead

Today Expedient is using NSX Enterprise to ensure that its services are relevant, competitive, and that customers are well served in a multi-cloud future. NSX, and the availability of DRaaS opens up the conversation for opportunities with other projects, which include services for a customer's primary site as well.

"The DR service was a reason to get started with NSX Enterprise, but it is very strategic for the rest of our operation plan in the future," concludes White. "The network automation and enhanced network security that NSX Enterprise enables is going to be something that we're going to require as a cloud builder to make sure that we can move fast, move securely, and create services that our customers can't get on their own."

The new NSX Enterprise-enabled DRaaS solution has grown Expedient's new customer pipeline as part of its private and public cloud offering, creating new conversations with existing customers and opening doors to larger opportunities.

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