



INDUSTRY

CLOUD SERVICE PROVIDER

LOCATION

HEADQUARTERED IN HOUSTON, TX

DATA CENTER LOCATIONS

- AMSTERDAM
- LONDON
- MANCHESTER
- DALLAS
- STERLING
- LOS ANGELES
- RESTON
- TORONTO
- MELBOURNE
- SYDNEY
- SINGAPORE

iland Achieves 75% Reduction in Capital Expenditure With VMware NSX® Advanced and NSX Distributed Firewall

iland is an award-winning enterprise cloud services provider and a long-time user of VMware's software-defined networking. Founded in 1995, iland quickly recognized that embracing cutting-edge technologies and a commitment to developing solutions for challenging business needs would form the foundation of the company's growth.

More than two decades later, iland has established itself as a leading cloud infrastructure provider, with high industry recognition from Gartner for top leadership in the "Magic Quadrant for Disaster Recovery-as-a-Service", and from VMware with the "Best of Breed Infrastructure as a Service Award" at VMworld. With tens of thousands of networks deployed via software, iland wanted to evolve beyond its existing software-defined networking and security solution to bring new services and capabilities to its customers with VMware NSX.

The Challenge

iland Secure CloudSM services, including Infrastructure-as-a-Service (IaaS) and Disaster-Recovery-as-a-Service (DRaaS), were designed to enable customers to extend the rigor of their on-premises security and compliance practices into the cloud. Built on VMware vCloud suite, this self-service, enterprise-grade cloud infrastructure is accessed through the iland Secure Cloud ConsoleSM and is designed to support a variety of cloud hosting, security, disaster recovery, and compliance needs. The introduction of iland Secure Cloud highlighted the need for a new software-based solution that could support security demands while improving agility.

"We believe there shouldn't be a trade-off between security and flexibility," explains Justin Giardina, Chief Technology Officer. "We needed a solution that could deliver the flexibility and agility of software-based networking without sacrificing security and scalability."

“NSX has enabled us to enhance the scalability, availability, and security of iland’s cloud services by leveraging distributed firewall, distributed routing, and NSX’s rich integration with third party solutions. In addition to allowing us to run a fully scalable cloud, NSX gives us a scalable security framework on top of it.”

JUSTIN GIARDINA
CHIEF TECHNOLOGY OFFICER
iland

KEY CHALLENGES

Deliver the flexibility and agility of software-based networking for iland Secure Cloud service, reducing CapEx and OpEx without sacrificing security and scalability.

SOLUTION

VMware NSX Advanced Edition
VMware NSX Distributed Firewall

There was also an opportunity to reduce the costs and time associated with ordering, provisioning, and sending equipment to the data center to meet the changing bandwidth needs of our customers.”

The Solution

iland deployed VMware NSX Advanced Edition in all of its global data centers across the Americas, Europe and APAC. In addition to providing scalability, iland needed to support growth. NSX created an enhanced level of agility and programmability of services via software-defined networking and integration with third party APIs. The stability of the NSX platform was also an improvement over the previous solution, delivering increased uptime and availability.

NSX enables iland to split the data center into distinct security segments logically, down to the level of the individual workload. This is a networking best-practice known as micro-segmentation with distributed firewall. Through micro-segmentation, security policies and controls can be defined for each workload, based on dynamic security groups, ensuring immediate responses to threats inside the data center and enforcement down to the individual virtual machine.

With NSX in place, the iland Secure Cloud Console integrates a suite of security solutions, including intrusion protection, anti-malware, log inspection, and file heuristics. NSX integration gives customers full visibility into the network via a single pane of glass without having to manage third party products. NSX also allows iland to perform SSL Offloading, something it couldn’t do in the past. NSX enables SSL Offloading in a load balancer so that customers can install SSL certificates in a central place and then distribute the load to multiple backend web servers, without requiring a third-party device.

“NSX has enabled us to take iland Secure Cloud even further by leveraging distributed firewall, distributed routing, and NSX’s rich integration with third-party solutions,” says Giardina. “In addition to allowing us to run a fully scalable cloud, NSX gives us a scalable security framework on top of it, enabling us to seamlessly integrate the suite of Trend Micro offerings with the VMware NetX API.”

Today, customers have the ability to programmatically access routing protocols, such as BGP, via the iland console. This automates and streamlines the programming of devices while eliminating the need for customers to staff network experts. With NSX, iland can simply program the onboarding of a service via the portal in seconds, eliminating the need to involve a network admin.

“NSX supports a level of scalability previously unachievable, with numbers that are astronomically higher than our previous solution. Add to that the increased performance of firewall and VPN, as well as the enhanced load balancing NSX brings, and NSX has allowed us to deliver on our vision for iland Secure Cloud,” notes Giardina.

Business Results and Benefits

Previously, when customers had firewall requirements that exceeded the edge’s capacity, iland had to explore several costly options, including purchasing a new

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JUSTIN GIARDINA
CHIEF TECHNOLOGY OFFICER
iland

BUSINESS BENEFITS

- 75% reduction in capital expenditure
- Reduces time to service from days to less than 1 minute
- Decreases provisioning of customer networks from hours to seconds
- Simplifies operation and cost model by eliminating 3rd party virtual or physical appliances for IPSEC VPN, load balancing or routing
- Integration with third-party solutions via a single pane of glass
- Increases agility and scalability with one API to provision all customer resources

VMWARE FOOTPRINT

- VMware NSX Advanced
- VMware vSphere
- VMware Cloud Director
- VMware Cloud Usage meter
- VMware vCenter
- VMware Log Insight

physical device for load balancing or buying a virtual device. Because NSX has these features built-in, iland now only needs one solution to give customers the features they want. NSX converges all services in software, eliminating the need to buy separate physical devices and appliances and reducing iland’s capital expenditures by 75%. With NSX Distributed Firewall, iland is less likely to have to leverage a 3rd party virtual or physical appliance for firewalling, IPSEC VPN, load balancing, or routing – meeting the network security needs of 99% of customer environments with the NSX solution.

“NSX has reduced the capital expenses associated with the acquisition of new hardware. It has also eliminated the need to catalog customer equipment, have technicians install the physical equipment in the data center, or provision physical devices,” explains Giardina. “The ability to programmatically assign resources also helps us operationally. Today, all we need to do is make an API call to the NSX manager, tell it what service we want, and the virtual machine spins up in seconds.”

The integration with NSX and third-party solutions enables a level of automation iland didn’t have before in its security offering. For example, the NSX API integrates with Trend Micro so that a customer with a VM in the iland Secure Cloud is notified via the console when a file is blocked due to ransomware or when the customer has a vulnerable web application. If a file is downloaded with ransomware, the integrations block the file and notify the customer via the console.

“Leveraging the integration with Trend Micro allows us to do things like real time intrusion prevention, malware scanning, and many more services that are controllable and visible in our console,” says Giardina. In the cloud, customers want to buy resources on the fly, as they need them. They want monthly contracts and to pay as they go. NSX supports this business model in a way that iland’s previous solution could not.

“When you have to buy something capital-intensive like a physical piece of hardware, in an environment that is pay as you go, it makes tracking financials difficult, because a piece of equipment may or may not actually be in use,” explains Giardina. “With NSX, iland can deploy services virtually so the length of a customer’s tenure doesn’t matter. We have a simple operational and cost model.”

Looking Ahead

As cloud adoption increases across many sectors, and customer expectations escalate, iland knows that agility and the ability to move upstream to create new products quickly, is important to deliver more customer value and ensure continued success.

“With the ability to leverage automation and APIs, NSX enables us to be nimble by adding custom services or our own intellectual property on top of the platform very quickly,” concludes Giardina. “iland wouldn’t be able to achieve this level of innovation without the solid, secure foundation for growth enabled by NSX.”

