J-SCube

vxAG/NUTANIX CASE STUDY

J-SCube

Business Process Outsourcing (BPO) company uses Nutanix's Hyper-converged Infrastructure (HCI) and Array's virtual secure access gateway to improve operational efficiency and ease of system maintenance.

Background

J-SCube is contracted by customers to perform high-volume office processing and back-office work, including converting physical data such as documents and forms into digital documents. In the past, it acquired the servers and network equipment, tools, software, and other items necessary to communicate data with its customers and partners each time it received an order and set up an environment in its BPO center. Frequently, J-SCube installed on-site centers at the client's premises when they were not allowed to move important documents off-site. This practice increased hardware procurement costs and made maintenance more difficult. Another challenge that needed to be solved was that the server management standards were different for each center.

Industry

Business Process Outsourcing (BPO)

Challenges

Take advantage of Nutanix hyperconverged infrastructure

Integrate operation and maintenance environment along with secure remote access

Achieve additional value via new services empowered by secure SSL connection

Solution

SSL VPN secure remote access provided by Array's vxAG virtual secure access gateway appliance

Benefits

Maintenance workload reduced and streamlined by allowing network admins secure access to Nutanix administration portal anywhere, any time

Future additional services are under consideration, including data linkage service and work progress rate confirmation service

Array vxAG Virtual Secure Access Gateway is certified as a Nutanix Ready AHV appliance

As a result, J-SCube started to look into virtually combining its work infrastructure; however, using a conventional three-tier architecture (virtual server, SAN switch and shared storage) proved far too costly.

Mr. Munehiro Inoue of the System & Engineering Division of J-SCube said, "About the time we were looking into this, there was a display of Nutanix products at an event, so we included them into the items we were considering. We believed that if we built an HCI with Nutanix products, we would be able to assure expandability while keeping initial costs down."

The final challenge of keeping hypervisor licensing fees low was also solved by adopting Nutanix's original and free Acropolis hypervisor.

Challenges

In addition to introducing the Nutanix products, J-SCube was also studying network connection methods. For communications between customers and partners through websites, J-SCube decided to use conventional VPNs that used physical routers, but with the introduction of its Nutanix HCI, J-SCube wanted to "make a system that allowed remote access to servers from mobile terminals" that was not yet available. In order to achieve this, J-SCube focused on Array's vxAG virtual SSL VPN appliance due to its high adoption rate for remote access management.

According to Mr. Inoue, "The first Array Networks product that we knew about was their Array AG hardware appliance. However, we wanted to utilize the virtual environment that we were making instead of adding more hardware, so we selected the virtual appliance, vxAG. When we selected this product in 2016, some of the main reasons for its adoption were that Array Networks was working on making vxAG compatible with the Acropolis

hypervisor and that they provided the product in the form of a monthly subscription."

J-SCube started to use Array's vxAG in April 2017. In addition to making virtual machines for new projects, issuing user accounts, and updating software, J-SCube also utilizes the product for SSL VPN connections (L3 VPN tunneling, remote desktop connections to managed clients, etc.).

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Mr. Munehiro Inoue
System & Engineering Division, J-SCube

Solution

Previously, if a problem occurred when servers were installed at both on-site and off-site BPO centers, Mr. Inoue and his colleagues would have to visit the server to provide support. Today, however, most work on the virtual servers integrated with the Nutanix products can be executed from mobile PCs connected with Array SSL VPN so that the work is no longer location-dependent.

Mr. Inoue explained how maintenance is more efficient, "First of all, it is very easy to launch a server. Previously, it took about two months from ordering equipment until we could start operation, and then we would have to be on site for one or

two weeks before we were certain that operation was stable. Today, once we connect the network, both start-up and support can be executed regardless of the location or time."

The integrated virtual infrastructure using Nutanix products and the secure access realized by using Array vxAG have eliminated the cost and time necessary for procuring hardware, and they have also greatly reduced the labor required when setting up servers. The time needed to start new servers has been reduced to about half, and the burden on the System & Engineering Division personnel has also been reduced.

Acquiring an integrated infrastructure also solved the problem of unifying server management standards. The scope of device control, the frequency of anti-virus software updates, the decision of whether to assign domains or workgroups for each project, and other items that are different at each center will all be common in the future, and there is a plan to create a system that will allow for centralized management. Integration into the Nutanix environment, which is gradually being implemented with new project orders and when replacing servers at BPO centers. About 50 percent of the work has been completed so far.

Benefits

By introducing HCI and SSL VPN to its BPO business, J-SCube has reduced the costs and labor necessary for procuring and operating its infrastructure, and it has also made it easier to expand it. Although it is mainly using SSL VPN for remote maintenance at the present time, J-SCube is also considering providing SSL VPN to its customers and partners in order to add more value to its BPO business.

Mr. Inoue elaborated, "For instance, we are thinking about making a system that will allow access to our external connection servers through vxAG. This will allow our customers and partners to easily share data, and easily check the progress of work that they have requested, online."

It has been about one year since the operation of the Nutanix system started. Although it has only been a few months since the introduction of Array vxAG, J-SCube has already realized its effectiveness, and has high expectations for its new infrastructure.

Summary

The Array vxAG virtual secure gateway appliance supports Nutanix's free Acropolis hypervisor, and enables remote access using SSL connections and contributes to assuring security. J-SCube adopted Nutanix products and the Acropolis hypervisor to build its HCI environment, and it is using the SSL connections provided by Array vxAG to build a system that allows for remote access to the Nutanix system from mobile PCs.

This allows J-SCube to increase or decrease virtual servers depending on its business growth, and it has reduced labor by allowing daily operation and maintenance work to be conducted from anywhere, at any time. J-SCube hopes to provide SSL VPN to its customers and partners in the future, so that they can share their data and check on the progress of work.

Business Servers

Management Client

Nutanix

Business Network (Core)

Business Center

Private WAN

Business Center

Servers for external collaboration

vxAG

Nutanix

External Connection Network

Array vxAG runs on Nutanix to manage remote maintenance access

Data Center

Client 1 Connecting to Servers for External Collaboration via External Link

Internet

Client 2 Connecting to Management Client via DesktopDirect

Remote Clients for Maintenance

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