Shinsegae Corporation Standardizes on Nutanix

SHINSEGAE I & C

CHALLENGE

Shinsegae had been relying on an aging IT infrastructure environment, with blade servers at the company's main datacenter in Seoul, South Korea and another vendor's blade servers at its disaster recovery center in Incheon, both running wide range of applications and virtual machines as Active-Active Datacenter. A broad mix of storage solutions were being used along with these, including SAN, NAS and database storage appliance from a wide range of vendors.

Management Complexity and Reliability Issues

"Having multiple management tools made troubleshooting failures very difficult, which extended the length and impact and outages," explained Yoon-sup Hyun, Architect team manager at ShinsegaeI&C. "In addition to the management complexity, many of our existing systems were experiencing issues and required downtime to install custom patches."

Poor Scalability and Upgrade Challenges

Shinsegae's IT team wanted to expand one of its scale-out storage systems, but found that the existing model could not interoperate with the newer hardware. This incompatibility necessitated the purchase of all new hardware, resulting in additional downtime and an unplanned services engagement.

SOLUTION

Shinsegae started its search for a better server and storage platform in 2014. The company's IT team evaluated a wide range of options for the upgrade, including Nutanix Enterprise Cloud Platform, and solutions from it's previous vendors. After evaluating the alternatives, the Nutanix Enterprise Cloud Plat-form comprising of the NX-8000 series was chosen as the standard platform for Shinsegae's mixed workloads.

"Nutanix provided the ease of management and high performance required for our critical IT services," noted Yoon-sup Hyun, Architect team manager at ShinsegaeI&C. "In addition, the ease of expansion of the Nutanix platform is unrivaled. During the POC we found the Nutanix solution was easier to implement, and its performance easily exceeded all of the other products we evaluated."

Shinsegae is now using Nutanix as its standard platform for all x86 workloads, lowering both initial CapEx and ongoing OpEx. All existing x86 servers, NAS, and Fibre Channel based SAN systems have already been or are awaiting hardware end of life (EOL) before being decommissioned. Shinsegae is running a wide range of mixed workloads on Nutanix, including its very large Microsoft SQL Server databases, MongoDB, Microsoft Exchange deployment for 50,000 users, and several other general server workloads.

RESULTS

Better than Expected Performance

"The Nutanix solution has performed even better than anticipated for our Exchange and other environments," Seung-keun Kang, groupware team manager at ShinsegaeI&C, reported. "We used the Microsoft JetStress tool to test our systems and were surprised when we achieved more than four times the required IOPS with Nutanix—even when using their in-line compression."

> **"By moving to Nutanix, we have obtained better agility, more operational flexibility, less down time, higher user satisfaction, and a faster return on investment. Our IT team can now focus on other more strategic projects, not just managing our IT infrastructure."**
>
> – Mr. Seo, Director, Shinsegae I&C

NUTANIX™
Your Enterprise Cloud Platform

A Fast and Easy Deployment

"The Nutanix deployment was very simple," according to Sang-heon Lee, server admin. "Our local Nutanix Sales Engineer, Joshua Kim, assisted us throughout the process, and a Nutanix Platform Expert (NPX), Josh Odgers, helped us design our solution and validate the deployment for all of applications. Immediately after completing the operational verification tasks recommended by Nutanix, we began deploying our production workloads. We deployed our first nodes at our main datacenter in less than two days, and moved our DR datacenter cluster over during the following two days."

Switching to AHV

Shinsegae also made the decision to switch to Nutanix AHV. "We are actively moving all of our workloads to AHV as our previous hardware is at end of support," Chong-min Park, Architect said. "Nutanix AHV provides all the required functionality we need without the ongoing licensing costs and complexity – a win for us."

Easier Upgrades

Upgrades are much simpler and non-disruptive on the Nutanix platform. Firmware upgrades to our critical database environment and SAN/NAS systems were challenging, due to the complexity and risk to the infrastructure. In contrast, the Nutanix systems are very easy to upgrade as a result of the fully automated, one-click upgrades of the entire stack, including AHV, the Acropolis Operating system, the BIOS, and all firmware."

More Accurate Capacity Planning

"We had to use thick provisioning in an attempt to minimize complexity and the risk of running out of space," Byung-gon Song, Operation team manager reported. "Nutanix allows us to track usage and growth centrally using the intuitive Prism interface, and alerts us in advance when additional capacity is required. With this knowledge, we are now able to leverage thin provisioning and improve our ability to track utilization and scale with Nutanix supporting all workloads."

Compression Savings Using Nutanix

"We are currently achieving 2:1 compression savings with our Microsoft Exchange environment with Nutanix," Hyo-young Kim said. "This has give us the ability to deploy larger mailbox capacities for no extra cost. The benefits of using Nutanix just keep on coming."

NEXT STEPS

Shinsegae has successfully migrated over virtual machines to Nutanix, with a "Nutanix-first" policy when building all new services. The architecture team is considering moving the company's critical applications over to Nutanix within the next three to six months and planed BMT/PoC about it. "We are confidently consolidating everything onto one standard platform," concluded Mr. Seo, Director. "By moving to Nutanix, our IT team can now focus on other more strategic projects, not just managing our IT infrastructure."

Company
Shinsegae is a South Korean retail store franchise headquartered in Seoul, South Korea. Its flagship store in Centum City, Busan, is currently the world's largest department store.

Industry
Retail

Business Need
› Shinsegae was looking to consolidate its existing IT infrastructure. A complex mix of existing systems made it difficult to manage and troubleshoot problems, and the environment was experiencing reliability issues.

› A single platform to run multiple enterprise applications on: To ensure organizational productivity and re-sponsiveness, Shinsegae had built a collaboration software called "GRAP" including instant messaging, presence, mobility, audio/video conferencing, interactive colla-boration, call control, and unified messaging.

Solution
› Nutanix Enterprise Cloud Platform NX-8000 series

› Nutanix AHV virtualization

› Prism management solution

› Microsoft Exchange and Microsoft SQL Server

› Node.js, MongoDB and WebRTC

Benefits
› Simplified management utilizing the centralized Prism console

› Increased control and visibility, speeding troubleshooting and minimizing outages

› Consolidated a variety of complex workloads onto a single platform

› Obtained 2:1 compression savings, providing larger mailbox capacities for no extra cost

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