



Yahoo Japan Corporation Chooses Nutanix for VDI Environment

Nutanix and Virtual Desktop Solution Strengthens Client PC Security, Enables Easy Scalability, and Reduces Infrastructure Management

Company Background

Yahoo Japan Corporation is a Japanese Internet company formed as a joint venture between the American company Yahoo! and the Japanese Internet company SoftBank. It is headquartered at Midtown Tower in the Tokyo Midtown complex in Akasaka, Minato, Tokvo.

IT and Business Challenges

"As Internet usage increases dramatically, due to trends like the rapid adoption of smartphones and other mobile devices, we at Yahoo Japan Corporation are undertaking what is known as 'explosive speed operations' with the goal of enabling our entire organization to keep up with changes as a single unit," explained Hiroshi Kiyomiya, leader of IT planning at Yahoo Japan Corporation. "Using lean startup methods and small-group teams, we are able to introduce new innovative services very quickly, helping us to maintain our lead in the smart device markets and e-commerce. Our group provides employees at both Yahoo Japan Corporation and our partner companies with across-the-board support for all of our business systems, client-access devices, including PCs and smart devices, as well as operations management. Our mission is to deliver an IT infrastructure that our employees can use efficiently, conveniently, and safely."

Mr. Kiyomiya's IT group supports the Yahoo Japan Corporation organization that reviews the applications customers complete when registering their sites with the Yahoo Japan Corporation service. His team also conducts periodic patrolling of all sites that have already been registered with Yahoo Japan Corporation. The team was trying to address several IT challenges that were making it difficult for employees to complete their tasks.

"Our first challenge was mitigating the risk of malware infections," Mr. Kiyomiya explained. "Yahoo Japan Corporation, as one of the largest of the Internet information sites in the country, is frequently the target of cyber-terrorist attacks. When we review or patrol our third-party sites, it is not uncommon to find embedded malware that targets Yahoo! JAPAN, making it impossible ignore this threat from a security standpoint."

The second challenge was the effect potential malware could have on employee productivity. "PCs that have been infected with malware must be confiscated and immediately replaced per our security guidelines, but it requires several hours to install and setup the new systems and software before work can be resumed, which lowers employee productivity," noted Mr. Kiyomiya.

Deploying Virtual Desktops

Yahoo Japan Corporation decided to deploy virtual desktops to protect its business PCs from malware, according to Toru Konishi, at Yahoo Japan Corporation's System Integration Headquarters. "We focused our attention

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Internet / Technology

Business Needs

Yahoo! JAPAN wanted to mitigate the risks of malware infections for its customer registration applications.

Yahoo Japan Corporation deployed a new virtual desktop environment using the Nutanix Virtual Computing Platform.

Benefits

- Enhanced website security
- Increased operational productivity
- · Accelerated deployments, enabling new services to be launched quickly.
- Reduced management load should enable dramatically reduced operational costs, due to the ease and simplicity to manage.
- Enabled easy scale-out for business







towards VDI as a means to solve these problems. With a VDI environment, we can immediately reset the virtual desktops that have been infected with malware, revert to a virtual desktop image that was taken before it was infected, and resume work quickly."

Once Yahoo Japan Corporation decided to deploy VDI at its three hubs for the 300 staff that perform daily patrolling operations, they began the process of selecting the underlying server and storage platform. "We initially envisioned a standard virtual environment, consisting of traditional servers and shared storage, but various issues became apparent as our examination progressed," Mr. Konishi explained. "First, there is a high operational load in this environment. With the traditional method, we would have to manage the servers and the shared storage separately, making it very complicated to troubleshoot when failure occurs. Management of shared storage is complex, requiring specially trained engineers. We also found out that in terms of scalability, it was extremely costly to expand servers and storage using conventional methods."

The decisive factor in choosing a new platform was Yahoo Japan Corporation's concern about system performance. "In a VDI environment, access concentrates on the shared storage from multiple virtual desktops, but it was difficult to secure enough I/O capacity to handle such a load," Mr. Konishi said. "There were serious concerns that the slow response could affect the efficiency of our operations. We were up against the wall looking for a solution when we encountered Nutanix."

Choosing Nutanix

"The first reason we chose Nutanix was due to its high performance," noted Mr. Konishi. "Nutanix's unique architecture integrates server and storage into one platform, which helps when you need to resolve bottlenecks. Also, thanks to the automatic layering process that utilizes ultra-fast SSD and SATA HDD, I/O performance has been maximized. We recognized that with this kind of performance, it would be possible to achieve the same or higher level of response with our VDI environment as our physical PCs.'

The second reason Yahoo Japan Corporation selected Nutanix was its modular scalability. "We can securely and easily expand resources by simply attaching new Nutanix units to the network as needed," Mr. Konishi replied. "We figured that this would allow us to quickly respond to increases in number of users or requests for more performance." The third criteria in Yahoo Japan Corporation's selection of a new platform was interoperability with the company's existing IT environment.

"Nutanix, with its hardware redundancy and management of data through its distributed file system (NDFS), is able to offer high availability," noted Mr. Konishi. "The Nutanix Prism management tool allows for comprehensive management of both servers and storage, so management load is low. Configuration is also extremely simple. If something happens to out of our systems, it's very easy to identify the source of the problem."

Relying on Nissho Electronics Support

Nissho Electronics Corporation is a service provider that offers solutions, technologies, and services to customers across Japan and internationally. Nissho Electronics provides business process outsourcing services; storage disaster recovery services; technical services that include information technology (IT) planning, design, development, construction, maintenance, and operation; and hosting and managed services.

"We were able to proceed with this project on schedule because of all the cooperation we received from many people, especially the people at Nissho Electronics," noted Mr. Kiyomiya. "We conducted verification experiments on the Nutanix platform repeatedly in the Nissho Electronics lab. After seeing the results of the tests, we decided to deploy VDI on the Nutanix platform."

Nutanix Benefits

"The Nutanix deployment went very quickly," Mr. Konishi reported. "Because data is automatically layered between the SSD and the HDD, setting up RAID and configuring other storage settings for our VDI environment were not needed. All of the deployment planning tasks were drastically reduced, so the

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actual deployment period was dramatically shortened as well. When designing servers and storage, compatibility with the network switch is always very important. Nissho Electronics recommended a Brocade switch that required almost no setup and was highly scalable."

The Nutanix systems provided all of the performance gains that Yahoo Japan Corporation was hoping for. "We conducted vigorous tests on the load by having all of the staff in each location login to the VDI environment simultaneously, but there were no delays in response times," noted Mr. Konishi. "The other advantage of Nutanix is its easy scalability. With Nutanix, we can easily grow the system just by installing a new unit. We are currently in the process of deploying the VDI environment to other locations. The project is proceeding rapidly, since it is almost unnecessary to redesign or reconfigure any settings."

Yahoo Japan Corporation's field locations are already benefiting from the Nutanix deployment. "After a malware infection, we can now create a new desktop environment in only a few minutes," Mr. Konishi reported. "We are receiving excellent feedback from our staff saying how great everything is since we switched to Nutanix and VDI."

About Nutanix

Nutanix delivers web-scale converged infrastructure to medium and large enterprises with its software-driven Virtual Computing Platform, natively converging compute and storage into a single solution to drive unprecedented simplicity in the datacenter. Customers can start with a few servers and scale to thousands, with predictable performance and economics. With a proprietary elastic data fabric and consumer-grade management, Nutanix is the blueprint for application-optimized and policy-driven infrastructure.

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