



Objective

Strengthen security by enabling network isolation while preserving existing Citrix® investments and thin client operating environment

Approach

Adopt hosted desktop infrastructure (HDI) built on HPE Moonshot with Citrix XenApp and Citrix XenDesktop®

IT Matters

- Isolates in-house business services from external network access in one box
- Maintains user productivity with familiar Citrix XenDesktop environment
- Simplifies system administration with remote console management

Business Matters

- Strengthens security of client environment to protect business assets
- Avoids migration costs by absorbing existing software licenses
- Guarantees stable performance for end users thanks to dedicated servers

Japanese leasing company optimizes security and efficiency with HPE Moonshot

Hosted desktop infrastructure ensures secure performance



Achieving network isolation for enhanced security

San-in General Lease Company Limited is the leasing subsidiary of San-in Godo Bank (Gogin), a commercial banking business based in Matsue, Japan. Established in 1975, San-in General Lease Company Limited recently expanded its customer base to Sanin, Sanyo district, in response to a variety of customer needs.

Mr. Tadashige Morii, deputy general manager of San-in General Lease Company Limited's Business Development Office, remarks, "San-in General Lease Company Limited welcomes the milestone of our 40th anniversary as

a major contributor to local development through our leasing business. To honor this milestone, we are launching a variety of initiatives to strengthen our business even further. One of the most important initiatives is to enhance security to protect our business and information assets from targeted cyber attacks. To this end, we are separating the internal commercial network from external access."

Targeted cyber attacks are a major cause of information leaks in companies and local governments. The Ministry of Internal Affairs and Communications and Information Technology Promotion Agency (IPA) have recommended separating

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— Mr. Tadashige Morii, Deputy General Manager, Business Development Office, San-in General Lease Company Limited

the business terminal from an Internet-connected environment for correspondence in organizations that deal with sensitive information.

In accordance with this security policy, Mr. Morii notes, “Gogin group has decided to introduce network separation. However, since we’ve been using a thin client environment in the company for seven years, we do not want to change this environment.”

San-in General Lease Company Limited is an advanced user of remote desktops and has been taking advantage of a Virtual Desktop Infrastructure (VDI) since 2009. Approximately 80 people in the head office and seven branches carry out their day-to-day business in this environment.

Mr. Morii asserts that reverting to a traditional PC environment is not an option. “The original purpose of introducing the thin client with VDI was to reduce client terminal management. In fact, to maintain and update our Citrix XenDesktop environment company-wide is now very easy. In addition, centralizing backup by consolidating the file server in our head office instead of the branches led to significant benefits for operations and management.”

San-in General Lease Company Limited has taken some steps to strengthen client security in the VDI environment, including restricting the use of external media such as USB drives, and introducing two-factor authentication in IC cards. In considering how to implement network isolation while continuing to use the thin-client environment, Mr. Morii looked to an innovative solution from Hewlett Packard Enterprise (HPE): a hosted desktop infrastructure (HDI) built on the HPE Moonshot System.

Boosting performance and efficiency with HDI on HPE Moonshot

Mr. Morii explains that a hosted desktop infrastructure takes advantage of ultra-high-density HPE Moonshot servers for allocating physical resources for each user. This ensures very stable performance. While VDI inevitably defaults to best effort, HDI can guarantee performance. Consequently, HDI has expanded rapidly as a new choice for remote desktop environments.

HDI is ideal for thin client environments, leveraging HPE ProLiant m700 Servers with the AMD Opteron X2150 APU, which integrates the CPU and a GPU. With four independent compute resources on a

single m700 server, and 45 servers in the 4.3U Moonshot 1500 Chassis, the HDI environment can support 180 users. It can also accommodate a management server for the Citrix environment all-in-one system.

“With HPE Moonshot I could see the opportunity to build a solution on one box that kept our remote desktop environment in-house, physically divided from outside access, while still centralizing client management as we did with VDI,” Mr. Morii says.

Discussions with an HPE partner in Japan, Axio, deepened Mr. Morii’s confidence in HDI.

Takashi Okamoto of Axio, recalls the conversation with Mr. Morii: “Considering the requirement for network isolation while preserving an existing Citrix environment to avoid license migration costs, Mr. Morii and I could both see how HPE Moonshot and HDI could meet San-in General Lease Company Limited’s needs in an efficient, consolidated solution.”

Following the consultation with Axio, San-in General Lease Company Limited promptly introduced HDI based on the HPE Moonshot System.

“A remote desktop environment provided by HDI gives each user a dedicated CPU/GPU with 8GB of memory and 64GB of solid-state disk storage,” says Mr. Okamoto. “This is a very big feature unlike VDI, which subdivides resources by virtualization. It means that we can promise stable performance to our customers. It is also great that the design can be introduced in a short period of time because it is so simple.”

Maintains end-user productivity while simplifying IT

The true test of HDI built on HPE Moonshot is whether it meets San-in General Lease Company Limited’s requirements. First, regarding network separation, Mr. Morii says, “To provide a desktop environment for using internal business systems, we used Citrix XenDesktop, which runs high-performance remote desktop services on HPE ProLiant m700 servers. To enable the desktop environment to access outside services, such as the Internet and e-mail, we implemented Citrix XenApp by partitioning the physical server. This way, users have two desktops—one for internal use and one for external access—both from a single thin client.”

By segregating the XenDesktop and XenApp environments, internal services and external services never cross paths. Even if the Internet-connected side suffers a cyber attack, it will not have any impact on the separate corporate network. Since users do not need two different terminals, San-in General Lease Company Limited also avoided any impact on business productivity.

The other major consideration was how well Citrix could be managed on HPE Moonshot. Junichi Sugimura of Axio explains, “The HDI environment allows you to use familiar methods for managing Citrix, such as .PVS server, within HPE Moonshot. This makes server-side system configuration very simple. Another benefit was being able to directly migrate the license for Citrix to the HDI environment.”

Case study

Industry

San-in General Lease Company Limited
Financial services

Customer at a glance

Application

- Hosted desktops for secure business operations in headquarters and branch offices

Hardware

- HPE Moonshot System
- HP ProLiant m700 Servers
- HPE Moonshot 1500 Chassis

Software

- Citrix XenApp
- Citrix XenDesktop
- Windows 10
- Linux Kernel Virtual Machine

San-in General Lease Company Limited also adopted the HPE Moonshot Remote Console Administrator (mRCA), which enables remote access to the HPE Moonshot System at a node level from the Linux kernel-based virtual machine (KVM). This not only enables remote access to the hardware operating status, but also the ability to remotely mount an operating system image, whether to restore a system or set up the OS on a per-user basis.

As San-in General Lease Company Limited plans to transition to a Windows 10 operating environment, Mr. Morii remarks, "Initially, we assumed we would use the Windows Deployment Services (WDS), but we have found the HPE mRCA to be very effective."

Axio has worked with San-in General Lease Company Limited throughout the deployment of HPE Moonshot and configuration of the HDI solution. They also integrated the back-end management system into the entire thin client environment to ensure efficient problem resolution should any issues arise.

Now, San-in General Lease Company Limited has a stable remote desktop environment that will carry them through the Windows 10 migration and support the company's business with efficiency and security for many years.

Mr. Morii concludes, "We now have the same advanced user capabilities as VDI but in an HDI environment that provides required network isolation for security while allowing us to preserve our Citrix environment." Mr. Morii smiles to display his satisfaction in pursuing the latest technology, but yet his eyes reveal the anticipated calm he sees in the future.

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