

#### **Problems**

- Life cycle inconsistencies for servers and storage
- Significant cost and work required for the installation and operation of shared storage systems
- High level of knowledge and know-how required to operate storage systems

## **Solutions**

At Home used VMware vSAN to build a new virtual environment system. Without introducing expensive external shared storage systems, they reduced the time spent on preparation, such as investigation and design, and reduced the operational workload.

## **Implementation Results**

- Procurement of servers and storage can be synchronized.
- Costs and labor related to shared storage were reduced significantly.
- Multi-vendor configurations are possible with the open selection of hardware.

### Implementation Environment

- VMware vSAN
- VMware vSphere



At Home uses VMware vSAN to Reduce Costs for Deploying and Operating Storage Systems for Rapidly Developing IT Services that Support the Real Estate Industry

At Home Co., Ltd., provides real estate information services targeting 50,000 participating locations throughout Japan. It is leading the transition for real estate business from paper to electronic data, by developing a wide variety of services to support real estate business with IT infrastructure. Although they have developed virtual environments to support this rapid business transformation, shared storage has long been a potential issue. In addition to costs, installation and operation are labor intensive, and there were challenges and inconsistency in server life cycles. Therefore, At Home used VMware vSAN to reduce the workload associated with the installation and management of storage systems.

# Providing Various IT Services that Support Real Estate Companies throughout Japan

At Home Co., Ltd., a pioneer in real estate information services, is a leading company with more than 54,000 affiliate and retail real estate offices throughout Japan (as of August 1, 2016). In addition to services for the distribution of information between real estate companies, At Home provides a variety of services and tools to support business, promoting the use of IT in real estate and supporting efficiency and advancements in business.

"While real estate has traditionally been centered on paper documents and application forms, they have gradually become caught in the wave of digitalization," says Nobuchika Isoda (Group Leader, Management Operations Group, Information Management Office, Information Systems Department). "In order to develop IT services rapidly and flexibly in response to the trend of this age, they promoted the migration from physical to virtual server environments at an early stage. Currently, they operate most of their systems for real estate companies, customers, and in-house business on a virtual infrastructure using VMware vSphere."

# Expensive Shared Storage Increases the Load on both Installation and Operation

At Home's virtual infrastructure, upon which more than 800 virtual machines were running, was one of their major problems. The costs for installing and operating shared storage used for their virtual environment were increasing dramatically. Dedicated storage products are generally expensive and lack flexibility, resulting in design complications when they are installed. Procurement takes time, and advanced knowledge and know-how are required to run these systems.

According to Hideo Miyanohara (Team Leader, Infrastructure Design Team, Management Operations Group, Information Systems Department), "The latest server is required to take full advantage of the latest storage systems. When a server is updated, the latest storage system is required to demonstrate its full potential. Designing and procuring each individual unit is a difficult process that is not worthwhile. They have been searching for some time for procedures and techniques to resolve this inconsistency."

They found their solution to this problem in VMware vSAN . vSAN pools the SSDs and HDDs that are built into server machines and clusters them as a single shared storage system. It was a new product at the time and provided the technology and concept that At Home was hoping for. Further, it was also an attractive product as a VMware solution, which has demonstrated stable performance with server virtualization.

### Storage Performance that Exceeds Expectations for a General-Purpose Server and Software

At the start of 2015, At Home installed VMware vSAN on three hosts and started small with a test environment. Although there was a small amount of anxiety regarding the technology, they thought that performance and stability should be fully verified.



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"They have had zero trouble with VMware vSAN since installing it at the beginning of 2015. It is very stable and demonstrates performance that dramatically surpasses what was originally expected. They are free to choose their own hardware and design clusters, which avoids an additional increase in operational load."

At Home Co., Ltd Nobuchika Isoda



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Hideo Miyanohara



At Home Co., Ltd.
Information Systems
Department
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Kenta Toma

## **Customer Profile**

At Home has continued to lead the industry as a pioneer in real estate information services since its establishment in 1967. They support real estate businesses by providing comprehensive information distribution services and business support services to more than 50,000 affiliates throughout Japan. They respond promptly to changes in the industry and actively develop new services that meet the times, such as information sites for consumers and smartphone apps.

Their concern was unnecessary. Even during performance verification simulating use on a database, vSAN demonstrated stable performance beyond expectations and was verified to have no problems with fault tolerance. At Home realized that a general-purpose server and software performed sufficiently, even in a live environment where dedicated storage is normally used. Six month later, they expanded with two additional hosts as they quickly used up all of their resources.

After experiencing firsthand the results of implementing vSAN, Mr. Miyanohara and his colleagues purchased three more hosts in March 2016. They then built a new virtual environment using the latest version of vSAN. According to Kenta Toma (Infrastructure Design Team, Management Operations Group, Information Systems Department), who is in charge of operating the system, "Although the clusters are divided, the infrastructure technology is the same. Therefore, there is no increase on operating load. They can enjoy the technological advantages of either a distributed system or a consolidated system. Another benefit of vSAN is that they were free to choose a server that met their needs and they could also use the latest high-speed and inexpensive flash storage."

Mr. Toma added, "Although vSAN is a new technology, you can use functions such as data stores and HA as usual, without increasing the load on the end user. Even after 18 months since first installing the system, it runs stably and without trouble. It is great that it takes such little effort to operate."

#### vSAN Dramatically Reduces the Time from Consideration to Actual Operation

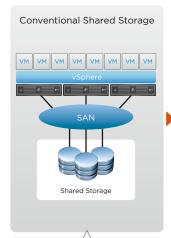
At Home runs approximately 800 virtual machines in total. Currently, one-fifth of these are operating in a VMware vSAN environment. In the future, they plan to migrate as many of their systems as possible, including systems requiring a high level of availability and redundancy, and systems that run in a physical environment, either to their current vSAN environment or to a newly built environment.

Mr. Miyanohara adds, "When building shared storage, it took several months to progress from the gathering of information to design, estimates, careful planning, maintenance of surrounding environments, delivery, testing, and actual implementation. Since this requires a high-level of knowledge, it also took time to prepare the operations staff. However, with vSAN, simply procuring a server machine is the same as procuring storage, and therefore the transfer of actual operations doesn't take that much time. The migration of existing environments and building of new environments takes a fraction of the time."

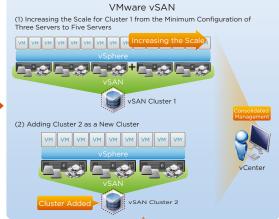
At Home plans to continue using vSAN in the future to increase their ratio of virtual environments. As they consider a wide range of new technologies and services, they also expect great things from VMware's technology, such as automated provisioning and network virtualization.

Mr. Isoda adds, "Both on-premises systems and cloud services have their own characteristics, and they want to utilize the advantages of each. I think that VMware provides reliable technology that will solve their challenges in the future."

At Home uses the latest IT to provide a variety of services that meet the needs of the rapidly changing real estate industry. VMware's technologies and services will continue to support such rapid business development.



- Server and storage life cycles are not the same.
- Cost and work are required to install and operate the system.



- It is possible to increase the scale of the server and storage at the same time.
- Dramatically reduces the cost and work associated with installation and operation of the system.
- The available functions are the same even when clusters are separated, allowing consolidated management with vCenter without an increase in work load.

Figure: Differences between Conventional Shared Storage and VMware vSAN

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