Save communication costs, respond quickly

Significantly reduce the building costs

The deployment is ready all at once, saving at least 25% of the building man hours

Wistron Corporation Embraces VMware vSAN to Enable the Cost of Building Common Storage Drastically Reduced

What problems did Wistron solve after introducing VMware vSAN?

In 2018, we found that our company have urgent needs in expanding computing resources and storage while executing our annual IT projects. Our existing servers and SAN storage devices were coming to EOS status (products no longer available), which means original factory cannot provide updated products. Since there is no opportunity for on-site expansion and upgrade, we can only opt to equipment replacement.

Under this premise, Wistron reconsidered and planned a new generation IT infrastructure, and then moved towards the goal of building a software-defined data center. After careful evaluation, we decided at the end of 2018 to introduce VMware SDS HCI architecture to replace our previous traditional three-tier architecture with the vSAN solution, and gradually reduced servers and SAN storage devices.

After more than five months of procurement and products onboarding, we began installation and testing in May 2019, and officially launched in July. The very first one was the QAS testing cluster consisting of 8 nodes. In 2020, we continued to expand the scope. In fourth quarter of 2020, the PRD production cluster with 4 nodes was activated, which was used to run OA (Office Automation) related websites and applications.

In conclusion, the introduction of VMware vSAN™ by Wistron not only solved the existing expansion bottleneck in old computing and storage equipment just in time, but also provided unprecedented flexibility and rapid scalability for the IT infrastructure. And compared with the previous SAN storage architecture, the investment cost was significantly reduced.

Wistron is a global leader in the ICT (Information and Communications Technology) industry. It focuses on information and communication technology products, provides customers with customized product development and services, including portable computer products, desktop computer systems, servers and storage devices, professional display products, communication products, and after-sales maintenance services, etc. In addition, with the trend of cloud development, Wistron integrates hardware devices (such as computers and smart devices) with cloud data systems through software services, providing technical service platforms and solutions, and establish a new technology industry chain and innovation platform, including education and corporate services, Internet of Things and medical care, etc. Wistron is committed to realizing the vision of "the technology powerhouse for a better life and environment." In 2019, Wistron introduced VMware vSAN Hyper-Converged Infrastructure (HCI) project to drive IT modernization at full pace.

Industry
Computer and peripheral equipment manufacturing

Location
Taipei, Taiwan

Products Introduced
- VMware vSAN™
- VMware vSphere™
- VMware vRealize Operations™

Results
- The vSAN resource scheduling is integrated by the VM Admin, and there is no need to repeatedly communicate with other Admins such as Storage or Network to quickly respond to the VM application requirements of frontline users.
- The storage infrastructure is converted from SAN to LAN, greatly reducing the building cost.
- Under previous traditional three-tier architecture, both servers and storage devices must be installed. Nowadays, under the vSAN architecture, the deployment of storage and servers can be completed all at once, saving at least 25% of the building man hours.

vmware | **wiAdvance**

After deployment, what was the greatest benefits VMware vSAN brought to Wistron?

First, we would like to answer from the perspective of IT resource management. In the past, when VM Admin received a virtual host application from frontline users, it had to coordinate Storage Admin to allocate storage resources, which was equivalent to two more layers of communication, resulting in users waiting for the machine to be ready for a longer time. Nowadays, VM Admin is able to consistently evaluates and manages vSAN environment resources, and operations tends to be simple and fast.

On the other hand, if from the perspective of investment efficiency, the biggest change lies in storage. With the transition from SAN architecture to LAN architecture, from a more expensive SAN storage equipment to a relatively inexpensive storage server, IOPS performance can meet our needs of current applications. As the number of nodes increases, IOPS will also increase, and the building cost is also significantly reduced.

Regarding the building speed, both servers and storage equipment need to be installed in traditional three-tier architecture, which equals to two redundant works. In the contrast, you only need to deploy storage server nodes in vSAN HCI environment and get them ready all at one time, saving a quarter of the man hours compared to the past.

In addition, Wistron also takes advantage of VMware vRealize Operations™ management mechanism, which allows VM Admins to quickly determine the status of the vSAN DataStore by themselves in just 15~30 minutes, speeding up the problem solving process.

Why choose VMware vSAN solution?

In fact, Wistron still listed both "SAN" and "Non-SAN" as options when evaluating the transformation of IT infrastructure. The former is a traditional three-tier architecture, while the latter is based on VMware vSAN. It is intended to examine whether the overall TCO of vSAN is relatively economical, whether the scalability is relatively fast, simple and flexible, and whether the operational performance maintains the same excellent level through comparison. It has proved that vSAN really can withstand these rigorous examinations, so it becomes our choice.

Why Wistron only prefers vSAN among many HCI products on the market? It is mainly based on two major considerations. First of all, Wistron is a long-term user of vSphere, vCenter and other products, and deeply trusts the technical support and maintenance service capabilities of VMware. Secondly, consider whether it is our original architecture or the vSAN architecture that is expected to be imported, it is also based on the operation of the vSphere virtual machine. Therefore, whether it is the compatibility of the front and back environment or the technical takeover ability of the personnel, it is not a problem.

It is worth mentioning that since vSAN is a software-based HCI, there must be a complete compatibility match with the hardware device. Focus on this, VMware and WiAdvance, a partner of this project, actively assist Wistron to perform relevant verification, testing and adjustments to ensure the best match between software and hardware, and to demonstrate the excellent performance that Wistron expects. This indeed demonstrates the quality and attitude of VMware technical support services, which is truly worthy of users' recognition.

"Assist by the introduction of vSAN HCI, this allows us to deploy with x86 Storage Server and get ready all at once, replacing the complicated procedures of installing servers and SAN storage devices separately in the past, greatly improving the efficiency of IT infrastructure, saving about a quarter of the building man hours."

Kevin Fong, Deputy General Manager of Information, Wistron

vmware®