

Simplify the shift to flexible hybrid cloud. Modernize your data center.

Gain the benefits of efficient, software-defined, optimized hybrid cloud—all on Intel® Select Solution for VMware vSAN* from SHI



Executive summary

Today's organizations need cloud and hyperconverged solutions that are available, economical, easy to work with, and scalable. SHI is making this possible by enabling an easier path to hybrid cloud and hyperconvergence—so organizations can gain benefits from high performance to increased flexibility. With its cloud expertise, professional services, and Customer Innovation Center, SHI helps organizations assess, plan, and successfully migrate to hybrid cloud. A verified Intel® Select Solution for VMware vSAN* from SHI can help organizations improve business agility through the adoption of virtualized hybrid cloud while managing complexity, cost, and risk.

Challenges

Ever-increasing data, demands for near-real-time responsiveness, the need to improve workload scalability, and a drive for greater power and cost efficiencies are challenging legacy infrastructure. In-memory databases, complex analytics applications, and high density virtual desktop infrastructure (VDI) deployments need high levels of performance. Many enterprise workloads also require large amounts of system memory to provide peak performance; but for most businesses, simply expanding DRAM is not viable due to cost and capacity limitations.

Cloud offers a route to increase performance and capacity while bringing the scalability and manageability to help optimize and modernize business environments. But moving to a hybrid cloud can be complex. It requires an assessment of hardware, software, and services, along with strategic planning to ensure intellectual property (IP) and applications are protected and that IT has clear visibility into ongoing operations.

Adding to the complexity, the plethora of technologies and cloud services available today must be assessed in light of interoperability issues and the limitations of vendor lock-in.

Solution

As workloads scale and are being managed in increasingly heterogeneous environments, hybrid cloud and hyperconverged infrastructure offer a path to greater levels of automation and self-service capabilities. Hybrid cloud supports operational goals of cost efficiency, improved security, and manageability. It allows virtualization of networks from edge to cloud to data center—a critical requirement for cloud environments.

SHI offers Intel Select Solutions for VMware vSAN for virtualized hybrid cloud based on software-defined infrastructure. With SHI, organizations can start with a small or partial deployment and migrate as needs evolve. The solution offers data centers the

Customer Innovation Center

Located at SHI's New Jersey world headquarters, the 8,000-square-foot Customer Innovation Center is designed to help organizations test new solutions, accelerate the adoption of emerging technologies, and build capabilities that facilitate strategic transformation. Take advantage of the state-of-the-art labs, workshops, training, and industry-leading technologies to test how a hybrid cloud solution will work in your environment. SHI can help you simulate current conditions, as well as the impact of new equipment or upgrades.

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flexibility to move workloads around as needed, better support, increased uptime, improved performance, and the portability for ongoing efficiencies. Scale-out cost savings are achieved via hyperconvergence—delivering a boost in both performance and storage. And with SHI's industry-leading partnerships, organizations have the flexibility to choose from a variety of server and storage manufacturers.

VMware vSAN

vSAN is enterprise-class, storage virtualization software that, when combined with vSphere*, allows compute and storage to be managed with a single platform. It seamlessly joins all storage devices across a vSphere cluster into a shared data pool for easy scaling up or down as needs change. Using industry-standard servers, vSAN-powered hyperconverged infrastructure lowers storage costs 40 percent or more versus traditional server and storage architectures.¹

There's no need to deploy or maintain separate arrays and storage networking hardware with vSAN. Its policy-based management removes the burden of provisioning and modifying numerous logical unit numbers (LUNs) and data services. With its consistency and flexibility, VMware vSAN architecture provides the simplest path from server virtualization to hyperconverged infrastructure and a true hybrid cloud architecture.

Sample VMware vSAN* use cases



Business-critical applications



Virtual Desktop Infrastructure (VDI)



Disaster Recovery



Remote and branch offices

Intel Select Solutions for VMware vSAN from SHI

SHI's Intel Select Solutions for VMware vSAN offer a scalable, hyperconverged solution that is preconfigured, performance-optimized, and offers high-capacity memory for the most demanding applications and workloads.

Intel Select Solutions for VMware vSAN from SHI combine Intel® Xeon® Scalable processors, Intel® Optane™ DC Solid State Drives (SSDs), Intel® 3D NAND SSDs, and the Intel® Ethernet 700 Series, so organizations can quickly deploy reliable, comprehensive VMware vSAN hyperconverged infrastructure built on a performance-optimized platform. Gain the higher capacity memory for demanding applications and workloads.

Unleash the savings and efficiencies within your virtual network. Proven configurations from SHI:

- Are performance-optimized specifically for VMware vSAN
- Reduce the time required to evaluate, select, and purchase the necessary hardware components
- Minimize the time required to deploy new infrastructure
- Deliver performance optimized to a specific threshold across compute, storage, and network on trusted Intel® architecture

Solution components

- VMware vSAN*
- VMware vSphere*
- Intel® Xeon® Scalable processors
- Intel® Optane™ DC SSDs
- Intel® 3D NAND SSDs
- Intel® Ethernet 700 Series

Learn more

Explore SHI solutions

Discover Intel Select Solutions for VMware vSAN

See Intel Select Solutions for VMware vSAN (version 2)

SHI professional services

With longstanding experience and dedicated vSAN experts, SHI offers a range of custom services to help you achieve your goals.

- **Assessment:** Take a deep dive into the readiness of your network to move to the cloud—or the health of your existing cloud environment. Our VMware vSAN Assessment tool helps you validate vSAN benefits by providing total cost of ownership analysis, hardware guidance, and sizing recommendations specific to your infrastructure. It includes identifying machines that are suitable candidates for vSAN and the best-fit architecture (hybrid or all-flash).
- **Cloud optimization:** SHI will track, analyze and report on your cloud usage, and provide recommendations to reduce costs and optimize your infrastructure.
- **Simplified billing:** SHI will help you understand your cloud charges and offer flexible billing options based on your requirements.
- **Volume licensing and product expertise:** SHI offers guidance on various Bring-Your-Own-License (BYOL) models to reduce your total cost of ownership or purchasing redundancy.

Conclusion

When organizations choose SHI hybrid cloud solutions based on Intel Select Solutions for VMware vSAN, they get the optimized performance and additional memory capacity that hyperconverged infrastructures need and demand—without the time and hassle required to tune the stack.

About SHI

From software and hardware procurement to deployment planning, configuration, data center optimization, IT asset management and cloud computing, SHI offers custom IT solutions for every aspect of your environment.

SHI's goal is to foster long-term and mutually-beneficial relationships with our customers and partners, every single day. The expertise, dedication and commitment to excellence of each member of your SHI account team (and the support organization that backs them) have made SHI into the industry-leading, complete IT solution provider we are today.

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For more information about SHI, please visit **shi.com**.



For more information about Intel, please visit **intel.com**.

1. <https://www.vmware.com/products/vsan.html>.

2. <https://storagehub.vmware.com/t/vmware-vsan/vsan-6-2-virtual-desktop-infrastructure-workload/>.

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