

StorMagic SvHCI™

Full-stack Hyperconverged Infrastructure



StorMagic SvHCI

StorMagic SvHCI is a full-stack hyperconverged infrastructure (HCI) software solution. It combines virtualized storage with a StorMagic hypervisor, virtualized networking, and management components. SvHCI includes 24x7x365 StorMagic Platinum support for the entire HCI stack.

SvHCI is reliable and simple, and provides HCI at a lower cost making it the ideal solution for a variety of use cases. Those use cases are being expanded and driven by changes in the computing landscape. For example, Gartner predicted “By 2022, as a result of digital business projects, 75 percent of enterprise-generated data will be created and processed outside the traditional, centralized data center or cloud, up from less than 10 percent in 2018¹” and that “By 2025 more than 40% of enterprise storage will be deployed at the edge, which is a significant increase from 15%

in 2022.”² They also see big changes as a result of Broadcom’s acquisition of VMware, with a doubling of the non-VMware full-stack HCI installed base in 5 years, from 30% to 60%³. In other words, many current VMware customers are looking for and will move to non-VMware HCI solutions.

RIGHT-SIZED

SvHCI is the most cost-effective HCI solution for on-site applications and data. It is built on proven technologies and has high availability built in. SvHCI can be deployed on a single server or deployed on two servers to eliminate downtime.

With SvHCI, organizations at the edge and in edge-like environments no longer need to deploy overengineered, overprovisioned, overpriced HCI solutions that are too much and too complicated for their needs. SvHCI has a combination of right-sized features and functionality,

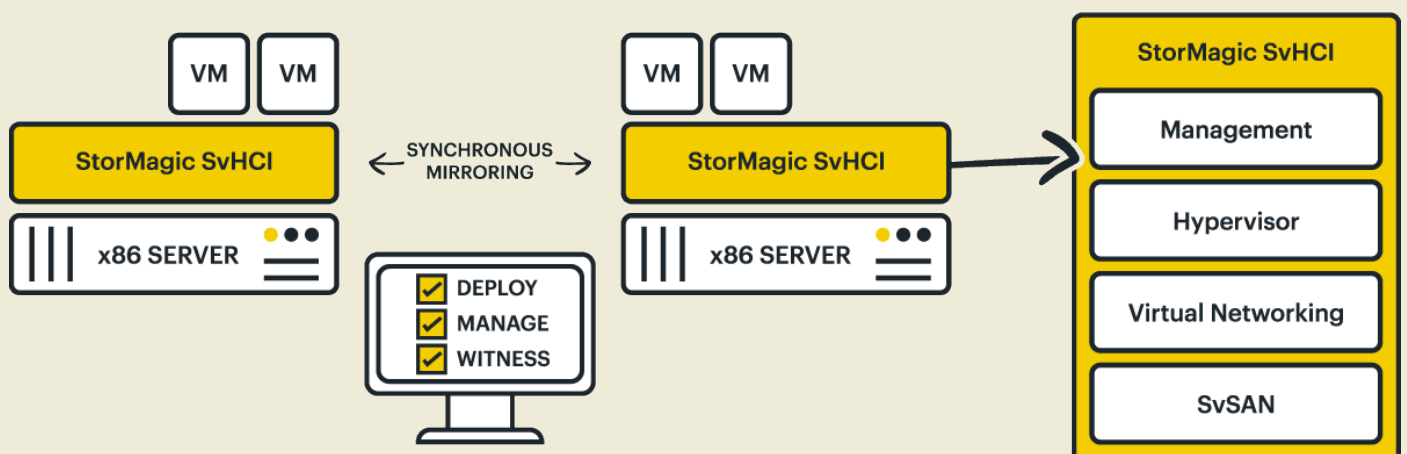


Fig. 1: A 2-node SvHCI deployment showing what makes up the stack

minimal hardware requirements, and is supported on a choice of server models from major vendors.

SvHCI is easy to deploy and manage and can be up and running in less than an hour. VMs can be easily brought across from VMware environments with the VM import feature. Furthermore, the solution can be deployed and managed remotely with Edge Control, the centralized fleet monitoring and management tool for SvHCI. Consequently, there is no need for onsite, specialized IT personnel at each location. And the solution is fast, with VM failover in 20 seconds vs. a typical Hyper-V failover of 4 minutes and a vSphere failover of 2.5 minutes.

VM FAILOVER TIMES	
StorMagic SvHCI	<30 Seconds
Microsoft Hyper-V	4 Minutes
VMware vSphere	2.5 Minutes

FULL-STACK SOLUTION, ROCK SOLID FOUNDATION

SvHCI integrates an advanced, trusted hypervisor and virtual networking based on open-source KVM/QEMU technology and Open vSwitch with highly available storage delivered by StorMagic's proven, ironclad SvSAN virtualized storage software. It provides all the data storage features and performance of SvSAN, as enjoyed by thousands of customers globally with over 50,000 installations. All elements (hypervisor, virtual networking, and virtual storage) install together, directly on the server (bare metal) with no other operating system required.

The solution is designed for 100% uptime. And, unlike most high availability HCI solutions that require three or more servers, SvHCI eliminates downtime with only two servers and a remote witness, which can support up to 1,000 clusters. Each cluster has the option of being deployed as a stretched, or metro cluster, meaning that the individual nodes within the cluster can be separated geographically, whether a separate rack, room, or building, for added resiliency in the event of disasters such as fire or power outage. For added peace of mind, SvHCI includes VM-level snapshot capability, while backup and recovery products, such as those from Acronis, Commvault, and Veeam, can provide additional protection.

FULLY SUPPORTED BY STORMAGIC

StorMagic provides enterprise-grade support, which is consistently cited by customers as a key benefit in choosing StorMagic software. StorMagic support has maintained a 99.3% CSAT (customer satisfaction) score for the past two years and is rated 4.5 stars for service and support from customer reviews.

SvHCI licenses include 24x7x365 Platinum support from StorMagic. This covers all components of the technology stack: Edge Control fleet management, web-based Graphical User Interface (GUI), StorMagic hypervisor, network virtualization capabilities, and virtualized storage layer. Support is also provided for the servers on the hardware compatibility list (HCL) and approved guest OSes.

PRICING AND SAVINGS

SvHCI is sold as a 1-, 3-, or 5-year subscription based on the amount of storage capacity needed, with options for 2TB, 6TB, 12TB, 24TB, 48TB and Unlimited capacities. SvHCI is priced per server node, unlike other HCI solutions that are priced per core or per CPU.

Recent analysis of SvHCI pricing shows a range of savings from 21% to 62% vs. VMware by Broadcom pricing, depending on the license term and capacity.⁴ Additional savings are available on hardware in several areas.

For high availability (HA) configurations, the savings should be at least 33%, as SvHCI requires only two servers for HA, whereas other HCI solutions require 3 servers or more. Hardware requirements are also lower for SvHCI regarding the number of cores, memory, storage minimums, etc. vs. other HCI providers. Short- and long-term operating expenses should be less with SvHCI as well, enabling lower TCO overall. Fewer and more lightweight servers equate to less power, cooling, and spare parts. And, with Edge Control, the simplicity of deployment and ongoing management means lower IT personnel costs. For organizations with many locations, deploying SvHCI can contribute to sustainability efforts.



SUMMARY

StorMagic is solving the world’s edge data problems so organizations can protect, use, and manage their on-site applications and data. StorMagic SvHCI is purpose-built and right-sized, it’s a full-stack HCI solution that is, easy to deploy and manage, and eliminates downtime through proven technologies to provide benefits crucial for many use cases. Backed by enterprise-grade support and trusted by thousands of customers worldwide, StorMagic SvHCI is a complete, cost-effective HCI solution.

SYSTEM REQUIREMENTS

SvHCI has the following minimum hardware requirements:

Server	<ul style="list-style-type: none">● x86 server from Hardware Compatibility List (HCL)● 2+ CPU cores. More recommended for performance● Support for hardware virtualization (Intel VT-x or AMD RVI) must be enabled on x86-64 CPUs
Memory	2GB RAM (4GB+ recommended)
Network	1 or more 1Gb+ Ethernet controller (see HCL for supported adapters)
Disk	1 drive with 32GB+ boot disk (HDD, SSD or NVMe)

Supported Guest Operating Systems:

- Microsoft Windows Server 2025 64-Bit (x86)
- Microsoft Windows Server 2022 64-Bit (x86)
- Microsoft Windows Server 2019 64-Bit (x86)
- Red Hat Enterprise Linux (RHEL) 9.x 64-Bit (x86)
- Red Hat Enterprise Linux (RHEL) 8.x 64-Bit (x86)
- SUSE Linux Enterprise Server 15 (SLES15) SP5 64-bit (x86)
- Canonical Ubuntu Server 24.04 LTS 64-bit (x86)
- Canonical Ubuntu Server 22.04 LTS 64-bit (x86)
- Canonical Ubuntu Server 20.04 LTS 64-bit (x86)
- Debian OS Linux Server 12.x 64-bit (x86)
- Rocky Linux 8.x 64-bit

PLATINUM SUPPORT

Hours of operation	24 hours a day (7 days a week)
Length of service	1, 3 or 5 years
Product updates	Yes
Product upgrades	Yes
Access method	Email + Telephone (via platinum engagement form on support.stormagic.com)
Response method	Email + Telephone + WebEx
Maximum number of support administrators per contract	4
Response time	1 hour

¹ Gartner Magic Quadrant for Hyperconverged Infrastructure by John McArthur, Kiyomi Yamada, Philip Dawson, Julia Palmer, 2 January 2019.

² Gartner Innovation Insight: Rethink Your Enterprise Storage and Cloud Data Services Strategies for the Edge Awakening by Julia Palmer, Jeff Vogel, 1 August 2022.

³ Gartner Market Guide for Full-Stack Hyperconverged Infrastructure Software by Jeffrey Hewitt, Philip Dawson, Julia Palmer, Tony Harvey, 8 April 2024.

⁴ Savings based on pricing as of May, 2024, for 1-, 3-, and 5-year subscriptions of SvHCI at 2TB, 6TB, 12TB, 24TB, and 48TB capacities compared to the same subscription lengths and capacities of VMware VVF w/vSAN and VMware VCF w/vSAN.



SvHCI FEATURES AND BENEFITS

SIMPLE DEPLOYMENT

- ✔ Simple, guided deployment experience
- ✔ Installs all virtualization layers in one integrated flow
- ✔ No need for third-party hypervisors

HIGH AVAILABILITY INCLUDED

- ✔ No additional software required. Add a server, turn on HA.
- ✔ Provides high availability with only 2 nodes and a lightweight remote Witness
- ✔ SvSAN technology built in
- ✔ Protect up to 50 VMs with HA per cluster

TESTED, TRUSTED HYPERVISOR AND VIRTUALIZED NETWORKING

- ✔ Based on open-source Linux/KVM/QEMU technology and Open vSwitch
- ✔ Fully supported by StorMagic
- ✔ Simple, reliable virtualization technologies

VIRTUAL NETWORKING

- ✔ Create and configure virtual networking actions directly from the SvHCI GUI
- ✔ Delivers necessary networking functionality to virtual machines
- ✔ Reduces the amount of network hardware required by shifting functions to software
- ✔ Simplifies virtual machine network management

LIVE MIGRATION OF VMs BETWEEN HOSTS

- ✔ Migrate a running VM from one server host to another without any downtime
- ✔ Available for HA-protected VMs only
- ✔ Minimizes both scheduled and unscheduled downtime

NON-DISRUPTIVE SOFTWARE UPGRADES

- ✔ Upgrades don't impact data availability or performance
- ✔ No downtime, no impact to data accessibility, no degradation in performance

STRETCHED / METRO CLUSTER SUPPORT [more information](#)

- ✔ Separate SvHCI nodes geographically to provide an added layer of resiliency
- ✔ Different racks, separate rooms or buildings, or even across an entire city

VM-LEVEL SNAPSHOTS

- ✔ Crash-consistent recovery only
- ✔ Maximum of 16 VM snapshots are retained for each VM
- ✔ Point-in-time (PIT) copy of data from the operating system, software application, or disk state
- ✔ Preserves records as an integral part of the backup and recovery process
- ✔ Preserve VM disk data and virtual machine configuration settings
- ✔ Rollback a VM to a previous point-in-time and deliver quick recovery
- ✔ VM snapshots to enable quick remediation in cases of accidental deletion, data loss, data corruption, or malicious attacks

UPLOAD OF DISK IMAGES

- ✔ Manual import of virtual machine images from any previous or existing environments
- ✔ Import raw disks or ISO images via the web-based GUI upload

DEPLOYMENT OPTIONS

- ✔ Deploy as a single node (server) when high availability features are not needed for VMs
- ✔ Add a second node when needed to achieve HA
- ✔ Deploy as 2 nodes (servers) initially when high availability is required

EDGE CONTROL - CLOUD-BASED FLEET MANAGEMENT INTERFACE

- ✔ Edge Control provides a single interface for managing the entire stack of every SvHCI cluster within an organization
- ✔ Edge Control is a cloud-based console accessible via any web browser - monitor and manage SvHCI from anywhere in the world with an internet connection
- ✔ Use it as an inventory of clusters, nodes and VMs, with filters, sorting, and keyword search
- ✔ Quickly identify faults or failures
- ✔ Access individual server configuration data
- ✔ Launch into a server's local web interface
- ✔ Simple, single-vendor approach for all elements of the solution
- ✔ Easy to use and understand interface

STORAGE

- ✔ Based on latest version of SvSAN ([more information](#))
- ✔ Includes data storage, performance, and high availability features of SvSAN

VM IMPORT FROM VMware ENVIRONMENTS TO SvHCI

- ✔ Scripted process to import VMs from VMware to SvHCI
- ✔ VM configuration settings and all virtual disks with data are copied over
- ✔ Easily import multiple VMs, with imports queued and run sequentially

GUEST OPERATING SYSTEM SUPPORT

- ✔ Technical support for a variety of Windows and Linux guest operating systems
- ✔ Support for Microsoft Windows Server 2022 64-bit (x86), Microsoft Windows Server 2019 64-Bit (x86), and 7 Linux versions (see table)
- ✔ Support for up to 50 virtual machines per cluster

CHOICE OF SERVERS

- ✔ Multiple servers from major vendors included on SvHCI Hardware Compatibility List (HCL)
- ✔ Includes servers from HPE, Lenovo, Dell, and Supermicro

BACKUP SUPPORT

- ✔ Quickly recover lost or corrupted data
- ✔ Restore data and applications to a previous state when needed
- ✔ Backup solutions include: Veeam Backup & Replication v12; Acronis Cyber Protect v16 (on-premises); Commvault Backup & Recovery

INTEL VROC SUPPORT

- ✔ SvHCI supports Intel Virtual RAID on CPU (VROC) embedded storage RAID controllers for RAID 0, 1 and 10
- ✔ Allows the use of server hardware that doesn't contain, or doesn't allow, physical RAID controllers, such as lightweight edge-specific server models
- ✔ StorMagic recommends using a single VROC controller with up to four disks
- ✔ Further support planned in future releases

Additional add-on features available:

DATA ENCRYPTION ADD-ON [more information](#)

- ✔ 100% software approach
- ✔ Eliminates the need for complex, expensive specialist hardware and OS-level solutions
- ✔ Data encrypted before it is written to disk
- ✔ FIPS 140-2 compliant

PREDICTIVE STORAGE CACHING ADD-ON [more information](#)

- ✔ Can use multiple storage types as a cache
- ✔ Significant performance gains and considerable reductions in CapEx and OpEx

