

A photograph of a data center aisle, viewed from a low angle looking down the corridor. On both sides are tall server racks filled with equipment. The scene is illuminated with a cool blue light, and there are green geometric light patterns or reflections on the floor and racks. The perspective creates a sense of depth and scale.

# MEET THE DEMANDS OF THE DIGITAL ERA WITH HYPER-CONVERGED INFRASTRUCTURE

See How Organizations Around the World  
Are Transforming Their Data Centers



# The Data Center Is Poised to Take Another Leap Forward

Virtualization isn't a new concept for today's IT professionals. In fact, most organizations have already virtualized compute functions across the data center. But as digital businesses continue to evolve, compute virtualization alone is no longer enough to keep up with rising demand.

Data volumes continue to grow at a rapid pace, making storage one of the most critical functions of the data center. But a hardware-centric approach to storage simply can't meet the needs of modern business. It comes with high price tags, long provisioning and deployment times, and performance hurdles.

At a time when IT is struggling with stretched labor resources and budget constraints, traditional approaches to storage are holding it back.



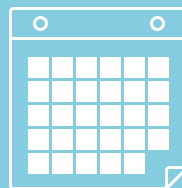
On average, organizations are seeing:



**1.2M**  
typical  
storage costs<sup>1</sup>



**73%**  
of apps  
underperform<sup>2</sup>



**5 weeks**  
to deploy  
storage<sup>3</sup>

To stay competitive and meet user demands, IT needs to extend virtualization beyond compute and into the storage layer.

<sup>1</sup> Hybrid Array Cost Source: 120TB high-end Hybrid SAN. Hardware is \$462K and Software is \$709k. Quote based on Gartner Competitive Profiles storage database.

<sup>2</sup> Ent Poor Performance Source: Network World, Don't let app performance problems drag you down: get proactive, August 2013

<sup>3</sup> Storage Deployment Time Source: Richard L. Villars, Jed Scaramella, Randy Perry—IDC—Converging the Data center Infrastructure: Why, How, So What?, May 2012

# Building Your Software-Defined Data Center

In a Software-Defined Data Center (SDDC), compute, storage, and networking are fully virtualized and controlled by software. This approach gives organizations the flexibility and control required to move at the speed of business. But to achieve these benefits, a solid foundation is necessary. Change begins at the infrastructure level.

Hyper-converged infrastructure (HCI) collapses compute, management, and storage onto industry-standard x86 servers, enabling a building-block approach to the SDDC. By integrating compute and storage in a single software stack, HCI offers higher performance, scalability, and lower CapEx costs compared to traditional storage. With HCI powered by VMware vSAN,<sup>™</sup> key data center functions run as software on the hypervisor in a tightly integrated software layer—an approach that is transforming IT organizations around the world. The single stack VMware HCI solution delivers in-kernel optimization of I/O data paths, better resource utilization, and the ability to take advantage of native VMware vSphere<sup>®</sup> features like vMotion and DRS.

***So how exactly are modern organizations using HCI? Let's find out.***



hyper-converged systems  
are projected to grow

# 75%

between 2015 and 2020<sup>4</sup>

# Customers Around the World Are Finding Success with HCI



## **Americas**

- Synergent
- Baystate Health



## **Europe, Middle East, and Africa**

- Coop
- Abo Akademi



## **Asia Pacific and Japan**

- Zettagrid
- Myanmar Oriental Bank





Synergent is an IT services bureau for the credit union industry. They struggled with managing multiple storage vendors, and needed security they could count on. Now that Synergent has HCI powered by VMware vSAN, they're able to accommodate changing storage demands while ensuring greater security.

## BEFORE

Products from multiple storage vendors made scaling unnecessarily complicated.

Learning new technologies took time and resources

Locally attached storage was very risky in case of failure

## AFTER

Single vendor makes scaling and provisioning storage easy

Staff is already familiar with VMware technology, so there's nothing new to learn

vSAN handles failure easily and smoothly, simply switching to another disk

*"We're skeptical about any new technology, so we started comparing [vSAN] to other storage systems. We took our time to make sure it was performing up to par. It's a lot cheaper than a traditional SAN, and we don't have to worry about a three-year uptick when maintenance renewal comes in."*

**MICHAEL CARUSO**

ASSISTANT VP OF CORPORATE INFORMATION SYSTEMS  
SYNERGENT

Read the full case study ➤





## Baystate Health

As a leading healthcare provider with more than 12,000 employees and one million patients per year, Baystate Health relies on cutting-edge technology to provide fast, secure access to essential services. But its existing storage solution couldn't keep pace with increasing volumes of healthcare data. With HCI powered by VMware vSAN, Baystate Health now can meet demands with ease.

### BEFORE

Existing storage solution couldn't meet rapidly changing demands

Siloed infrastructure limited the speed and flexibility needed to support IT needs

Moving forward with traditional storage solutions was cost-prohibitive

### AFTER

"Grow-as-you-go" scaling capabilities helps ensure they can avoid large capital expenses while keeping up with increasing demands for storage

Improved resiliency with an always-on, flexible, and highly available data center

Saved approximately \$3.5 million in data center construction costs

*"Based on the requirements of uptime, integration of all the different silos and essentially the seamlessness of the architecture, VMware is, as far as we're concerned, the proper choice—pretty much the most solid approach to hyper-convergence."*

MIKE FELD  
INTERIM CTO  
BAYSTATE HEALTH

Read the full case study >





Coop is a large retail enterprise with more than 1,200 supermarkets in Denmark. To stay relevant in a highly competitive retail sector, Coop needed to lower costs and simplify IT operations. Its processes were complicated and time-consuming, and provisioning took far too long. With HCI powered by VMware vSAN, it was able to eliminate storage bottlenecks and respond to business needs faster.

## BEFORE

Existing storage solution was needlessly complicated	Simpler provisioning and management improved day-to-day operations
Performance bottlenecks occurred when bandwidth was constrained	Scaling out is now a much faster, easier templated process
TCO was too high with multiple specialized functions operating concurrently	Total cost of ownership (TCO) is now much lower

## AFTER

*"We feel that the retail business is due for a lot of changes in the upcoming years, but we feel certain that vSAN will be of great support for us as we handle those changes in the future."*

**SOREN VENDLE**  
IT ENTERPRISE ARCHITECT MANAGER  
COOP DENMARK

Watch the case study video ➤







Abo Akademi is a prestigious university in Finland. With a data center infrastructure built around physical servers, it was difficult and costly to perform routine maintenance. The university needed a simple solution that would last for years. With HCI powered by VMware vSAN, the university now has a streamlined, cost-effective solution that will grow along with it.

## BEFORE

Support for the legacy storage system was ending and needed to be updated

Entire storage system could not be updated at once

Maintenance was complicated for limited IT staff

## AFTER

Extending storage is simple with an efficient, modular system

Policy-based storage system management frees up valuable time

Simpler maintenance saves on labor costs

*"The new storage system [vSAN] has now been in use for six months, and every single day we notice how easy it is to maintain and how [re]liable it is. It takes less of working time to do things compared to the old system."*

**BJÖRN PUNDARS**  
ICT-MANAGER  
ABO AKADEMI

Read the full case study >



As a leader in the Infrastructure-as-a-Service (IAAS) industry, ZettaGrid needed a cutting-edge solution that would enable them to provide the best possible infrastructure and services to their customers. Before it implemented HCI powered by VMware vSAN, it was struggling to keep pace with rapid growth. Now it has the infrastructure needed to continue growing the business.

## BEFORE

Co-joined customer and management workloads caused downtime	Separate management platform provides more control
Frequent storage outages due to existing SAN	Data can be recovered without any loss
SAN management was complex and time-consuming	Management is simple and allows for greater visibility with just a few clicks

## AFTER

*"The simplicity of the setup has been a huge productivity booster for us. Thanks to [vSAN's] integration with vCenter, I can see everything, and with a couple of clicks, I can create a couple of disk groups, provision virtual machines, assign SLAs, and then you have your storage presented."*

ANTHONY SPITERI  
LEAD ARCHITECT  
ZETTAGRID

Read the full case study ➤





Myanmar Oriental Bank faced unique challenges as a growing financial institution. With customers that rely heavily on mobile solutions, they needed an efficient, reliable platform that could supply both speed and scale. With HCI powered by VMware vSAN, they can now handle massive volumes of data and ensure customer security.

## BEFORE

Existing storage solution couldn't handle rising data volume

Inefficient infrastructure was hindering growth

Services were slow and unreliable

## AFTER

Flexible, grow-as-you-go storage makes it simple to meet changing demands

Efficient storage infrastructure enables business growth

Services for customers are now faster and more secure

*"[With VMware] we are going to offer better services to our clients and provide 24-hour service."*

DAW KYI KYI  
MANAGING DIRECTOR  
MYANMAR ORIENTAL BANK

Read the full story >

# Conclusion

Laying a solid foundation for your SDDC is essential to success in the fast-paced, digital future. Having an agile, software-defined infrastructure can help ensure that your organization can adapt to changes, meet demands, and keep costs low as you grow.

As the market leader in virtualization technology, HCI powered by VMware vSAN helps eliminate the restrictions of hardware-centric infrastructure. It offers tremendous ease of use and simplified deployment, and helps make IT teams more agile and responsive.

With VMware, you can move forward with confidence, knowing that you're backed by best-in-class solutions.

To eliminate the complexity of IT by leveraging new technologies and our unique expertise; to provide integral value and support for your organization, and to assure our client's success by delivering high quality IT Managed Services and

## MAKE THE SMART CHOICE

[Learn more about HCI Powered by VMware vSAN >](#)

[Try vSAN in a Hands-On Lab Today >](#)

For more information contact: Plexeon Sales

[info@plexeon.com](mailto:info@plexeon.com)

203.321.1283

[www.plexeon.com](http://www.plexeon.com)



**VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)**  
Copyright © 2017 VMware, Inc. All rights reserved. This product is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/go/patents>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.  
Item No: vmware-meet-the-demands-of-the-digital-era-with-hyper-converged-infrastructure-vSAN-0190 08/17