

How Hyperconverged Infrastructure Enables IT Agility

Challenges in the modern IT environment

Need to deliver IT services faster and more efficiently

Organizations are under pressure to deliver new technologies and services faster than ever. Much of this pressure is coming from the top down, as a majority of executives are frustrated with IT's ability to move quickly. However, most IT teams are stretched thin just to keep pace with everyday operations. Deploying modern technologies is continually delayed because there aren't enough hours in the day to manage the existing environment—never mind new projects.

New solutions can't be rolled out in a legacy environment

Because of the complexity inherent in legacy infrastructure, some of the most attractive new technologies cannot be efficiently deployed. For instance, implementing VDI in a traditional environment is costly due to the I/O demands and high fixed cost of storage. Technology that can simplify or reduce the burden on IT may never see the light of day because of insufficient resources to qualify and deploy these improvements.

New expectations placed on technology teams

Today, CIOs are expected to contribute to corporate strategy development, with technology viewed as one of the top catalysts for accelerating company growth. No longer is it acceptable to define your role as simply keeping the lights on. IT has become the think tank for new business initiatives, but the demands of managing legacy infrastructure can impede this growth.



80% of IT time is spent managing the legacy environment

Impact of IT challenges on the business

Traditional data center architecture creates inflexible silos of specialized skills

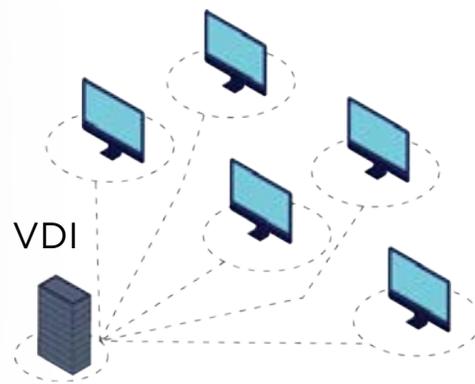
Managing traditional infrastructure is complex and disorienting because every piece is managed and programmed differently. Today's virtualized environment requires multiple devices to keep it running. This leads to a silo effect in which IT resources are segregated based on skills. Integrating new systems and applications is cumbersome in this environment.

Costs of maintaining legacy infrastructure drain resources

Companies that are weighed down by a traditional data center are finding it difficult to adapt and integrate new features. Not only does legacy technology impede their ability to take advantage of cost-savings, it also places a strain on IT resources because they are constantly having to put out fires and manage an aging environment.



Multiple devices required for today's virtualized environment



History of the Data Center



Traditional Infrastructure

Your legacy data center is a pain to manage

Inflexible silos of specialized IT skills and endless cycles of updates are some of the most exasperating realities of legacy infrastructure. The traditional approach to the data center included separate networking, servers and storage solutions. This made it difficult and costly to scale infrastructure for growth, because each new addition brought a host of new costs and integration problems to solve. Traditional architecture is not agile enough to support modern IT initiatives, and furthermore, it causes major headaches when trying to make changes because of all the moving pieces.



Traditional



Separate Servers, Storage, and Networking



Disparate systems, from different vendors

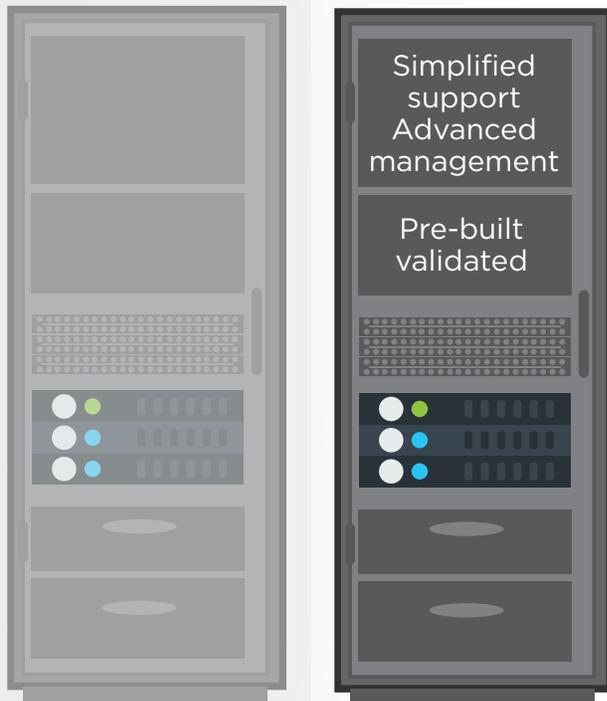


Difficult/costly to scale

The Next Step: Converged Infrastructure

Data center technology evolved to reduce complexity

Recognizing the need for a more nimble environment, IT managers made the switch to converged infrastructure. While still built on separate networking, storage and server components, the various solutions were validated for compatibility and packaged with simple management on a single platform. Each piece of the data center may have come from a separate vendor, but the systems themselves were bundled in a converged solution that improved management and compatibility for new implementations. Still, this solution lacks scalability and cost effectiveness, especially when implementing virtualization solutions.



Traditional

Converged

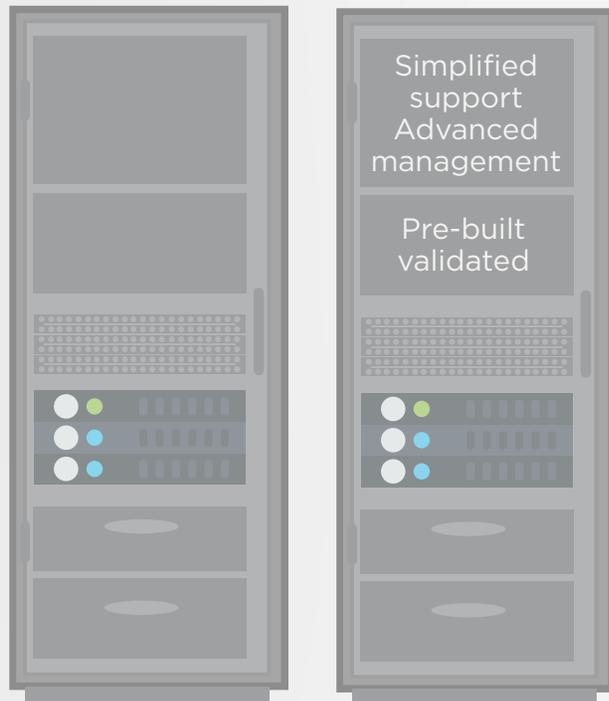


Separate components,
validated for compatibility

Today's Reality: Hyperconverged

Now there is a solution that is simpler, lighter, and more scalable

Thanks to the explosion of virtualization and cutting-edge, faster storage, there is a solution that drastically reduces the complexity of traditional data centers. By combining software-defined storage and compute with networking on a single server, hyperconverged solves many of the data center woes faced by the “new” IT initiatives. Besides drastically reducing the data center footprint, hyperconverged also simplifies data center management by combining resources into a single platform that integrates with everyday tools.



Traditional

Converged

Simplified support
Advanced management

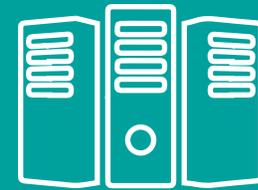
Pre-built validated

Virtualized components



Hyperconverged

10:1



Storage Efficiency

Provides ROI



In less than 7 months

Reduces TCO by

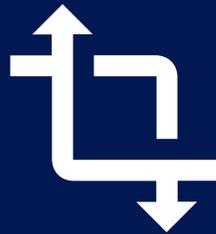


Hyperconverged is the most agile form of infrastructure

-  Utilize a building-block approach to meet new growth demands with flexible nodes
-  Save on the traditional costs of storage and compute with a consolidated solution
-  Manage storage needs and I/O demands with powerful compression and deduplication
-  Keep your virtual environment up and running with resilient data replication and offsite backup
-  Simplify management on a single integrated platform
-  Clone environments for development and collapse as needed



Ways IT agility can enable
Transformation



Consolidating the data center

A financial company is trying to consolidate their data center to help simplify security management. The growing complexity of their infrastructure makes it difficult to track and isolate threats and to demonstrate security compliance. In addition, the increasing number of user-generated emails and business applications is hindering backup efficiency.

The company looks into hyperconverged infrastructure to consolidate storage and compute resources for easier handling. HPE SimpliVity is chosen because of its integrated solution offering industry leading deduplication and compression, along with automatic offsite backup and storage. Less overall hardware is needed to run applications and back up their environment. This results in a simplified solution that is easier to secure. Additionally, the reduced complexity in their infrastructure has made compliance easier to meet and report.



Setting up development environment

The development team at a cloud communications company is looking for a solution to test new software and applications separate from the production environment. They are looking to adopt a SaaS model that enables cloud-like agility and simplifies the process of cloning their production environment. Typically, the premier infrastructure solution is reserved for production while testing is relegated to decommissioned servers that are several generations older.

But with a hyperconverged system in place, development would have the ability to quickly spin up a copy of production, leading to greater flexibility. Having the production environment built on hyperconverged would allow the dev team to keep pace with business needs by quickly turning out incremental tasks in a production-like environment.

The company decides to implement hyperconverged, and as a result, the dev team is able to clone their production environment in minutes. Hyperconverged also enables them to push changes to production while creating a backup of the original configuration. This allows for a much more competitively paced application development cycle that drives growth and innovation.



Building a base to implement hybrid cloud

An ecommerce organization is looking to get the performance and agility of a cloud-based environment while retaining their on-premise data center. Even though public cloud offers the cost savings and flexibility they need, the company wants to keep their infrastructure in-house for greater control over security. They have decided to set up a hybrid cloud environment for versatility and to improve resource provisioning during peak workload cycles.

Hyperconverged provides the most flexible solution and eliminates the high cost of traditional servers. They gain the full benefits of a next-generation data center, with independent scaling and scale-out architecture. This makes it easier and more cost effective to expand resources during periods of heavy demand, such as holidays. The reduced TCO from simplifying the physical infrastructure saves even more than comparable cloud solutions.

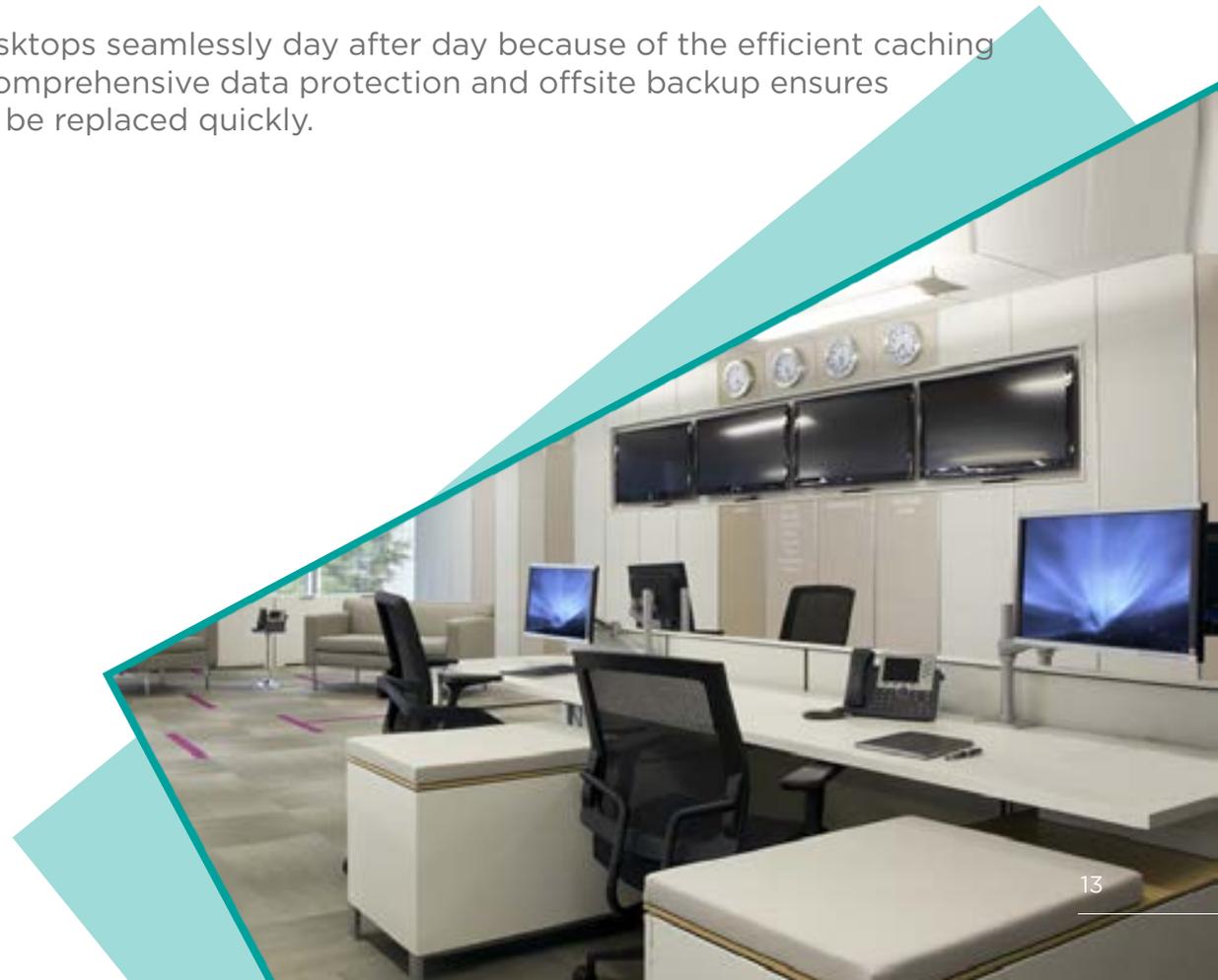


Deploying virtual desktop infrastructure

A hospital is looking to implement virtual desktop infrastructure (VDI) and needs a solution that can handle the I/O demands of its current operations while providing linear resource scalability for upcoming expansion. The hospital staff needs to be able to access persistent desktops reliably from varying endpoints through a central server. The current legacy infrastructure does not have the capacity to handle this.

With its combination of flash storage for performance and spinning disk for resource capacity, hyperconverged infrastructure enables the ideal environment they are looking for. Comprehensive deduplication and compression allow more desktops on the virtualized server, which results in immediate cost savings and a reduced I/O footprint.

Staff members are able to login and access desktops seamlessly day after day because of the efficient caching capabilities of hyperconverged. Additionally, comprehensive data protection and offsite backup ensures that in the event of a workstation failure, it will be replaced quickly.



How could greater agility in the data center improve your business?

Legacy infrastructure strains IT resources because of its inherent complexity and rigidity. Modern hyperconverged solutions free up IT to contribute to business initiatives.

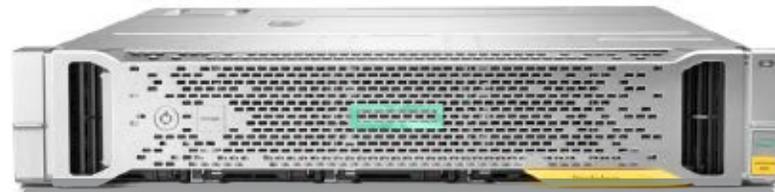
Technology has come a long way to meet the changing needs of the modern data center. Your legacy infrastructure could hold you back from achieving new efficiencies that are well within reach. How could your business benefit from hyperconverged?



Restore up to 1 TB VM in under 60 seconds

Why SimpliVity for Hyperconverged

Built on the world's best-selling server, HPE SimpliVity is a premier solution for hyperconverged. Combining best-in-class data services into a single, integrated all-flash solution, SimpliVity enables streamlined operations at a fraction of the cost of traditional and public cloud solutions.



Guaranteed 10:1
reduction in storage



69% decrease
in TCO



50% increase in staff
productivity



90% cost savings on
capacity



Hewlett Packard
Enterprise

Are you ready to adapt?

Explore the possibilities of hyperconverged. Learn how you can transform the way you handle data.



Talk to Comport about getting started with Hyperconverged

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About Comport

Since 1982 Comport has partnered with commercial enterprises and healthcare organizations to access, manage and secure their critical digital data. We hold a platinum partnership with Hewlett Packard Enterprise as well as best-in-class partnerships with other premier platform vendors, ISV's and Enterprise Service Providers.