

# Enterprise-class Hyper-converged Infrastructure with the Lowest TCO




Next-generation private cloud infrastructure that delivers flexibility and availability, with unmatched performance and web-scale economics.



**M**uch of the interest in hyper-converged infrastructure comes from the promise of standard x86 servers in scale-out clusters to simplify management and eliminate complexity, resulting in reduced costs. Realization of those promises depends largely on the ability of the software to perform advanced I/O functions, alongside application processing in these servers. Poor performance can be disguised by techniques that quietly force customers to spread workloads across many servers under the excuse of scaling out while latency-sensitive applications don't see any performance improvement.

DataCore™ Hyper-Converged Virtual SAN software delivers a highly available and high performance solution for virtualized applications, including databases, in a cost-effective package. Compared to other hyper-converged products, DataCore offers the following advantages:

**DataCore's SPC-1 Price Performance™**  
**WORLD RECORD RESULTS!**

PERFORMANCE	PRICE-PERFORMANCE	RESPONSE TIME
459,290.87 SPC-1 IOPS™ in 2U	\$0.08 Per SPC-1 IOPS™	0.32 milliseconds
		
Smallest Footprint	Lowest Cost, Maximum I/O	Ultra Fast Applications

*See SPC-1 full disclosure report >*

- **Go faster:** Faster applications (databases, critical applications, VDI, etc.) means more transactions processed in less time, more data analyzed faster and happier users, leading to more revenue.
- **Always on:** Highly available infrastructure reduces disruptions to business operations and decreases risk.
- **Do more with less:** Run more workloads, with better performance and availability, on far fewer servers and utilize the infrastructure you already have, for remarkable cost savings both direct and indirect (less power, cooling and space).
- **More Efficiency:** Integrated infrastructure means it's easy to manage everything, with fewer people.
- **Future-Proof:** Hardware-independent software ensures services live beyond current generation of infrastructure technology and change.

The net result is greater consolidation savings, faster performance and higher availability for databases, VDI and other virtualized applications.

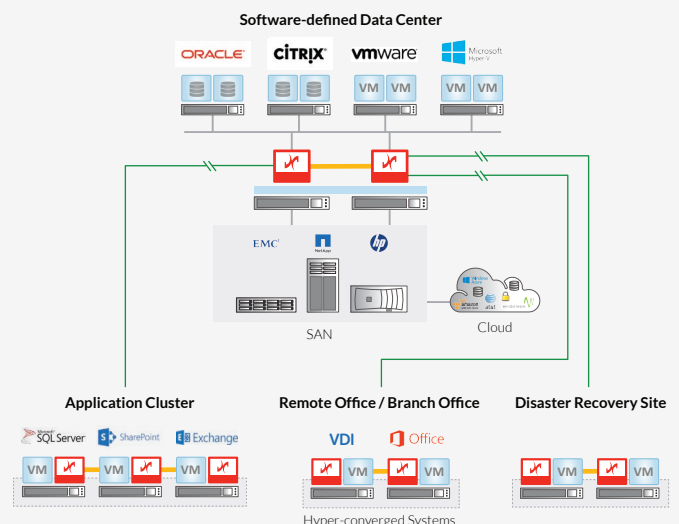
## USE CASES

### High-performance Database And Analytics

- **Need:** Deliver predictable performance and scalability to support high-performance tier 1 applications.
- **Challenge:** Providing infrastructure for reliable application performance of latency-sensitive applications is hard to do, expensive and difficult to scale.
- **Solution:** Enable industry-best response times via Parallel I/O Technology, High-Speed Caching, Random Write Accelerator and Auto-Tiering.

### Remote Office / Branch Office (ROBO) Sites

- **Need:** Simplify remote infrastructure and centrally manage with enterprise availability.
- **Challenge:** Dedicating Infrastructure at Remote Sites is too expensive for high availability and difficult to setup and manage.
- **Solution:** Provide a compact and high performance solution that requires only 2 servers to support continuous availability to storage resources, greatly reducing TCO and complexity.



## Disaster Recovery / Long-term Archive

- **Need:** Ensure business continuity, prevent downtime and automate recovery operations.
- **Challenge:** Deploying reliable storage infrastructure for Disaster Recovery and Archiving is too expensive and complex.
- **Solution:** Lower price point and provide better reliability for both disaster recovery and for long-term archiving purposes.

## Virtual Desktop Infrastructure (VDI)

- **Need:** Make VDI predictable and cost-effective while reducing risk as deployment grows.
- **Challenge:** Run far more VDI desktops per node while scaling storage I/O to meet enterprise VDI demands.
- **Solution:** Provide a low-cost, high-performance and scalable storage infrastructure to meet the demands of a growing VDI deployment.

## DATA CORE HYPER-CONVERGED VIRTUAL SAN SOFTWARE

DataCore Hyper-converged Virtual SAN runs directly on hosts to aggregate their individual local spinning disks and flash storage into a fast and highly-available, virtual storage pool. This enables you to web-scale and share data across the cluster of servers without an external SAN. The complete set of advanced features is available for VMware and Microsoft environments. Key features include:

### Fastest response time in the industry

Utilizing DataCore™ Parallel I/O Technology, proven by Storage Performance Council (SPC) to be 3x-10x faster than any all-flash array or enterprise storage system ever tested. This means data is accessible faster and can be stored and updated quicker in response to application and business needs.

### Highest availability with the fewest nodes

Only 2 nodes needed for fully redundant cluster, both single location as well as stretched across sites, unlike others that require 3 nodes for a single location and double that for stretch clusters (if they support stretch clusters).

### Lowest TCO to scale-up or scale-out

Flexibility to expand hyper-converged storage capacity independently of compute by utilizing existing SAN and cloud storage, without requiring additional nodes (wasting compute to get storage capacity).

DataCore removes infrastructure silos using a single platform that manages hyper-converged, converged, external SAN and cloud storage.

### Single platform for virtualized and non-virtualized applications

DataCore Hyper-converged Virtual SAN supports both virtualized and non-virtualized applications on the same infrastructure as well as a variety of hardware and hypervisors versus others that can only work with specific hypervisor(s).

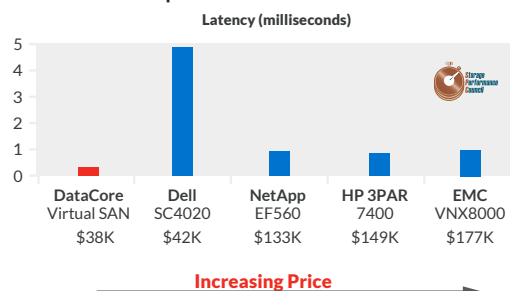
Freedom to substitute different hardware from competing suppliers when appropriate and cost-effective, unlike competitors that restrict choice.

### World leader in price performance

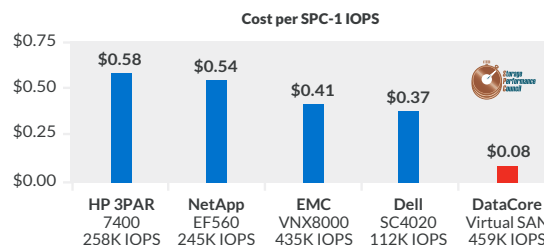
At least 66% less than the next closest competitor, as showed by SPC benchmark.

Smallest footprint per I/O reducing space, power and cooling demands.

### DataCore has the Fastest Response Time & Lowest TCO



### DataCore has significantly Better Price / Performance



## CASE STUDY: Retail Solution for Large Restaurant Chain (ROBO)

A large restaurant chain with over a thousand locations needs a highly available, small footprint, and low cost infrastructure. The company runs a number of applications on-site (point-of-sale, order scheduling, kitchen management, etc.) rather than rely on a central location because it cannot have its restaurants grind to a halt due to data center or WAN outages.

The DataCore Hyper-converged Virtual SAN solution only needs two servers for HA (compared to three or four nodes for other products); accelerates I/O using DataCore™ Parallel I/O Technology along with caching directly on the servers (eliminating the need for Flash storage, reducing costs); and supports auto-tiering, allowing a mix of storage media, for the right level of performance needed. By dramatically reducing infrastructure costs, as well as the space needed for a highly available infrastructure, the DataCore solution is ideal for remote and branch offices.

For additional information, please visit [www.datacore.com](http://www.datacore.com) or email [info@datacore.com](mailto:info@datacore.com)

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