

HyperSERV™: The Enterprise Hyperconverged Data Platform

MODULAR SOFTWARE STACK

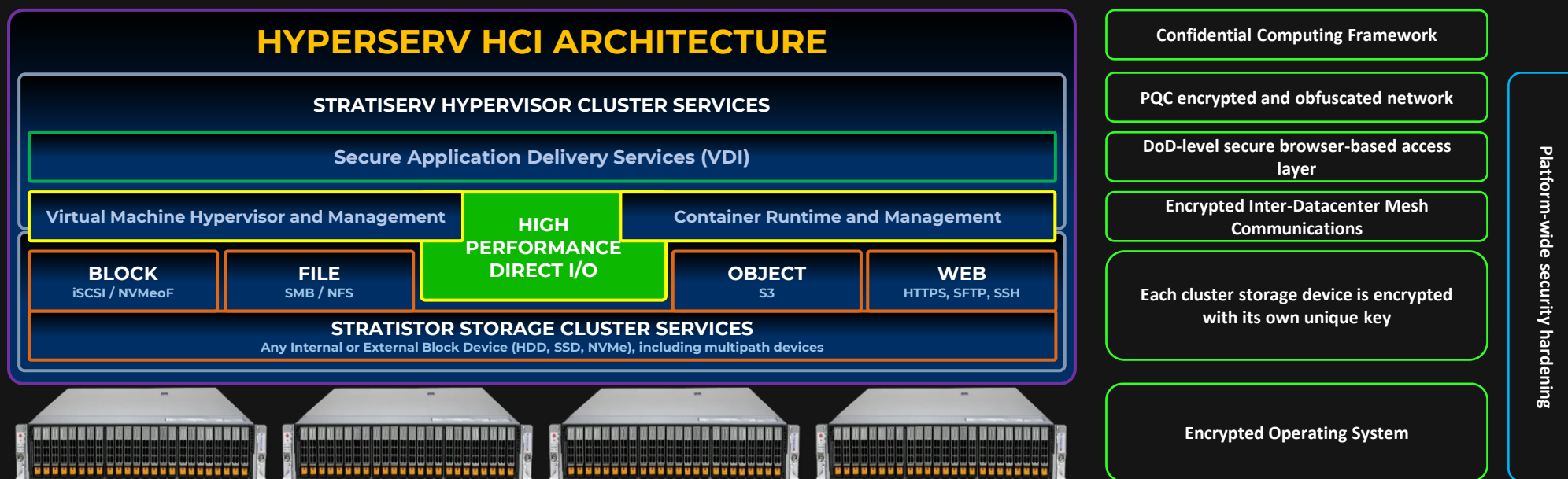
The StratiSYSTEM OS is the core operating system for all storage and compute related functions within the platform.

STRATISTOR is software that when enabled forms an enterprise storage cluster which provides block, file, and object services with outstanding reliability, scalability, and performance.

STRATISERV is software that when enabled forms an enterprise virtual machine hypervisor and container cluster.

HYPERSERV combines StratiSTOR and StratiSERV on a single hardware platform, delivering a feature-rich hyperconverged solution.

ESSENTIAL TECHNOLOGY FOUNDATION



SFF TO SUPERCLUSTER DEPLOYMENTS



HCI PERFORMANCE METRICS

4-node cluster with 6x NVMe per node

- 10 million IOps / 40GB per sec throughput (4K read) (IOR)
- 4 million IOps / 16GB per sec throughput (4K write) (IOR)

8-node cluster with 6x NVMe per node

- 24 million IOps / 96GB per sec throughput (4K read) (IOR)
- 8 million IOps / 32GB per sec throughput (4K write) (IOR)

Single VM performance (direct I/O, bypassing OS cache)

Test Type	Operation	Block Size	IOPS	Bandwidth
IOPS Test 1	Seq Read	4K	815K	3.18 GiB/s
IOPS Test 2	Rand Read	4K	100K	391 MiB/s
IOPS Test 3	Seq Write	4K	662K	2.59 GiB/s
IOPS Test 4	Rand Write	4K	79.1K	309 MiB/s
Throughput 1	Seq Read	1M	20.3K	19.9 GiB/s
Throughput 2	Rand Read	1M	8039	8.04 GiB/s
Throughput 3	Seq Write	1M	3460	3.46 GiB/s
Throughput 4	Rand Write	1M	1870	1.87 GiB/s

**** Performance scales linearly at
hardware resources scale within cluster**

CUSTOMER CHALLENGES

LONG DEPLOYMENT TIMELINES & SLOW TIME TO VALUE

Solution: HyperSERV, running on Supermicro's optimized systems, enables same-day, push-button deployment of VMs, containers, and storage — delivering business value in hours rather than weeks or months.

LACK OF HARDWARE FLEXIBILITY

Solution: HyperSERV is designed for broad hardware compatibility, our collaboration with Supermicro ensures a pre-validated, enterprise-class solution — offering customers choice without compromise.

HIGH TOTAL COST OF OWNERSHIP (TCO)

Solution: HyperSERV, powered by a tightly integrated software stack and Supermicro's high-performance platforms, eliminates unnecessary layers and simplifies operations — dramatically reducing both infrastructure and operational costs.

DISRUPTIVE DATA MIGRATION AT END-OF-HARDWARE-LIFE

Solution: HyperSERV decouples data from the underlying hardware at scale, enabling seamless, zero-impact hardware transitions across generations of Supermicro servers and storage — eliminating EOL data migrations forever.

CUSTOMER CHALLENGES

LACK OF UNIFIED SUPPORT FOR VMS AND CONTAINERS

Solution: HyperSERV provides native, integrated support for both VMs and containers — simplifying infrastructure by eliminating the need for separate tools or parallel workflows, especially when running on Supermicro's unified HCI hardware platforms.

COMPLEX, DISPARATE, SILOED INFRASTRUCTURE

Solution: HyperSERV consolidates compute, storage, and orchestration into a single, software-defined platform. When paired with Supermicro's versatile infrastructure, the result is simplified operations and reduced management overhead.

OPERATIONAL INEFFICIENCY FROM MULTIPLE STACKS

Solution: HyperSERV centralizes the control plane for compute, storage, and orchestration. When paired with Supermicro's high-density servers, it dramatically improves operational efficiency and streamlines IT management.

POOR SCALABILITY AND DISRUPTIVE UPGRADES

Solution: HyperSERV, deployed on Supermicro's flexible and modular hardware platforms, enables non-disruptive, linear scaling of compute and storage — with no reconfiguration or downtime required.

USE CASES

VMWARE REPLACEMENT

Migrate entire VMware environments to StratiSERV to reduce licensing overhead while retaining live migration, HA, and vCenter-like VM management.

COST-OPTIMIZE PRIVATE CLOUD

Replace expensive hypervisor platforms with StratiSERV for self-hosted private clouds with enterprise-grade performance.

TURNKEY HCI DEPLOYMENT

Deploy HyperSERV as a hyperconverged system combining compute, storage, and networking in a single cluster.

EDGE AND ROBO

Compact, scalable HCI setup for edge locations or remote offices without sacrificing manageability.

MIXED WORKLOAD CONSOLIDATION

Run virtual desktops, databases, and general-purpose workloads on a single, optimized HCI platform.

AI/ML TRAINING AND INFERENCE

Deploy GPU-accelerated nodes within StratiSERV for fast AI training and inference pipelines.

USE CASES

DISASTER RECOVERY AND BUSINESS CONTINUITY

Deploy a multi-site StratiSTOR + StratiSERV setup for active-active or active-passive failover with snapshot and replication.

VDI MODERNIZATION

Use StratiSERV to deploy virtual desktops with low latency and dynamic resource scaling.

SECURE MULTI-TENANT HOSTING

Leverage built-in tenant isolation and access control for MSPs or internal teams serving multiple departments.

STORAGE FOR AI DATA LAKES

Use StratiSTOR to manage massive data sets with tiered storage for hot/cold AI datasets.

SEAMLESS STORAGE EXPANSION

Scale out capacity using StratiSTOR without downtime—ideal for growing datasets or new applications.

MIGRATION FROM LEGACY STORAGE

Replace costly, aging SAN or NAS devices with modern software-defined storage supporting block, file, and object access.