Datasheet

NetApp HCI

Enterprise-Scale Hyper Converged
Infrastructure Solution

Key Benefits

Guaranteed Performance
- Consolidate mixed workloads
- Deliver predictable performance
- Provide granular control at VM level

Flexibility and Scale
- Optimize and protect existing investments
- Scale compute and storage independently
- Eliminate HCI tax

Automated Infrastructure
- Automate and streamline management
- Deploy rapidly
- Simplify via comprehensive API ecosystem

NetApp Data Fabric
- Move data anywhere
- Provide greater data visibility across clouds
- Optimize and protect all your data

Are You Ready For Next?

Break free from the limits of today's hyper converged infrastructure solutions that can't consolidate all of your workloads, force you to scale in ways that strand resources, and throttle the performance required by next-generation applications. Stop making compromises, and instead, focus on innovation that can transform you into a data-centric organization.

NetApp is delivering on all of the promises of HCI. Now you can run multiple applications with guaranteed performance to confidently deploy HCI across your entire data center. Unleash the true power of your infrastructure by simplifying management and independently scaling both compute and storage resources. And NetApp HCI is Data Fabric ready out-of-the box so you can access all your data across any cloud—public, private or hybrid.

Transform and empower your IT organization so you can move faster, drive operational efficiency, and reduce costs. Realize the true promise of an enterprise-scale hyper converged solution with NetApp HCI.

Confidently Deploy All Your Applications

One of the biggest challenges in any data center is delivering predictable performance, especially in the face of proliferating applications and workloads—many of which can be extremely resource intensive. Any time you have multiple applications sharing the same infrastructure, the potential exists for one application to interfere with the performance of another. Important applications, such as virtual desktop infrastructure (VDI) and database applications, have very different I/O patterns that tend to impact one another. NetApp HCI provides the solution for IT predictability challenges with unique Quality of Service (QoS) limits that allow the granular control of every application, eliminating noisy neighbors, meeting unique performance needs, and satisfying all performance SLAs.

Scale On Your Terms

Unlike previous generations of HCI that have fixed resource ratios, NetApp HCI scales compute and storage resources independently. Independent scaling avoids costly and inefficient over-provisioning, eliminates the 10% to 30% "HCI Tax," and simplifies capacity and performance planning. NetApp HCI is available in mix-and-match small, medium, and large storage and compute configurations and can be scaled in 1RU, half-width increments (see specs below). Rapidly meet changing needs while never buying more than you use again.

Transform and Empower Your IT Operations

The holy grail of IT is to automate all routine tasks, eliminating the risk of user error associated with manual operations, while freeing up resources to focus on higher value assignments that drive the organization. NetApp HCI allows IT departments to become more agile and responsive by simplifying Day 0 deployment and ongoing management from Day 1 forward. The NetApp Deployment Engine (NDE) eliminates the majority of manual steps it takes to deploy infrastructure while the vCenter plug-in makes management with the VMware environment simple and intuitive. Finally, a robust suite of APIs enables seamless integration into higher-level management, orchestration, backup, and disaster-recovery tools.

Unleash the Power of Data to Achieve a New Advantage

Enterprises are under tremendous pressure to harness today's wealth of data and apply it to create new value across the entire organization—all with limited time, skills, and budget. The NetApp Data Fabric allows the full potential of data to be unleashed across your environment—whether they be on-premises, public, or hybrid cloud. NetApp HCI is ready to integrate into the NetApp Data Fabric out-of-the-box for enhanced data portability, visibility, and protection.

NetApp HCI. Enterprise-Scale.

Running on innovative SolidFire technology and delivered on a NetApp designed architecuture, NetApp HCI is the only true enterprise-scale hyper converged infrastructure solution. NetApp HCI comes in 2RU x 4-node building blocks (chassis) with compute and storage nodes available in small, medium, and large sizes.

Minimum configuration is made up of:

- (Two) 2RU4N chassis
- (Four) Storage nodes
- (Two) Compute nodes
- (Two) Open bays for expansion nodes

Once minimum configuration is met, storage and compute nodes and sizes can be mixed and matched.

NetApp HCI integrates and supports the following technologies:

- **NetApp SolidFire Element OS:** SolidFire Storage Operating System for scale-out block storage
- **Intuitive Deployment Engine:** Deploys and configures software components to storage and compute resources
- **Robust Monitoring Agent:** Monitors HCI and storage resources and sends information to vCenter and Active IQ
- **NetApp SolidFire vCenter Plugin:** Comprehensive set of storage management functions
- **NetApp SolidFire Management Node:** VM to monitor and upgrade HCI systems and allows for remote support
- **VMware ESXi and vCenter v6:** Host virtualize and management software
- **NetApp Data Fabric:** Integration provided through SolidFire Element OS including SnapMirror, SnapCenter, and ONTAP Select file services as well as AltaVault and StorageGRID for backup

NetApp HCI is also backed by world-class support, with a single point of contact for both hardware and software, and includes 24/7/265 worldwide availability, and 4-hour on-site response for critical system issues.

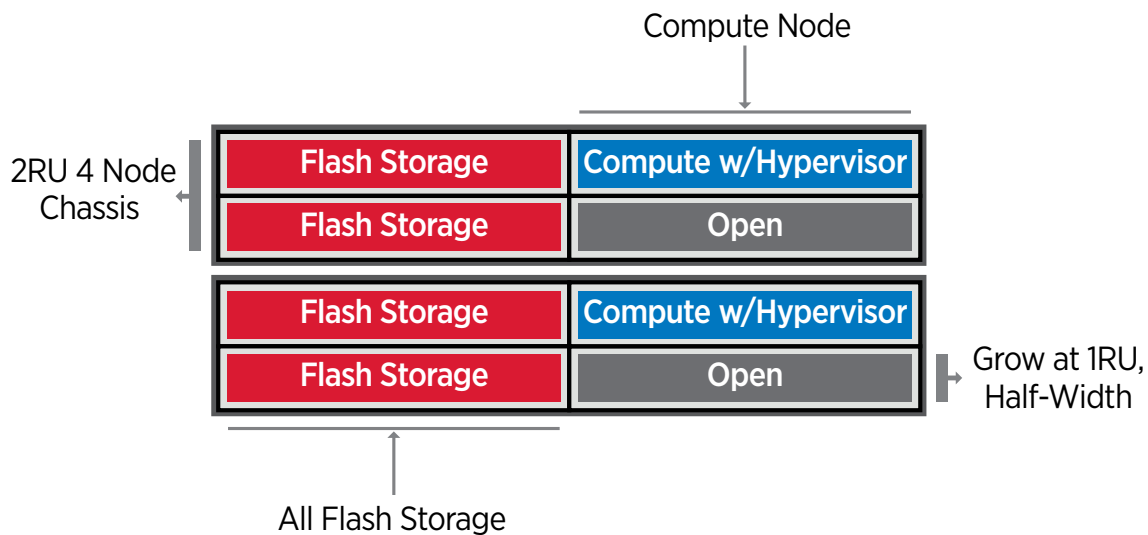Detailed specifications of the NetApp HCI Storage and Compute nodes follows:

Figure 1) NetApp HCI Minimum Configuration

NetApp HCI Specifications

Storage Nodes

	SMALL	MEDIUM	LARGE
SSD's	(6) 480GB	(6) 960GB	(6) 1.9TB
Effective Block Capacity @ 5x - 10x Efficiency	5.5TB - 11TB	11TB - 22TB	22TB - 44TB
NVRAM	8GB	8GB	8GB
Networking	(2) 25/10GbE SFP28/SFP+ (2) 1GbE RJ45	(2) 25/10GbE SFP28/SFP+ (2) 1GbE RJ45	(2) 25/10GbE SFP28/SFP+ (2) 1GbE RJ45
Rack Units (RU)	1RU, Half-Width	1RU, Half-Width	1RU, Half-Width

Compute Nodes

	SMALL	MEDIUM	LARGE
Cores for VM's	16	24	36
GB Memory for VM's	256	512	768
Networking	(4) 25/10GbE SFP28/SFP+ (2) 1GbE RJ45	(4) 25/10GbE SFP28/SFP+ (2) 1GbE RJ45	4) 25/10GbE SFP28/SFP+ (2) 1GbE RJ45
Rack Units (RU)	1RU, Half-Width	1RU, Half-Width	1RU, Half-Width

For more information visit www.netapp.com

About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

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