

Hybrid HCI Node



Hyperconverged IT Infrastructure Building Block



- Hyperconverged compute and storage resources
- Very high storage efficiency, up to 92% usable storage
- Erasure coding enables high availability
- pay-as-you-grow scalability; dynamically scalable arrays

The Building Block of the Data Center of the Future

Pivot3's hyperconverged hybrid nodes enable a radical rethink of IT infrastructure. Now enterprises can properly address the many challenges created by à la carte architectures and invest in a future where IT can focus on driving business outcomes rather than managing hardware. The result is a simpler, more resilient, easily managed, and more cost-effective data center.

Key Features

IT Infrastructure with a Focus on Applications

Pivot3's vSTAC OS aggregates all RAM cache, SSD and hard drive storage into a unified pool which is distributed across all nodes in an array. Any application running on a virtual machine may access ALL compute and storage resources regardless of which node it resides on.

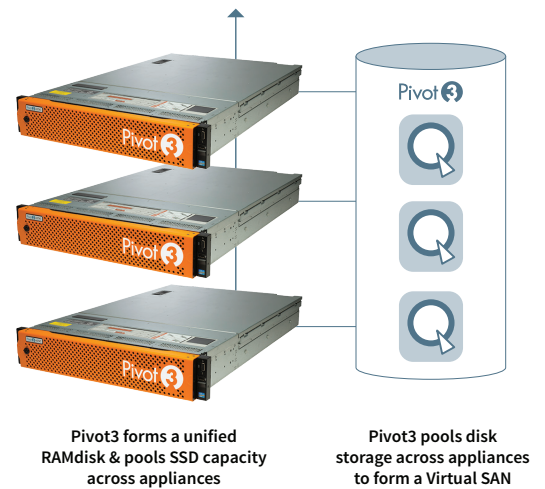
Integral HyperSAN

Pivot3 has deep roots in software-defined storage. Pivot3 vSTAC OS converges the storage capacity of all disk drives present in an array of Hybrid nodes. This forms the HyperSAN, which offers all the characteristics of a SAN without the complexity or the costs. vSTAC OS presents a converged storage capacity as a unified pool of storage to any application(s) running on any of the appliances.

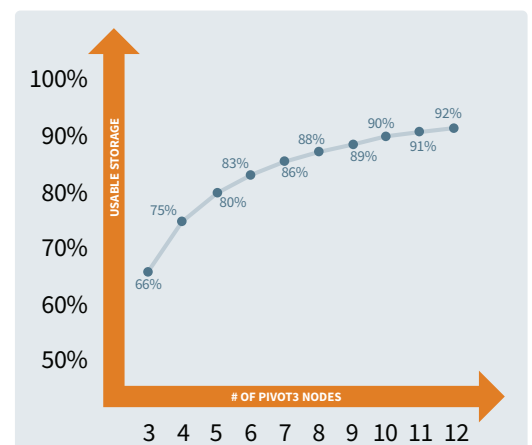
High Fault Tolerance and Storage Efficiency

Pivot3 implements patented erasure coding to achieve very high fault tolerance in our hybrid nodes. Pivot3 arrays can be configured to withstand up to 5 drive failures, or two drives plus one entire node failure without losing data. Erasure Coding also yields exceptional usable storage. With 12 appliances, usable storage reaches 92% without sacrificing data protection.

AGGREGATED RESOURCE DISTRIBUTION



USABLE STORAGE CAPACITY IMPROVES WITH EACH NODE



Virtual Server and Storage Specifications

- Dual eight core or 14 core Intel® Xeon® CPU
- 128 GB to 768 GB of 2133 MT/s RAM
- 4x10GB BaseT and 2x1GB BaseT
- ESXi 5.5 and 6.0 hypervisor
- Dual SSD SATA write cache drives
- Redundant hot-swap 1100w Auto-Ranging AC input
- 12 Enterprise SATA 2.0 hard drives
- 1 TB, 2 TB, 4 TB, 6 TB and 12TB SATA drives available
- Optional: Teradici PcoIP Apex Card
NVIDIA Grid GPU Graphics (K1 or K2)



All-Flash HCI Specifications

Scalability Specifications

- Stack up to 12 nodes per cluster with multiple scale- up clusters unified via vSTAC Manager
- Total storage pools sharable across clusters
- Scale to 864 TB iSCSI Pivot3 virtual SAN
- Aggregate bandwidth of up to 12 storage controllers

Dynamic Storage Management

- Dynamic logical and physical capacity expansion
- Automatic disk and controller load-balancing
- Dynamic iSCSI multi-path and load-balancing

Management Software

- vSTAC Manager configures HCI Nodes
- VMware vCenter plugin: vSTAC OS Management Client Integration Plug-In integrates with the VMware vSphere 6 Web Client interface to enable users to manage their entire Pivot3 hyperconverged array of nodes.

Storage Protection

- No single point of failure
- Distributed virtual sparing
- Predictive drive sparing
- Scalar Erasure Coding Lvl.3
 - 5 simultaneous disk events or
 - 2 drives and an entire appliance
- Scalar Erasure Coding Lvl.2
 - simultaneous disk events or
 - 1 drive and an entire appliance
- Scalar Erasure Coding Lvl.1
 - 1 disk event or
 - an entire appliance

Alarms and Alerts

- State-sensitive LEDs indicate drive events
- vSTAC Manager indicates state changes
- SNMP MIB support for email notification and third party integration
- “Phone Home” remote notification