Pivot3

Data

Store more. See more.

UP TO 90% STORAGE EFFICIENCY

NO DATA LOSS

INTEL XEON
CPU

12–128 TB
HDD

16–384 GB
RAM

BUILT-IN
SERVER FAILOVER

ADVANCED
FAULT TOLERANCE

Add storage resources without additional virtualized servers

Data delivers shared storage and compute resources that scale as nodes are stacked in an array. Pivot3 vSTAC OS aggregates storage, cache and bandwidth resources from all nodes in the array into a single virtual SAN shared by all cameras and all video management software instances. Data may be used to extend the storage capacity of a Pivot3 array consisting of Watch or Trend nodes, or may be used as a stand-alone iSCSI SAN. Each array can contain up to 12 Watch, Data or Trend nodes, and can be scaled dynamically with no system downtime.

Software-Defined SAN Storage

Storage resources from all nodes in an array are aggregated into a shared pool that all cameras and related applications can access regardless of which physical server they reside on. This eliminates islands of stranded capacity, delivers highly efficient storage utilization and ensures that all data stored remains protected and accessible even during major failures.

**Resilient, Flexible Storage Options**

Data nodes may be added to arrays with Watch or Trend nodes to extend overall storage capacity. Additionally, Data nodes may be deployed as stand-alone iSCSI SAN storage, accessible by any third-party server application. Patented Scalar Erasure Coding technology protects data against the simultaneous failure of up to five disks or one node + two disks, delivering the highest levels of data protection.

Purpose-Built for Video Surveillance

Data is optimized to handle write-intensive video surveillance workloads without dropping any frames. Each node includes lightning-fast solid state write cache. Hard drives, cache and storage bandwidth are aggregated across the array and utilized simultaneously for every write transaction. And the vSTAC OS bypasses the hypervisor to eliminate any write performance impact due to server virtualization.
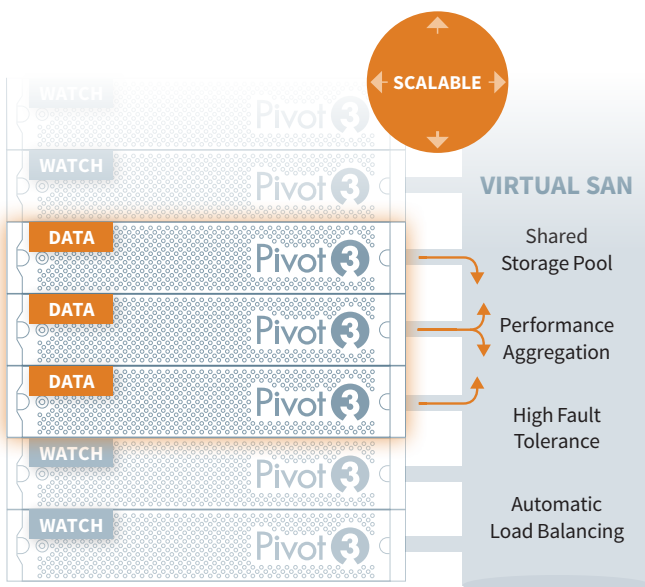
Data Specifications

DATA NODE
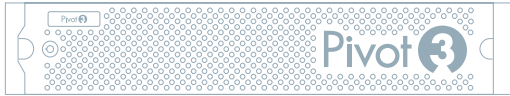
Intel Xeon E5-2603 v4 1.7GHz CPU, 15MB cache, 6 core, 12 thread

16GB 2133 MT/s ECC RAM configurable to 384GB

2 x 10GbE (BaseT or SFP+)
2 x 1GbE

Dual hot-swap power supplies

12 or 16 hot-plug SATA hard drives, front loading

12/24/48/72/96/128 TB available node sizes

2 x 400GB SSD cache

vSTAC OS 7

2U Rack-Mount Form Factor

VIRTUAL PROTECTION GROUP

SCALABLE

WATCH
WATCH
DATA
DATA
DATA
WATCH
WATCH

VIRTUAL SAN

Shared
Storage Pool

Performance
Aggregation

High Fault
Tolerance

Automatic
Load Balancing

MAXIMUM 12 NODES

Data Protection - Erasure Coding
• EC 1: 1 disk or 1 node failure
• EC 3: 3 disk or 1 disk + 1 node failure
• EC 5: 5 disk or 2 disks + 1 node failure

Dynamic Storage Management
• Dynamic logical and physical capacity expansion
• Dynamic disk and RAID controller load-balancing
• Dynamic iSCSI multi-path and load-balancing

Storage Protection
• No single point of failure
• Distributed virtual sparing
• Predictive drive sparing

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

For more information, visit Pivot3.com