

vSTAC Watch™

STACKABLE SURVEILLANCE STORAGE WITH SERVERLESS COMPUTING™



- Purpose-built for surveillance workloads
- Scalable for both performance and capacity
- Simple to configure, easy to manage appliances
- Eliminates archiving server cost and power



Pivot3 vSTAC™ Watch Appliance

vSTAC Watch appliances deliver high-performance compute and storage resources that scale as appliances are “stacked” together in a Pivot3 virtual storage and compute array, the vSTAC Array. Each vSTAC Watch appliance contributes a high-performance VMware ESXi virtual server environment with dedicated local compute resources as well as IP SAN resources that are shared across the entire vSTAC Array. Each vSTAC Array contains from three to twelve vSTAC Watch appliances and can be expanded on the fly.

KEY FEATURES

Reduce power and cost by 40%

vSTAC Watch appliances integrate one virtual server and scale-out storage resources in a common appliance that saves up to 40% in power, cost and rack space over physical servers and storage.

Improve Uptime for Applications and Storage

Each vSTAC Array is self-healing for storage failures and supports self-healing single-vm restarts using the patented Pivot3 VM Failover™ feature. Support for failover solutions from VMS partners and from VMware is also supported.

Scale IP SAN Storage Seamlessly

Storage capacity and performance can be logically and physically expanded while applications are running to meet the needs of the most demanding environments. New appliances contribute capacity, bandwidth and RAID resources to the expanded vSTAC Array.

Data-on in Thirty Minutes

Pivot3 uses virtualization technology to rejoin servers and storage in easy to use appliances that can be managed by server and network administrators. There is no need to master complex SAN concepts since Serverless Computing is based on familiar Ethernet and server standards.

Serverless Computing vSTAC Array

5 Appliance Example



Pivot3 vSTAC Arrays are centrally managed

Patented vSTAC OS Technology

The vSTAC OS simultaneously runs VMS archiving applications in virtual server environments and creates, protects and load balances IP SAN capacity and performance across all the drives, solid state, network and RAID resources contained within the appliances in the vSTAC Array.



vSTAC WATCH SPECIFICATIONS

Appliance Specifications

Virtual Server and Storage Specifications



- Dual quad-core Intel® Xeon® CPUs
- 12 GB RAM
- 4 Gigabit Ethernet LAN NICs
- Integrated VMware ESXi® hypervisor
- 2 high-performance solid-state write-cache disks
- 12 Enterprise SATA 2.0 hard drives
- 2 Gigabit Ethernet iSCSI ports
- 128 physical or virtual iSCSI initiators
- 128 dynamically expandable volumes
- 50 GB Flash Accelerator



vSTAC WATCH APPLIANCE



2U 12-drive vSTAC Watch Platform

See www.pivot3.com/products/overview for detailed hardware specifications

vSTAC Specifications

Stack Specifications

- Stack 3 to 12 appliances in a vSTAC Array
- Scale to 432TB iSCSI SAN
- Scale to 720MB/sec ingest rate
- Scale to 12 parallel RAID controllers
- Scale to 600 GB Unified Flash Accelerator



Virtual Server Protection

- Pivot3 VM Failover™ for high availability
- No separate licenses to purchase
- No dedicated hardware to deploy
- One-click UI selection
- Optional vMotion, HA and other VMware software sold separately through authorized VMware reseller partners

Dynamic Storage Scaling

- 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
- Multi-path protection for iSCSI connections
- RAID 6x
 - 5 simultaneous disk events or
 - 2 drives and an entire appliance
- RAID 6e
 - 3 simultaneous disk events or
 - 1 drive and an entire appliance
- RAID 5e
 - 1 disk event or
 - an entire appliance

Management Software

- **Pivot3 vSTAC Manager** configures vSTACArrays and runs on any PC

Alarms and Alerts

- State-sensitive LEDs indicate drive events
- vSTAC Manager indicates state changes
- SNMP MIB support for email notification

USABLE CAPACITY IN TB

2U vSTAC WATCH CAPACITY CHART

vSTAC Size	RAID 5e			RAID 6e			RAID 6x		
	1TB	2TB	3TB	1TB	2TB	3TB	1TB	2TB	3TB
Standalone	9.8	19.8	29.6	8.9	18.0	26.9	—	—	—
3	22.5	45.3	67.9	20.2	40.6	60.9	18.3	36.8	55.2
4	34.2	68.8	103.3	30.6	61.7	92.5	27.8	55.9	83.8
5	46.0	92.5	138.9	41.2	82.8	124.3	37.3	75.0	112.5
6	57.8	116.3	174.6	51.7	104.1	156.2	46.8	94.1	141.3
7	69.6	140.2	210.4	62.3	125.3	188.1	56.3	113.3	170.1
8	81.5	164.0	246.2	72.8	146.6	220.1	65.9	132.6	199.0
9	93.4	187.9	282.0	83.4	167.9	252.0	75.4	151.8	227.8
10	105.2	211.8	317.9	94.0	189.2	284.0	85.0	171.0	256.7
11	117.1	235.7	353.8	104.6	210.5	316.0	94.5	190.3	285.6
12	129.0	259.6	389.6	115.2	231.9	348.1	104.1	209.5	314.5

1TB = 1,000,000,000,000 bytes

