

SMARTER INFRASTRUCTURE FOR VIDEO AND LARGE FILE STORAGE

Lenovo

Pivot3

CHOOSE LEAN, CLOUD-READY HYPERCONVERGED INFRASTRUCTURE (HCI) OPTIMISED FOR STORAGE-INTENSIVE WORKLOADS

Organisations are choosing cloud-ready HCI solutions to address challenges like simplifying IT, reducing expenses and scaling to handle growing requirements. For companies with video data and IoT workloads, and those storing large files, there is also a need for optimised storage and high availability systems. But many organisations with video workloads still rely on outdated network video recorders (NVRs) and direct attached storage (DAS), which scale poorly and are unreliable.

Certified, pre-integrated HCI solutions from Lenovo® and Pivot3 are an ideal route to modernisation. Built on ThinkSystem servers and Pivot3 Acuity software, they combine the power of Intel® Xeon® Scalable processors, proven optimisations for video, IoT and large file storage, and streamlined support. Organisations enjoy the superior experience of a fully certified, tested solutions. Deployment and operations are also simplified.



Intel® Xeon®
Platinum Processor

TARGET WORKLOADS

- Video data: including traffic monitoring, security and safeguarding public spaces
- IoT systems: including smart city infrastructure
- Long-term retention of large files: as required by security, government and healthcare organisations

BUSINESS BENEFITS

- Build scalable, cost-efficient enterprise-class infrastructure
- Modernise obsolete network video recorders (NVRs) and direct attached storage
- Utilise up to 94% of storage capacity with erasure coding
- Eliminate data loss and video frame drops
- Achieve high availability at lower cost with built-in server and storage failover
- Simplify management with Pivot3 VSTAC OS

ERASURE CODING: FAST, EFFICIENT LARGE-FILE STORAGE

A key challenge when storing large files long-term is balancing efficiency against performance. Typically, HCI storage makes use of data compression or de-duplication to improve efficiency, but this can slow data down. Pivot3's VSTAC OS meets the challenge with 'erasure coding', where large files are broken up into smaller pieces. The pieces can be stored across virtual drives to protect against corruption and improve utilisation (up to 94% usable capacity), with virtually no effect on performance.

VSTAC OS manages shared compute and storage resources in place of a hypervisor. Organisations also have flexibility to use VMware ESXi or Microsoft Hyper-V hypervisors if required. Solutions can be configured with NVMe, all-flash or hybrid-flash storage.

SCALABLE, HIGH AVAILABILITY VIDEO AND OTHER WORKLOADS

Video data requirements are growing, but many companies still rely on outdated technology. NVRs based on DAS technology were designed to mimic obsolete analogue video recorders and are prone to data loss. As well as eliminating frame drops, the Lenovo-Pivot3 solution can handle any environment with capability to create IoT-based video networks of up to 10,000 cameras. And with built-in server and storage failover, the solution provides high availability for video (and other workloads) without the need for costly redundant hardware or software.

EXTREME RELIABILITY

The advantages of deploying Pivot3 Acuity in a pre-integrated Lenovo solution are numerous. As well as being powered by Intel® Xeon® Scalable processors, designed for mission-critical, real-time analytics and multi-cloud workloads, Lenovo servers are also rated #1 for reliability.¹ Businesses can also seamlessly integrate cloud resources.

If you are seeking a cost-efficient and performance-optimised solution to growing video surveillance or large-file storage needs, contact Lenovo to learn more.

GET IN CONTACT

*ITIC (March 2019) "Global Server Hardware, Server OS Reliability Report", <https://en.resources.lenovo.com/analyst-reports/itic-2019-global-server-hardware-server-os-reliability-report>

SOLUTION DETAILS

- Lenovo ThinkSystem SR650 or SR630 servers powered by 2nd Generation Intel® Xeon® Scalable processors, (min 3 per cluster)
- Pivot3 Acuity software optimised for video, IoT, long-term data retention
- Certified, factory-tested integration
- Streamlined support
- Integration with major cloud platforms



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