

Experience different! Tintri VMstore intelligent infrastructure delivers the best quality of service for all your virtualized workloads, maximizing performance, automating storage management and providing real-time analytics – so you can spend less time on storage management and refocus your efforts on high-impact projects and business innovation.

## Why Choose VMstore?

IT departments spend a lot of time managing storage that's not optimized for virtualized environments. VMstore Intelligent Infrastructure removes legacy constraints of standard infrastructure and provides autonomous, intelligent operations that eliminate many manual steps associated with deployment, troubleshooting, workload balancing, data protection, and more, saving time and money while reducing errors. You also get VM-level visibility and control, scalability to hundreds of thousands of VMs, and deep insights and recommendations that boost performance and uptime for all your virtualized applications.

## How is VMstore Different?

Since today's data centers are increasingly virtualized, VM-level storage management offers a different experience – a simpler way to enable policy-based performance optimization, disaster recovery, security, and DevOps to drive efficiencies and improve business results.

**PREDICTABLE PERFORMANCE.** Each VM and database gets the resources needed to deliver outstanding performance and <1ms latency. Workloads are isolated and resources adjusted dynamically and automatically as I/O needs change – with zero administrator intervention.

**VISIBILITY WITH VALUE.** Real-time analytics provide latency statistics for each VM, enabling you to troubleshoot bottlenecks in seconds. Predictive analytics enable you to plan resource needs 18 months into the future and provision with precision.

**ACCELERATED PRODUCTIVITY.** Copy data management speeds developer velocity and enhances efficiency with snapshots that can spin up 1,000 VMs and database clones in minutes. You can easily accommodate data growth by scaling to over 40PB capacity and improve agility by quickly moving workloads across data centers or to the cloud.

## Intelligent Infrastructure Delivers a Better Customer Experience

Storage has become commoditized, including flash storage. Well-known vendors have solutions that work, but they are standard infrastructure, where performance, data services redundancy, deduplication, compression, data protection, and other capabilities are expected "table stakes". What is not standard is the experience of humans, both those who manage IT and their customers; there is opportunity to choose a different experience.



**<1ms**

Latency for each VM

**Seconds, Not Minutes**

Troubleshoot Fast with Real-Time Analytics

**<1 Hour**

From Box to Production

**18 Months**

Predict Resource Needs in Advance

**"Four years after we purchased VMstore... other storage vendors still have not caught up to what the VMstore systems could do...Tintri is storage for those who have better things to do than manage storage."**

*John Ward, Enterprise Architect, UC Irvine*

**"With VMstore... we were able to terminate our managed services contracts—now it takes just one person a quarter of their time to manage a footprint that spans multiple data centers. Growing our footprint without adding management burden is a requirement..."**

*Mike Baker, Data Center Architect, Takeda*

Infrastructure decisions have been historically made on three vectors: price, performance, and whatever “good enough” experience comes with it. Like any triple constraint, organizations select two of the three – typically performance (all flash today), price per gigabyte, and accept what operational efficiency is received. Performance is abundant today in all flash, thus allowing price and “experience” to be the differentiating choices.

The agility of the cloud experience has raised expectations for the operational experience in private data centers. This offers a different experience that does not force you to compromise on expected storage capabilities while delivering a completely different operational experience. Your business can benefit too from Intelligent Infrastructure, which has been proven by thousands of Tintri enterprise customers who have saved millions of hours related to storage administration.

Choose Intelligent Infrastructure for a better customer experience!

## **Better Business Decisions with Powerful Analytics**

Standard infrastructure struggles to scale beyond a few hundred VMs. VMstore’s patented scale-out technology lets you grow a federated storage pool to 64 systems and 480,000 VMs. But it’s not enough to scale VMs; you need to operate your virtualized environment efficiently at scale. Tintri Global Center (TGC) lets you manage all VMs for individual storage systems, applications, and databases from a single console. Broad visibility with deep intelligence help pinpoint problems almost immediately. Advanced analytics and timely recommendations also enable you to optimize application distribution across systems and data centers to save time, bandwidth, and capacity.

## **Building a Foundation for AIOps**

Most data centers are complex, with separate technology layers for storage, networking, VMs, and more, each with their own management tools. This creates management complexity that inhibits both visibility and action. VMstore intelligent infrastructure is a foundational technology for AIOps. It collects insights and manages data structures for VMs, containers, databases, and applications. It does this by not just being aware of VMs and databases, but by integrating with them. By understanding trends, anomalies, and alerts at the individual VM level you can improve the productivity of all your databases and applications.

## **Policy-Based Data Management**

In addition to centralized administration and deep analytics, VMstore systems offer a range of integrated data services that simplify and automate infrastructure management. Capabilities include 2-click replication for worry-free disaster recovery, cloud connectivity for fast cloud-based replication, copy data management for space-efficient snapshots, and flexible scale-out technology that lets you add capacity one drive at a time or as complete systems.



## VMstore: VM- and DB-Integrated Intelligent Infrastructure



	VMstore T7000 Series Premium NVMe	VMstore EC6000 Series Premium All-Flash	VMstore T1000 Series ROBO/Entry All-Flash
	Autonomous operations for storage management, minus the management		Zero touch for your remote and branch offices
<b>Models</b>	T7080	EC6030, EC6050, EC6070, EC6090	T1000
<b>Flash RAW Capacity</b>			
Single Node <sup>b</sup> / 64-Node Scale-out <sup>b,c</sup>	23TB to 184TB / Up to 11.8PB		3.1TB / N/A
<b>Flash Effective Capacity</b>			
Single Node <sup>a,b</sup> / 64-Node Scale-out <sup>a,b,c</sup>	81TB to 645TB / Up to 41.3PB		10TB
<b>Application Density</b>			
Single Node / 64-Node Scale-out	750 to 7,500 VMs / Up to 480,000 VMs		100 / N/A
<b>Protocol Support</b>	NFS, SMB3		
<b>Intelligent Management</b>	Tintri Global Center Standard, Tintri Analytics (with active VMstore maintenance contract)		
<b>Bundled VMstore Software</b>	Synchronous and Asynchronous Replication (Replicate VM); Data-at-Rest Encryption (SecureVM); Public Cloud Connector (Cloud Connector); VM Scale-out (Tintri Global Center Advanced); Copy Data Management (SyncVM)		Synchronous and Asynchronous Replication (Replicate VM); Data-at-Rest Encryption (SecureVM)

<sup>a</sup> Effective capacity is calculated after data protection (double parity RAID-6, spare, and metadata overhead) and includes the benefit of data reduction (inline deduplication and compression) but does not include thin provisioning. Data reduction typically provides 3-5x capacity savings.

<sup>b</sup> One MB is equal to one million bytes, one GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes) when referring to storage capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of SSDs, the operating system, and other factors.

<sup>c</sup> Stated capacity assumes a homogeneous pool of 64 nodes equipped at maximum capacity. Scale-out storage pools can be heterogeneous with a mixture of up to 64 all-flash and hybrid system nodes.