DATA SHEET

Tintri VMstore™ T7000

NVMe Platform

VMstore

Workload Intelligence Drives Tintri's Most Powerful and Flexible Auto Adaptive Platform

NVMe is currently the fastest storage media available. But today's IT departments realize that hardware performance is just one of many important factors that drive successful data center operations.

The Tintri VMstore T7000 Series is the latest addition to the storage industry's only true Intelligent Infrastructure portfolio. The T7000 delivers NVMe-driven performance and efficiencies, supporting up to 7,500 virtualized applications in just two rack units. It offers the kind of scalability, availability and security that you'd expect from an enterprise-grade system that powers numerous Fortune 100 firms. Our customers love the outstanding AI-driven efficiency and optimizations that set VMstore apart from traditional approaches. VMstore systems deploy in minutes, self-optimize and dynamically adapt to accommodate the most demanding workloads in the data center maintaining quality of service (Auto-QoS) for each Virtual Machine (VM). Autonomous operations and advanced real-time and predictive analytics consistently drive down storage management activities and costs – by as much as 95%.

The T7000 is the first NVMe-based VMstore platform, leveraging DDN's award-winning NVMe technology and providing 30% faster performance than previous generation VMstore systems. VMstore T7000 customers benefit from using the same storage hardware controller as DDN At-Scale solutions, deployed in the most demanding AI, analytics, deep learning and high IOPS workloads on the planet.

Scale up to 645TB with a single VMstore T7000 system and grow beyond 40PB in a scale-out configuration. All your VMstore systems – supporting up to hundreds of thousands of VMs, databases or containers – can be managed from a single console with Tintri Global Center™. Enterprises choosing NVMe as their preferred platform can now gain the advantages of Intelligent Infrastructure to consolidate their enterprise applications, manage storage with generalist IT skills and re-focus on their business.

Features

- Consistent Performance – Isolation for each and every VM workload or database workload all the time
- Data Services – Real-time deduplication and compression, public cloud connector, copy data management, and more
- Real-Time Analytics – Visibility across storage, network, and hosts on a per-VM or per-database basis
- Actionable Analytics – Get to root cause in one click. Fix and see results instantly
- Predictive Analytics – Profile application types, then model and forecast capacity and performance needs over the next 18 months
- Developer Choice – Select Tintri's native REST APIs, PowerShell toolkit, Python SDK, or plugins such as our vRealize Orchestrator to meet your needs
- Per-Application Data Management – Manage snapshots, clones, replication, and QoS policies on a per-app, per-VM, or per-database basis
- High Availability – Dual-controllers, hot spares, inline checksums and referential integrity with real-time error detection
- Choice of Application Environments – Supports VMs, Databases and container

Benefits

- Guaranteed high performance for every workload without manual intervention
- Concurrent multi-hypervisor support enables you to operate vSphere®, Hyper-V, RedHat® Enterprise Virtualization, Citrix Hypervisor and OpenStack® simultaneously on a single system without partitioning
- Remote management of both initial system configuration and power simplifies administration of your distributed environment
- Share analytics data with vRealize Operations, Microsoft System Center Operations Manager, and other platforms to gain valuable holistic insight
- Easy configuration enables you to go from box to production workloads in under an hour in most cases
- Open APIs deliver choice while making scripting simple, standardized, and powerful
- Autonomous operation eliminates the vast majority of manual tasks, saving time and reducing errors
- Dependability when and where it's needed most
- Kubernetes container support with vSphere7

Tintri
Intelligent Infrastructure

Tintri VMstore T7000 NVMe Platform

Product Specifications				
VMstore T7000 Model		**VMstore T7080**	**VMstore T7060**	**VMstore T7040**
Application Density	VMs (max)	7,500	5,000	2,500
	vDisks (max)	22,500	15,000	7,500
Flash	Effective capacity[ab]	Up to 645TB		
	Raw capacity	20 to 185TB		
	Data protected as DP/DR target[ac]	Up to 1290TB		
Onboard Network ports per controller	Admin ports	2 x 1/10GBASE-T		
	Data/Replication ports	2 x 1/10GBASE-T		
	Management port	1 x 1GBASE-T		
Optional Network ports per controller	Data ports	2 x 100GbE or 2 x 40GbE or 2 x 25GbE[d] or 4 x 10GbE[ef] or 2 x 10GbE		
	Replication ports	2 x 100GbE or 2 x 40GbE or 2 x 25GbE[d] or 4 x 10GbE[ef] or 2 x 10GbE		
Physical Specifications	Dimensions (HxWxD)	2RU, 3.5" x 19.0" x 34.5" (89mm x 483mm x 850mm) without bezel		
	Weight 10x NVMe drives	84.2 lbs (38.19kg)		
	Weight 24x NVMe drives	90.6 lbs (41.09kg)		
	Power supplies	Dual fully redundant hot swappable power supplies; Choice of NEMA or IEC plug types		
Operational Specifications	Voltage	200-240 VAC / 50-60 Hz		
	Watts (avg./max)	870 / 2000		
	BTUs (avg./max)	2969 / 6824		
	Operating temp.	5°C to 35 °C (41°F to 95°F)		
	Operating humidity	8% to 85% (non-condensing)		
	Non-oper. temp.	-40°C to 60°C (-40°F to 140°F)		
	Non-oper. humidity	8% to 95% (non-condensing)		
System	Type	Fully redundant all-flash hot swappable dual controllers		
Software	Tintri OS	Software Tintri OS TintriOS 5.2 or higher		
Workloads	Supported Hypervisors and Databases	VMware vSphere®, Microsoft® Hyper-V, Red Hat® Enterprise Virtualization (RHEV), Citrix Hypervisor, and Microsoft® SQL Server		
Additional Software	Management	Tintri Global Center™ Standard (included)		
	Analytics	Tintri Analytics[g]:Up to 3 years of detailed operational historical metrics		
	Tintri Software Suite	ReplicateVM™: Synchronous and Asynchronous Replication VMstore Cloud Connector™: Public Cloud Connector Tintri Global Center™ Advanced: VM Scale-out[a] SyncVM™: Copy Data Management: SecureVM™: Data-at-rest Encryption SQL Integrated Storage FIPS 140-2 NIST Validated Encryption[h]		
Product Support	Administration	Revolutionizing and Minimizing Storage Management with Intelligent Infrastructure		
	Support	Proactive support with automated phone home and case creation		
Regulatory	UL/CSA/EN/IEC 60950-1, EMC Emissions Class A, FCC, IC, CE, VCCI, RCM, BSMI, EAC, KC, ROHS, REACH, WEEE			

a. Effective capacity refers to usable space. It is calculated by removing data protection overhead from RAW capacity, and then a space savings multiplier is applied. Data protection overhead includes double parity, hot spare and internal reserves for metadata. Space savings is derived from inline deduplication, compression and clone savings, but does not include thin provisioning. Data reduction typically provides 2.5-5x capacity savings; 5x was used for the value shown.

b. 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.

c. Assumes minimum policy of 8 hourly snapshots, 7 daily snapshots, and 4 weekly snapshots. All snapshots are logically represented as full recoveries.

d. Supports Auto-Negotiation down to 10 GbE.

e. Supports Auto-Negotiation down to 1 GbE.

f. Copper 10GBASE-T only for 4 port card option.

g. Included with an active VMstore maintenance contract.

h. Only available as a factory installed and configured option on a new VMstore T7060 or VMstore T7080 system.

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