

# **VM**store

#### Maximum Performance for Applications and the People Who Manage Them



Flash storage has the power to fundamentally transform how you do business. But most solutions force you to compromise on

performance, price, or features. The Tintri VMstore EC6000 All-Flash Series intelligent infrastructure delivers powerful and efficient all-flash performance for up to 7,500 virtualized applications in just two rack units.

At the core of VMstore EC6000-Series is the unique VMstore file system that is built specifically for virtualized and cloud workloads. This enables you to control each application automatically and helps you match capacity to business needs one drive at a time. With the EC6000-Series, you can start with a 19TB all-flash system and grow to over 40PB of all-flash storage supporting over 480,000 applications all managed by a single console.<sup>a</sup> The EC6000 delivers an exceptional user experience through completely autonomous operation, real-time and predictive analytics, and powerful automation at the application level of abstraction to build and drive your virtualized workloads in today's data centers.

Consolidate your virtualized enterprise applications onto a scalable, performant, and easy-to-use intelligent infrastructure. When the data that drives your line-of-business applications resides on VMstore EC6000-Series, your operations are dramatically simplified. Go from pilot to production with a few clicks of a button. Enjoy a simplified administrative experience so you can focus on your business. Experience different!

### **Features**

- Consistent Performance Isolation for every application all the time
- High Availability RAID, active-standby controller with hot spares, and more
- 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-application 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 that meet your needs
- Per-Application Data Management Manage snapshots, clones, replication, and QoS policies on a per-VM basis

## **Benefits**

- Guaranteed high performance for every application without manual intervention
- Concurrent multi-hypervisor support enables you to operate vSphere, Hyper-V, RHEV, XenServer 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
- Our autonomous operation eliminates many manual steps saving time and reducing errors
- Our support for open APIs delivers choice while making scripting simple, standardized, and powerful



## **VMstore EC6000 All-Flash Series**

Models		EC6090	EC6075	EC6055	EC6030	
64 Nodes		1-64 VMstore Systems				
Flash	Effective capacity <sup>bde</sup>	Up to 41.3PB	Up to 41.3PB	Up to 20.6PB	Up to 5.2PB	
	Flash raw capacity <sup>e</sup>	11.8PB	11.8PB	5.9PB	1.5PB	
	Data protected as DP/DR target <sup>bce</sup>	82.6PB	82.6PB	10.4PB	10.4PB	
Application Density	VMs (max)	480,000	480,000	160,000	32,000	
Per Node			<u> </u>			
Flash	Effective capacity <sup>bd</sup>	Up to 645TB	Up to 645TB	Up to 322TB	Up to 81TB	
	Flash raw capacity	25 to 184TB	25 to 184TB	12 to 92TB	6 to 23TB	
	Data protected as DP/DR target <sup>bc</sup>	Up to 1290TB	Up to 1290TB	Up to 645TB	Up to 161TB	
Application Density	VMs (max)	7,500	5,000	2,500	750	
	VDisks (max)	15,000	15,000	7,500	2,500	
Onboard Network ports per controller	DATA ports	2 x 10GbE				
	ADMIN ports	2 x 1GbE				
	REPL ports	2 x 1/10GbE				
Optional Network	DATA ports	2 x 40GbE or 4 x 10GbE or 2 x 25GbE				
ports per controller	REPL ports	2x 40GbE or 4x 10GbE or 2x 1/10GbE or 2x25GbE				
Physical Specifications	Dimensions (HxWxD)	2RU, 3.5" x 19.0" x 34.63" (89mm x 483mm x 880mm) without bezel				
	Weight 13x SSDs	72.8 lbs (33.0kg)	72.5 lbs (32.9kg)	72.1 lbs (32.7kg)	69.2 lbs (31.4kg)	
	Weight 24x SSDs	74.5 lbs (33.8kg)	74.2 lbs (33.7kg)	73.8 lbs (33.5kg)	70.9 lbs (32.2kg)	
	Power supplies	Dual redundant hot swappable with a choice of NEMA or IEC plug types				
	Watts (avg./max)	650 / 1100	550 / 1100	464 / 1100	433 / 1100	
	BTUs (avg./max)	2218 / 3412	1877 / 3412	1583 / 3412	1477 / 3412	
	Operating temp.	5°C to 40 °C (41°F to 104°F)				
	Non-oper. temp.	-40°C to 70°C (-40°F to 158°F)				
	Operating humidity	8% to 90% (non-condensing)				
	Non-oper. humidity	5% to 95% (non-condensing)				
System	Туре	All-flash dual controller (active-standby)				
Software	Tintri OS	Requires Tintri OS 4.3.3.x or higher				
Virtualization	Protocol Support	NFS and SMB3				
Additional Software	Management	Tintri Global Center™ Standard (included)				
	Analytics	Tintri Analytics (included in active VMstore maintenance contract)				
	Tintri Software Suite	Synchronous and Asynchronous Replication: ReplicateVM™ Public Cloud Connector: VMstore Cloud Connector™ VM Scale-out: Tintri Global Center™ Advanced Copy Data Management: SyncVM™				
	Administration	Data-at-rest Encryption: SecureVM™ Tintri Global Center, web interface (https), KVM (console), SMTP and SNMP for alerts				
Product Support	Support	Proactive support with automated phone home and case creation				
Regulatory	+'-'	L/CSA/EN/IEC 60950-1, EMC Emissions Class A, FCC, IC, CE, VCCI, RCM, BSMI, EAC, KC, ROHS, REACH, WEEE				

a. VMstore Scale-out enables you to manage storage as a federated pool, heterogeneously accommodating hybrid/all-flash nodes for both existing and future systems. You can start with one 19TB all-flash system and grow up to 40PB capacity supporting up to 480,000 virtual machines.

b. 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.

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

d. 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.

e. 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.



info@tintri.com