



DATERA ELASTIC DATA FABRIC

Datera Elastic Data Fabric™ (EDF), a next-generation “public-cloud”-like elastic block storage that is deployable within enterprises and service providers on industry-standard x86 servers. Datera Elastic Data Fabric takes datacenter automation and efficiency to a whole new level, delivering cloud operations at transformational speed, agility and economics.

Datera Elastic Data Fabric is built to deliver intent-based multi-tenant aware storage with the ability to automate to scale through application awareness. The distributed system is completely self-aware, self-adaptive, and self-optimizing making it an autonomic organism adapting to the changes in the underlying infrastructure as well as the scale/changes in the workloads.

SOFTWARE FEATURES

PROGRAMMABLE

Management Interface	RESTful API, CLI and GUI
REST Explorer	Live searchable endpoint APIs Self-describing schema Auto-generate cURL or Python script; copy and paste live data center transactions
Monitoring/Diagnostics	SNMP, syslog, event logging and monitoring support

INTENT-BASED

Application Defined	Built-in Application Templates: Cassandra, Hadoop, MySQL test/dev or customize your own Linked Application Instance support: Deploy, manage 1000's of App Instances with a single App Template
Policy-driven QoS Engine	Set QoS by application or fine-grain volume/data store Wide range of cost, performance or data protection options
Cloud Ecosystem Plug-and-Play	VMware VAAI, vCenter Plugin OpenStack Cinder driver with multi-tenancy, QoS configuration and multi-pathing CloudStack driver with shared volume, and manage volume support Docker/Swarm volume driver, Kubernetes driver, Mesos driver

HYPERSCALE

Cluster Architecture/ Metadata	Smart placement of data – all-flash, single replica flash hybrid Symmetric, log-structured/Key Value Store Available as software on qualified x86 platforms or as an integrated appliance
Heterogeneous Hyperscale	Mix and match all-flash nodes, and hybrid flash nodes Auto-load balancing across nodes (both data capacity and bandwidth) Transparent tech refresh
High Availability	Online, non-disruptive cluster shrink/expand, software and hardware upgrades No single point of failure, automated mix node rebuilds, media failure handling Minimum/Maximum Replicas: 1-5 Clones, Snapshots (read, write, online, offline and scheduled)

MULTI-TENANT

Tenant Isolation	Support for native multi-tenancy, tenant administration Micro-segmentation: separates application traffic for security and fault isolation Support of multiple IP blocks, VLAN Tagging Secure administrative roles; end point-based access control
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NODE CONFIGURATIONS

	All-FLASH NODE (AFN)		HYBRID FLASH NODE (HFN)		XTREME FLASH NODE (XFN)
	DF 4010	DF 4020	DF 5005	DF 5010	DF 8003*
Storage	9.6 TB Flash (raw)	19.2 TB Flash (raw)	48 TB HDD (raw) 3.2 TB Flash (raw)	96 TB HDD (raw) 6.4 TB Flash (raw)	3TB 3DXP Flash (raw)
Access Protocols	iSCSI, iSER	iSCSI, iSER	iSCSI, iSER	iSCSI, iSER	iSCSI, iSER
Performance	Up to 70,000 IOPS @ < 1ms latency Up to 2.5GB/s bandwidth	Up to 70,000 IOPS @ < 1ms latency Up to 2.5GB/s bandwidth	Up to 50,000 IOPS @ < 1ms latency Up to 2.5GB/s bandwidth	Up to 50,000 IOPS @ < 1ms latency Up to 2.5GB/s bandwidth	Up to 1 Million IOPS @ < 0.5 ms latency Up to 6.25 GB/s bandwidth
System Configuration	2-socket Xeon E5-2630v4 192GB memory Mirrored boot drives	2-socket Xeon E5-2630v4 192GB memory Mirrored boot drives	2-socket Xeon E5-2630v4 192GB memory Mirrored boot drives	2-socket Xeon E5-2630v4 192GB memory Mirrored boot drives	2-socket Xeon E5-2630v4 192GB memory Mirrored boot drives
Networking	Management: Up to 3x1GbE RJ45 Access Network: 2x 10GbE SFP+ Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP	Management: Up to 3x1GbE RJ45 Access Network: 2x 10GbE SFP+ Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP	Management: Up to 3x1GbE RJ45 Access Network: 2x 10GbE SFP+ Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP	Management: Up to 3x1GbE RJ45 Access Network: 2x 10GbE SFP+ Internal Network: 2x 10GbE SFP+ (or) 40GbE QSFP	Management: Up to 3x1GbE RJ45 Access Network: 2x 50GbE QSFP Internal Network: 2x 50GbE QSFP
Power	2x Hot-plug redundant high-efficiency 750W 150W to 300W depending upon IO load	2x Hot-plug redundant high-efficiency 750W 150W to 300W depending upon IO load	2x Hot-plug redundant high-efficiency 750W 220W to 300W depending up on IO load	2x Hot-plug redundant high-efficiency 750W 220W to 300W depending up on IO load	2x Hot-plug redundant high-efficiency 980W 150W to 300W depending up on IO load
Gross Weight	17.2 kg (38 lbs)	17.2 kg (38 lbs)	38.6 kg (85 lbs)	38.6kg (85 lbs)	32.6kg (72 lbs)
Enclosure	1RU, Height: 42.8mm (1.7"), Width: 434mm (17.09"), Depth: 731mm (28.8")	1RU, Height: 42.8mm (1.7"), Width: 434mm (17.09"), Depth: 731mm (28.8")	2RU, Height: 88.9mm (3.5"), Width: 434mm (17.09"), Depth: 731mm (28.8")	2RU, Height: 88.9mm (3.5"), Width: 434mm (17.09"), Depth: 731mm (28.8")	3RU, Height: 132 mm (5.2"), Width: 437 mm (17.2"), Depth: 648 mm (25.5")

*Available in late 2017

**Specifications are subject to change