

# NexentaEdge Datasheet

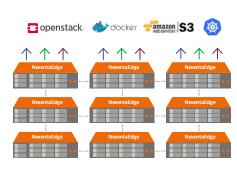
## Multi-Service Scale-Out Storage Software

NexentaEdge provides scale-out Block, File and Object (S3 & Swift) storage services delivering cluster-wide inline deduplication and compression at chunk level to deliver enterprise grade data integrity. Quick Erasure Coding and shared namespace between NFS and object data provide best in class performance with low touch operating model.

#### **Next Generation Scale-Out Architecture**

NexentaEdge is a truly distributed, scale-out architecture, consisting of four or more physical servers interconnected using a dedicated 10 Gigabit Ethernet (10 GbE) network for cluster communication. The connected servers form a cluster that maintains redundancy and resilience of data throughout the system using strong cryptographic checksums for data integrity, and replication technology to ensure hardware-level redundancy.

NexentaEdge runs on shared nothing clusters of industry standard Linux servers. See the NexentaEdge Configuration Guidelines for more information.



Multi-service Scale-Out Block. File & Object

















## Supporting Platforms for Converged Infrastructures

NexentaEdge is ideally suited to support use cases from Enterprise and Next Generation Clouds, Object Applications, and large Object-Based Archives. Nexenta Edge clusters can be deployed as either all-flash, hybrid, or all-disk configurations.









All-Flash

**Hybrid** 

All HDD

iSCSI, Native Block, NFS, S3 and Swift High Performance Inline Deduplication & Compression Ease of operation

S3, Swift, NFS Scalability Quick EC Data integrity

## NexentaEdge System Requirements & Feature Highlights

NexentaEdge software provides flexibility in hardware configuration and brings unparalleled simplicity to your daily user experience regardless of your deployment size.

Protocols	Block: iSCSI, native driver File: NFSv3 Object: S3, Swift
Cluster Profiles	All-Flash, Hybrid, All-Disk
Deployment Models	Dedicated, Mixed, Container-Converged
Data Management	Patented Cloud Copy On Write (CCOW) Unlimited metadata scaling End to end data integrity Cluster wide inline deduplication Inline compression Unlimited snapshots and clones Quick Erasure Coding (zero performance penalty)
Management	Self-documenting REST API CLI Native Graphical User Interface
Eco-system integration	AWS S3-compatible API OpenStack Cinder & Swift Docker Volume Plugin and Docker DataCenter

Network	Minimum of enterprise class non-blocking 10GbE switches
Hardware (4 servers, each with)	CPU: Intel Xeon E5-2630v3
	DRAM: 64GB
	Boot Drive: HDD
	Minimum 1x 10GbE NIC
	Minimum of 4 HDDs and 1 SSD for Block storage configurations
Host Operating System Support:	Ubuntu 16.04, CentOS 7.3, RHEL 7.3

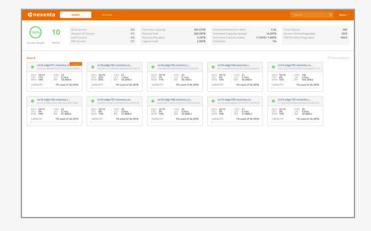
To request the full details of the NexentaEdge Configuration Guidelines email **sales@nexenta.com** 

### Object Archive, Fast & Cost Optimized

High-performance object storage capabilities are one of the key differentiators of NexentaEdge in archive environments. This performance is powered by advanced data reduction technologies and further enhanced by the newly added feature, Quick Erasure Coding. Quick EC eliminates the performance penalty usually associated with accessing objects in traditional erasure coded solutions while offering data protection against multiple hardware failures with as little as 30% overhead.

#### **Nexenta Quick Erasure Coding benefits:**

- Designed for efficient storage of cold data, without compromising on performance
- Encoding is done as post-processing when data "goes cold" (tunable)
- Innovative approach avoids read penalty of traditional erasure coding
- Supports a fixed set of data/parity combinations

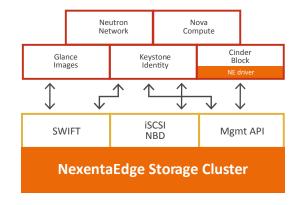




#### **OpenStack Integration**

NexentaEdge is ideally suited to be an OpenStack back end. Cluster-wide inline deduplication and compression of all data delivers impressive savings for organizations with thousands of VM boot images. Having a distributed metadata service provides NexentaEdge greater scalability, redundancy, and durability.

NexentaEdge is fully integrated into the OpenStack framework, providing object storage through OpenStack Swift interfaces, including integration with Glance image repositories. NexentaEdge provides OpenStack Swift and Amazon S3 object storage interfaces for application storage and iSCSI block storage services with OpenStack Cinder integration for Virtual Machine Boot images.

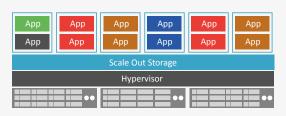




#### **Container Converged**

Container-converged infrastructure shares deployment benefits with hyper-converged infrastructure and adds to it the inherent benefits of containers compared to virtual machines. The virtual machine centric approach in hyper-converged deployments translates into extra resources spent to store, run and manage the virtual machines and their various operating system images. From an operational perspective, each of these virtual machine needs to be managed, secured, patched, etc. Each virtual machine consumes extra CPU, memory and storage resources.

A NexentaEdge based container-converged deployment on the other hand benefits from a full-featured scale-out storage platform that provides standard block, NFS file and S3 object services to any application. This allows a wide variety of applications to be supported, whether they depend on block, file or object. NexentaEdge also supports unified namespace across file and object, allowing applications to access the same data via either method.



**Hyper-Converged Virtual Machine Centric** 



**Container-Converged Application Centric** 

#### **Proven Success through Partnerships**















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