Reference Architecture Datasheet

High performance and low latency scale-out NAS with vNAS

FEATURES

- **Fully flash compatible:** Maximum performance by intelligent use of cache through flash storage.
- **Extreme scalability:** Linear scalability up to hundreds of nodes, Exabytes of storage and billions of files.
- **Health check:** Monitor data and cluster state changes.
- **High reliability:** Self-healing cluster and data resiliency.
- **Supports all major protocols:** CIFS, NFS, iSCSI, OpenStack and Amazon S3.
- **Redundancy:** Supports copies of files and Erasure coding.
- **High availability:** High availability with horizontal and vertical cache synchronization.
- **Telecom grade:** 99.999% reliability.
- **Performance:** Linear increase in performance and storage with scaling.

Full featured high performance scale-out NAS

Scale-out NAS from Compuverde, offers extreme performance and scalability up to Exabyte's of data and trillions of files.

By using a decentralized, symmetric architecture all storage nodes share the same functionalities and responsibilities. No special purpose nodes or central exist in the cluster which greatly simplifies deployment and maintenance. Also, potential bottlenecks or single points of failure are solved by multiple entries to the file system.

You will take full advantage of the built-in cache that improves performance levels of your setup significantly. The cache is in the cluster is at all times synchronized with the storage layer and in order to further increased redundancy, Compuverde is also allowing for efficient synchronization horizontally between caches.

Running vNAS on EUROstor hardware, Compuverde delivers a scale-out NAS solution with remarkable performance that scales linear with every added node.

EUROstor-Compuverde reference architecture are ideally suited to support demanding enterprise applications in physical or virtual infrastructure, high performance digital media applications, and large scale data analyzing. EUROstor certified reference architecture configuration is delivering industry leading performance numbers. It starts with four nodes and scales to hundreds of nodes.

Architecture configuration

	8 node cluster	12 node cluster	14node cluster	16 node cluster
Memory (Total system)	2 TB	3 TB	3.5 TB	4 TB
Raw capacity	172 TB	259 TB	302 TB	345 TB
Data drive	192	288	336	384
Form factor (Total system)	16U	24U	28U	32U
Raw Cache capacity	6.4TB	9.6 TB	11.2 TB	12.8 TB
10 GBe port	32	48	56	64
Software	Compuverde vNAS			
Protocols	NFS v3, v4, CIFS/SMB1.0, SMB2.0, SMB3.0, Amazon S3, OpenStack			
Network switch	10 Gigabit Ethernet switch Managed layer 2			

Components in each node	
Motherboard	SuperMicro X10DRi-T
CPU	2x Intel Xeon E5-2630v3
SAS HBA	1x Avago 9300-4i
RAM	16x 16 GB DDR4 2133 MHz
Storage disks	24 x 900 GB 10K SAS (2,5”)
Read/Write Cache	2x Intel SSD DC P3700 400GB
Storage Enclosure	SuperChassis C216BE1C-R920LP
NIC	Intel X540-T2 + QLogic 3442-CU
Boot disk	32 GB SATA DOM