



The Linux Storage People

# Linux NAS Gateway CLN21

The Linux Storage



## SUMMARY

- Unlimited Capacity Linux Network Attached Storage Gateway (NAS Filer)
- Pre-configured with Coraid's Linux NAS distro tuned for performance and scalability
- Unlimited storage capacity, >1,000 TB, one disk at a time
- Uses ATA-over-Ethernet for connection to storage
- NAS Gateway is separate from disk storage, eliminating captive storage
- Logical Volume Management (LVM2) for flexible capacity control
- Includes AoE tools and Coraid Ether Console (CEC) for storage management
- NFS and CIFS file sharing
- System boots from FLASH disk

### Coraid Linux NAS Gateway

Coraid is proud to introduce its CLN21 Linux NAS Gateway, using our own Linux distro for NAS. Storage is attached to the NAS Gateway using the AoE protocol and standard Ethernet networking, creating a file storage system with unlimited capacity.

### NAS Gateway

The CLN21 is the first in a family of high performance Linux NAS Gateways designed to work with EtherDrive® Storage. CLN21 is a 1U Linux box pre-loaded with Coraid's Linux NAS distro. It includes lots of application specific "HowTo" that will allow users to get up and running quickly. The unit has four GigE ports. Two ports connect to NFS and CIFS clients on the LAN, and two GigE ports connect to a dedicated storage LAN consisting of an unlimited size pool of EtherDrive® Storage. Separating the storage from the NAS server eliminates wasted captive storage inside the server. This increases storage reliability, and makes the whole systems scalable to multi-petabytes of storage.

### Unlimited Storage

Using Ethernet thousands of disks can be attached to and accessed by one or more CLN21 NAS Gateways. A storage system can be expanded gradually, one disk at a time. An unlimited number of filesystems can be exported, each mounted filesystem being up to 9 million TB. Single file sizes up to 9 million TB can be stored in any single directory.

### File Sharing

Files are shared and accessible to Unix, Linux, Solaris, Apple and Windows clients using the NFS or CIFS file sharing protocol.

### Linux Distro for NAS

Coraid's Linux distro for NAS is a modified Debian distro highly targeted to be an NFS server or SAMBA CIFS server exporting ATA-over-Ethernet storage. With Coraid's Linux you get a distro that is easy to configure with lots of specific "HowTo" all on one place. This saves you time and effort, and you also receive Coraid's top rated customer support.



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## Flexible Configuration

From the "Client" side connection, the Coraid Linux NAS Gateway appears as an unlimited capacity network attached storage device, exporting XFS filesystems as NFS/CIFS file shares. Client access to files and directories can be controlled, and quotas can be set for each user.

On the "Storage" side connection, the Coraid Linux NAS Gateway has access to an unlimited size array of EtherDrive Storage Appliances. CLN21 is also a flexible RAID controller allowing storage to be grouped into RAID sets, and allowing RAID to span multiple EtherDrive Storage appliances.

Using Ethernet the storage system can be expanded without limit. The XFS filesystems can be expanded as the storage grows without interrupting the NFS client file access.

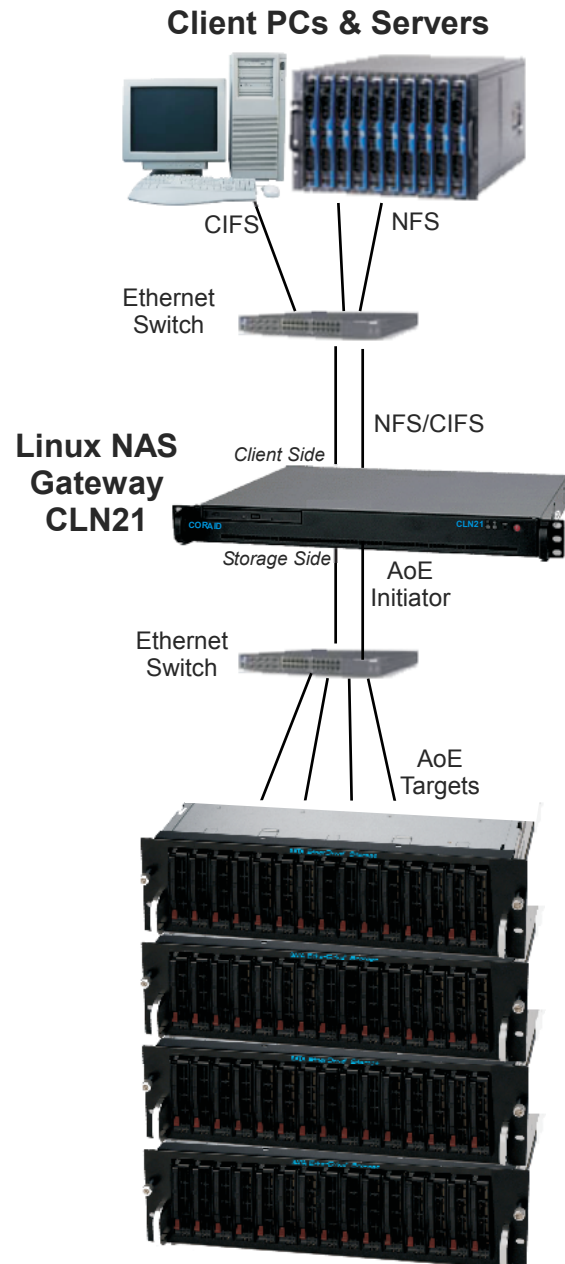
Linux logical volume management (LVM2) is used to divide up the storage volumes into any desired configuration.

## Performance You Want

CLN21 has 2 GigaByte of memory that it aggressively used as cache to optimize the server connection response time.

CLN21 is a diskless server and boots from FLASH. Software updates are provided via network download.

When CLN21 boots, it auto configures itself to the last settings. No operator intervention is required to recover from a power outage.



Multiple  
EtherDrive  
Storage  
Appliances



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## SPECIFICATIONS

Processor	Intel 3GHz P4 with 64bit support
LAN Ports (2 for clients, 2 for storage)	Four Gigabit Ethernet (10/100/1000) RJ-45
Control Interface	SSH network, RS-232 or KVM, command line interface
Cache Memory	2 GigaByte RAM
Performance (sync mode)	100/60 MBytes/sec read/write, sustained throughput
Boot Media	Flash (CLN21 has 512MB with 100MB free) (CLN22 has 2GB with 1.6GB free)
RAID Types Supported	RAID 0 (striping) RAID 1 (mirroring) RAID 5 (striping with parity) RAID10 (striping with mirror) Concatenated RAID sets & linear
File Sharing Protocol	NFS version 3, SAMBA CIFS
Number of NFS Clients	Unlimited
Number of EtherDrive Storage	983,040 disks of networked storage
Storage Journaling Filesystem	XFS
Volume Management	LVM2, with POSIX ACL support
Power Supply	115/230VAC auto select, 50/60Hz
Power Consumption	200 Watts
Dimensions	1.75 x 17 x 14 inches
Operating Temp	50 -104 degrees F (10 - 40 degrees C)
Relative Humidity	20% to 80%(non-condensing)
Warranty	36 Months