

# Power Saving Cloud Archive

## Cost-effective High-density Storage Solution



The Power Saving Cloud Archive (PSCA) from Cutting Edge Networked Storage is ideal for organizations of all sizes and types that are struggling to deal with a relentlessly rising flood of data. This challenge is made especially difficult by the shift toward more unstructured, file-based data (such as video, images, etc.) and by the need for longer retention times. Many organizations are grappling with a rapidly rising quantities of “long-tailed” data that must be stored for long periods of time but is rarely accessed after the initial file creation. The Power Saving Cloud Archive is an enterprise class, high performance file server solution ideal for critical data applications that require dedicated, expandable and affordable network attached storage.

The Power Saving Cloud Archive is powered by Cutting Edge’s 5th generation field proven EdgeWare Unified Storage OS, a fully integrated 64-bit Linux operating environment customized for storage based operations. EdgeWare is designed to maximize NAS and SAN performance and efficiency with a storage-centric operating system and heterogeneous network file system that is both easy-to-use and easy-to-support. EdgeWare offers complete NAS and SAN functionality in a unified storage solution, coupled with best-in-class performance, versatility, and security.

### Benefits of Power Saving Cloud Archive:

#### Compact High-density Storage:

36TB of RAID-6 protected data storage in each Long Term Storage Node (LTSN)

#### Scalable Capacity and Performance:

Designed for maximum scalability, flexibility, and adaptability to meet a full range of data archiving requirements

#### Low Acquisition Cost:

Designed to use standards-based, inexpensive components to deliver maximum value. PSCA based storage is less expensive than most tape libraries while offering increased performance, flexibility, and availability of disk-based systems

#### Fast Data Access Time:

PSCA can provide the speed of disk at the price of tape. PSCA represents a major breakthrough in simplifying and improving the data retrieval process without incurring any increase in storage infrastructure costs.

#### Reduced Power Usage:

With power costs already representing more than half of overall IT costs and still escalating, perhaps the most important impact of PSCA is the ability to drive down power usage for storage archives by as much as 90 percent.

### PSCA Performance

- PSCA dynamically increases and decreases the number of active Long Term Storage Nodes to ensure that the performance required for archiving data is always available regardless of work load.

### PSCA Connectivity

- PSCA NAS connects to clients via a CIFS share for robust yet simple shared access to data.
- PSCA LTSNs connect to the PSCA NAS over a private network to ensure that data is always available.

### PSCA Reliability

- PSCA NAS minimizes down-time with hardware RAID 0, 1, 5, 6, 10, 50, 60 and Single-Disk data protection with Hot-Spare drive capability and redundant hot-swap removable disk drives and power supplies.
- PSCA LTSNs have software RAID 6 with automatic error detection to ensure data integrity. LTSNs can detect drive failures, automatically remove themselves from service, and copy their data to other available LTSNs to ensure data availability.

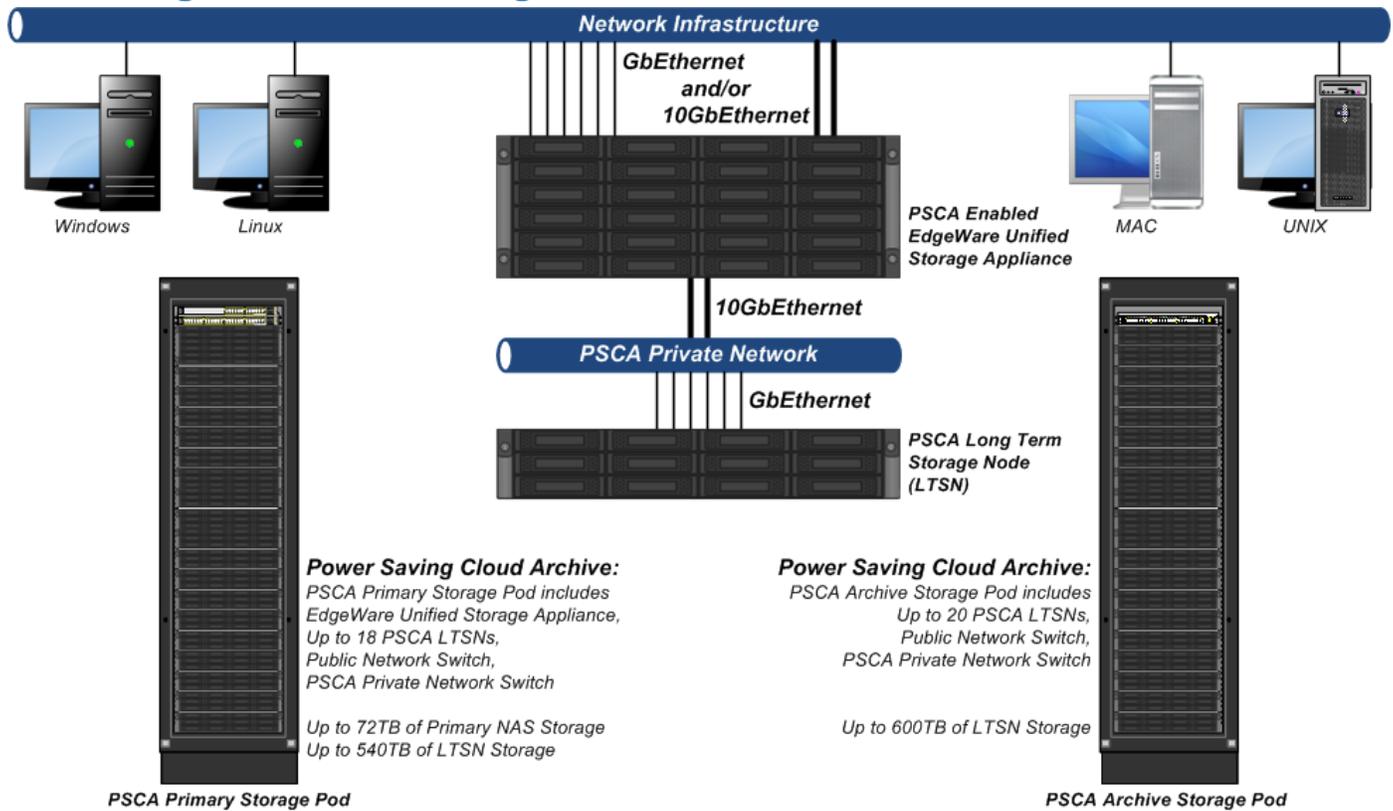
### PSCA Security

- PSCA NAS provides a highly secure storage environment using SSL for secure communications over the internet, asymmetric key encryption, and multiple login control services for conditional access.
- PSCA LTSNs are connected via a private network and are physically isolated from the rest of the network.

### PSCA Recovery

- PSCA NAS shares can be restored from the PSCA LTSNs in case of system failure.
- PSCA LTSNs have automatic data copying and system recovery tools.

# Power Saving Cloud Archive Configuration



## POWER SAVING CLOUD ARCHIVE:

### PSCA ENABLED EDGEWARE UNIFIED STORAGE APPLIANCE

Form Factor	1U-4U 19" Rackmount Server
Processors	Up to 2x Intel® Xeon Quad Core 5600 Series CPUs
Memory	Up to 192GB DDR-3 ECC Reg DIMM
Network Interface	Up to 32x Gigabit Ethernet ports Up to 10x 10Gigabit (CX4, SFP+) or a combination of GbE/10GbE
Network Support	CIFS, NFS, iSCSI Target, FC Target
Storage Interface	6Gb SAS/SATA RAID (Internal) 8Gb FC RAID (External)
Storage Capacity	1TB – 72TB PSCA Protected Share
System Management	EdgeWare 5.0 OS

## POWER SAVING CLOUD ARCHIVE:

### LONG TERM STORAGE NODE APPLIANCE

Form Factor	2U 19" Rackmount Server
Network Interface	Dual Bonded Gigabit Ethernet
Network Support	CIFS
Storage Capacity	30TB RAID-6 (usable) per LTSN
System Management	Proprietary
Power Usage	< 220W@120V when active, < 6W@120V when in S5 sleep mode

## ENVIRONMENTAL

Operating Temperature	50°F-95°F / 10°C-35°C
Humidity	10%-85% Non-Condensing

## POWER SAVING CLOUD ARCHIVE:

### PSCA STORAGE SPECIFICATIONS

Throughput	Scalable to meet requirements
Security	PSCA Share/Server Level Permissions LTSNs reside on isolated private network
Data Availability	PSCA protected NAS shares can reside in Active/Passive clustered servers for redundancy to minimize down time
Disaster Recovery	PSCA protected NAS shares can be regenerated from LTSNs in the event of a unified storage appliance failure. LTSN drives can be transferred to spare LTSN chassis to rapidly mitigate hardware failures. (assumes spare systems available on-site)
Management	EdgeWare 5.0 Web UI

## EDGEWARE UNIFIED STORAGE SYSTEM:

### GENERAL NAS SPECIFICATIONS

Throughput	Customizable to meet requirements
Client Support	UNIX, Windows, MAC OS, Linux
Security	Share/Server Level Permissions, Remote Replication (rsync), Remote Mirroring (drbd), Snapshots and Disk-Disk, Disk- Tape and Disk-USB Backup
Data Integrity	Web Based: Firefox (preferred), IE, Safari, SNMP MIBs and Traps, Log Review/Download, Flash Boot Audible and E-Mail Alerts, Storage & Enclosure Monitoring
Management	
Maintenance	

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