DELL POWERVAULT NX3500 SYSTEM GLOSSARY

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Understanding the terminology related to a Dell Fluid File System (FluidFS) based PowerVault NAS system will help you successfully deploy, manage, and maintain your unified storage environment.

Backup Power Supply (BPS) – Provides back up battery power in the event of a power loss.

Client access VIP – Virtual IP addresses that clients use to access CIFS shares and NFS exports hosted by a PowerVault NAS system. The PowerVault NAS system supports multiple client access VIPs.

Controller (NAS controller or nodes) – Server appliance installed with the PowerVault FluidFS software.

Controller pair – Two NAS controllers that are configured as pair in a PowerVault NAS clustered system. Cache data is mirrored between the paired NAS controllers. Dell Management Application (DMA) – Data Management Application is also known as a Backup Application Server.

Dell PowerVault Modular Disk Storage Manager (MDSM) – The management software that ships with the PowerVault MD32x0i/MD36x0i array.

Dell Fluid File System (FluidFS) – High-performance, scalable file system software installed on NAS controllers.

Host Port Identifier – Unique ID used to identify hosts in a network.

Internal network A (peer connection) – The PowerVault NX3500's internal network consists of two independent Gigabit Ethernet ports. The internal network is the infrastructure for PowerVault NX3500 clustering, including the heartbeat monitor, data transfer, and mirroring information between the controllers.

Internal network B (internal management/IPMI) – The PowerVault NX3500 internal management network (also known as internal network b) connects both controllers. All administrative related functions and controller reboots are performed on this network.

LAN/client network (primary network) – The network through which clients access NAS shares/exports. The PowerVault NAS system is connected to customer IT environment and its NAS clients using this network. NAS storage pool Virtual disks created on the PowerVault MD32x0i/MD36x0i storage arrays dedicated to the PowerVault NX3500 system.

NAS volume (NAS container or virtual volume) – A virtualized volume that consumes storage space in the NAS storage pool. Administrators can create CIFS shares and NFS exports on a NAS volume and share them with authorized users. A PowerVault NAS system supports multiple NAS volumes.

NAS replication – Replication between two PowerVault NAS systems or between two NAS volumes.

NAS replication partners – PowerVault NAS systems participating in a replication activity.

PowerVault NX3500 Architecture – The PowerVault NX3500 clustered NAS solution consists of a pair of controllers and the PowerVault Modular Disk (MD) iSCSI storage array. In addition, both controllers are protected by a backup power supply (BPS), which helps protect data during power failure.

Network Data Management Protocol (NDMP) – Network Data Management Protocol is used for backup and restore.

Peer controller – The peer NAS controller with which a specific NAS controller is paired in a PowerVault NAS system.

Power module (battery unit) – One of the battery units in a Backup Power Supply.

PowerVault MD3xx0i – Refers to the PowerVault MD3200i, MD3220i, MD3600i, MD3620i iSCSI storage solutions.

PowerVault NAS Configuration Utility – The setup wizard used to initially discover and configure a PowerVault NAS system. This utility is only used for initial setup.

PowerVault NAS Manager – The web-based user interface, which is part of the PowerVault NX3500 software, used to manage the PowerVault NAS system.

PowerVault NAS system – A fully configured, highly-available and scalable NAS appliance, providing NAS (CIFS and/or NFS) services, which is comprised of a pair of NAS controllers, a BPS, a PowerVault storage subsystem and the NAS Manager.

Standby controller – A server appliance that is not installed with the PowerVault NX3500 FluidFS software. For example, a new or replacement controller from the Dell factory is considered as a standby controller.

SAN network (iSCSI network) – The network that carries the block level (iSCSI) traffic and to which the storage subsystem is connected. NOTE: It is recommended that this network be isolated from the LAN/client network.