

## **GLOSSARY**

### **NAS (Network Attached Storage)**

A hard drive storage server that is connected directly to a network rather than to a server or other computer. A NAS system runs on a slimmed-down operating system optimized for fast input and output, and is assigned a network IP address (automatically through DHCP or manually) that makes it directly addressable across the network.

### **PARITY**

Information written across multiple disk drives in certain RAID storage levels used to reconstruct the data stored in the array in the event of a drive failure. Parity makes significantly more efficient use of disk space than mirroring, which stores two identical copies of all data on separate drives. Of the most common RAID levels, only RAID 5 uses parity.

### **RAID (Redundant Array of Independent Disks)**

A method for storing data across multiple hard disks to improve read/write performance, provide redundancy to protect against data loss in the event of a drive failure, or some combination of both. Various RAID levels offer differing balances of performance, data protection, and storage efficiency. The most-used RAID levels are 0, 1, 5, and 10.

### **RAID 0**

A data storage method that distributes data across several disks to improve read/write speeds but which provides no protection against data loss in the event of any disk drive.

### **RAID 1**

A data storage method that protects against loss by duplicating, or mirroring, data across every disk in the array. As long as one disk remains operational, no data is lost. RAID 1 requires two or more disks with total capacity limited to that of the smallest disk in the array.

### **RAID 5**

A data storage method that combines three or more disk drives to provide total protection of all data against the loss of any one disk. The available storage capacity of the array is reduced by the equivalent of one disk. RAID 5 uses disk space efficiently by not storing data in duplicate. Instead, it stores parity information which can be used to reconstruct data.

### **RAID 10**

A combination of RAID 0 performance and RAID 1 protection, RAID-10 is faster than RAID 1, but requires significantly more disk space. Offered in two configurations, RAID 0+1 distributes data across multiple drives then mirrors the drives. RAID 1+0, data is mirrored first and then the mirrors are distributed across multiple drives.

**TB** (terabyte)

When referring to drive capacity, one terabyte, or TB, equals one trillion bytes, or 1,000 gigabytes (GB). The amount of space available for storage of files may vary, as computers' operating systems may use different standards of measurement and report a somewhat lower capacity. In addition, a portion of a drive's listed capacity is used for formatting and other system functions, making it unavailable for data storage.

**Uninterruptible Power Supply (UPS)**

A power management device that conditions electrical current by regulating voltage peaks and dips, and which provides battery current during a power outage for a limited number of minutes. Many UPS units can communicate with a server, computer, or storage device to initiate a controlled shutdown in the event of an extended outage.

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