

Appendix A : Glossary

The terms used on the NEC ESMPRO Manager RAID System Management function are listed in the tables below.

Basic Terms on RAID System

Term	Description
RAID System	The RAID System has the ability of using hard disk drives in a computer as Disk Arrays. The RAID System handles a single RAID Controller as a single system.
RAID Controller	The RAID Controller can use hard disk drives as Disk Arrays.
Physical Device	Physical Devices are used by a RAID System. Physical Devices mean hard disk drives or SSD (Solid State Drive). Physical Devices can be other than hard disk drives if the RAID Controller can connect with devices other than hard disk drives. NEC ESMPRO Manager displays "PD" as Physical Device too.
Disk Array	The virtual hard disk space is created by some Physical Devices. So, you cannot see Disk Array on operating system. You can create Logical Drive on Disk Array.
SSD Cache Disk Array	The Disk Array that consists of SSD Cache Drive.
Logical Drive	The virtual hard disk drive is created on a Disk Array to be recognized by operating system. A specific RAID Level should be set for each Logical Drive. NEC ESMPRO Manager displays "LD" as Logical Drive too.
SSD Cache Drive	The virtual cache drive is created on an SSD Cache Disk Array. The SSD Cache Drive operates as the Cache of Logical Drive.
Hot Spare	Hard disk drives of the type are prepared previously to be replaced with a Physical Device in which a failure occurs.
Global Hot Spare	Available as a Hot Spare of any Disk Array in a single RAID Controller.
Dedicated Hot Spare	Available as a Hot Spare of a specific Disk Array in a single RAID Controller.
Battery	The battery is intended to hold the information on the cache memory in a RAID Controller if the power supplied to the RAID Controller is interrupted.
Flash Backup Unit	Transfers the cache of the RAID Controller to the flash memory to keep the information safe when the power to the RAID Controller is cut off.
Cache Memory	The cache is intended to improve the I/O performance of a RAID Controller.
Enclosure	Means a module equipped with slots to which Physical Devices are inserted.
Fan Unit	Means a cooling fan unit installed in an enclosure.
Power Supply Unit	Means a power unit supplying power to an enclosure.

Basic Terms on Functions of RAID System

Term	Description
Operation	Generic term of maintenance functions requiring certain periods for executions such as Rebuild and Consistency Check
Configuration	Means the configuration of a RAID System.
Initialize	Initializes management area and data area of the Logical Drive.
Rebuild	Writes the data in a failed hard disk drive into a new hard disk drive replaced to Rebuild the Logical Drive.
Consistency Check	Reads all sectors on hard disk drives configuring a Logical Drive to verify the data or provide parity check.
Patrol Read	Reads all sectors on hard disk drives in a RAID System to check whether errors occur or not.
Cache Mode	Indicates the mode in which data is written into the cache memory in a RAID Controller.
Make Online	Means that a Physical Device is entered into the Online status manually.
Make Offline	Means that a Physical Device is entered into the Failed status manually.
Buzzer	Indicates a Buzzer installed in a RAID Controller. The Buzzer notifies you of occurrence of a failure with sound.
HDD Power Saving	Reduces power consumption of the System by spinning down Physical Devices that are not in use.
Refresh Battery	Indicates the function of restoring the degraded battery due to charging and discharging.

Basic Terms on RAID System Management

Term	Description
Standard Mode	Provides the basic RAID System Management functions. In the mode, you can use the standard functions for managing the RAID System.
Advanced Mode	Provides the advanced RAID System Management functions and maintenance functions. To use this mode, expert knowledge on RAID is required. You can mainly use the functions required for maintenance jobs, functions of setting data about a RAID System closely to configure the system and functions of changing parameters.
RAID Log	Means the operation log for the RAID System.
Alert	Means the operation of sending events such as failures occurred in a RAID System to Alert Viewer.
Express Report	Means the operation of sending events such as failures occurred in a RAID System to the customer service.
Rescan	Means the operation of acquiring all the information on managed RAID Systems to update the information managed by the NEC ESMPRO Manager RAID System Management functions to the latest.