



# VTrak E-Class x10 Series

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*3.34.0000.00 Release Notes*

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## 1. Release Summary

VTrak firmware version 3.34.0000.00 is specifically designed for Windows and Linux environments. This release provides stability enhancements for VTrak E-Class models with Serial Attached SCSI (SAS) or Fibre Channel (FC) host interfaces, improving both direct attached and SAN availability for mission critical environments.

Supported Promise VTrak models:

- VTE610fD – 3U/16 FC, dual controller
- VTE610fS – 3U/16 FC, single controller
- VTE310fD – 2U/12 FC, dual controller
- VTE310fS – 2U/12 FC, single controller
- VTE610sD – 3U/16 SAS, dual controller
- VTE610sS – 3U/16 SAS, single controller
- VTE310sD – 2U/12 SAS, dual controller
- VTE310sS – 2U/12 SAS, single controller

### Notes:

- This firmware also contains VTrak J-Class expander updates that will update attached expansion chassis I/O modules simultaneously, eliminating the need for separate updates on expanded systems.
- If connecting Jx30s JBODS with VTrak Ex10 subsystems, the Jx30s systems must be updated to firmware revision 6.04.0000.07 or higher.

## 2. What's New

### 2.1. New Features

- Hard disk drive advanced power management (MAID) support
- SMART log view support
- RAID5/RAID6 32 drives spindle support
- Solid state drive (SSD) support
- VTrak J630s & J830s JBOD support
- Asymmetric logical unit access (ALUA) support
- 2TB hard disk drive support

### 2.2. Enhancements & Fixes

- Enhances host I/O error recovery support

- Enhances disk drive hot-add/hot-remove functionality
- Improves disk drive status reporting
- Enhances physical disk error handling
- Improves general system stability
- Improve method of expanding RAID 50 logical drives
- Improves RAID 6 and 60 rebuild performance
- Addresses issue preventing RAID 6 logical drive expansion using new physical disks in WebPAM PROe
- Resolves network time protocol (NTP) synching issues during system restart
- Enhances software support for UPS
- Resolves an issue with VMware SCSI reservation conflicts
- Enhances reported information in subsystem service report
- Improves accessibility of “Save Subsystem Report”
- Improves reliability of controller fail-over and fail-back
- Improves reliability of Ethernet management port fail-over
- Improves data displayed of SMART log page in WebPAM PROe, CLI & CLU
- Addresses issues seen when displaying SMART data
- Improves reliability of the of background tasks disk array including rebuild, migration, redundancy check, PDM and transition
- Adds capacity rounding option in CLI for ‘migration’ and ‘array’ commands
- Addresses issues seen with battery reconditioning and status reporting
- Enhances expander firmware update feature
- Enhances background activity scheduler interface
- Enhances WebPAM PROe reliability
- Addresses WebPAM PROe issues displaying incorrect data on performance monitoring and controller information page
- Improves CLI and CLU reliability
- Enhances support in configuration scripts allowing BGA scheduling and event subscription to be configured
- Enhances export functionality for configuration script and user database support
- Addresses issue occasional reporting of incorrect Fibre Channel speed
- Improves reliability when handling disk array creation
- Enhances CLI command syntax error checking
- Enhances statistics to report port link errors.
- Addresses statistics display issues

- Improves handling of incomplete arrays
- Resolves issues with spare drive creation and deletion
- Revises the factory default values for SMART, BBM, PDM and medium error thresholds
- Enhances DNS support options
- Enhances subsystem event reporting
- Updates to RaidConsole.inf (Applicable to Windows users only)
- Addresses and enhances behavior of SNMP server
- Addresses and enhances behavior of CIM server
- Addressed issue of logical drive alias disappearance
- Enhances online help documentation

### 3. Errata

Errata Description	Workaround/Solution
In a dual controller configuration, if one of the controllers is pulled out of the enclosure the statistics for that controller will display all zeros.	This is a cosmetic issue that does not cause any loss of functionality.
Rebuild will not start when a dead drive is replaced with a new drive and the active revertible spare is offline.	Manually start the rebuild process through the user interface.
Transporting an array when a migration is in progress and inserting the drives in the enclosure while the subsystem is running could lead to a controller failure.	Do not transport an array when migration is in progress.
Cannot exit from maintenance mode if both controller versions are different.	Flash one of the controllers to the same version as the other controller.
WebPAM PROe display issue with Netscape browser 8.1.2 in Advance Configuration.	This is a browser Issue in Netscape 8.1.2 which is fixed in Netscape 8.1.3. The configuration can still be created. Upgrade to Netscape 8.1.3 to resolve the issue.
Intermittently, the server location protocol (SLP) service will stop after multiple failover and failback iterations.	Reboot the subsystem for the SLP service to recover and restart.

Errata Description	Workaround/Solution
When performing migration on an array containing a RAID 10 logical drive (LD), the LD will automatically migrate to RAID 1E even if the LD is not selected for migration.	Select the RAID 10 LD and force it to migrate to RAID 10.
WebPAM PROe provides an option to change number of axles when performing capacity expansion on a RAID 50 or RAID 60.	WebPAM PROe can only change the number of axles during a RAID level migration.
When a RAID Level Migration is started containing multiple logical drives with some of them configured as RAID 6 or 60, the command will be rejected as "invalid data".	Firmware does not support performing RAID level migration from RAID 6 to any other RAID levels except RAID 60.
Physical drive operational status is incorrectly reported if it was forced offline and it was previously used to create a spare.	This is a cosmetic issue that does not cause any loss of functionality.
Repeatedly transporting an array within same enclosure may cause controller lock up.	Reboot the system to recover.
Manually pulling a controller with cables connected may get result in an I/O timeout.	Quiescence I/O prior to removing controller or if necessary to remove while I/O is present, remove cables prior to controller removal.
Timeout events are seen on configured dead or stale drive.	This is a cosmetic issue that does not cause any loss of functionality.
Starting rebuild on 2 PDs in the same array could end up in IO hung; sometimes when second hotspare rebuild on same RAID 6/60	This condition is very corner case where second Pd should die while the other trying to start the rebuild.
A controller in the second controller slot of an E310 enclosure may report higher temperature than the controller in the first controller slot.	Location of thermal sensor for second controller is located closer to the power supply and this behavior is expected provided temperature is under documented maximum values.
E310s will not remove the HBA SAS Address from the initiator list even if the HBA is disconnected.	Check to make sure if the initiator is still connected and powered on before making use of the initiator information.
While rebuild or sync is running on SSD drive, SMART info can't be retrieved via GUI/CLI/CLU.	Retrieve SMART info when rebuild or sync is done.

Errata Description	Workaround/Solution
Asymmetric logical unit access (ALUA) does not function under Red Hat Enterprise Linux 5.3.	Requires kernel recompile with ALUA option enabled.
Under Windows 2003, controller failback cause a cluster node failover.	No workaround.
Under certain circumstances, disabling a sounding buzzer may fail that had been caused by a physical I/O timeout.	No workaround.
Ex10 will not detect Jx10 when mixed with Jx30.	Ensure that the Jx30 is connected behind the Jx10 enclosure.