



VTrak[®] E5000/EFA5310 Series

E5000/EFA5310 SR4 Release Notes

FW 11.07.0000.01

1. Release Summary

VTrak firmware version 11.07.0000.01 is a service release update to the FCS, PR1, SR1, SR2 SR3 and SR3.1 releases. It is designed for Windows, Mac and Linux environments.

Image combinations for SR4 release:

- Firmware: 11.07.0000.01 (Includes embedded Power CPLD v22 and Expander FW 1.01.0000.60)

In addition to the fixes listed below, this release includes:

- Support J5910 (4U60) and J5920 (4U102) SAS 12G HD JBOD
- Support simple QoS for customer application issue
- Bug fixes.

The Firmware 11.07.0000.01 release contains the following fixes:

Ref #	Description
30256	Support J5910 (4U60) and J5920 (4U102) SAS 12G HD JBOD
30568	Support simple QoS (enable/disable it by CLI only) for customer application issue
240406	Do "shutdown -a restart" looping test, hold on LOADING MODULE Isas_12G_init
241052	WWN not match at dual controllers sync while doing restart controllers testing
247378	The SSD's power LED become off after customer plug out the master controller
244549	Some of the PDs in JBOD goes to Not Usable state after powering up the JBOD, least seen with J930 or > 256 phydrv.
248969	Firmware fixes for memory corrupt issues
250435	Major event "PSU fan or blower speed cannot be detected", least seen on J5000 series JBOD 4U24-Bay
250078	Case ID: 20181107160443S Active Directory
	Upgrade SW php package from 5.4.37 to 5.4.45 to resolve security issue.
231901 234889 232756 250151 250302	Fixed SW (GUI/CLI) minor issues.

The Power CPLD v22 release contains following fix:

Ref #	Description
241048	Fix hot plug issue. Plug in CTRL 1 will lead to CTRL 2 auto restart after plug out CTRL 1 and wait for "Finished high memory copy".
250057	Fix Ctrl hung at "*no 12V from PSU!!!! shutdown! Shutdown platform" followed by IO failure least seen during fail-over
	Fix error code -5 issue for the 10G BaseT DB.
	Fix both 1G management ports lost issue (When an AC power cord is plugged in not well or not solidly).

The Expander FW 1.01.0000.60 release contains following fix:

Ref #	Description
242027	the PSU abnormal when stress test with 3U enclosure
247923	Enclosure status will report PSU critical and voltage sensors error if PSU2 is turned off but report PSU critical only if PSU1 is turned off
	Support HDD power on/off function through SES status control page
	Support J5910 and J5920 SAS 12G HD JBOD, and fine tune SAS cable parameter.

This document is applicable to the following PROMISE VTrak E5000 series models:

Model	Description
E5800fD	4U/24 FC, Dual controller
E5800fS	4U/24 FC, Single controller
E5600fD	3U/16 FC, Dual controller
E5600fS	3U/16 FC, Single controller
E5300fD	2U/12 FC, Dual controller
E5300fS	2U/12 FC, Single controller
E5320fD	2U/24 FC, Dual controller, 2.5" Drive Bays
E5320fS	2U/24 FC, Single controller, 2.5" Drive Bays

This Release supports the E5000 as a Node in a Promise A-Class Network File System High Availability Cluster. Any of the following A-Class Enclosures and the G1100 NAS Gateway can be used. A-Class Firmware 1.16.0000.00 or later required for full support.



Model	Description
A3800fDM	4U/24 FC, Dual controller
A3800fSL	4U/24 FC, Single controller
A3600fDM	3U/16 FC, Dual controller
G1100	NAS Gateway

The supported Expansion subsystems include:

Vendor	Platform	Description
Promise	VTrak J5320s	2U/24-bay JBOD, 12Gbs SAS to 12Gbs SAS (or 6Gbs SAS/SATA), 2.5" Drive Bays
	VTrak J5300s	2U/12-bay JBOD, 12Gbs SAS to 12Gbs SAS (or 6Gbs SAS/SATA)
	VTrak J5600s	3U/16-bay JBOD, 12Gbs SAS to 12Gbs SAS (or 6Gbs SAS/SATA)
	VTrak J5800s	4U/24-bay JBOD, 12Gbs SAS to 12Gbs SAS (or 6Gbs SAS/SATA)

Vendor	Platform	Description
Promise	VTrak J5910	4U/60-bay JBOD, 12Gbs SAS to 12Gbs SAS
	VTrak J5920	4U/102-bay JBOD, 12Gbs SAS to 12Gbs SAS

Vendor	Platform	Description
Promise	VTrak J630s	3U/16-bay JBOD, 6Gbs SAS to 6Gbs SAS/SATA
	VTrak J830s	4U/24-bay JBOD, 6Gbs SAS to 6Gbs SAS/SATA
	VTrak J930s	4U/60-bay JBOD, 6Gbs SAS to 6Gbs SAS

2. Errata and known issues

Ref #	Description	Workaround/Solution
247570	Multipath I/O (MPIO) application in Windows Server 2016	<p>If Customer would utilize E5000 ALUA with multipath I/O in Windows Server 2016, customer could use native Microsoft Multipath I/O (MPIO) in Windows Server 2016</p> <p>Please follow listed procedure below to manually add the “Promise Vtrak” model to Microsoft MPIO DSM</p> <ol style="list-style-type: none"> 1. Please search and execute MPIO tool via Server Manager 2. Please follow steps in MPIO tool <ul style="list-style-type: none"> MPIO ----> Under MPIO Devices ---> Click add button -- --> Add the Model “Promise VTrak” 3. Then reboot the Client for the change to be effected.
247176	I/O request timed out may occur when E5000 process of BGA with heavy Windows I/O, and Windows Disk timed out value is 10 seconds. Attached ATTO Celerity FC162E (16G) or other kind FC HBA.	<p>If Customer wants to install/upgrade ATTO Celerity HBA, then manually customer needs to change the Windows disk timeout value (from Registry) to 60 seconds to avoid IO failure.</p> <p>Please execute regedit command, then search TimeOutValue and then enter 60 for following registry item</p> <pre>HKEY_LOCAL_MACHINE --- >SYSTEM--->CurrentControlSet--- >Services-->Disk ---- >TimeOutValue 0X0000000a(10) change to 0X0000003c(60)</pre>
242732	Alive Controller sometimes restart suddenly after user insert partner Controller into enclosure	<p>The issue could be resolved by Power CPLD v19.</p> <p>To prevent this problem while user</p>

Ref #	Description	Workaround/Solution
		hot plug (or insert) Controller FRU, user could check/upgrade both Firmware and BIOS to released SR3 version before insert partner Controller into enclosure
220589	The E5000 FC port does not support 4G FC SFP's (but 4G negotiation speed can be set for supported SFP's)	User needs to use 8G or 16G SFP's only in the E5000. Speed negotiation can link at 4 Gbps if the initiator (Host or switch) requires it.
231836	IO failure and "Non Disruptive firmware update has failed" event can occur while Non Disruptive Image Update (NDIU) flashing the E5000 SR1 code back to older releases.	<p>A user can upgrade from previous releases (FCS or PR1) to the E5000 SR1 via NDIU, but can't downgrade by NDIU from SR1 to previous releases.</p> <p>User can downgrade the SR1 FW to previous releases by DIU, or stop any background IOs when downgrading the FW by NDIU.</p>
229102	Mac users with a 16Gb Sanlink2 with Mac driver versions 2.05 or before may face I/O failure when there is a configuration with a Switch and Sanlink2 and a Controller port fail-over. With high I/O, it is possible that one of the controllers could go into an inaccessible state.	The issue is fixed by Sanlink2 driver version 2.0.6 and E5000 SR1 FW.
	If both Emulex 16GB HBA LPe16002B-M6 HBA and any make/ model of CISCO switch are set to "Loop" topology, the users will face incompatibility issue such as unable to negotiate through loop topology.	The Topology should be set to P2P, N_port or Auto on the switch and the HBA.
229338	In E5000 GUI, when SSL/TLS is enabled, Users will not be able to send mail using port nos. 456 & 587.	SMTP server works only on port 465 with SSL/TLS enabled.
229619	In E5000 GUI, User may see an error message such as "Cannot connect to	Refresh the browser to connect it

Ref #	Description	Workaround/Solution
	webserver", if the browser is kept idle for longer time (> 20 mins)	again to E5000 GUI
228912	In E5000 GUI, users will not be able to see any JBOD related information under the "Dashboard->Storage overview" screen.	User can alternatively get the JBOD related details from "Administration->Subsystem information" screen.
233000	A new user cannot be created using the GUI in Internet Explorer.	Users need to be created using Firefox or Chrome browsers
226688	FPNG command fail on Fabric mode with CISCO MDS 9148S switch The FC ping command in CLI from any target port to any initiator port thru the CISCO MDS 9148S switch fails.	Cisco reports that the MDS 9148 series does not support the FPING, they have initiated a request to add that support in MDS9148 series. Do not send FC ping command when connected FC switch is CISCO MDS 9148S
	For SSDs: The mixing of SAS and SATA SSD drives in the same array is not supported	Don't configure Arrays with a mixture of SAS and SATA SSD's.
	Mixing Trim supporting SSDs and Non-TRIM supporting SSDs in the same array is not supported.	Don't configure Arrays with a mixture of SSD drives that support TRIM with drives that don't support Trim. A drive that does not support TRIM will be displayed as a regular HDD in the GUI.
227932	After removing a Spare drive and reinserting it, or inserting a new drive in any slot, the drive may not be seen or be marked as "not usable". Rebooting the Controller fixes this.	Users who wish to remove a spare should delete the spare and then remove it. If a newly inserted drive is not usable because this procedure wasn't followed, then rebooting the controller may fix this issue.

Ref #	Description	Workaround/Solution
221229	In MAC OS X, if LD0 is mapped to a NON ZERO LMM entry AND if the Capacity is expanded (migration), the new capacity is not reported in Mac OS x without a reboot of the OS X Host	Reboot the OS X host in such an instance following a Capacity Expansion.
231248	A Mac host can get hung/panic if a user tries to mass delete large number of files created on a Large configuration (more than 10 LDs) on a E5000 controller.	Reboot the OS X host is such an event occurs.

3. Contacting Technical Support

PROMISE Support Website at http://www.promise.com/support/support_eng.asp

PROMISE E-mail Support at <http://support.promise.com/>

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