# VTrak® A-Class

# A3800 & A3600

## Service Release SR3.2 Release Notes

## A-Class

VTrak A-Class firmware version 1.15.0000.00

## Clients

VTrak **Mac Client** Package 1.4.1 – 47758 VTrak **Windows** Client Package 1.4.1 - 47618 VTrak **Linux** Client Package 1.4.1 - 47250



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#### **Release Summary**

SR 3.2 is a Service Release for the A-Class Shared Storage Appliance and the supported SAN Clients for Windows, Mac OSX and Linux. This release includes updates for the following:

- AClass Firmware (1.15.0000.00),
- Windows SAN Client (1.4.1-47618)
- MAC OS X Client (1.4.1-47758).
- Linux SAN Client update (1.4.1-47250) also released as part of a point release SR 3.1.1
- Promise G1100 NAS Gateway. Changes are covered in the "Vtrak G1100 NAS Gateway SR 3.2 Release Notes.docx."

### General Information and Important Notices about the A-Class

- Support for up to 6 Promise VTrak EX30 Storage Nodes
  - Support for the Filesystem spanning the nodes.
  - Support for managing all of these Storage Nodes using the A-Class GUI.
  - The A-Class and Storage Node can be direct attached without a FC switch
  - In this direct attached configuration, auto LMM discovers the SAN Clients, A-Class and Storage Node FC Port WWN and adds entries to the LMM table

**Note:** Ex30 Firmware 10.13.2270.59 or later is required to be supported as Storage node. The GUI and CLI won't allow an EX30 with an earlier Firmware version to be added as a Storage Node

- Support for a maximum of 32 LUNs in the A-Class Subsystem
  - The A-Class supports a maximum of 32 LUNs divided between the AClass and up to the 6 supported EX30 Storage Nodes.
  - Each Storage node can support a maximum of 32 LUNs.
  - The 32 LUNs are supported for the entire SAN Configuration i.e. LUNs of A-Class + LUNs of Storage Node(s).
- Support for up to 4 Filesystems
- An externally available patch is included in this firmware which provides a significant improvement in the net effective usage of the USB Flash in the A-Class controller over firmware installations before 1.11.0000.00.



# Important Note: Don't use NDIU when upgrading from A-Class Firmware 1.14.0000.00, use DIU instead

If the Current A-Class firmware is 1.14.0000.00, then upgrading to 1.15.0000.00 (or any other version) using NDIU can result in one of the controller's management IP addresses going to 0.0.0.0. The controller will have to be rebooted to get its IP address back.

#### Important Note for Mac Users upgrading from Mac Client version 1.1.0 or 1.2.0

If the current Mac Client version installed is 1.2.0 or before, the user must first <u>UNINSTALL</u> the previous Mac Client using the <u>PREVIOUS</u> Mac Client package. THEN use the current package to install the new one.

### Note on Mac OS X Finder when using the Promise Default "squash\_root" setting

Mac OS X Finder cannot empty trash when the "squash" setting in the Folder Access Settings in the Promise GUI is set to "root". You can empty trash if the "squash" setting is either "all" or "no\_root".

However, if the setting is set to "root", the Terminal can be used to remove the files by using the following command line:

#### rm -rf /Volumes/<FSNAME>/.Trashes/\$UID/\*

Where FSNAME is the VTrakFS volume name mounted on your Mac. This will empty the Trash folder in Trashes associated with your User ID.

# Currently there is only English Language support. Additional language support is to be added in future releases.

# This document is applicable to the following PROMISE A-Class models:

Model	Description
VTrak A3800fSL	4U/24 FC, single controller with 2 FS support
VTrak A3800fDM	4U/24 FC, dual controller with 4 FS support
VTrak A3600fSL	3U/16 FC, single controller with 2 FS support
VTrak A3600fDM	3U/16 FC, dual controller with 4 FS support

## **Tested Client Operating Systems**

Vendor	Platform	Туре	Client Package	Multipath
	Windows Server 2008 R2 SP1	x64	VTrakFS Client 1.4.1	PerfectPath 4.1.0.8
Microsoft	Windows 7 SP1	x64	VTrakFS Client 1.4.1	Included in Client
	Windows 8	x64	VTrakFS Client 1.4.1	Included in Client
	Windows Server 2012	x64	VTrakFS Client 1.4.1	PerfectPath 4.1.0.8
	OS X 10.9	x64	VTrakFS Client 1.4.1	Included in OS
Apple	OS X 10.10 (10.10.3, 10.10.4, 10.10.5)	x64	VTrakFS Client 1.4.1	Included in OS
	OS X 10.11 (10.11, 10.11.1)		VTrakFS Client 1.4.1	Included in OS
	Redhat RHEL 5.11 (kernel 2.6.18-398 x86_64)	x64	VTrakFS Client 1.4.1	PerfectPath 0.0.0.9
	Redhat RHEL 6.4 (kernel 2.6.32-358 x86_64)	x64	VTrakFS Client 1.4.1	PerfectPath 0.0.0.9
Linux	Redhat RHEL 6.5 (kernel 2.6.32-431 x86_64)	x64	VTrakFS Client 1.4.1	PerfectPath 0.0.0.9
	Redhat RHEL 6.6 (kernel 2.6.32-504 x86_64)	x64	VTrakFS Client 1.4.1	PerfectPath 0.0.0.9
	SUSE 11 SP2 (kernel 3.0.13-0.27-default x86_64)	x64	VTrakFS Client 1.4.1	PerfectPath 0.0.0.9
	SUSE 11 SP3 (kernel 3.0.101- 0.47.52.1 x86_64)	x64	VTrakFS Client 1.4.1	PerfectPath 0.0.0.9

## Supported Promise Expansion subsystems

Vendor	Platform	Туре
	VTrak J630s	3U/16-bay 6Gbs SAS
	VTrak J830s	4U/24-bay 6Gbs SAS
	VTrak J930s	4U/60-bay 6Gbs SAS
Promise	VTrak J5320s*	2U/24 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA, 2.5" Drive Bays
	VTrak J5300s*	2U/12 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA
	VTrak J5600s*	3U/16 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA
	VTrak J5800s*	4U/24 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA

<sup>\*</sup>Connection to the AClass A3x00 and EX30 is at 6Gbs

The Auto configuration wizard only supports the J630s, J830s, J5600s and J5800s JBODs

# Promise Ex30 RAID subsystems that can be attached as Storage Nodes to the A-Class SAN

Vendor	Platform	Туре	Supported Firmware
Promise	VTrak E630f	3U/16-bay 6Gbs SAS HDD	10.17.2270.00 or higher
FIUIIISE	VTrak E830f	4U/24-bay 6Gbs SAS HDD	10.17.2270.00 or higher

### **Features and Changes New to this Release:**

1. Added support to upgrade multiple NAS Gateway's firmware for multiple node configurations (up to 4 nodes per cluster) all at once through the AClass. ( AClass FW change)

#### Notes:

- Multi-node upgrade should be done without IO during the upgrades.
- For firmware updates, NDIU is disabled in the AClass GUI if there is an attached NAS Gateway. Upgrades have to be done using DIU which requires the A-Class Controllers to be rebooted.
- Downgrading NAS Gateway firmware via A-Class GUI=>NAS Gateway=>Firmware update is not supported in this version.
- 2. Added the ability to enable FCN support so that Windows Explorer on multiple Windows SAN clients will synch with each other without a refresh (Windows SAN Client 1.4.1 change)

#### Notes:

- The FCN is enabled from Windows VTrakFS client
- FCN is disabled by default, since it can impact performance if there are large number of files
- FCN doesn't support Mac SAN client. Mac SAN client can use Finder Refresh Tool (available on Promise Website) as a workaround.
- Linux Client is not supported.
- 3. Improved Multipathing in Windows 7 and 8 SAN Clients to eliminate I/O fluctuation especially in mixed Windows/Mac OS X environments. (Windows Client 1.4.1 change)



- 4. Fix made for the unusual case when the modify time of a file is 0 and the file is copied. This could lead to some of the file not getting copied. ( AClass FW change)
- 5. Change made to assure that the IP address of the Management port will always Fail-Over to Partner Controller during NDIU and Controller Failover. (AClass FW change)
- 6. The addition of Mac OS X El Capitan 10.11 and 10.11.1 SAN/NAS Support (Mac Client change released in SR3.1.1)

#### Notes:

- Includes Extended ACL support for SAN client
- Includes Spotlight 10.11 support Command line command "mdutil -i on" to enable Spotlight on VTrakFS (network) volume
- Supports for English language only. The option to switch language is not implemented.

### **Notes on Support for Extended ACL**

Support is included for all extended ACL permissions included in the Table below:

Table 1 – Extended ACL Permissions List

Permission name	Туре	Description
Change Permissions	Administration	User can change standard permissions.
Take Ownership	Administration	User can change the file's or folder's ownership to himself or herself.



Read Attributes	Read	User can view the file's or folder's attributes (for example, name, date, and size).
Read Extended Attributes	Read	User can view the file's or folder's attributes added by third-party developers.
List Folder Contents (Read Data)	Read	User can list folder contents and read files.
Traverse Folder (Execute File)	Read	User can open subfolders and run a program.
Read Permissions	Read	User can view the file's or folder's standard permissions using the Get Info or Terminal commands.
Write Attributes	Write	User can change the file's or folder's standard attributes.
Write Extended Attributes	Write	User can change the file's or folder's other attributes.
Create Files (Write Data)	Write	User can create files and change files.
Create Folder (Append Data)	Write	User can create subfolders and add data to files.
Delete	Write	User can delete file or folder.



Delete	Write	User can delete subfolders and files.
Subfolders and		
Files		

- Support Extended ACL for both folders and files
- Support Extended ACL for multiple Users and Groups
  - Local Users and Groups
  - Mac Open Directory network users and groups
- > Permissions are passed from folders to their descendants

#### **Notes on Extended ACL use:**

General Use Restriction for Extended ACL on a **Mac OS X 10.10.2** system. On any disk in Mac OS X, even though a user sets the Deny Execute permissions, the user will still be able to execute the file. This is true for the Promise VTrak system as well.

- Squash must be set to no\_root in File System Access Setting
- SMB reshare must support extended ACL

### Additional Fixes and Enhancements in this Release

Ref #	Note			
	A-Class Fixes			
220645	Under extreme test case condition involving repetitive manual plug and unplug of the USB to Ethernet cable port on controller it sometimes may not fail over to the partner controllers USB to Ethernet port. The expected behavior is for the controller in question to enter maintenance mode. If the problem occurs it can lead to LDAP authentication problem, which will lead to denied access of respective files or folders.			
221014	Administration can't modify user settings or change password in the GUI under certain conditions			



221013	Administration pane intermittently does not load in the GUI		
221496	Power Events displayed in the logs even though the system was fine.		
<u>221836</u>	NAS Gateway could take the license from A-Class		
220645	Removing the USB Ethernet cable failed to trigger the controller to boot into Maintenance mode		
222880	Controller 1 did not wait 20 seconds before booting into Maintenance Mode after the USB Dongle was removed		
220823	In GUI File System Access Settings, "Add New Access" and click first time on "Select" for Meta Data Write Policy does nothing until second click		
221233	SAN management page sometimes does not display correctly (sometimes it's blank) when switching between Nodes.		
221234	When changing the Port 2 to DHCP, the GUI sometimes shuts you out		
222698	The A-Class/NAS Gateway GUI does not allow the end-user to edit SMB share permissions after share the 25 <sup>th</sup> share.		
Client Fixes			
221976	Mac Client running OS X 10.11.1 cannot refresh LMM on A-Class with SANLink 2 with OS X driver 1.2.2. Use SANLink 2 Driver 1.2.3 or later.		
222719	Windows 7 and Windows 8.1 SAN Client I/O halts, when there is a failover on one of the controller.		



# **Current A-Class and SAN Client Product Requirements or Limitations**

Ref #	Note	Workaround/Solution				
	General A-Class Controller Information					
126154	In an VTrak A-Class subsystem configured with multiple VTrak Ex30 nodes and one of the nodes has a metadata LUN, if a controller in one of the Ex30 nodes fails over due to some problem, I/O that is running on the Ex30 with the Metadata might sometimes stop and will have to be restarted.	Either keep the Metadata LUN on the VTrak or restart the I/O in the controller should it stop after a controller failover in one of the other Ex30's.				
217649, 217667, 217669, 217671.	RAID 1 is recommended for the filesystem's Metadata drive. This is the setting created by the GUI Wizard and is the practice in almost every configuration. With RAID levels 1e, 6, 50 or 60, there currently is a problem where a filesystem check can fail after it is formatted when it is part of the Metadata drive.	It is suggested that the user only use a RAID  1 for the Meta drive. This is the configuration that is used by the Configuration Wizard and by almost all users.				
220874	If the Current A-Class firmware is 1.14.0000.00, then upgrading to 1.15.0000.00 (or any other version) using NDIU, can result in one of the controller's management IP addresses going to 0.0.0.0. The controller will have to be rebooted to get its IP address back.	Upgrade from 1.14.0000.00 using DIU				
126313	If there is a need to flash from the current Release 1.14.0000.00 back to the previous releases like 1.08.0000.00 using NDIU, sometimes the file system will stop and the subsystem will have to be rebooted.	If it is necessary to flash back to the former firmware version 1.08.0000.00 from 1.14.0000.xx, the user will need to use the regular flash utility and realize that the system will need to stop and reboot in order to update.				
221381	Adding a controller to a running A-Class causes the newly added controller to change firmware to match the running controller (autosync). If Controller 2 has firmware 1.14.0000.00, then the autosync might fail and get stuck in the process.	Either update the A-Class controllers one at a time to match the desired firmware using the firmware file from the Promise Website, or make sure that the 1.14.0000.00 firmware is on Controller 1.				



Ref #	Note	Workaround/Solution			
	Array Transport is not supported in this Release				
	The A-Class only supports ALUA and LUN Affinity Enabled				
	The A-Class supports a maximum of 32 LUNs per node.	Only attempt to configure 32 LUNs for each A-Class node.			
	The Auto configuration Wizard cannot configure a configuration with more than a 219 physical drives.	If you have a configuration with more than 219 drives, use the advanced options to manually configure the LUNs and use more than 7 drives per disk array group.			
126303	User is unable to receive email notification from gmail	Email notification will have to be done using other mail servers.			
220053	The second A-Class Storage Controller fails to boot into Maintenance Mode when losing its network connection immediately following the loss of network connection and reboot of the other AClass Controller.	Try to maintain the network integrity of AClass controllers.			
220071	Following the loss of network connection of the Primary Controller, the controller goes into Maintenance mode. After reestablishing the network connection and rebooting the Controller, sometimes the ongoing I/O activity of the other controller will stop and have to be restarted.	Restart I/O of the remaining controller if it stops following the reboot of a controller that has previously lost its network connection.			
219449	Following the inclusion of Extended ACL in the AClass, even after setting Deny "readsecurity, execute, readattr, writeattr" permissions on an smb reshare environment, the User can still read, execute, and read the attributes, write the attributes from the smb client. Note: This behavior is same for both local disk and VtrakFS volumes	This is the same behavior as a local disk and can be expected and adapted for.			
	General SAN File System Information				
125802	In a VTrak3800 subsystem that includes an Ex30 Node with a File system with a meta LUN, if there is a problem with one of the VTrak A3800 controllers and it fails over to the other controller, the Ex30 node sometimes gets an "unlinked inode" error and goes to ReadOnly.	The user will need to reboot A-Class to get out of Readonly. Then an fsck will need to be run on the filesystem to keep it from going to Readonly again.			
<u>222615</u>	Some Windows utilities (Notepad) aren't able to open files created in a Mac OS X SAN client in an SMB share. Other utilities (WordPad) don't have an issue.	Use WordPad for reading text files on an SMB share for files created in a Max OS X.			



Ref #	Note	Workaround/Solution
221539	On rare occasions during an AClass Controller failover, there are erroneous LBA error messages "blocks with corrupted data".	Following a controller failover, ignore "blocks with corrupted data" messages following Controller failover.
	Mac OS X SAN File Sys	stem Information
<u>N/A</u>	If a filesystem is mounted on a Mac OS 10.7 or 10.8 Mac client, the new volume cannot be shared through AFP/SMB "File Sharing" for other machines to access remotely through the network.	This problem was addressed and is working as part of Mac OS X 10.9 (Mavericks) or Mac OS X 10.10 (Yosemite).
218319	Mounting a new VTrak Filesystem on a Mac OSX will require that the host be restarted for the filesystem to be seen. It will displaying Error Message (Make sure all the storage devices are connected) when trying to mount a FS on VTrak FS client.	Restart the host after mounting the VTrak filesystem
N/A	In OS X, when a file is opened, the time stamp for when it is opened is not updated	Only changes to the file will cause the time stamp to be updated.
N/A	The Mac OS X Finder might not initially list all of the files copied or created by one Mac Client when viewed by a second Mac Client.  In order for the second Mac Client to see all of the files with Finder, it will need to refresh the directory. This can be done by copying some file or with the "Finder Refresh Tool" available on the Promise website.	Either copy or create a small file in the directory or use the Promise "Finder Refresh Tool" to refresh the directory data in Finder.
<u>N/A</u>	It is currently not possible to save a System Report for a Mac SAN Client. If a report needs to be generated and sent to Promise for review, it will need to be generated from the Mac Client itself.	Contact Promise support for assistance in generation a Report from a Mac SAN Client.
N/A	When permissions are set for a file by an Open Directory user, they don't get saved in a Mac OS X environment. This is a limitation of SMB2 used by Mac OS X and Windows.	
217544	The GID for folders/files created by an Open Directory user via SAN CLIENT is incorrectly listed	The issue only happens on Mac SAN client, no matter what the directory server is.



Ref #	Note	Workaround/Solution
	and the quota set for that group does not limit the	Two workarounds are:
	user.	1. Create a subfolder on Mac SAN client and change the group ownership to the "quota group" [see 1 below]. Network user uses the subfolder as the working folder.
		The problem with this workaround is it cannot limit network user no write any data outside the working folder.
		2. Export subfolder from the A-Class with "Squash no_root". On Mac SAN client, mount this subfolder and change the group ownership of the mount point (root folder) to the quota group.
		This way, you can limit all network users to use the subfolder only.
		Note: [1] "quota group" means the network group which has been set quota on A-Class
219719	When there is heavy I/O on a Mac OSX 10.8 or 10.10 host at the same time that a user is expanding a filesystem by adding an additional LUN, the I/O may stop with an error "Device not configured". The Filesystem will expand successfully, and the I/O can be restarted.	Restart the I/O. The Filesystem will expand successfully.
222886	Mac OS X Finder will hang trying to read any Font filed stored on the A-Class. It will hangs the Finder on SAN and won't be able to open the file on NAS. The Mac system will have to be rebooted to continue.	Don't attempt to access font files on the VTrak Filesystem on the AClass through Finder. If you do, you may need to reboot the system to continue.
22211	Attempting to copy a folder that contains files to an SMB sharepoint results in an error and the operation doesn't complete. The user first needs to create the empty folder then copy the files.	Create the folder or copy an empty folder on an SMB sharepoint, then copy any included files.
	Windows SAN File Sys	stem Information



Ref #	Note	Workaround/Solution
126322	Windows 8.1 used with an ATTO FC82EN FC HBA requires the ATTO 1.61.2.0 driver in order to load the VTrakFS SAN Client 1.3.0-406892. Newer or older drivers cause the installation to hang	Use the ATTO 1.61.2.0 driver in order to load the VTrakFS Client 1.3.0-406892.
126254	The VTrak A8300f with a Windows 8.1 SAN client does not support Adobe Premiere Pro UHD DPX in Playback.	The same configuration will support UHD DPX at 60fps, both ingest and playback
	Windows 7 and Windows 8 display the following harmless errors when the Client Package is installed:  1. module reporter (xx) "this is a redundant path to the LUN"  2. Disk xxx has duplicate disk signature	Ignore the 2 messages on Windows 7 and 8 when installing the Client Package.
	If you have a Windows Client installed on a Windows 2008 R2 server with Domain Control, the VTrakFS GUI "Add SAN" wizard does not detect the new client.  If you add it manually, the client has a Status of Warning, and no OS Type or Client Version. The LMM refresh fails for client with "connect to client is failed" Message	Clients that are Domain Controllers' are not supported in this release.
	If there is currently a system with LUN's installed and I/O is running on them, attempting to expand the Filesystem may cause the I/O's to stop. The user should always stop any disk activity before expanding the filesystem to avoid this issue.	This was seen on some Clients with Qlogic HBA's. Stop any disk activity before expanding a file system.
	With Windows SAN clients, sometimes after the Filesystem Client is installed, the Windows Client isn't discovered. The user will see either 1) the client is not discovered by the GUI's setup wizard, or it shows the "! warning" or "n/a" status after manually adding the SAN to the GUI or the CLI.	The most likely cause is that the client installed "bonjour" service needs to be restarted. This can be done by going to the Windows Task Manager or Control Panel and restarting the "bonjour" service.
<u>217858</u>	If a user Creates and exports 1 or more filesystems to a SAN client and Mounts the filesystems, then reboots the SAN Client, sometimes there is a Warning message in the GUI or running the "san -a list" shows a "warning" status.	This Warning message can be ignored and may be related to the "bonjour" service.



Ref #	Note	Workaround/Solution
	In the Windows system Event log, the following error messages are generated when adding a Server or when mounting LUNs: Virtual Disk Service (VDS) error ownership messages for "bw" volumes are listed after adding the server and rebooting. Partmanager (partmgr) warnings for duplicate LUN disk signatures are listed after mounting the LUNs	The error messages can be ignored.
	When a Client has two or more network cards or ports, the Primary Port must be assigned to the A-Class network connections in order for the A-Class Filesystem to be seen.	Use the Primary Port to attach the client to the A-Class.
221928	LDAP Users folders created on Windows client allow full permission to everyone until configured in Windows.  With the DALET application, there are rewind performance speed issues. There can be blank holes at the end of clips, and others	Permission can be granted as follows:  1) Create a new fs.  2) Create LDAP "testgroup" which has two members, such as testuser1 and testuser2.  3) login as local administrator, remove everyone from mount point and add  "testgroup" & "owner" to it, then grant  "testgroup" read and exec permission,  grant "owner" full permission.  4) logout and login as testuser1 or testuser2
400000	Linux SAN File Syste	
<u>126323</u>	After creating and exporting a new file system on the A3800 to a Linux SAN Client, the SAN Client may not be able to detect the newly created filesystem multipath device paths, even though the A-Class displays that this has been done successfully. It may be necessary to run the "iscsi-	1) On Linux SAN Client, run command line "iscsi-rescan", then system will see the newly created device path. To verify device path, run "multipath -II"  2) If option #1 does not see newly created device path, it may be required to repeat the
	rescan" command.	device path, it may be required to reboot the Linux SAN Client, then run "multipath -II"



Ref # 126301	Note	Workaround/Solution
120301	IO fails on Linux SAN Clients when expanding a file system by adding an additional LUN to volume group	I/O can be restarted with expansion completes which is does in less than a minute.
125916	With a Redhat RHEL 6.4 64 bit SAN client, if a controller on the Vtrak A3800 has a problem and fails over to the other controller, the I/O running on the client might stop and have to be restarted.	Restart the I/O in the controller should it stop after a controller failover
126340	When Linux SAN Clients login as Active Directory users, they can Create/Write/Delete all files in the root of the mounted ENFS filesystem no matter who owns it.	This is per design. Permissions can be given to all directories created from root.
219332	For this release, up to 4 Filesystems are supported.	
219668	With a Redhat RHEL 5.11 64bit SAN client with very heavy I/O on 4 mounted filesystems, after repeatedly connecting and disconnecting the fibre channel ports, the I/O failed due to path failure and did not come back online. It was necessary to reboot for the path to be reestablished.	
217896	With the setting of squash=root or squash=no_root, when trying to move a "file" from the Vtrak filesystem to the local filesystem, you may get a message that includes "set owner/group (was: 501/1000): operation not permitted". The file gets moved, however. A workaround is use "sudo" to move file from the VTrak filesystem to local. This workaround works for both squash root and squash noroot settings. For the squash all setting, this isn't required.	To avoid the error message, use "sudo" to move a file from the VTrak filesystem to the local filesystem.
222885	With a SLES 11 SP3 or SP4 client, after setting automount for created filesystems in the GUI, sometimes one or more of the filesystems won't mount after a reboot due to extra block devices being created. You need to delete this block device to mount those filesystems	Use "multipath -F" to clear all softlink in /dev/mapper that relate to mpio disks,  Then use "multipath" to regenerate all mpio disks' softlinks.



Ref #	Note	Workaround/Solution
	GUI and CLI Information	
	In the GUI, if a user creates a Spare drive and later decides to change it from Global to Dedicated or Dedicated to Global, the modifying action won't succeed. It will need to be deleted and a new Spare created.	To change the Spare drive from Global to Dedicated or vice versa, delete the spare drive and create it with the desired configuration.
	The GUI will show the default settings after a Spare drive is created instead of the actual Spare drive setting.	Actual Spare drive configuration can be viewed in the CLI.
	UPS support not currently available in the GUI but will be available in the future. It is available in the CLI using the UPS command.	Use the CLI to configure the UPS.
	SNMP support is currently not available in the GUI. The CLI supports only RAID and enclosure functions just as the Ex30 products.	Full SNMP support for both the GUI and CLI will be available in a future release.
	In the CLI, issuing the LUN command while Initialization is in progress will show drives as Faulty.	Check drive status with the LUN command only after the Initialization completes.
	Currently the VTrak Performance Monitor contains Internally generated command traffic on Port 0 in addition to the traffic of the FC ports. This will be changed in the next release.	Realize that the VTrak Performance monitor also contains internal command traffic.
126308	A Filesystem check seen on a RAID 1E may sometimes get hung up and not complete if run after a bga (such as a PDM or Transition) completed with an A3800 with an Ex30 (E-Class) node attached.	Reboot the A-Class Controller for the fsck to complete.

## **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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