

Profile XP System Software 5.4.9 Release Notes

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Grass Valley Product Support

To get technical assistance, check on the status of a question, or to report new issue, contact Grass Valley Product Support via e-mail, the Web, or by phone or fax.

Web Technical Support

To access support information on the Web, visit the product support Web page on the Grass Valley Web site. You can download software or find solutions to problems by searching our Frequently Asked Questions (FAQ) database.

World Wide Web: <http://www.thomsongrassvalley.com/support/>

Technical Support E-mail Address: gvgtechsupport@thomson.net.

Phone Support

Use the following information to contact product support by phone during business hours. Afterhours phone support is available for warranty and contract customers.

| | | | |
|---|---------------------------------------|--|--|
| International (France) | +800 80 80 20 20 +33 1 48 25 20 20 | Italy | +39 02 24 13 16 01 +39 06 87 20 35 42 |
| International (United States, Canada) | +1 800 547 8949 +1 530 478 4148 | Belarus, Russia, Tadzikistan, Ukraine, Uzbekistan | +7 095 258 09 20 +33 (0) 2 334 90 30 |
| Hong Kong, Taiwan, Korea, Macau | +852 2531 3058 | Indian Subcontinent | +91 11 515 282 502 +91 11 515 282 504 |
| Australia, New Zealand | +61 1300 721 495 | Germany, Austria, Eastern Europe | +49 6150 104 444 |
| Central, South America | +55 11 5509 3440 | Near East, Africa | +33 1 48 25 20 20 |
| China | +861 066 0159 450 | Netherlands | +31 (0) 35 62 38 421 |
| Belgium | +32 (0) 2 334 90 30 | Northern Europe | +45 45 96 88 70 |
| Japan | +81 3 5484 6868 | Singapore | +65 6379 1313 |
| Malaysia | +603 7805 3884 | Spain | +41 487 80 02 |
| Middle East | +971 4 299 64 40 | UK, Ireland, Israel | +44 118 923 0499 |

Authorized Support Representative

A local authorized support representative may be available in your country. To locate the support representative for your country, visit the product support Web page on the Grass Valley Web site.



Version 5.4 features and introductions

Version 5.4 introduces the following hardware and software features to extend the capabilities of the Profile XP Media Platform. These features are supported in all 5.4.x versions. Refer to “What’s new by version” on page 7 for features specific to a particular 5.4.x version as well as other past versions.

- **PVS3000.** This new Profile XP Media Platform lets you use standard and high definition channels in the same system. The various PVS 3000 models are equipped with the HD encoders, decoders, and HD-SDI boards of the PVS 2000, as well as Video Processor boards and SDI inputs and outputs of the PVS 1100.
- **PVS3500.** Agile Outputs let you use HD decoders, paired with either HD SDI or SD SDI outputs, to play both standard and high definition material on the same output. Clips are up- or down-converted appropriately, with full control of aspect ratio conversion between 4:3 and 16:9. Standard definition clips must be in MPEG 4:2:0 format to play on an definition independent Agile Output channel. You can record your clips MPEG 4:2:0, or use the Transcode utility to convert them to this format from any supported standard definition format.

NOTE: *Only 1080i material can be downconverted and played on an SDI output. Up-converted SD material must be played on a 1080i output.*

- **Agile Outputs.** You can add the definition independent capabilities of the PVS 3500 to your PVS 2000 or PVS 3000 by purchasing an Agile Output license. You can then play both your HD and MPEG 4:2:0 SD clips with an HD decoder (1080i or 720p), down-converting HD if your channel uses an SDI output, or up-converting your SD clips if you use an HD SDI output. Aspect ratio conversion is fully configurable.
- **Agile Outputs Uncompressed VBI support.** If you use Agile Outputs to play SD clips that contain uncompressed VBI lines, only the first two VBI lines recorded are output (luma only) per field. The remaining uncompressed lines are output at black level.
- **Ancillary data.** You can add a Data Track to your channel definitions and record and play back ancillary data on your HD-SDI inputs and outputs. Refer to “Modifying a Channel: Ancillary Data” in the *Profile XP System Guide* for more information. Although you can configure a Data Track for both HD and SD channels, only HD ancillary data is supported in this release.
- **Mixed format payout.** Systems equipped with the Video Processor card (PVS 1100, PVS 3000, PVS 3500) can play out clips of any supported standard definition format, consecutively, with no change in the codec configuration. For example, you can use VdrPanel to play a DVCPRO 25 clip, immediately followed by an MPEG clip.
- **PFR700 RAID.** 2Gb/s is now available in a Profile RAID storage chassis. Combined with the new Fibre Channel Disk II card on the Profile XP Media Platform, which also supports data rates up to 2Gb/s, you can now use fewer LUNs to support the bandwidth required by your operations.
- **PFR600 RAID.** This new Profile RAID storage chassis also supports 2Gb/s transfer rates, and uses the same chassis and drives as recent PFR 500s.

NOTE: *All clips that comprise a Master (complex movie) must be of one format only. You cannot mix standard and high definition clips in a master, nor can you mix different standard definition formats, such as MPEG and DVCPRO 25.*

-
- **Long GoP on Video Processor board.** The codecs used in the PVS 1100, PVS 3000, and PVS 3500 now support long Group of Pictures recording in MPEG. This saves storage space and bandwidth while providing equivalent quality for your on-air material. You can still choose to use I-frame only recording for editing purposes.
 - **MPEG D-10 enhancements.** You can now record your MPEG D-10 clips at 30, 40, or 50 Mb/s. Clips in this format are now identified in Media Manager, when you view their Properties.
 - **DVCAM format.** DVCAM has been added to the list of codec types on the Video Processor board used in the PVS 1100, PVS 3000, and PVS 3500.
 - **New installation program.** This enhanced installation shuts down all required services and seamlessly installs Profile XP System Software and required elements such as the Microsoft XML parser. Some stages of the installation process may take more than a minute. Please be patient.
 - **NetCentral IV.** NetCentral is a comprehensive remote monitoring and workflow analysis tool for multiple Grass Valley, third-party and IT devices. Designed specifically for broadcast facilities it represents a huge step forward in lowering the total cost of ownership and minimizing downtime. Contact your Grass Valley sales representative or visit <http://www.thomsongrassvalley.com/products/c2md/netcentral/> for more information.



Version 5.4.9 supported platforms and applications

Version 5.4.9 supports the following media platforms:

- PVS3500 with:
 - Recent System Processor (Radisys) only
 - RTP II only
 - Fibre Channel Disk II only
 - local storage, PFR 500/E, PFR 600, and PFR 700.
- PVS3000 with:
 - Recent System Processor (Radisys) only
 - RTP II
 - Fibre Channel Disk II
 - local storage, PFR 500/E, PFR 600, and PFR 700.
- PVS2000 with:
 - RTP I or RTP II
 - Fibre Channel Disk I or II
 - local storage, PFC 500/E, PFR 500/E, PFR 600, and PFR 700.
- PVS1100 with:
 - RTP I or RTP II
 - Fibre Channel Disk I or II
 - local storage, PFC 500/E, PFR 500/E, PFR 600, and PFR 700.
 - Recorder/Player resource using a single codec
- PVS1000 with:
 - RTP I or RTP II
 - Fibre Channel Disk I or II
 - local storage, PFC 500/E, PFR 500/E, PFR 600, and PFR 700.
- PVS3500, PVS3000, PVS2000, PVS1100 and PVS1000 connected to an Open SAN. For more information, consult the *Open SAN Release Notes*.

What's new by version

Each version contains numerous improvements to performance and reliability with both the Open SAN and local storage. The following sections describe the introductions included in this release and in recent past releases.

Version 5.4.9

- **Disk drive microcode for PFR700 drives available** — DB90 microcode is available for optional upgrade. Refer to the following table for the complete list of microcode, including previous versions.

| Disk Drive Model | Capacity | Microcode Version Number | Microcode File Name ^a | Comments |
|------------------|----------|--------------------------|----------------------------------|--------------------------------------|
| ST336607FC | 36G | 0006 | ST336607FC 0006.bin | — |
| ST373307FC | 73G | 0006 | ST373307FC 0006.bin | — |
| ST373207FC | 73G | 0003 | ST373207FC 0003.bin | This version is still compatible. |
| | | DB90 | ST373207FC DB90.bin | Upgrade to this version is optional. |
| ST3146807FC | 146G | 0006 | ST3146807FC 0006.bin | — |
| ST3146707FC | 146G | 0003 | ST3146707FC 0003.bin | This version is still compatible. |
| | | DB90 | ST3146707FC DB90.bin | Upgrade to this version is optional. |
| ST3300007FC | 300G | 0003 | ST3300007FC 0003.bin | This version is still compatible. |
| | | DB90 | ST3300007FC DB90.bin | Upgrade to this version is optional. |

a. For PFR700 RAID, interface and servo microcode are combined in one file

0003 and DB90 versions are fully compatible. The versions can be mixed on drives in a LUN and mixed in LUNs in a RAID device. A drive with one version can be a replacement (FRU) for a drive with the other version.

NOTE: Do not upgrade to disk drive firmware version 0004.

Version 5.4.8

- **Updated AMP user interface** — The user interface for configuration and control by the AMP protocol has been updated. It is now consistent with the AMP user interface on other Grass Valley products, such as the M-Series iVDR, the Turbo iDDR, and the K2 Media Client. Refer to “AMP on the Profile XP” on page 38.
- **.Net support** — The Microsoft .Net framework is installed with Profile XP System Software. This prepares the Profile XP for compatibility with future versions of the M-Series iVDR and K2 products. Refer to “Installing Profile XP System Software 5.4.9” on page 15.



- **PFR700 firmware updates** — If your Profile XP Media Platform uses PFR700 RAID storage, you should update the following firmware:

| Type | Version | File name | Improvements | Instructions |
|------------|---------|--------------|---|---|
| Controller | RV70 | 03FHRV70.BIN | Bug fixes and operational features to extend the life of drives | This upgrade is not mandatory for compatibility with Profile XP system software Version 5.4.9. However, you should consider loading the firmware at the next most convenient time. Refer to the <i>Profile XP System Guide</i> for procedures. |
| LAN card | GS05 | 03SPGS05.bin | Fixes an SNMP device offline/online problem | This upgrade is not mandatory for compatibility with Profile XP system software Version 5.4.9. However, if you monitor the PFR700 with NetCentral or another SNMP Manager, it is highly recommended. Contact your Grass Valley representative for instructions. |

- **Data-bridging SDI board** — A new two-in/two-out SDI board supports down-convert data-bridging of HD Ancillary Closed Caption Data (either EIA-608 or EIA-708) to SD Closed Caption (output as a VBI line 21 closed caption waveform). This enhances the compatibility of the Profile XP Media Platform with other Grass Valley products. The data-bridging SDI board requires system software version 5.4.8 or higher. The board is available as a field kit upgrade for existing systems. New PVS3500 systems shipping from the factory include the board as standard.
- **Up-convert data bridging** — Up-convert is a software-only process and is supported on any Profile XP system with version 5.4.8 or higher system software that has a HD decoder board and a HD SDI card. Up-convert does not work with the SD decoder boards.

Up-convert data-bridging specifications are as follows:

- If the SD clip has Uncompressed VBI line 21 Closed Caption data
- OR-
- If the SD clip has the Uncompressed Closed Caption data generated from a K2 product
- AND-
- The clip's playout is HD
- THEN-
- The SD Closed Caption data is bridged to Ancillary Data Closed Caption EIA-708-B packets

Version 5.4.6

- **Update disk drive microcode for PFR700 drives** — If your Profile XP Media Platform uses PFR 700 RAID storage, you should update to disk drive microcode version .0003 for all sizes of Cheetah 7 drives. Refer to the latest version of the *Profile XP System Guide* for detailed instructions on how to use the GVG Disk Utility to install disk microcode.

- **FSM on Dell 2850 with Windows Server 2003 OS** — If your Profile XPs are part of an Open SAN system, refer to *Open SAN Release Notes* for information on the new FSM platform.

Version 5.4.5

- **Support for PFR600 300GB disk drives** — The PFR600 RAID chassis is now available with 300GB disk drives.
- **Update firmware for PFR600** — To ensure compatibility with FRU drives in the future, it is recommended that you update firmware. Refer to “Upgrade PFR 600/E firmware” on page 33 of these release notes for more information.
- **RS-422 board driver** — You should update to the new Rocketport Plus driver. This supports the current version of the board as well as previous versions.

Version 5.4.4

- **Support for PFR700 300GB disk drives** — The PFR700 RAID chassis is now available with 300GB disk drives and is introduced by version 5.4.4 software.
- **NetCentral Lite Version 3.1.3.2** — This new NetCentral Lite version resolves some AMP compatibility issues.

Version 5.4.3

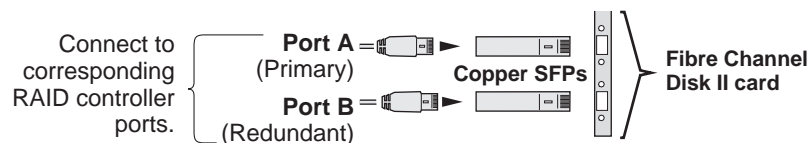
- **720p up- and down-conversion** — The 1080i-only limitation is removed for Agile Outputs. Any MPEG 4:2:0 clip can be played through any HD decoder and be up- or down-converted appropriately for the channel definition. Note that 720p clips must have an even number of frames to avoid problems playing with interlaced clips.

Version 5.4.1

- **5.4 introductions** — Most of the features listed in “Version 5.4 features and introductions” on page 4 were introduced in 5.4.1.

Version 5.2.15

- **New Fibre Channel Disk II card** — Profile XP Media Platforms include this new design, which allows transfer rates up to 2Gb/s to targets that support similar rates, such as the PFR600. Replaceable Small Form-factor Pluggable interfaces (SFPs) let you configure the card for use with optical or copper cables. Copper interfaces are limited to 1Gb/s, and must be used when connecting PFR500 or PFC500 RAID chassis directly to the Profile XP Media Platform. This card requires Version 5.2.14 or higher.



- **Critical Windows updates supported** — To help protect systems from external security attacks, Grass Valley now supports the installation of all critical Windows security updates on Open SAN FSMs, Remote Monitoring PCs, and Profile XP Media Platforms. Critical security patches are qualified as they become available, and may be installed on all systems according to site security requirements.



Version 5.2.12

This release contains numerous improvements to performance and reliability with both the Open SAN and local storage.

- **New PFR500 disk microcode.** This release includes new disk microcode for the PFR500 disk drives. You must update the disk microcode to the approved version after upgrading the Profile XP system software. See “PFR500 disk drive and controller microcode” on page 31 for approved version numbers.
- **New PFR500 controller firmware.** This release includes new controller firmware for the PFR500 RAID storage systems. If your system is not using the latest version, you must update the controller firmware after upgrading the Profile XP system software.
- **Revised HD SDI I/O board.** Support for Revision 3 of the HD SDI I/O board is included in this release. Systems that include this board require Version 5.4.9 or higher.
- **NetCentral Lite version 3.1.X.** This new version of NetCentral Lite comes with the device provider software required to monitor the QLogic Fibre Channel switch and the PFR 600 and PFR 700 RAID chassis. Refer to “Installing and configuring NetCentral Lite” on page 26.

Tips

The following suggestions may help you get your Profile XP Media Platform on air faster, and keep it running trouble free for a long time.

- **Power up RAID units first.** When you power up your Profile XP Media Platform, be sure to power up your RAID expansion chassis first, then the main RAID chassis. Wait about four minutes to ensure that the RAID units have time to initialize, then power up the Profile XP Media Platform.
- **PFR500 power down sequence.** When powering down a PFR500 RAID storage system with PFR500E Expansion chassis attached, always power down the PFR500 RAID Controller chassis prior to, or simultaneously with the PFR500E Expansion chassis.
- **Give RAID controllers time to reconfigure.** After hot-swapping a RAID controller, or after an automatic recovery event, be sure to allow some time for both controllers to adjust to the new RAID configuration. Wait at least one minute before removing the other PFC500 controller or initiating another automatic recovery event. PFR500 systems require approximately five minutes.
- **Don't fill your disks.** This is good advice for any disk-based system, including your PC. Limiting your usage to about 90% of disk capacity will protect you from many potential problems.
- **Set audio levels everywhere.** Many Profile applications provide ways to set audio record and playback levels. In addition, Configuration Manager lets you set levels or mute audio. Be sure that you have set levels appropriately in your application and in Configuration Manager before suspecting a hardware problem on your audio board.
- **Set up Fibre Channel with VDCP.** In addition to performing your regular Fibre Channel setup tasks as described in the *Profile XP System Guide*, you must also use VdrPanel to configure VDCP Protocol to use streaming transfers over Fibre Channel.
- **K2 transfers with VDCP.** If using VDCP to initiate transfers between K2 systems and Profile XP systems, you must send the VDCP command to the K2 system, not the Profile XP system. Transfers (both push and pull) are successful if the K2 system hosts the command. Transfers fail if the Profile XP system hosts the command.
- **Don't minimize windows.** Avoid unnecessary manipulation of the Windows NT interface when the Profile XP Media Platform is performing critical or on-air operations. When the system is heavily loaded, processor- and disk-intensive operations such as minimizing windows or using Windows Explorer to copy files to the system drive may interfere with command response. Error messages may appear in the log files, and occasionally there may be missed frames on record and playout. Systems under RS-422 control, and especially those connected to an Open SAN, are more likely to be adversely affected by these actions.
- **PDRCHECK.** For version 5.4.8 and higher, before running the PDRCHECK utility you must stop *GrassValley AppService* and *AMPTcpService*. This is in addition to stopping *HostTransfer* (which also stops *MuxDemux*), which was required in versions lower than 5.4.8.

In addition to these short tips, please read the following sections, which will help you manage your Profile XP Media Platform more efficiently.



Network ports

Grass Valley products use network ports as follows:

Profile XP Media Platform ports

| Ports | Protocols | Uses |
|------------|-----------|---|
| 21 | — | VxWorks IP address listens on this port. |
| 23 | — | Telnet |
| 80 | HTTP | — |
| 1678 | — | Pronet. Needed for NT transfers. |
| 1946 | — | TekRem. Needed for NT transfers. |
| 3811 | AMP | Using sockets. Might be necessary for NT transfers, depending on the automation. |
| 29728 | — | Streaming uses this as a control port. VxWorks IP address listens on this port. |
| 161/162 | SNMP | NetCentral or other SNMP monitoring. |
| 20/21 | FTP | — |
| above 1024 | — | For streaming, communication between initiator and receiver. See explanation below. |

All data transfers (Streaming) are done via the VxWorks IP address. NT sets this up, via automation, TekRem, and/or Pronet.

NT transfers need, at most, the Pronet and TekRem ports (1678 and 1946). AMP may be necessary depending on the automation. SNMP ports are needed if NetCentral or other SNMP monitoring is in use. HTTP, telnet, and FTP are not necessary for PVS operation.

Streaming uses port 29728 as a control port. When the actual data transfer is started a separate connection is started, much like FTP does. The initiator opens a socket and sends the IP and port number to the receiver who connects back to the initiator. The port that the initiator uses is generated by the TCP above 1024. The receiver will connect and use whatever TCP assigns it (above 1024). So, there is no way to predict what ports will actually be used, other than above 1024.

There are only two ports that the VxWorks IP address listens on (not including the transient ones of data transfer). They are 21 and 29728.

Performance and compatibility information

Please take note of the following characteristics of your Profile XP Media Platform when installing or operating your system.

Software version requirements

New Profile XP Media Platforms include the latest hardware, including the Real Time Processor II (RTP-II) board, and the four-channel Video Processor board. These systems require version 5.1.X or higher to operate, and you must not install an earlier version of Profile XP System Software on systems that include these boards.

Version 5.2.12 introduced support for Revision 3 of the HD SDI I/O, which is installed in all new PVS2000 systems. If your PVS2000 includes this new board, as reported in the Profile log file, you must not install any version of Profile XP System Software earlier than 5.2.12 on your system.

Version 5.2.15 added support for the Fibre Channel Disk II card. If your Profile XP Media Platform includes this new board, as reported in the Profile log file, you must not install any version of Profile XP System Software earlier than Version 5.2.15 on your system.

Version 5.4.1 or higher is required for all PVS 3000 and PVS3500 systems, as well as systems using PFR 600 RAID storage. Do not install earlier versions of Profile System Software on these systems.

Contact your third-party software vendor to obtain a version of your software application that has been qualified for operation with Version 5.4.9.

Contact Grass Valley Support if you are unable to obtain the required software.

Fibre Channel network compatibility

You can connect your Profile XP Media Platform to a Fibre Channel fabric (switched environment) and use Media Manager or any application that uses Profile APIs or FTP over Fibre Channel to move MPEG material to and from Profile XP systems and PDR300s, and move DVCPRO 25 and DVCPRO 50 material to and from Profile XP systems and PDR400s.

Fibre Channel performance is dependent on play/record activity in the Profile XP media platform.

Please note the following when using your Profile XP Fibre Channel Video Network:

- You must connect your Profile XP to a Fibre Channel fabric using a Fibre Channel switch. Profile XP does not support connection to a Fibre Channel Arbitrated Loop (Fibre Channel hub).
- If you connect PDR 400 Video File Servers to the same Fibre Channel fabric as a PVS 1100, the PDR 400s must use a recent release of Profile System Software version 3.2 and switch-compatible microcode (3.0.10) for successful Fibre Channel transfers of DVCPRO 25 and DVCPRO 50 clips.
- Media Manager included with this release can connect to Profile Video File Servers such as the PDR 400. However, to be able to connect to a Profile XP Media Platform, the Profile Video File Server must have the Media Manager included with recent releases of versions 3.2 or 2.5 of Profile System Software. Contact Grass Valley Support for information.



NewsEdit compatibility

Some NewsEdit software versions create clips that are not compatible with Profile XP System Software 5.4.9. If you are using NewsEdit software, please contact your Grass Valley Service representative to verify your software version and, if necessary, install the appropriate NewsEdit software version before upgrading to Profile XP System Software 5.4.9.

Software installation

Profile XP System Software 5.4.9 was installed on your new Profile XP Media Platform at the factory. In normal operation, you should not need to install Profile XP System Software 5.4.9.

If your Profile XP system is operating with an earlier version of Profile XP System Software, you should update to the current version. In addition, if you install a new board in your system, or if you replace a system drive, you may need to re-install the software. Please read and follow these instructions to install the software.

This section includes the following procedures:

- “Installing Profile XP System Software 5.4.9” on page 15
- “Updating the RS-422 interface board device driver” on page 18
- “Installing and configuring NetCentral Lite” on page 26

Installing Profile XP System Software 5.4.9

The new Profile XP System Software 5.4.9 installation program includes enhanced features to better manage system services, the Microsoft XML parser installation, and file registration. Be sure to read the following instructions as well as the on-screen messages to successfully install this software.

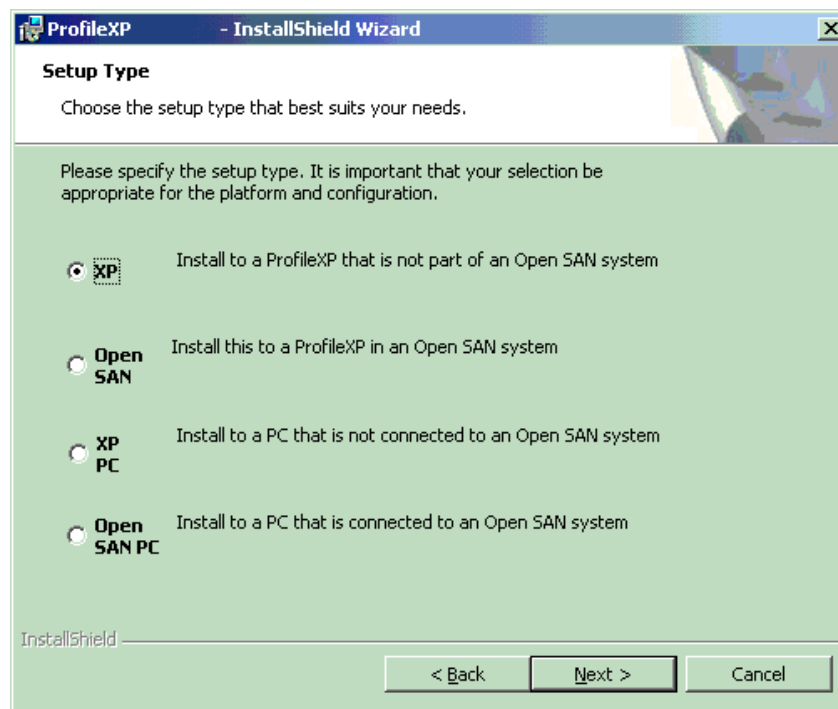
NOTE: You must uninstall any older version of Profile XP System Software prior to installing Profile XP System Software 5.4.9.

Follow these steps to install Profile XP System Software 5.4.9.

1. Use Configuration Manager to save your current configuration to a file such as *c:\temp\goodconfig*.
2. Log out of the system to ensure that no applications are running.
3. Hold the Shift key down during start-up to prevent auto-logon as user *profile*.
4. Log in as *administrator*. The default *administrator* password on a Profile XP system is *triton*.
5. Verify that Windows NT Service Pack 6a and all critical updates are installed on your system. If it is not, refer to “Microsoft Windows NT support” on page 27 and install the Service Pack and updates, restarting Windows NT and logging in as *Administrator* as required.
6. Shut down all Profile applications, such as VdrPanel, ProLink, ProNet, etc. The installation program detects and lists applications that are still running, and will not complete until they are shut down.
7. Uninstall the existing version of Profile System Software by using **Control Panel | Add/Remove Programs**, then restart the system.
8. If you are updating a system from 5.2.X or earlier to the current version:
 - a. Run *prep54.exe* from the *Profile XP System Software 5.4.9* CD-ROM, or from the location of the downloaded file. This extracts the files required to prepare your system for Version 5.4.9 into the *c:\prep54* folder.



- b. Read `c:\prep54\prep54.txt` and follow the instructions to remove old entries from the registry and load Version 5.4.9 firmware onto the cards in your system.
 - c. Restart the system.
 - d. Accept the default response when asked if `pci_wnt.sys` is in use.
 - e. Proceed with the installation of the current version.
9. Insert the Profile XP System Software 5.4.9 CD-ROM in the CD-ROM reader or connect to a network drive containing the downloaded software.
 10. The software installation will start automatically. (You may choose to run the `setup.exe` program by choosing **Start | Run** and specifying the appropriate drive.)
 11. If the installation program can not shut down services because there are applications attached, a list of the currently running applications appears. Close the listed applications and continue with the next step.
 12. When prompted, select the appropriate installation type for your system. Choose Open SAN PC only if you are installing Profile XP System Software on an Open SAN-connected system such as a NewsEdit.



13. Follow the on-screen prompts and click Next or Install to complete the installation process.

NOTE: *Some installation steps may take several minutes to complete. Please be patient and allow the setup program to perform its tasks.*

If prompted to install the .Net framework, you must follow the on-screen prompts, complete the .Net installation wizard, and restart the Profile XP system. When the Profile XP system restarts, the .Net installation completes and you return to the Profile XP System Software installation program.

NOTE: Do not attempt to skip the .Net installation. Doing so results in installation errors.

14. When the Profile XP System Software installation process is complete, choose **Yes** when prompted to restart the system.
15. Use the GVG Disk Utility to view the version numbers of RAID disk and controller microcode and compare them with the version numbers included with this release. Upgrade as required using the procedures described in “Performing RAID storage maintenance using GVG Disk Utility” in the *Profile XP System Guide*.
16. Update your RS-422 device driver as described in “Updating the RS-422 interface board device driver” on page 18.
17. If you are using NetCentral Lite to monitor your Profile XP system, re-install NetCentral Lite as described in “Installing and configuring NetCentral Lite” on page 26.
18. If you are using NetCentral to monitor your Profile XP system from a remote monitoring station, do the following:
 - a. On the Profile XP system, re-install (enable) the NetCentral Profile XP agent.
 - b. On the NetCentral PC, if you have not already done so, install the most recent NetCentral Service Pack. Contact your Grass Valley Support representative for the latest Service Pack for your NetCentral III or NetCentral IV product.
 - c. On the NetCentral PC, if you are using the Profile XP GPI action, reconfigure the GPI outputs for the action.
19. Start VdrPanel and verify that your channels are correctly configured. If not, use Configuration Manager to load the configuration file that you saved in step 1.
20. If you can't successfully load a stored configuration file, run Configuration Manager to set the video standard, then restart the system. You can then run Configuration Manager again and completely configure your system.

Your Profile XP System Software 5.4.9 is installed and ready to use. You should now create an emergency repair disk by inserting a floppy disk in the A drive and running *rdisk.exe*.

NOTE: Be sure to install this version of Profile System Software on all PCs running remote Profile applications.



Updating the RS-422 interface board device driver

The Profile system software installation program copies an updated version of the RS-422 device driver to *C:\profile\drivers* but does not automatically install it. Check the version currently running on your Profile XP Media Platform and if it is older than the version in *C:\profile\drivers*, update it using the following procedure.

Viewing version numbers

To find out what version of the RS-422 device driver is running on your system and what version is included with this release, do the following:

1. Use **My Computer** to open the *c:\winnt\system32\drivers* folder.
2. Highlight *rocket.sys* and choose **Properties** from the right-click menu.
3. Choose the **Version** tab to view the version number for the RS-422 device driver that is currently running on your system.
4. Repeat steps 2 and 3 to view the version information for *c:\profile\drivers\rocket\rocket.sys*.

Removing the existing RS-422 device driver

Before you can install the updated RS-422 device driver, you must first remove the current driver.

1. Power On the Profile system and logon as *Administrator* using these steps.
 - a. Power On the Profile system and hold the **Shift** key down during start-up to prevent auto-logon as user *profile*. Be sure to hold down the shift key until the logon dialog box appears.
 - b. Logon as *administrator*. The factory default *administrator* password on a Profile system is *triton*.
2. Open Control Panel by choosing **Start | Settings | Control Panel**
3. Double-click the **Network** icon.
4. The Network dialog box appears. Click the **Adapters** tab.
5. Highlight the **Control RocketPort RocketModem** and then click the **Remove** button.
6. When prompted “*Do you wish to continue?*”, click **Yes**.
7. Close the Network dialog box.
8. Restart the system and logon again as *Administrator*.

You are now ready to install the updated RS-422 device driver.

Installing the RS-422 Board Device Driver

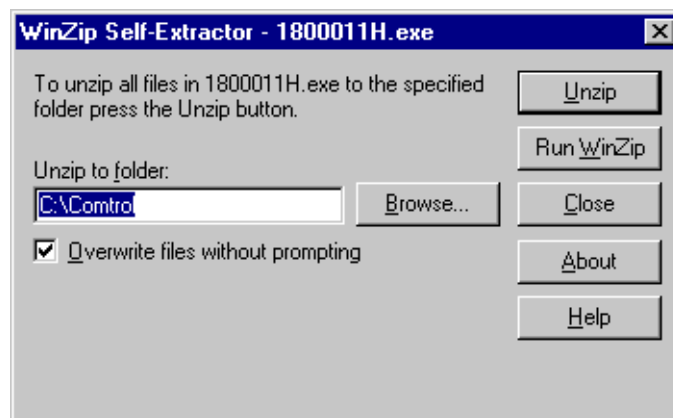
After removing the old RS-422 board device driver and re-starting the system, you are ready to install the driver for the new RS-422 board. Use the following instructions to install the driver.

To install the RS-422 device driver:

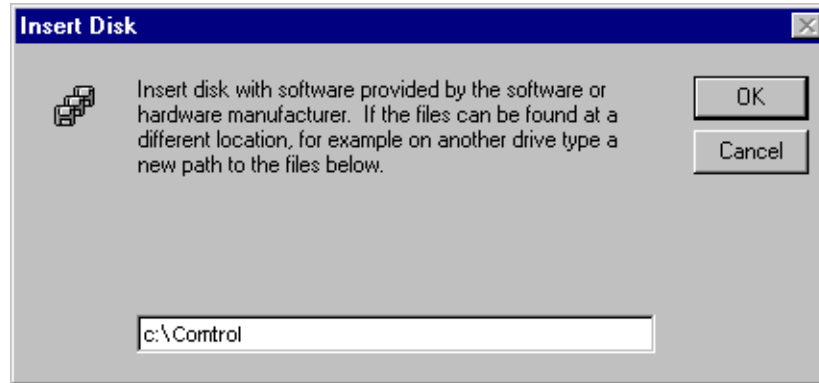
1. Make sure you are logged on as *Administrator*. The factory default password on the Profile system for *Administrator* is *triton*.
2. Double-click the following file:

C:\profile\drivers\rocket_4.77.0\1800011H.exe

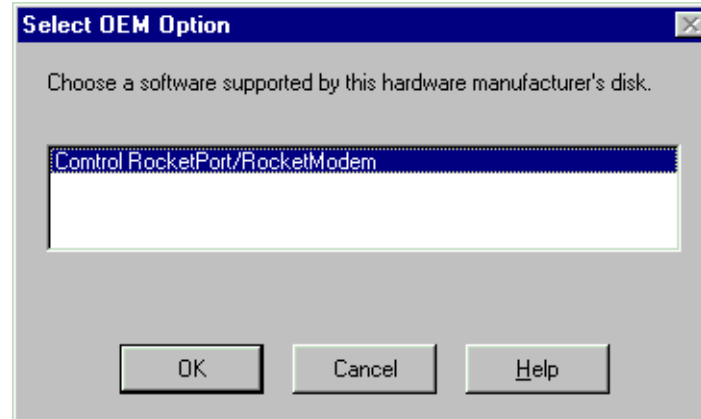
The WinZip Self-Extractor dialog box opens.



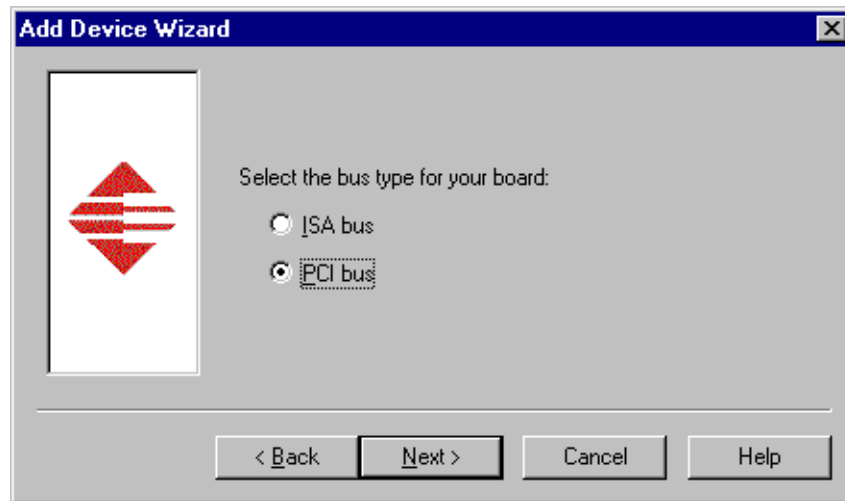
3. Click **Unzip**, then **OK**.
4. Close the WinZip Self-Extractor dialog box.
5. Open the Control Panel by choosing **Start | Settings | Control Panel**.
6. Double-click the **Network** icon.
7. The Network dialog box appears. Click the **Adapters** tab.
8. Click the **Add** button, and then the **Have Disk...** button.
9. When you are prompted, type **c:\Control** as the path of the directory containing the driver files and click **OK**.



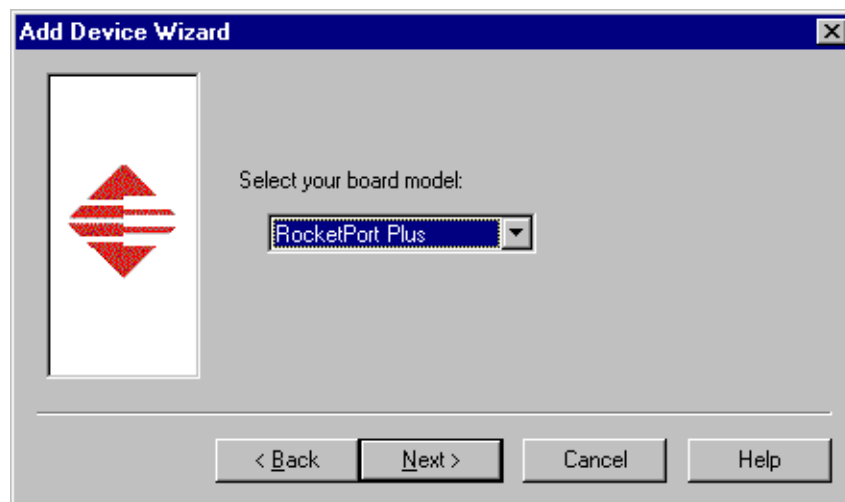
10. The Select OEM Option dialog box appears. Ensure that the Control RocketPort RocketModem is selected, then click **OK**.



11. The Add Device Wizard starts. Click **Next** to continue, then select PCI bus as the bus type and click **Next** again.

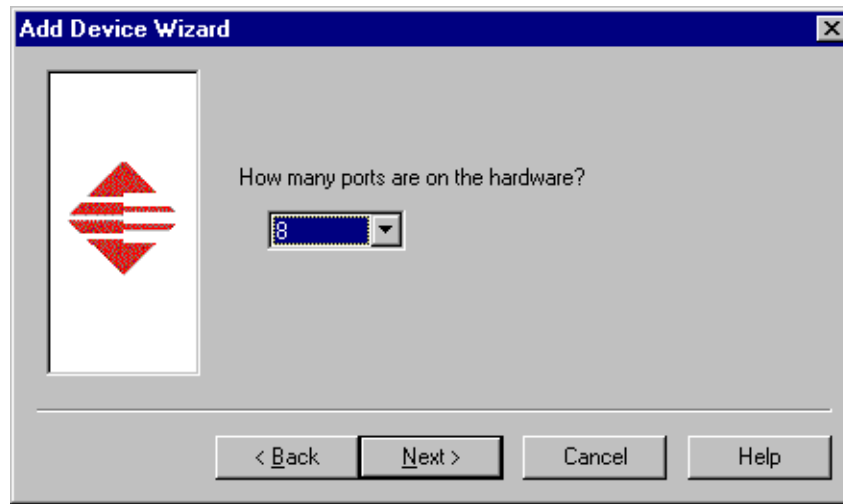


12. Select RocketPort Plus as the board type, then click **Next**.





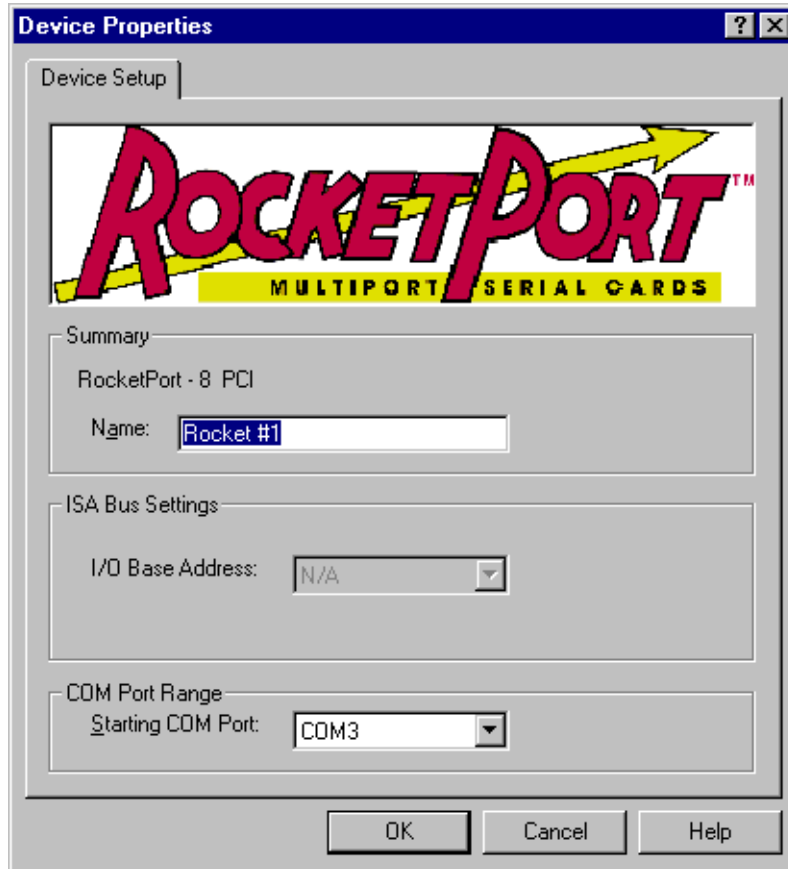
13. Select eight ports on the hardware, then click **Next**.



14. Click Finish to close the Add Devices Wizard. The Device Properties dialog box opens.



15. Ensure that the Starting COM Port is set to COM3, then click **OK** to close the Device Properties dialog box.

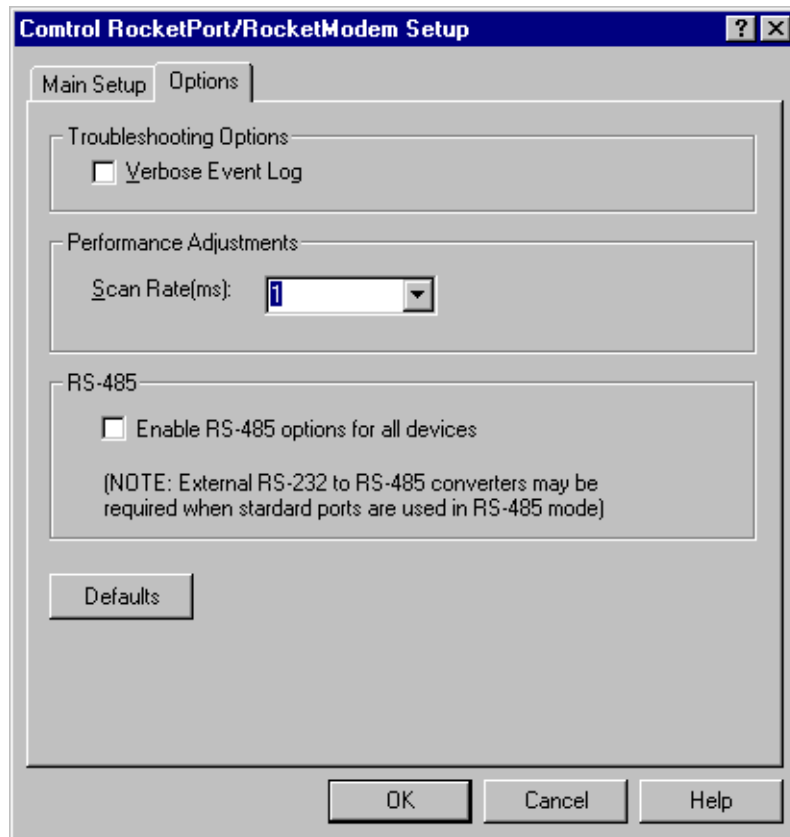




16. Choose the Options tab in the Control RocketPort/RocketModem Setup dialog box.



17. In the **Options** tab, set the **Scan Rate(ms)** to 1ms.



18. Choose **OK** to accept your changes in the RocketPort/RocketModem Setup dialog box.
19. Chose **Yes** to save new configuration settings and **OK** when reminded to restart.
20. Click **Close** in the Network dialog box.
21. Restart the system. Logon as *Profile*. The factory default password for the *Profile* user account is *profile*.



Installing and configuring NetCentral Lite

This version of Profile System Software includes NetCentral Lite version 3.1.3.2, which is installed on all Profile XP Media Platforms shipped from the factory with Profile XP System Software Version 5.4.9. After installing Profile system software, use the following procedure to install NetCentral Lite version 3.1.3.2.

To install and configure NetCentral Lite:

1. Customize the network settings (IP address, Computer Name) on your Profile XP Media Platform and PFR 500, PFR 600, or PFR 700 RAID chassis as required for your site. Refer to the *Installation Guide* and *Profile XP System Guide* for relevant instructions. If no customizing is required, proceed to the next step.
2. On the *Profile XP System Software* CD-ROM, locate *NetCentralLite.exe* in the *\NetCentral Manager Lite* folder.
3. Double-click the self-extracting file *NetCentralLite.exe* to start installation. The installation wizard appears.
4. If any version NetCentral Lite software is already installed, you are forced to select **Remove** in the install wizard. Click **Next** and follow onscreen instructions to remove the installed version of NetCentral Lite. Afterward, double-click *NetCentralLite.exe* again and proceed to step 5.
5. In the installation wizard, click **Next**, then follow on-screen installation instructions. NetCentral Lite automatically configures the Trap Destination Address for the Profile XP Media Platform and the PFR 500, PFR 600, or PFR 700 RAID chassis.
6. When installation is complete, select **Yes, I want to restart my computer now**, then click **Finish** to reboot the Profile XP system.
7. Start NetCentral Lite by clicking **Start | Programs | NetCentral | NetCentral Lite**. Refer to the *Profile XP Service Manual* for information on using NetCentral Lite.

Microsoft Windows NT support

Your new Profile XP Media Platform is preloaded with all of the required software, including Windows NT 4.0 with Service Pack 6a and all available critical Windows updates. The `c:\i386` directory contains all the Windows NT 4.0 installation files that normally would be found on the installation diskettes or on the CD-ROM. Profile administrators can use files in this directory if they need to add drivers or other software to the default installation.

Windows NT 4.0 Service Pack 6a is located on the Profile XP System Software CD-ROM in `\nt40sp6a`.

If required, you can also download Service Pack 6a from the Microsoft web page at:

<http://www.microsoft.com/ntserver/nts/downloads/recommended/SP6/128bitX86/default.asp>

Click the button labeled “Start SP6a Network Download”.

Refer to the next sections for information on Windows critical updates and the use of virus protection software.

Microsoft Windows critical updates

Thomson Broadcast recognizes that it is essential to be able to deploy Microsoft security patches to our Windows-based products as quickly as possible. As Thomson Broadcast systems are used to meet the mission-critical requirements of your environment, we feel it is imperative that systems be kept up to date in order to maintain the highest level of security available. To that end, we encourage you to install all **critical** operating system updates provided by Microsoft. In the unlikely event that one of these updates causes ill effects to a Grass Valley system, you are urged to uninstall the update and contact Grass Valley customer service as soon as possible. Thomson Broadcast will investigate the incompatibility and, if necessary, provide a software update or work-around to allow our products to properly function with the Microsoft update in question.

Please note that this policy applies to critical updates only. There are countless other noncritical updates which are made available by Microsoft. If you feel that one or more of these non-critical updates must be applied, we request that you contact Thomson Broadcast prior to installation.

You should exercise common sense when applying these updates. Specifically, updates should not be downloaded or installed while a Grass Valley product is being used for mission critical purposes such as play to air.

Virus protection

Thomson Broadcast does not support the running of anti-virus programs on a Grass Valley Profile XP Media Platform system at the same time as the system is being used to record or play video to air. This system must meet the real-time requirements of the broadcast environment and to do this it must have deterministic response from its Microsoft Windows operating system.

Any anti-virus program running on the Windows operating system can cause non-deterministic behavior for a Profile XP Media Platform system. Anti-virus programs, by their very nature, place great demands on a system’s CPU and disk subsystems. In so doing, these virus programs can interrupt operating system tasks that are essential in the play-out of high bandwidth video. For example, a Profile XP system running an anti-virus program while it is



playing to air will likely operate without incident 95% of the time. However, it is likely that at some undetermined time the anti-virus program will perform an operation that will result in black video being played to air.

Because of the danger in running virus software during use of a Profile XP Media Platform, Thomson Broadcast recommends the following actions be taken to protect Grass Valley systems from virus infections:

1. Where possible, Grass Valley systems should be run in a closed and protected environment without network access to the corporate IS environment or outside world.
2. Access to the Profile XP Media Platforms should be controlled in order to limit the likelihood of malicious or unintended introduction of viruses. Upon the loading of non-video material (programs, text files, graphic files, etc.) an up-to-date anti-virus program should be run while the system is off-line to insure that this material hasn't introduced a virus.
3. If it is imperative that Profile XP Media Platforms operate in a larger network, we recommend that access to these systems be through a gateway that provides anti-virus protection. As outlined above, if non-video material is loaded directly on a Profile XP Media Platform, then an up to date anti-virus program should be run while the system is off line to insure that this material hasn't introduced a virus.
4. If the system must be exposed to an outside network, Thomson Broadcast recommends that you regularly execute an anti-virus program on the system.

Important guidelines for execution of virus software

When running any anti-virus software on a Profile XP Media Platform, you should take care to:

1. Only run the anti virus software when the system is not playing to air.
2. Run the anti virus software as soon as possible following the loading of any non-video material.
3. Avoid scanning shared drives (e.g. the V drive on a SAN system) unless the user is certain that all systems making use of the shared drive are quiescent. That is, it is important that none of the systems sharing the shared drive are performing records or playbacks of video material.
4. Call the Thomson Broadcast customer support number if any of the system files are reported to be infected and cannot be cleaned by the virus software.

Upgrading PVS2000 from Version 4.1.X

Changes introduced in Version 5.2.X require that you perform two procedures on your PVS2000 systems to ensure a trouble-free upgrade and continued access to your media after the upgrade. These two procedures are:

- Running a special software utility prior to the upgrade on *all* PVS2000 systems currently using Version 4.1.X.
- Modifying the Fibre Channel loop addresses on your PFC500 RAID chassis *only* if you have two or more attached to your PVS2000.

The following sections describe how to perform these procedures.

Preparing a PVS2000 running Version 4.1.X for Version 5.4.9

If you want to upgrade your PVS2000 from Profile System Software Version 4.1.X to Version 5.4.9, you must run a special software utility that prepares the boards your system to receive Version 5.4.9.

NOTE: If you do not run this software utility prior to installing Version 5.4.9, your system may not operate correctly after the upgrade, and you may be required to remove all the boards in your system and re-install them one by one, installing Version 5.4.9 at each step.

To prepare your PVS2000 system running Version 4.1.X to receive Version 5.4.9, follow the instructions in “Installing Profile XP System Software 5.4.9” on page 15, paying particular attention to the steps that describe the *prep54* utility. Stop the procedure after step 8.

- If your PVS2000 is connected to a *single* PFC500 RAID chassis, not including PFC500E Expansion chassis, continue the installation of Version 5.4.9 by following step 9 of the procedure and all subsequent steps.
- If your PVS2000 is connected to *two or more* PFC500 RAID chassis, not including PFC500E Expansion chassis, shut down the system and proceed to “Changing the PFC500 RAID Fibre Channel loop addresses” on page 30.



Changing the PFC500 RAID Fibre Channel loop addresses

If your PVS2000 is connected to two or more PFC500 RAID chassis and you are upgrading your system from Version 4.1.X to Version 5.4.9, you must change the Fibre Channel loop addresses on both the primary and redundant RAID controllers in all of your PFC500 RAID chassis.

NOTE: *If you do not change the Fibre Channel loop addresses as described in this procedure, you must create a new file system, which removes all of your existing media.*

To do this:

1. Shut down all your PFC500 RAID chassis and modify the Fibre Channel loop addresses of **both** the primary and redundant RAID controllers as shown here. If you do not have redundant controllers, change the primary controllers only.

The diagram illustrates the physical components and the specific switch settings for changing the Fibre Channel loop addresses. It shows the PFC500 Rear Panel with an optional redundant controller and a primary controller. A callout provides a detailed view of the RAID Controller Board, highlighting the top switch (set to 0) and the address ID settings (A through H).

| Number of PFC500s * | PFC 500 Chassis | Primary Controller Address ID | | Redundant Controller Address ID | |
|---------------------|-----------------|-------------------------------|--------------|---------------------------------|--------------|
| | | Change from... | Change to... | Change from... | Change to... |
| 2 | First | 0 | 1 | 2 | 3 |
| | Second | 1 | 0 | 3 | 2 |
| 3 | First | 0 | 2 | 3 | 5 |
| | Second | 1 | 0 | 4 | 3 |
| | Third | 2 | 1 | 5 | 4 |

* For systems with greater than three PFC500s, contact Grass Valley Support.

2. Reinstall the RAID controllers and power up the RAID chassis, starting with the PFC500E expansion chassis, if present.
3. Power up the PVS2000 system, start Media Manager or VdrPanel, and verify that you have access to all of your clips.
4. Continue with the installation of Version 5.4.9 by following step 9 and all subsequent steps of “Installing Profile XP System Software 5.4.9” on page 15 of these release notes.

Working with PFR 500/E Fibre Channel RAID

The latest version of the *Profile XP System Guide* includes detailed instructions on using the Grass Valley Disk Utility to manage your PFR 500/E Fibre Channel RAID storage. The latest versions of the *PVS 1000 and PVS 1100 Installation Guides* include up-to-date setup instructions for your PFR 500/E Fibre Channel RAID storage. Please refer to the revised manuals and to the current Release Notes for the most accurate installation, configuration, and maintenance procedures. You can find these documents on the latest Profile System Software CD-ROM, or at www.thomsongrassvalley.com.

PFR 500 disk drive and controller microcode

You must ensure that your PFR 500 Fibre Channel RAID units are using the approved versions of disk drive microcode and controller firmware to benefit from the latest performance and reliability enhancements. The latest versions are distributed with this release, and are available at www.thomsongrassvalley.com. Refer to the latest version of the *Profile XP System Guide* for detailed instructions on how to use the GVG Disk Utility to install controller or disk microcode.

Use the GVG Disk Utility to view the installed controller microcode version numbers and compare them with the version number distributed with this release. If the version numbers do not match, you must update your controller firmware as soon as possible. The latest controller microcode file is located in `c:\profile\microcode` directory, and has a `.ima` extension.

Use the GVG Disk Utility to view the installed drive microcode version numbers and compare them with the following table. If the version numbers do not match, you must update your microcode as soon as possible. The required files are located in the `c:\profile\microcode` directory.

The GVG Disk Utility reports inconsistent disk drive microcode versions if it detects different versions on some of your drives. This can be a normal condition, since your Fibre Channel RAID system supports several models of disk drive of the same capacity, each with its own disk drive microcode. Be sure to compare the version numbers with this table, and update only as required.

NOTE: Never update drive microcode prior to forcing a rebuild operation. Always wait until the rebuild is complete before updating the microcode.

| Disk Drive Model | Capacity | Microcode Version Number | Microcode File Name |
|------------------|----------|--------------------------|--|
| ST336605FC | 36G | 0003 | Ciprico_Seagate_Cheetah5_36G_0003.lod |
| ST336607FC | 36G | F96F | Ciprico_Seagate_Cheetah6_F96F.lod |
| ST373405FC | 73G | F60D | Ciprico_Seagate73LP_F60D.lod |
| ST373307FC | 73G | 0004 or F96F | Ciprico_Seagate_Cheetah6_0004.lod or Ciprico_Seagate_Cheetah6_F96F.lod |
| ST3146807FC | 146G | 0004 or F96F | Ciprico_Seagate_Cheetah6_0004.lod or Ciprico_Seagate_Cheetah6_F96F.lod |
| ST1181677FCV | 181G | F43E or F441 | Ciprico_Seagate181HH_F43E.lod or Ciprico_Seagate181HH_F441.lod |



Replacing a failed PFR 500 RAID Controller or LBB

Redundant RAID Controllers and LBBs allow continued access to RAID storage in the event of a failure. If a fault occurs, you can use the hot-swap procedure in the PFR 500 Instruction Manual to change the failed controller or LBB. Please take note of the following additions to the procedure which will ensure a successful hot swap with minimal disruption to your operation.

- After removing the failed controller or LBB, wait five minutes before inserting the replacement module.
- Firmly seat the replacement module. Grasp the power supply handles and use your thumbs to push the replacement module all the way in.
- Configure a replacement controller for SNMP monitoring. Refer to “Set up PFR 500 network settings (Required for NetCentral monitoring)” in the *PVS Installation Guide*.
- When replacing a controller, launch the GVG Disk Utility. If a warning message about controller settings appears, close the message box, right click the replaced controller, and choose **Advanced | Check Default Settings** to establish the correct settings.

Upgrade PFR 600/E firmware

It is recommended that all PFR600 family devices update firmware to version 3.3.4 with this release. This is to ensure that any FRU drives that you might install in the future will be compatible.

NOTE: On-air upgrade is not supported with this release. The PFR600 must be power cycled prior to loading firmware.

The following rules apply to updating firmware:

- If currently at version 3.3.2, you must first upgrade to version 3.3.3, then upgrade to 3.3.4. Use the procedures “Upgrade to 3.3.3” on page 33 and “Upgrade to 3.3.4” on page 35 in these release notes.
- If currently at version 3.3.3 on a base unit with expansion units, upgrade to 3.3.4 using the procedure “Upgrade to 3.3.4” on page 35 in these release notes.
- If currently at version 3.3.3 on a base unit with only a single controller, upgrade to 3.3.4 using the procedure “Upgrade to 3.3.4” on page 35 in these release notes.
- If currently at version 3.3.3 on a base unit only (no expansion units) that has dual controllers, you can upgrade to 3.3.4 using the procedure “Upgrade to 3.3.4” on page 35 in these release notes or you can use the GVG Disk Utility. Refer to the *Profile XP System Guide* for Disk Utility procedures. If you upgrade with the Disk Utility, load the following files:

- *PFR600_fs2200_334.bin*
- *PFR600_app_334.bin*

The ESI code remains at 333 (*PFR600_cipESI_333.s3r*). The ESI code will not need to be updated.

Upgrade to 3.3.3

The 3.3.3 version of PFR600/E firmware is for all controllers and Loop Bypass Boards (LBB) in the PFR 600/E RAID chassis. All existing controllers and LBBs, ***including those installed in PFR600E expansion chassis***, should be upgraded to this version at the same time.

NOTE: Your Profile XP Media Platform or Open SAN must be off line to accomplish this procedure.

To load new firmware on the LBBs:

1. Use the GVG Disk Utility to verify the version of microcode on your controller and expansion chassis. If the current version is 3.3.3, you do not need to perform this procedure.
2. Remove all controllers and LBBs except for the first controller that you want to upgrade.

NOTE: During this upgrade procedure, you must never have more than a one controller or LBB installed and powered up at any time.

3. From the Profile XP system or another PC connect a standard serial cable to the only controller that is installed PFR 600 and start a HyperTerminal session with that controller using the following parameters:



- 9600 bits per second
 - 8 data bits
 - No parity
 - 1 stop bit
 - No flow control
4. Power up the PFR600/E and watch the HyperTerminal window.
 5. Note the IP address of the LBB. If there is no IP address, set one using the procedure in the *PVS1000 Installation Guide*.
 6. Copy the new *PFR600_fs2200_333.bin*, *PFR600_app_333.bin*, and *PFR600_cipESI_333.s3r* files to the *C:\profile\microcode\Ciprico* directory of the system running HyperTerminal.
 7. Power down the PFR600/E.
 8. Connect an Ethernet cable to the controller and make sure that the Ethernet cable is connected to the network. Ensure that the standard serial is still connected between the controller and the system running HyperTerminal.
 9. Power up the PFR600/E and watch the HyperTerminal to ensure that it has booted.
 10. Open a Command Prompt on the HyperTerminal system and navigate to the *C:\profile\microcode\Ciprico* directory.

NOTE: In the following FTP sessions, you must type quickly or use copy/paste and history (up arrow) operations to successfully complete commands before the sessions close automatically.

11. Establish an FTP connection to controller by typing `ftp xxx.xxx.xxx.xxx` where `xxx.xxx.xxx.xxx` is the IP address for controller.
12. Log in using the username `root`, and the password `root`.
13. Set the ftp transfer mode to binary by typing `bin`.
14. Enable the hash marks by typing `hash`.
15. Load the controller firmware on the controller by typing the following command:

```
send PFR600_fs2200_333.bin fs2200.bin.
```

NOTE: Do not load the controller firmware on an LBB.

16. Patiently watch the HyperTerminal window for the transfer to finish, which takes about three minutes. The hash marks show the progress of the transfer.
17. When the message 'RAID firmware image complete' is seen in the HyperTerminal window, press Enter in the HyperTerminal window to obtain a prompt, then type `reboot`.
18. Type `quit` in the Command Prompt window.
19. Wait for reboot the complete, then repeat steps 11 to 18, this time loading the Web Manager firmware using the following command:

```
send PFR600_app_333.bin app.bin.
```

-
20. When the message 'Firmware upgrade complete' is seen in the HyperTerminal window, press Enter in the HyperTerminal window to obtain a prompt, then type `reboot`.
 21. Wait for reboot the complete, then repeat steps 11 to 18 once more, this time loading the Enclosure Services using the following command:

```
send PFR600_cipESI_333.s3r cipESI.s3r
```
 22. When the message 'Ethernet firmware download complete' is seen in the HyperTerminal window, you have successfully downloaded all firmware files. Close the ftp connection by typing `quit` in the Command Prompt window.
 23. In the HyperTerminal window, press Enter to obtain a prompt, then type `reboot`.
 24. As LBB reboots, verify the new Web Manager version number in the HyperTerminal window.
 25. Power down the PFR600/E, remove the upgraded controller, then insert the other controller or the next LBB to be upgraded.
 26. Repeat steps 3 to 25 for each controller and LBB in your system, including those in your PFR600E RAID Expansion chassis.

NOTE: Load three files on controllers (PFR600_fs2200_333.bin, PFR600_app_333.bin, and PFR600_cipESI_333.s3r), but only two files on LBBs (PFR600_app_333.bin and PFR600_cipESI_333.s3r).
 27. Once all the controllers and LBBs have been upgraded, power down every PFR600/E and restart all attached Profile XP Media Platforms

Upgrade to 3.3.4

The 3.3.4 version of PRF600/E firmware is for all controllers and Loop Bypass Boards (LBB) in the PFR600/E RAID chassis. All existing controllers and LBBs, *including those installed in PFR600E expansion chassis*, should be upgraded to this version at the same time.

NOTE: Your Profile XP Media Platform or Open SAN must be off line to accomplish this procedure.

To load new firmware on the LBBs:

1. Use the GVG Disk Utility to verify the version of microcode on your controller and expansion chassis. If the current version is 3.3.4, you do not need to perform this procedure.
2. Remove all controllers and LBBs except for the first controller that you want to upgrade.

NOTE: During this upgrade procedure, you must never have more than a one controller or LBB installed and powered up at any time.

3. From the Profile XP system or another PC connect a standard serial cable to the only controller that is installed PFR600 and start a HyperTerminal session with that controller using the following parameters:
 - 9600 bits per second
 - 8 data bits
 - No parity



- 1 stop bit
 - No flow control
4. Power up the PFR600/E and watch the HyperTerminal window.
 5. Note the IP address of the LBB. If there is no IP address, set one using the procedure in the *PVS1000 Installation Guide*.
 6. Copy the new *PFR600_fs2200_334.bin* and *PFR600_app_334.bin* files to the *C:\profile\microcode\Ciprico* directory of the system running HyperTerminal.

NOTE: The ESI code remains at 333 (PFR600_cipESI_333.s3r). The ESI code will not need to be updated.

7. Power down the PFR600/E.
8. Connect an Ethernet cable to the controller and make sure that the Ethernet cable is connected to the network. Ensure that the standard serial is still connected between the controller and the system running HyperTerminal.
9. Power up the PFR600/E and watch the HyperTerminal to ensure that it has booted.
10. Open a Command Prompt on the HyperTerminal system and navigate to the *C:\profile\microcode\Ciprico* directory.

NOTE: In the following FTP sessions, you must type quickly or use copy/paste and history (up arrow) operations to successfully complete commands before the sessions close automatically.

11. Establish an FTP connection to controller by typing `ftp xxx.xxx.xxx.xxx` where `xxx.xxx.xxx.xxx` is the IP address for controller.
12. Log in using the username `root`, and the password `root`.
13. Set the ftp transfer mode to binary by typing `bin`.
14. Enable the hash marks by typing `hash`.
15. Load the controller firmware on the controller by typing the following command:

```
send PFR600_fs2200_334.bin fs2200.bin.
```

NOTE: Do not load the controller firmware on an LBB.

16. Patiently watch the HyperTerminal window for the transfer to finish, which takes about three minutes. The hash marks show the progress of the transfer.
 17. When the message 'RAID firmware image complete' is seen in the HyperTerminal window, press Enter in the HyperTerminal window to obtain a prompt, then type `reboot`.
 18. Type `quit` in the Command Prompt window.
 19. Wait for reboot the complete, then repeat steps 11 to 18, this time loading the Web Manager firmware using the following command:
- ```
send PFR600_app_334.bin app.bin.
```
20. When the message 'Firmware upgrade complete' is seen in the HyperTerminal window, you have successfully downloaded all firmware files. Close the ftp connection by typing

- 
- quit in the Command Prompt window.
21. In the HyperTerminal window, press Enter to obtain a prompt, then type `reboot`.
  22. As LBB reboots, verify the new Web Manager version number in the HyperTerminal window.
  23. Power down the PFR600/E, remove the upgraded controller, then insert the other controller or the next LBB to be upgraded.
  24. Repeat steps 3 to 23 for each controller and LBB in your system, including those in your PFR600E RAID Expansion chassis.

***NOTE: Load two files on controllers (PFR600\_fs2200\_334.bin and PFR600\_app\_334.bin), but only one file on LBBs (PFR600\_app\_334.bin).***

25. Once all the controllers and LBBs have been upgraded, power down every PFR600/E and restart all attached Profile XP Media Platforms.



## AMP on the Profile XP

The following sections provide the complete documentation for AMP on the Profile XP system. Refer to these sections rather than those in the *Profile XP System Guide*.

### Using AMP remote control

You can use Advanced Media Protocol (AMP) to control a Profile XP system channel. This protocol is an extension of the Odetics protocol and is supported through the Profile XP AMP Client application. External control devices can be connected via rear panel RS-422 serial connectors or an Ethernet network connection.

The AMP Client application acquires a single channel (Play, Record, or Play-Record) at a time. You can run the application from the command line or in an AMP Client window.

The AMP Client application runs in the following modes:

- Protocol control only mode — The Profile XP channel is controlled by a remote third-party application and the local AMP Client application only monitors activities on the channel.
- Local and protocol control mode — The Profile XP channel can be controlled by either the local AMP Client application or by third-party applications such as a hardware controller or a software application.

When you are using a remote third-party application, AMP protocol supports the use of a two-head model in that two clips are loaded simultaneously, as follows:

- Active clip — The AMP “preset id” is considered the active clip that controls channel resources.
- Preview clip — The AMP “preview preset id” is considered the preview clip. Generally the preview clip begins playing after the active clip completes, at which point the preview clip becomes the active clip.

The allowable clip name length that can be sent using AMP to 32 chars. Though the AMP protocol supports variable-length clip names, with lengths up to 64K bytes, Profile XP only supports clip names up to 32 chars.

### Communicating via AMP: Ethernet or RS-422

AMP can be used via Ethernet or RS-422. In a networked environment, commands can be issued through the network using protocols such as TCP/IP, IPX, RPC, etc.

Ethernet access is possible using DCOM or sockets on the Profile XP platform. Interfacing with sockets is similar to interfacing with DCOM; it only requires that your send and receive functionality be changed from DCOM send/receive units to sockets send/receive units. For more information on using sockets with AMP, see AMP Sockets Development on the GV Developers website [www.gvgdevelopers.com](http://www.gvgdevelopers.com).

### Starting up or shutting down AMP or Profile XP

With the 5.4.8 release, Profile XP no longer uses the `ampethernetserver` process. When Profile XP starts up, the `AmpTcpService` process is started automatically. The first time you open an AMP Client window, the `AmpAppServer` process is started automatically. Each time you open an AMP Client window, the TCP Interface creates a client processor called `ampclient`. You can have several `ampclient` processes running at once; Profile XP only needs one `AmpTcpService` process and one `AmpAppServer` process.

---

**NOTE:** Any batch files used with previous versions of Profile XP might need to be updated to reflect the change in the status of the processes.

When you close an AMP Client window, the channel settings are lost for that channel. When Profile XP shuts down, the settings for all channels are lost. To ensure channel settings are maintained, you can create a batch file in the Startup folder. If the Profile XP system is shut down and restarted, the batch file automatically opens all the channels with the last-configured settings. Batch files are discussed in the following section. A sample batch file is included in “Optimizing AMP resource usage” on page 39.

## Starting AMP Client automatically

**NOTE:** Any batch files used with previous versions of Profile XP might need to be updated to reflect the change in the status of the processes.

To run AMP Client automatically via DCOM or RS-422, create a batch file and save it in the Startup folder. Specify the channel, communication method, and the name of the server. Include a Sleep command before and after the AMP Client command. For larger databases, the Sleep value might need to be adjusted for the system. If you want to open more than one AMP Client in a batch file, put a `sleep 10` between the AMP Client commands. To run a channel via DCOM, specify `DCOM` in the command line.

For example, to automatically run two channels via DCOM, use this format:

```
Sleep 200
Start C:\Profile\ampclient vtr1 DCOM ServerName
Sleep 10
Start C:\Profile\ampclient vtr2 DCOM ServerName
```

To automatically run channels via RS-422, you need to include the port number. Use this format:

```
Sleep 200
Start C:\Profile\ampclient vtr1 RS422 P1 ServerName
sleep 10
Start C:\Profile\ampclient vtr2 RS422 P2 ServerName
```

## Optimizing AMP resource usage

If you are concerned with CPU usage, Grass Valley recommends that you run AMP Client windows minimized. With the Profile XP 5.4.8 release, the AMP Client window can be run minimized without affecting performance. You can run the application minimized from the AMP Client window or from the command line.

This is an example of a batch file to run the AMP Client minimized.

```
sleep 60
Start /min C:\Profile\ampclient vtr1 RS422 P1 PVS_3
sleep 10
Start /min C:\Profile\ampclient vtr2 RS422 P2 PVS_3
sleep 10
Start /min C:\Profile\ampclient vtr3 RS422 P3 PVS_3
```



```
sleep 10
Start /min C:\Profile\ampclient vtr4 RS422 P4 PVS_3
sleep 10
Start /min C:\Profile\ampclient vtr5 RS422 P5 PVS_3
sleep 10
Start /min C:\Profile\ampclient vtr6 RS422 P6 PVS_3
sleep 10
Start /min C:\Profile\ampclient vtr7 RS422 P7 PVS_3
sleep 10
Start /min C:\Profile\ampclient vtr8 RS422 P8 PVS_3
```

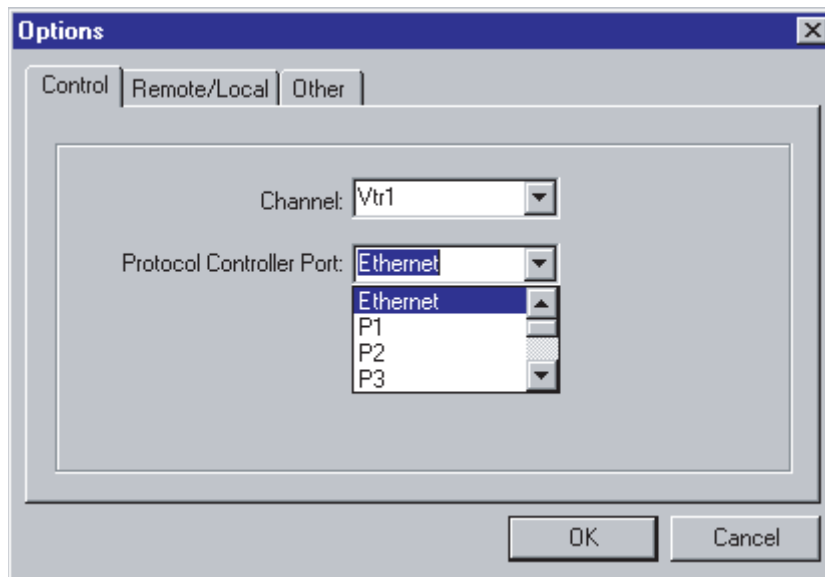
## Configuring AMP protocol control

To configure a Profile XP channel for control by the AMP protocol, do the following:

1. Make sure that the channel you intend to control by the AMP protocol is not currently allocated to an application.
2. Open *C:\profile\ampclient.exe*. The AMP Client application opens.
3. Click the **Options** button,

- or -

On the **File** menu, click **Options**. The Options dialog box opens.



4. On the **Channel** drop-down list, select the local Profile XP channel to be controlled by AMP protocol. If the selected channel is currently allocated to another application, a message informs you that it is not available.



- 
5. Select either **Ethernet** or the RS-422 **Port** for the type of communication you are using for AMP protocol.
  6. Click **OK** to save changes and close.

After a pause (indicated by “Connecting...Please wait” in the status bar) the selected channel is allocated to the AMP protocol. The channel remains allocated as long as the AMP application remains open.

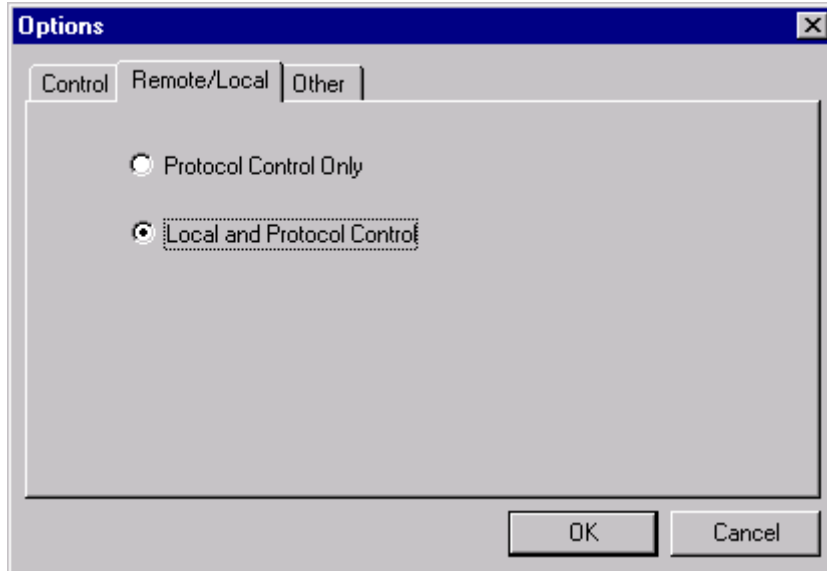
You can now control the Profile XP channel with the AMP protocol using a remote AMP application or device. To control the channel with the AMP protocol using the local AMP application, continue with the next section “Setting the AMP application for local and protocol control”.

## Setting the AMP application for local and protocol control

To use the AMP application for local and protocol control, a channel must first be allocated as in “Configuring AMP protocol control” on page 40.

To set the AMP application to the local and protocol control mode, follow these steps:

1. Click the **Options** button,  
- or -  
On the **File** menu, click **Options**. The Options dialog box opens.
2. Click the Remote/Local tab.

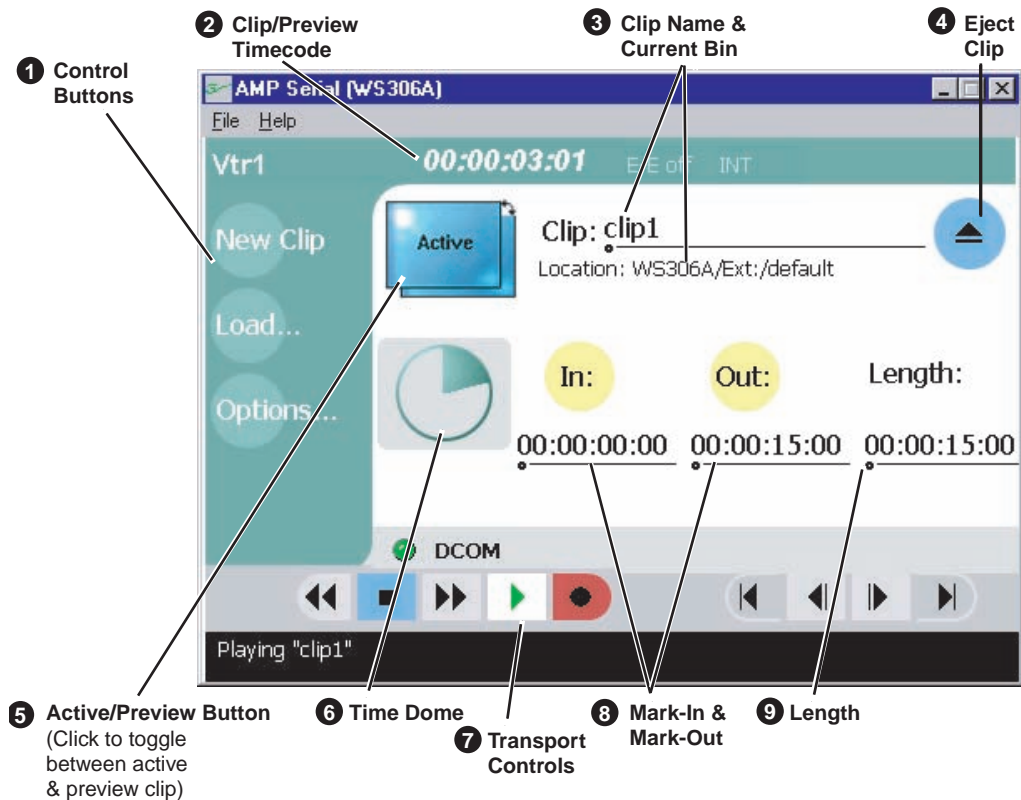


3. Select the Local and Protocol Control option.
4. Click OK.

**NOTE:** To toggle between the two settings, click Remote/Local on the File menu.



The following describes the controls and indicators used in the local and protocol control mode.



| Control                                                                                            | Description and User Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Control Buttons</b><br>(The control buttons function the same as the <b>File</b> menu items.) | <b>New Clip</b> – Used to create and name a clip prior to starting the recording. A default clip name is generated by incrementing some seed name, for example, Clip_2 if the last clip created was Clip_1. To rename the clip, click the clip name and enter a new name.<br><b>Load</b> – Select to open the Load dialog, which displays the contents of the current bin. Select a clip, then choose Load. See “Loading a clip” on page 44.<br><b>Options</b> – Opens the Options dialog box. Use this to select a channel, choose local and remote control, and timecode modes. |
| <b>2 Clip/Preview Timecode</b>                                                                     | Indicates the current timecode of the timecode source. The timecode value of XX:XX:XX:XX is displayed if there is no input timecode.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>3 Clip Name Edit Control</b>                                                                    | Displays the clip’s name and location in the media storage system. To rename the clip, click the Clip Name, then enter text. To change the current bin, i.e. the target location for recording clips, refer to “Setting Options” on page 43.                                                                                                                                                                                                                                                                                                                                      |
| <b>4 Eject Clip</b>                                                                                | Ejects the currently loaded clip.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>5 Active/Preview Button</b>                                                                     | Toggle to specify active clip or preview clip.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>6 Time Dome</b>                                                                                 | This indicator displays record progress. The Time Dome indicates one revolution every 10 seconds.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Control                       | Description and User Operation       |
|-------------------------------|--------------------------------------|
| <b>7 Transport Controls</b>   | Controls the currently loaded clip.  |
|                               |                                      |
| <b>8 Mark-in and Mark-out</b> | Displays mark-in or mark-out points. |
| <b>9 Length</b>               | Displays clip length                 |

## Setting Options

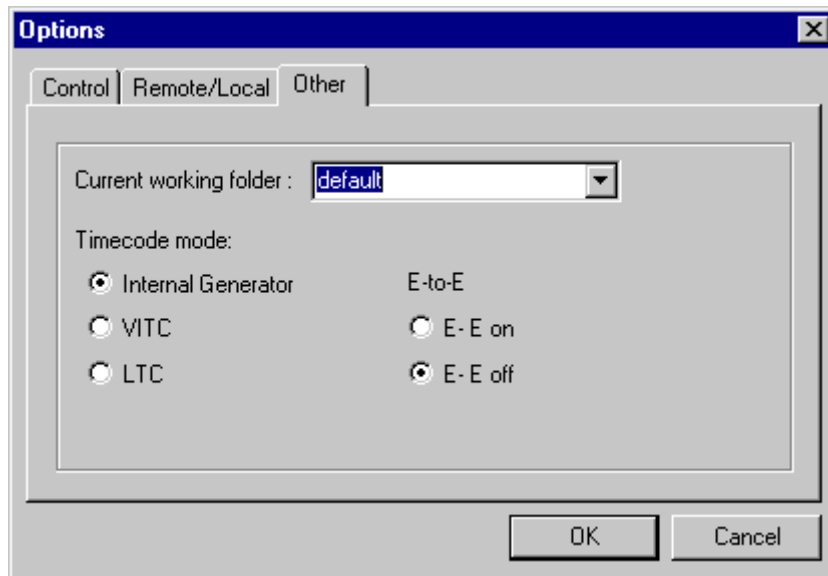
To set the working folder and timecode mode of the AMP Client application, follow these steps:

1. Click the **Options** button

- or -

On the **File** menu, click **Options**. The Options dialog box opens.

2. Select the Other tab.



3. Specify the current working folder. This is the folder to which clips are recorded and from which clips are loaded.
4. Select the Timecode mode and the E-to-E mode.
5. Click **OK** to save settings and close.



## Loading a clip

1. Open the Load dialog using one of the following:
  - Select the **Load** button.  
- or -
  - Select the **File** menu, then choose **Load**.  
The Load dialog box opens.
2. Enter a clip name or select a clip in the list.
3. Click **Load**. The clip is loaded.

## Playing a clip

1. Click the Active/Preview button to put the Active button in front.
2. Load a clip.
3. Click the **Play** transport control button.

## Creating a new clip

1. Create a new clip using one of the following:
  - Select the **New Clip** button.  
- or -
  - Select the **File** menu, then choose **New Clip**. The clip is given a default name, such as Clip\_1.
2. To rename the clip, click the Clip Name and enter text.

## Recording a clip

1. Create a new clip.
2. Click the **Record** transport control button.
3. When the desired material has been recorded, click the **Stop** transport control button.

# Changing a Profile XP system name

If changing the computer name on a Profile XP system with Fibre Channel or Low-Speed Ethernet transfer capabilities, in addition to changing the name in Windows control panel and host files, you must manually force the Real Time Processor (RTP) to update the name.

To force the RTP to update the Profile XP computer name, do the following:

1. Open Configuration Manager using the desktop shortcut or by choosing **Start | Programs | Profile Applications | Configuration Manager**.
2. Choose **Network** in the Configuration Manager window. The Network dialog box appears.
3. Make a note of the current Subnet mask, as you must re-enter it at the end of this procedure.
4. Change the Subnet mask.
5. Click **Finish**.

- 
6. Restart the Profile XP system.
  7. Repeat this procedure, re-entering the original Subnet mask.



## Known problems

The following limitations are present in this Profile XP System Software 5.4.9 release. If you wish to obtain more information about these limitations, please mention the reference numbers that follow the description of each limitation.

## Installation

- |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Problem    | After upgrading a PVS 1000 or PVS 1100 system with High Definition encoders or decoders, the system appears to be unable to record or play HD clips, even though the system timing is correctly set (1080i at 29.97 Hz, for example). (CR 40414)                                                                                                                                                                                                                                                |
| Workaround | After the upgrade, you must use Configuration Manager to set the system timing to something other than the desired timing, then set it to the HD timing. For example, change the System Reference to Reference Black: 25 frames/sec, then open the Video Timing again and set the desired timing.                                                                                                                                                                                               |
| Problem    | After adding standard definition codecs to a PVS2000 system, the system cannot record or play. Existing channel definitions lack inputs and outputs, and they cannot be added. (CR 41343)                                                                                                                                                                                                                                                                                                       |
| Workaround | After the upgrade, you must use Configuration Manager define new channels. Existing channels can be modified by first changing the channel type (HD MPEG Player/Recorder to SD MPEG Player/Recorder, for example), then selecting the desired channel type and adding inputs and outputs.                                                                                                                                                                                                       |
| Problem    | After upgrading a PVS2000 system with more than one PFC500 RAID chassis from Version 4.1.X to Version 5.4.9, an error message about a missing file system appears, and you don't have access to any of your clips. (CR 36828)                                                                                                                                                                                                                                                                   |
| Workaround | Version 5.4.9 uses a different SCSI addressing scheme than Version 4.1.X. Refer to "Changing the PFC 500 RAID Fibre Channel loop addresses" on page 30 for complete instructions on how to modify your settings.                                                                                                                                                                                                                                                                                |
| Problem    | Profile System Software installation hangs at 5% on the progress bar while stopping the PCI_WNT device.                                                                                                                                                                                                                                                                                                                                                                                         |
| Workaround | As described in "Installing Profile XP System Software 5.4.9" on page 15, you must manually stop the PCI_WNT device before installing Profile System Software. To recover from the hang:<br><br><ol style="list-style-type: none"><li>1. Open Task Manager and end the InstallShield Wizard task.</li><li>2. Choose <b>Start   Settings   Control Panel   Devices</b>. In the Devices dialog box, select <b>PCI_WNT</b> and click <b>Stop</b>.</li><li>3. Run <i>setup.exe</i> again.</li></ol> |
| Problem    | When attempting to remove or re-install Profile system software, InstallShield displays an "Invalid parameter" error message and does not open. (CR 17504)                                                                                                                                                                                                                                                                                                                                      |

---

**Workaround** This problem is the result of a mis-match for the setup type in the setup log file. You must allow InstallShield to create a new setup log file in order to clear this error, as explained in the following procedure.

1. Rename the following setup log file:

*C:\InstallShield Installation Information\  
{E9541B35-0F31-11D4-BDDC-00104B2714D0}\setup.ilg*

2. Open regedit. Click **Start | Run**, type `regedit`, and press **Enter**.

3. Note the setup type stored at  
HKEY\_LOCAL\_MACHINE\SOFTWARE\tektronix\profile\SetupType

4. Close regedit.

5. Run the Profile system software installation program. Make sure that you select the setup type as noted in regedit.

6. Complete the installation process. InstallShield creates a new setup log file.

7. Delete the setup log file that you renamed earlier in this procedure. You can now remove or re-install software as usual.

**Problem** The installation program fails and generates a “Profile services failed to stop” error message. (CR 29055)

**Workaround** Restart the Profile XP system and try installing the software again. In an Open SAN environment, be sure to take the system out of service as described in the *Open SAN Instruction Manual* before installing the software.

**Problem** Uninstalling Profile XP System Software fails after a few minutes. (CR 29057)

**Workaround** This is caused by uninstalling the software while logged on as user *profile*. When uninstalling or installing Profile System Software, you must always be logged on as user *administrator*.

**Problem** After installing Profile XP System Software 5.4.9, VdrPanel may generate an error message about missing configurations.

**Workaround** Open each panel and reassign the desired protocol and port for the panel.

**Problem** The LEDs on the Fibre Channel Disk II card don't light appropriately.

**Workaround** The LEDs on the Fibre Channel Disk II card are reversed. The LEDs for Port A are next to Port B, and vice versa.

## Startup

**Problem** The Profile XP system is slow to start when it contains a large number of clips or a few very large clips.

**Workaround** Profile XP starts more quickly than older Profile systems. However, startup time is proportional to the number of clips loaded on the system, and to the length of the clips.



- Problem** Profile applications such as VdrPanel do not start. The Profile log reports that no filesystem exists.
- Workaround** All your RAID units must be powered up before you start your Profile XP Media Platform. Be sure to power up your devices in the following order:
- 1.RAID expansion chassis, if present.
  - 2.Main RAID chassis. Wait four minutes.
  - 3.Profile XP Media Platform.
- Problem** A “valid file system not found” message is reported once Windows NT boots, even though there are no disk or controller failures, and no configuration changes. (CR 26996)
- Workaround** This problem can occur when using PFR500 storage system with LUNs in *offline* status. LUNs can appear offline for two reasons: either a PFR500E Expansion Chassis is powered down before the PFR500 RAID Controller chassis, or you add a PFR500E Expansion chassis containing disk drives that were bound using a controller other than the one to which it is connected. If you powered down your storage in the wrong sequence, you can safely repair the system using information found in “Performing RAID storage maintenance using GVG Disk Utility” in the *Profile XP System Guide*. If you encounter this problem while configuring storage using a PFR500E Expansion chassis, contact Grass Valley Product Support for assistance.
- Problem** Not all your clip bins appear when you restart your system after deleting the Profile clip database, pdrmovie\_db. (CR 38914)
- Workaround** The missing bins and the clips they contain are not lost. Contact Grass Valley support, who will help you use the *regenmf* tool to restore your clip database. You can avoid this problem by limiting to about 700 the number of clips you store in each bin.
- Problem** One or more “Reference generator unlocked” warning messages appear in the Profile log file at system startup, even though a valid reference signal is correctly connected.
- Workaround** You may safely ignore these messages. If a single warning message is not followed by a “locked to the external reference” message, there may be a real problem with the external reference signal or the Real Time System board.

## Configuration

- Problem** You cannot change the output of an HD/SD MPEG Player channel (Agile Output) from HD-SDI to SDI, or from SDI to HD-SDI. (CR\_46292)
- Workaround** You must first set the output to None, then select the desired output.
- Problem** After modifying Ethernet networking by adding a dual-port card or replacing the system processor board, the Agile Output license becomes invalid, though it continues to work for 30 days. (CR\_44709)



- 
- Workaround** Obtain a new license for your system from your Grass Valley representative. SabreTooth licensing uses a unique identifier for each system. This identifier is partially based on the Media Access Control (MAC) address of your system's primary Ethernet port. If you change the primary Ethernet port, as you would when replacing the system processor board or adding a dual-port Ethernet card, you must obtain a new Agile Output license.
- Problem** When using embedded audio on a PVS 3000 or PVS 3500, error messages appear about various resources that cannot be allocated when you start VdrPanel. (CR 39359)
- Workaround** When more than one audio board is present in a system that includes both HD and SD codecs, channels that use HD resources must use embedded audio resources from the lower-numbered audio board (J13, for example), and SD channels must use embedded audio resources from the higher-numbered audio board (J14, for example).
- Problem** Messages similar to the following appear in the Profile log file (CR 40565):
- ```
10.0-0002ae4e-E: decoder 1 picture DMA sent too early
before VsyncOperations
```
- Workaround** Ensure that all your channels have valid outputs assigned. Channels with None selected as an output may cause this error message to occur. If all your channels have valid output assignments, use Configuration Manager to change the reference timing offset by one line, then change it back to the desired setting.
- Problem** If multiple video outputs are assigned to one codec or decoder, ancillary data is present on only one of the outputs. Similarly, if one input is assigned to several codecs or encoders, only one of the channels records ancillary data. (CR 41206)
- Workaround** Use an external distribution amplifier to supply the output with ancillary data to the multiple devices that require it, or to feed more than one input on your Profile XP Media Platform.
- Problem** Codec settings (DVC25, DVC50, MPEG Encoder, MPEG Decoder) are not stored in configuration files. (CR 16114)
- Workaround** This is only an issue when you restore configurations that were saved prior to changing the video codec types. If you change the video codec type and wish to save and use configurations, you must: 1) restart the system for the codec change to become effective, 2) make and save new configuration files (so that restore will work with the new video codec type). If you do not change the video codec type, configuration files will work as expected.
- Problem** Changing the Profile XP computer name does not change the Fibre Channel adapter host name. Profile Logs show the old Fibre Channel host name. (CR47178)
- Workaround** To change the Fibre Channel host name, do the following:
1. Restart the Profile XP platform for the new Windows computer name to take affect.
 2. After boot, use Configuration Manager to replace the Fibre Channel



adapter IP address with a temporary IP address, then reboot the Profile XP platform.

3. On startup, use Configuration Manager to restore the original Fibre Channel IP address, then restart the Profile XP platform again.

On startup, the Fibre Channel IP address is restored and now the Fibre Channel adapter hostname matches the Windows computer name.

Recording

- Problem** Recording of 625/50 material in MPEG D10 format at 30 and 40Mb/s fails. Error messages similar to the following appear in the Profile log. (CR 42893, 42914)
- ```
cCubeHandleMpegEncodeStatusMessage: No space to save picture type.
pix 13 (0xc3351100) unknown start code = 0xC3CEF9B7 at addr 0xc381f9c0
```
- Workaround** In this release, you must set the MPEG D10 bitrate to 50Mb/s when you record 625/50 material.
- Problem** Occasionally, a clip is recorded with timecode one frame behind the video. If both VITC and LTC are recorded, only one of the two is delayed by one frame. (CR 38836)
- Workaround** Restart your system. This resets the encoders and corrects the problem.

## Video

- Problem** The last frame of a DVCPRO 50 clip is sometimes displayed twice, replacing the first frame of the following I-frame MPEG clip. (CR 44882)
- Workaround** Avoid playing I-frame MPEG clips immediately following DVCPRO 50 clips. No other clip transitions are affected in this way.
- Problem** A clip appears to be one field shorter on a PVS 1000 Media Platform or one field longer on a PVS 1100 media platform if the clip is transferred between the different Media Platforms. (CR 19154)
- Workaround** The clips are the same length on both Media Platforms. Decoders on the PVS1000 stop only on odd-numbered fields. Codecs on the PVS1100 can stop on any field, odd or even.
- Problem** Slow motion playout of an SD clip on an HD output HD/SD player is not as smooth as it is on an SD output. (CR 40751)
- Workaround** Up-converted clips always play correctly at normal speed, but occasionally display an incorrect field in off-speed play. There is no workaround at this time.
- Problem** When playing a list of clips in VdrPanel, a black frame may appear between clips if you perform reverse jog operations. (CR 29657)
- Workaround** The recorded material does not contain the extra frame. Play the list again, avoiding reverse jog, to view the material.
- Problem** You cannot playout High Definition 4:2:2 video. (CR 60131)

---

Workaround There is no workaround. High Definition 4:2:2 is not supported on any Profile XP model. You can transfer HD 4:2:2 into the Profile XP for storage purposes only, but do not attempt to play it.

## Audio

Problem A slight clicking or static noise may be present in embedded audio in 720p mode. (CR 42887)

Workaround There is no workaround at this time. This noise is not present in AES audio.

Problem Playing clips with audio recorded as Data causes play failures and error messages in the Profile log. (CR 42895)

Workaround Avoid configuring channels with the digital audio format set to Data. Use the AC3 or Dolby E settings for compressed audio.

## VDR Panel

Problem After creating long channel names in Configuration Manager, the panels in VDRPanel always open in the “NO CHANNEL” state. (CR 38801)

Workaround Use Configuration Manager to rename channels. Limit channel names to 18 characters or less, including spaces.

## Media Manager

Problem Media Manager loses connections with remote systems over time. (CR 24430)

Workaround Reconnect to the remote system.

Problem Media Manager does not correctly show the contents of a remote Profile system after losing and restoring the Ethernet connection to that machine.

Workaround If you lose an Ethernet connection to any system on your network (disconnected cable, for example), you must reconnect to that machine from all Media Manager sessions on all systems to reestablish proper communications.

## Toolbox Editor

Problem Occasionally, the last frame of a clip shows distorted video. (CR 39305)

Workaround There is no workaround at this time. Avoid displaying the last frame of your clips when playing clips using Toolbox Editor.

## TimeDelay

Problem The delay setting changes when you choose a timecode source. (CR 44509)

Workaround Choose the timecode source first, then set your desired delay.

Problem You cannot assign a Recorder/Player channel to a panel. (CR 40132)

Workaround Use a Recorder channel for the TimeDelay input, and Player channels for your outputs.



## List Manager

No known problems.

## Applications running remotely over Ethernet

- |            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Problem    | Applications such as TimeDelay and Tool Box Editor report a “Cannot Allocate Channel” error message if you attempt to run them remotely over the Ethernet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Workaround | <p>The DCOM permissions may be set incorrectly on your Profile XP Media Platform. This prevents remote applications from using channel allocation commands such as VdrAllocateChannel from the Profile SDK. To set DCOM permissions correctly:</p> <ol style="list-style-type: none"><li>1. Log on as administrator.</li><li>2. Choose <b>Start   Run</b>, type <code>dcomcnfg</code> in the Open text box, and click <b>OK</b>.</li><li>3. In the <b>Default Protocols</b> tab, select <b>Connection Oriented TCP/IP</b> and move it to the top of the list using the <b>Move Up</b> button, then click <b>Apply</b>.</li><li>4. Choose the <b>Applications</b> tab, select <b>ChanDct</b>, and click <b>Properties</b>.</li><li>5. In the <b>General</b> tab, set the <b>Authentication Level</b> to <b>None</b>.</li><li>6. In the <b>Security</b> tab, choose <b>Use Custom Configuration Permissions</b> and click <b>Edit</b>.</li><li>7. Grant <b>Full Control</b> to user <b>Everyone</b> and click <b>OK</b>.</li><li>8. Click <b>OK</b> to close the DCOM Configuration dialog box.</li></ol> |

## NetCentral

- |            |                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Problem    | NetCentral does not always report a failed connection to RAID storage. (CR 41404)                                                                                                                                                                                                                                                                                                                              |
| Workaround | Look for RAID storage messages in the Profile log file.                                                                                                                                                                                                                                                                                                                                                        |
| Problem    | The ends of longer NetCentral messages may not be visible in the Log Viewer (WinTail). (CR 7318)                                                                                                                                                                                                                                                                                                               |
| Workaround | Open the NetCentral log file in Notepad or any other text editor to view the complete message.                                                                                                                                                                                                                                                                                                                 |
| Problem    | Messages similar to the following appear in the Profile log file (CR 32679):<br><pre>04.0-2101b021-N: Unresolved internal message (Buffer Values: "controller# 9 reports SN of 00F92510B2081264").</pre>                                                                                                                                                                                                       |
| Workaround | An unresolved internal message is an SNMP message that is not registered in the NetCentral device provider, and so cannot be interpreted and displayed in the NetCentral interface. The message is passed directly from the monitored device to a Profile log entry, as shown here. Such messages can often be read directly. If not, contact Grass Valley support for assistance in interpreting the message. |

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## Transferring Media: General

- Problem** Network transfers fail if the clip being transferred contains an ancillary data track and there is no ancillary data recorded. (CR 49568)
- Workaround** Remove the record channel data track if no ancillary data is available from the signal source. Record the clip again, then transfer the clip.  
*NOTE: Although you can configure a Data Track for both HD and SD channels, only HD ancillary data is supported in this release. Refer to “Version 5.4 features and introductions” on page 4.*
- Problem** When transcoding a large number of clips, Media Manager does not display the correct time to finish transcoding. (CR 75575)
- Workaround** Transcode is a real-time operation. Calculate the time to finish transcoding based on the length of the clips you are transcoding, rather than the time displayed in Media Manager.

## Transferring Media: Fibre Channel Network

- Problem** Four simultaneous transfers between a Profile Network Archive and a Profile XP Media Platform may fail. (CR 36695)
- Workaround** Contact your Grass Valley Service representative for assistance in matching the MTU size on both your Profile Network Archive and your Profile XP Media Platforms. You can also limit simultaneous transfers to three or fewer.
- Problem** A clip stops playing on the destination machine if the clip is still being recorded on the source system and the definitions of the two channels (source and destination) don't match. (CR 30487)
- Workaround** Make sure that the channel definitions match on the source and destination systems, specifically that both are set up with the same number of video, audio, and timecode tracks. Otherwise, you must end the recording and eject the clip before playing it on the destination system.
- Problem** Clips being recorded in loop mode are not updated if a video network transfer is initiated more than once. Applications such as InSync will not correctly update clips being recorded in loop mode. (CR 9966, CR 10619)
- Workaround** There is no workaround for this problem since the content of the clip is endlessly changing. Avoid transferring clips being recorded in loop mode.

## Transferring Media: Ethernet Network

- Problem** A clip stops playing on the destination machine if the clip is still being recorded on the source system and the definitions of the two channels (source and destination) don't match. (CR 30487)
- Workaround** Make sure that the channel definitions match on the source and destination systems, specifically that both are set up with the same number of video, audio, and timecode tracks. Otherwise, you must end the recording and eject the clip before playing it on the destination system.
- Problem** Performing several concurrent transfers may result in the failure of one or more of the transfers. (CR 26284)



Workaround Queue your transfers so that only one is active at any time. This problem will be resolved in a future release.

Problem Transfers are slower when transferring between a system equipped with an RTP I board and one equipped with an RTP II board. (CR 28261)

Workaround There is no workaround at this time. This problem will be resolved in a future release.

## Disk Management

Problem After unbinding a LUN, subsequent attempts to use existing clips or create new ones fail.

Workaround If you unbind a LUN, you must create a new file system before you can record and play. Note that after creating a new file system, you can not use previously recorded material. Be sure to back up your material before performing this operation.

Problem Occasionally, creating a new file system on an existing system does not remove references to pre-existing clips. Attempting to record clips with the same names produces an error message stating that the clips already exist. (CR 43026)

Workaround After creating a new file system to replace an existing one, stop the PdrAccess Control service (vdrsvc -stop at the Command Prompt), delete the `c:\pdrmovie_db` folder from the system drive, then restart the system. This removes the old clip database and ensures that a new empty one is created.

## GVG Disk Utility

Problem Extra controllers appear in the tree view after Unbind All LUNs is used. If you unbind all LUNs on a PFR 500 and then reboot the Profile, then you may see double the controllers and double the LUNs for that PFR500.

Workaround Bind the required LUNs as usual. The bound LUNs will show up under each controller.

Problem PFR500 replacement disk module fails to rebuild. After a disk module failure, and the faulty disk module is replaced, the replacement drive sometimes fails to automatically rebuild.

Workaround Use the following procedure to force disk rebuild:

1. Start the GVG Disk Utility. Ignore any messages about disk drive microcode inconsistencies for now. Do not upgrade microcode on any of the drives at this time.
2. Expand the tree view to view the LUN containing the replacement drive.
3. Right-click the replacement disk, then select **Advanced | Force Rebuild** in the context menu. The rebuild process begins. (You can verify this by checking disk status in the right-hand status pane.)

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On completion, the disk module status changes from rebuild to online. You may need to refresh the GVG Disk Utility display. After the successful rebuild, you should upgrade the drive microcode to the latest version. Contact Grass Valley Support if the rebuild does not proceed as expected.

**Problem** GVG Disk Utility stops responding during RAID Controller discovery. This can occur when using PFR500 storage system with LUNs in *offline* status due to an improper power off sequence.

**Workaround** Contact Grass Valley Support to recover from this condition.

## PFR500 Fibre Channel RAID chassis

**Problem** You cannot set the subnet mask in PFR500 network settings. When trying to set the subnet mask to less than 255.255.255.224, the console program displays an invalid subnet mask error message. This prevents completing the network setup procedure.

**Workaround** During initial network setup, enter a subnet mask of 255.255.255.224, then complete the procedure as directed in the *Installation Guide*. Afterward, repeat the entire procedure again, this time entering your own subnet mask. This time the console program will accept any valid subnet mask.

## PFR600 Fibre Channel RAID chassis

**Problem** Controller settings may be lost when configured with the Ciprico Web Manager.

**Workaround** Use Disk Utility for all your RAID configuration changes. If Grass Valley Service advises you to use Web Manager, always use Microsoft Internet Explorer to view the Web Manager pages.

If you do inadvertently clear your settings, use the Back button to return to your previous settings, then save them. Do not invoke Web Manager from Net Central, since this method does not provide a Back button.

## Profile Protocol

No known problems at this time.

## VDCP Control

**Problem** The Protect command does not prevent clip IDs from being deleted. (CR 10891)

**Workaround** Be very careful when deleting clips.

**Problem** The Profile XP system may respond slowly to VDCP protocol commands during the brief moment that VdrPanel is being minimized. (CR 9621)

**Workaround** Avoid minimizing VdrPanel when one or more panels under VDCP control are performing critical on air operations.

## VDCP Protocol

No known problems at this time.



## AMP Protocol

- Problem** The Time Dome does not change to indicate current play position when the clip is played. This occurs if the clip was recorded without a timecode input. (CR 49554)
- Workaround** Set the timecode mode to Internal Generator. In the local control mode, select the **Options** button, then select **Internal Generator**.

## BVW Protocol

- Problem** The timecode displayed in VdrPanel and on a BVW controller sometimes does not match the actual timecode, but is off by one frame. (CR 38064)
- Workaround** There is no workaround at this time. This problem usually occurs after jog and shuttle operations.

## APIs

- Problem** The Profile Protocol command VdrShuttleAtGenTc (10.14) does not return a data structure that complies with the Profile SDK specification. (CR 35998, CR 43895)

- Workaround** By default, this release provides the following reply data structure for VdrShuttleAtGenTc, which conforms to the specification established in version 2.5.X:

data1: Transaction number

data2: 0 = Success

or

data1: Transaction number

data2: 1 = Failure

data3-6: Error code

If your Prolink use of VdrShuttleAtGenTc implements the reply structure in version 5.0.X or 5.1.X, perform the following procedure:

1. Start Prolink, then close it. This adds a registry key.
2. Use *regedit.exe* to modify Software\Tektronix\Profile\ShuttleAtMode in the registry so that its value is TRUE.
3. Restart Prolink.

VdrShuttleAtGenTc now has the following reply structure:

data1: Transaction number

data2-5: 1 Success / 0 Failure

data6-9: Error code

You can return to the version 2.5.X reply structure by setting the registry key to FALSE.

Similarly, you can configure the reply structure for Pronet by setting the Software\Tektronix\Profile\PronetShuttleAtMode registry key. Setting this to TRUE provides the 5.0.X or 5.1.X reply structure,



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## Maintenance

- Problem** After changing the computer name of your Profile XP system, Fibre Channel transfers fail.
- Workaround** The computer name of your Profile XP system is also stored on the RTP card. To change the name on this card, you must use Configuration Manager to change the Fibre Channel IP address, then restart your system. The new computer name is now correctly stored.
- If you want to use the original Fibre Channel IP address, use Configuration Manager to set the IP address back to what it was before, then restart the system.
- Problem** After replacing the motherboard, the system does not start, and hangs at the blue Windows NT Initialization screen.
- Workaround** The version of Profile XP System Software on the motherboard must match the software version on the other boards in the system. To load the correct version on the motherboard, remove all circuit boards except the processor board, install the desired version of Profile XP System Software, then reinstall the other boards and install Profile XP System Software again. This procedure is detailed in the latest version of the *Profile XP Service Manual*.
- Problem** Diagnostics do not run correctly.
- Workaround** You must disconnect all external I/O cables including connections to the Fibre Channel RAID storage prior to running diagnostics.
- Problem** On older systems with DupliDisk II, rebuilding the system drive using the version 5.4.1 rebuild CD-ROM to restore the system drive proceeds very slowly or fails.
- Workaround** The newer version of the imaging software requires a change to the DupliDisk II configuration. Perform the following procedure prior to restoring your system drive.
1. Insert the *DupliDisk II DUPLI Mirroring Utility* diskette or CD-ROM into the appropriate drive and restart the system.
  2. At the command prompt, type `dupli` to start the application.
  3. In the DupliDisk application, choose **Configure | Startup Operations**.
  4. From the list, choose **Ultra UDMA**, then set it to **Disable**.
  5. Press the ESC key, then choose **Exit**.
- You can now successfully rebuild your system drive.

