



Profile XP System Software 4.0.48 Release Notes

Table of Contents

Grass Valley Group Product Support
Profile XP Media Platform Features
<i>What's new in Version 4.0.48?</i>
<i>Tips</i>
Using Channels in applications
VdrPanel
Tool Box Editor
List Manager
<i>TimeDelay</i>
About Time Remaining
Important RAID considerations
Updating your PFC500 microcode
Using redundant RAID controllers 12
Configurable VDCP stop mode
New system processor board
Performance information
Fibre Channel network compatibility
RAID controller and drive requirements
Software installation
Installing Profile XP System Software 4.0.48
Updating the RS-422 interface board device driver
Viewing version numbers
Removing the existing RS-422 device driver
Installing the RS-422 Board Device Driver
Installing and configuring NetCentral II
Setting the SNMP Trap Destination Address
Controlling the front panel LED
Configuring the Flash LED action
Turning off a Profile XP Media Platform LED
Microsoft Windows NT support
Known problems

Copyright © 2002 Grass Valley Group Inc. All rights reserved. Printed in the United States of America.

This document may not be copied in whole or in part, or otherwise reproduced except as specifically permitted under U.S. copyright law, without the prior written consent of Grass Valley Group Inc., P.O. Box 59900, Nevada City, California 95959-7900

Product options and specifications subject to change without notice. The information in this manual is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Grass Valley Group. Grass Valley Group assumes no responsibility or liability for any errors or inaccuracies that may appear in this publication.

Grass Valley, GRASS VALLEY GROUP, Profile and Profile XP are either registered trademarks or trademarks of Grass Valley Group in the United States and/or other countries. Other trademarks used in this document are either registered trademarks or trademarks of the manufacturers or vendors of the associated products. Grass Valley Group products are covered by U.S. and foreign patents, issued and pending. Additional information regarding Grass Valley Group's trademarks and other proprietary rights may be found at www.grassvalleygroup.com.



Grass Valley Group Product Support

To get technical assistance, check on the status of problems, or report new problems, 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 Group Web site. You can download software or find solutions to problems by searching our Frequently Asked Questions (FAQ) database.

World Wide Web: http://www.grassvalleygroup.com/support/ Technical Support E-mail Address: gvgtechsupport@grassvalleygroup.com.

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.

USA and Americas (includes Latin America and Canada)

Telephone	(800) 547-8949 (Toll Free)
	(530) 478-4148 (Direct Dial Toll Call)
Fax	(530) 478-3181

Europe and UK

UK Regional Service Location	Tel +44 1753 218 777 Fax +44 1753 218 757	Italy	Tel +39 72 901 428 Fax +39 72 905 371
France	Tel +33 145 297 300 Fax +33 145 297 302	Germany	Tel +49 221 1791 234 Fax +49 221 1791 235
Asia Pacific			
Australia	Tel (612) 8877 6800 Fax (612) 8877 6825	India	Tel (91) 11 373 0544 Fax (91) 11 373 0543
China	Tel (86) 10 6235 1185 Fax (86)10 6235 1190	Japan	Tel (813) 5484 6869 Fax (813) 5484 3775
Hong Kong	Tel (852)-2531-3000 Fax (852)-2802-2996	South East Asia	Tel (65) 6 7328 729 Fax (65) 6 7327 649

Authorized Support Representative

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

Profile Users Group

You can connect with other Profile XP Media Platform users to ask questions or share advice, tips, and hints. Send e-mail to profile-users@grassvalleygroup.com to join the community and benefit from the experience of others.

Profile XP Media Platform Features

Profile XP introduces a new line of Profile Media Platforms. The first in this line, the PVS 1000, provides the following new features, in addition to the outstanding features of the Profile Video File Servers:

Up to eight channels in a single I/O chassis. You can order your PVS 1000 with various combinations of inputs and outputs to meet your specific requirements.

- Fibre Channel RAID is the standard disk storage. Optional redundant power supplies, controllers, and hot-spare drives are available for the Fibre Channel RAID units.
- Increased system bandwidth, allowing eight-channel operation at 50 Mb/s and concurrent Fibre Channel transfers. Additional RAID controllers or chassis are required to attain full system bandwidth.
- Optional redundant power supplies and Windows NT system drives.
- Serial Digital Video I/O, SMPTE 259M with a frame buffer on each input.
- Monitor outputs with text overlay and timecode burn-in capability.
- Flexible Audio formats 16/32 channels of AES/EBU or embedded digital audio. An optional analog audio interface is also available. Audio may be stored in AC3 or Dolby E formats. You must supply the appropriate external encoders and decoders for this compressed audio.
- GPI ports, eight inputs and eight outputs.
- Full Profile API support, including Profile Protocol.
- Compatible with VDCP, Odetics, and BVW 75 protocol controllers over RS-422 ports. BVW Insert/Edit operation is not supported.

In addition to a new hardware platform, Profile XP System Software 4.0.48 contains a number of major enhancements:

- The new Configuration Manager lets you create pre-defined channels, which you can use with any Profile XP application. A channel is a set of resources (video and audio inputs and outputs, timecode tracks, encoders and decoders) that you can use with your applications. You can change the resource usage of a channel at any time to meet your needs, or use the factory-default channels for quick initial setup. The *Profile XP Installation Guide* shows the factory-default channels. The *Profile XP System Guide* provides detailed instructions on how to change the defaults.
- All Profile applications, including VdrPanel, now use the channels you create in Configuration Manager to request resources. Conflicts for system resources are reported immediately through easy-to-understand messages. Because of the new central resource management, resources specified by the channel are not assigned until the conflict is resolved.



- The new NetCentral II Lite application provides enhanced error reporting tools which allow you to better understand the current state of your Profile XP system. The optional NetCentral II lets you monitor the status of several Profile XP systems and other products such as some Grass Valley Group modular products or your Fibre Channel switch from a central location through SNMP. You can install NetCentral II on any Windows NT 4.0 or Windows 2000 system.
- ProLink, the Profile Protocol interpreter for your Profile XP RS-422 ports, now includes more status information in its window. Profile Protocol applications also use channels defined in Configuration Manager, and benefit from the same resource conflict reporting as all the other Profile applications. Although previous Profile Protocol configuration files (*.cfg*) are no longer supported, you can use configuration Manager to create channels called VTR1, VTR2, etc. Your existing application will use the resources specified by these channels in exactly the same way it used the old configuration files.
- VdrPanel has a new look. In addition to its use of channels and central resource management, the VdrPanel interface has been redesigned to make it easier for you to get many panels on the screen at the same time. However, except for the removal of resource assignment tools (crosspoints), all the functions of the old VdrPanel are available in the new one.
- The other Profile applications, Media Manager and the optional TimeDelay, Tool Box Editor, and List Manager, are all are essentially unchanged from the 2.5.X and 3.X releases, except for the addition of central resource management. Contact your Grass Valley Group representative to obtain Profile TimeDelay, Tool Box Editor, or List Manager.
- ContentShare Explorer, based on XML technology, allows you to manage your assets on all the Profile systems at your site and around the world. Read the *ContentShare Explorer User Guide* to learn more about this new tool.
- Grass Valley Group has implemented complete API compatibility between this release and those that preceded it. This should ensure that your third-party Profile application will run on a Profile XP Media Platform with few, if any, changes. However, some basic changes in the Profile XP Media Platform design, such as the absence of external SCSI ports for Profile Library System connections, require Grass Valley Group to not support the following API commands in this release:
 - All TekPls commands
 - All TekVME commands
 - PdrCopyMovie, which has been replaced by the TekXfr streaming transfer commands

4

What's new in Version 4.0.48?

This version of Profile System Software includes several improvements introduced in this and earlier versions, in addition to correcting some problems that were present in earlier releases,

- Windows NT Service Pack 6a support. Version 4.0.48 was qualified Windows NT Service Pack 6a, which includes many improvements and provides more reliable operation. If you are upgrading to Version 4.0.48, you should first install Service Pack 6a. "Microsoft Windows NT support" on page 30 tells you where to find Service Pack 6a.
- WebAble support. You can now assign an encoder to record browse video (MPEG-1) at the same time as you record your high-quality video. You can then use the browse video with the tools supplied in the WebAble suite, which operates on the ContentShare Platform. ProBrowse lets you view the proxy video from any Windows 2000 PC on your network, and StreamCode prepares material for Internet distribution. Refer to the latest Profile XP System Guide for information on adding a browse video encoder to a channel.
- **Improved storage efficiency.** In transmission-type applications that don't require offspeed play or jog and shuttle operations, the minimum number of RAID controllers and drives has been reduced. Please refer to "RAID controller and drive requirements" on page 15 for more information.
- New RAID microcode. This new microcode version includes support current RAID controllers, and improves support for 73GB media drives. Be sure to update your RAID microcode using the Configuration Manager File System command after you update your system to Version 4.0.48.
- **Configurable VDCP stop mode.** You can now set each channel under VDCP control in VdrPanel to display either the last frame the current clip or the first frame of the next clip in the group when playback of the current clip is finished. See "Configurable VDCP stop mode" on page 12.
- **Recording synchronous and asynchronous inputs.** The Profile XP Media Platform is a synchronous device. All the outputs are locked to the house reference and all the inputs must be genlocked to that reference and at zero time. The Profile XP Media Platform inputs can handle the anomalous asynchronous case without interruption; video and audio are resampled to the house clock and maintain phase within a window of one video frame. This resampling is not intended to take the place of a frame synchronizer. It provides some protection if an untimed signal is routed to an input, although loss of sync events may result in lip-sync errors. The ability to select an audio clock reference, described in the *Profile XP System Guide*, is no longer included on the Audio Routing page of Configuration Manager. Similarly, the **Allow the signal to pass asynchronously** option on the Video Input page is no longer present.
- Visual C++ version 6.0. This version of Profile System Software was built using Visual C++ version 6.0. Applications built with earlier versions of Visual C++ may not operate correctly, and should be rebuilt using the current Profile SDK and Visual C++ version 6.0.



• Streaming of clips with predefined length. This release supports the streaming of clips with predefined lengths over the video network (Fibre Channel or Ethernet). Software applications such as InSync version 2.0 or higher can now transfer clips with predefined lengths (such as clips modified with BVW Insert Edit) without error. As the clip is modified or recorded, the transfer updates the copy of the clip to its new content.

6

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 three minutes to ensure that the RAID units have time to initialize, then power up the Profile XP Media Platform. If you update the microcode on your RAID systems, be sure to wait at least four minutes between powering up the RAID units and your Profile XP Media Platform on the first power-up after the update.
- **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 control to use streaming transfers over Fibre Channel.

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

Using Channels in applications

Profile applications supplied with this release require the use of channels created in Configuration Manager to assign resources to the applications. Central resource management manages resource conflicts between all applications that use channels. In addition, resource conflicts with third-party applications that do not use channels will be reported by the applications included in this release.

Existing applications that use Profile API commands to assign resources do not need to be changed to operate with the Profile XP Media Platform.

Similarly, Profile Protocol applications using the Named Configuration Space can continue to use the OpenPort command with a configuration name as a parameter to assign the desired resources to that port. However, the OpenPort command now accepts a channel name instead of a file name to allocate resources to the port. Default channels VTR1, VTR2, VTR3, etc. are configured at the factory, so existing controllers should require no changes. Use Configuration Manger to change the definitions of these channels to meet your needs. New controllers and applications may specify any channel name, provided you create channels with the specified names in Configuration Manger.

Configuration files (*.cfg*) created with a text editor or with the Profile Protocol Resources Utility from previous Profile System Software versions are no longer supported.

The following sections briefly describe how to use channels with each of the applications.

VdrPanel

Select a panel, then choose **Controller | Configure** to select the channel to be used by that panel.

Tool Box Editor

Choose **Config | Select Channels** to select the desired channel definition. The **Config | Resources** command is no longer supported.

List Manager

Choose Config | Select Channels to select the desired channel definition.

TimeDelay

Choose **Config** | **Add Panel**, then select the channel to be used by that channel. To change the channel for an existing panel, click on the panel name, then select the desired channel.

8

About Time Remaining

The Time Remaining reported by various Profile applications may differ due to the way time remaining is calculated.

Time Remaining is always based on the amount of free disk space available. You can see the remaining disk space by choosing the Storage tab on the Properties page in NetCentral.

To calculate Time Remaining from the free disk space, an application may use your current recording bitrate and the number of audio and time code tracks. However, if the application is not currently recording or cannot record, it may make assumptions as to video bitrate and audio and time code requirements. For example, NetCentral XP calculates time remaining based on 15Mb/second recording on one video track with four audio tracks and one time code track. If you typically record at 8Mb/second, for example, your actual time remaining may be almost double the time reported by NetCentral.

In addition, Time Remaining is based on the actual media files on your storage system. If you have two clips that refer to the same media files, deleting one of the clips will not free up that space, and the time remaining will not change.

In general, you should use the Time Remaining reported by applications as an indicator only, not a precise number. Use NetCentral to see the actual disk space remaining, and avoid filling your storage system to more than 90% of its capacity.

Important RAID considerations

In addition to the installation and configuration instructions provided in the *PVS1000 Installation Guide*, the *Profile XP System Guide*, and the *PFC500/E Instruction Manual*, please take a moment to read the following PFC500 Fibre Channel RAID sections. These notes provide instructions not included in other Profile XP documentation.

This version of Profile System Software, together with a new version of the RAID controller microcode, provides the following capabilities:

- You can use the latest RAID controllers.
- You can assign drives as hot spares.
- You can attach up to two RAID expansion chassis to a PFC 500.
- You can use the second controller in a PFC 500 as a redundant controller that will take over control of the RAID chassis should the primary controller fail.

To use these features, you must first update the microcode on all your PFC 500 Fibre Channel RAID chassis to the latest version included with this release. The instructions for updating the microcode are included in "Updating your PFC 500 microcode" on page 11.

If you wish to use the redundant controller on your PFC 500 chassis, be sure to follow the addressing instructions provided in "Using redundant RAID controllers" on page 12.

Updating your PFC500 microcode

If you update your Profile system software from a version earlier than 4.0.17, you *must* update the microcode on all your PFC500 Fibre Channel RAID chassis after you install Version 4.0.48 (See "Software installation" on page 17.) This will allow to you take advantage of all of the RAID enhancements and benefit from improved reliability. It will also ensure that you can use the latest RAID controllers as replacement or upgrade boards in your RAID chassis.

To update your PFC 500 Fibre Channel RAID microcode:

- 1. Start Configuration Manager and choose File System.
- 2. Click Next twice to open the third page, Disk Utility.
- 3. In the Disk Utility Page 3 of 3, browse for the latest RAID microcode file in the c:*Profile\microcode* directory on the system drive. Select the .*bin* file with the highest "flare" or "prom" version number. For example, *flare32104prom202.bin* is more recent than *flare32103prom202.bin* and *flare32103prom203.bin* is more recent than *flare32103prom202.bin*.
- 4. Click **Finish** and wait for the microcode to load.

Disk Utility - Page 3 of 3	×
RAID controller:	
HAID controller: Load new microcode only when instructed to by Grass Valley support or release notes.	RAID controller microcode version: 3.21.3 Load new microcode from: [C:\profile\microcode\flare32103prom] Browse
< <u>B</u> ack	Next > Einish Cancel i

- 5. When the loading is completed, shut down and turn off the power to the Profile XP system *and to all attached PFC 500 Fibre channel RAID chassis*. Failure to shut down the RAID units will prevent the new microcode from taking effect.
- 6. Turn on the power to all the RAID chassis, wait *four* minutes to allow the new code to be loaded onto the controller, then turn on the Profile XP system.

Using redundant RAID controllers

Connecting the optional second RAID controller on the PFC 500 Fibre Channel RAID chassis ensures improved availability of your material, since the redundant controller will take over operation of all the attached LUNs if the primary controller fails.

If you decide to use the redundant controller, be sure to follow these instructions.

- 1. Connect your PFC 500 as described in the Profile XP System Guide.
- 2. *Do not* set the Fibre Channel address IDs as described in the *Profile XP System Guide*. All controllers, primary and redundant, must have unique Fibre Channel address IDs. To ensure that all the Fibre Channel address IDs are unique, first assign sequential addresses starting at 0 to all the primary controllers, then continue the sequence, assigning subsequent address IDs to the redundant controllers. Use the following table to determine the correct Fibre Channel address IDs for your PFC500 Fibre Channel RAID controllers.

Number of PFC 500S	PFC500 chassis	Primary controller address ID	Redundant controller address ID
1	First	0	1
2	First	0	2
	Second	1	3
3	First	0	3
	Second	1	4
	Third	2	5

Configurable VDCP stop mode

You can now select which frame to display when playback of the current clip finishes. and the next clip in the group must be cued but not played immediately following the current clip. VdrPanel allows you to configure the stop mode on each panel under VDCP control.

- 1. Select the panel that you wish to configure.
- 2. Choose an appropriate stop mode from the following list:
- **Options | VDCP Stop Mode | Last Frame** freezes on the last frame of the current clip. The next clip is cued and ready to play. The preroll on the VDCP controller must be set to at least two frames for this operation. If the preroll is less than two frames, the Non-End Mode will take effect.
- **Options | VDCP Stop Mode | End Mode** freezes on the first frame of the next clip. The preroll on the VDCP controller must be set to at least two frames for this operation. If the preroll is less than two frames, the Non-End Mode will take effect.
- Options | VDCP Stop Mode | Non-End Mode plays several frames of the next clip in the group, then recues the clip and freeze on its first frame.

New system processor board

This release supports a new system processor board that is used on current Profile XP systems. The previous system processor board has been discontinued.

NOTE: Although this and subsequent versions of Profile XP System Software support both models of system processor board, you cannot use earlier versions of Profile System Software (prior to Version 4.0.16) with the new system processor board.

If you need to replace a defective system processor board, be sure to order the correct part number to match your existing board. Your Profile XP system will not operate correctly if you install the newer model system processor board in a Profile XP system running versions of Profile System Software earlier than 4.0.16.

Please consult the following table to identify the two models of system processor board. The table also includes information on drivers required to use the two boards. The appropriate drivers are installed at the factory. Be sure to load the appropriate drivers if you rebuild your system drive. These drivers are also located in the same subdirectories on the Profile System Software CD-ROM.

System Processor	Hardware	Driver	Location
115-0002-XX	VGA adapter for	Intel 810 Graphics	c:\profile\Drivers\Intel_810
(New board)	use with this	Controller Hub	
 	system processor.		
	Ethernet adapter	Intel (R) GD82559ER	c:\profile\Drivers\Intel_GD82559ER
	for use with this	Fast Ethernet Adapter	
• • • •	system processor.		
039-0081-XX	VGA adapter for	ATI Rage PRO	c:\profile\Drivers\ATI_RAGE
(Previous board)	use with this		
I.	system processor.		
	Ethernet adapter	Intel EtherExpress	c:\profile\Drivers\Intel_PRO
	for use with this system processor.	PRO Adapter 82558	

Performance information

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

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 which uses Profile APIs or FTP over Fibre Channel to move MPEG material to and from Profile XP systems and PDR 300s. Please note the following when using your Profile XP Fibre Channel Video Network.

- Clips that include Browse Video, required for WebAble support, can only be transferred to other Profile XP Media Platforms running Profile System Software version 4.0.40 or higher versions of 4.0.X. They cannot be transferred to Profile Video File Servers (PDR 100, PDR 200, PDR 300, or PDR 400), or to High-Definition Profile XP Media Platforms (PVS 2000). Transfers to Profile XP Media Platforms running Profile System Software version 5.0 have not been qualified.
- 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 any PDR 300 systems to the same Fibre Channel fabric as your Profile XP, they must use Profile System Software version 2.5.X and switch-compatible microcode (3.0.10).
- Media Manager included with this release can connect to Profile Video File Servers such as the PDR 300. However, the Media Manager included with Profile System Software versions earlier than 2.5.13 or 3.2.4 cannot connect to or manage clips on a Profile XP Media Platform. Please obtain and install the latest version of 2.5 or 3.2 software if you want to use Media Manager on a PDR 200, PDR 300, or PDR 400 to view and manage clips on a Profile XP Media Platform.

RAID controller and drive requirements

This release includes improved storage techniques that optimize performance in a transmission application. The minimum number of RAID controllers and drives are reduced on systems that do not perform any off-speed play, jog, or shuttle operations.

Table 1 shows the minimum number of RAID controllers and drives required for a transmission application (normal speed operation, no off-speed play, no jog or shuttle), Table 2 shows the minimum number of RAID controllers and drives required for an application that performs occasional off-speed play or jog/shuttle operations.

The minimum requirements in these tables are based on:

- Two audio tracks per video
- One timecode track per video
- No video network streaming transfers

Contact your Grass Valley Group representative to determine the exact number of RAID controllers and drives that you require for your application.

Profile	Number of		Video Data Rate Per Channel					
XPModel	Channels	8Mb/s	12Mb/s	15Mb/s	24Mb/s	30Mb/s	40Mb/s	50Mb/s
PVS1002	2	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500
PVS1022 PVS1004	4	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	10 drives 1 PFC500	10 drives 1 PFC500
PVS1024	6	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	10 drives 1 PFC500	10 drives 1 PFC500	15 drives 2 PFC500
PVS1044 PVS1026 PVS1062 PVS1008	8	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	10 drives 1 PFC500	10 drives 1 PFC500	15 drives 2 PFC500	20 drives 2 PFC500

Table 1. Transmission application RAID controller and drive requirements

 Table 2. Jog/shuttle RAID controller and drive requirements

Profile	Number of		Video Data Rate Per Channel					
XPModel	Channels	8Mb/s	12Mb/s	15Mb/s	24Mb/s	30Mb/s	40Mb/s	50Mb/s
PVS1002	2	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	10 drives 1 PFC500	10 drives 1 PFC500
PVS1022 PVS1004	4	5 drives 1 PFC500	5 drives 1 PFC500	5 drives 1 PFC500	10 drives 1 PFC500	15 drives 1 PFC500	15 drives 1 PFC500	20 drives 2 PFC500
PVS1024	6	5 drives 1 PFC500	10 drives 1 PFC500	10 drives 1 PFC500	15 drives 1 PFC500	20 drives 1 PFC500	20 drives 2 PFC500	30 drives 3 PFC500
PVS1044 PVS1026 PVS1062 PVS1008	8	10 drives 1 PFC500	10 drives 1 PFC500	10 drives 1 PFC500	20 drives 1 PFC500	20 drives 2 PFC500	25 drives 3 PFC500	30 drives 3 PFC500

Software installation

Profile XP System Software 4.0.48 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 4.0.48.

If your Profile XP system is operating with an earlier version of Profile XP System Software, you should upgrade 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.

Installing Profile XP System Software 4.0.48

The new Profile XP System Software 4.0.48 installation program includes enhanced features which allow you to update programmable parts on the various Profile XP boards during the installation process. Be sure to read the following instructions as well as the on-screen messages to successfully install this software.

Follow these steps install to Profile XP System Software 4.0.48.

- >>> Do not delete the contents of the c:\profile directory before installing Profile XP System Software 4.0.48. Do not use Add/Remove Programs in Control Panel to remove an older version of Profile XP System Software or any Profile applications.
 - 1. Log out of the system to ensure that no applications are running.
 - 2. Hold the Shift key down during start-up to prevent auto-logon as user profile.
 - 3. Log in as *administrator*. The default *administrator* password on a Profile XP system is *triton*.
 - 4. Shut down all Profile applications, such as VdrPanel, ProLink, ProNet, etc.
 - 5. Choose Start | Settings | Control Panel | Devices. In the Devices dialog box, select PCI_WNT and click Stop.
 - 6. If you use List Manager or any other application that uses the Event Scheduler Engine and you are upgrading from version 4.0.4 or earlier, delete *master.mmf* from the *c:\profile* directory. Older versions o *mmf* files are not compatible with the new engine.
 - 7. Insert the Profile XP System Software 4.0.48 CD-ROM in the CD-ROM reader or connect to a network drive containing the downloaded software.
 - 8. The software installation will start automatically. (You may choose to run the *setup.exe* program by choosing **Start | Run** and specifying the appropriate drive.).

NOTE: Be sure to install the software in the default c:\profile *directory. Specifying another location may result in incorrect operation of the software.*

9. If an error message appears stating that services could not shut down because there are applications attached, ensure that all applications are closed, then click **OK**. You may safely ignore any subsequent service error messages.



- 10. When the installation process is complete, choose **Yes** when prompted to restart the system.
- 11. Update your PFC500 RAID chassis microcode as describe on "Updating your PFC500 microcode" on page 11. If the current microcode version is the same as the version included on the CD-ROM, you do not need to update the microcode.
- 12. Update your RS-422 interface board driver as described in "Updating the RS-422 interface board device driver" on page 18.
- 13. If you are using NetCentral II to monitor your Profile XP system from a remote monitoring station, re-install the NetCentral II Profile XP agent.

Your Profile XP System Software 4.0.48 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. 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 Comtrol 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.

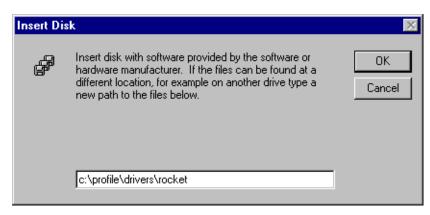
You are now ready to install the updated RS-422 device driver.

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.

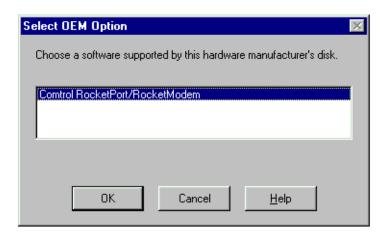
To install the RS-422 device driver:

- 1. Make sure you are logged on as *Administrator*. The factory default password on the Profile system for *Administrator* is *triton*.
- 2. Open the 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. Click the Add button, and then the Have Disk... button.
- 6. When you are prompted, type c:\profile\drivers\rocket as the path of the directory containing the driver files and click OK.





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



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

Add Device Wiza		X
	Select the bus type for your board: ISA bus PCI bus	
	< <u>B</u> ack <u>N</u> ext > Cancel Help	

9. Select RocketPort as the board type, then click Next.

Add Device Wize	ard	×
	Select your board model: RocketPort	
	< <u>B</u> ack <u>N</u> ext > Cancel	Help

10. Select eight ports on the hardware, then click $\ensuremath{\mathsf{Next}}$.

Add Device Wiza	ard	×
	How many ports are on the hardware?	
	< <u>B</u> ack <u>N</u> ext > Cancel Help	

11. Click Finish to close the Add Devices Wizard and open the Device Properties dialog box.



Device Properties ? X
Device Setup
ROCKET PORT
Summary
RocketPort - 8 PCI
Name: Rocket #1
- ISA Bus Settings
I/O Base Address: N/A
COM Port Range
Starting COM Port: COM3
OK Cancel Help

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

Comtrol RocketPort/RocketModem Setup	? ×
Main Setup Options	
Configuration	
COM3 COM4 COM5 COM6 COM7 COM7 COM9 COM9 COM10 Add <u>Remove</u> <u>Properties</u>	
OK Cancel H	Help

13. Choose the Options tab in the Comtrol RocketPort/RocketModem Setup dialog box.

_

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

Comtrol RocketPort/RocketModem Setup	? ×
Main Setup Options	
Troubleshooting Options <u>V</u> erbose Event Log	
Performance Adjustments	
Scan Rate(ms):	
RS-485 Enable RS-485 options for all devices (NOTE: External RS-232 to RS-485 converters may be required when stardard ports are used in RS-485 mode)	
Defaults	
OK Cancel H	elp

- 15. Choose **OK** to accept your changes in the RocketPort/RocketModem Setup dialog box.
- 16. Chose **OK** to save new configuration settings and exit the setup.
- 17. Click **Close** in the Network dialog box.
- 18. Restart the system. Logon as *Profile*. The factory default password for the *Profile* user account is *profile*.

Installing and configuring NetCentral II

This version of Profile System Software includes NetCentral Lite version 1.0, which is installed on all Profile XP Media Platforms that are shipped from the factory with Profile System Software version 4.0 or higher.

Upon initial setup, or if you change the IP address of your Profile XP Media Platform, you must configure your Profile XP Media Platform's SNMP Trap Destination Address as described in "Setting the SNMP Trap Destination Address" on page 26. You must also set the SNMP Trap Destination address if you wish to monitor your Profile XP Media Platform from a remote monitoring station using NetCentral II.

If you use the latest version of NetCentral II, version 2.1, you should take note of the new ability to control the front panel LED, and read "Controlling the front panel LED" on page 27 to learn how to configure this action.

Setting the SNMP Trap Destination Address

If you wish to use NetCentral II Lite to monitor your Profile XP Media Platform, or NetCentral II to monitor several Profile XP Media Platforms, you must ensure that the SNMP Trap Destination address on each Profile XP system is correctly set.

Be sure to set the following SNMP Trap Destination addresses:

- The IP address of the local Profile XP Media Platform, even if it is not networked.
- The IP address of the monitoring station on which you install and run the optional NetCentral II.

NOTE: You must update the SNMP Trap Destination address if you subsequently change the IP address of the local system or the monitoring station.

To set the SNMP Trap Destination addresses on each of your Profile XP Media Platforms:

- 1. Configure the IP address of the Profile XP Media Platform for operation in your network environment as explained in the *Profile XP System Guide*. You must also set the IP address of the monitoring station, a PC connected to your Ethernet network.
- 2. On the Profile XP Media Platform, right-click the Network Neighborhood icon, choose **Properties**, then select the Services tab.
- 3. Double-click SNMP Properties from the list of services, then choose the Traps tab.
- 4. Enter public as the Community Name.
- 5. Edit the local IP address in the Traps Destinations list to match the new address of the local system. Add the IP address of the remote monitoring station if applicable.
- 6. Close all the open Network windows.
- Using My Computer or Windows NT Explorer, delete the file called *NetCentral.net* from the *c:\profile* directory. This file may not exist if you have never run NetCentral II Lite.
- 8. Restart the system.

Controlling the front panel LED

Beginning in version 2.1 of the Profile XP device provider, you can configure the LED on the front panel of the Profile XP Media Platform to flash whenever an alarm or warning condition occurs on that Profile XP Media Platform. This action is different from other NetCentral actions in that it is device specific—the action only goes into effect (triggering the LED) for the single device from which the alarm or warning message originates, rather than going into effect for all devices.

This action is configured by default when you install the device provider or NetCentral II Lite. You can change the LED configuration from the NetCentral monitoring station, as explained in this section.

Configuring the Flash LED action

1. In the NetCentral main window, click **Configure | Actions**. The Actions dialog box opens.

Actions			×
- 👯 🖫	nessage is received. I	n an action when an a f the message matche following rules, then th	s the severity
Apply the followi	ng rules:		
For alarms and	warnings, from Profile	: XP, Flash LED	<u>R</u> emove <u>P</u> roperties
•			1
Add rule to list:			
Message <u>S</u> everi 🔽 Alarm 🔽 🏌		<u>•</u>	Add to List
		OK	Cancel

The "For alarms and warnings, from Profile XP, Flash LED" rule is displayed as the default rule for this action.

- 2. If you want to change the default rule, do the following:
 - a. Select the default rule and click Remove.
 - b. As indicated by the interface text, create a new rule for this action by selecting Alarm or Warning. Then, in the Action list, select **Flash LED**.
 - c. Click the Add to List button. The Flash LED Configuration dialog box opens.

Continue with your configuration as instructed in step 4 of this procedure.

3. If you want to accept the rule as it is, select the rule and click **Properties**. The Flash LED Configuration dialog box opens.



- 4. If your environment uses unique SNMP community names, enter the appropriate SNMP community name. Otherwise, accept "public" as the default name.
- 5. Select the option that controls the LED as desired. In most cases you will select "On" or "Flash" to activate the LED for alarms or warnings.
- 6. Click **Test**. The Test Configuration dialog box opens.

T	est Configuration	×	(
	Profile XP		
	Name or IP Address :	ED_XP2	
		OK Cancel	

7. Select the name of one of your Profile XP Media Platforms and click **OK** on the dialog box and on the "...triggered successfully..." message that appears. The Firing Action dialog box appears.

Firing Action	×
Press "Stop" to cancel the action.	
Stop	

8. After you have verified that the LED is behaving correctly as configured, click **Stop** on the Firing Action dialog box. You can also stop the action as explained in the next procedure section titled *Turning off a Profile XP Media Platform LED*.

Turning off a Profile XP Media Platform LED

If a previous alarm or warning message triggers the LED on a Profile XP Media Platform, use the following procedure to turn the LED off.

- 1. On the NetCentral monitoring station, open the NetCentral main window.
- 2. Click Configure | Actions. The Actions dialog box opens.
- 3. Select a "Flash LED" rule and click **Properties**. The Flash LED Configuration dialog box opens.
- 4. Select Off and click Test. The Test Configuration dialog box opens.
- 5. Select the Profile XP Media Platform whose LED you want to turn off and click **OK** on the dialog box and on the "...triggered successfully..." message that appears. The Firing Action dialog box appears.

Firing Action	×
Press "Stop" to cancel the action.	

- 6. Verify that the LED is off and click **Stop** on the Firing Action dialog box.
- 7. In the Flash LED Configuration dialog box, select **On** or **Flash** to return to your previous setting for the rule. Click **OK** on open dialog boxes to save settings and close.

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. 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 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".

Known problems

The following limitations are present in this Profile XP System Software 4.0.48 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	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 4.0.48" on page 17, you must manually stop the PCI_WNT device before installing Profile System Software. To recover from the hang:
	1. Open Task Manager and end the InstallShield Wizard task.
	2. Choose Start Settings Control Panel Devices. In the Devices dialog box, select PCI_WNT and click Stop.
	3.Run <i>setup.exe</i> again.
Problem	After installing Profile XP System Software 4.0.48, VdrPanel may generate an error message about missing configurations.
Workaround	Open each panel and reassign the desired protocol and port for the panel.
Startup	
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 three or four minutes.
	3.Profile XP Media Platform.
Problem	The Profile XP system is slow to start when it contains a large number of 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.
Problem	Occasionally, after a power up of the system, Configuration Manager does not start.
Workaround	Restart Windows NT (Start Shut Down Restart the computer).

Services

Problem	An SNMP application error message may appear when you shut down PDR Access Service (VDR Service), such as when you launch diagnostics or shut down the system without closing applications such as VdrPanel. (10814)	
Workaround	You should restart your system if you see this message.	
Recording		
Problem	VdrPanel may cease to respond if the disk system fills up. (17878)	
Workaround	Do not record enough material to fill the disk system. Avoid exceeding approximately 90% of your disk capacity. You can set NetCentral to advise you when your disk system is approaching full capacity.	
Video		
Problem	Occasionally, playout may be corrupted if you rapidly switch between play, shuttle, and rewind on open-GOP clips. (17773)	
Workaround	Normal playout of open-GOP clips preforms as expected at all speeds. If you need to shuttle through material, you should avoid recording open-GOP clips.	
Audio		
Problem	Audio popping is heard on embedded audio outputs when switching from play back (PB) to E to E if the output is zero-timed.	
Workaround	Set output channels to E to E timing, not zero timed.	
Problem	Occasionally, recorded audio may be offset from its associated video (lip sync problems), or contain short periods of noise. (11683, 12268)	
Workaround	Do not mix record and playback audio channels in a group of four audio channels. Make sure that all of the audio channels in each group of four audio channels are assigned as either record or playback. For example, if audio channels 1 and 2 are assigned to a record channel, you must assign audio channels 3 and 4 to a record channel, too.	
Profile Applications		

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.

Problem	Media Manager does not report the audio compression type on the clip properties page when the clip includes AC3 or Dolby E audio. (17339)
Workaround	No workaround at this time.
Problem	The Media Manager Paste Special command transfers only the clip material between the in and out points of the second and subsequent clips when more than one clip is pasted. (4651)
Workaround	If you wish to transfer all of the clip material of several clips to the destination, use Paste Special on one clip at a time. Use the Transfer Monitor to verify that each transfer is complete before copying and using Paste Special to transfer the next clip.
Problem	List Manager or the Event Scheduler Engine fails to start correctly and error messages concerning <i>master.mmf</i> or the location of the Event Scheduler Engine appear. (8873)
Workaround	Delete <i>master.mmf</i> from the <i>c:\profile</i> directory if you upgraded Profile System Software from a version earlier than 4.0.4. The new engine is unable to use <i>.mmf</i> files from earlier versions.
Problem	Closing the Event Scheduler window by clicking the Close button generates an error message. (18414)
Workaround	Type exit at the command prompt to close the window.
Problem	Clicking the Edit button when the edit list is not open hangs the List Manager application. (17528)
Workaround	There is no workaround at this time.
Problem	The System Fault LED does not light when errors occur. (19256)
Workaround	The latest version of NetCentral II allows you to configure the operation of the System Fault LED. Contact Grass Valley Group Support for information on obtaining the latest version of NetCentral II.
Problem	The ends of longer NetCentral messages may not be visible in the Log Viewer (WinTail). (7318)
Workaround	Open the NetCentral log file in Notepad or any other text editor to view the complete message.
Problem	InSync does not copy clips while recording is in progress. (9615)
Workaround	InSync waits for an active recording operation to complete before performing any subsequent copies, including copies of clips recorded on other panels. Avoid very long recording operations and periodically stop all recording to ensure that all of your material is transferred to the backup system.



Problem	If you install NetCentral, then reinstall Profile XP System Software 4.0.48, NetCentral Lite replaces NetCentral.
Workaround	You must reinstall NetCentral after installing Profile XP System Software 4.0.48.

Configuration

Problem	Configuration Manager falsely shows that the Fibre Channel and Ethernet video network boards are not operational. (18799)
Workaround	The boards should operate correctly. If not, test the boards using by using the Diagnostics as described in the <i>Profile XP Service Manual with NetCentral</i> .
Problem	On a PVS 1008, which has no encoders, LTC is not read on input channels even though the LTC input is assigned in Configuration Manager. (19441)
Workaround	There is no workaround at this time.

Fibre Channel or Ethernet transfers

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. (9966, 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.
Problem	The API command PdrCopyMovie fails. (18420)
Workaround	Use the streaming API commands (Xfr) to move material between machines.

Disk Management

Problem	After unbinding a LUN, subsequent attempts to use existing clips or create new ones fail. (4635)
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	After unbinding a LUN, you can't bind any LUNs as Data. (10783)
Workaround	Close the Disk Utility window by clicking Finish, then reopen the window. You can now bind LUNs as Data.

Profile Protocol

No known problems at this time.

VDCP Protocol

Problem	The Profile XP system may respond slowly to VDCP protocol commands during the brief moment that VdrPanel is being minimized. (9621)
Workaround	Avoid minimizing VdrPanel when one or more panels under VDCP control are performing critical on air operations.

Odetics Protocol

Problem	Occasionally, a clip may cue to a frame three or four frames earlier than the specified frame. (19123)
Workaround	Cue the clip again, or shuttle to the desired frame.
Problem	Using the FittedMedia commands (VdrAttachFittedMedia, VdrAttachFittedMediaWithMarks) on long-GOP clips may display

	unexpected frame sequences when a clip is played. (15802)
Workaround	You can ensure correct playout in this situation by using I-frame only clips with FittedMedia commands.

Diagnostics

APIs

Problem	Profile applications do not start or do not operate correctly after running diagnostics.
Workaround	You must restart Windows NT (Start Shut Down Restart the computer) after running diagnostics.
Problem	The Profile XP diagnostics no longer start as described in the <i>Profile XP Service Manual</i> .
Workaround	To start the Profile XP diagnostics:
	1. Disregard the "Before you begin" section in the <i>Profile XP Service</i> <i>Manual</i> . Instead, before you start the Profile XP diagnostics, disconnect all video and reference signal cables. Do not disconnect Fibre Channel and external disk connections.
	2. Follow the instructions beginning with "Starting Profile XP diagnostics."

Problem	The Profile XP diagnostics slot configuration display, described in the <i>Profile XP Service Manual</i> , is no longer available.
Workaround	The latest version of Profile XP diagnostics no longer includes the slot configuration panel. To view the slot configuration, start Configuration Manager and choose View Board Location .