

## Installing the NetCentral Agent and Device Provider for the Profile XP Media Platform

These instructions explain how to set up a Profile XP Media Platform for monitoring by the NetCentral system version 4 (IV) or higher, as follows:

- How to install the Profile XP device provider on the NetCentral Server PC. The Profile XP device provider files are copied onto the NetCentral server PC when the NetCentral manager software is installed.
- How to unlock the SNMP agent on the Profile XP Media Platform to be monitored. The unlocking mechanism for the agent is on the *NetCentral Profile XP Agent* CD-ROM.
- How to add the FTP Service (if it is not already running) and set it up on a Profile XP Media Platform, which allows someone using NetCentral to open Profile XP logs. The FTP server is available as part of Microsoft Windows NT.

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## **About Device Providers and SNMP Agents**

The NetCentral system is a suite of software modules that work together to monitor and report the operational status of TV and video equipment from a NetCentral server PC and its network connected clients.

On each monitored device, there is a software module called an *SNMP agent*. The agent allows the device to collect and store management information (such as disk errors, temperature, video and audio status) and make this available to network management stations using SNMP (Simple Network Management Protocol). On a Profile XP Media Platform, the agent is embedded in the Profile XP system software.

On the NetCentral server PC, the *NetCentral Manager* software module is installed. NetCentral Manager is an SNMP manager application that performs all the centralized monitoring functions and provides the primary user interface. NetCentral Manager requires a software component called a *device provider*. The device provider provides device specific information to NetCentral Manager including information for a customized user interface to monitor device status and to set up monitoring parameters. A device provider must be installed for each type of device monitored. The device provider files are copied onto the NetCentral server PC when the NetCentral manager software is installed, which makes the Profile XP device provider available for installation from the local machine.

#### **Device Providers installed**

The Profile XP Media Platform Device Provider must be installed on the NetCentral server PC. In addition, you must install device providers for the RAID storage devices and Fibre Channel network switches (if any) that you use with your Profile XP system. Refer to the following list of device providers that are available for installation from the NetCentral server PC:

- Profile XP Media Platform
- PFR 500/600 Fibre Channel RAID Chassis (Ciprico Disk Array)
- PFR 700 Fibre Channel RAID Chassis (NEC Disk Array)
- Brocade Fibre Channel Switch
- QLogic Fibre Channel Switch

If you use PFC500 RAID storage devices, it is not necessary to install a RAID storage device provider. This is explained in the next section *Monitoring Profile XP RAID storage in NetCentral*.

#### Monitoring Profile XP RAID storage in NetCentral

PFC 500 RAID storage is monitored "in-band", which means the status information from the RAID chassis is communicated to the attached Profile XP via the Fibre Channel connection. This status information is then reported to the NetCentral system as a subsystem of the Profile XP Media Platform. Therefore, no RAID storage device provider is required for PFC 500 RAID devices.

PFR 500/600 and PFR 700 RAID storage is monitored "out-of-band", and requires additional configuration steps. One or more SNMP agents run on the RAID Chassis itself. As a result, the RAID chassis appears in NetCentral as one or more standalone devices rather than as a subsystem of the Profile XP platform.

Communication with NetCentral takes place over the RAID Controller Ethernet port on a PFR 500/600 RAID chassis and over the LAN card Ethernet port on a PFR 700 RAID chassis. To monitor PFR 500/600 or PFR 700, you must follow the cabling and network configuration instructions found in the *Installation Guide* for your Profile XP model.

PFR 500/600 and PFR 700 device providers must be installed on the NetCentral server PC. Once you've cabled and configured these RAID devices as directed, you can add them to the list of monitored devices in the NetCentral interface. For PFR 500/600 RAID chassis, if the redundant RAID Controller option is installed, both RAID controllers can be added to NetCentral.

#### For more information

For more information about NetCentral, how it works, and how to configure its features, refer to the *NetCentral User Guide*. For information about specific NetCentral messages that appear with regard to the Profile XP Media Platform, refer to the *Profile XP Service Manual*.

## Installing the device provider on the NetCentral server PC

For each type of device that you monitor with NetCentral, there must be a corresponding device provider software component installed and registered on the NetCentral server PC. To monitor a Profile XP Media Platform you typically install multiple device providers.

To install the Profile XP device providers on the NetCentral server PC:

- 1. At the NetCentral server, log on to NetCentral manager with administrator-level access rights. (Tip: In NetCentral, select File | Logon)
- 2. In NetCentral manager, click File | New | Device Provider.
- 3. Accept the license agreement, the select **Next**. The Device Provider Installation dialog box opens.

Device Provider Installation         Select the device providers to install         Install available device providers as selected from the following list.         Image: Profile XF         Image	NetCentral Setup Information     This option is for monitoring a stand-alone (not Open SAN)     Profile XP system and its connected RAID storage     devices.     Profile XP system monitoring requirements are as follows:         - This option installed on the NetCentral server PC         - Agent CD installed on the NetCentral server PC         - FTP server installed and configured on Profile XP system         (Prise and SNMP trap destination set on Profile XP         system         PFR 500/600/700 RAID device monitoring requirements         are as follows:         - Network connection to RAID device         - I'le address and SNMP trap destination set on RAID         device         Save Print         Save Print         Save print         Save privite         Save Privite
	< <u>B</u> ack <u>N</u> ext > Cancel

- 4. In the device provider list, select **Profile XP**.
- 5. Also select device providers for the types of RAID storage device(s) and Fibre Channel switch(es) that you use. Refer to "Device Providers installed" on page 2.
- 6. Click Next.

## NOTE: If you have an updated Profile XP Device Provider, select the Have Disk option, then click Next and browse to the .ncp file.

7. When installation is complete, continue with the next procedure, *Unlocking the SNMP* agent on the Profile XP Media Platform.

## Unlocking the SNMP agent on the Profile XP Media Platform

The SNMP service must be running on each Profile XP Media Platform to be monitored. To determine if the SNMP service is running, right-click the Network Neighborhood icon and select **Properties**. Select the **Services** tab and verify that the SNMP Service is listed in the Network Services box. If it is not, install it using standard Windows operating system procedures.

Use the following steps to unlock the agent on the Profile XP platform:

- 1. On the Profile XP system, log on as administrator.
- 2. Insert the *NetCentral Profile XP Agent* CD-ROM in the Profile XP Media Platform's CD-ROM drive. Browse the CD-ROM contents and double-click on *ProfileXP\_NetCentralAgent.exe* to start the installation program.
- 3. Click **Next** in the install wizard Welcome page, then follow the instructions given by the installation program as they appear.
- 4. Click Next and Finish to complete installation.
- 5. Proceed to the next step "Add the Profile XP and configure SNMP" on page 5.

### Add the Profile XP and configure SNMP

SNMP traps are unsolicited messages that the Profile XP Media Platform sends to NetCentral Server PC. For instance, if one of the power supplies in a Profile XP system fails, the agent initiates an SNMP trap that signals the NetCentral server PC and sends it the failure information. Each Profile XP system must be configured with the correct IP address of the NetCentral server PC to ensure that its traps reach the appropriate destination.

To have the NetCentral manager software automatically add the Profile XP Media Platform and configure its SNMP trap destination, do the following:

- 1. On the NetCentral server PC, open the NetCentral manager interface and logon to NetCentral as administrator. (Tip: In NetCentral, select File | Logon)
- 2. Wait while NetCentral auto-discovers a Profile XP Media Platform on the local network. This can take several minutes. The Profile XP must have its SNMP agent unlocked. If a Profile XP Media Platform is not on the NetCentral server PC's local network or is otherwise not added through auto-discovery, click File | New | Device | Profile XP and enter the IP address of the Profile XP. When discovered, the Profile XP appears in the Tree view of the NetCentral interface. Proceed as follows:
  - If the name or IP address of the Profile XP appears as black text, it means the Profile XP's SNMP properties are already properly configured. Skip ahead to step 6 of this procedure.
  - If the name or IP address of the Profile XP appears as gray text, it means the Profile XP's SNMP properties are not yet configured as required. Continue with



the next step in this procedure.

- 3. Allow automatic processes to continue to run as they attempt to configure the Profile XP's SNMP properties. These automatic processes enter the IP address of the NetCentral server PC as a trap destination. Track these processes by viewing the "SNMP Trap Target Status" message in the Messages view.
- 4. When the message reports that NetCentral has successfully configured SNMP properties on the Profile XP system, restart SNMP service on the Profile XP system. This puts the SNMP configuration changes into effect. To restart SNMP service, do the following:
  - a. On the Profile XP system, click **Start | Settings | Control Panel**. Open the **Services** icon.
  - b. Select SNMP.
  - c. Click Stop. Windows stops the service.
  - d. Click Start. Windows starts the service.
  - e. Close dialog boxes.
- 5. On the NetCentral server PC, right-click the Profile XP, select **Trap Validation**, and then proceed as follows.
  - If the Profile XP name is black (not grayed-out) in the Tree view proceed with the next step in this procedure.
  - If the Profile XP name is still grayed-out, continue with "Manually configure the SNMP trap destination" on page 7 and then return to this procedure.
- 6. If applicable, add the Profile XP's RAID storage device(s) and Fibre Channel switch(es) to the NetCentral system. Refer to "Monitoring Profile XP RAID storage in NetCentral" on page 3.
- 7. Continue with "Setting up the FTP Service (Peer Web Server) on a Profile XP Media Platform" on page 9.

## Manually configure the SNMP trap destination

To manually configure the trap destination you need the following information:

- The names of the SNMP communities to which the media platform belongs. The default name is "public". If you use other SNMP community names, make sure you set trap destinations for each one.
- The IP address of the NetCentral server PC.

To check, add, edit, or remove trap destinations on the Profile XP system:

- 1. On the Profile XP system, log on as administrator.
- 2. On the desktop, right-click the Network Neighborhood icon and select Properties.
- 3. Select SNMP Service and click Properties.
- 4. Select the **Traps** tab.
- 5. Enter the name of the SNMP community and click the Add button adjacent to the text box.
- 6. Check the Trap Destinations box and determine if the IP address of your NetCentral server PC is already listed. Proceed as follows:
  - If the IP address and community name of the NetCentral server PC is already correctly listed, skip ahead to the next step in this procedure.
  - If the IP address and community name of the NetCentral server PC is not listed, enter it as a trap destination. Click the Add button below the Trap Destinations box. Enter the IP address in the Service Configuration dialog box that appears and click Add.
  - If the IP address is not correct, edit the trap destination. Select the trap destination and click **Edit**. (Refer to the figure that follows.)

Microsoft SNMP Properties	
Agent Traps Security	
The SNMP Service provides network management over TCP/IP and IPX/SPX protocols. If traps are required, one or more community names must be specified. Trap destinations may be host names, IP addresses, or IPX addresses.	
Community Name:	As a member of this community
Irap Destinations:	
192.168.8.90	Traps are sent to these IP addresses
Add Edit Remove	
OK Cancel Apply	

When the list of trap destinations is complete, click **OK** to save settings and close.

7. Complete the procedure "Add the Profile XP and configure SNMP" on page 5 to put SNMP changes into effect.

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# Setting up the FTP Service (Peer Web Server) on a Profile XP Media Platform

In order to view Profile XP logs from the NetCentral manager interface, each Profile XP Media Platform to be monitored must have the FTP service installed and properly configured. Using the instructions that follow, you can

- Check whether the FTP service is installed and configured. Recent Profile XP models ship from the factory with this already done.
- Install the FTP service
- Configure the FTP service to be accessible to NetCentral when NetCentral requests to display the logs.

#### Step 1: Install the FTP service

Installation of the FTP service requires the use of the Windows NT Workstation CD-ROM and the service pack currently installed on the Profile XP system.

Follow these steps:

- 1. Log on to the Profile XP Media Platform as administrator.
- 2. On the desktop, right-click the Network Neighborhood icon and select Properties.



3. Click the Services tab in the Network dialog box that appears.

Network
Identification Services Protocols Adapters Bindings
Network Services:
Image: Solution of the service of the service of the service of the service of the server         Image: Solution of the server
Add <u>R</u> emove <u>Properties</u> Update
Description: Microsoft Peer Web Server
Cancel

4. If Microsoft Peer Web Server is listed as one of the Network Services, click **Close** and go on to "Step 2: Configure the FTP site" on page 15.

If Microsoft Peer Web Server is *not* listed as one of the Network Services, click the Add button to continue with the installation.

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5. Insert the Windows NT Workstation CD-ROM in the drive, then select Microsoft Peer Web Server from the Network Service list and click **OK**.



6. Change the drive letter to install from so that it is correct for your CD-ROM drive and click **OK** to start the setup program. The Microsoft Peer Web Services Setup window appears.

Mi	crosoft Peer Web Services Setup	×
	Welcome to the Microsoft Peer Web Services installation program.	
	Setup cannot install system files or update shared files if they are in use. Before proceeding, we recommend that you close any applications you may be running.	
	For information on closing applications without exiting Setup, choose Help.	
	WARNING: This program is protected by copyright law and international reaties.	
	Unauthorized reproduction or distribution of this program, or any portion of t may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.	
	<u>E</u> xit Setup Help	

7. After reading the information displayed and closing applications as necessary, click **OK** to continue with Setup.

8. When the following dialog box appears, make sure that the only the Internet Service Manager and FTP Service boxes are checked and the rest of the check boxes are not, as shown here. Then click **OK**.

World Wide Web Service WWW Service Samples Internet Service Manager (HTML) Gopher Service XFTP Service ODBC Drivers & Administration	(install) (install)	120 342 K 459 K 231 K 267 K 231 K 0 K	Microsoft FTP Publishing Server
Install Directory for Selected Option: — C:\WINNT\System32\inetsrv			Change <u>D</u> irectory
pace Required on C:			2630 K
pace Available on C:			1924224 K

9. When prompted with the message box "The following directory does not exist. Do you want to create it? C:\WINNT\System32\inetsrv", click Yes.

10. In the Publishing Directories dialog box, accept the default for the FTP publishing directory and click **OK** to continue setup.

Publishing Directories	×
World Wide Web Publishing Directory	Browse
ETP Publishing Directory C:\InetPub\ftproot	Biowse
<u>G</u> opher Publishing Directory	Br <u>o</u> wse
OK Cancel H	telp

11. Click **Yes** to create the directory requested in this dialog box.

Microsoft Peer Web Services Setup 🛛 🛛
The following directories do not exist. Do you want to create them?
C:\InetPub\ftproot
Yes No



12. Click **OK** to close this message box announcing the successful completion of Setup.



13. Verify that the setup was successful by looking at the Services tab (as in steps 1 and 2). Microsoft Peer Web Server should appear in the Network Services list.

Network			? ×
Identification Se	vices Protocol:	s Adapters Bin	dings
<u>N</u> etwork Service	s:		
Scom dRMC     Client Servic     Computer Bi     Microsoft Pe     NetBIOS Int     RPC Config     Server     SNMP Serv	IN SmartAgent P e for NetWare owser er <del>Web Server</del> erface uration ce	C Software	
<u>A</u> dd	<u>R</u> emove	Properties	<u>U</u> pdate
Description: — Microsoft Peer	Web Server		
		Close	Cancel

14. Close the Network dialog box and the CD-ROM window. Remove the CD-ROM from the drive.

NOTE: You must continue with the remainder of this document. Failure to complete all the procedures will cause your Profile XP Media Platform to malfunction.

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#### Step 2: Configure the FTP site

After the FTP server is in place you must configure the FTP server, which consists of setting up a virtual directory that points to the physical location of the log files. The log files are typically stored in *c:\profile\logs*. In this case, we are setting up a virtual directory called 'log' which points to the physical location of the Profile logs – *c:\profile\logs*.

#### URLs for an FTP site take the basic format

*ftp://<hostname>/<virtualdirectory>/<filename>*. The virtual directory is a logical name that points to the actual physical location where the files you want to access are stored.

Virtual directories are specified under an FTP root, which is itself a virtual directory with the URL *ftp://<hostname>/*. The FTP root is specified when Microsoft Peer Web Server is installed.

- 1. Select Start | Programs | Microsoft Peer Web Services (Common) | Internet Service Manager.
- 2. In the Internet Service Manager window, right click on the machine name of the Profile system for the FTP service and select **Service Properties**.

😰 Hicrosoft Internet Service Manager	_ 🗆 🗵
<u>P</u> roperties <u>V</u> iew <u>I</u> ools <u>H</u> elp	
Computer Service State Comments	
FTP Running	
J	
Ready 1 Server(s) 2 Service(s) Running	<b>)</b> //.

3. In the Service tab, accept the default settings, which configure the FTP server for anonymous login.

NOTE: Do not attempt to change the default Username. The factory default username may not include the Profile XP host name as shown in this example, nor is it required to do so.

FTP Service Properties for qa4
Service Messages Directories Logging
ICP Port:
Connection Timeout: 900 💼 seconds
Maximum Connections: 1000
Allow Anonymous Connections
Username: IUSR_QA4
Password:
Allow only anonymous connections
Comm <u>e</u> nt:
Current Sessions
OK Cancel Apply Help

- FTP Service Properties for qa4
   X

   Service Messages Directories Logging
   Directory
   Alias
   Error

   C:\InetPub\ftproot
   <Home>
   Home>
   Add...
   Bernove
   Edit Properties...

   Directory Listing Style
   © UNIX @
   MS-DOS @
   MS-DOS @
   OK
   Cancel
   Apply
   Help
- 4. Select the Directories tab to display the page for setting up the virtual directories. Click the **Add** button.



5. In the Directory text entry box enter c:\profile\logs, the path to the physical location of the log files.

<b>Directory Propertie</b>	es	×
Directory:	C:\profile\logs <u>B</u> rowse	
C Home Director	y 👪	
_⊡ 	vi	
Alias:	log	
Account Information	on	
∐ser Name:		
<u>P</u> assword:		
Access		
<b>⊠</b> <u>R</u> ead	☐ <u>W</u> rite	
	OK Cancel <u>H</u> elp	

- 6. Select the Virtual Directory option and enter log in the Alias text entry box. With this configuration the URL for the FTP site takes the form *ftp://<hostname>/log/<filename>*.
- 7. Verify that only the Read Access check box is checked to prevent clients from writing files to the FTP server.

*NOTE: Be careful that you type "log" and not "logs" for the Virtual Directory Alias.* 

8. Click **OK** to save the configuration. The virtual directory setting appears in the Directory list on the Directories tab as shown. Leave the UNIX directory listing style option selected to ensure compatibility with the greatest number of browsers.

FTP Service Properties for	or qa4	×
Service Messages Directories Logging		
Directory	Alias	Error
C:\InetPub\ftproot	<home></home>	
C:\profile\logs	/log	
	Add Bemove	E dit Properties
		Earthaportios
- Directory Listing Style -		
10 0 <u>0</u> 1/1 0		
⊂ M <u>s</u> -Dos ⊗		
	OK Cancel	Applu Help
_		

- 9. Click **OK** to close the FTP Service Properties window.
- 10. Close the Microsoft Internet Service Manager.
- 11. Re-install your Windows NT service pack as required. Refer to your Profile System Software Release Notes:
  - Service Pack 3 and the year 2000 hotfix for Windows NT. When prompted "Overwrite the newer files?", select **No to All**. Refer to the *Profile XP System Software Release Notes* for more information.

-or-

- Service Pack 6a. Refer to the *Profile XP System Software Release Notes* for more information.

### Step 3: Verify that the FTP server is configured correctly

To check that the FTP server is configured correctly, open a browser and enter the URL *ftp://<hostname>/log*, where *<hostname>* is the name of the Profile XP Media Platform on which you have configured the FTP service. In the example shown here, the URL is *ftp://qa4/log*.

When correctly configured, the browser window shows a listing of all the files in the  $C:\profile\logs$  directory.



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