Release Notes and Installation Guide for QPM-PRO 2.0

These release notes are for use with Provisioned QoS Policy Manager (QPM-PRO) version 2.0.

These release notes provide:

- Documentation Roadmap
- Installing QPM-PRO 2.0
- Documentation Updates
- Obtaining Documentation
- Obtaining Technical Assistance

CISCO SYSTEMS

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Documentation Roadmap

The following documents are provided with QPM-PRO 2.0:

- Using Provisioned QoS Policy Manager—A user guide that describes QPM-PRO's features and provides detailed information on using Policy Manager and Distribution Manager to define and deploy QoS features and policies.

  This user guide is provided in PDF format on your product CD. You can order a printed copy of the guide, if required. Refer to Obtaining Documentation, page 20, for more information.

  > **Note** Adobe Acrobat Reader 4.0 is required.

- These Release Notes and Installation Guide—Provide instructions on installing QPM-PRO, as well as additional information about QPM-PRO 2.0.

In addition, you can use the following to learn how to install and use QPM-PRO 2.0:

- QPM-PRO online help—Contains all of the information available in *Using Provisioned QoS Policy Manager*. In addition, you can access context sensitive online help from every window in Policy Manager and Distribution Manager, ensuring that you have complete information while using QPM-PRO.

Installing QPM-PRO 2.0

Before you install Provisioned QoS Policy Manager (QPM-PRO), ensure that your system meets the requirements for running QPM-PRO. These sections describe the requirements and procedures for installing QPM-PRO:

Note If you have the beta version of QPM-PRO 2.0 installed, please uninstall it before starting the current QPM-PRO 2.0 installation.

Note For optimal display of QPM-PRO windows, it is recommended that you set your system to use small fonts.

Hardware and Software Requirements

Table 1 shows the hardware and software requirements for installing QPM-PRO.

Table 1   Hardware and Software Requirements for QPM-PRO

Complete QoS Policy Manager	Remote QoS Policy Manager
Pentium 266 MHz processor or better. Works on single or multiple processor machines.	Pentium 266 MHz processor or better. Works on single or multiple processor machines.
64MB RAM or more.	64MB RAM or more.
50MB or more free hard disk space.	50MB or more of free hard disk space.

Table 1   Hardware and Software Requirements for QPM-PRO (continued)

Complete QoS Policy Manager	Remote QoS Policy Manager
Any of these operating systems running TCP/IP and Microsoft Networking: • Windows NT Workstation or Server with Service Pack 5 or higher. • Windows 2000 with Service Pack 1	Any of these operating systems running TCP/IP and Microsoft Networking: • Windows 95 with the Year 2000 upgrade • Windows 98 • Windows 2000 with Service Pack 1 • Windows NT Workstation or Server with Service Pack 5 or higher.
Microsoft Internet Explorer 5.01 or higher, or Netscape Navigator 4.5 or higher. Needed to view the online help or QPM-PRO reports.	Microsoft Internet Explorer 5.01 or higher, or Netscape Navigator 4.5 or higher. Needed to view the online help or QPM-PRO reports.

Upgrading QPM-PRO

> **Note** Partial upgrades are not supported. You cannot upgrade the remote installations and use them with a former complete installation version. Similarly, you cannot upgrade the complete installation and use it with previous versions of remote installations.
>
> All QPM-PRO systems that interact must be upgraded together. Databases that were created with previous versions of QPM-PRO can be read by QPM-PRO 2.0 without any special conversion program. Refer to the chapter *Working with QoS Databases* in the user guide, for more information.

You can upgrade a QPM-PRO 1.1 installation without first uninstalling it. Simply follow the instructions in the "Installing the Complete QPM-PRO" section on page 5 (or the "Installing the Remote QPM-PRO" section on page 12 for remote installations).

However, before you upgrade your QPM-PRO installations, consider these changes in QPM-PRO 2.0:

- QoS databases are formatted differently in QPM-PRO 2.0. After you upgrade, your QoS databases are converted to the QPM-PRO 2.0 format when you open them in Policy Manager. Be sure to back up your QoS databases prior to opening them in QPM-PRO 2.0, so that you can restore the databases if you decide to uninstall QPM-PRO 2.0 and reinstall QPM-PRO 1.1.

- QPM-PRO 2.0 includes user security. This security is based on Windows NT local user groups. During installation, QPM-PRO can create the required user groups. However, you can use existing groups. QPM-PRO uses two groups: one for read-write users, one for read-only users.

- You cannot mix versions of QPM-PRO. For example, you cannot use a QPM-PRO 1.1 remote installation to connect to a QPM-PRO 2.0 QoS Manager service.

- In QPM-PRO 2.0, coloring and limiting policies with both directions are converted to two policies—one inbound and one outbound.

Installing the Complete QPM-PRO

The complete Provisioned QoS Policy Manager includes the management interfaces that you use to create and distribute your QoS policies to network devices, and the QoS Manager service used to manage and process the QoS database.

Before You Begin

If you are upgrading from a previous version of QPM-PRO, exit Policy Manager and Distribution Manager if you are currently running either program. The installation program automatically stops the QoS Manager service.

Procedure

Step 1   Insert the Provisioned QoS Policy Manager CD-ROM into the CD-ROM drive on your computer.

✎

Note We do not recommend that you install QPM-PRO from a network CD-ROM drive.

Step 2 The installation process should start automatically. If it does not, select **Start > Run**, and enter *d***:\qpmpro.exe**, where *d*: is the drive letter for your CD-ROM drive. The initial installation screen appears (Figure 1).
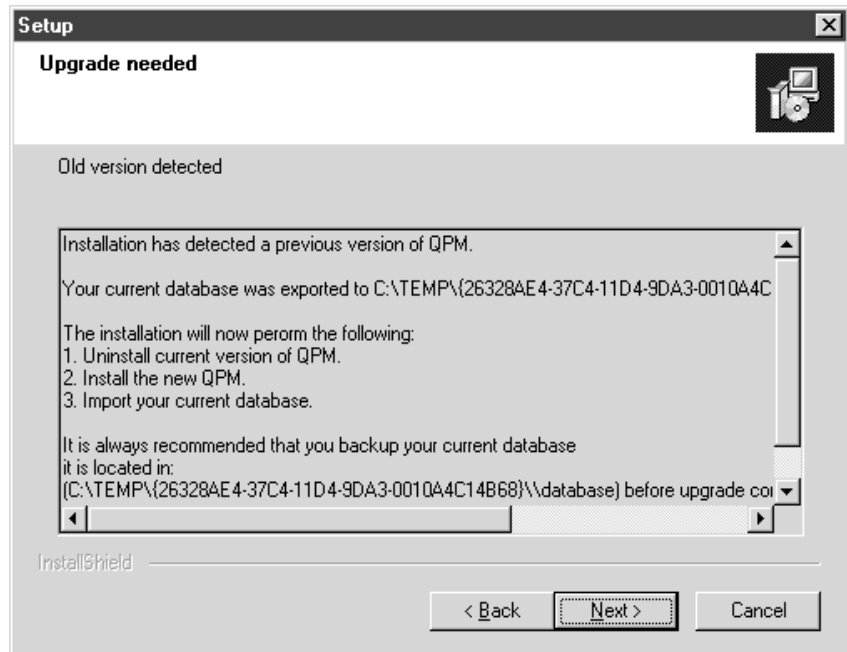
Figure 1   Initial Installation Screen

Step 3 Select **Complete Installation**.

If you are upgrading from a previous version of QPM-PRO, the following screen appears:
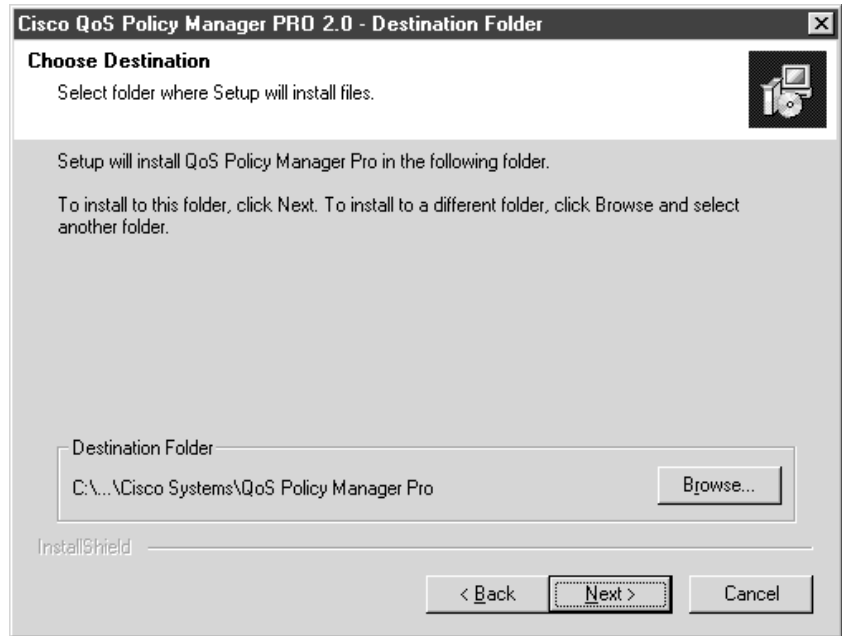
Figure 2 Upgrade Needed Screen

Click **Next** to uninstall the old version of QPM-PRO. Your existing databases will be saved and restored at the end of the installation process.

**Step 4** Read the Welcome screen and click **Next**.

Step 5   Choose a destination folder (one is selected by default) and click **Next**.

Figure 3   *Select Destination Folder screen*

Step 6   Select **Complete QoS Policy Manager** in the Setup Type window and click **Next**.

Step 7   Enter a Windows NT or Windows 2000 local group name in the Users Group Creation window, or use the default name shown, and click **Next**.

*Figure 4   User Group Creation screen*
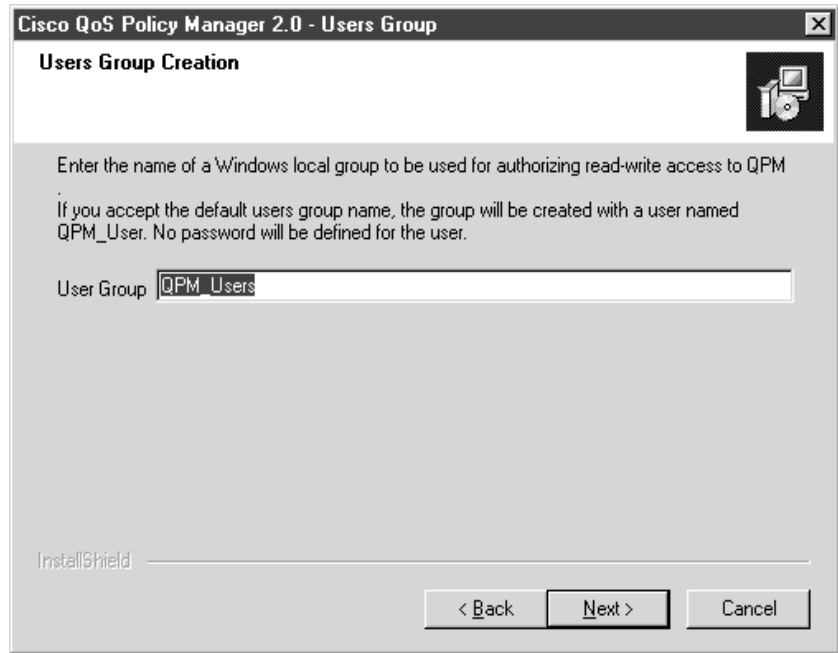
The QPM-PRO user group is used for authenticating QPM-PRO read-write users. Members of this group can save changes to the QoS database. You can enter the name of an existing group, or have QPM-PRO create a new group. The default user group is QPM_Users.

Step 8   Enter a Windows NT or Windows 2000 local group name in the Guest Group Creation window, or use the default name shown, and click **Next**. If the group does not exist, you are prompted to create it.

The QPM-PRO guest group is used for authenticating QPM-PRO read-only users. Members of this group can view the QoS database, but they cannot save changes. You can enter the name of an existing group, or have QPM-PRO create a new group. The default guest group is QPM_Guests.

**Step 9** Specify or select a program group, if you do not want to use the default name, and click **Next**.

Figure 5   Select Program Folder screen
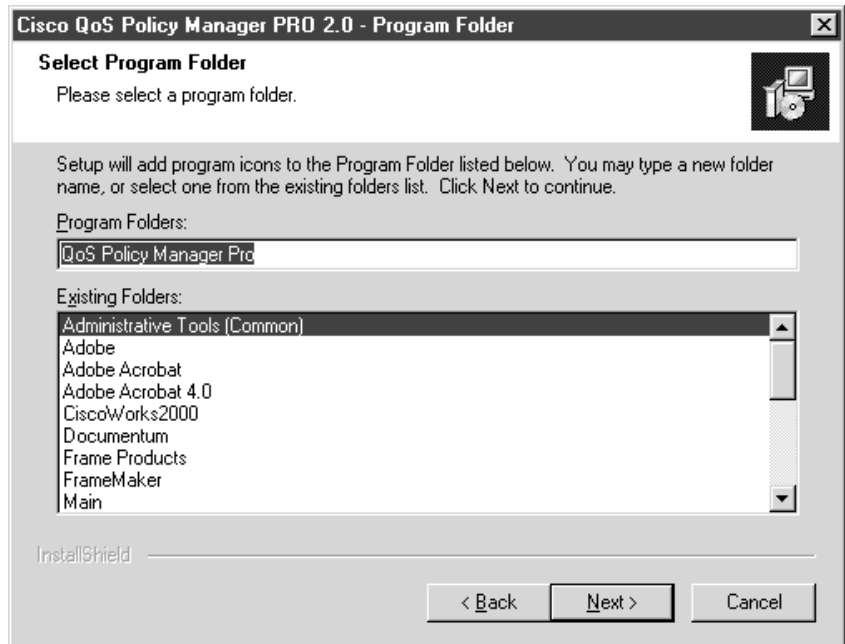
Step 10 Review your selections on the Start Copying Files screen. If you are satisfied, click **Next**. If you are not satisfied, click **Back** until you come to the screen that has selections you want to change.

After you click **Next**, QPM-PRO is installed on your system. If you are upgrading from a previous version of QPM-PRO, the following screen appears:

Figure 6   Successful Import of Database Box
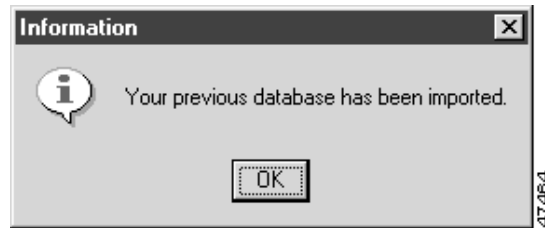
Step 11   Click **OK**.

Step 12   Click **Finish** to complete the setup.

Tips

- To start Policy Manager, select **Start > Programs > QoS Policy Manager > Policy Manager**. You must log into QPM-PRO using a name defined in the Windows NT or Windows 2000 QPM-PRO user group (for read-write access) or guest group (for read-only access). If you used the installation defaults, log in as QPM_User, with no password, using the Windows NT or Windows 2000 system name for the domain.

- The QoS Manager service is started automatically whenever you boot your system, and appears in the Services control panel. It is started automatically when you install QPM-PRO, so you do not need to restart your system after installation.

- Use the Windows NT or Windows 2000 User Manager administrative tool to add users to the QPM-PRO user and guest groups. You can start the User Manager directly from QPM-PRO.

- If you elect to create the QPM_Users local group, a user named QPM_User is defined in the group with no password. For security reasons, it is recommended that you delete this user or update the user with a password. Ensure there is at least one user defined in QPM_User so that you can log into QPM-PRO. Refer to the chapter *Managing QPM-PRO Users* in the user guide, for more information.

Installing the Remote QPM-PRO

You can install the remote Provisioned QoS Policy Manager on any machine that has access to QoS Manager (the Windows NT or Windows 2000 service installed with the complete QPM-PRO). This allows you to manage the QoS policies from remote locations, for example, from a laptop.

Before You Begin

Determine the host name of the workstation where you installed, or intend to install, the complete QPM-PRO.

If you are upgrading from a previous version of QPM-PRO, exit Policy Manager and Distribution Manager if you are currently running either program.

Procedure

Step 1 Insert the Provisioned QoS Policy Manager CD-ROM into the CD-ROM drive on your computer.

> **Note** We do not recommend that you install QPM-PRO from a network CD-ROM drive.

Step 2 The installation process should start automatically. If it does not, select **Start > Run**, and enter *d*:**\qpmpro.exe**, where *d*: is the drive letter for your CD-ROM drive. The screen in Figure 1 appears.

Step 3 Select Remote Installation.

If you are upgrading from a previous version of QPM-PRO, the screen in Figure 2 appears. Click **Next** to uninstall the previous version. Your existing databases will be saved and restored at the end of the installation process.

Step 4 Read the Welcome screen and click **Next**.

Step 5 Choose a destination folder (one is selected by default) and click **Next**. The following screen appears:

Figure 7   QoS Policy Manager Hostname Identification Screen
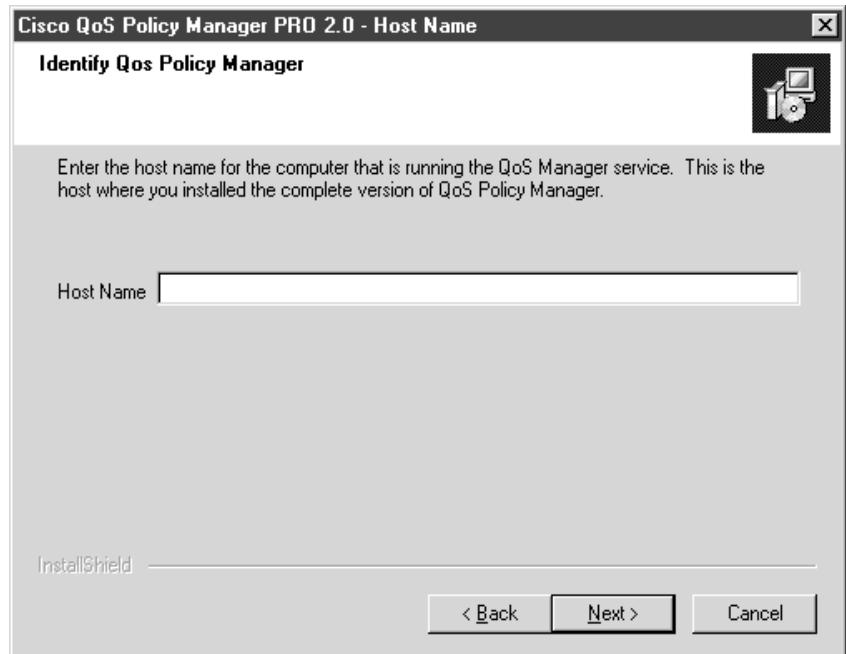
Step 6 Enter the host name of the machine that is running the QoS Policy Manager service. This is the machine where you installed, or intend to install, the complete QPM-PRO.

Step 7 Specify or select a program group, if you do not want to use the default name, and click **Next**.

Step 8 Review your selections on the Start Copying Files screen. If you are satisfied, click **Next**. If you are not satisfied, click **Back** until you come to the screen that has selections you want to change.

After you click **Next**, QPM-PRO is installed on your system. If you are upgrading from a previous version of QPM-PRO, the screen in Figure 6 appears. Click **OK**.

Step 9   Click **Finish** to complete the setup.

Tips

- To start Policy Manager, select **Start>Programs>QoS Policy Manager>Policy Manager**. You must log into QPM-PRO using a name defined in the Windows NT or Windows 2000 QPM-PRO user group (for read-write access) or guest group (for read-only access). If the complete QPM-PRO was installed using the user group defaults, you can log into QPM-PRO using QPM_User, no password, and the name of the machine running QoS Manager for the domain.

- QoS Manager is not installed, nor does it appear in the Services control panel, when you install the remote QPM-PRO.

Documentation Updates

This section contains the following information that is not included in the user guide or online help:

- Blind Device Login

- Debug Facility

- Device Support

- Copying Policies on Cisco 8500 Devices

- Device Explorer

- Subnet Mask Validity in Access Control Policies

- QoS Policy Manager Planner Page

- Troubleshooting Information

Blind Device Login

QPM-PRO provides users with the option to use its blind login feature if problems are encountered when logging into a device for detection, verification, validation or deployment. During blind login, debug and other data generated by the device are disregarded, thus avoiding possible interference with the login process.

By default, blind login is not used. However, you can set blind login in the QoS Manager.ini file, located in the AppData directory under the root QPM-PRO installation directory. Follow the procedure provided below.

Procedure

Step 1   Open the QoS Manager.ini file, located in the AppData directory under the root directory.

Step 2   In the Device Mode section, set BlindLogin to **1**.

Step 3   Change the BlindLoginDelay value as required. This determines the number of milliseconds to wait between each command sent during the login process.

Step 4   Save the QoS Manager.ini file.

Debug Facility

QPM-PRO provides a debug facility which can be used if communication problems are encountered during the validation process or during deployment of policies and QoS features to a device. The debug facility helps to identify the source of the problem by logging the function call trace for QPM-PRO operations, and/or logging sessions. This information can then be used for troubleshooting.

The following logging functions can be enabled in the cqpm.ini file, located in your Windows installation directory (usually c:/Winnt):

• Function trace log—Set the disabled value (in the Logger section) to **0** and make sure that the file_output value is **1** (which is the default). The log information will be saved to a file in the log directory under the root QPM-PRO installation directory.

   Set the FORCE_ALL value (in the Logger Layers section) to **1** in order to activate all logging layers of each component in the system.

• Session log—Set the Incremental_debug value to **1**. Telnet session log information will be written to a file.

Device Support

Support for Cisco MC3810 multiservice access concentrator has been partially tested. There is a possibility that QoS configurations that are supported on the device may not be updated in the QPM knowledge database.

Copying Policies on Cisco 8500 Devices

It is not recommended to cut and paste policies from one Cisco 8500 family device to another, since on these devices, the policy filter contains the names of the device's interfaces. Therefore, either create a new policy on the second device or, if you have copied a policy, adjust the filter accordingly.

Device Explorer

The Device Explorer utility is provided with the QPM-PRO 2.0 installation. This utility can be used to read the properties of a device (such as device model, IOS version and interface details), and output this information so that it can be used for troubleshooting purposes.

The Device Explorer utility is located in the bin directory under the root QPM-PRO installation directory. It can be activated from the command line interface, by entering the following information:

```
DeviceExplorer <device IP> [community string]
```

Subnet Mask Validity in Access Control Policies

In Access Control policies, the mask in the filter can be any valid IP address. This is an exception to the rule that a valid mask must be a valid IP address, with a binary translation format of a sequence of one or more '1' digits followed by a sequence of '0' digits.

QoS Policy Manager Planner Page

The QPM Planner Page provides information about QPM, including product announcements, upgrades and related information. It can be accessed from:

http://www.cisco.com/kobayashi/sw-center/sw-cw2000.shtml

Troubleshooting Information

This section includes troubleshooting information that was not included in the user guide.

You can search for known problems on the Cisco bug tracking system tool, called Bug Navigator II. To access Bug Navigator II, do the following:

Step 1 Enter **http://www.cisco.com/support/bugtools** in your web browser.

Step 2 Log into CCO and select **Bug Navigator II**.

Problem Your QPM-PRO 2.0 login user name is not recognized.

Explanation The QPM-PRO 2.0 login user name is case sensitive—you may not be using the correct case.

Action Reenter your user name with the correct case.

Problem Deployment of class-based QoS policies created on a device group that includes ATM interfaces fails.

Explanation QPM-PRO allows the definition of unsupported policies on ATM interfaces in device groups.

Action Avoid including ATM interfaces in a device group with Class Based QoS as the QoS property.

Problem `Deployment of a class-based QoS policy fails and you receive a message indicating that the requested bandwidth is not available.`

Explanation If you configured the maximum bandwidth allocation for an interface with Class Based QoS, QPM-PRO may actually deploy a slightly higher bandwidth allocation, for example, 76% instead of 75%.

Action Do not configure the maximum bandwidth allocation for a device. For example, configure an overall bandwidth allocation of 74% instead of the maximum 75%.

Problem `You are unable to connect to a Catalyst 6000 device via Telnet, for deployment or device verification.`

Explanation The device may not have an associated login password. This occasionally causes login problems.

Action Keep trying until a successful connection is established, or define a password for the device.

Problem `Limiting policies on device groups created using QPM-PRO 1.1 are not converted correctly for QPM-PRO 2.0.`

Explanation If both directions have been specified in the policy, problems may be encountered with the conversion to QPM-PRO 2.0.

Action Delete the policies from the database and recreate them using QPM-PRO 2.0.

Problem `Deployment of a shaping (GTS) policy fails and you receive a message instructing you to remove the FRTS configuration from the device.`

Explanation If FRTS is configured on an interface that is detected by QPM-PRO and the QoS property for the device is Do not Change, QPM-PRO does not remove FRTS from the device.

Action Either change the QoS property in the Interface Properties window, manually remove the FRTS configuration from the device using the CLI, or perform the Upload operation for the device.

Problem `The results of validation or deployment of databases that contain Frame Relay interfaces are inaccurate.`

Explanation If an interface is configured with more than one Frame Relay command that is not supported by QPM-PRO, the device's configuration is not fully read, and a job may not be correctly validated/deployed.

Action Manually delete the unsupported Frame Relay configuration.

Problem `After deployment of class-based QOS policies or FRTS on a device group that contains several interfaces with different rates from the same device, you see that the same rate was configured for all the interfaces.`

Explanation When interfaces with different rates on the same device are grouped into one device group, which is configured with Class Based Qos or FRTS, QPM-PRO does not create separate policy maps or frame relay map classes for the interfaces. One policy map or map class is created and it is based on the rate of the last interface in the group.

Action For class-based QoS, FRTS or queuing policies, only group interfaces from the same device that have identical rates.

Obtaining Documentation

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at http://www.cisco.com, http://www-china.cisco.com, or http://www-europe.cisco.com.

Documentation CD-ROM

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Obtaining Technical Assistance

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- Telnet: cco.cisco.com
- Modem using standard connection rates and the following terminal settings: VT100 emulation; 8 data bits; no parity; and 1 stop bit.
  - From North America, call 408 526-8070
  - From Europe, call 33 1 64 46 40 82

You can e-mail questions about using CCO to cco-team@cisco.com.

Technical Assistance Center

The Cisco Technical Assistance Center (TAC) is available to warranty or maintenance contract customers who need technical assistance with a Cisco product that is under warranty or covered by a maintenance contract.

To display the TAC web site that includes links to technical support information and software upgrades and for requesting TAC support, use www.cisco.com/techsupport.

To contact the TAC by e-mail, use one of the following:

Language	E-mail Address
English	tac@cisco.com
Hanzi (Chinese)	chinese-tac@cisco.com
Kanji (Japanese)	japan-tac@cisco.com
Hangul (Korean)	korea-tac@cisco.com
Spanish	tac@cisco.com
Thai	thai-tac@cisco.com

In North America, the TAC can be reached at 800 553-2447 or 408 526-7209. For other telephone numbers and TAC e-mail addresses worldwide, consult the following web site:
http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml.

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