



# CHAPTER 1

## Overview of QPM 4.0

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This chapter contains the following topics:

- [What is QPM?, page 1-1](#)
- [Preparing to Install QPM, page 1-2](#)
- [Further Resources, page 1-8](#)

## What is QPM?

QoS Policy Manager (QPM) lets you analyze traffic throughput by application or service class, and then leverage that information to configure QoS policies. This allows you to differentiate traffic and define the QoS functions to be applied to each type of traffic flow.

By simplifying QoS policy definition and deployment, QPM makes it easier for you to create and manage end-to-end differentiated services in your network, thus making more efficient and economical use of your existing network resources.

For example, you can deploy policies that ensure that your mission-critical applications always get the bandwidth required to run your business.

QPM is suitable for large-scale enterprise deployments, and IP telephony deployments, consisting of hundreds or thousands of devices.

QPM helps you to manage large networks by providing advanced user authorization capabilities through integration with Cisco Access Control Server (ACS).

QPM runs on the CiscoWorks Common Services server. CiscoWorks Common Services provides the infrastructure required by QPM to run from the CiscoWorks desktop environment. It allows you to manage user roles and privileges, and control user access to specific tasks in QPM.

QPM stores policy and device information in a relational database. Reports generated by QPM are stored separately as XML files. Monitoring task data is also stored separately.

QPM uses the CiscoWorks Common Services server to backup all application data. All QPM application data can also be exported to a destination folder for migrating from one QPM server to another.

## Preparing to Install QPM

Before you install QPM, review the installation prerequisites and available installation paths to prevent problems during installation.

- [Hardware and Software Requirements, page 1-2](#)
- [Installation Prerequisites, page 1-6](#)
- [Installation Paths, page 1-7](#)

## Hardware and Software Requirements

[Table 1-1](#) shows the hardware and software requirements for the QPM server.

If the server does not meet the recommended system requirements, QPM startup and performance might be slow, or QPM might not work at all on the server.

**Table 1-1 Server Hardware and Software Requirements**

Processor	<p>The processor requirement depends on the number of devices being monitored by QPM. This further further depends on the license (or the combination of licenses) you purchased for QPM.</p> <ul style="list-style-type: none"> <li>• For around 2500 devices—2.8 GHz Intel Pentium IV or 2.8 GHz Intel Xeon processor</li> <li>• For around 10000 devices—Dual 2.8 GHz Intel Pentium IV or Dual 2.8 GHz Intel Xeon processor.</li> </ul>
Monitor	Monitor with display set to High Color (16 Bit)
Memory (RAM)	<ul style="list-style-type: none"> <li>• For around 2500 devices—2 GB RAM</li> <li>• For around 10000 devices—4 GB RAM</li> </ul>
Virtual memory	<ul style="list-style-type: none"> <li>• Double the amount of RAM</li> </ul>
Available disk drive space	<ul style="list-style-type: none"> <li>• A minimum of 9 GB.</li> </ul> <p>CiscoWorks Common Services 3.0.5 requires 2 GB free disk space, therefore ensure that you have a minimum of 9 GB free disk space before you install CiscoWorks Common Services 3.0.5.and QPM.</p> <p>The available disk space required also depends on the tasks you want to do in QPM. The following are the recommendations:</p> <ul style="list-style-type: none"> <li>• For around 2500 devices—40 GB</li> <li>• For around 10000 devices—80 GB</li> </ul>

**Table 1-1**      **Server Hardware and Software Requirements (continued)**

Software <sup>1</sup>	<p>Any of the following:</p> <ul style="list-style-type: none"> <li>• Windows 2000 Professional with SP3 or SP4</li> <li>• Windows 2000 Server with SP3 or SP4</li> <li>• Windows 2000 Advanced Server with SP3 and SP4</li> <li>• Windows 2003 Server (Standard and Enterprise versions)</li> <li>• Windows 2003 Server Standard Edition with SP1</li> <li>• Windows 2003 Server Enterprise Edition with SP1</li> <li>• Windows 2003 R2 Server (Standard and Enterprise versions)</li> <li>• Windows 2003 Server Standard and Enterprise Editions with SP2</li> <li>• Windows 2003 R2 Server Standard and Enterprise Editions with SP2</li> </ul>
Browser (optional)	<p>One of the following:</p> <ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 6.0 with Service Pack 2</li> <li>• Netscape 7.1</li> </ul>

1. Common Services 3.0.5 supports only US-English and Japanese versions of Windows Operating Systems. It does not support any other language version. Installation might proceed normally in other locales but there might be problems in the functionality of CiscoWorks.

Table 1-2 shows the requirements for client systems.

**Table 1-2**      **Client Requirements**

System hardware and software	<ul style="list-style-type: none"> <li>• Any of these systems:             <ul style="list-style-type: none"> <li>– IBM PC-compatible computer with 1GHz Pentium IV processor, running Windows</li> <li>– Sun UltraSPARC IIIi, running Solaris 8 or Solaris 9</li> </ul> </li> <li>• Monitor with display set to High Color (16 Bit)</li> <li>• Any of the following OS             <ul style="list-style-type: none"> <li>– Windows 2000 Professional with Service Pack 3 or Service Pack 4</li> <li>– Windows 2000 Server with Service Pack 3 or Service Pack 4</li> <li>– Windows 2000 Advanced Server with Service Pack 3 or Service Pack 4</li> <li>– Windows XP SP1</li> <li>– Windows XP SP2</li> <li>– Windows 2003 Server and Enterprise Edition</li> <li>– Windows 2003 Server and Enterprise Edition with Service Pack 1</li> <li>– Windows 2003 R2 Server (Standard and Enterprise versions)</li> <li>– Windows 2003 Server Standard and Enterprise Editions with SP2</li> <li>– Windows 2003 R2 Server Standard and Enterprise Editions with SP2</li> <li>– Solaris 8 or Solaris 9</li> </ul> </li> </ul>
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**Table 1-2**      **Client Requirements (continued)**

Memory(RAM)	<ul style="list-style-type: none"> <li>• 512 MB</li> </ul>
Browser	<p>Any of these browsers:</p> <p>On Windows and Windows XP clients:</p> <ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 6.0 (version 6.0.2600)</li> <li>• Internet Explorer 6.0 with Service Pack 1 (version 6.0.2800)</li> <li>• Internet Explorer 6.0 with Service Pack 2 (version 6.0.2900) for Windows XP</li> <li>• Internet Explorer 6.0 with Service Pack 1 (version 6.0.3790.1830) for Windows 2003 R2</li> <li>• Netscape Navigator 7.1</li> </ul> <p>On Solaris clients:</p> <ul style="list-style-type: none"> <li>• Netscape Navigator 7.0 for Solaris 8 and Solaris 9</li> </ul>

## Installation Prerequisites

We recommend that you use a dedicated server for QPM for maximum performance.

If you cannot use a dedicated server for QPM, you can install QPM on a Common Services server with LAN Management Solution (LMS) 2.6.

## Prerequisites for Installing QPM

Before you install QPM, ensure that:

- The machine on which you are going to install QPM meets the requirements for running QPM. See [Hardware and Software Requirements, page 1-2](#).
- CiscoWorks Common Services 3.0.5 must be installed on the machine before you begin to install QPM.

The QPM installation DVD contains Common Services 3.0.5 installation files. For more information, see [Chapter 2, “Installing and Uninstalling QPM.”](#)

- Set the desktop display to High Color (16 Bit). You can set the color depth under **Display Properties > Settings** on your desktop.

## Prerequisites for Installing Common Services

Before you install CiscoWorks Common Services, note the following:

- Do not install CiscoWorks on a system that is configured as a primary or backup domain controller.
- Do not install CiscoWorks on Advanced Server with terminal services enabled in application server mode.
- Do not install CiscoWorks on a FAT file system.
- Do not install CiscoWorks on Windows XP server.

## Installation Paths

If you have other CiscoWorks products installed on your server, review the information in [Table 1-3](#) to determine the installation path required for QoS Policy Manager to successfully operate.

**Table 1-3**      **Recommended Installation Paths**

If You are Installing QoS Policy Manager on a System That...	Then You Must...
Has no other CiscoWorks products	Install (from the QPM 4.0 DVD): <ol style="list-style-type: none"> <li>1. Common Services 3.0.5</li> <li>2. QoS Policy Manager 4.0</li> </ol>
Has LMS 2.6	Install QoS Policy Manager 4.0 (from the DVD)

**Table 1-3**      **Recommended Installation Paths (continued)**

<b>If You are Installing QoS Policy Manager on a System That...</b>	<b>Then You Must...</b>
Has QPM 3.1 with Common Services 1.0	<ol style="list-style-type: none"> <li>1. Export the QPM 3.1 database and configuration information if you want to use it in your QPM 4.0 installation.  For this, you must use the export utility available in the QPM4.0 DVD.</li> <li>2. Uninstall QPM 3.1</li> <li>3. Upgrade to Common Services 3.0.5</li> <li>4. Install QoS Policy Manager 4.0</li> <li>5. Import the QPM 3.1 database and configuration.</li> </ol>
Has QPM 3.2 or 3.2.x with Common Services 2.2	<ol style="list-style-type: none"> <li>1. Install Common Services 3.0.5</li> <li>2. Install QoS Policy Manager 4.0</li> </ol> <p>The QPM 3.2 or 3.2.x database and configuration information is migrated automatically.</p>

## Further Resources

For further information see the following:

- For information on installing CS 3.0.5 and QPM 4.0, see [Chapter 2, “Installing and Uninstalling QPM.”](#)
- For information on upgrading from QPM 3.1, QPM 3.2, or QPM 3.2.x, and the QPM export and import utilities, see [Chapter 4, “Upgrading and Migrating QPM.”](#)