



# CHAPTER 4

## Upgrading and Migrating QPM

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This chapter contains the following topics:

- [Upgrading QPM 4.0 to QPM 4.1, page 4-1](#)
- [Migrating to a New QPM Server on Solaris, page 4-2](#)
- [Backing Up and Restoring CS and QPM Application Data, page 4-5](#)
- [Importing QPM Application Data, page 4-6](#)
- [Exporting QPM Application Data, page 4-7](#)

### Upgrading QPM 4.0 to QPM 4.1

QPM 4.1 supports upgrade from QPM 4.0.x.



#### Note

Before you upgrade from QPM 4.0.x to QPM 4.1, to ensure that there is no loss of historical monitoring data, you must:

- Stop the historical jobs that are currently being monitored and in the Running state. The historical jobs move from the Running to Stopped state, and then to the Finished state.
- Start the Upgrade after the historical jobs move to the Finished state.

After you successfully upgrade to QPM 4.1, you can create new monitoring jobs.

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If you have installed QPM4.0.x on a custom path (a path other than the Common Services default installation directory), you must install the patch, QPMUpdater.tar over QPM4.0.x, before you proceed with the upgrade.

To install the patch (if you have installed QPM 4.0.x on a custom path):

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**Step 1** From the QPM 4.1 DVD, copy QPMUpdater.tar to any directory on the machine you have installed QPM 4.0.x.

The QPMUpdater.tar is in the location,  
`//dvd/QPM_4_0_x_Patches/Solaris_custom_install_path_upgrade_patch.`

**Step 2** Go to the directory, and untar the file, QPMUpdater.tar

**Step 3** Run `per1 QPMUpdater_so1.p1` in the directory.



**Note** During this upgrade, [Step 6](#) of fresh installation is not available. Instead, the upgrade license is automatically installed.

The patch is installed over QPM 4.0.x.

You can now upgrade QPM 4.0.x to QPM 4.1.

To upgrade QPM 4.0.x to QPM 4.1:

**Step 1** Install CiscoWorks Common Services 3.2 over QPM 4.0.x.  
See [Installing Common Services on Solaris, page 2-2](#).  
The CS 3.0.5 data is migrated automatically to CS 3.2 during this process.

**Step 2** Install QPM 4.1.  
See [Installing QPM on Solaris, page 2-5](#) for details.  
QPM 4.0.x application data is migrated automatically to QPM 4.1 during this process.



**Note** While upgrading, the QPM application data is automatically backed up at `opt/CSCOPx/temp/QPMexport`, where `opt/CSCOPx` is the Common Services installation directory.

## Migrating to a New QPM Server on Solaris

You can migrate QPM application data from:

- A QPM 4.1 server to another QPM 4.1 server. See [Migrating QPM Information from One QPM 4.1 Server to Another, page 4-3](#) for details.
- A QPM 4.0 server to a QPM 4.1 server. See [Migrating QPM Information from a QPM 4.0 Server to a QPM 4.1 Server, page 4-3](#) for details.



**Note** You need to buy a new license for remote migration because the QPM license is a node-locked license. Also, the device limit with the new license should be equal to or more than the device limit supported by the old server.

## Migrating QPM Information from One QPM 4.1 Server to Another

This section describes how to migrate QPM 4.1 information to a new QPM 4.1 server that runs on Solaris.

To migrate QPM information to a new QPM 4.1 server:

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- Step 1** Take a backup of the QPM 4.1 application data, using the Common Services Backup utility (available in QPM 4.1 under **Administration > Configuration Backup**).  
See [Backing Up CS and QPM Application Data, page 4-5](#).
  - Step 2** Copy the backed up data to the new server.
  - Step 3** Install CiscoWorks Common Services 3.2 on the new server.
  - Step 4** Install QPM 4.1 on the new server.  
See [Installing QPM on Solaris, page 2-5](#) for details.
  - Step 5** Run the `restorebackup.pl` script (in Common Services) in the new server to restore the QPM data.  
See [Restoring CS and QPM Application Data, page 4-6](#).
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Before you begin to work with QPM, ensure that you have the appropriate permissions. See [Chapter 3, “Setting Up the QPM Server”](#) for details.

If you are working with ACS user permissions, register the new QPM server in CiscoWorks and ACS. See [Setting up ACS User Groups and Permissions for QPM, page 3-9](#) for details.

## Migrating QPM Information from a QPM 4.0 Server to a QPM 4.1 Server

This section describes how to migrate QPM 4.0 information to a new QPM 4.1 server that runs on Solaris.

To migrate QPM information from a QPM 4.0 server to a QPM 4.1 server:

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- Step 1** Take a backup of the CS 3.0.5 data, using the Common Services Backup utility (available in QPM 4.0 under **Administration > Configuration Backup**).  
See [Backing Up and Restoring CS and QPM Application Data, page 4-5](#) for details.
  - Step 2** Take a backup of QPM 4.0.x data.  
See [Exporting QPM Application Data, page 4-7](#) for details.
  - Step 3** Copy the backup data to the new server.
  - Step 4** Install CiscoWorks Common Services 3.2. on the new server.  
See [Installing Common Services on Solaris, page 2-2](#) for details.
  - Step 5** Install QPM 4.1 on the new server.  
See [Installing QPM on Solaris, page 2-5](#) for details.
  - Step 6** Run the `restorebackup.pl` script (in Common Services) to restore the CS data on the new server.  
See [Restoring CS and QPM Application Data, page 4-6](#) for details.
  - Step 7** Restore QPM application data.

See [Importing QPM Application Data, page 4-6](#) for details.

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Before you begin to work with QPM, ensure that you have the appropriate permissions. See [Chapter 3, “Setting Up the QPM Server”](#) for details.

If you are working with ACS user permissions, register the new QPM server in CiscoWorks and ACS. See [Setting up ACS User Groups and Permissions for QPM, page 3-9](#) for details.

# Backing Up and Restoring CS and QPM Application Data

The following topics describe how to use the backup and restore utilities for QPM application data:

- [Backing Up CS and QPM Application Data, page 4-5](#)
- [Restoring CS and QPM Application Data, page 4-6](#)

## Backing Up CS and QPM Application Data

You can take a backup of the following:

- Common Services application data
- QPM application data
  - QPM database containing device and policy information
  - QPM monitoring jobs containing network traffic data
  - QPM reports
  - QPM configuration information

You can use the Backup utility when you want to:

- Migrate QPM 4.0.x application data to a QPM 4.1 server.
- Migrate QPM 4.1 application data from one QPM 4.1 server to another.
- Back up QPM application data.



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**Note**

While migrating from QPM 4.0.x to QPM 4.1, the Backup and Restore utilities will restore only Common Services data on the QPM 4.1 server. To back up QPM 4.0.x application data, see [Exporting QPM Application Data, page 4-7](#).

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You must specify the directory to which you want to back up the data.

To back up QPM application data:

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- Step 1** In QPM, go to **Administration > Configuration Backup**.  
You are redirected to the Backup Job page in CiscoWorks Common Services.
- Step 2** In the Backup Job page, enter the path of the Backup Directory, or click **Browse** to select the directory.
- Step 3** Click **Apply**.
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## Restoring CS and QPM Application Data

Use the `restorebackup.pl` utility in Common Services to restore the QPM application data that was backed up.


**Note**

The backed up data is platform dependent. Therefore you cannot restore the QPM data onto a Solaris server if this data was backed up from a Windows server.

When you use the Restore utility, any existing QPM data is overwritten.

To restore the QPM application data:

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- Step 1** Log in as Super User.
- Step 2** Copy the backed up data to the new server.
- Step 3** In Common Services, go to the root directory, and enter the following command to stop all processes:
- ```
# /etc/init.d/dmgttd stop
```
- Step 4** Restore the data by entering the following command:
- ```
NMSROOT/bin/perl NMSROOT/bin/restorebackup.pl -d BKP [-t temporary_directory]
```
- where *BKP* is the backup directory.
- You must enter the absolute path for *BKP*. For example, if *BKP* is under */opt*, give the path as `NMSROOT/bin/perl NMSROOT/bin/restorebackup.pl -d /opt/BKP`.
- Step 5** Restart the processes by entering the following command:
- ```
# /etc/init.d/dmgttd start
```
- 


**Note**

While migrating from QPM 4.0.x to QPM 4.1, the Restore utility will restore only Common Services data on the QPM 4.1 server. To restore QPM application data, see [Importing QPM Application Data, page 4-6](#).

## Importing QPM Application Data

Use the `import.pl` utility to import any QPM 4.0.x application data into QPM 4.1.


**Note**

The exported data is platform dependent. Therefore you cannot import the QPM data onto a Solaris server if this data was exported from a Windows server.

When you use the Import utility, any existing QPM data is overwritten.

To import the application data:

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**Step 1** Log in as Super User.

**Step 2** Go to the root directory and enter the following commands to start the Import utility:

```
# cd /opt/CSCOpX/MDC/qpm/bin
```

```
# /opt/CSCOpX/bin/perl import.pl export directory
```

where */opt/CSCOpX* is the default installation directory, and *export directory* is the directory that contains the exported data.

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This utility stops CiscoWorks services, and imports the QPM data. When the import process completes, the CiscoWorks services are restarted.

If you export the QPM 4.0.x data in ACS mode, and import the data in QPM 4.1 Non-ACS mode, you may not be able to login to QPM 4.1 after the import. This is because the login mode automatically changes to ACS mode in QPM 4.1.

So, after the import, you must reset the login mode of QPM 4.1 to Non-ACS. See [Obtaining Debug Information for Cisco Technical Support, page A-3](#) for information on how to reset the login mode.

## Exporting QPM Application Data

You can export the following QPM 4.0.x application data during an upgrade to QPM 4.1:

- QPM database containing device and policy information
- QPM monitoring jobs containing network traffic data
- QPM reports
- QPM configuration information

Use the Export utility when you want to migrate and upgrade QPM 4.0.x application data to QPM 4.1.

You need to specify the destination folder to which you want to export the application data.

To export QPM application data from QPM 4.0.x:

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**Step 1** Log in as Super User.

**Step 2** Go to the root directory and enter the following commands to start the Export utility:

```
# cd /opt/CSCOpX/MDC/qpm/bin
```

```
# /opt/CSCOpX/bin/perl export.pl destination directory
```

where */opt/CSCOpX* is the default installation directory, and *destination directory* is the directory to which QPM exports the data.

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This utility stops CiscoWorks services, and exports the QPM information to the specified destination folder.

After the export process has completed, the CiscoWorks services are restarted.

