User's Guide

OME-SERIES DATA ACQUISITION CARDS

Resource Checking User Manual

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1 PCI DAQ card with Win 95/98

Follow the steps below to check for resource conflicts.

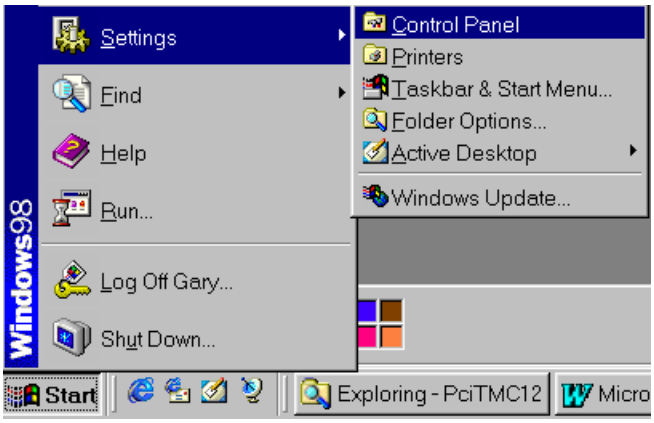

Figure 1-1. The "Start" menu

- Click the "Start" button.
- Select the "Settings" menu item.
- Select the "Control Panel" menu item.

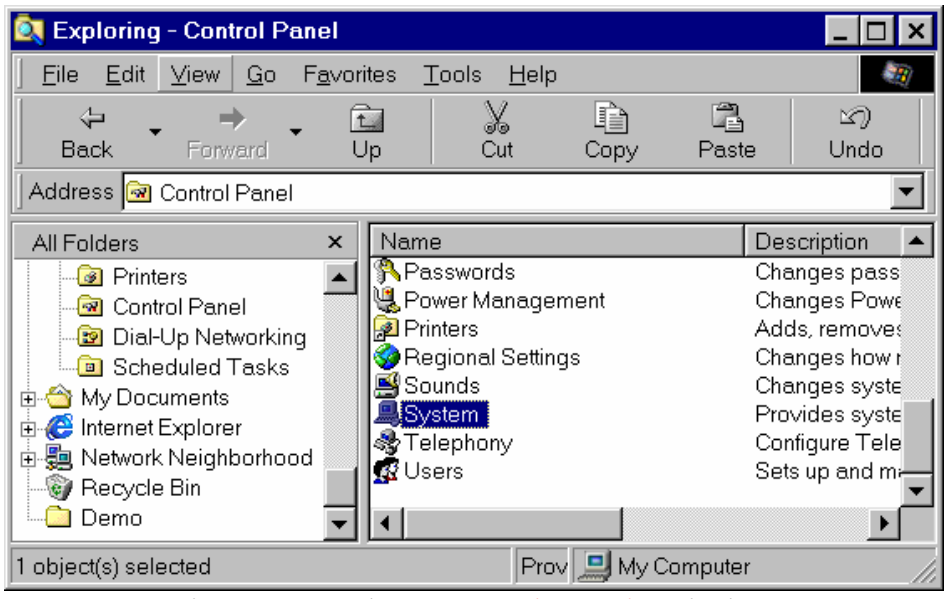

Figure 1-2. The "Control Panel" window

Double click the "System" icon in the "Control Panel" folder.

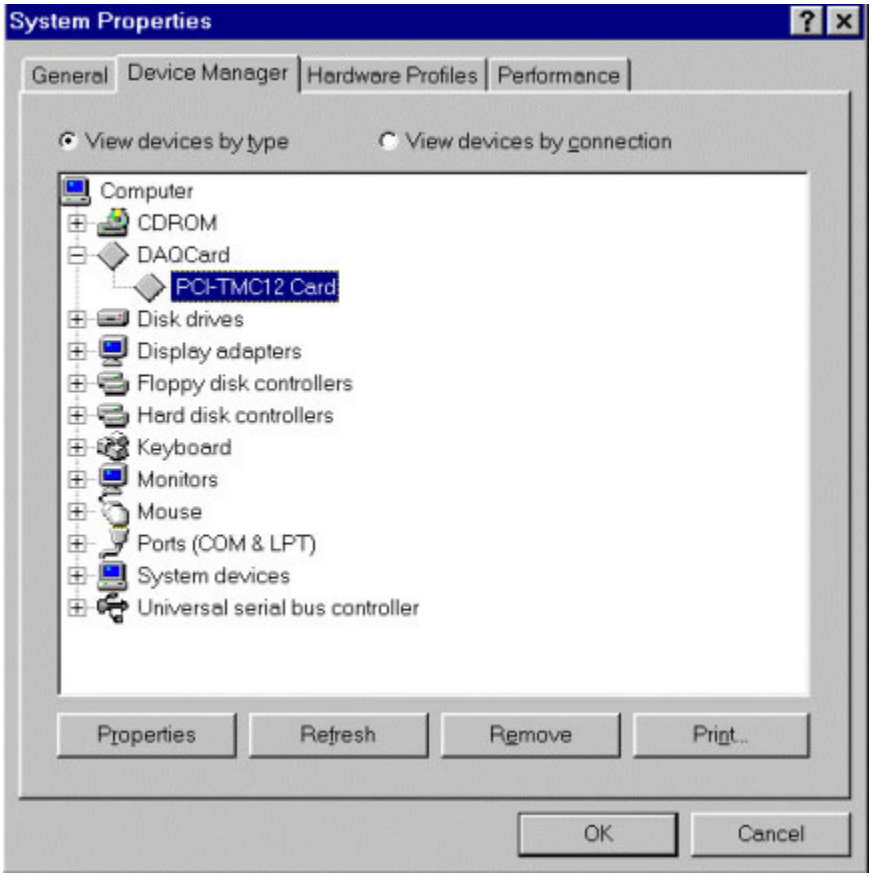

Figure 1-3. The "System properties" window.

- Select the "Device Manager" page.
- Select the device "PCI-TMC12 Card" under the item "DAQCard".
- Click button "Properties" to see detailed information.

Some PCI cards may be under the "Other Devices" item.

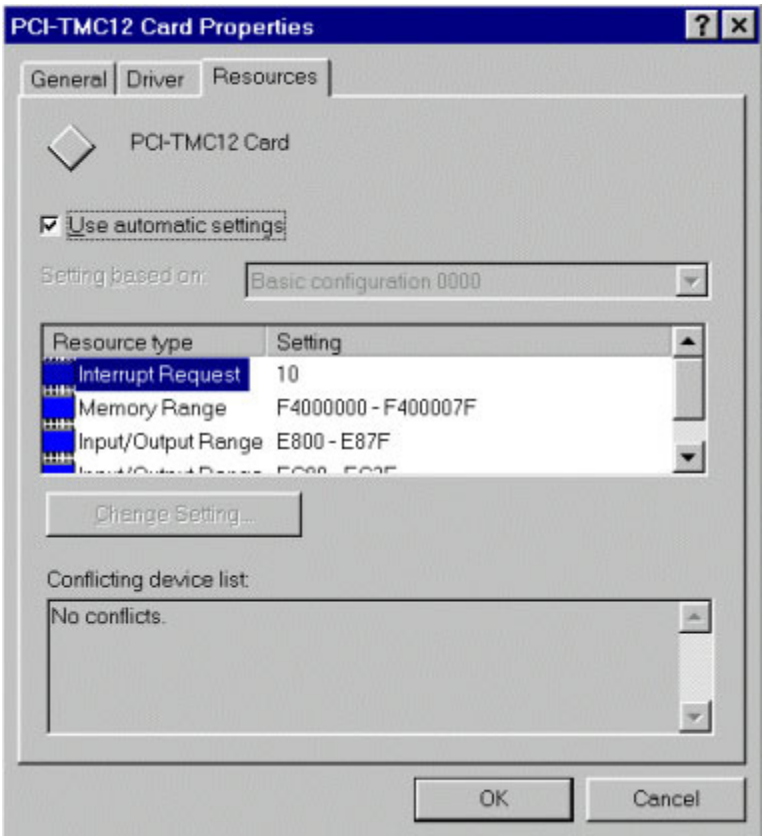

Figure 1-4. Detailed information of the PCI DAQ card.

- Select the "Resources" page.
- Please verify that this device has no conflicts with other devices.
- In the "Conflicting device list:" box, "No conflicts" should be displayed.

If the IRQ number has conflicts with other devices, you can not use INTERRUPT or DMA functions with the DAQ card.

If the DMA number has conflicts with other devices, you can not use DMA functions with the DAQ card.

If the "Input/Output Range" has conflicts with other devices, the DAQ card will not work.

The user may need to free some resource for the PCI DAQ card by removing other devices to prevent conflict.

2 ISA DAQ card with Win 95/98

Follow the steps below to check if there are any resource conflicts.

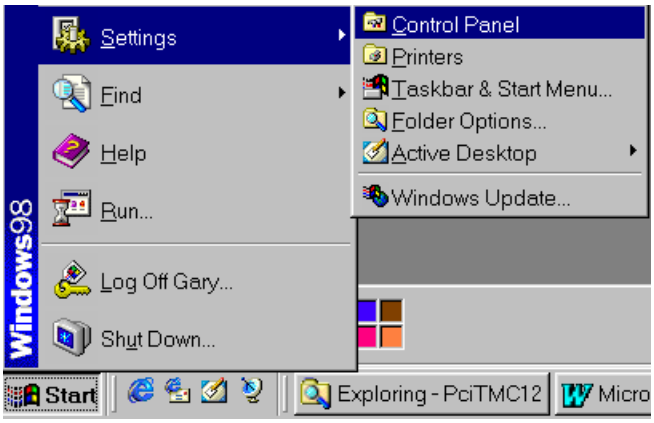

Figure 2-1. The "Start" menu.

- Click the "Start" button .
- Select the "Settings" menu item.
- Select the "Control Panel" menu item.

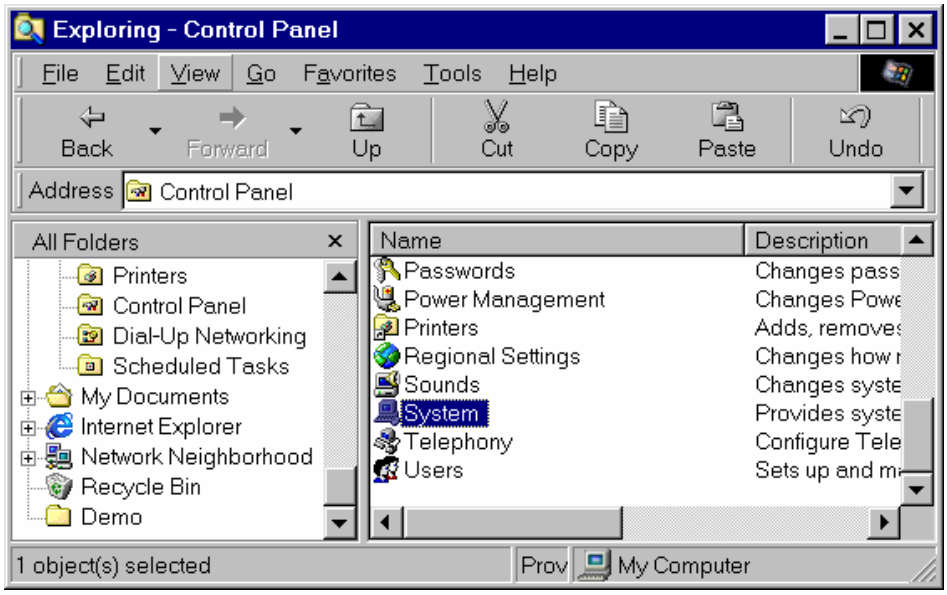

Figure 2-2. The "Control Panel" window

Double click the "System" icon in the "Control Panel" folder.

Figure 2-3. "Device Manager".

- Select the "Device Manager" page .
- Select the "Computer" item.
- Click the "Properties" button.

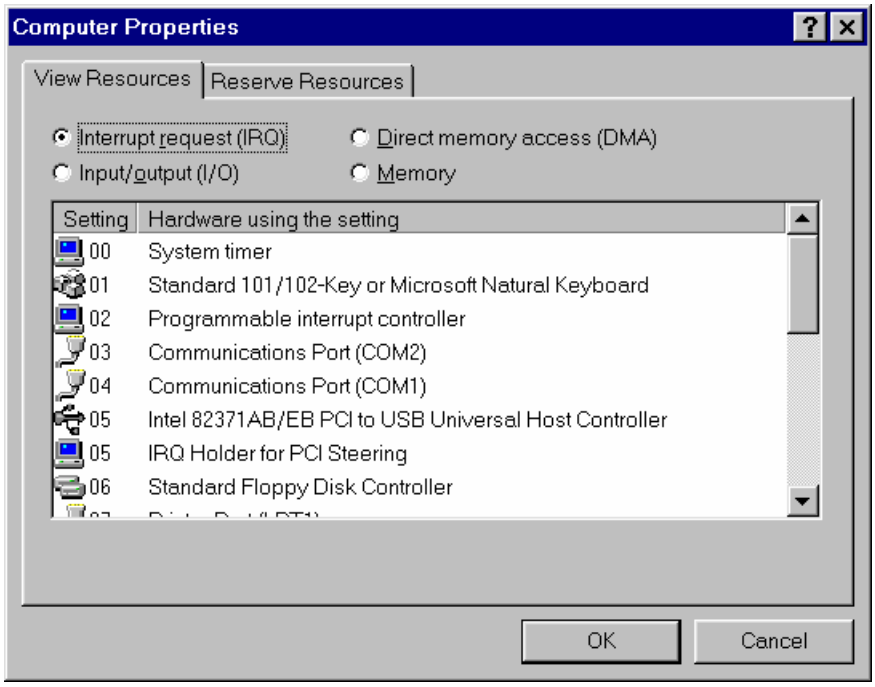

Figure 2-4. "View Resources".

You must check if the card IRQ conflict with other devices.

The card IRQ will not be shown in the above window. You must set the card IRQ number via the jumper on the card. The card IRQ number should not be listed in the above window in order to prevent conflicts.

If there are no additional IRQs available for use by the DAQ card, you may need to remove some other device to free an IRQ. Otherwise, you can not use INTERRUPT and DMA functions of the DAQ card

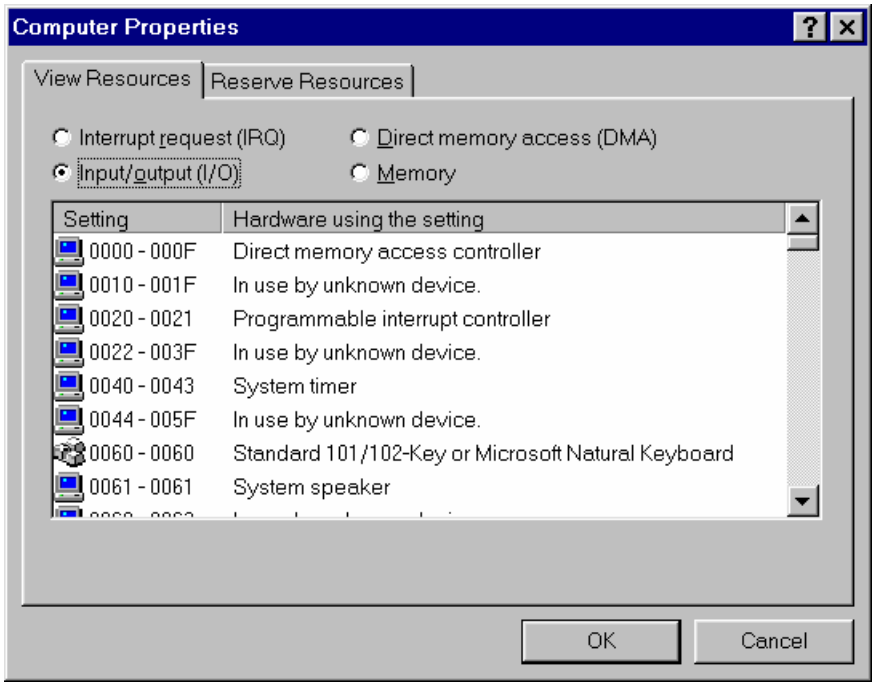

Figure 2-5. "View Resources".

- Click the "Input/Output (I/O)" item to see the system resources.

Verify that the "Input/Output (I/O)" address of the DAQ card does not conflict with any other device.

The "Input/Output (I/O)" address of the DAQ card will not be shown in the above window. You must set the "Input/Output (I/O)" address of the DAQ card by switches on the card. The "Input/Output (I/O)" address must not be listed in the above window to prevent conflicts.

If Windows has no additional "Input/Output (I/O)" addresses available for use by the DAQ card, you must remove some other device to free the "Input/Output (I/O)" address.

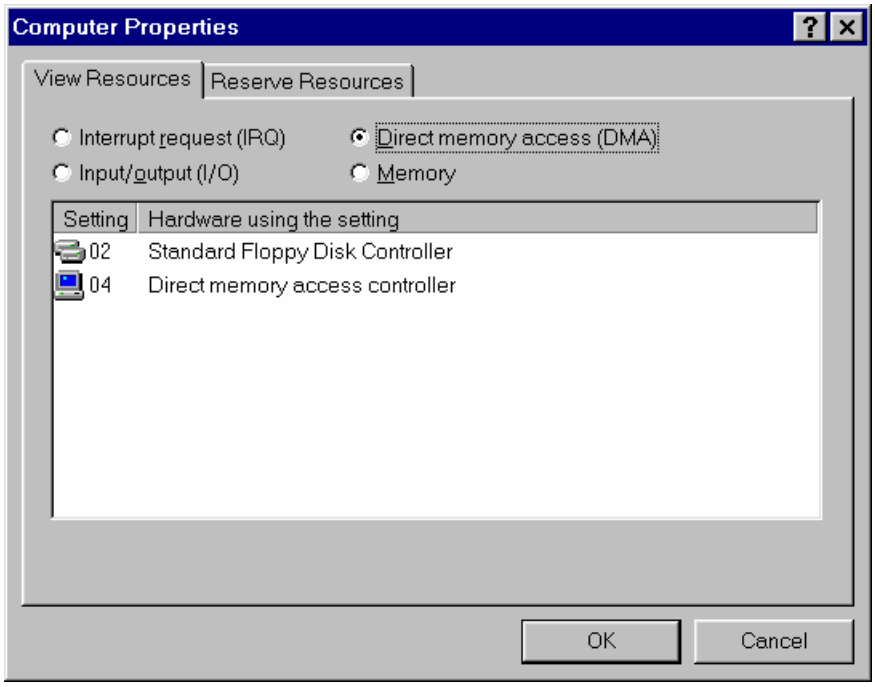

Figure 2-6. "View Resources".

- Click the "Direct memory access (DMA)" item to see the DMA resources.

You must verify that the DAQ card "Direct memory access (DMA)" resource does not conflict any other devices.

The "Direct memory access (DMA)" resource for the DAQ card will not be shown in the above window. The user must select the DAQ card's "Direct memory access (DMA)" channel by setting the jumper on the card. The "Direct memory access (DMA)" channel must not listed in the above window to prevent conflicts.

If Windows has no additional "Direct memory access (DMA)" channels available, you may need to remove some other devices to free the "Direct memory access (DMA)" resources. Or, the you must not use the DMA functions of the DAQ card.

3 PCI/ISA DAQ card with Win NT

Please follow the steps below to check the resources in Windows NT. If there is a conflict with the DAQ card you may need to remove the other device to prevent the conflict.

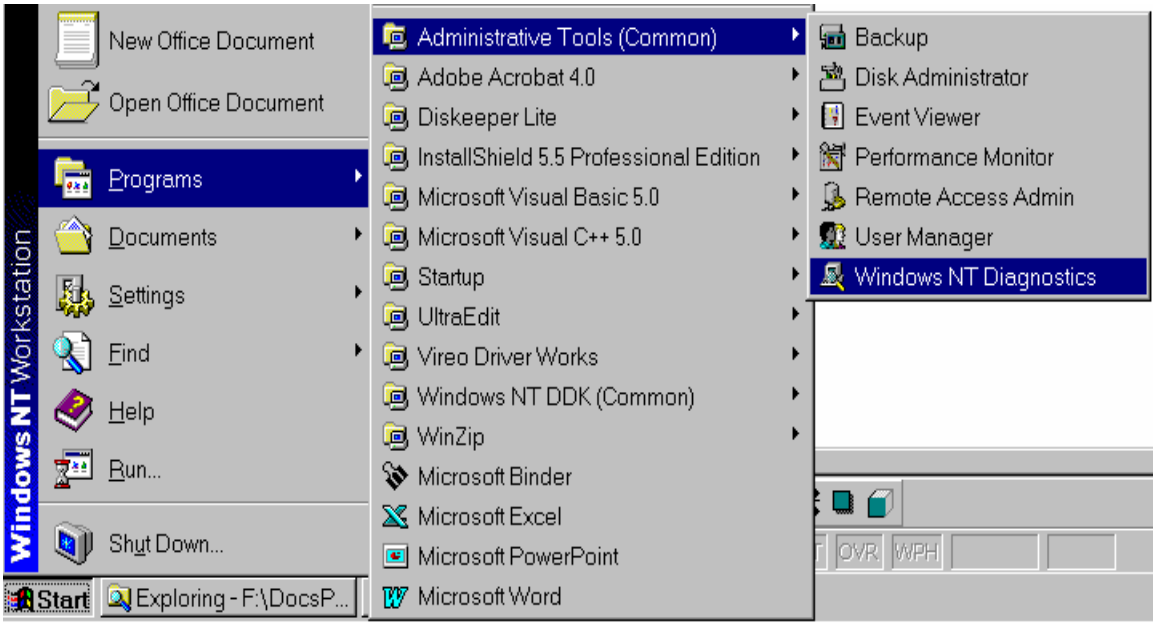

Figure 3-1. Click the “Start” button.

- Select the “Programs” menu item.
- Select the “Administrative Tools (Common)” menu item.
- Select the menu item “Windows NT Diagnostics”.

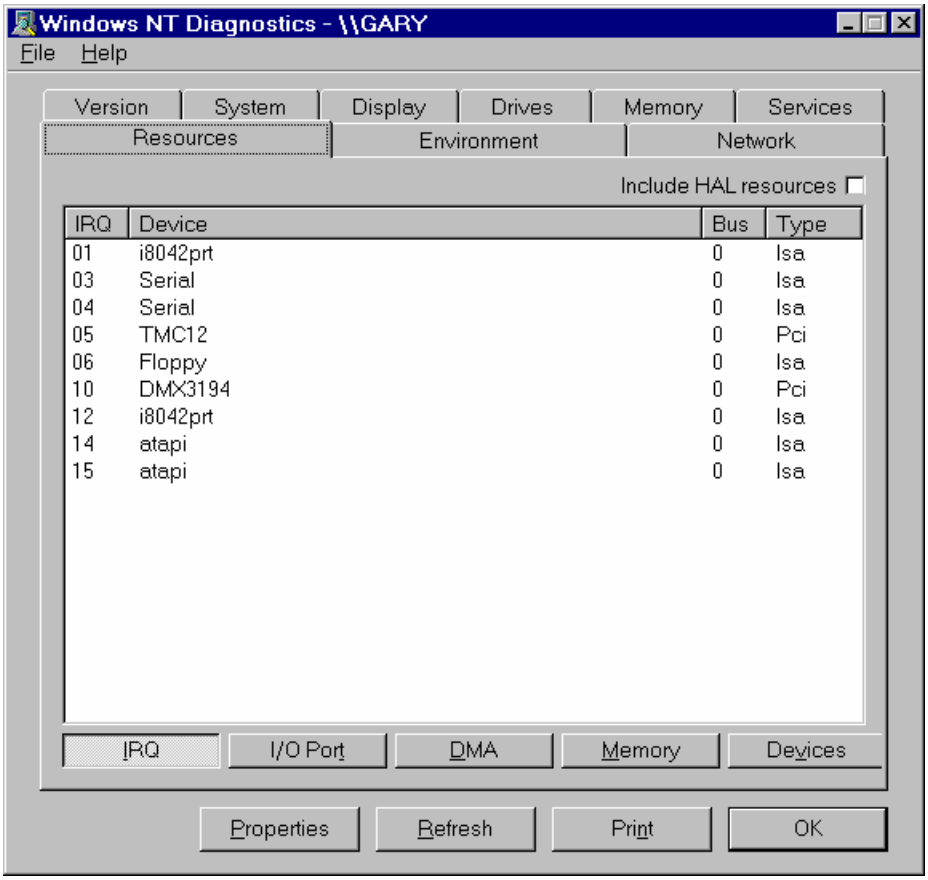

Figure 3-2. Click the "Resources" page.

You should verify that the IRQ of the DAQ card does not conflict with any other device.

The IRQ of the ISA DAQ card will not be shown in the above window. The user must select the IRQ number of the ISA DAQ card by setting the jumper on the card. The IRQ number must not be listed in the above window to prevent conflicts.

If Windows NT has no additional IRQs to be used by the DAQ card, the user may need to unplug another device in order to free an IRQ. Otherwise, the user must not use the INTERRUPT or DMA functions.

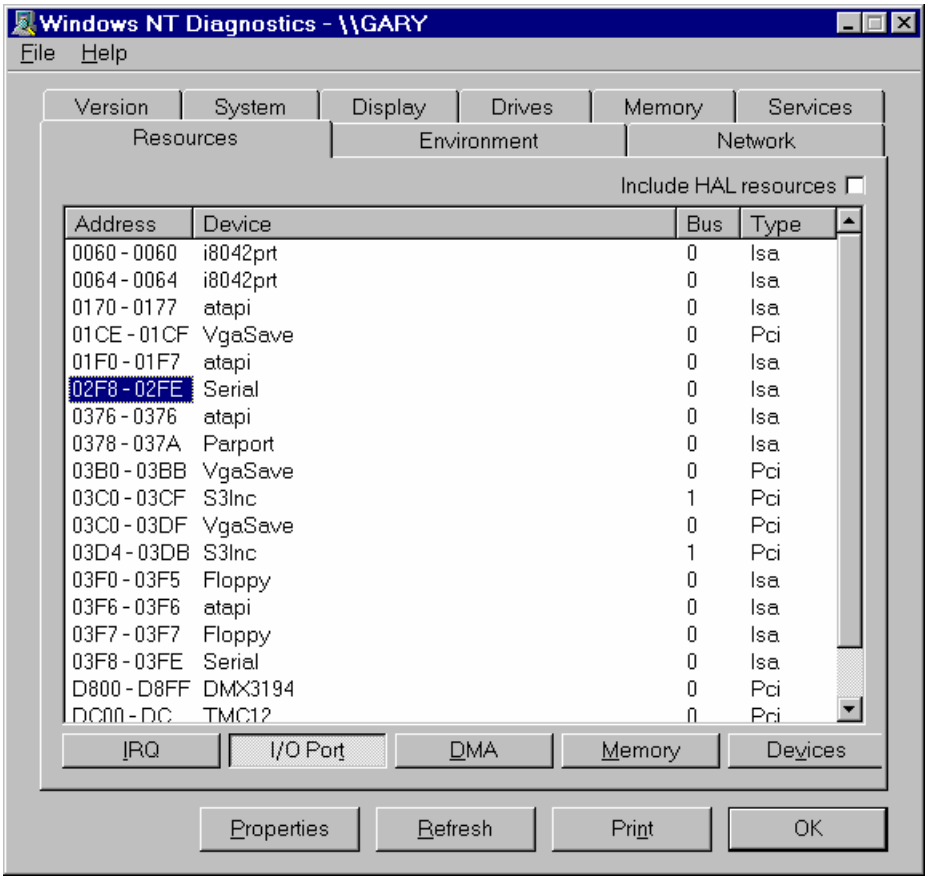

Figure 3-3. Click the"I/O Port" button.

Verify that the I/O Port address of DAQ card does not conflict with any other device.

The I/O Port address of the ISA DAQ card will not be shown in the above window. The user must select the I/O Port address of the ISA DAQ card by setting the switch on the card. The I/O Port address must not be listed in the above window to prevent conflicts.

If Windows NT has no available I/O Port addresses to be used by the PCI/ISA DAQ card, you MUST unplug some other devices to free the I/O Port address resources.

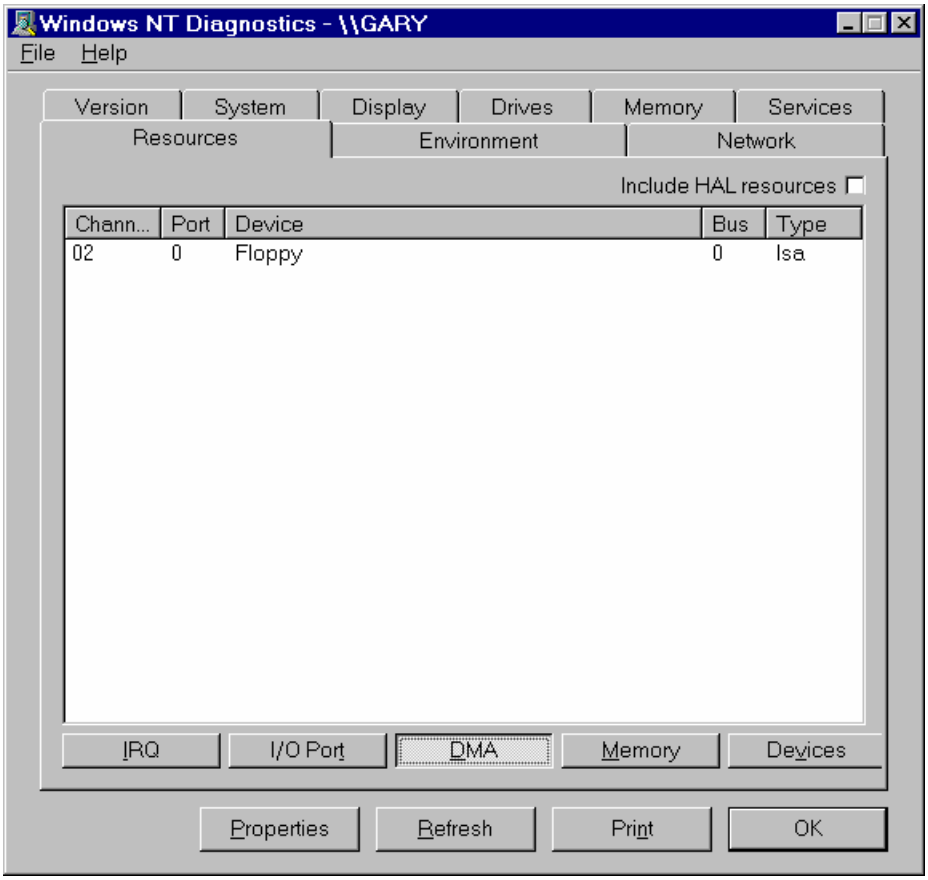

Figure 3-4. Click the "DMA" button.

Verify that the DMA resources of the PCI/ISA DAQ card does not conflict with any other devices.

The DMA channel of the ISA DAQ card will not be shown in the above window. The user must select the DMA channel of the ISA DAQ card by setting the jumper on the card. Furthermore, the DMA channel must not listed in the above window to prevent conflicts.

If Windows NT has no additional DMA channels available for use by the DAQ card, you may need to remvove another device to free the DMA resources. Otherwise, the you must not use theDMA functions.

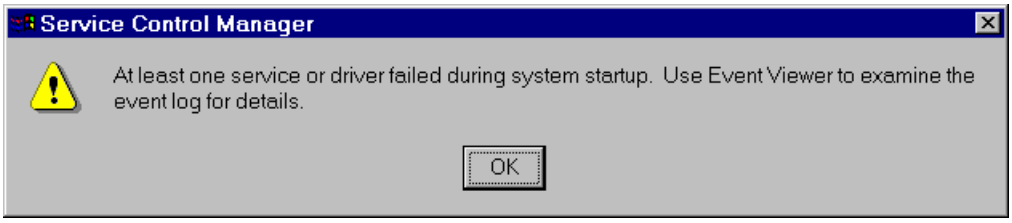

Figure 3-5. "Service Control Manager" window pops up when some services or drivers failed.

In this case, the user should check the Windows "Event Viewer" to determine the problem. Please follow the steps below.

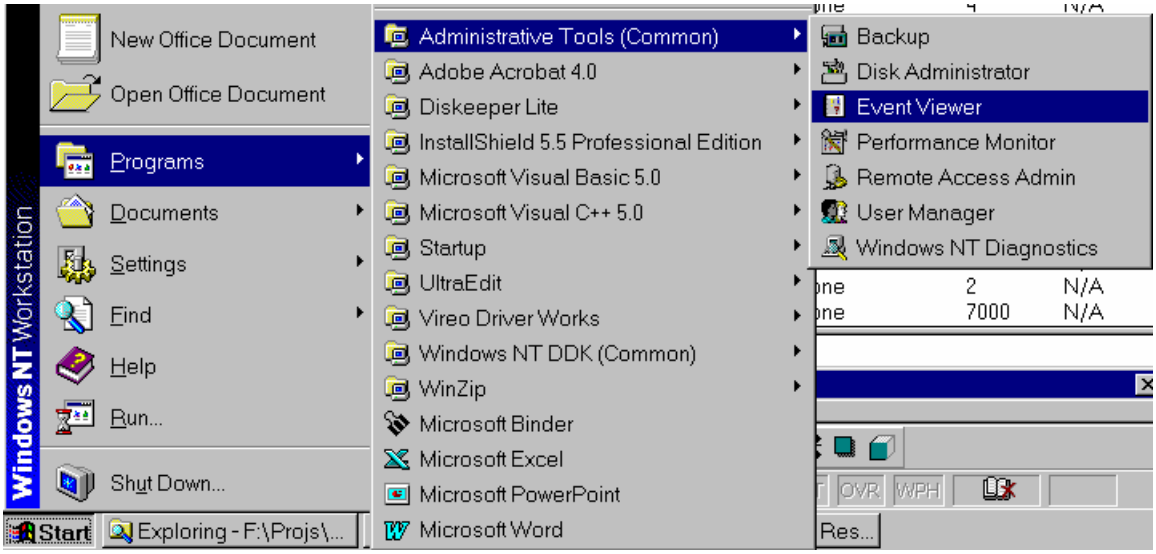

Figure 3-6. Click the "Start" button.

- Select the "Programs" menu item.
- Select the "Administrative Tools (Common)" menu item.
- Select the "Event Viewer" menu item.

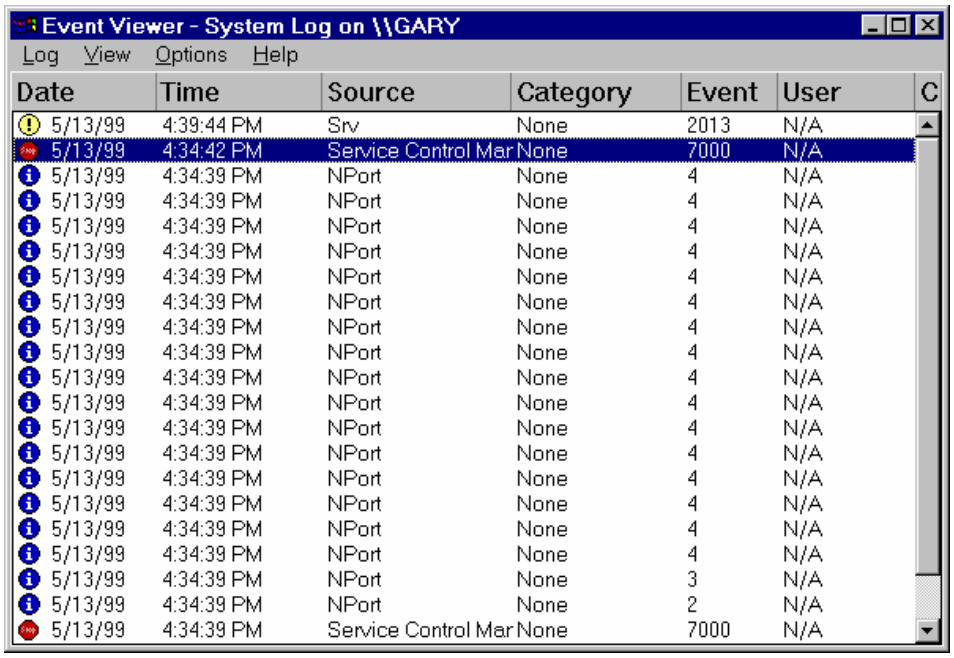

Figure 3-7. The "Event Viewer" window.

The user can double-click on the item to see detailed information.

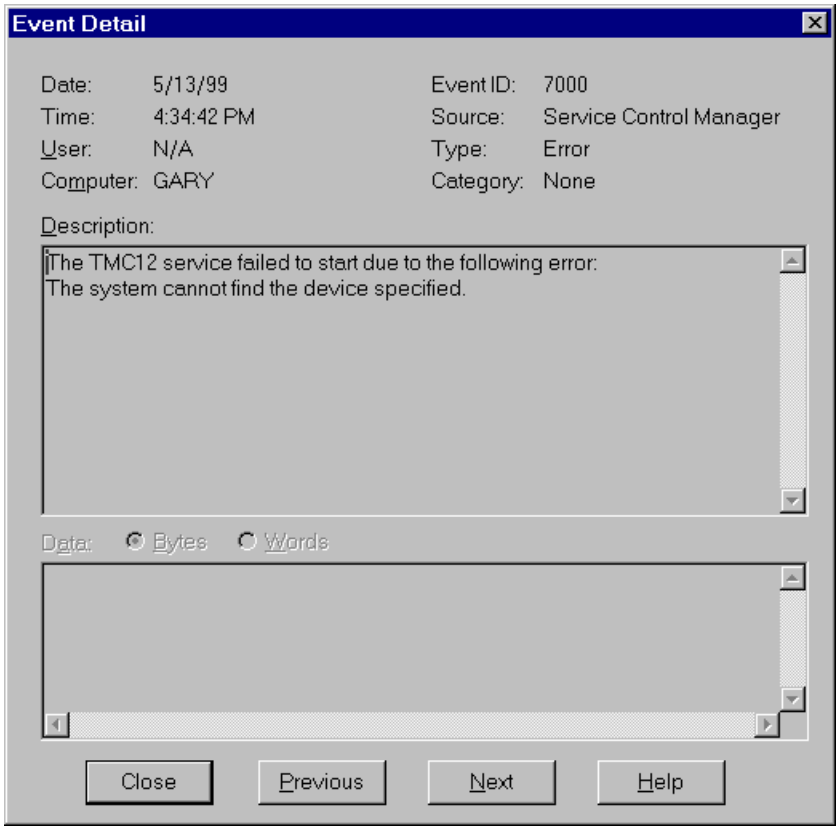

Figure 3-8. The "Event Detail"

The Description area shows a description of the event that occurred.

4 PCI/ISA DAQ card with Win 2000

Follow the steps below to check the resources on Windows 2000. If the DAQ card has conflicts, the user may need to free resources by removing another device.

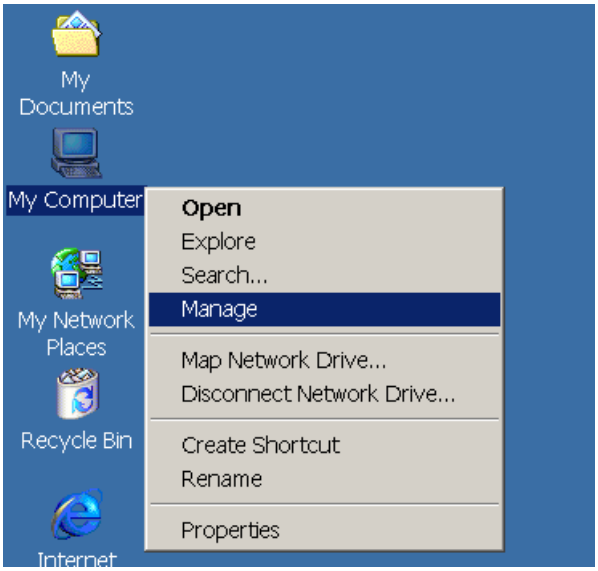

Figure 4-1. Open "Computer Management".

- Right-Click the icon "My Computer".
- Select the "Manage" menu item.
- "Computer Management" will popup, refer to figure 4-2.

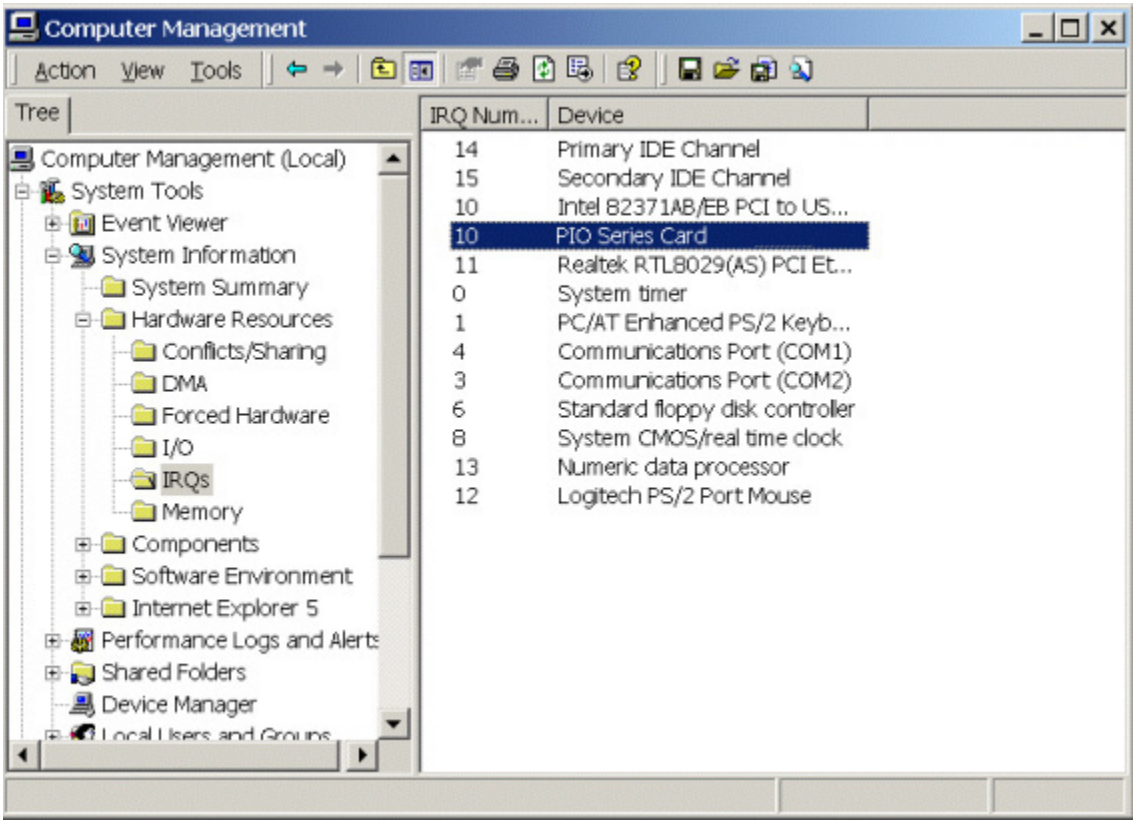

Figure 4-2. The "IRQs" resources under "Computer Management".

Select the "IRQs" resources under "Computer Management (Local) / System Tools / System Information / Hardware Resources / IRQs".

Verify that the IRQ of the DAQ card does not conflict with any other device.

The IRQ of the ISA DAQ card will not be shown in the above window. You must select the IRQ number of the ISA DAQ card by setting the jumper on the card. Furthermore, the IRQ number must not listed in the above window to prevent conflicts.

If Windows 2000 has no additional IRQs to be used by the PCI/ISA DAQ card, the user may need to remove another device to free the IRQ resources. Otherwise, the user must not use the INTERRUPT and DMA functions.

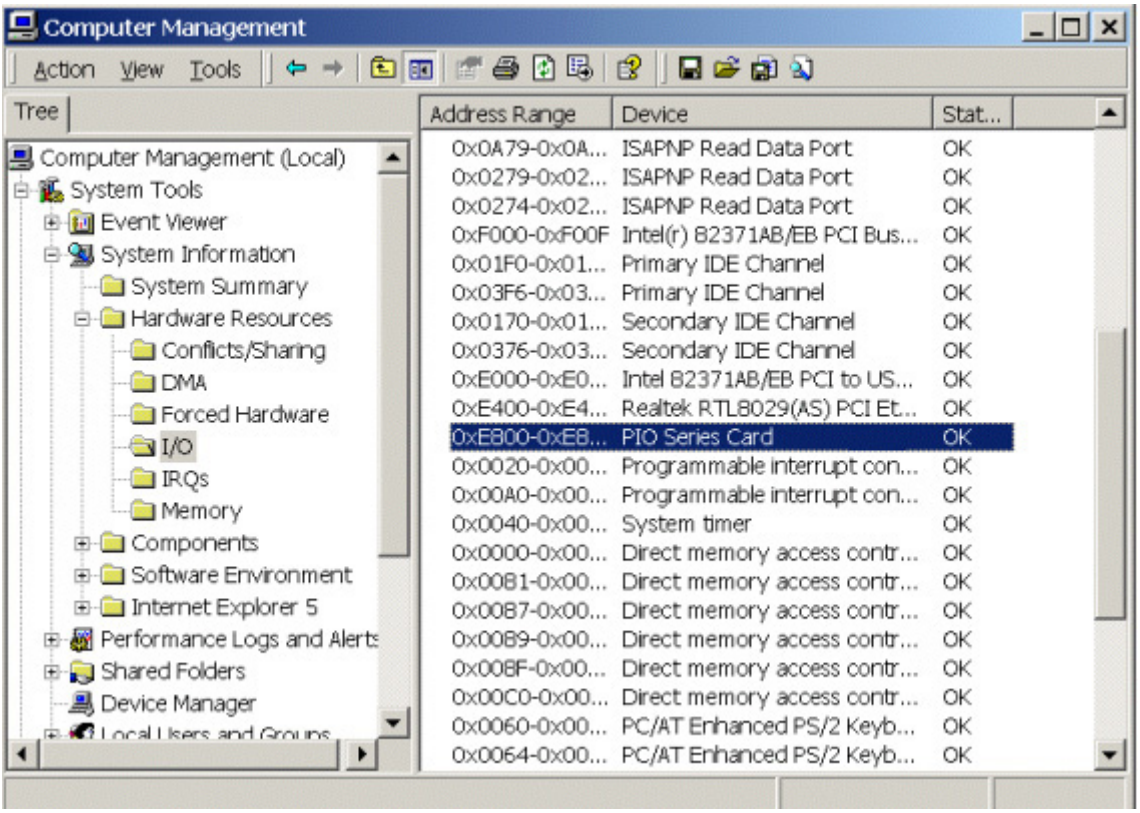

Figure 4-3. The "I/O" resources under "Computer Management".

Select the "I/O" resources under "Computer Management (Local) / System Tools / System Information / Hardware Resources / I/O".

Verify that the I/O Port address of the PCI/ISA DAQ does not conflict with any other device.

The I/O Port address of the ISA DAQ card will not be shown in the above window. The user must select the I/O Port address of the ISA DAQ card by setting the switch on the card. Furthermore, the I/O Port address must not listed in the above window to prevent conflicts.

If Windows 2000 has no additional I/O Port addresses available for use by the PCI/ISA DAQ card, the user MUST remove another device to free I/O Port addresses.

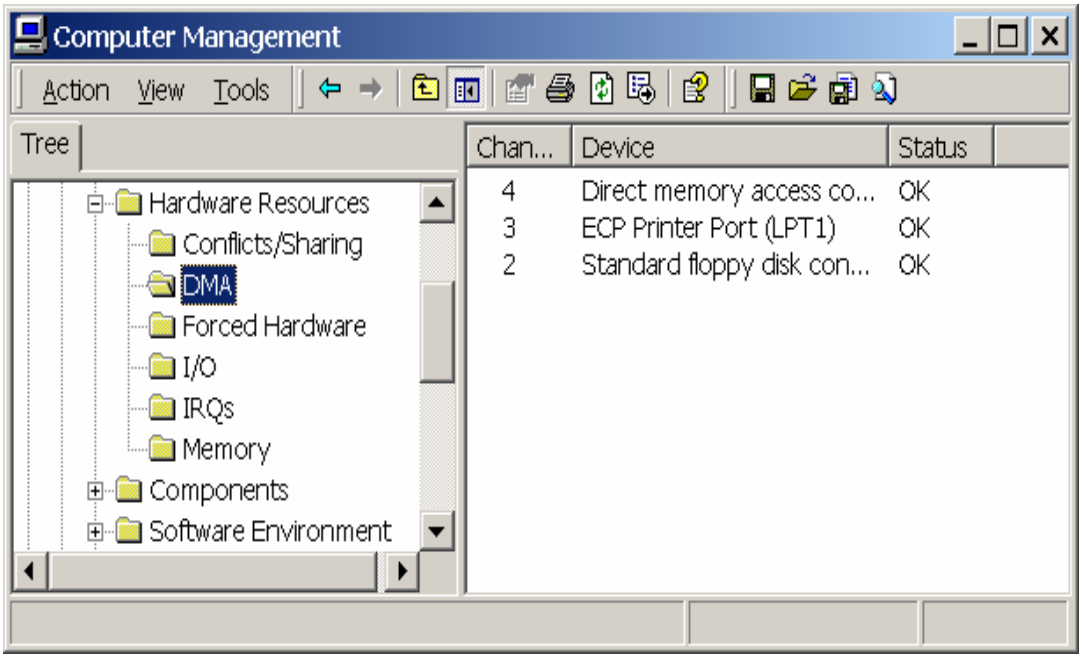

Figure 4-4. The "DMA" resources under "Computer Management".

Select the "DMA" resources under "Computer Management (Local) / System Tools / System Information / Hardware Resources / DMA".

Verify that the DMA channel of the PCI/ISA DAQ card does not conflict with any other device.

The DMA channel of the ISA DAQ card will not be shown in the above window. The user must select the DMA channel of the ISA DAQ card by setting the jumper on the card. Furthermore, the DMA channel must not listed in the above window to prevent conflicts.

If Windows 2000 has no additional DMA channels available for use by the PCI/ISA DAQ card, the user may need to remove some other devices to free DMA resources. Otherwise, the user must not use theDMA functions.

You may need to check the "Event Viewer" of Windows 2000 if a service or driver fails. Please see the following figures to view detailed information.

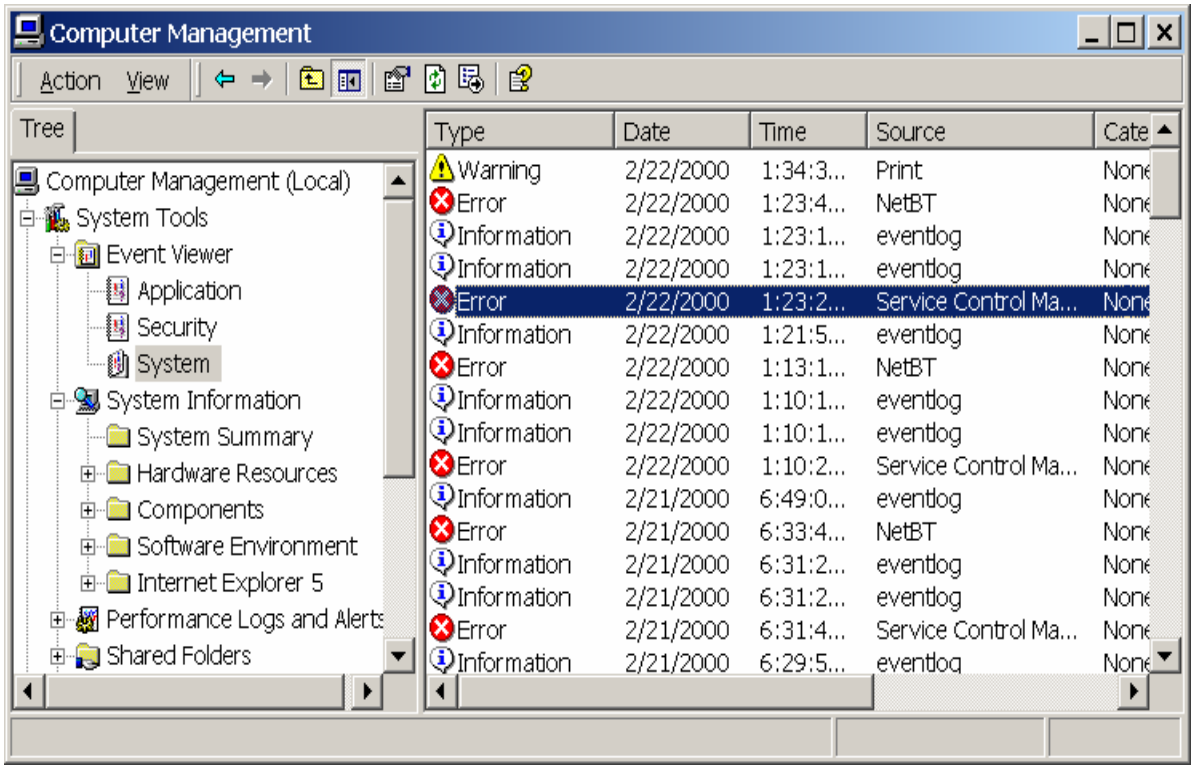

Figure 4-5. The "Event Viewer" under "Computer Management".

Select the "Event Viewer" under "Computer Management (Local) / System Tools / Event Viewer / System".

The user can double-click on the item to see detailed information. Please refer to figure 4-6.

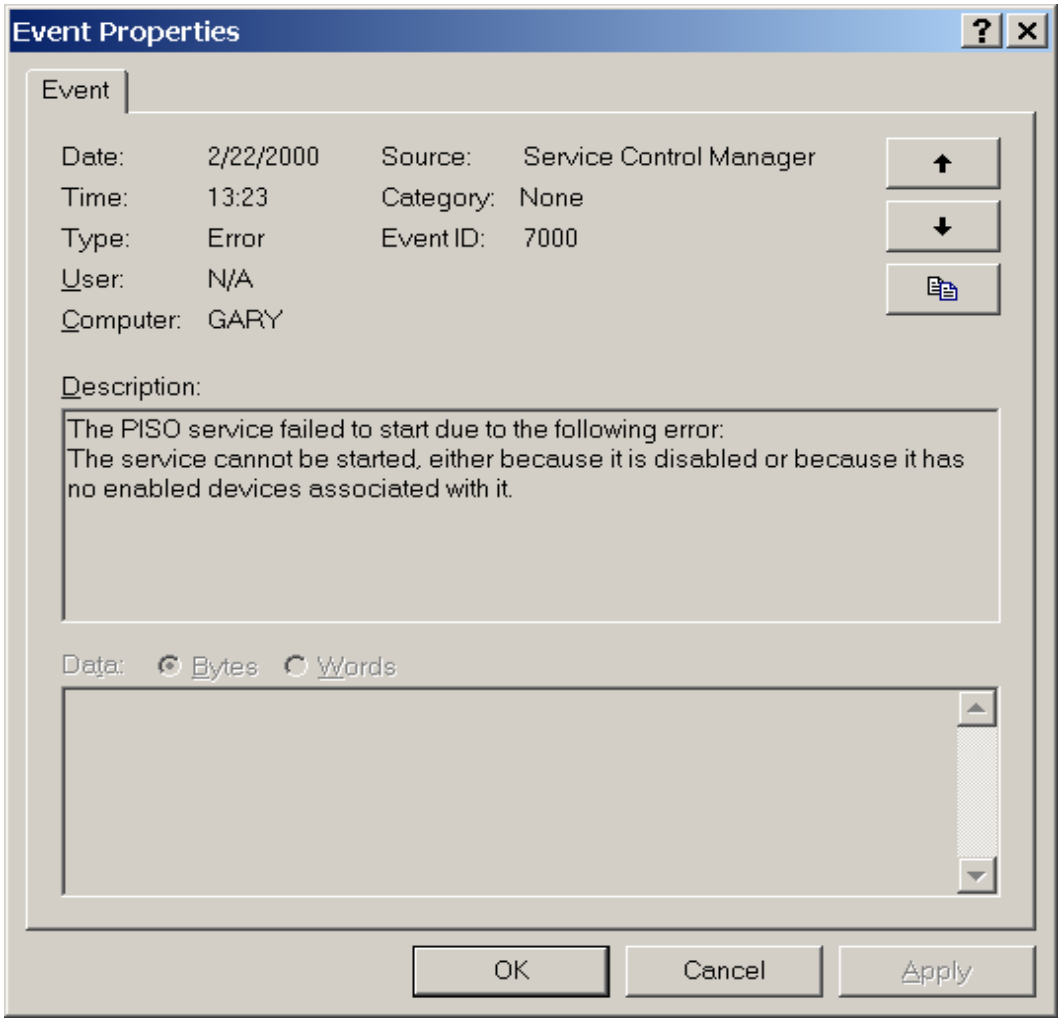

Figure 4-6. The “Event Properties” window

The Description message field provides information about the problem.

As shown below, the device manager can also be used to view the computer's resources.

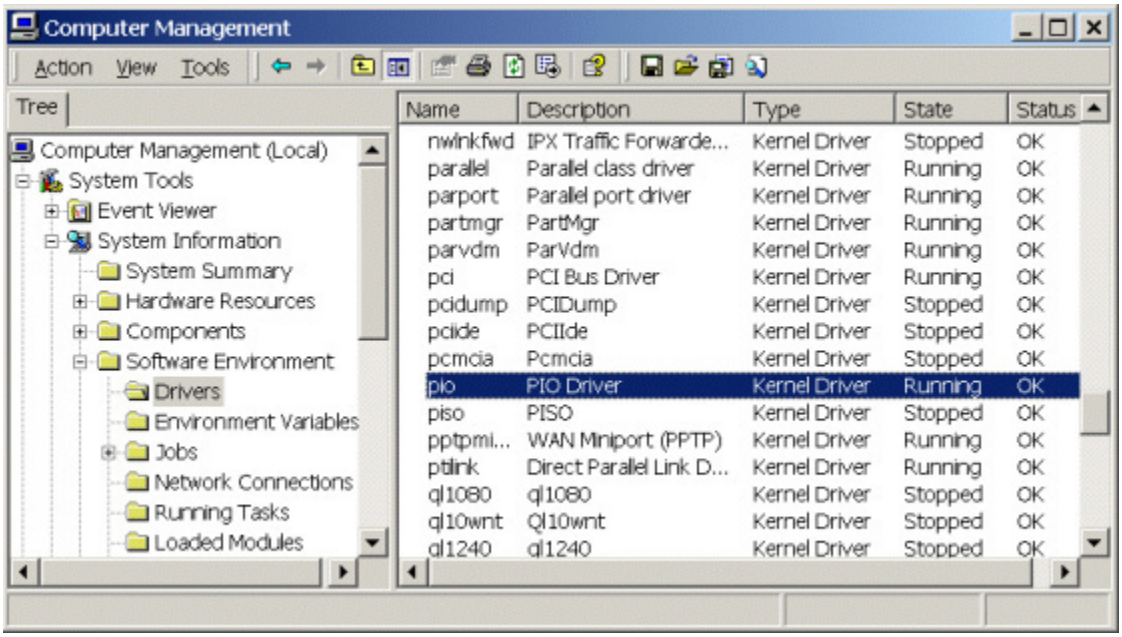

Figure 4-7. Select "Drivers" under "Computer Management (Local) / System Tools / System Information / Software Environment / Drivers".

Figure 4-8. Select "Device Manager" under "Computer Management (Local) / System Tools / Device Manager".

Double click on the item to show the detailed information.

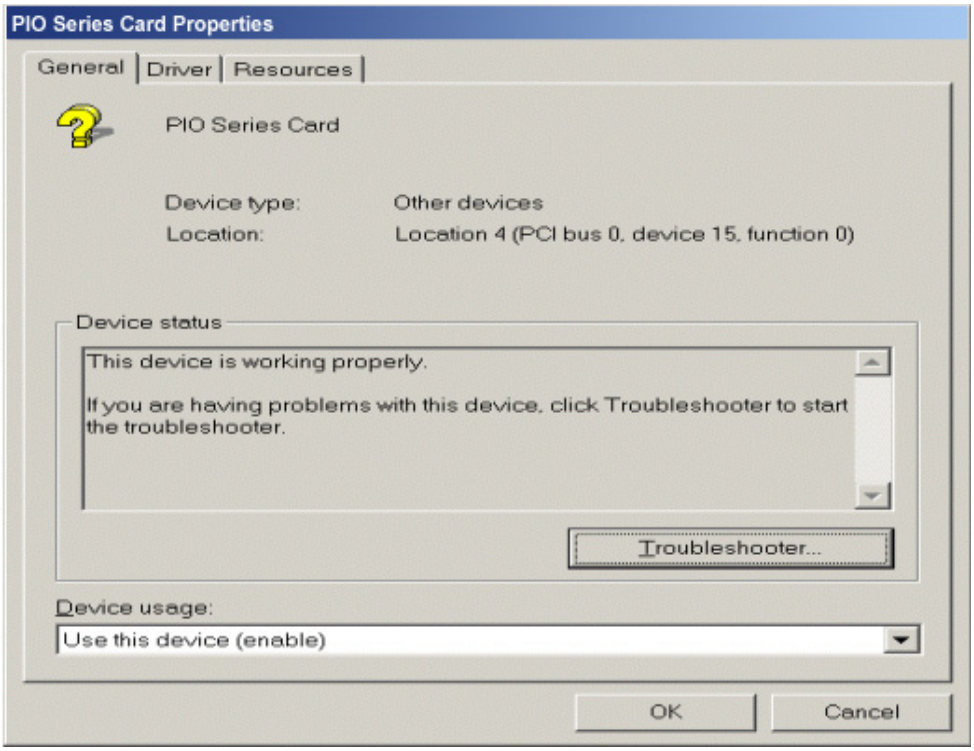

Figure 4-9. General information.

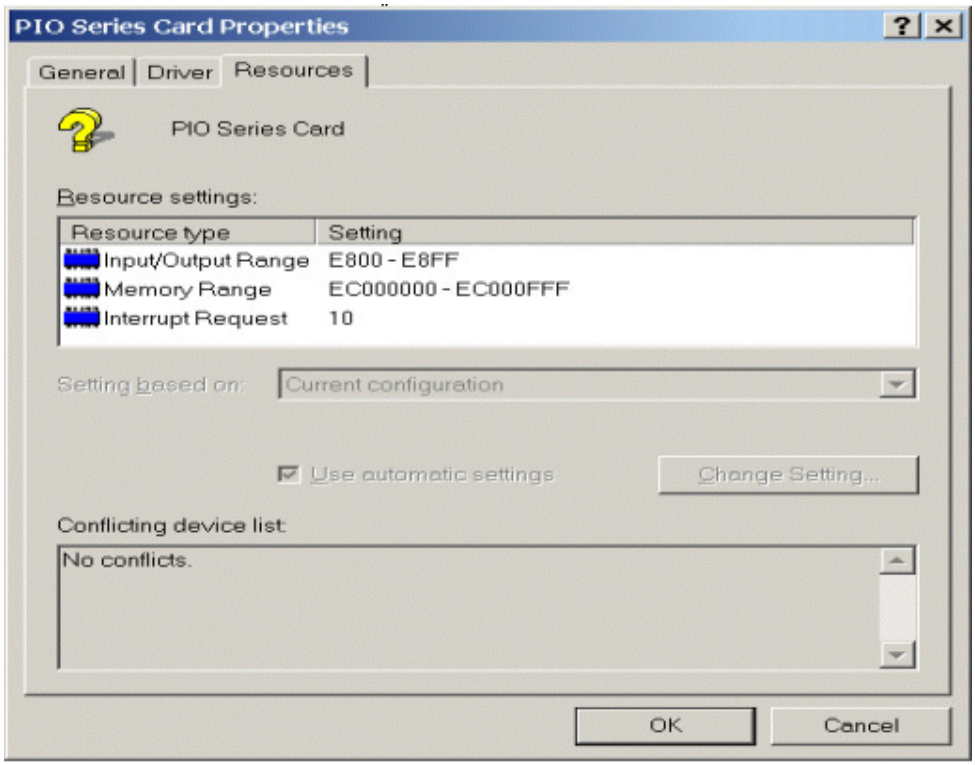

Figure 4-10. Resources

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