



Installing Software on Host Computer

You must install LabVIEW Real-Time (RT) on the host Windows 2000/NT/Me/9x computer before you can begin developing real-time applications. You must then install the RT Series DAQ board in the host computer. You use the host computer to develop your applications.

Installing LabVIEW

1. Insert the LabVIEW CD into your CD drive.
2. Run the setup program. Follow the instructions that appear on your screen.
3. Register online at www.ni.com/register. You also can fill out the LabVIEW Product Registration Card and return it to National Instruments. Registering allows you to access support, upgrades, and other important product information.
4. If you are new to LabVIEW, complete the LabVIEW Tutorial. Click the **LabVIEW Tutorial** button on the **LabVIEW** dialog box as shown in the following illustration.



Installing LabVIEW Real-Time Module

1. Remove the LabVIEW CD. Insert the LabVIEW Real-Time CD into your CD drive.
2. Run `autorun.exe`. Follow the instructions that appear on your screen.

Installing and Configuring the RT Series DAQ Board

You can install an RT Series DAQ device in any available expansion slot in your computer. However, to achieve best noise performance, leave as much room as possible between the RT Series DAQ device and other boards and hardware.

PCI Board Installation

Complete the following steps to install your RT Series PCI board.

1. Turn off and unplug your computer.
2. Remove the top cover or access panel of the computer.
3. Remove the expansion slot cover on the back panel of the computer.
4. Insert the RT Series DAQ board into a 5 V PCI slot. Gently rock the board to ease it into place. It might be a tight fit, but **do not force** the board into place.
5. If required, screw the mounting bracket of the RT Series DAQ board to the back panel rail of the computer.
6. Replace the cover.
7. Plug in and turn on your computer.

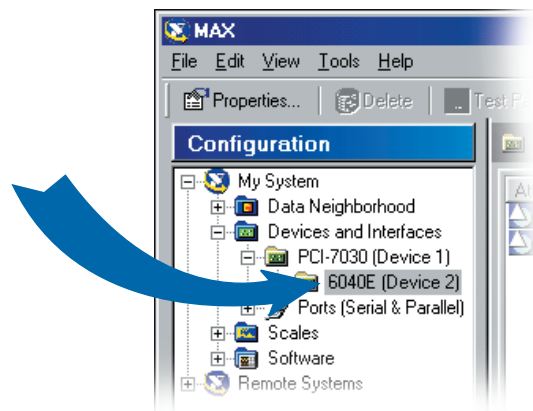
PXI Board Installation

Complete the following steps to install your RT Series PXI board.

1. Turn off and unplug your computer.
2. Remove the filler panel for the PXI slot you have chosen.
3. Insert the RT Series DAQ board into a 5 V PXI slot. Use the injector/ejector handle to fully insert the board into the chassis.
4. Screw the front panel of the RT Series DAQ board to the front-panel mounting rail of the system.
5. Plug in and turn on your computer.

Configuring the RT Series DAQ Board

1. Double-click the **Measurement & Automation Explorer (MAX)** icon on the desktop of the host computer.
2. Expand **Devices and Interfaces** in the left pane. The RT Series processor board and daughterboard appear. For example, the PCI-7030 processor board and 6040E daughterboard appear in the following illustration.

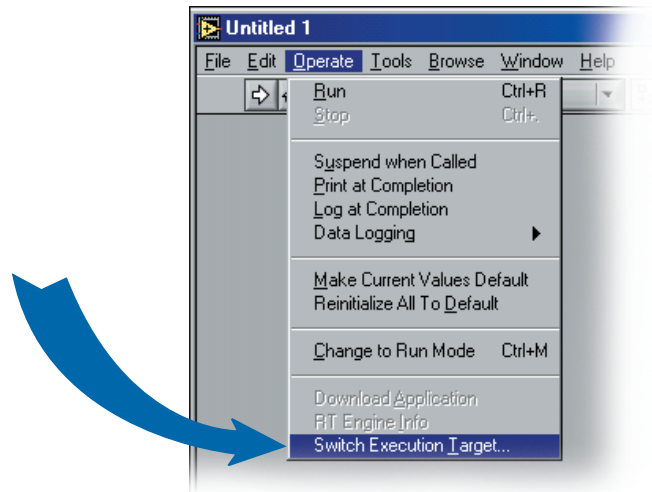


3. You now can configure the RT Series daughterboard. Select the daughterboard in the left pane. Click the **Properties** button to open the **Configuration** dialog box.

Starting an Application

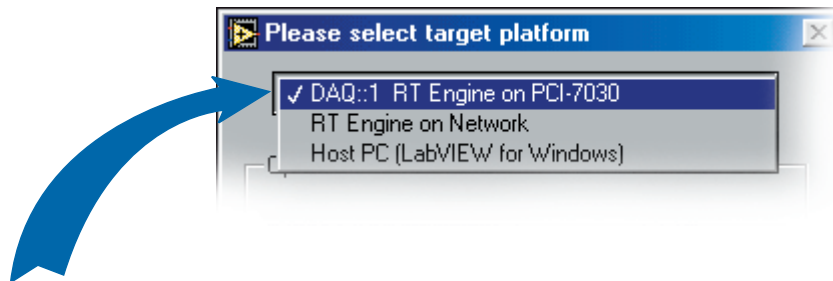
Complete the following steps to target LabVIEW RT to the RT Series DAQ Device.

1. Start LabVIEW.
2. Select **Operate»Switch Execution Target** from a new VI as shown in the following illustration.

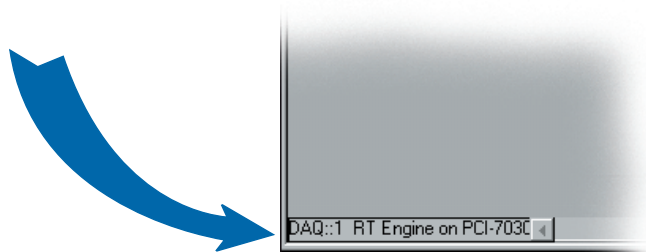


The **Select Target Platform** dialog box appears.

3. Select the RT Series DAQ device from the pull-down menu, as shown in the following illustration. Click the **OK** button.



The bottom left corner of the front panel specifies which hardware target you selected, as shown in the following illustration. Any VI that you subsequently run automatically downloads to the RT Series DAQ device.



Creating an Application

Now you are ready to create a LabVIEW RT application. Refer to the following documents to learn about LabVIEW RT:

- *LabVIEW Real-Time User Manual*—Use this manual to learn about creating deterministic applications using LabVIEW RT.
- *RT Series DAQ Device User Manual*—Use this manual to learn about using your RT Series DAQ device with LabVIEW RT.
- *LabVIEW Real-Time Help*—Use this help to learn more about LabVIEW RT VIs.
- *MAX Help*—Use this help to learn more about configuring your RT Series DAQ device.



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