

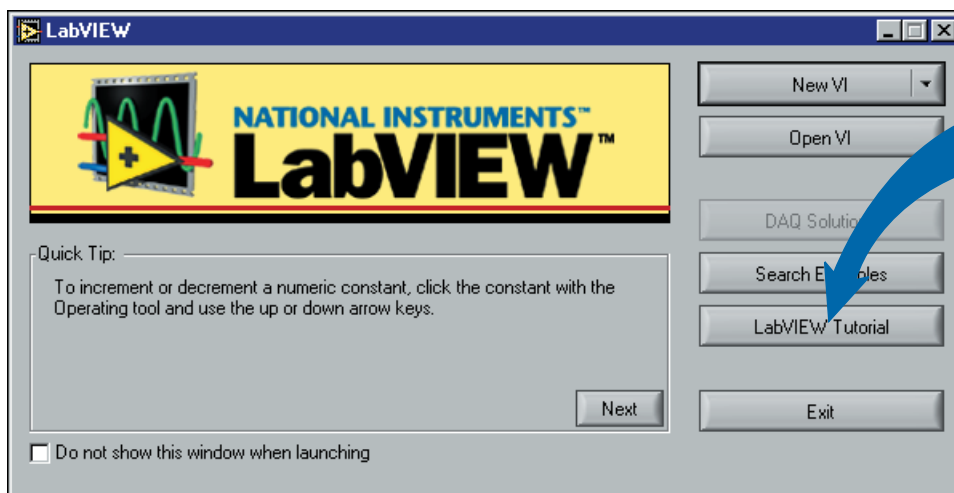


Installing Software on Host Computer

You must install LabVIEW Real-Time (RT) on the host computer before you can begin developing real-time applications. The host computer can be any Windows 2000/NT/Me/9x computer connected to the same network as the RT Series PXI system. Use the host computer to develop applications and then download them across the network to the RT Series PXI system. The host computer must be on the same subnet for you to configure the RT Series PXI system.

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 in 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 PXI System

Installing the Components of the RT Series PXI System

Complete the following steps to install all the hardware components of your RT Series PXI system.

1. Plug in your chassis before installing the RT Series PXI controller. The power cord grounds the chassis and protects it from electrical damage while you install the module.



Caution: To protect both yourself and the chassis from electrical hazards, leave the chassis off until you finish installing the RT Series PXI controller.

2. Remove or open any doors or covers blocking access to the system controller slot (Slot 1) in the chassis.
3. Touch the metal part of the case to discharge any static electricity that might be on your clothes or body.
4. Make sure the injector/ejector handle is in its downward position. Align the RT Series PXI controller with the card guides on the top and bottom of the system controller slot.



Caution: Do not raise the injector/ejector handle as you insert the RT Series PXI controller. The module will not insert properly unless the handle is in its downward position so that it does not interfere with the injector rail on the chassis.

5. Hold the handle as you slowly slide the module into the chassis until the handle catches on the injector/ejector rail.
6. Raise the injector/ejector handle until the module firmly seats into the backplane receptacle connectors. The front panel of the RT Series PXI controller should be even with the front panel of the chassis.
7. Tighten the four bracket-retaining screws on the top and bottom of the front panel to secure the RT Series PXI controller to the chassis.
8. (Optional) To add Fast Ethernet to your RT Series PXI system, plug in the PXI-8211 card using the same procedure described in steps 2-7.
9. Install any additional PXI cards into the chassis using the same procedure described in steps 2-7.
10. Check the installation.
11. Replace or close any doors or covers to the chassis.

Configuring the RT Series PXI system

Complete the following steps to configure your RT Series PXI system.

1. Connect the RT Series PXI controller to the network and power on the controller.
2. Double-click the **Measurement & Automation Explorer (MAX)** icon on the desktop of the host computer.
3. Expand **Remote Systems** in the left pane of MAX. The system appears listed under **Remote Systems** with its serial number as its default name.



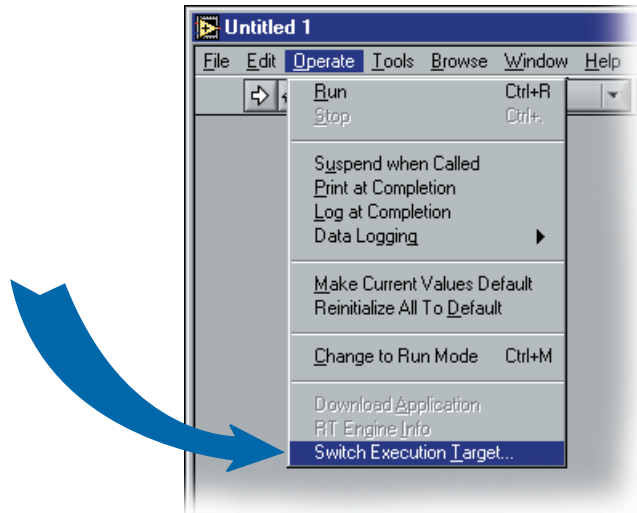
Note: The host computer must be on the same subnet for you to configure the RT Series PXI system.

4. Click the system in MAX and click the **Network Settings** tab in the right pane. Fill in the appropriate network settings. You can select **Obtain an IP Address Automatically (DHCP)** if you are unsure of the correct network settings. Contact your system administrator if you need more help.
5. Click the **Apply** button.
6. Click the **Yes** button to reboot.

Starting an Application

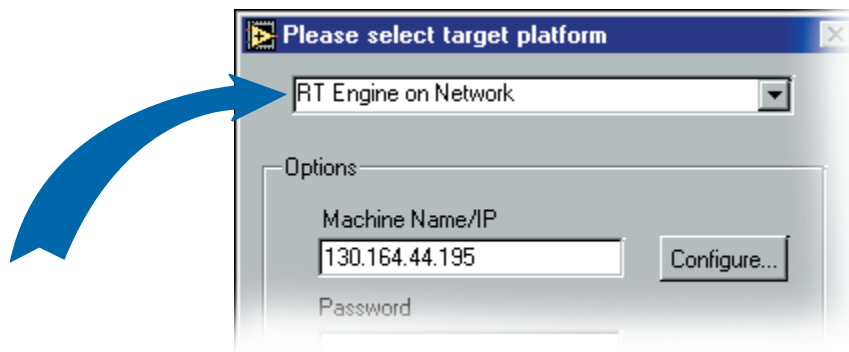
Complete the following steps to target LabVIEW RT to the RT Series PXI controller.

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



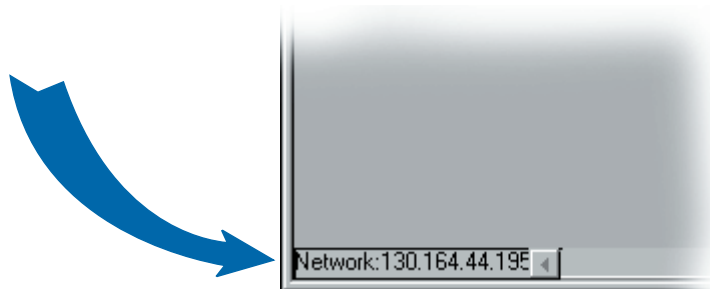
The **Select Target Platform** dialog box appears.

3. Select **RT Engine on Network** from the pull-down menu as shown in the following illustration.



4. Specify the IP address of the RT Series PXI system. Click the **OK** button.

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



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 PXI/CompactPCI Controller User Manual*—Use this manual to learn about using your RT Series PXI system 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 PXI system.



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