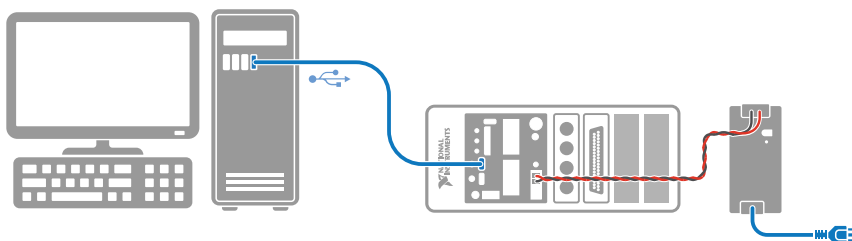# cRIO-905x

Embedded CompactRIO Controller with Real-Time Processor and Reconfigurable FPGA

This document describes how to begin using the cRIO-905*x*.

In this document, the cRIO-9053, cRIO-9054, cRIO-9055, cRIO-9056, cRIO-9057, and cRIO-9058 are referred to collectively as cRIO-905*x*.

> **Note** Refer to the device Safety, Environmental, and Regulatory Information document, shipped with your cRIO-905*x* controller and available on *ni.com/manuals*, for important safety and environmental specifications necessary when setting up your device.

Unpacking the Kit

> **Notice** To prevent electrostatic discharge (ESD) from damaging the device, ground yourself using a grounding strap or by holding a grounded object, such as your computer chassis.

1. Touch the antistatic package to a metal part of the computer chassis.
2. Remove the device from the package and inspect the device for loose components or any other sign of damage.

> **Notice** Never touch the exposed pins of connectors.

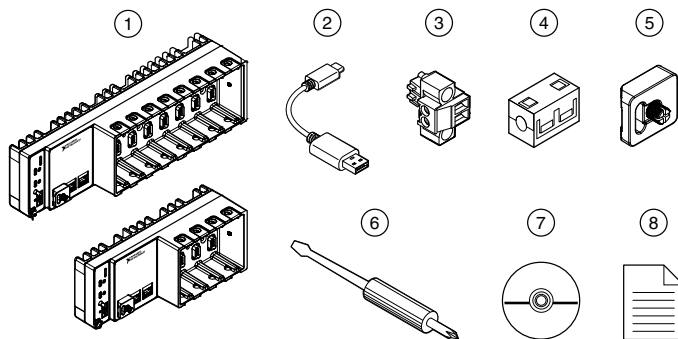> **Note** Do not install a device if it appears damaged in any way.

3. Unpack any other items and documentation from the kit.

Store the device in the antistatic package when the device is not in use.

What You Need to Get Started

Verify that the following items are included in the cRIO-905x controller kit.

Figure 1. cRIO-905x Kit Contents

1. Controller (4-Slot or 8-Slot)
2. USB Type-A Male to USB Type-C Male Cable
3. Power Connector (Ships connected on Front Panel)
4. Ferrite
5. SD Association MicroSD Card Cover (Ships Connected on Front Panel)
6. Screwdriver
7. Driver Media
8. Documentation

Required Components

- Host Computer
- C Series Modules
- Power Supply

Installing Software on the Host Computer

If you do not currently have any NI software installed on your host computer, see the *Install Software* section for details on required software and in which order to install it. If you have some NI software already installed, see the *Software Compatibility Resources* section for resources to check the compatibility of your software with your controller.

Install Software

Before using the cRIO-905x, you must install the following application software and device drivers on the host computer in the order shown.

Refer to the "Choosing Your Programming Mode" section of the *cRIO-905x User Manual* to determine the programming modes you wish to use.

Sequence	Software	Corresponding Programming Mode
1	LabVIEW 2018 or later	
2	LabVIEW Real-Time Module 2018 or later	
3	LabVIEW FPGA Module 2018 or later[1]	LabVIEW FPGA Mode
4	NI CompactRIO Device Drivers 18.1 or later[2]	Real-Time Mode Real-Time Scan (IO Variables) Mode

Note If you do not have the software media included with your hardware or do not have a media drive, go to *ni.com/downloads* to download the required software.

After installing the software, you must activate it using NI License Manager.

Software Compatibility Resources

For more information about installing the correct versions of software, visit *ni.com/info* and enter the Info Code swsupport.

For tips on resolving software compatibility issues with CompactRIO systems, visit *ni.com/info* and enter the Info Code swcompatibility.

Note If you try to install software that already exists on your host computer, the installer will show nothing installed.

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[1] LabVIEW FPGA Module is not required when using Real-Time or Real-Time Scan (IO Variables) program modes. To program the user-accessible FPGA on the cRIO-905*x* or deploy C Series modules in the LabVIEW FPGA program mode, LabVIEW FPGA Module is required.

[2] NI CompactRIO Device Drivers 18.1 and later include NI-DAQmx driver software. To deploy C Series modules installed in the cRIO-905*x* in Real-Time (NI-DAQmx) mode, ensure that NI-DAQmx is selected during installation. To deploy C Series modules installed in the cRIO-905*x* in Real-Time Scan (IO Variables) mode, ensure that NI Scan Engine is selected during installation.

Installing the C Series Modules

Complete the following steps to install a C Series module.
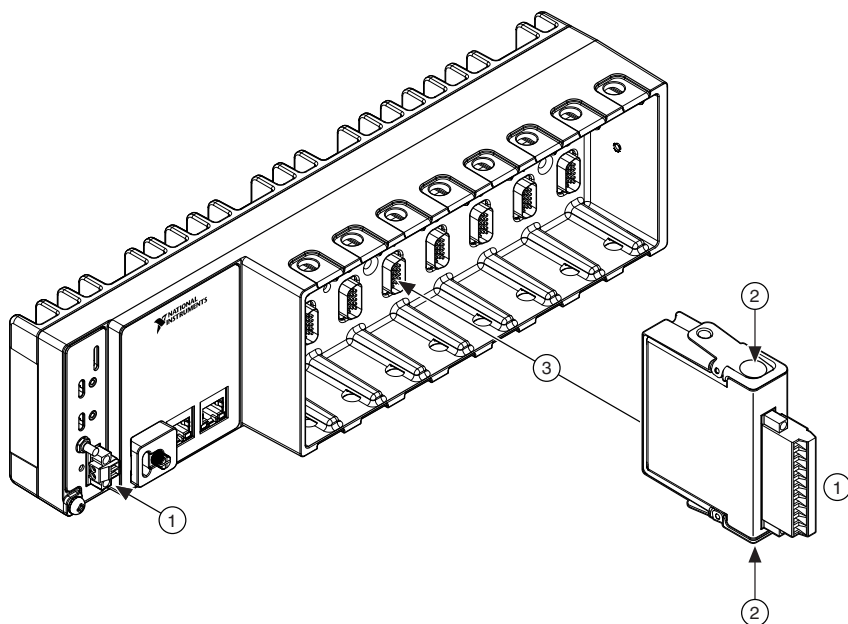
1. Verify that power is not connected to the I/O connector(s) on the C Series module and the cRIO-905*x*.

    ✏️ **Note** If the system is in a nonhazardous location, the cRIO-905*x* can be powered on when you install modules.

2. Press the latches on the C Series module.
3. Align the C Series module with a slot and seat it in the slot until the latches lock in place.

Connecting the cRIO-905*x*

The cRIO-905*x* has the following connectors, LEDs, and buttons. For a full description of all front panel features, see the *cRIO-905x User Manual*.

Figure 2. cRIO-905*x* Front Panel
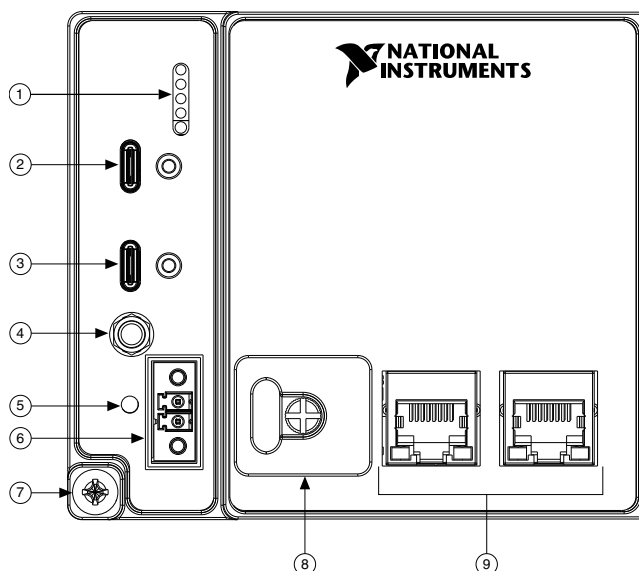
1. LEDs
2. USB 2.0 Type-C Device Port with Console Out
3. USB 3.1 Type-C Host
4. PFI 0
5. RESET Button
6. Power Connector
7. Grounding Screw
8. MicroSD Card Removable Storage
9. RJ-45 Gigabit Ethernet Ports

Note The cRIO-905*x* may have 1 Ethernet port or 2 Ethernet ports depending on the model.

Connecting the Controller to Ground

You must connect the cRIO-905*x* grounding terminal to the grounding electrode system of the facility.
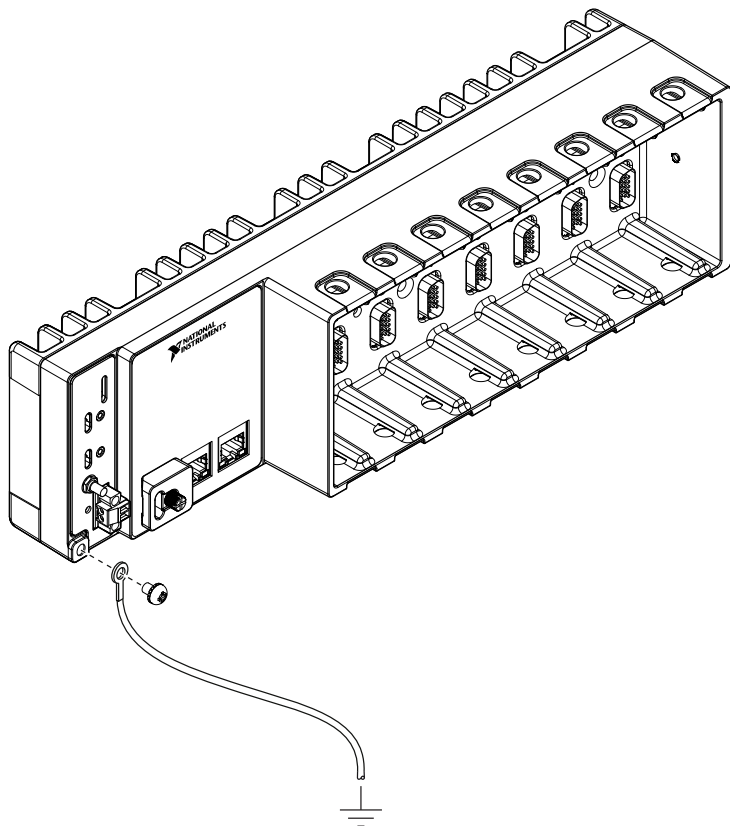
What to Use

• Ring lug
• Wire, 1.3 mm^2 (16 AWG) or larger
• Screwdriver, Phillips #2

What to Do

Complete the following steps to ground the cRIO-905*x*.

1. Attach the ring lug to the wire.
2. Remove the grounding screw from the grounding terminal on the cRIO-905*x*.

3. Attach the ring lug to the grounding terminal.
4. Tighten the grounding screw to 0.5 N · m (4.4 lb · in.) of torque.
5. Attach the other end of the wire to the chassis safety ground using a method that is appropriate for your application.

⚠ **Notice** If you use shielded cabling to connect to a C Series module with a plastic connector, you must attach the cable shield to the chassis grounding terminal using 1.3 mm^2 (16 AWG) or larger wire. Attach a ring lug to the wire and attach the wire to the chassis grounding terminal. Solder the other end of the wire to the cable shield. Use shorter wire for better EMC performance.

For more information about ground connections, visit *ni.com/info* and enter the Info Code emcground.

Connecting the Controller to Power

The cRIO-905*x* requires a 9 V to 30 V DC external power supply. The cRIO-905*x* filters and regulates the supplied power and provides power for the C Series modules.

The POWER LED on the cRIO-905x indicates if the power input is in use, as shown in the following table.

Table 1. POWER LED Indicators

LED Color	LED Pattern	Indication
Green	Solid	The cRIO-905x is powered on and the connected power supply is adequate.
—	Off	The cRIO-905x is off.

> ⃠ **Notice** Do not connect the power connector to a DC mains supply or to any supply that requires a connecting cable longer than 3 m (10 ft). A DC mains supply is a local DC electricity supply network in the infrastructure of a site or building.

What to Use

- Ferrite (included in kit)
- Screwdriver, 2.54 mm (0.10 in.) flathead
- Power supply, 9 V to 30 V, 60 W minimum

NI recommends the power supplies listed in the following table for the cRIO-905x.

Table 2. NI Power Supplies

Power Supply	Part Number
NI PS-15 Industrial Power Supply (24 VDC, 5 A, 100 VAC to 120 VAC/200 VAC to 240 VAC input)	781093-01
NI PS-10 Desktop Power Supply (24 VDC, 5 A, 100 VAC to 120 VAC/200 VAC to 240 VAC input)	782698-01

What to Do

Complete the following steps to connect a power supply to the cRIO-905x.

1. Ensure that your power supply is powered off.
2. Install the ferrite (National Instruments part number 711849-01, included in the shipping kit) on the negative and positive leads of the power supply, as shown in the following figure.

Figure 3. Installing a Ferrite on the Power Leads
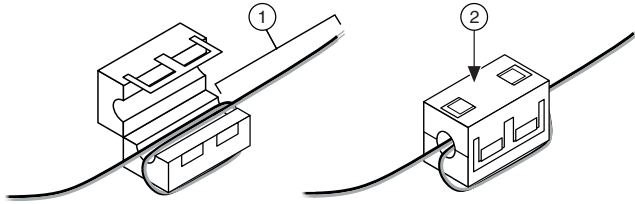
1. Pass the leads through the ferrite twice, leaving 50 mm to 75 mm (2 in. to 3 in.) between the ferrite and the end of the leads.
2. Close the ferrite around the leads.

3. Remove the power connector from the cRIO-905*x*.
4. Connect the power supply to the power connector, as shown in the following figure.

Figure 4. cRIO-905*x* Power Connections
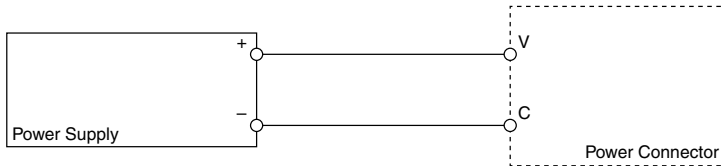
5. Tighten the terminal screws on the power connector to 0.20 N · m to 0.25 N · m (1.8 lb · in to 2.2 lb · in) of torque.
6. Install the power connector on the front panel of the cRIO-905*x*.
7. Tighten the power connector screw flanges to 0.20 N · m to 0.25 N · m (1.8 lb · in to 2.2 lb · in) of torque.
8. Power on the primary power supply.

    When you power on the cRIO-905*x* for the first time, the device boots into safe mode. The POWER LED illuminates, the STATUS LED illuminates briefly, and then the STATUS LED blinks twice every few seconds, indicating the controller does not yet have software installed.

Connecting the Controller to the Host Computer

Complete the following steps to connect the cRIO-905*x* to the host computer using the USB Type-C Device Port with Console Out.

1. Power on the host computer.
2. Connect the cRIO-905*x* to the host computer using the USB-Type-C-to-USB-Type-A cable (included in kit), inserting the USB Type-C connector into the USB Type-C Device Port with Console Out. Connect the other end of the USB cable (Type-A) to the host computer.

    The device driver software automatically detects the cRIO-905*x*. Select **Configure and install software to this device**.
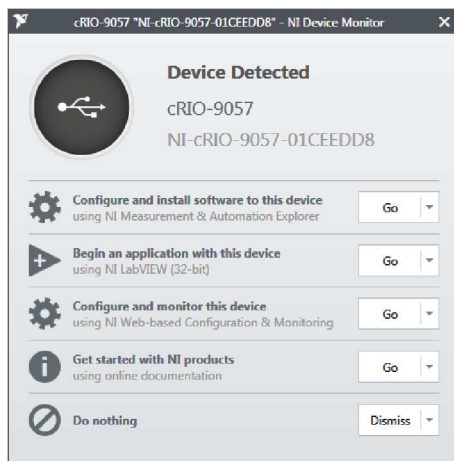
If the device driver software does not detect the cRIO-905*x*, verify that you installed the appropriate NI software in the correct order on the host computer as described in *Installing Software on the Host Computer*.
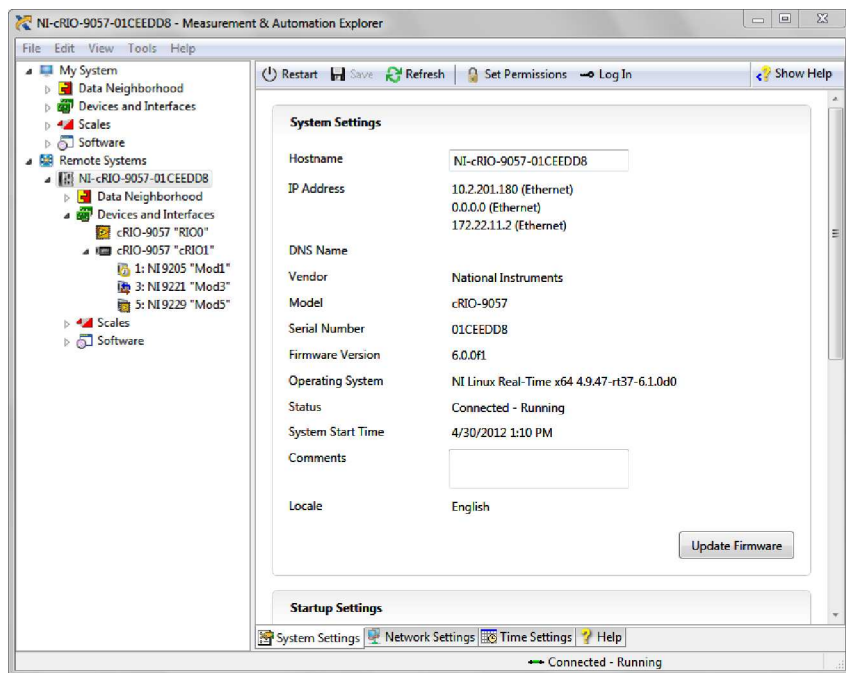
Discovering the Controller in MAX

Complete the following steps to find the cRIO-905*x* controller in MAX.

1. Launch MAX on the host computer.
2. Expand **Remote Systems** in the configuration tree and locate your system.
3. Select your target.

> **Tip** MAX lists the system under the model number followed by the serial number, such as NI-cRIO-9057-01CEEDD8 by default.

Setting a System Password

Complete the following steps to set a system password.

1. In MAX, click the **Log In** button on the toolbar.
2. Enter `admin` in the **User name** field.
3. Leave the **Password** field blank.

> **Note** There is no default password for the cRIO-905*x*, so you must leave the password field blank when logging in until you set a system password.

4. Click the **OK** button.
5. Click the **Set Permissions** button in the toolbar.

   The NI Web-Based Configuration and Monitoring utility opens in your default browser and is where you set the password. If you have not installed Microsoft Silverlight, NI Web-based Configuration & Monitoring prompts you to do so.

6. Click the **Login** button and enter `admin` in the **User name** field.
7. Leave the **Password** field blank if you have not changed the default password, or enter the current password.
8. Double-click **admin** in the list of users under the **Users** tab.
9. Click **Change Password**.
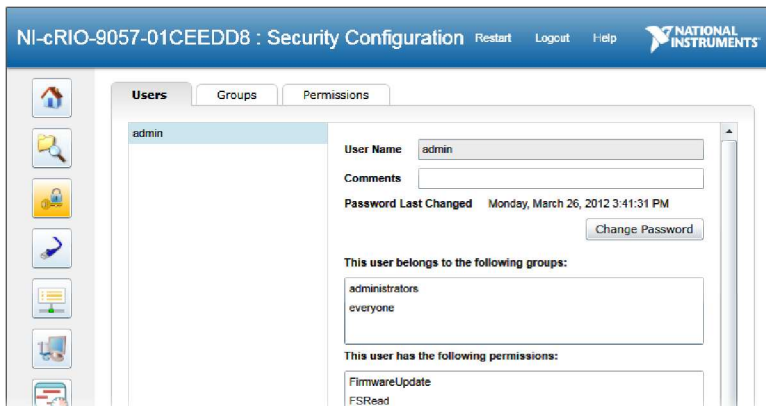
10. Enter and re-enter a new password.
11. Click **OK**.
12. Click **Save**.
13. Click **OK** to confirm you are changing the password.

> (!) **Notice** NI cannot recover lost system passwords. If you forget the password, you must contact NI and reformat the controller.

14. Close the NI Web-Based Configuration and Monitoring utility.

Installing Software on the Controller

Complete the following steps to install software on the cRIO-905*x*.

1. In MAX, expand your system under Remote Systems.
2. Right-click **Software**.
3. Select **Add/Remove Software** to launch the LabVIEW Real-Time Software Wizard.

> 💡 **Tip** You must log in to install software on the cRIO-905*x*. The default username for the cRIO-905*x* is admin. There is no default password for the cRIO-905*x*. To set a password for your system, refer to *Setting a System Password*.

4. Select the recommended software set for your LabVIEW and NI-RIO Device Drivers versions.
5. Click **Next**.
6. Select any additional software from the list of software add-ons, if needed.

> 💡 **Tip** You can use this wizard at any time to install additional software.

> 📝 **Note** LabVIEW FPGA Module is required to run your modules in the LabVIEW FPGA programming mode. NI Scan Engine is required to run your modules in the Real-Time Scan (IO Variables) programming mode.

7. Click **Next**.

8. Verify that the summary of software to install is correct.

9. Click **Next** to start the installation.

10. Click **Finish** when the installation is complete.

Testing Your Controller in MAX

Complete the following steps to run a test panel in Measurement & Automation Explorer (MAX) to confirm that your cRIO-905*x* is communicating with your system.

> **Note** MAX test panels are only available for systems running NI-DAQmx driver software with supported C Series modules installed, and with modules deployed in the Real-Time (NI-DAQmx) programming mode. For additional information, refer to *Installing Software on the Host Computer* and "Choosing Your Programming Mode" in the *cRIO-905x User Manual* .

1. Launch MAX.

2. Locate and select your cRIO-905*x* system in the **My System** tree. If your module and the software are functioning correctly, the System Settings for your module will show a status of **Connected - Running**.


> **Note** If your cRIO-905*x* has a single Ethernet port, only one Ethernet IP address is populated in the system settings.

If your cRIO-905*x* is present but the status is **Connected – Safe Mode (No Software Installed)**, complete the procedure to install software on the cRIO-905*x* in *Installing Software on the Controller*.

3. Wire the C Series module as indicated in the C Series module documentation.

4. Right-click any module and select **Test Panels**, or select **Test Panels** from the main configuration window options.
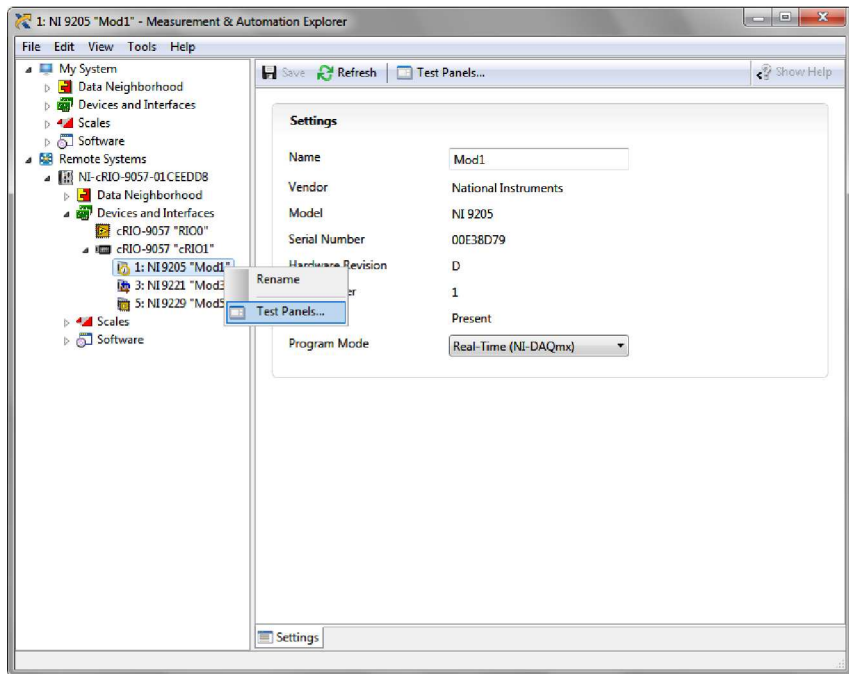
Note If the module you select is not deployed in Real-Time (NI-DAQmx) mode, you will be prompted to switch modes to view the test panel.

5. Configure the measurement settings and click **Start**.
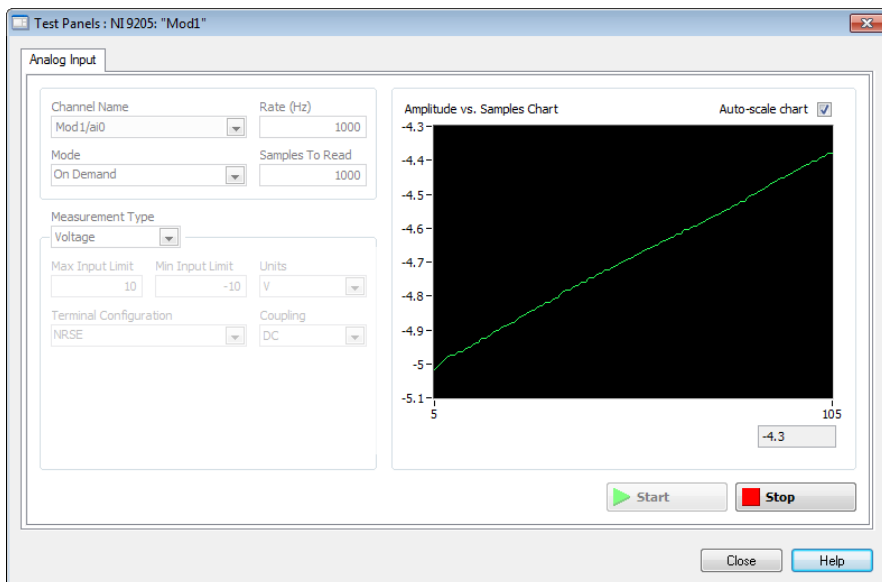
Changing Module Programming Modes in MAX

Complete the following steps to deploy your C Series module in a new program mode in MAX.

1. Launch MAX on the host computer.
2. Expand **Remote Systems** in the configuration tree and locate your cRIO-905*x* system.
3. Select the C Series module you wish to program.
4. In the **Settings** pane, choose the **Program Mode** you wish to deploy the module in from the drop-down menu.
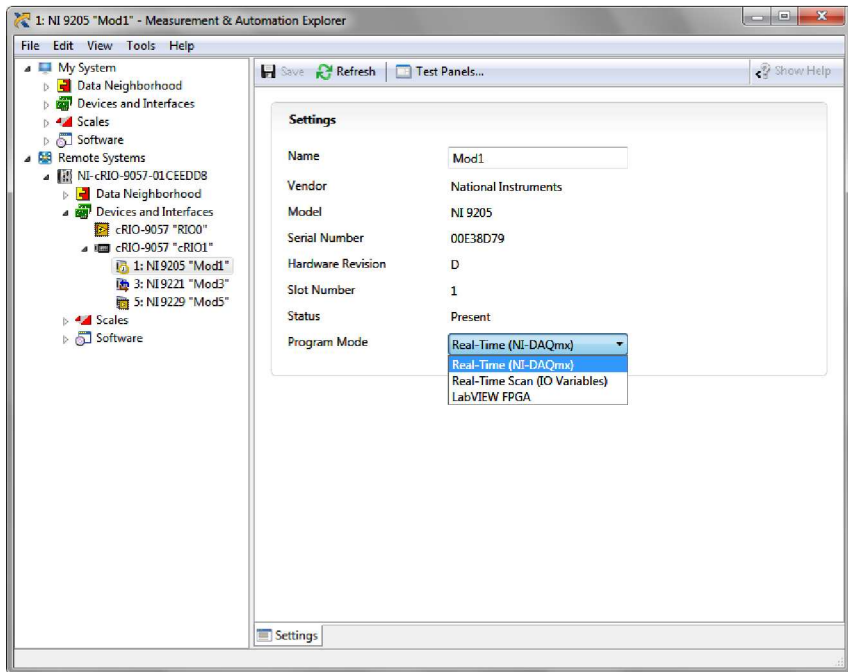
5. Click **Save**.

    The module is deployed in the program mode. Notice the module icon changes to represent the program mode.
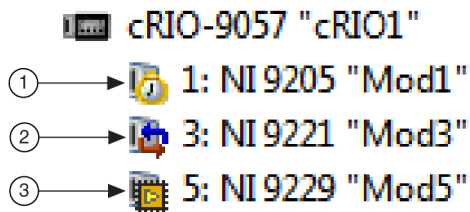
1. Real-Time Mode
2. Real-Time Scan (IO Variables) Mode
3. LabVIEW FPGA Mode

Troubleshooting the Controller

The cRIO-905*x* is Not Communicating with the Network

Use this topic to troubleshoot possible reasons your cRIO-905*x* is not communicating with the network.

- Ensure that the USB Device connection between the cRIO-905*x* and the host computer and the Ethernet connections between the host computer and the router are secure.
- Configure the IP and other network settings by completing the following steps.
  1. Use a USB-Type-C-to-USB-Type-A cable (included in the kit) to connect the cRIO-905*x* USB Type-C Device Port with Console Out to a host computer. The USB driver creates a virtual network interface card and assigns an IP address to the cRIO-905*x* in the format of 172.22.11.*x.*
  2. In MAX, expand your system under **Remote Systems**.

     💡 **Tip** If you do not see the cRIO-905*x* under **Remote Systems**, use the **Troubleshoot Remote System Discovery** utility to walk through troubleshooting steps.

  3. Select the **Network Settings** tab to configure the IP and other network settings.
  4. (Optional) Use the RJ-45 Ethernet port 0 or port 1 to reconnect the cRIO-905*x* to the host computer. The cRIO-905*x* attempts to initiate a DHCP network connection at power up.

     📝 **Note** If the cRIO-905*x* cannot obtain an IP address, it connects to the network with a link-local IP address with the form 169.254.*x.x.* The host computer communicates with the cRIO-905*x* over a standard Ethernet connection.

- Ensure that you have the correct version of NI CompactRIO Device Drivers installed on the host computer. Visit *ni.com/info* and enter the Info Code swsupport for the minimum supported versions of LabVIEW and NI CompactRIO Device Drivers.

  💡 **Tip** If you have recently upgraded LabVIEW, you must reinstall NI CompactRIO Device Drivers.

- Ensure that the NI USBLAN adapter is recognized in the Device Manager. Select **Start**»**Control Panel**»**Device Manager**»**Network adapters**»**National Instruments**»**USBLAN adapter**. If the USBLAN adapter is not recognized, you must reinstall NI CompactRIO Device Drivers.

  📝 **Note** For Windows 10, you may need to search for the Control Panel as it not always available from the Start Menu.

- Temporarily disable any network firewalls or other security software.

Verify the System IP Configuration

Complete the following steps to verify the system IP configuration of your cRIO-905*x*

1. Put the cRIO-905*x* in safe mode and enable the Console Out feature of the USB Type-C Device Port with Console Out by holding the RESET button down for 5 seconds.

   The STATUS LED starts blinking three times every few seconds.

2. Use the USB Type-C Device Port with Console Out terminal to read the IP address.

   > **Note** Refer to the *cRIO-905x User Manual* for more information about port configuration.

3. Set a new DHCP connection by holding the RESET button down for 5 seconds. The STATUS LED repeats the same behavior from Step 1.

   If the cRIO-905*x* fails to set a new DHCP address, it assigns itself a link-local IP address. If the DHCP connection is successful and appropriate for your application, skip to Step 6.

4. In MAX, expand your system under Remote Systems.

5. Select the **Network Settings** tab to configure the IP and other network settings.

6. Reboot the cRIO-905*x* by pressing the RESET button.

Configure the Windows Firewall

Use this topic to configure the firewall in Windows to ensure you cRIO-905*x* can communicate with the network.

- Use the **Troubleshoot Remote System Discovery** tool to configure the firewall.
  1. In MAX, right click **Remote Systems** and select **Troubleshoot Remote System Discovery**.
  2. Follow the steps in the tool.
- Add an exception for MAX to your network firewall or other security software by completing the following steps:
  1. Select **Start**»**Control Panel**»**Windows Firewall**»**Allow a program through Windows Firewall**.

     > **Note** For Windows 10, you may need to search for the Control Panel as it not always available from the Start Menu.

  2. Click **Allow another program**.
  3. Select **Measurement & Automation**.
  4. Click **Add**.
  5. Click **OK**.
- Ensure that UDP port 44525 is open to communication on the host computer. If you are using an intelligent switch on the network, ensure that it is not disabling UDP port 44525.

System Reset

The following figure shows the reset behavior of the cRIO-905*x*.

Figure 5. Reset Button Behavior
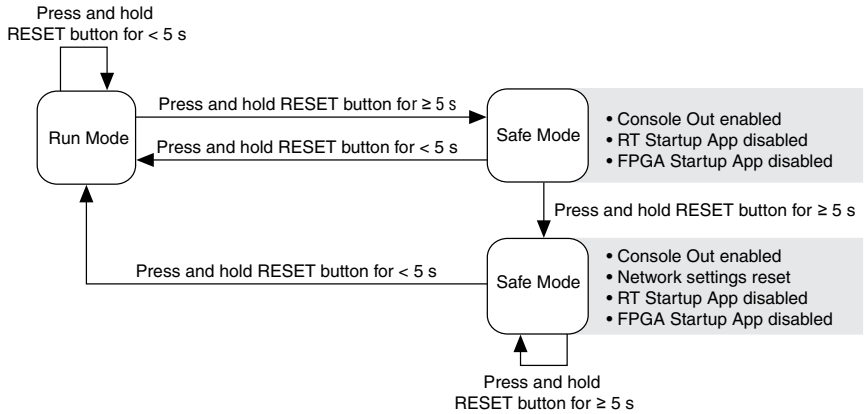
STATUS LED Indicators

The following table describes the STATUS LED indicators.

Table 3. STATUS LED Indicators

LED Pattern	Indication
Blinks twice and pauses	The cRIO-905x is in safe mode. Software is not installed, which is the factory default state, or software has been improperly installed on the cRIO-905x.
	An error can occur when an attempt to upgrade the software is interrupted. Reinstall software on the cRIO-905x. Refer to *Installing Software on the Controller* for information about installing software on the cRIO-905x.
Blinks three times and pauses	The cRIO-905x is in user-directed safe mode, or the cRIO-905x is in install mode to indicate that software is currently being installed.
	This pattern may also indicate that the user has forced the cRIO-905x to boot into safe mode by pressing the reset button for longer than five seconds or by enabling safe mode in MAX. Refer to the *Measurement & Automation Explorer (MAX) Help* for information about safe mode.
Blinks four times and pauses	The cRIO-905x is in safe mode. The software has crashed twice without rebooting or cycling power between crashes.

Table 3. STATUS LED Indicators (Continued)

LED Pattern	Indication
Continuously blinks	The cRIO-905*x* has not booted into NI Linux Real-Time. The cRIO-905*x* either booted into an unsupported operating system, was interrupted during the boot process, or detected an unrecoverable software error.
On momentarily	The cRIO-905*x* is booting. No action required.
Off	The cRIO-905*x* is in run mode. Software is installed and the operating system is running.

Using the cRIO-905*x* in LabVIEW

Visit the following topics for information on how to create a new LabVIEW Project configured with the cRIO-905*x*, and how to deploy the C Series module in the Real-Time, Real-Time Scan (IO Variables), or LabVIEW FPGA programming modes.

| Using the cRIO-905*x* in LabVIEW	**Programming Modes:** • Real-Time • Real-Time Scan (IO Variables)	1. *Adding the cRIO-905x to a LabVIEW Project* 2. *Deploying Your C Series Module in a Programming Mode in LabVIEW*
Using the cRIO-905*x* in LabVIEW FPGA (Requires LabVIEW FPGA Module)	**Programming Modes:** • Real-Time • Real-Time Scan (IO Variables) • LabVIEW FPGA	1. *Adding the cRIO-905x to a LabVIEW FPGA Project* 2. *Deploying Your C Series Module in a Programming Mode in LabVIEW FPGA*

Adding the cRIO-905*x* to a LabVIEW Project

Complete the following steps to create a new LabVIEW project configured with the cRIO-905*x* controller.

You can use LabVIEW to program in Real-Time (NI-DAQmx) or Real-Time Scan (IO Variables) modes. For applications using advanced functionality that require programming the FPGA, LabVIEW FPGA Module is required to deploy C Series modules in the LabVIEW FPGA programming mode. Refer to the *Adding the cRIO-905x to a LabVIEW FPGA Project* for more information.

Refer to "Choosing Your Programming Mode" in the *cRIO-905x User Manual* to determine which programming modes are right for your application.

1. To create a new LabVIEW project, launch LabVIEW and click **Create Project**.

2. Select **Blank Project** from the **Create Project** dialog and click **Finish**.

3. To add your system to the project, right-click the top of the project tree and select **New»Targets and Devices** to launch the **Add Targets and Devices** discovery dialog.
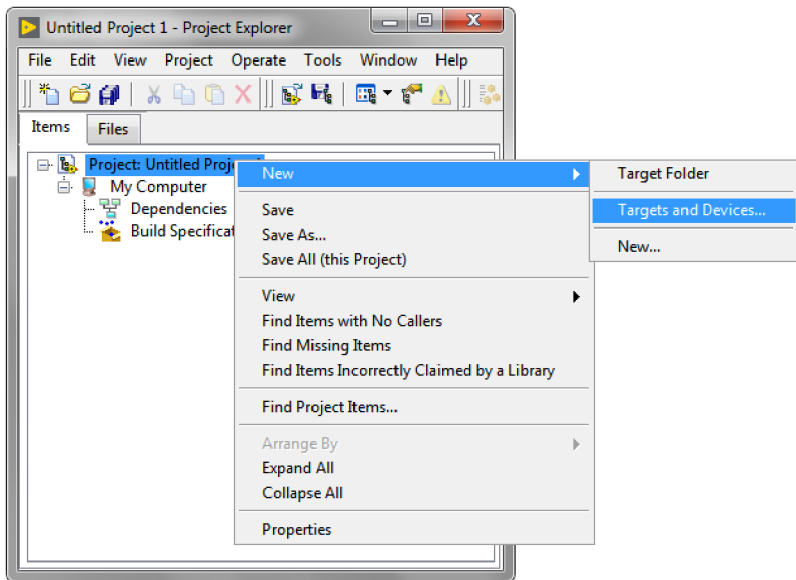
4. In the **Add Targets and Devices** dialog, expand the **Real-Time CompactRIO** folder, select your system, and click **OK**.
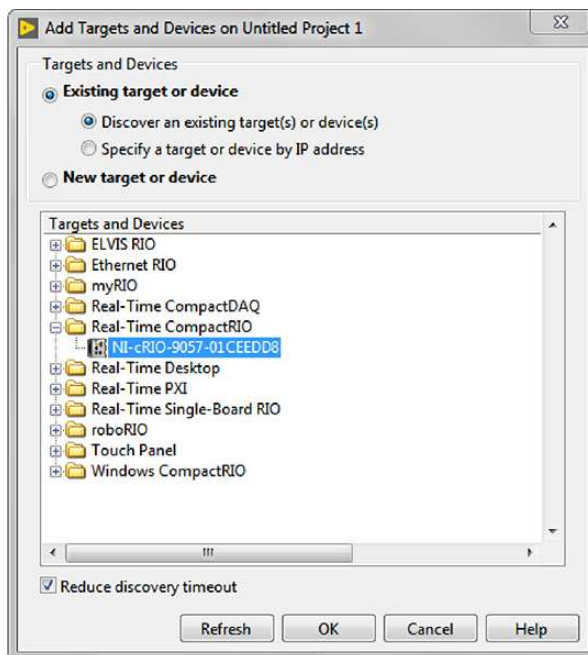
Note If your system is not listed, LabVIEW could not detect it on the network. Ensure that your system is properly configured with a valid IP address in Measurement & Automation Explorer. If your system is on a remote subnet, you can also select to manually enter the IP address. You can locate the system IP address in MAX in the System Settings for the cRIO-905*x*.
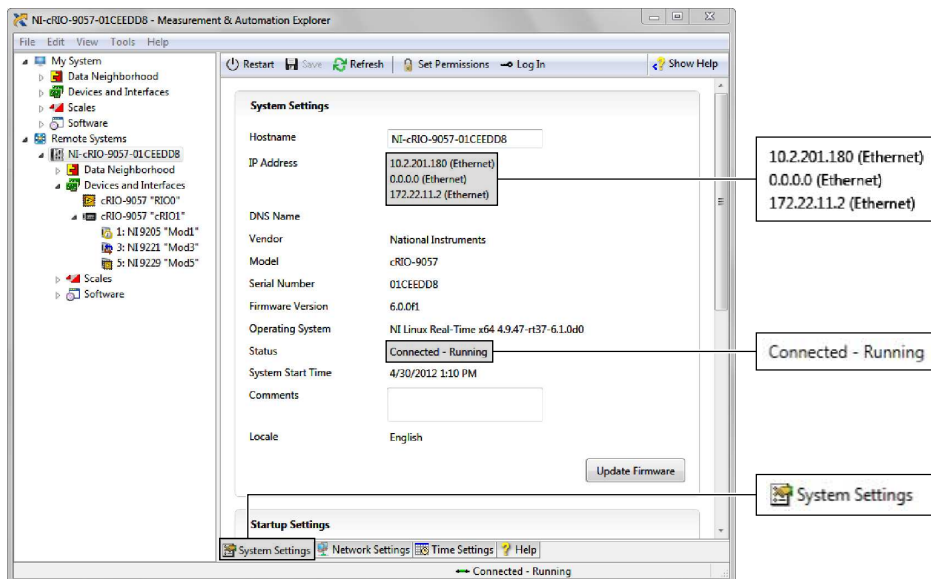
5. In the LabVIEW Project Explorer, verify that your system is present in the project tree. Click **File»Save** to save the project.

    The LabVIEW project is created. All C Series modules and corresponding I/O appear under Real-Time Resources by default, which indicates that all modules are deployed in Real-Time (NI-DAQmx) mode.

    > **Note** For information on how to change programming modes in LabVIEW, see *Deploying Your C Series Module in a Programming Mode in LabVIEW*.

Deploying Your C Series Module in a Programming Mode in LabVIEW

Complete the following steps to deploy C Series modules in a new programming mode in the LabVIEW project.

1. Locate your C Series module in your LabVIEW project. If you just created the project, all C Series modules appear under Real-Time Resources, which indicates that they are in the Real-Time (NI-DAQmx) programming mode.

2. Drag your C Series module to **Real-Time Scan Resources**. This indicates you plan to use your module in Real-Time Scan (IO Variables) programming mode.

3. Right-click the cRIO-905*x* in the project and select **Deploy All** to deploy the module in the Real-Time Scan (IO Variables) programming mode.

    Your module is now in Real-Time Scan mode.

4. Drag your C Series module back to **Real-Time Resources**. This indicates you plan to use your module in Real-Time (NI-DAQmx) programming mode.

5. Right-click the cRIO-905*x* in the project and select **Deploy All** to deploy the module in the Real-Time (NI-DAQmx) programming mode.

   Your module is now in Real-Time (NI-DAQmx) mode.

Programming Examples

For information on getting started with DAQmx programming mode examples in LabVIEW, go to *ni.com/info* and enter the Info Code `criodaqmx`. You can also access example projects in LabVIEW by selecting **Help»Find Examples**, and navigating to **Hardware Input and Output»CompactRIO**.

Adding the cRIO-905*x* to a LabVIEW FPGA Project

Complete the following steps to create a new LabVIEW FPGA project configured with the cRIO-905*x* controller.

LabVIEW FPGA Module is required to program the user-accessible FPGA on the cRIO-905*x* or deploy C Series modules in the LabVIEW FPGA program mode. To program in Real-Time (NI-DAQmx) or Real-Time Scan (IO Variables) modes, the LabVIEW FPGA module is not required. Refer to *Adding the cRIO-905x to a LabVIEW Project* for more information.

Refer to "Choosing Your Programming Mode" in the *cRIO-905x User Manual* to determine which programming modes are right for your application.

1. To create a new LabVIEW project, launch LabVIEW and click **Create Project**.
2. Select **Templates»LabVIEW FPGA Project**.
3. Select the **CompactRIO Embedded System** project type and click **Next**.

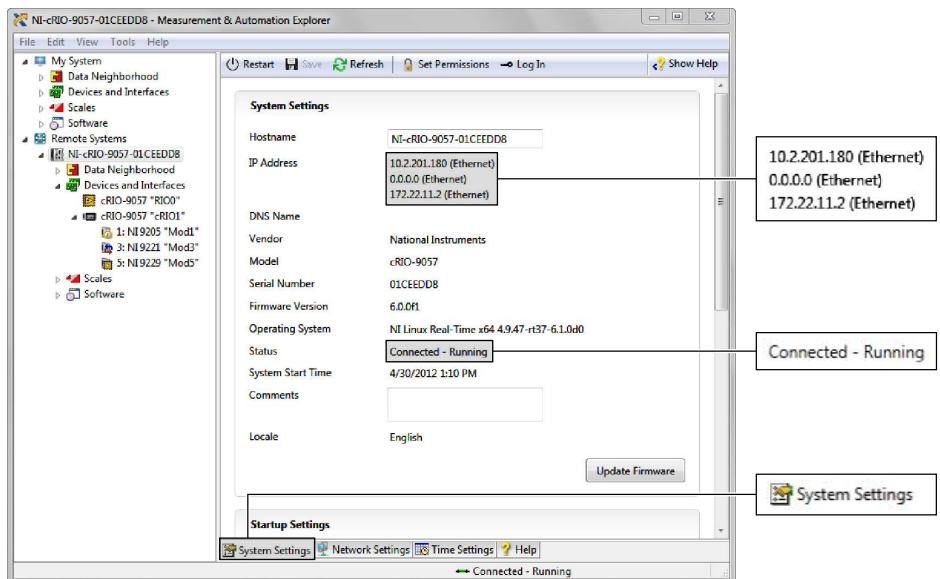   The **System Setup** window opens, which will allow you to add your system to the project.
4. Under **Discover existing system**, check the box next to **Device is connected to a remote subnet IP address**.
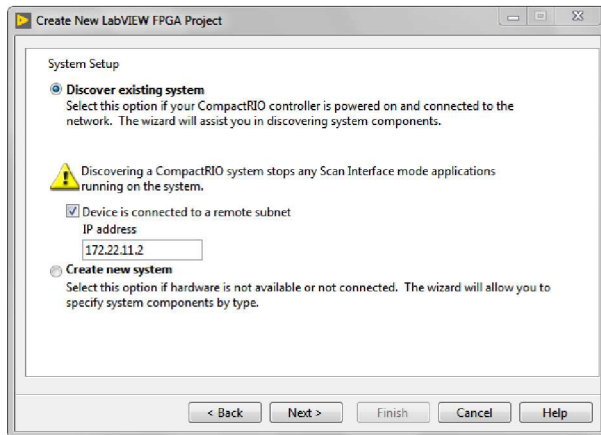
5. Enter the IP address for the cRIO-905*x* and click **Next**.

> **Note** You can locate the system IP address in MAX in the System Settings for the cRIO-905*x*.

6. In the LabVIEW Project Explorer, verify that your system is present in the project tree and click **Finish**.

The LabVIEW project is created. All C Series modules and corresponding I/O appear under the FPGA Target.

> 📝 **Note** By default, all C Series modules appear under the FPGA Target, which indicates that all modules are selected for use in LabVIEW FPGA mode. For information on how to change programming modes in LabVIEW FPGA, visit *Deploying Your C Series Module in a Programming Mode in LabVIEW FPGA*.

Deploying Your C Series Module in a Programming Mode in LabVIEW FPGA

Complete the following steps to deploy C Series modules in a new programming mode in the LabVIEW project.

1. Locate your C Series module in your LabVIEW project. If you just created the project, all C Series modules appear under the FPGA Target, which indicates that they are in the LabVIEW FPGA programming mode.

2. Drag your C Series module to **Real-Time Scan Resources**. This indicates you plan to use your module in Real-Time Scan (IO Variables) programming mode.

3. Right-click the cRIO-905*x* in the project and select **Deploy All** to deploy the module in the Real-Time Scan (IO Variables) programming mode.

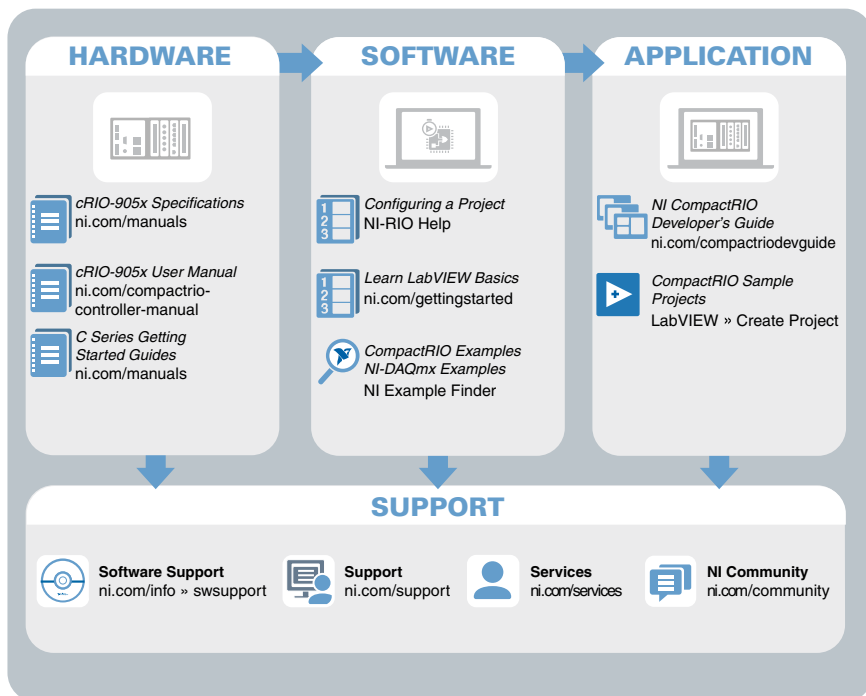   Your module is now in Real-Time Scan mode.

4. Drag your C Series module to **Real-Time Resources**. This indicates you plan to use your module in Real-Time (NI-DAQmx) programming mode.

5. Right-click the cRIO-905*x* in the project and select **Deploy All** to deploy the module in the Real-Time (NI-DAQmx) programming mode.

   Your module is now in Real-Time (NI-DAQmx) mode.

Programming Examples

For information on getting started with DAQmx programming mode examples in LabVIEW FPGA, go to *ni.com/info* and enter the Info Code `daq2comboExample`.

Where to Go Next

HARDWARE

cRIO-905x Specifications
ni.com/manuals

cRIO-905x User Manual
ni.com/compactrio-
controller-manual

C Series Getting
Started Guides
ni.com/manuals

SOFTWARE

Configuring a Project
NI-RIO Help

Learn LabVIEW Basics
ni.com/gettingstarted

CompactRIO Examples
NI-DAQmx Examples
NI Example Finder

APPLICATION

NI CompactRIO
Developer's Guide
ni.com/compactriodevguide

CompactRIO Sample
Projects
LabVIEW » Create Project

SUPPORT

Software Support
ni.com/info » swsupport

Support
ni.com/support

Services
ni.com/services

NI Community
ni.com/community

Worldwide Support and Services

The NI website is your complete resource for technical support. At *ni.com/support*, you have access to everything from troubleshooting and application development self-help resources to email and phone assistance from NI Application Engineers.

Visit *ni.com/services* for information about the services NI offers.

Visit *ni.com/register* to register your NI product. Product registration facilitates technical support and ensures that you receive important information updates from NI.

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