Quick Start

Allen-Bradley

Connected Components Building Blocks

Important User Information

Solid-state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (publication SGI-1.1 available from your local Rockwell Automation® sales office or online at http://www.rockwellautomation.com/literature/) describes some important differences between solid-state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid-state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

Reproduction of the contents of this manual, in whole or in part, without written permission of Rockwell Automation, Inc., is prohibited.

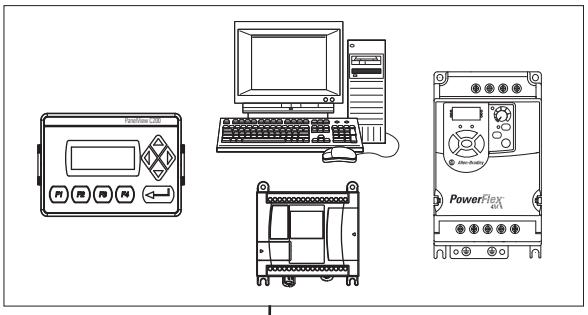
Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

	**WARNING:** Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.
	**ATTENTION:** Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard, and recognize the consequence.
	**SHOCK HAZARD:** Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.
	**BURN HAZARD:** Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.
IMPORTANT	Identifies information that is critical for successful application and understanding of the product.

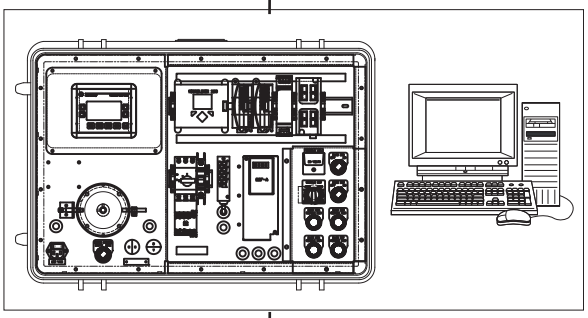
Connected Components Building Block Outline

Follow the path below to complete your connected components building block (CCBB).

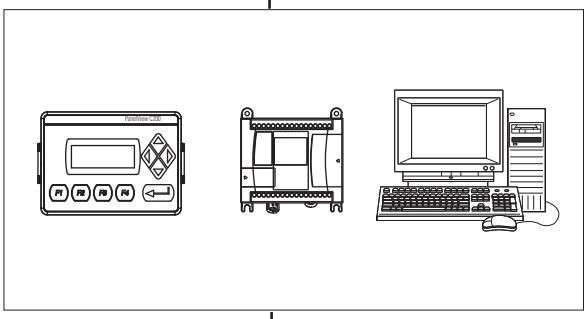
Chapter 1 Product Selection



Chapter 2 Hardware Planning and Design



Chapter 3 Controller and HMI Integration



Use this publication in conjunction with a specific building block quick start.

Notes:

About This Publication

This quick start is designed to provide a way to implement common control tasks by aiding in the selection of products and providing access to panel and wiring information. Each section is designed with a different task as a standalone machine, or implemented in a larger system.

IMPORTANT Use this publication in conjunction with a specific Connected Components Building Block quick start. Refer to Additional Resources on page 7 for a listing of quick starts.

To assist in the design and installation of your system, application files and other information are provided on the Connected Components Building Blocks Overview DVD, publication CC-QR001. The DVD provides bills of materials (BOM), CAD drawings for panel layout and wiring, control programs, Human Machine Interface (HMI) screens, and more. With these tools and the built-in best-practices design, the system designer is free to focus on the design of their machine control and not on design overhead tasks.

The beginning of each chapter contains the following information. Read these sections carefully before beginning work in each chapter:

- **Before You Begin** - This section lists the steps that must be completed and decisions that must be made before starting that chapter. The chapters in this quick start do not have to be completed in the order in which they appear, but this section defines the minimum amount of preparation required before completing the current chapter.
- **What You Need** - This section lists the tools that are required to complete the steps in the current chapter. This includes, but is not limited to, hardware and software.
- **Follow These Steps** - This section illustrates the steps in the current chapter and identifies which steps are required to complete the examples.

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

Table 1 - Resources for Hardware

Resource	Description
MicroLogix 1100 Installation Instructions, publication 1763-IN001	Provides information on installing the MicroLogix™ 1100 Programmable Controller.
MicroLogix 1400 Installation Instructions, publication 1766-IN001	Provides information on installing the MicroLogix 1400 Programmable Controller.
PanelView Component Installation Instructions, publication 2711C-IN001	Provides information on installing the PanelView™ Component HMI Terminals including wiring, grounding, and troubleshooting.

You can view or download publications at http://www.rockwellautomation.com/literature. To order paper copies of technical documentation, contact your local Allen-Bradley® distributor or Rockwell Automation sales representative.

For more Connected Components Building Block quick starts, refer to this table and to the Connected Components Building Blocks at http://www.rockwellautomation.com/components/connected/blocks.html.

Table 2 - Additional Connected Components Building Blocks

Resource	Description
Connected Components Building Blocks Overview DVD, publication CC-QR001	Provides files for the Connected Components Building Blocks.
Speed Control Connected Components Building Block Quick Start, publication CC-QS002	Provides information on configuring the drives necessary for the MicroLogix 1100/1400 controller to communicate with a PowerFlex® 4-class drive as well as implementing the drive parameter backup and restore functionality.
Position Control Connected Components Building Block Quick Start, publication CC-QS003	Provides information on installing and setting up the PowerFlex 40P drive parameters with the pre-configured RSLogix™ 500 program that controls your base system including application tips, as well as implementing the drive parameter backup and restore functionality.
Simple Color Sensing Connected Components Building Block Quick Start, publication CC-QS004	Demonstrates the setup and functionality of the 45CLR ColorSight™ sensor when used with the MicroLogix controller to read true color values from the sensor.
Simple Temperature Control Connected Components Building Block Quick Start, publication CC-QS005	Provides information on how to develop an application to control a light, heater, relay, contactor (single or three-phase output) or fan using an analog output from the 900-TC temperature controller.
Simple Motor Control Connected Components Building Block Quick Start, publication CC-QS006	By using discrete information (simple on-off signals from contacts) from a PowerFlex 4M drive, SMC™-3 starter, 103T starter, or 190E starter, this building block demonstrates an example of extracting important basic information about the status of a motor and displaying it on a PanelView Component terminal.
Simple HMI to Drive Connected Components Building Block Quick Start, publication CC-QS007	Provides an example of how to implement a connected component for position control where control of a one- and two-axis system is accomplished via the PanelView Component terminal without the use of a MicroLogix controller.
Simple Motion Control Connected Components Building Block Quick Start, publication CC-QS008	Provides a simple motion control connected components application by using predefined configurations in the Ultra™1500 drive (such as gear ratio and output ratio) and the MicroLogix 1400 controller (such as pulse train output, high speed counters, and input filters).
Alarm Handling Connected Components Building Block Quick Start, publication CC-QS009	Demonstrates an easy-to-follow, structured alarm-handling template for Connected Components Building Block users.
Teaching Color Sensing Connected Components Building Block Quick Start, publication CC-QS010	Demonstrates the setup and functionality of the 45CLR ColorSight sensor over an RS-485 network inn an application where the sensor is taught five colors
Simple Machine Safety (E-stop, Door Switch, Light Curtain) Connected Components Building Block Quick Start, publication CC-QS011	Provides a simple, reusable implementation of a low-cost safety system.
Simple Package Measurement Connected Components Building Block Quick Start, publication CC-QS012	Demonstrates an application that uses three 45MLA Measuring Light Array sensors with a MicroLogix controller and a PanelView Component terminal to determine an object's three-dimensional size.
Pump Control Connected Components Building Block Quick Start, publication CC-QS013	Provides information to aid in the design and implementation of a pump control system with advanced features.
Single-direction (2-sensor, L-type) Muting with MSR42 Relay Connected Components Building Block Quick Start, publication CC-QS014	Demonstrates an application that combines a set of Micro 400 Light Curtains, an MSR42 safety relay, an MSR45E expansion module, an MSR127 safety relay, an E-stop, and two contactors into an integrated safety system providing both a two-sensor, L-type muting function and an E-stop function.
Bidirectional (4-sensor, T-type) Muting With MSR42 Relay Connected Components Building Block Quick Start, publication CC-QS015	Demonstrates an application that combines a set of Micro 400 Light Curtains, an MSR42 safety relay, an MSR45E expansion module, an MSR127 safety relay, an E-stop, and two contactors into an integrated safety system providing both a bidirectional, four-sensor, T-type muting function and an E-stop function.
Bidirectional (2-sensor, T-type) Muting With Enable Using MSR42 Relay Connected Components Building Block Quick Start, publication CC-QS016	Demonstrates an application that combines a set of Micro 400 Light Curtains, an MSR42 safety relay, an MSR45E expansion module, an MSR127 safety relay, an E-stop, and two contactors into an integrated safety system providing both a bidirectional, two-sensor, T-type muting with enable function and an E-stop function.

Table 2 - Additional Connected Components Building Blocks

Resource	Description
Energy Management Connected Components Building Block – PowerMonitor 1000 Quick Start, publication CC-QS017	Provides an example of how to use a connected component with a PowerMonitor™ 1000 device for energy management.
Simple Motion Control via EtherNet/IP with Kinetix 300 Drives Connected Components Building Block Quick Start, publication CC-QS018	Demonstrates a simple motion control application using connected components and the Kinetix® 300 drive.
Energy Management Connected Components Building Block – Plant Power Metering System Quick Start, publication CC-QS019	Provides an example of how to use a connected component with a PowerMonitor 1000 device and RSEnergyMetrix® software for energy management.
Error Proofing: MultiSight Inspection Solution Connected Components Building Block Quick Start, publication CC-QS020	Demonstrates implementation of 48MS MultiSight sensors with a MicroLogix controller and a PanelView Component terminal, where all devices communicate via the Ethernet network.
Energy Management Connected Components Building Block – W.A.G.E.S. Energy Solution Quick Start, publication CC-QS021	Provides an example of how to use a W.A.G.E.S. MicroLogix controller and PanelView Component terminal with a PowerMonitor 1000 device and RSEnergyMetrix software for energy management.
Simple Safety with Guardmaster® MSR57P Speed Monitoring Safety Relay Connected Components Building Block Quick Start, publication CC-QS022	This Quick Start illustrates an example of a retrofit to an existing PowerFlex 40P drive-based position control application, based on the Position Control Connected Components Building Block, publication CC-QS003.The retrofit described in this Quick Start adds the MSR57P Speed Monitoring Safety Relay and a Lifeline™4 cable pull switch to the application.
Energy Management Connected Components Building Block – Capacitor Bank Controller Application Quick Start, publication CC-QS023	Provides an example of how to use a Capacitor Bank MicroLogix controller and PanelView Component terminal with a PowerMonitor 1000 device and RSEnergyMetrix software for energy management.

Notes:

Product Selection

Introduction

This chapter helps you determine which hardware components you need for this connected component building block (CCBB).

Installing Your Connected Components Building Blocks DVD

Before you begin exploring this building block, you need to install you Connected Components Building Blocks DVD, publication CC-QR001. If you don't have the DVD already you can order it online at http://www.rockwellautomation.com/components/connected/blocks.html.

Insert the DVD into your computer's DVD drive and follow the installation instructions.

You can also receive periodic content updates by registering for current updates when you install the DVD.

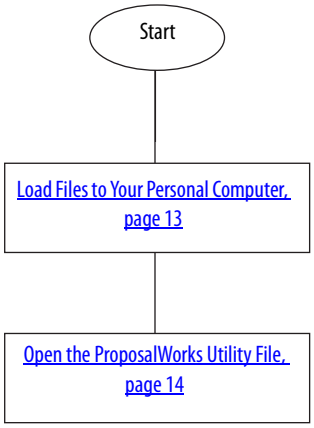
What You Need

- ProposalWorks™ utility to complete quote requests and access product information.
- Personal computer with Internet access.
- Other selector tools such as:
  - CrossWorks utility.
  - Industrial Computer Selector.
  - Operator Interface Selection Tool.
  - Programmable Controller Family Selector.
- Application-specific Connected Components Building Block Quick Starts. Refer to Additional Resources on page 7 for a listing of available quick starts.
- Connected Components Building Blocks Overview DVD, publication CC-QR001.

You can access these selector tools at http://www.rockwellautomation.com/en/e-tools/.

Follow These Steps

Follow these steps to access the ProposalWorks utility and select your required components.



Using ProposalWorks Utility to Adjust Your Bill of Material

You'll need to complete your bill of materials (BOM) in the ProposalWorks utility for this building block.

Load Files to Your Personal Computer

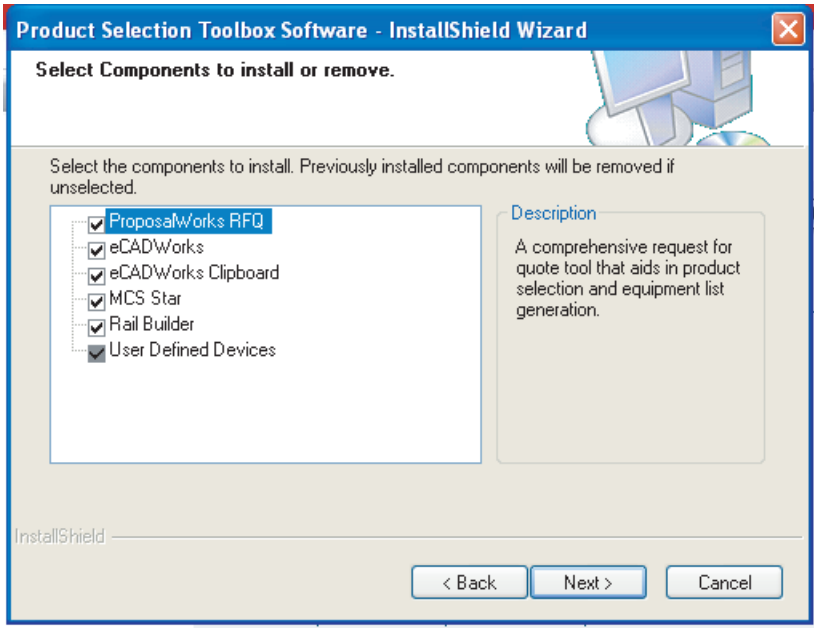
Follow these steps to access the ProposalWorks utility.

1. Open your web browser and go to http://www.rockwellautomation.com/en/e-tools/.
2. Choose the ProposalWorks utility.

   You can either click Download or Order. By clicking Download, you will receive updates periodically.

   - CrossWorks – Cross Reference Competitive Catalog Numbers
   - ProposalWorks – Build Complete Quote Requests and Get a Wealth of Product Information for Rockwell Automation Products
   - Industrial Computer Selector – Select an Industrial Computer
   - Operator Interface Selection Tool – Select an Operator Interface
   - Programmable Controller Family Selector – Choose a Programmable Controller Family
3. Click Download and follow the instructions provided.
4. Click Install.
5. Check the programs you want to install on your personal computer.
6. Click Next.

   The programs are loaded to your personal computer.



Open the ProposalWorks Utility File

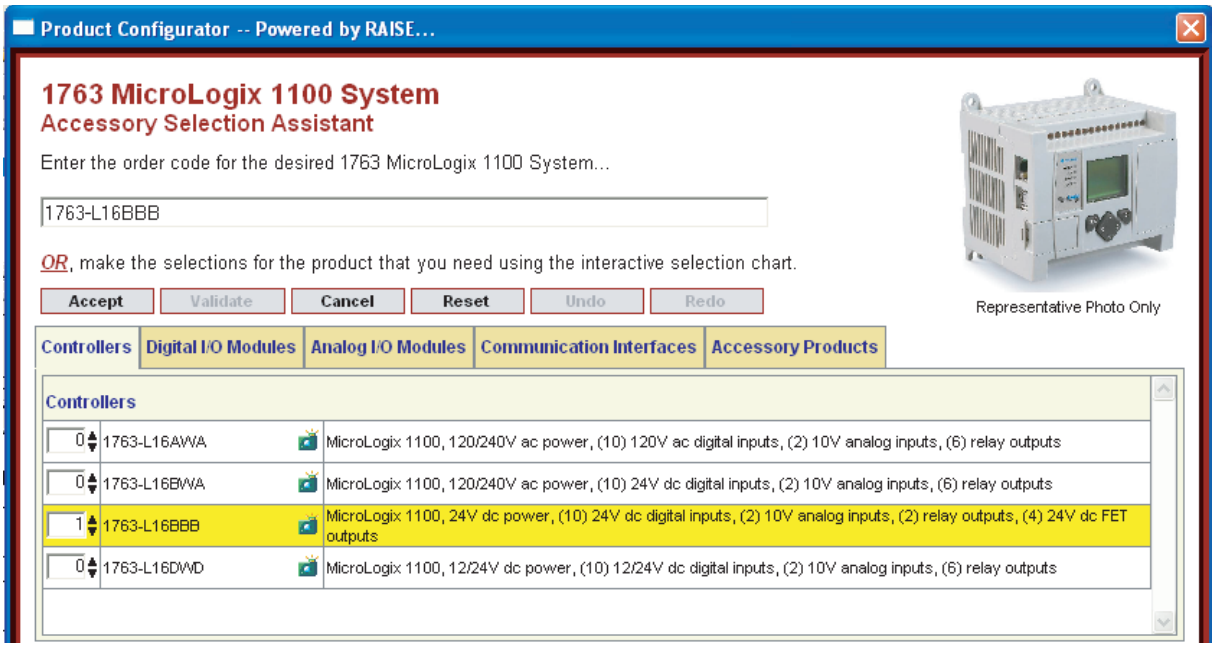
1. Double-click the program file name for the building block you are going to work with.

   The BOM dialog box appears in the ProposalWorks utility.

Item / DevID	Qty	Deliv	Wt (kg/lbs)	Each
Simple Speed Control Basic Products				
1	**1763-L16BBB** MicroLogix 1100, 24V dc power, (10) 24V dc digital inputs, (2) 10V analog inputs, (2) relay outputs, (4) 24V dc FET outputs			
	1		N/A	$ 567.00
2	**22F-D2P5N103** PowerFlex4M AC Drive, 480VAC, 3PH, 2.5 Amps, 0.75 kW, 1 HP,Frame Size A, IP20 (Open), LED Display, Fixed Digital Keypad, No CE Compli			
	1		0.000	$ 365.00
3	**AK-U0-RJ45-TB2P** PowerFlex 4-Class DSI RJ45 Terminal Blocks - RJ45 two position terminal block (5 pieces) with two 120 Ohm terminating resistors (loose)			
	1		0.000	$ 20.00
4	**1763-NC01** MicroLogix 1100 RS485 Comms Cable			
	1		N/A	$ 40.00

2. Review the list of products and modify them, including adding and deleting products, to match the needs of your application.

   If you click a product entry, a dialog box similar to the following appears. You can make product changes by clicking the product features.



3. If you need additional features to help make your product selection, choose Libraries>Product Library>Standard Products from the ProposalWorks menu bar.

If you need assistance in making a product selection, contact your local Allen-Bradley representative.

4. After you have all of the products you need, choose Generate Project Proposal from the RFQ menu.

A product Request for Quote is generated. Contact your local Allen-Bradley representative for ordering and delivery information.

Hardware Components Specifications

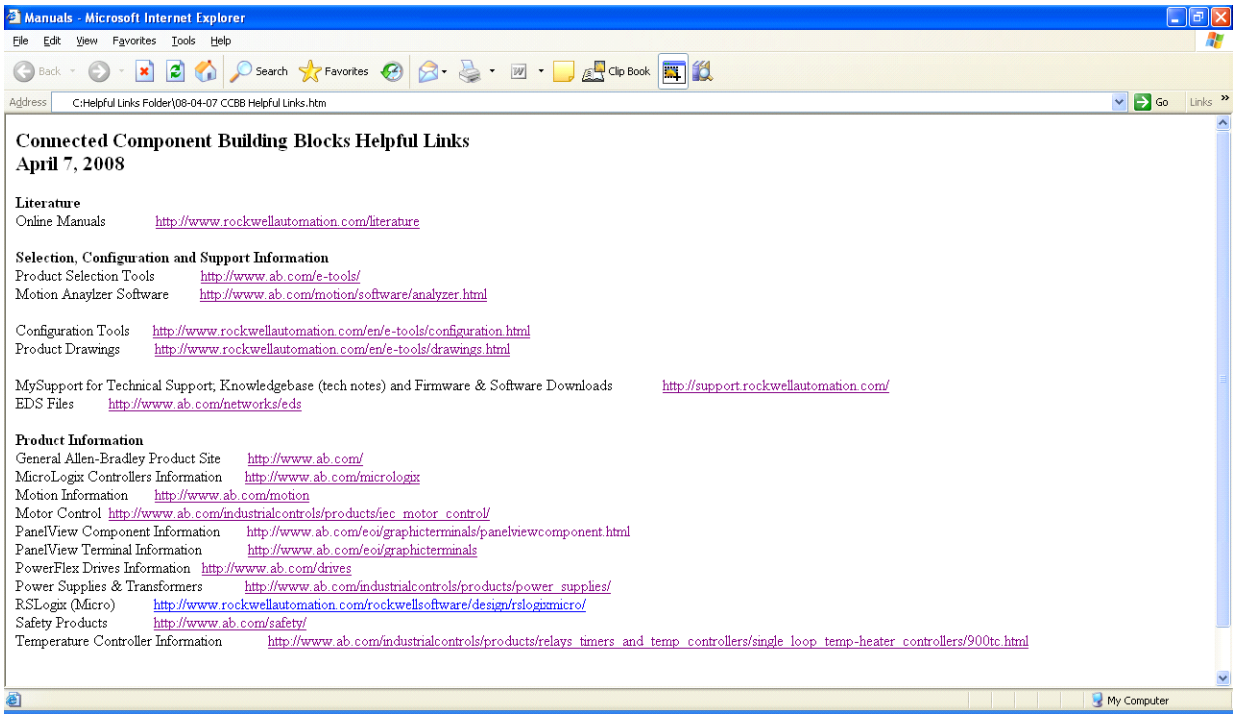
For a listing of product specifications, refer to the BOM list or product documentation available from http://www.rockwellautomation.com/literature.

Additional Resources

Refer to page 7 for a listing of product and information resources.

Helpful Links

Helpful links for the building blocks are accessible from the Connected Components Building Blocks Overview DVD, publication CC-QR001.



Hardware Planning and Design

Introduction

In this chapter, you design and install your connected components building block (CCBB). Use the CCBB-specific CAD drawings as a reference guide and a starting point for your machine-specific control-panel layout and wiring connections. The supplied drawings are based on the ProposalWorks CCBB-specific bill of materials (BOM).

In addition, as you configure the BOM for the particular needs of your machine, you can modify the control panel layout and wiring connection drawings that are provided.

Before You Begin

Complete your Allen-Bradley hardware BOM selection, as described in Chapter 1, including acquiring the hardware.

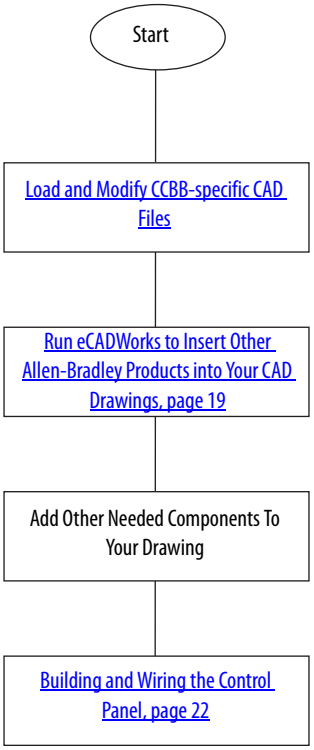
IMPORTANT	You need to be proficient at understanding, building, and wiring from CAD drawings. You need to be mechanically and electrically proficient at building and wiring control panels. You need to be proficient at selecting the appropriate components if modifications to the standard BOM are necessary, making system design changes and validating the overall control panel design.

What You Need

- A personal computer with CAD software installed that is capable of working with AutoCAD and AutoCAD electrical drawings (to view and modify drawings) or AutoCAD DWG TrueView viewer (an AutoCAD file viewer is available at http://www.autodesk.com).
- The Connected Components Building Blocks Overview DVD, publication CC-QR001, or access to the CCBB-specific CAD drawings available from http://www.rockwellautomation.com/components/connected/blocks.html.
- The Allen-Bradley hardware listed in your BOM.
- Any hardware, including tools, necessary to complete and wire your control panel.
- Application-specific Connected Components Building Block Quick Starts. Refer to Additional Resources on page 7 for a listing of quick starts.

Follow These Steps

Follow these steps to design and install your connected component building block.



Control Panel Layout

The CAD files, available in DWG format, are available to assist you in component layout and wiring of your control panel. The control panel layout drawing is designed to optimize panel space and to minimize electrical noise.

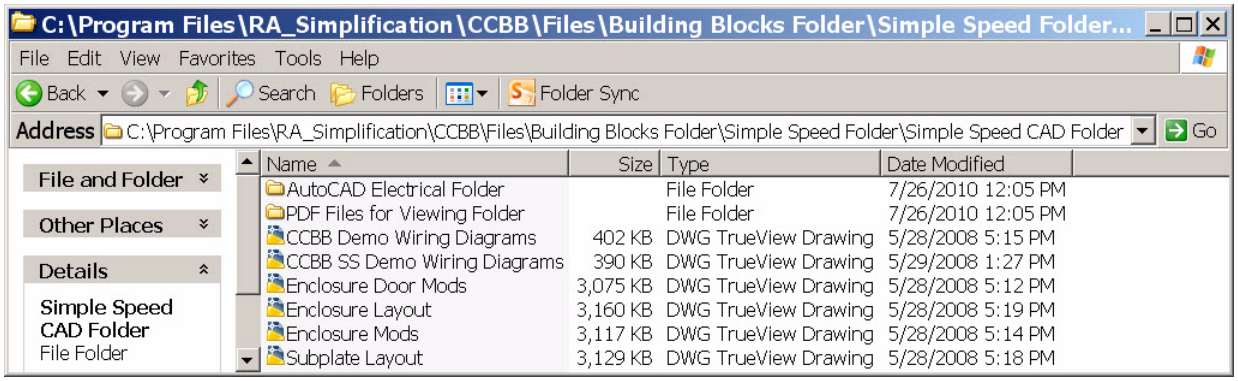
Load and Modify CCBB-specific CAD Files

You can load the CCBB-specific CAD files from the Connected Components Building Blocks Overview DVD, publication CC-QR001, or from http://www.rockwellautomation.com/components/connected/blocks.html.

Follow this procedure to load the CAD files.

1. Browse to the CCBB-specific CAD file folder by using your CAD program.

   In this case of the simple speed control example, the folder is:
   \CCBB\Files\Simple Speed Folder\Simple Speed CAD Folder.



2. Click the files you need to view or modify.

Run eCADWorks to Insert Other Allen-Bradley Products into Your CAD Drawings

Follow this procedure to run eCADWorks to download and insert additional Allen-Bradley product CAD drawings not already included in the CCBB-specific CAD files.

1. Start your AutoCAD software.

   We recommend that you use the prototype drawing ABECAD.DWG or the template ABECAD.DWT when you start a new layout. The CCBB CAD drawings already use these options. These preset node-object snapping, point style, and other options to make your ECADWorks work easier. They can be found in your ABECAD directory at C:\ProgramFiles\RAISE\ABECAD when using the default installation location. You can move them to your AutoCAD directory, if you prefer.

2. Load the ABECAD plug-in within your AutoCAD software.

   This lets you run ABECAD from the AutoCAD command line.

3. From the AutoCAD Tools menu, choose Load Application.

4. Select C:\ProgramFiles\RAISE\ABECAD\ABECADr200x.arx and click Load.

   If the file is not listed, browse to the directory and select it. You can add this to your start-up suite to have it auto load each time AutoCAD software is selected.

   These instructions execute the APPLOAD command. Refer to your AutoCAD documentation for further explanation of the commands.

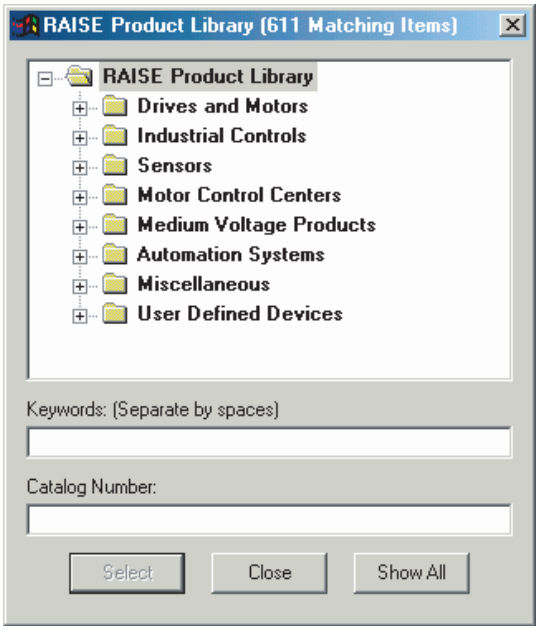
   The ABECAD application is not supported with other CAD systems. However, if your CAD system supports AutoCAD 2000 or later DWG files, you can perform the drawing selection and insertion manually. To identify which drawing files you need to open, search Drawings.xls found as a link in the DRAWINGS.DOC file or open it from the C:\ProgramFiles\RAISE\ABECAD folder. This file shows a cross-reference between the drawing names and the products they represent by bulletin number. Once you locate the desired item, you can open or insert it from the C:\ProgramFiles\RAISE\ABECAD\DWG folder.

5. Run the ABECAD plug-in.

   Each time you want to insert an eCADWorks drawing, type ABECAD at the AutoCAD command prompt and press Enter (or press the space bar).

6. Perform one of the following tasks:
   - Enter a complete catalog number.
     - If you enter a valid catalog number, the ABECAD drawing is displayed at your pointer to be dropped into your workspace.
     - If the catalog number is invalid or there isn't a drawing for the requested device, a message appears. After the message appears, enter a bulletin number, partial catalog number, or keyword.
   - Press Enter if you need assistance in selecting the product. This presents the complete product drawings selection library.
   - Enter PREF to set, change, or view your Internet connection settings. This launches the Current File Server connection dialog box.

If you could not get to the product you wanted, select from the Product Server library. The RAISE™ Product Library dialog box appears.



As you open the folders, you see the specific product lines that you can choose from. You can also use keywords and catalog numbers to search the product drawings.

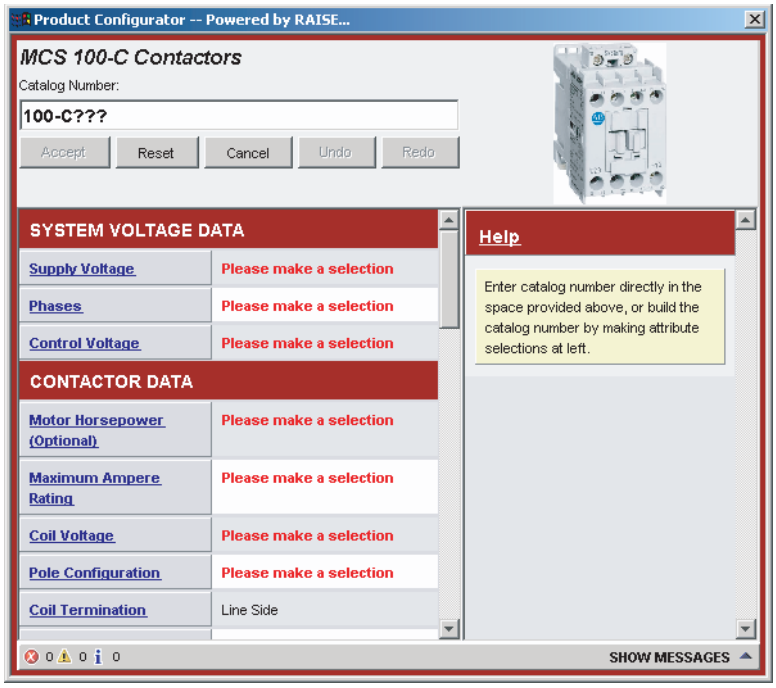
After you have narrowed your selection to a specific product line, the product configuration dialog box appears.

7. Enter the attribute data as required for the appropriate product.

   A menu of available product categories is displayed.

8. Select the desired category and click OK.

   A dialog box appears listing the characteristics of products within that category. As you select the appropriate characteristics, the product catalog number is created.



9. Select the application data after you have selected the product line by clicking No Selection and making choices on the right.

   As you do so, the software builds the catalog number of the product you need.

10. When you are finished selecting the product, click Accept.

ABECAD then selects the correct product drawing, pre-fills the device attributes, such as catalog number and description, and provides the drawing to you, at your pointer, ready for your positioning.

11. Position the drawing at the desired location and left-click.

    The drawing you selected is positioned.

    Certain products contain snapping origins (nodes) that let you position products that can be used together. For example, a PLC chassis contains nodes so that your module selections snap into the slots properly.

Building and Wiring the Control Panel

Follow the CCBB-specific or user-modified control panel **layout** drawing to install each of the BOM components into your control panel.

Follow the CCBB-specific or user-modified control panel **wiring** drawing to install the power, control, and network wiring.

You can also use the product and wiring drawings, and information from other building blocks located on the Connected Components Building Blocks Overview DVD, publication CC-QR001.

Additional Resources

Refer to page 7 for a listing of product and information resources.

Controller and HMI Integration

Introduction

In this chapter, you configure network communication on your personal computer and install the necessary programming and configuration software.

Before You Begin

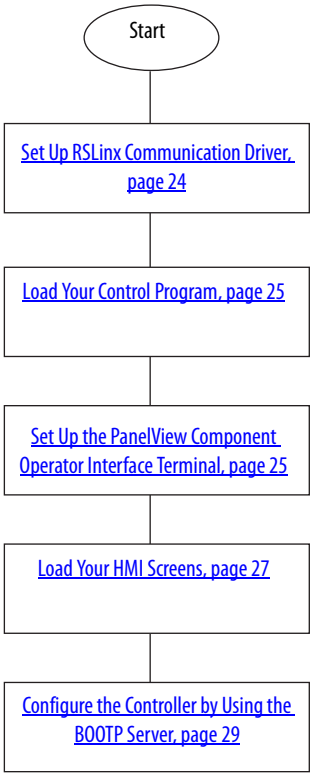
- Assemble your selected hardware (Chapter 2).
- Apply power to all your connected components.

What You Need

- A personal computer with Internet Explorer 7.*x* or Firefox 2.*x*, RSLinx® software, RSLogix 500 software, and BOOTP server installed. From Connection Properties, set your personal computer Internet protocol to:
  - IP address 192.168.1.1.
  - Subnet mask 255.255.255.0.
- MicroLogix 1100/1400 controller files and PanelView Component terminal files from Connected Components Building Blocks Overview DVD, publication CC-QR001.
- Ethernet CAT5 cable.
- Application-specific Connected Components Building Block Quick Start, publication CC-QS*xxx*. Refer to Additional Resources on page 7 for a listing of quick starts.

Follow These Steps

Follow these steps to configure your network communication and install the necessary programming and configuration software.



Set Up RSLinx Communication Driver

Follow these steps to set up your RSLinx communication driver.

1. From the Start menu, launch the RSLinx Classic software.
2. From the Communications menu, choose Configure Drivers.
3. From Available Driver Types pull-down menu, choose Ethernet devices.
4. Click Add New.
5. Accept AB-ETH-1 A-B Ethernet by clicking OK.
6. Enter 192.168.1.2 for the MicroLogix 1100/1400 controller Ethernet address.
7. Click OK.

8. Click Close.
9. Click Close to close RSLinx Classic software.

Load Your Control Program

Follow these steps to load your control program to the MicroLogix controller for use in your application.

1. Connect the Ethernet cable from your MicroLogix 1100/1400 controller to your personal computer.
2. Assign IP address 192.168.1.2 to the MicroLogix 1100/1400 controller by using the BOOTP server.

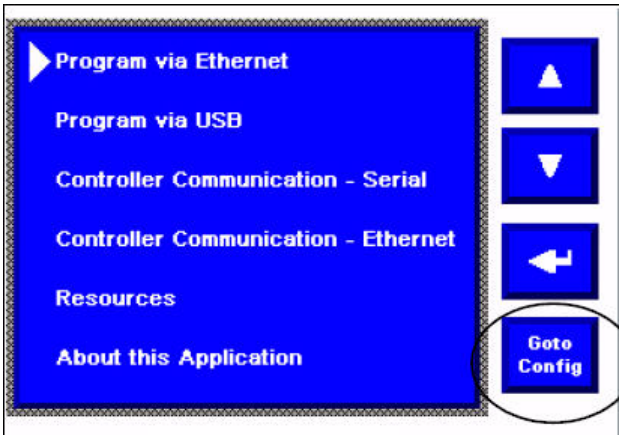
   Refer to page 29 for information regarding BOOTP.
3. Double-click the .RSS file provided on the Connected Components Building Blocks Overview DVD, publication CC-QR001.
4. Go online with the MicroLogix controller and download the provided example file.

   This step assumes you have knowledge of downloading to the MicroLogix 1100/1400 controller.
5. Leave the controller in Program mode.

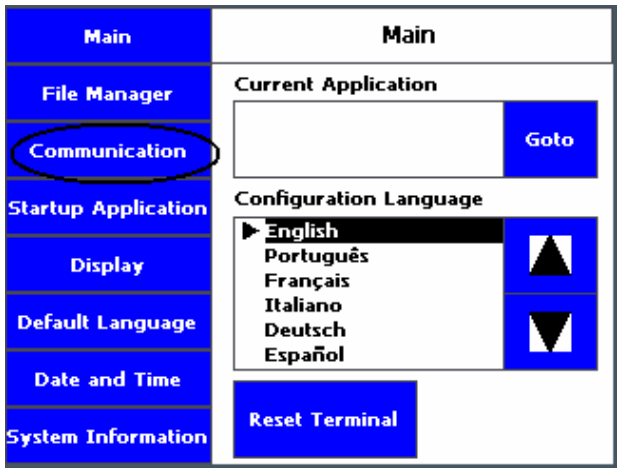
Set Up the PanelView Component Operator Interface Terminal

Follow these steps to set up your PanelView operator interface terminal.

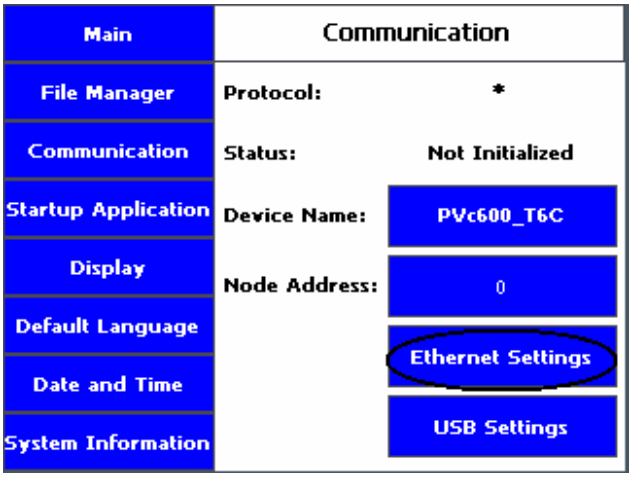
1. Connect the Ethernet cable from your PanelView terminal to your personal computer.
2. To get to the main dialog box, click Goto Config.



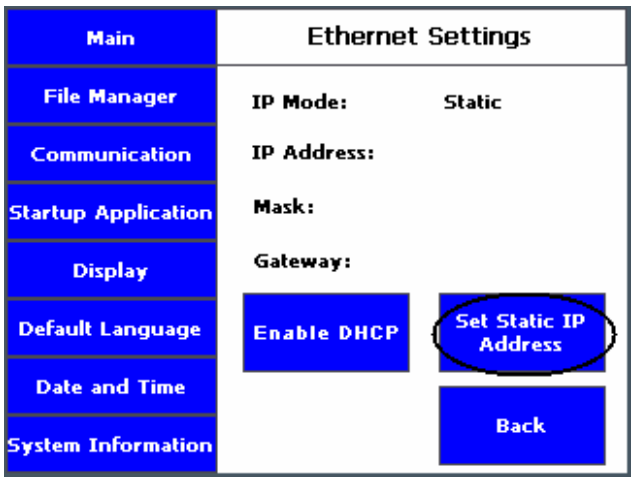
3. From the Main dialog box, click Communication.



4. Click Ethernet Settings to configure the Ethernet address.



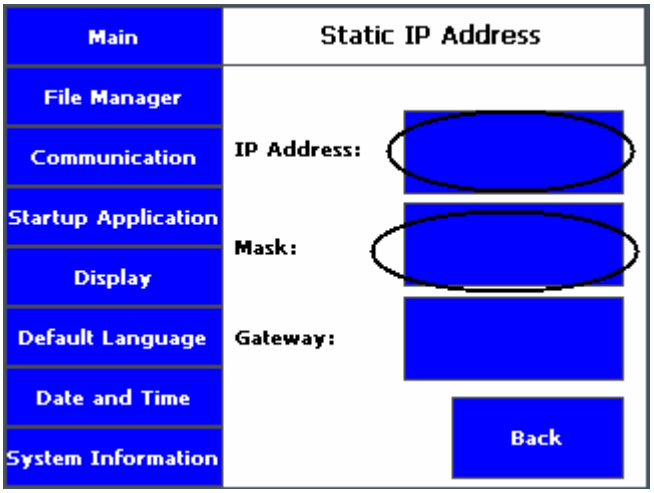
   a. Choose Disable DHCP since it is connected directly to the personal computer and click Set Static IP Address.
   b. Click IP Address and enter IP address 192.168.1.4.



c. Press Enter.

d. Click Mask and enter mask address 255.255.255.0.

e. Click Back to verify that the static IP address was entered correctly.



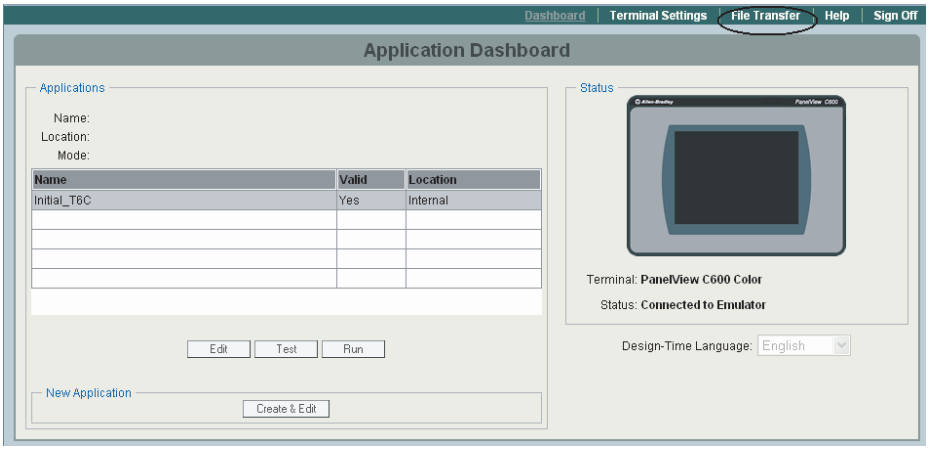
5. Launch your Internet browser and enter IP Address 192.168.1.4 in the URL window.

Load Your HMI Screens

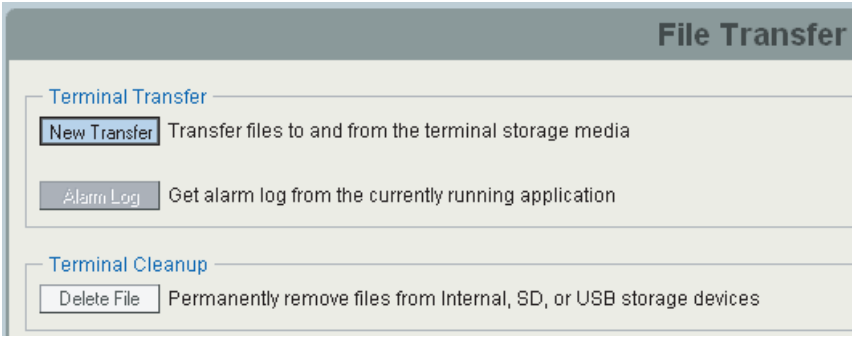
Follow these steps to load your HMI screens.

1. Make sure your personal computer is connected to your PanelView terminal.

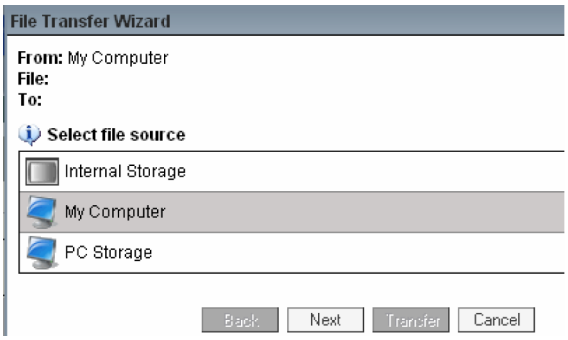
2. From the Application Dashboard, choose File Transfer.



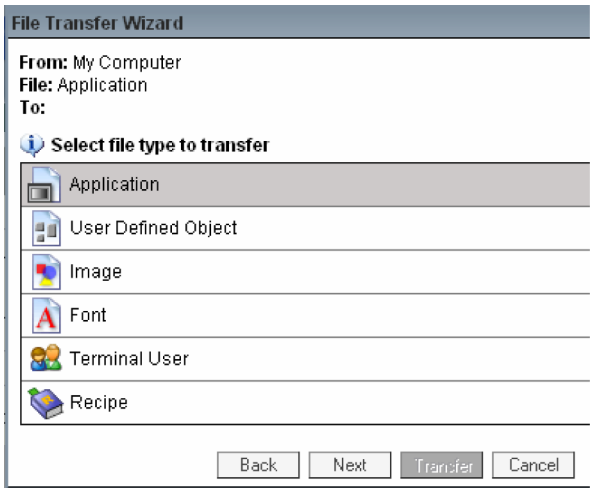
3. Click New Transfer to launch the File Transfer Wizard.



4. Select My Computer and click Next.



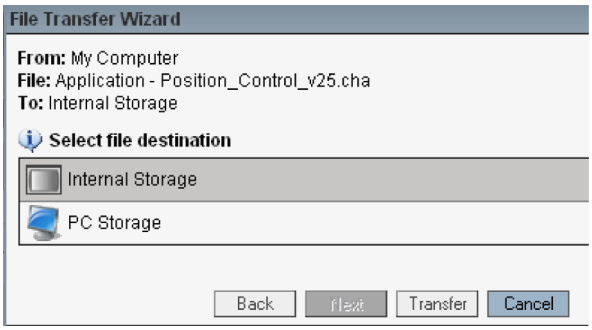
5. Select Application and click Next.



6. Browse to .cha file on the Connected Components Building Blocks Overview DVD, publication CC-QR001, and click Open.

7. Select Internal Storage and click Transfer.

   If you are successful, an informational dialog box appears briefly stating 'Operation Complete'.



8. Click Dashboard.

9. Select the downloaded file name and click Run.

ATTENTION: If you want to modify your HMI screens, click Edit. Otherwise, make sure that your system is safe and ready to run the program before clicking Run.

10. Leave the MicroLogix 1100/1400 controller in Program mode.

11. Reconnect the Ethernet cable between the MicroLogix 1100/1400 controller and the PanelView Component terminal.

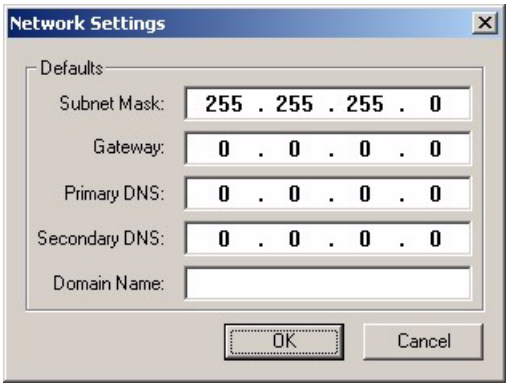
Using BOOTP

By default, the controller is configured so that you can set its IP address, subnet mask, and gateway address by using a BOOTP utility. You can select from a variety of BOOTP utilities. These instructions use the Rockwell Automation BOOTP Server (version 2.3.2), a standalone program that incorporates the functionality of standard BOOTP utilities with a graphical interface. It is available from http://www.ab.com/networks/ethernet/bootp.html.

Configure the Controller by Using the BOOTP Server

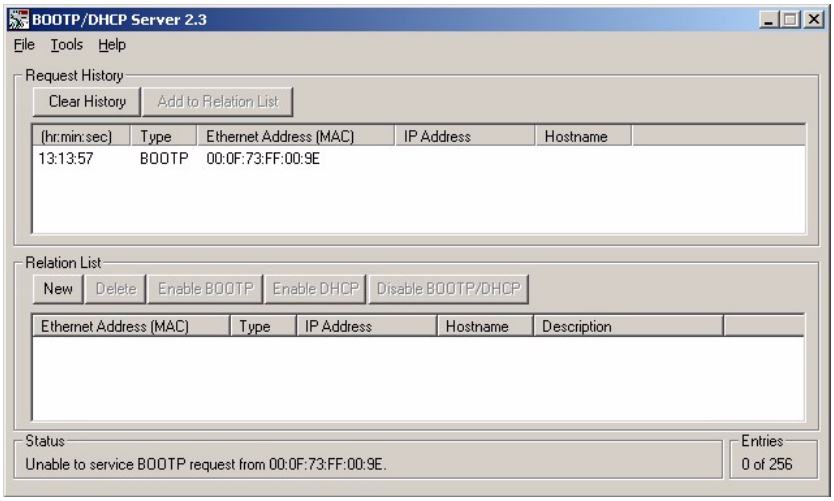
1. On the LCD screen of the controller, locate and note the Ethernet MAC address of the controller.
2. On a personal computer connected to the EtherNet/IP network, start the BOOTP software.
3. Enter 255.255.255.0 for the Subnet Mask on the Network Settings screen and click OK.

   The BOOTP Server dialog box appears. Devices on the network issuing BOOTP requests appear in the BOOTP Request History list.



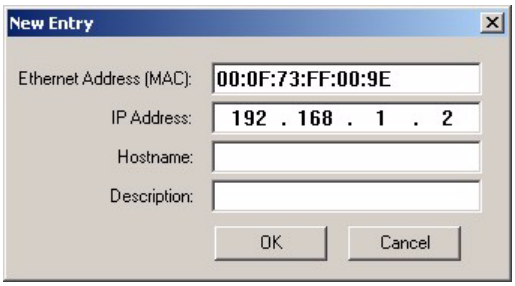
4. In the BOOTP Request History list, double-click the hardware address (Ethernet MAC address) of the controller.

   The New Entry dialog box appears.



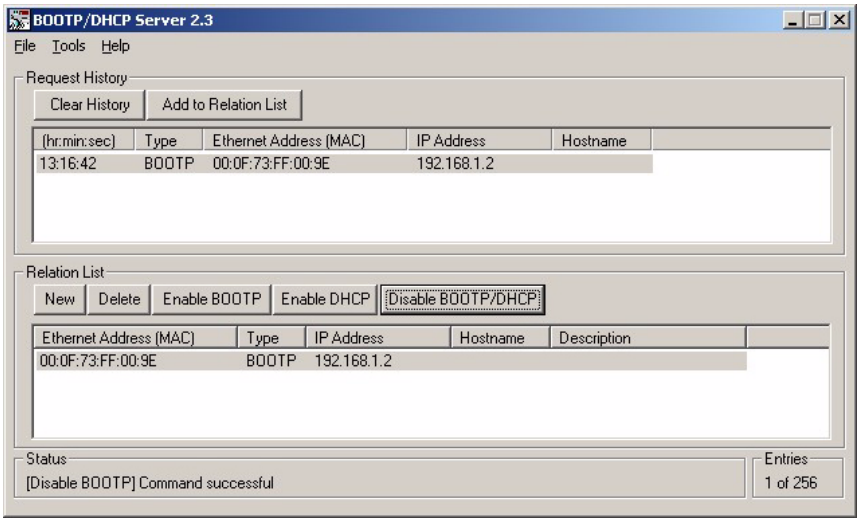
5. Enter 192.168.1.2 for the IP address.

6. Click OK to apply the settings.



The controller appears in the Relation List with the new settings.

7. To assign this configuration to the controller permanently, click Disable BOOTP.



TIP To enable BOOTP for a controller that has had BOOTP disabled, first select the controller in the Relation list, then click Enable BOOTP, and finally reset the controller.

8. To save the Relation List, from the File menu, choose Save.

TIP Using an Ethernet switch allows for easy connectivity and set up.

Additional Resources

Refer to page 7 for a listing of product and information resources.

Rockwell Automation Support

Rockwell Automation provides technical information on the Web to assist you in using its products. At http://www.rockwellautomation.com/support/, you can find technical manuals, a knowledge base of FAQs, technical and application notes, sample code and links to software service packs, and a MySupport feature that you can customize to make the best use of these tools.

For an additional level of technical phone support for installation, configuration, and troubleshooting, we offer TechConnect[SM] support programs. For more information, contact your local distributor or Rockwell Automation representative, or visit http://www.rockwellautomation.com/support/.

Installation Assistance

If you experience a problem within the first 24 hours of installation, review the information that is contained in this manual. You can contact Customer Support for initial help in getting your product up and running.

United States or Canada	1.440.646.3434
Outside United States or Canada	Use the Worldwide Locator at http://www.rockwellautomation.com/support/americas/phone_en.html, or contact your local Rockwell Automation representative.

New Product Satisfaction Return

Rockwell Automation tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

Documentation Feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete this form, publication RA-DU002, available at http://www.rockwellautomation.com/literature/.

Rockwell Otomasyon Ticaret A.Ş., Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication CC-QS001B-EN-P - January 2012
Supersedes Publication CC-QS001A-EN-P - April 2008