

EtherNet/IP Configuration and Troubleshooting

OEM: Rockwell Automation • Duration: 3 Days (24 hrs) • Code: CCP183

COURSE MODULES & TOPICS

Course Purpose

- Configure a Stratix® switch (5700, 8000, and/or 8300) to meet a variety of network requirements
- Assign IP addresses to devices on an EtherNet/IP network using rotary switches and a variety of software
- Monitor switch performance and status
- Diagnose and resolve issues with switches and devices on a network
- Configure a switch using both the Device Manager Web Interface and Studio 5000 Logix Designer® software
- Set up one-to-one IP address translation (NAT) for segmenting machine-level network devices from the plant network
- Secure and limit access to a switchOnce the EtherNet/IP network is up and running, you will monitor diagnostic information using web-based technologies and modify a web server module's data views and tag values

Objectives

- Assign an IP address to a computer
- Assign IP addresses using:
 - RSLinx classic software and rotary switches
 - BOOTP-DHCP server software
- Isolate an EtherNet/IP network problem
- Diagnose problems with EtherNet/IP modules and network components
- Monitor an EtherNet/IP network using web-enabled technologies

Prerequisites

- Completion of the Studio 5000 Logix Designer Level 1: ControlLogix System Fundamentals course (CCP146) or equivalent experience, such as downloading project files to a ControlLogix controller

Student Materials

- Student Manual includes the key concepts, definitions, examples, and activities presented in this course
- Lab Book provides learning activities and hands-on practice. Solutions are included after each exercise for immediate feedback
- EtherNet/IP Procedures Guide provides the steps required to complete tasks common to configuring Stratix® switches and other devices for communication over an EtherNet/IP network

Course Agenda

Day 1

- Assigning a Computer's IP Address
- Pinging a Device's IP Address
- Assigning IP Addresses Using RSLinx Classic Software and Rotary Switches
- Assigning IP Addresses Using BOOTP/DHCP Server Software
- Configuring Stratix 5700 Switch Settings Using the Express Setup
- Creating and Assigning VLANs

Day 2

- Configuring DHCP Persistence
- Configuring Network Address Translation (NAT)
- Configuring Port Security and Traffic Monitoring
- Monitoring Stratix 5700 Switch Status and Performance
- Managing a Stratix 5700 Switch Using a Studio 5000 Logix Designer Project

Day 3

- Isolating EtherNet/IP Network Problems
- Diagnosing Problems with EtherNet/IP Modules
- Diagnosing Problems with EtherNet/IP Network Components
- Monitoring an EtherNet/IP Network Using WebEnabled Technologies
- Troubleshooting a Stratix 5700 Switch
- Updating Stratix 5700 Switch Firmware