

ControlLogix Ethernet Connection

Monitouch HMI Technical Note TN-MH-0008a

Table of Contents

1. <i>Introduction</i>	2
2. <i>Requirements</i>	2
3. <i>Configuring RSLinx</i>	2
4. <i>Configuring RSLogix 5000</i>	5
5. <i>For More Information</i>	7

Monitouch HMI
Division of Fuji Electric Corp. of America

55 Westech Drive

Tyngsboro, MA 01879

Phone: (978) 649-8383

Toll Free: (866) 838-4031

Fax: (978) 649-0090

E-Mail: Support@MonitouchHMI.com

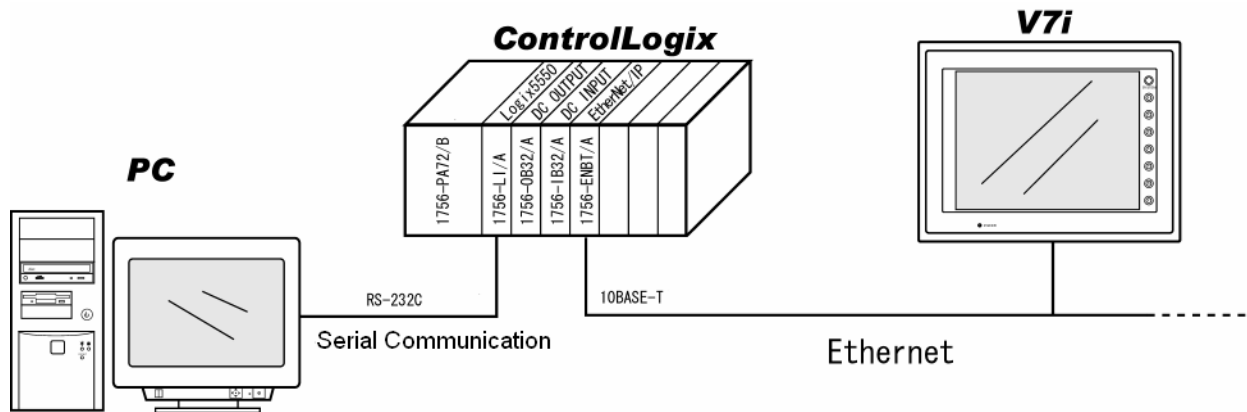
Website: www.MonitouchHMI.com

1. Introduction

This document describes how to configure an Allen Bradley ControlLogix for communications to a V7i over Ethernet. The PLC used for this is a Logix5550 with a 1756-ENBT/A (Ethernet) module. This document also applies for the Ethernet capable CompactLogix processors.

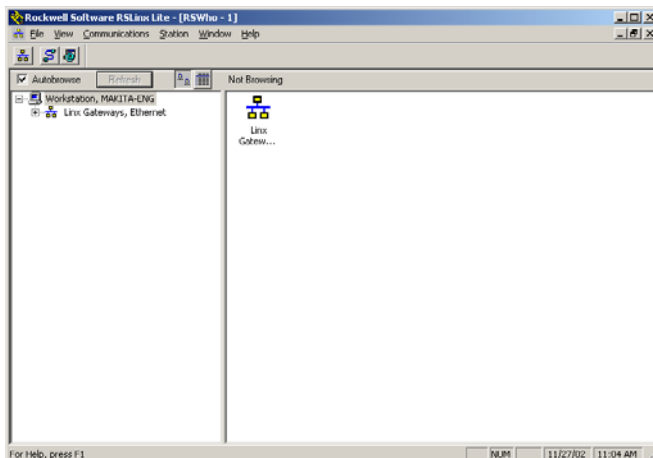
2. Requirements

- 1) RSLogix 5000 and RSLinx will be needed to program the PLC and configure the Ethernet port. For this an RS232C programming cable is needed.
- 2) An Ethernet cable will be needed for communications. Allen Bradley recommends against using a cross-over cable for direct connection to a PC. Their documentation specifies a straight cable to a hub or switch.



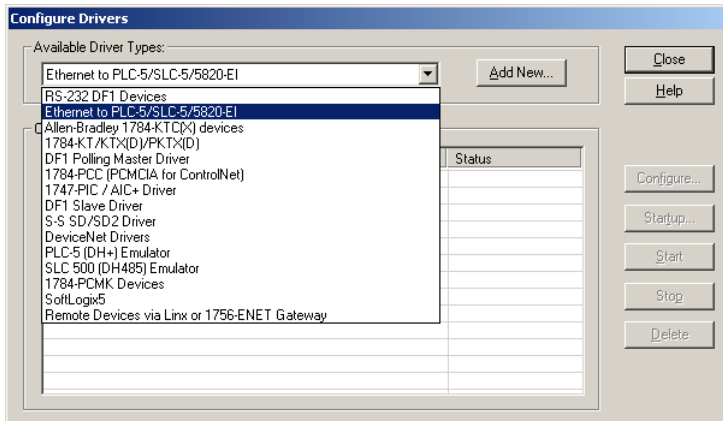
3. Configuring RSLinx

- 1) Open RSLinx to configure communication setting.





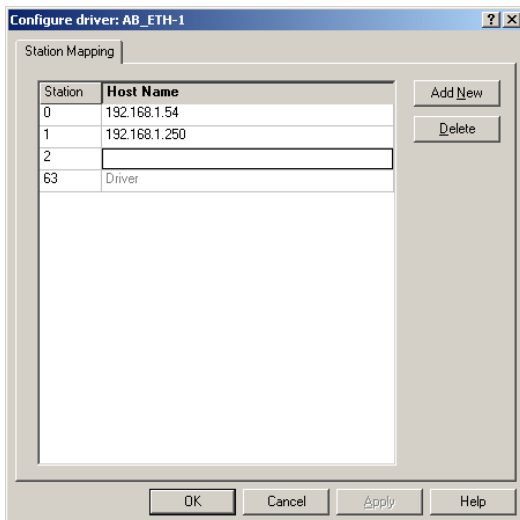
2) Add new drivers:



For RS232C communications, select "RS-232 DF1 Devices".

For Ethernet communication, select "Ethernet to PLC-5/SLC-5/5820-E1".

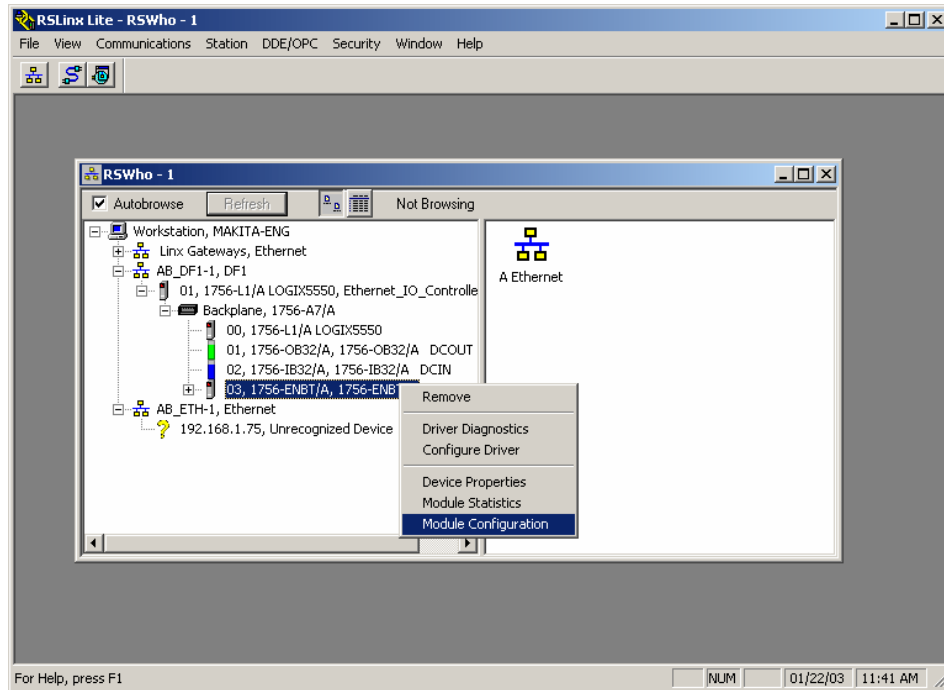
3) For the Ethernet configuration the following box should appear:



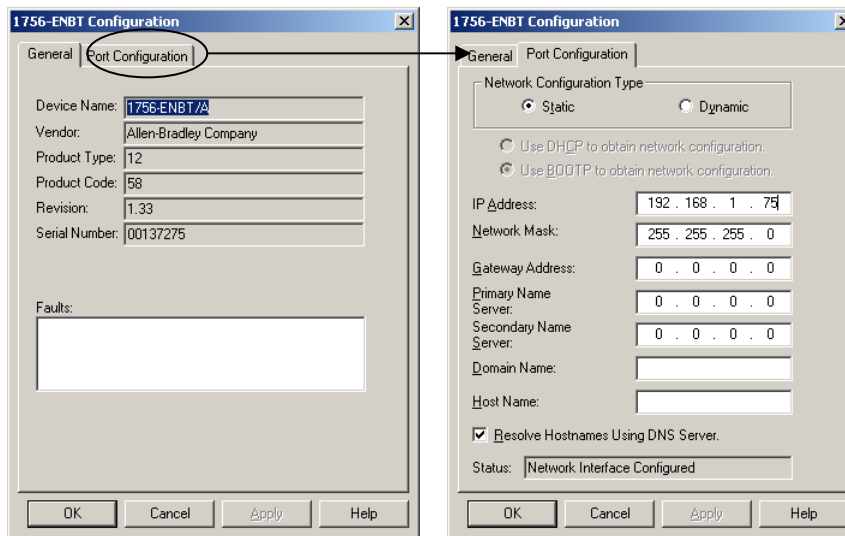
Enter the IP address for the PLC in the Host Name area.

For the RS-232 driver, click the Auto-Configure button with the cable connected to the PLC. The settings should be automatically set.

- 4) In the WhoActive box, expand the tree view for the DF1 driver connection to see the 1756-ENBT module. Right click and click on the Module Configuration option.



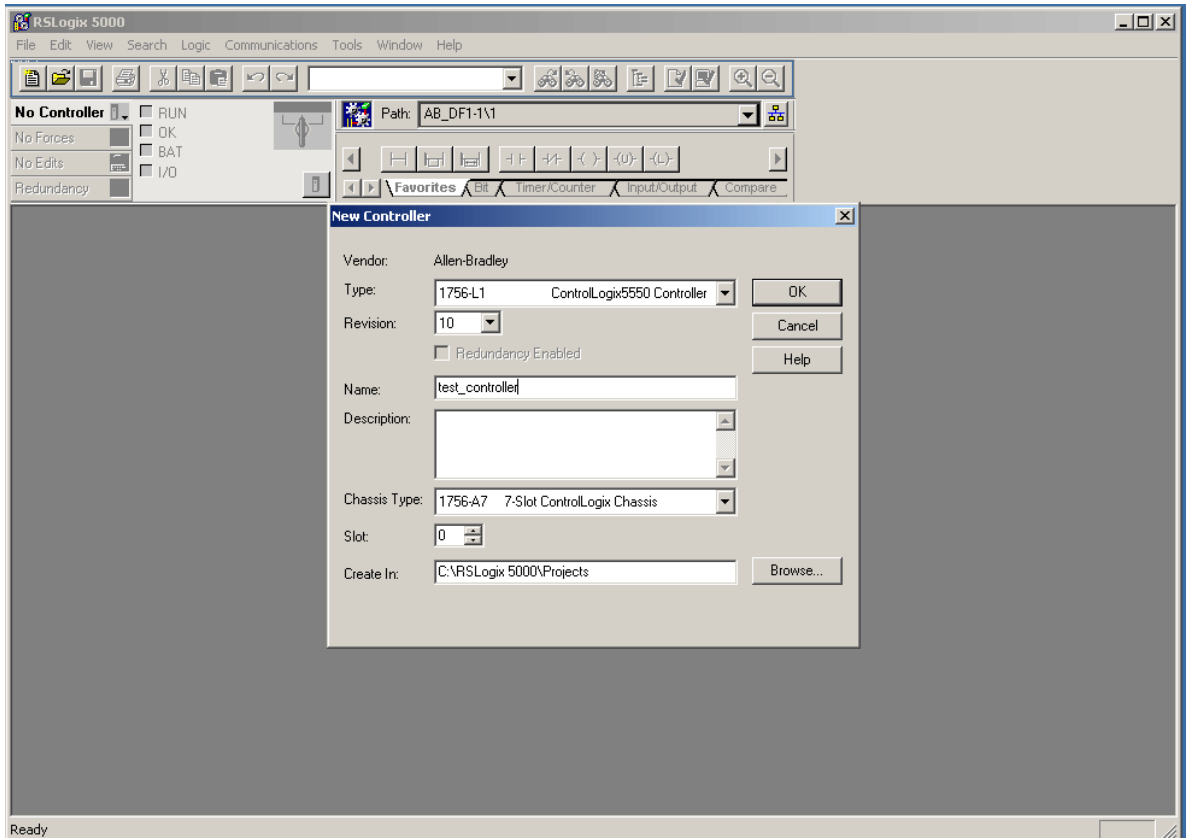
- 5) Select the Port Configuration tab and configure the IP settings. Then click OK.



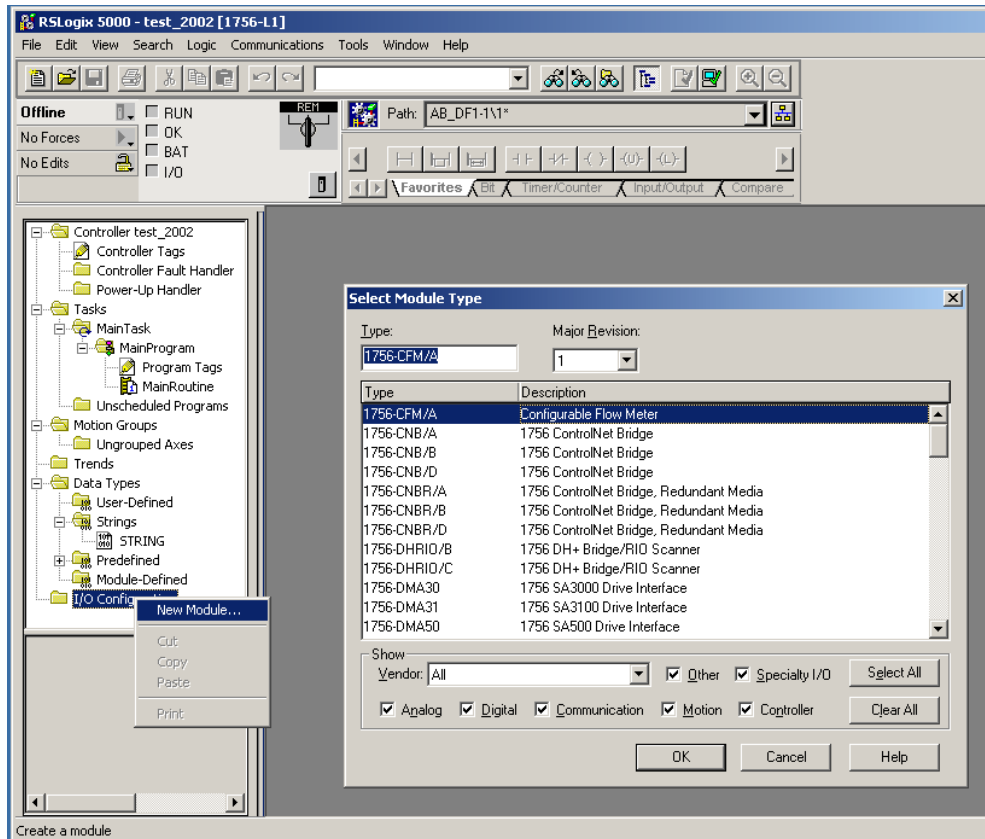
- 6) Click YES on the dialog box that comes up to download the settings. After downloading, confirm the settings.

4. Configuring RSLogix 5000

- 1) Start RSLogix 5 and create a new project. Select the correct processor type. You can also select "Who Active" to browse the PLCs on the network.

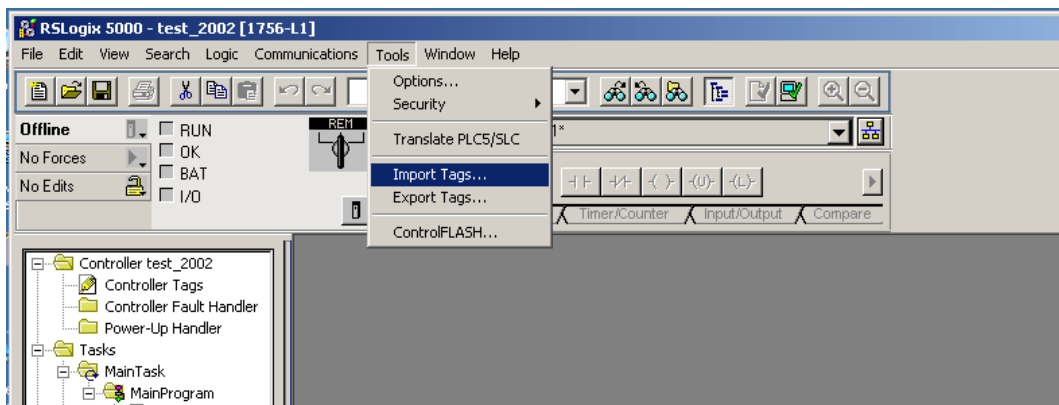


- 2) To configure the modules, right click on the I/O Configuration and select New Module. They must be done in the same order that they are installed in the chassis.

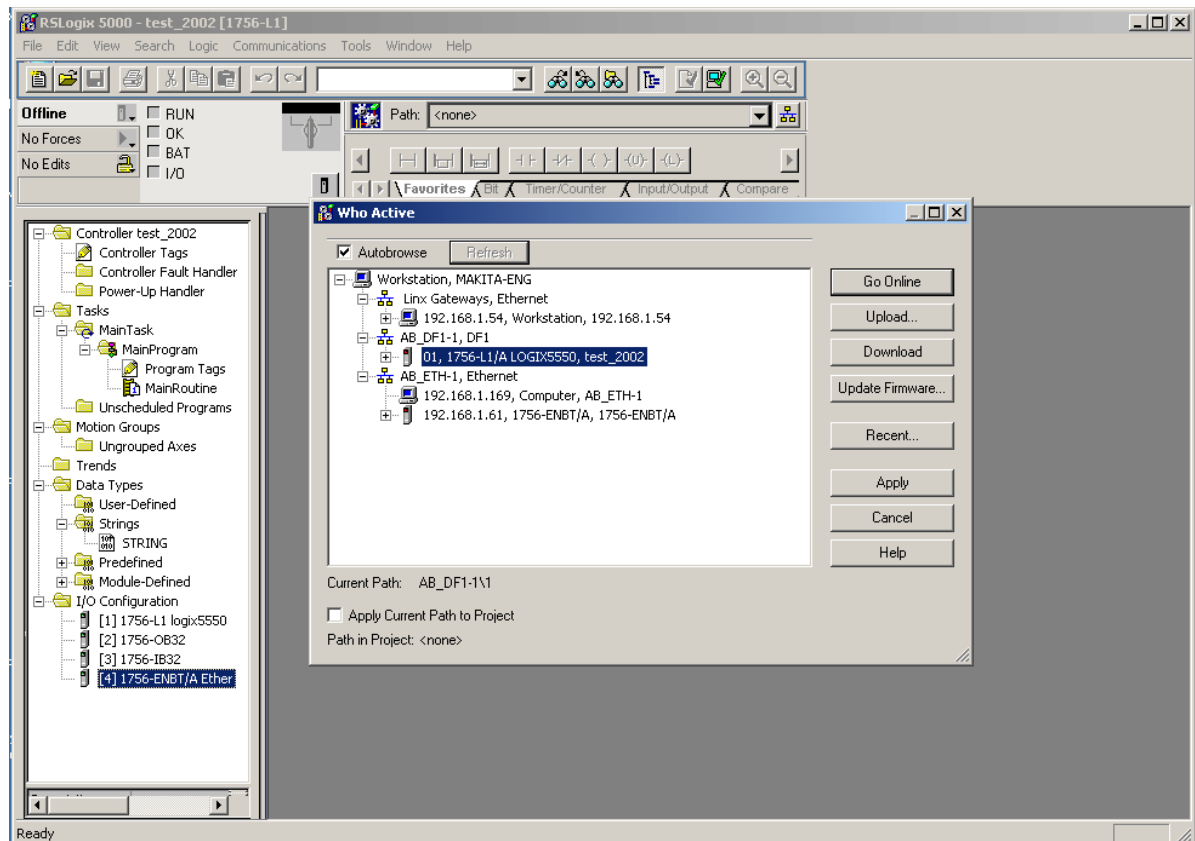


Then select the module. Enter a name and the slot number. You will need to do this for all 4 modules in this example. For the 1756-ENBT module, you will also need to enter the IP address of the module that you configured in RSLinx.

- 3) The ControlLogix PLCs use tags instead of memory addresses. You will need to create the controller tags (either in RSLogix 5000 or V-SFT) and then export them to a csv file and import them (either in V-SFT or RSLogix 5000). In this example the tags have been created in V-SFT and exported to a csv file. We will import them here. Click Tools – Import Tags in RSLogix. Then browse to the csv file that has the exported tags and click Import.



- 4) Now you can download the program to the PLC. You will need to set the driver for communications in RSLogix 5000. You can do this using the Comms – Who Active Go Online. Then select the PLC that should show up under the Ethernet driver.



5. For More Information

1. Manuals (Monitouch)
 - PLC Connection Manual, Chapter 2
 - Connection to AB ControlLogix
2. Allen Bradley Information
 - Website <http://www.ab.com>