# Industrial AutomationCrimson™ 3.0 Enable Ethernet PortTech Note 06for Download



### **Abstract:**

This document describes how to use Crimson 3 to configure/enable Ethernet download from the front panel of compatible Red Lion products.

## **Products:**

Red Lion Controls CR1000 Human Machine Interface (HMI), CR3000 HMI, Data Station Plus, G3 HMI, G3 Kadet HMI, Graphite<sup>®</sup> Controller, Graphite HMI, Modular Controller, and ProducTVity Station™

#### Use Case:

The default configuration state of the Ethernet port is "disabled" on the previously listed Red Lion Products. Therefore, a device's Ethernet port must be enabled before Ethernet downloads can occur.

#### **Required Software:**

Crimson<sup>®</sup> 3.0 or 3.1

## **Required Operating System:**

Microsoft Windows 2000, or above

## Introduction

By default, the Ethernet port found on compatible Red Lion devices is not enabled for downloading. Refer to the <u>Crimson 3 System Menu Technical Note</u> for information on enabling Ethernet download from the front panel of such units.

**NOTE 1**: Crimson support for Enable Ethernet Port for Download requires Crimson 3.0 or higher and is only available to Windows 2000 or above users. Please update your version of Crimson to the latest; available online at www.redlion.net.

## **Crimson 3 Configuration**

Crimson 3 must be configured to support Ethernet downloads. Refer to Figure 1 and perform the following:

- 1. Open Crimson 3.
- 2. Go to the Communication section.
- 3. From the Navigation Pane, click on Network; the Communications Network popup appears.
- 4. Click the *Ethernet* 1 tab.
- 5. Set the Port Mode option to Manual Configuration.
- 6. Define/enter the IP address that will be assigned to the unit; 192.168.1.20 in this example

Notes: 1. Ensure the specified IP address is reachable by the computer you are using.

2. Depending on the device being programmed, a cross-over cable to download over a direct connection may be required.

Navigation Pane	X Communications - N	Communications - Network			Resource Pane	×
💰 New - 🔀	Ethernet : Ethern	Ethernet 1 Ethernet 2 Routing Download Add Ports			0	
Communications	Port Settings	Port Settings			Devices	
C RS-232 Commi Port	Port Mode:	Manual Configuration			All two neighbors	
C RS-415 Commi Port	PAddress	192.168.1.20	1			
a fratocal I	Network Nask:	255-255-255-0	19			
Fratocal 3	Gateway:	0.00.0	1			
Tratocal 4	DNS Settings	DNS Settings				
Time Manager	DNS Mude	Disabled +				
FTP Server	Hans Service &	0.0.0.0				
Mait Manager	Banne Darren 21	0.0.0.0				
🗢 Option Card	Physical Layer	Physical Layer				
	Full Duples	Inabled +				
	High Speed	Inabled •				
	Maximum Segment	Maximum Segment Size				
	for Sendi 1	1260				
	For Receive: 1	1280				_
3346628	0.00000000				1 3 4 3	

Figure 1.



- 7. Referring to Figure 2, click on the *Download* tab.
- Set the IP Download option to *Enabled*; Unit Addressing can be set to Manual if you are changing the IP address or have specified the DHCP setting for Ethernet.

Nevigation Pane	X Communications - Ne	Communications - Network			Resource Pane	>
💰 New - 🔀	Ethernet 1 Ethernet	Ethernet 1 Ethernet 2 Routing Download Add Ports			0	
Communications     OP Programming Fort     OP 2322 Communications	Port Settings	Port Settings			Devices	
RS-435 Comm Port     RS-435 Comm Port	PAddress	192.163.1.20				
	Metwork Mask:	255.255.255.0				
Tratocal 3	Gateway:	0.000				
Tratocal 4	DNS Settings	DNI Settings				
OPC Proxy	DNS Mude	Disebles +				
FTP Server	diame Service &	0.0.0.0				
Mail Manager	Baue Dever 21	0.0.0.0				
I Option Card	Physical Layer	Physical Layer				
	Full Duplex	Inabled -				
	High Speed	Inabled +				
	Maximum Segment	Maximum Segment Size				
	for Sendi 1	280				
	For Receive: 1	280				

Figure 2.

- **9.** If the IP address and download are not already enabled in the unit, download this configuration using the USB or RS232/RS485 connection.
- **10.**Set the Link->Options to *TCP/IP* to have Crimson 3 use TCI/IP as the communications link to the unit; the Download Database via TCP/IP screen shown in Figure 3 is displayed.

Download Database via TCP/IP	×
Status	
ERROR - Memory Card is required for this operation. Do not power off the target device during this process.	

Figure 3.



## **Other Considerations**

When updating a device over Ethernet, it is important to check the build of Crimson 3 you are using by clicking *Help->About* on the menu bar. If the build of Crimson is different than the version indicated on the boot screen of the device, a <u>compact flash</u> memory card will be required to update the firmware prior to updating the configuration.

## Disclaimer

It is the customer's responsibility to review the advice provided herein and its applicability to the system. Red Lion makes no representation about specific knowledge of the customer's system or the specific performance of the system. Red Lion is not responsible for any damage to equipment or connected systems. The use of this document is at your own risk. Red Lion standard product warranty applies.

#### **Red Lion Technical Support**

If you have any questions or trouble contact Red Lion Technical Support by emailing <u>support@redlion.net</u> or calling 1-877-432-9908.

For more information: http://www.redlion.net/support/policies-statements/warranty-statement



**NOTE:** A device can also be updated without a compact flash by connecting locally using USB or serial programming cables to update the firmware.