

Cutler-Hammer

Configuring Prolinx 4201-DFNT-MCM Gateway

Application Note

Description

| General Description | . 1 |
|------------------------|-----|
| Setup | 1 |
| Changing Configuration | 3 |
| More Information | . 4 |



Soft Load Closed Transition Transfer

Page General Description

The Prolinx Gateway model 4201-DFNT-MCM is used to connect an Allen-Bradley Ethernet/IP network to a Modbus device.

In this application, we will connect the Gateway to a Cutler-Hammer Soft-Load Closed Transition Transfer Switch that utilizes the Encorp GPC control. The Encorp GPC control includes one Modbus slave port, configured for 9600 baud, no parity, 8 data bits and one stop bit. The default slave address is set to 002 for the main logic (a second address ,001, is used for the internal PLC, not used in this example). Note: the default Modbus slave addresses can be changed by the user through either the Modbus port (by writing register 40018 with a new address) or through the Lonworks port (cLNOMdBSIv_is the SNVT to write).

Setup

- This Prolinx has been preconfigured to read Encorp Modbus registers 30300-30309 and 40300-40309 and place this into internal registers 300-309 and 1300-1309. Refer to <u>http://www.ch.cutler-</u> <u>hammer.com/unsecure/cms1/TD1502TE</u> <u>TRANSFER_SWITCH_COMMUNICATI</u> <u>ONS.PDF</u> for a explanation of these Modbus addresses
- Connect DIN to 9-pin male adapter cable to the DEBUG DIN port on the Prolinx. This cable is supplied with the Prolinx.
- Connect a computer to this adapter cable using a 9-pin female to 9-pin female null modem cable.
- Start Hyperterminal and configure for 57600 baud, 8 data bits, no parity, 1 stop bit.

| Indersunt samber OnC 1321 L/E port 8-000 (2001) My Ethernat coldens in 00:00:63:01:00:91 | |
|---|--|
| MURITAR LEADER (2.40): (c) 1999-2082, Froline Communication Oxfoneses, Inc. | |
| Loading application and configuration files | |
| Bre file comind. | |
| Softing revis B SIANCY COMMANDATION MEDIAE ADDI-OFFET-MEN (C) 2000-2002, Frediew Communication Catemany, Jac. | |
| PERDUCT HUNG CODE SOFTWARE WEITELDW (ENVI BASETING SASTEN REVIEW) 2000 US MANNES 2000 | |
| Press 7 for mensionale. | |

Application Note

Page 2

DENTMON CEG

Effective: November 2002

This file contains the configuration for the DFNT/MCM communication # module. : ProLinx Communication Gateways, Inc. # LOCATION # DATE " This section is used to define the configuration for the Module level # data. [Module] Module Name : 4201-DFNT-MCM # This section is used to define the configuration for the master device # simulated on network port [DFNT Client 0] Minimum Command Delay : 0 #Minimum number of msec's between commands Response Timeout : 1000 #Response messgage timeout (0-65535 mSec) Retry Count : 3 #Response failure retry count [DFNT Client 0 Commands] # The file contains examples for a ControlLogix processor with the N7 file # configured. This example uses SLC and PLC5 commands. # " # 1 2 3 4 5 6 7 8 9 10 11 12 # DB Poll Swap Func File File Elm Sub #Enab Addr Delay Count Code Node IP Address Slot Code Type # # Elm 7 START END [DFNT Client 1]

 Minimum Command Delay
 : 50
 #Minimum number of msec's between commands

 Response Timeout
 : 1000
 #Response messgage timeout (0-65535 mSec)

 Retry Count
 : 3
 #Response failure retry count

 #Minimum number of msec's between commands [DFNT Client 1 Commands] # DB Poll Swap Func File Elm Sub #Enab Addr Delay Count Code Node IP Address Slot Code # # Elm START 1 50 0 10 0 192.168.0.101 -1 101 7 0 -1 END #This is an example of a Master port using Modbus RTU protocol [Modbus Port 0] # Settings required by both Master and Slave Enabled : Yes #Port enable flag y=yes, №=№0 : Master #Port type M=Master, S=Slave Yes #Port enable flag Y=Yes, N=No Type No #Use floating data type Y=Yes, N=No
 7000 #Register offset in message for floats
 2000 #Internal Address for floats Float Flag Float Start Float Offset

 Protocol
 :
 RTU #Modbus Protocol R=RTU, A=ASCII

 Baud Rate
 :
 9600 #Baud rate for port

 Parity
 :
 None #N=None, O=Odd, E=Even

 Data Bits
 :
 8 #5 to 8 data bits for messages

 Stop Bits
 :
 1 #1 or 2 stop bits for messages

 RTS On
 :
 0 #Delay after RTS set before message sent (mSec)

 Minimum Response Delay
 :
 1 #Number of mSec to delay before respose

 Use CTS Line
 :
 No #Monitor CTS modem line (Y/N)

 Response Timeout
 :
 1000 #mSec for response timeout of command

 Retry Count
 :
 2 #retry count for failed requests

 # Settings required for Slave Driver # Settings required for Slave Driver Internal Slave ID : 1 #Modbus Node address for this port on network Bit Input Offset : 0 #Internal DB offset to bit input data Word Input Offset : 0 #Internal DB offset to word input data Output Offset : 0 #Internal DB offset to bit output data Holding Register Offset : 0 #Internal DB offset to holding reg data Use Guard Band Timeout : No #Use packet gap timeout for messages Guard Band Timeout : 0 #0=Use default for baudrate, or set timeout # Settings required for Master Driver Minimum Command Delay : 0 #mSec delay between commands Error Delay Counter : 100 #0-65535 Command cycle count if error

.. ..



Effective: November 2002

(Continued from previous page)

| <pre>[ModBus Port 0 Commands] # Internal Poll Reg Swap Node Modbus MB Address # Enable Address Interval Count Code Address Func in Device STRAT 1 300 0 10 0 2 3 300 END # This section is used to define e-mail reports to be sent from the module # to a specified e-mail server/user account based on the value of selected # user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-MAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name STRAT 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers value cout to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 3412) # 2 Words and bytes are swapped (1234 -> 2143) [DATA MAP] # From TO Register Swap Delay #Address Address Count Code Preset #STRAT # 400 1000 9 0 2000 # 4000 1000 9 0 0 2000 # 4000 1000 9 0 0 2000 # 4000 10</pre> | _ | | | | | | | | | |
|---|-------------------|--|-------------|------------|----------|---------|------------|-----------|---------------|----------|
| <pre># Internal Poll Reg Swap Node Modbus ME Address # Enable Address Interval Count Code Address Func in Device START</pre> | [| Modbus P | ort 0 Comma | ands] | | | | | | |
| <pre># Enable Address Interval Count Code Address Func in Device START 1 300 0 10 0 2 3 300 END # This section is used to define e-mail reports to be sent from the module # to a specified e-mail server/user account based on the value of selected # user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-WAIL] # DB Trigger Mail TO # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data reguests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of fregisters set by Register Count to # the specified To Address (destination of fregisters set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 3412) # 2 Words and bytes are swapped (1234 -> 3412) # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1020 10 0 1002 # 7900 1060 20 0 1002 # TON 1000 80 0 1005</pre> | # | | Internal | Poll | Reg | swap | Node | Modbus | MB Address | |
| STAR 1 300 0 10 0 2 3 300 END # This section is used to define e-mail reports to be sent from the module # to a specified e-mail server/user account based on the value of selected # user register/alue combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-MAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # the value for the bytes can be altered using the Swap Code field as follows: # SWAP CODE DEFINITION # Swap Code DEFINITION # J Mords are swapped (1234 -> 1234) # Address Address Count Code Preset # A | # | Enable | Address | Interval | Count | Code | Address | Func | in Device | |
| <pre>1 300 0 10 0 2 3 300 END # This section is used to define e-mail reports to be sent from the module # to a specified e-mail server/user account based on the value of selected # user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-MAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words and bytes are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 2143) # 3 Bytes left in original order (1234 -> 2143) # 4000 1000 9 0 2000 # 4000 100 9 0 2000 # 4000 1000 100 0 0 1005 # ************************************</pre> | S | TART | | | | | | | | |
| <pre>I 1300 0 10 0 2 3 300 FTD FTD FTD FTD FTD FTT FTD FTTTT FTTTT FTTTTTTTT</pre> | | 1 | 300 | 0 | 10 | 0 | 2 | 2 | 300 | |
| <pre>ENU # This section is used to define e-mail reports to be sent from the module # to a specified e-mail server/user account based on the value of selected # user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-WAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler dat requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified TO Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words and bytes are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 1234) # 3 Bytes left in original code reset #TART # 4000 1000 9 0 2000 # 4000 1000 9 0 1005 # TOP # T</pre> | | 1 | 1300 | 0 | 10 | 0 | 2 | 3 | 300 | |
| <pre># This section is used to define e-mail reports to be sent from the module # to a specified e-mail server/user account based on the value of selected # user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-WAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # SAPP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 1 Words are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay # Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 3000 1100 80 0 0 1005</pre> | E. | ND | | | | | | | | |
| <pre># This section is used to define e-mail reports to be sent from the module # to a specified e-mail server/user account based on the value of selected # user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-MAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Cont to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # WAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 1234) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4020 1010 10 0 2001 # 4020 1020 10 0 1002 # 7900 1060 20 0 1003 # 8300 1100 80 0 0 1005 #START</pre> | | | | | | | | | | |
| <pre># to a specified e-mail server/user account based on the value of selected # user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-MAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # SNAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 4312) # 2 Words and bytes are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay # Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4020 1010 10 0 2001 # 4020 1020 10 0 1002 # 7900 1060 20 0 1004 # 8300 1100 80 0 0 1005 #START</pre> | # | This se | ction is u | sed to def | Eine e- | mail re | ports to | be sent | from the mod | ule |
| <pre># user register/value combinations. When the specified register value contains # the value defined, the e-mail file will be sent from the module. [E-MAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 3412) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4040 1020 10 0 1002 # 7900 1060 20 0 1003 # 8300 1100 80 0 1005 # WOND # 0 Bytes Ito I I I I I I I I I I I I I I I I I I</pre> | # | to a sp | ecified e- | mail serve | er/user | accour | nt based o | on the va | alue of selec | ted |
| <pre># the value defined, the e-mail file will be sent from the module. [E-MAIL] # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #STAPT # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4400 1020 100 0 1002 # 7900 1060 20 0 1003 # 8300 1100 80 0 1005 #END</pre> | # | user re | gister/val | ue combina | ations. | When | the speci | ified reg | gister value | contains |
| <pre>[E-WAIL] # DB Trigger Mail TO START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified TO Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code # the order of the bytes can be altered using the Swap Code # the order of the bytes can be altered using the Swap Code # 1 Words are swapped (1234 -> 1234) # 1 Words are swapped (1234 -> 2143) # 2 Words and bytes are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay # Address Address Count Code Preset #START # 400 1000 9 0 2000 # 4000 100 0 0 0 0 000 # 4000 100 0 0 0 000 # 4000 100 0 0 0 000 # 4000 100 0 0 0 000 # 600 000 0 000 # 8000 1100 80 000 # 8000 10</pre> | # | the val | ue defined | , the e-ma | ail fil | e will | be sent f | from the | module. | |
| <pre>lt=-Mail j # DB Trigger Mail TO # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified TO Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 1234) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4000 1010 10 0 2001 # 4400 1020 10 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1003 # 8100 1080 20 0 1005 #WDM</pre> | | | | | | | | | | |
| <pre># DB Irigger Mail 10 # Reg Value Server IP Name E-Mail File Name START 0 1 192.168.0.61 Test test # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # WAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 3412) # 2 Words and bytes are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4400 1020 110 0 1002 # 7900 1060 20 0 1004 # 8100 1080 20 0 1004 # 8100 1100 80 0 0 1005 #FWD</pre> | _ [] | E-MAIL] | m | Ma 4.7 | | - | | | | |
| <pre># reg value Server is Name = P-Mail File Name 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # # SNAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 4321) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 44000 1010 10 0 2001 # 4400 1020 10 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1004 # 8900 1100 80 0 1005</pre> | # | DB | Trigger | Mail | TD | TO | | - Meil Di | le Neme | |
| 0 1 192.168.0.61 Test test END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 1234) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2001 # 4000 1000 9 0 2001 # 4000 1000 100 0 0 2001 # 4400 1020 10 0 0 1002 # 7900 1060 20 0 1004 # 8000 1100 80 0 1005 | # c | кед тарт | value | Server | IP | Name | 1 | s-Mail Fi | Lie Name | |
| END # This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 1234) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4400 1020 10 0 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1004 # 8900 1100 80 0 1005 | 5 | 1AR1 0 | 1 | 102 169 | 8 0 61 | Tect | | oct | | |
| <pre># This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # U O Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 4321) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4400 1020 110 0 1002 # 7900 1060 20 0 1004 # 68100 1080 20 0 1005 #FRDM</pre> | E | ND | - | 192.100 | 5.0.01 | rese | | CDC | | |
| <pre># This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 1234) # 2 Words and bytes are swapped (1234 -> 4321) # 3 Bytes in each word are swapped (1234 -> 2143) [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 44400 1020 10 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1005 #EVENT</pre> | | | | | | | | | | |
| [DATA MAP] # From To Register Swap Delay #Address Address Count Code Preset #START """""""""""""""""""""""""""""""""""" | * # # # # # # # # | <pre># This section is used to move data within the database to concentrate information # for simpler data requests and control. The From Address specifies the start # database location to copy the number of registers set by Register Count to # the specified To Address (destination of data). When the data is copied, # the order of the bytes can be altered using the Swap Code field as follows: # # SWAP CODE DEFINITION # 0 Bytes left in original order (1234 -> 1234) # 1 Words are swapped (1234 -> 3412) # 2 Words and bytes are swapped (1234 -> 4321) # 3 Bytes in each word are swapped (1234 -> 2143)</pre> | | | | | | | | |
| # From To Register Swap Delay #Address Address Count Code Preset #START | r | рата мар | 1 | | | | | | | |
| #Address Address Count Code Preset #START | # | From | To | Registe | er Sw | ap I | Delay | | | |
| #START # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4400 1020 10 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1004 # 8900 1100 80 0 1005 | # | Address | Address | Cour | nt Co | de Pi | reset | | | |
| # 4000 1000 9 0 2000 # 4020 1010 10 0 2001 # 4400 1020 10 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1004 # 8900 1100 80 0 1005 | # | START | | | | | | | | |
| # 4020 1010 10 0 2001 # 4400 1020 10 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1004 # 8900 1100 80 0 1005 | # | 4000 | 1000 | | 9 | 0 | 2000 | | | |
| # 4400 1020 10 0 1002 # 7900 1060 20 0 1003 # 8100 1080 20 0 1004 # 8900 1100 80 0 1005 | # | 4020 | 1010 | | 10 | 0 | 2001 | | | |
| # /900 1000 20 0 1003 # 8100 1080 20 0 1004 # 8900 1100 80 0 1005 | # | 4400 | 1020 | | T0 | U | 1002 | | | |
| # 8900 1100 80 0 1004 #END | # | /900 | 1000 | | ∠U 20 | 0 | 1003 | | | |
| | # | 8000 | 1100 | | 20 | 0 | 1004 | | | |
| | # | 0900 | 1100 | | 00 | 0 | 1003 | | | |

Changing Configuration

Note that a configuration file is downloaded to the module by rebooting the module (cycling power, pressing ESC from a top level menu and answering 'Y' to the prompt. Press ? for menu help.

Press 'Y' key to confirm program exit!

If you don't press the 'Y' key, the Prolinx replies with: Confirmation timedout!

Hold the L key down while tha module reboots and you will be given the loader screen



Select "R" to Transfer files from Computer to Prolinx Unit".

The system will ask if you want to download a new executable file.

No yes want to develoed a new program executable file in eve file! 19907 _ Answer No.

The system will ask if you want to download a new configuration. you east to download a WHENING: CLESENT CONFIGURATION WILL BE LIST? By you want to exercise the existing configuration file (Proling stal 08/017

Answer Yes and select Transfer / Send from the Hyperterminal menu

FREIDER MODULE FREIDER LINDER MEMI (Versim 2.40) [c] 1979-2002, Freiles Communication Gateware, Inc.

| 3-Disploy New C-Nable Configuration | Send The | | 8.6 | |
|---|--------------|---------------------------------|------|---------------|
| B-Insector Files from Exc-Ren ProLine Realis | Pulle P.Hall | kains) fotikosi Todeo (Coldinos | | |
| Enter Selection (7.6.8.) | P Patent | Letter Detroited PTER | POH. | |
| | Tioland | | 100 | 2012/02/07 |
| Do you want to download | model | | | e filel (WH)? |
| Do you won't to deserioud | | | | le1 18/10? |
| | | Tend One | Cent | |
| MARHING: CHREENT CONFIDE | | | | |
| | | | | |

Do you word to exercise the emisting configuration file (Proline cful 1920)? INSERTINGS FILE FROM CONTINUE TO PROLING UNIT: Send the Configuration In.cful file non-using Modem transfer protocol?

After the configuration has been downloaded, the system will then ask if you want download a new Ethernet configuration

Do you want to download a new WAITCP.CFG file (V/N)? _ Answer No.

The module will then reboot and restart with the latest changed configuration.

Note that this configuration file is just a text file that is edited in a program such as Notepad. Refer to the Prolinx documentation for an explanation of the various sections of this configuration file.

One section that is not explained well in the Prolinx documentation is the [DATA MAP] section. You may not need this, and in fact, this section was commented out in the example configuration file listed on this and the previous page.

The DATA MAP section allows you to group registers from diverse Modbus messages into one table, making it easier for a block of data to be read from one Ethernet/IP message. The "Delay Preset" is in seconds and defines how often this table is updated (or consolidated).

Application Note

Page 4 Effective: November 2002

More Information

The Prolinx web site includes an FTP server with many required manuals. These manuals may be more up to date than the documentation supplied on the CD-ROM shipped with the Prolinx Gateway.

Also, Prolinx issued a mandatory upgrade notice that units must be updated to at least firmware V2.4. Refer to Prolinx technical support (www.prolinxgateways.com) for more information on accomplishing this upgrade. Plugging a computer into the DEBUG serial port (set to 57600 baud, 8, n, 1) and pressing ? will display a menu that will permit you to see the firmware version for your unit.

The upgrade from V2.x units to V2.4 is relatively easy and only requires a jumper to be moved temporarily, a flash file uploaded and the jumper returned to its original position.

Startup Guide: <u>ftp://ftp.prolinxgateways.com/ProLinx/Ma</u> <u>nuals2_2/05.PLNX.OOO.OO.01.EN.pdf</u>

Modbus Protocol Manual: <u>ftp://ftp.prolinxgateways.com/ProLinx/Ma</u> <u>nuals2_2/06.PLNX.MCM.OO.01.EN.pdf</u>

Allen-Bradley Ethernet/IP Protocol Manual: <u>ftp://ftp.prolinxgateways.com/ProLinx/Ma</u> nuals2_2/06.PLNX.DFNT.OO.01.EN.pdf

Prolinx 4201-DFNT-MCM Datasheet: <u>ftp://ftp.prolinxgateways.com/ProLinx/Dat</u> <u>asheets/4201.pdf</u>

Sample Configuration File for the 4201-DFNT-MCM: <u>ftp://ftp.prolinxgateways.com/ProLinx/Config_files/4201-DFNT-MCM/dfntmcm.cfg</u>