# Creating a Client/Server Memory Transfer between Two 2572 / 2572-A / 2572-B Modules

This is a simple example application of how to start the Network Server, create a software socket connection to a remote 2572/2572-A/2572-B (2572-X), and execute a Memory Transfer Command to the remote 2572-X from a client 2572. In this example, the client 2572-XX is in Slot #1 of Base #0 and has a starting address of WX1. Command Status (WX2) and Control bits (WY5) for Command Slot 1 will be used for command processing.

The Start Network Server Command Block is located at V100 and sets the Client 2572-X IP address for 199.184.177.207. This is determined by the values in V106 and V107.

Example: V106 = C7B8 (hex) where C7 (hex) = 199 B8 (hex) = 184 V107 = B1CF (hex) where B1 (hex) = 177 CF (hex) = 207



A "Write Remote" Memory Command Block is located at V140. This command is set up to write 25 words beginning at V1000 in the local PLC to V1000 in the remote PLC. Although we have chosen a "Write Remote" Command for this example, a "Read Remote" or "Memory Exchange" Command could also be used here.

Please refer to the 2572-X User Manual for a detailed description of Client Commands.

#### Start Network Server Command Block

V Memory Location	Description	Hex Value	Decimal Value
V100	Command Error Word	0000	0
V101	Command (Start Network Server)	0004	4
V102	Connection Number (19291-19298)	4B62	19298
V103	Protocol Manager Number	0023	35
V104	Startup Option Bits	0	0
V015	TCP Stale Socket Timeout in seconds (0 = none)	003C	60
V106	IP Address of this Module (High 16 bits) 199.184	C7B8	51128
V107	IP Address of Default Router (Low 16 Bits) 177.207	B1CF	45519
V108	TCP/UDP Port Number	05E1	1505
V109	IP Address of Default Router (High 16 bits)	0	0
V110	IP Address of Default Router (Low 16 bits)	0	0
V111	Max Number of TCP Connections $(0 = default = 8)$	0	0
V112	Subnet Mask (High 16 bits)	0	0
V113	Subnet Mask (Low 16 bits)	0	0
V114	Unused - Set to 0	0	0
V115	Unused - Set to 0	0	0



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#### Create Socket Command Block

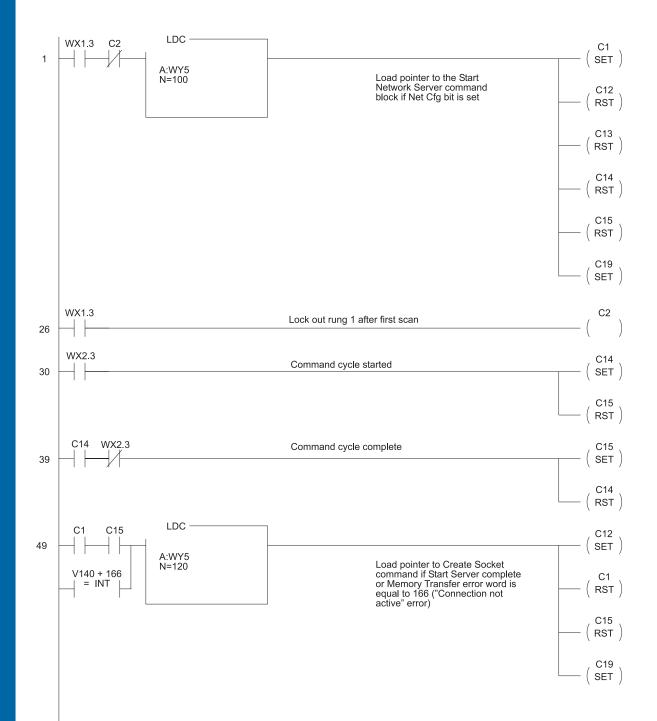
V Memory Location	Description	Hex Value	Decimal Value
V120	Command Error Word	0000	0
V121	Command (Create Socket)	0004	3
V122	Connection Number (19221-19228)	4B15	19221
V123	Protocol Manager Number	0024	36
V124	Startup Option Bits (None Used - Set to 0)	0000	0
V125	Type of Service $(1 = TCP, 2 = UDP)$	0001	1
V126	IP Address of Remote Device (High 16 bits) 199.184	C7B8	51128
V127	IP Address of Remote Device (Low 16 Bits) 177.217	B1D9	45529
V128	Unused - Set to 0	0000	0
V129	TCP/UDP Port Number of Remote Device	05E1	1505
V130	Unused - Set to 0	0000	0
V131	Unused - Set to 0	0000	0
V132	Unused - Set to 0	0000	0
V133	Unused - Set to 0	0000	0
V134	Unused - Set to 0	0000	0
V135	Unused - Set to 0	0000	0

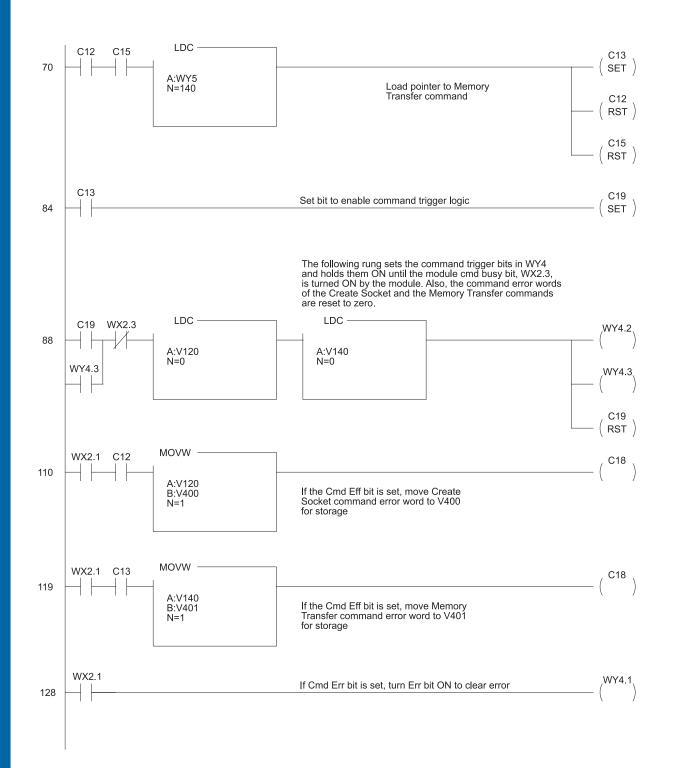
#### Write Remote Memory Command Block

V Memory Location	Description	Hex Value	Decimal Value
V140	Command Error Word	0000	0
V141	Command (Read Remote Memory)	0202	513
V142	Connection Number (19221-19228)	4B15	19221
V143	Source: Starting V Memory Address in Local PLC	03E8	1000
V144	Number of Words to Transfer (1 - 256)	0019	25
V145	Destination: Starting V Memory Address in Remote PLC	03E8	1000
V146	Command Timeout in Seconds $(0 = default = approx. 9 seconds)$	0003	3
V147	Unused - Set to 0	0000	0
V148	Unused - Set to 0	0000	0
V149	Unused - Set to 0	0000	0
V150	Unused - Set to 0	0000	0
V151	Unused - Set to 0	0000	0
V152	Unused - Set to 0	0000	0
V153	Unused - Set to 0	0000	0
V154	Unused - Set to 0	0000	0
V155	Unused - Set to 0	0000	0

The following ladder logic example is the minimum logic required to control command execution. This logic initiates a Start Network Server Command in the event that WX1.3 (network config bit) is turned ON by the module. A Create Socket Command is then initiated to the remote 2572-X. Once the socket is established, a Write Remote Memory Command is executed continuously.

Please refer to the 2572-X User Manual for a detailed description of the PLC interface and command processing.







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