

## Steps on PLC communicating with PC via Ethernet port

Tools: Works2(GX Works2 Version 1.521T)  $\smallsetminus$  EX3G PLC  $\smallsetminus$  network cable  $\smallsetminus$  24V power supple.

Connection method: PLC and computer are connected through LAN (the IP address of the computer and the IP address of the PLC must be on the same network segment) In this example, the IP address of the PC is 192.168.1.11. The IP address of the PLC is set to 192.168.1.250.

1. Use WORKS2 to create a new FX3G project and connect to it. Double-click the current connection target Connection1 in the connection target as shown below:

Connection Destination
1 🗅 🛆 🖗 🖻
Current Connection
Connection1
All Connections
Connection1
Project
Project User Library

2. In the dialog box that is displayed, click the Ethernet Board option on the computer side I/F, and select Yes in the pop-up dialog box. Operate as shown below:



3. On the programmable controller side I/F, double-click the PLC Module option to bring up the following dialog box:

GJWrite MAIN 1 St	tep 🔨			
Transfer Setup Co	onnection1			
PC side I/F	lin-	PLC side I/F Detailed Setting of PLC Module		L X
	Serial	PLC Mode FXCPU +		ОК
	<u>USB</u>	C Ethernet Port Direct Connection	Connection via <u>HUB</u>	
				Cancel
PLC side I/F	Ê			
	PLC			
	Module			
-				
	IP Address / H		2	
Other		* Please select "Connection via HUB" when you use HUB even if the equipments to be communicated is one.	IP Address 0 0	
Station		The load hangs to the line when "Ethemet Port Direct Connection" is selected with other equipment connected with	IP Input <u>F</u> ormat	DEC. V
	No Specification	HUB and it communicates and there is thing that influences the communication of other equipment.	C Host Name	<u> </u>
	<u></u>	IP address CPU Type Label	Commen	t 🔺
	Time Out (Se			
Network				
Route	CC IE Cont			
	NET/10(H)			_
				•
Co-existence				
Network Route		<u>R</u> esponse Wait Time 3 sec. □ ⊻iew	Only PLC Type of Project	Selection IP Address Input
No.	CC IE Cont NET/10(H)	Search for FXCPU on Network		
	Accessing H	Search for FXCPU on the same network. Unable to search to	for the following reasons:	
		- Connected via a router or subnet mask is different "Do not respond to search for CPU on network" is checke	ed in PI C parameter	
<b>-</b>	- Multiple CPU			
System				
	1 2 3	3 4 1		
I				

 $4\,{\scriptstyle \smallsetminus}\,$  In the CPU module detailed settings dialog box, set them in the order .

PLC side I/F Detailed Set	ting of PLC Module					X
PLC Mode FXCPU	v				5	ОК
C Ethernet Port <u>D</u> irec	t Connection	1	Connection via <u>H</u>	<u>I</u> UB		Cancel
		1	(6			
6	=					
	<u> </u>					
4	<b>7</b>			2		
* Please select "Connection	on via HUB" when you	use HUB				
even if the equipments to The load hangs to the line	be communicated is on when "Ethernet Port [	ie. Direct	IP Address		0 0	
Connection" is selected w HUB and it communicates	ith other equipment co and there is thing that	nnected with influences	E	IP Input Format	DEC. 💌	
the communication of othe	er equipment.		C Host Name			
IP address	CPU Type	Label		Commen	t	<u> </u>
1 192, 168, 1, 250	FX3G/FX3GC					
3						
-						
				Î		
						•
2 Response Wait Time	3	- Marin	Only PLC Type of Preis	. 4	Selection IP	
Desource wait time	o set:	1 view	Only FLC Type of Floje	CI.		
Search for FXCF	PU on Network		5 al 6 ll -			
- No response within a s	pecific time period.	e to search	for the following reason	S:		
- Connected via a router - "Do not respond to sea	r or subnet mask is diffe arch for CPU on netwo	erent. rk'' is checke	ed in PLC parameter.			

 $5_{\times}$  Click the [Communication Test] button and will prompt the successful connection.



6. Then the PLC can be read and written, and the PLC also can be monitored.

Onl	ine	De <u>b</u> ug	<u>D</u> iagnostics	Tool	Window		
20	Rea	ad from Pl	LC	8			
-	<u>W</u> ri	ite to PLC					
	Verify with PLC						
	Rer	note Ope	ration( <u>S</u> )				
	Rec	du <u>n</u> dant C	)peration				
	Pas	sword/ <u>K</u> e	ryword		Þ		
	Sof	t Securit <u>y</u>	Key Managem	ent			
	PLC	Memory	Operation		•		
	Del	ete PLC D	ata				
	PLC	C <mark>Us<u>e</u>r Dat</mark>	a		•		
	Exp	oort to RO	M <u>F</u> ormat				
	Pro	igram Me	mory <u>B</u> atch Do	wnload			
	Lat	ch Data B	ackup		•		
	PLC	Module	Change		•		
	Set	<u>C</u> lock					
	Reg	gister/Can	cel Display Mo	dule M	enu		
	Mo	nitor			•		
	Wa	<u>t</u> ch			•		
	Loc	al Device	Batch Read +S	Save CS	/		

面试	BRDPWInst-v1.6.2	2019-05-14 9:47	Windows Install	640 KB
RECOVERY (E:)	[1] 深圳市顾美科技有限公司图书名单	2019-03-30 17:09	XLSX 工作表	38 KB
本地磁盘 (G:)	🗮 CentOS-7-x86_64-Minimal-1708	2018-01-29 13:01	好压 ISO 压缩文件	811,008 KB
软件 (H:)	<b>藤美</b>	2019-04-24 15:07	好压 RAR 压缩文件	295 KB
	💼 历史资料列表 (最新)	2019-01-07 17:15	好压 RAR 压缩文件	689 KB
	💼 2N modbus 写一个数据	2019-05-20 11:54	好压 ZIP 压缩文件	12 KB
娱乐 (J:)	11曾工家程序	2019-05-15 15:03	好压 ZIP 压缩文件	2,635 KB
Public (\\192.1(	RDDW/rap-v1.6.2.(1)	2010-05-10 18-13	好臣 710 臣嫁文件	1.562 KB
cmt (\\192.168.	💼 sw1dnc-gxw2-e_531d	2019-05-21 15:36	好压 ZIP 压缩文件	658,737 KB
CMPublic (\\19	日日 初小主の別王	2019-04-22 14:43	对压 ZIP 压缩又I+	24 ND
PUDIIC (\\192.10	捡拾拖车集中控制方案	2019-03-29 15:31	好压 ZIP 压缩文件	1,127 KB
cmt (\\192,168.	💼 汽车报警系统	2019-03-25 15:03	好压 ZIP 压缩文件	2,302 KB
CMDublic 0\10	💼 实时曲线 (最新)	2019-04-24 16:16	好压 ZIP 压缩文件	382 KB
civirubile (((15	💼 一体机modbusTCP从站设置 (触摸屏设	2019-05-08 9:18	好压 ZIP 压缩文件	329 KB
、地磁盘 (G:)	📧 abcmk	2019-05-21 10:45	应用程序	101 KB
	📧 aebhm	2019-05-14 12:34	应用程序	101 KB
X1+ (n;)	TE seco	2010-05-21 10-25	<b>应田程</b> 度	101 KR

nnection Channel List			
hernet Board Communication PLC Module Cor	nection		System Image
C Read	Write to PLC	)	
PLC Module			
tle			
Edit Data Param			
Module Name/Data Name		Target Memory	Size
PLC Data	1/2	Program Memory/De	
- K- Program(Program File)	1/2	,	
MAIN	100/100%		16 Steps
PIC Parameter/Network Parame Global Device Comment COMMENT	Program (MAIN) Checking Devices		
	Parameter Write : Completed		
i 🗃 MAIN			
Necessary Setting( No Setting / Alm			
Program Size1	When processing ends, close this window automatically.	8,000 Steps	Refresh
ated Functions<<	Cancel	Exe	cute Close
	R		

7. It is also possible can monitor the PLC. As shown below:



Connection method: PLC directly connects to the computer through the network cable (the computer IP address can not be selected as automatic setting, manually set to 192.168.1.XXX, the gateway is 192.168.1.1)

The operation steps are the same as the operation steps of connecting the above PLC and the computer through the local area network.