## 32 Setting Up Environment

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## 32.1 Setting Up the Environment of 'Pro-Server EX'

This section describes how to set the environment of 'Pro-Server EX'.

• Effective range of "Pro-Server EX Environmental Setting" is Whole personal computer". The environment setting specified in the network project file "X" on the PC "A", for example, is reflected in the network project file "Y" created and edited on the PC "A" later.

1 Click [Pro-server EX Environmental Setting] from [Setup] on the start screen.

🂱 Pro-Studio EX 🛛 ?.npx					
File Edit Tool Programming Assist	Setting Help				
🧖 🔊 🔊	Pro-Serve EX Environmental Setting				
Start 🚧 💐 Nodę	Set Network				
	✓ Balloon Help				
Sample Wizard	Option Settings				
A new network will be constructed. Select a sample.					
📴 New Form	Recipe Wizard				

2 Specify each item on the "Pro-Server EX Environmental Setting" screen.

Pro-Server EX Environment Settings	X
Start Pro-Server EX when PC starts	
The Network Project to be automatically loaded when Pro-Ser	ver EX starts
Network Project File	Browse
1	
☑ Show Pro-Server EX icon on the task tray	
DDE Polling Cycle 1000 ms	
, <u>, , , , , , , , , , , , , , , , , , </u>	
ACTION Registration OK	Cancel

**NOTE** • Change of "Pro-Server EX Environmental Setting" becomes valid by restarting 'Pro-Server EX'.

Setting item	Setting content
Start Pro-Server EX when PC starts	Starts 'Pro-Server EX' at the same time as the PC starts.
The Network Project to be automatically loaded when Pro-Server EX starts	Loads automatically a network project file when 'Pro-Server EX' starts. Click the [Browse] button and select the network project file on the PC on the "Open File" screen. NOTE • This function is useful for system operation like 'Pro-Server EX' running. Specifying the network project file beforehand makes it unnecessary to start 'Pro-Studio EX' and load the file to 'Pro-Server EX'.

Setting item	Setting content	
Show Pro-Server EX icon on the task tray	<ul> <li>If unchecked, hides the 'Pro-Server EX' icon in the task tray.</li> <li>NOTE</li> <li>Please use this function when you wish to prevent the setting from being changed by third person without permission.</li> <li>To display the Pro-Server EX icon again, select the following buttons in this order: [Start] (on Windows), [Program], [Pro-face], [Pro-Server EX] and then [Pro-Server EX Environmental Setting].</li> </ul>	
DDE Polling Cycle	Enter the polling cycle at DDE access. The default value is 1000ms (1sec).	
ACTION Registration	Register ACTION created by a user to 'Pro-Server EX'. The "Open File" screen appears. Specify the file name of ACTION to be newly registered.	

## 32.2 Network Setup

This section describes the network setup of 'Pro-Server EX'.

The setting contents vary according to node type: GP Series (GP2000 Series, GLC Series and FGW), GP3000 Series, and Windows PC.

• "Network setup" is to be stored in the network project file. If you wish to switch between multiple network project files on one PC, network setup is required for every file.

1 Click [Network Setup] from [Setup] on the start screen.



2 Specify each item on the "Network Setting" screen.

💞 Network Settings	×		
Project ID 2006/04/03 17:35:11			
Control Port No. 8000 to 8019	GP-Node Settings		
Network Remote Password			
Password Password Settings			
Confirm			
OK	Cancel		

Setting item	Setting content
Project ID	Displays the date and time when the project was created.
Control Port No.	<ul> <li>Specify the port numbers for TCP and UDP.</li> <li>'Pro-Server EX' uses 10 ports beginning with the port number specified here.</li> <li><b>NOTE</b> <ul> <li>If you may find the overlapped port number on other application software, please change the setting.</li> <li>You also need to change the GP port number to be the same when changing the setting.</li> </ul> </li> </ul>
Network Remote Password	Set the password necessary for remote connecting.
GP Node Settings	The "GP Series Node Setting" screen appears when you make the network setting for GP Series node (GP2000 Series, GLC Series and FGW). Refer to " <b>■</b> "GP Node Setting" Screen" for more details.
Set GP3000 & Windows PC Node Settings	The "GP3000 Series Node & Windows PC Node Setting" screen appears when you make the network setting for GP3000 Series node/Windows PC node. Refer to "■"Set GP3000 Series Node & Windows PC Node" Screen" for more details.

"GP Node Setting" Screen

GP Series	NODE Settings			
	-Using 32 bit access with a 16	DIC DEVICE		
	C Low/High order is fixe	±		
	Automatic device dete	ction		
	Display Settings			
	Error Sound	• Enable O Dis	sable	
	Warning Indication	• Enable • Dis	sable	
	Character Timeout	5000	ms	
	Connection Timeout	20000	ms	
		2000		
	Device R/W Timeout	1.000	ms	
Data	Transfer/Action Timeout	20000		
Data	Transfer/Action filleouc	1	IIIS	
	Frame Timeout	10000	ms	
	Trano finoda			
	TCP/IP Timeout	2000	ms	
	OK	Cancel		Decet
	UK			Keset

Setting item		Setting content		
Using 32 bit access with a 16 bit device		Selects the access order of sequential two 16-bit devices that are regarded as a single 32- bit device.		
Display Settings	Error Sound	<ul> <li>Select whether the buzzer beeps or not when error occurs.</li> <li><b>NOTE</b></li> <li>GP3000 Series node and Windows PC node have auto-detecting function against error occurrence.</li> </ul>		
	Warning Indication	Select whether GP displays alarms or not.		
Character T	ïmeout	Reserved.		
Connection Timeout		While currently establishing connection, if there is no communication via the connection for the period of time specified here, the connection will be terminated. (You can establish only one connection for one consumer node, in TCP.)		
Device R/W Timeout		<ul> <li>If there is no response within the time specified here after 'Pro-Server' raised a read/write request, it will be regarded as timeout.</li> <li>Adjust the timeout period including the time required for the line speed and read/write process.</li> <li>NOTE</li> <li>When the network is quite busy or the delay is observed in the communication between GP and Device/PLC, timeout error may possibly occur even under the normal operation. In this case, set a longer time in [Device R/W Timeout]. If the set time is too long, however, it takes much time to detect the communication error (like packet lost) when it occurs.</li> </ul>		

Setting item	Setting content
Data Transfer/Action Timeout	<ul> <li>If there is no response within the time specified here after data transfer or ACTION is executed, it will be regarded as timeout.</li> <li>In the case of data transfer, however, this is effective only when you checked [Response Check] and [Use Distribution Timeout of Network Settings] in the [Detailed Settings] tab.</li> <li>NOTE</li> <li>Some of the ACTIONs use application software on the PC, like Excel, and need so much processing time as to cause timeout depending on your PC performance. In this case, please set a longer time in [Data Transfer/ACTION Timeout].</li> </ul>
Frame Timeout	When working on mass data, a provider node sends data dividing those into more than one packet, while a self node receives a packet sent in turn. If a self node cannot receive the next packet within the time specified here after receiving one packet, it will be regarded as timeout.
TCP/IP Timeout	In TCP communication, "ACK" will be returned to data sent. If "ACK" is not returned, it will be retried, however, if "ACK" is not returned even at retry time, it will be disconnected. Time specified here is maximum waiting time for one action from data sending till ACK return.

## ■ "Set GP3000 Series Node & Windows PC Node" Screen

By using [Timeout period for slow line between nodes], you can specify the setting of communication between particular nodes in details, when transmission speed of communication with a particular node differs from that with other nodes due to different pathway.

As for the communication with the node not specified in [Timeout period for slow line between nodes], [Default Setting] is adopted.

			TimeOut (ms)		Retry
			1000		2
		i			
the c	ase or slow i	ine			
Delet	e Time	-out period	l for slow line be	tween nodes	
No	NODE	NODE	1st time (ms)	2nd time or la	Retry (times)

Setting item		Setting content
Default Settings	Timeout	Enter a timeout period for communication (ms). You can specify the period in the range from min. 300ms to max. 86400000ms (24 hours). When receiving the requests for writing and reading simultaneously, each request will be processed in order. Adjust the timeout period using the following reference. For GP-3500/3600/3700 Series or Windows PC Nodes Timeout period = 300ms + Number of receiving requests simultaneously x 60ms or more For GP-3300/3400 Series Timeout period = 300ms + Number of receiving requests simultaneously x 120ms or more
	Retry	Specifies the number of retry frequency under communication. You can set the number up to 32. Retrying is not performed by entering "0".

Setting item		Setting content
Timeout period for slow line between nodes	Node	Select the node where the communication timeout period is specified, GP3000 Series node or Windows PC node. You can specify the communication timeout period for each pair of nodes. Click the display list and select the nodes to be specified.
	First Second or Later	<ul> <li>Specifies the first and the later timeout period under communication. Click the display field and enter the timeout period to be specified.</li> <li>NOTE</li> <li>When initial connection to the network takes some time like a dial-up connection, you can specify the timeout period for the first and later individually.</li> </ul>
	No. of Retry Times	Specifies the number of retry frequency under communication. Click the display field and enter the retry frequency to be specified.