# 3 Trial of Pro-Server EX

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# 3.1 Starting 'Pro-Studio EX'

Operating the data management system using 'Pro-Server EX' requires network setting of the Device/PLCs and functions to be used (Network project file creation).

'Pro-Studio EX' is used to create a network project file.

After having set up, start 'Pro-Studio EX'.

# 3.1.1 Start 'Pro-Studio EX'

- 1 Turn on the PC power to start Windows.
- 2 Click the [Start] button on the task bar. Point "All Programs" or "Programs" --- "Pro-face" --- and "Pro-Server EX", and then click "Pro-Studio EX".

÷	Set Program Access and Defaults									
*	Windows Update									
	Programs	•	Ē.	Pro-face	Þ	Ē.	Pro-Server EX 🔸	Ē	Manual (Help)	•
		_	(	Startup	•		×	LOG	2Way Log Viewer	
	Documents	۲	e	Internet Explorer				<u>.</u>	Device Access Log	
5	Cattioner		<u></u>	Outlook Express		L		<u>,</u>	Device Monitor	
\$\$	Settings	1		×		L		١	Environment Setup	
	Search	×						<b>(</b> 2)	Exit Pro-Server EX	
~								١	Pro-Server EX	
<b>Ø</b>	Help								Pro-Studio EX	
7	Run							U.	Status Monitor	-
<u> </u>	- Commission of the Commission	_						2	Symbol Monitor	
	Shut Down							3	Uninstall	

'Pro-Studio EX' will start and the opening screen will appear.

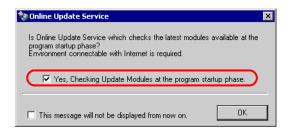
**NOTE** • When you have a shortcut on the Desktop, you can also double-click the shortcut icon to start it.





At the same time, the "Online Update Service" screen will appear.

When you receive the online update service, check "Yes, Checking Update Module at the program startup phase" and click [OK].



After a while, the start screen will appear with the "Open Network Project File" screen.

File Edit Tool       Programming Assit Setting Help         Image: Start       Image: Symbol       Image: Feature       Image: Start       Image: Symbol       Image: Symb	💸 Pro-Studio EX 🛛 ?.npx		_ D ×
Stat       Node       Symbol       Peature       Save       Innete       Statue         Sample Wizard       A new network will be constructed Select a sample.       Innete       Innet       Innet <td< th=""><th>File Edit Tool Programming Assist</th><th>Setting Help</th><th></th></td<>	File Edit Tool Programming Assist	Setting Help	
A new network will be constructed Select a sample. New Form Recipe Data Logging Send Mail Program Design Device-to-Device Lomminication Device-to-Device Construct VB/VC Application Debug Tool Construct VB/VC Application Debug Tool	Start 🔉 🔪 Node	🍑 🕨 🏹 Feature 💙 📄 Save	
New       Dus FA units (connection units)         Send Mail       Open File         Program Design       atabase of Access, etc. to the         Device-to-Device       file         Construct VB AVC Application       s of network such as the         Debug Tool       network project file is transferred to at the connection units Data         communication is executed between the PC and the connection units based on the setting of the Pro-Studie EX to activate the application software of the PC. In the 2-way network, the network project file is transferred to a UCP connect at the came stimum of the PC and the PC in operate at th	A new network will be constructed. Select a sample.	Open Network Project File	
Program Design       Open File         Device-to-Device Communication       a of network such as the he units and the PC connected in which these settings are         Montor Device Status       a of network such as the he units and the PC connected in which these settings are         Debua Tool       communication is executed between the PC and the connection units. Data         communication is executed between the PC and the connection units based on the setting of the Pro-Studio EX to activate the application software of the PC. In the 2-way network, the network project file is transferred to al GPC connected to the network from the Pro-Studio EX and the PC to operate at the sense setting	Data Logging	New	ous FA units (connection units)
Device-to-Device Communication       Recent File       Image: Solution of the PC of the product of the PC o		Open File	
Device-to-Device Communication         Recent File         In e units and the PC connected in which these settings are           Montor Device Status         Image: Construct VB AVC Application         Image: Construct VB AVC Application         Image: Construct VB AVC Application           Debug Tool         Image: Construct VB AVC Application         Image: Construct VB AVC Application         Image: Construct VB AVC Application           Debug Tool         Image: Construct VB AVC Application         Image: Construct VB AVC Application         Image: Construct VB AVC Application           Debug Tool         Image: Construct VB AVC Application         Image: Construct VB AVC Application         Image: Construct VB AVC Application	Program Design		
Debug Tool         Image: Specific and the pro-studie between the PC and the connection units. Data communication is executed between the PC and the connection units based on the setting of the Pro-Studie EX to activate the application software of the PC. In the 2-way network, the network project file is transferred to all GPs connected to the network from the Pro-Studie TX and the PC is operate at the came setting	Device-to-Device Communication	Recent File	he units and the PC connected
Debug Tool  communication is executed between the PC and the connection units based on the setting of the Pro-Studio EX to activate the application software of the PC. In the 2-way network, the network project file is transferred to all GPs connected to the network from the Pro-Studio EX and the PC to operate at the same setting			
the Pro. Studio FX, allowing the GPs and the PC to operate at the same setting	Debug Tool	communication is executed between the PC and the c setting of the Pro-Studio EX to activate the applicatio	onnection units based on the on software of the PC. In the 2-way
	Reference Manual		

Then proceed to manipulate on the "Open Network Project File" screen.

How to close 'Pro-Studio EX' On the start screen, click "Files" on the menu bar, and select "Exit" from the pull-down menu.	
On the start screen, click "Files" on the menu bar, and select "Exit" from the pull-down menu.	
Studio EX ?.npx	
File Edit Tool Programming Assist Setting	
New Jode >> 1	
Save Save As Input History at Save Time Print Export Nodes and Symbols Exit Send Mail	

Startup of 'Pro-Server EX' (Normal Mode)

While operating 'Pro-Studio EX', if communication is required between the PC and the diplay unit, the following message to request startup of 'Pro-Server EX' will appear. In this case, click the [Yes] button and start 'Pro-Server EX'.

Find Node	×
?	Pro-Server EX will start to communicate with another node. Is that OK?
	Yes No

After 'Pro-Server EX' has started, the Pro-Server EX icon will appear in the task tray. 'Pro-Server EX' is always active (resident) unless you close it.



To close 'Pro-Server EX' (resident cancellation), right-click the icon in the task tray and select 'Close Pro-Server EX' from the menu.

Load Network Project Start Pro-Studio EX	
Tools	•
ACTION	•
Pro-Server EX Environment Settings Network Setting	
About	
Exit Pro-Server EX	
-U	19

# • You can also start 'Pro-Server EX' as Windows service. Refer to "30 Starting 'Pro-Server EX' in the Service Mode" for more details.

• When you set the starting method of 'Pro-Server EX' to "Service Mode", it is different to how to close 'Pro-Server EX'. Refer to " 30.1.2 Starting and Closing 'Pro-Server EX' in the "Service Mode"".

# 3.1.2 Selecting Network Project File

After the program has started, the "Open Network Project File" screen will appear in front of the start screen.

Open Network Project File	×
New	
Open File	
Recent File	

On this screen, choose whether to create a new network project file or use an existing network project file.

# Creating New File

When you use 'Pro-Server EX' for the first time or you want to create a new network project file, click the [New] button.

# Using Existing File

When you want to use an existing network project file, click the [Open File], and select the file to use in the "Open Files" dialogue.

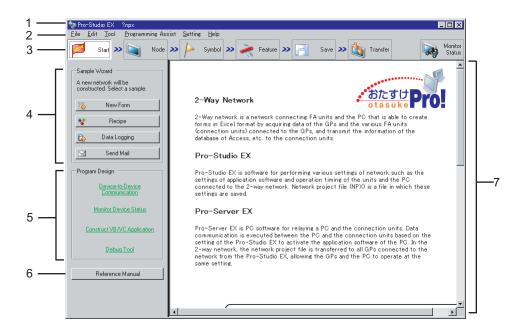
If you find the file name of the network project file you want to start on the list of "Recent File", click the file name on the list.

(Follow the same procedures above when you want to edit an existing network project file.)

The network project file you selected through the operations above will open, and the "Opening Network Project File" screen will close.

# 3.1.3 Start Screen of 'Pro-Studio EX'

The following explains about the start screen.



#### (1) Title bar

Displays the currently open network project file's name.

The file name of a new document is denoted as '? .npx'.

#### (2) Menu bar

Displays the menu to be used to operate 'Pro-Studio EX'. Clicking this bar displays the pull-down menu.

#### (3) Status bar

Displays necessary setting items for creating a network project file in a form of icon. Clicking the icon displays the corresponding setting screen.



Clicking this icon displays the start screen. At an initial startup, the start screen will appear without clicking this icon.



Clicking this icon displays the entry nodes setting screen. You can register or delete entry nodes on this screen.



Clicking this icon displays the symbol setting screen. You can register, delete or group symbols on this screen.



Clicking this icon displays the feature setting screen. You can register or set an ACTION item and content of data transfer, as well as register cache on this screen.



Clicking this icon displays the save setting screen. You can save the network project file you set on this screen.



The Transfer Settings screen appears. Use this setting to transfer to network nodes set up in the network project file.



Clicking this icon displays the monitoring setting screen. You can monitor the current status of the PC and the Device/PLCs on this screen.

### (4) [Sample Wizard]

'Pro-Server EX' has built-in "Sample Wizard" that allows you to learn how to set frequently used ACTION items such as form creation and recipe.

Clicking each item button activates the 'Sample Wizard' corresponding to the clicked item, and the "Sample Wizard" screen will appear.

Pointing each item button with mouse cursor will display a guide to the wizard of the pointed item in the task area (7).

# (5) [Program Design]

Displays a guide to setting items and operation procedures of useful features in programming. Pointing each item button with mouse cursor will display a guide to the pointed item in the task area (7). Clicking each item button displays a detailed guide to the clicked item.

### (6) [Reference Manual]

Displays the 'Pro-Server EX Reference Manual' (this manual).

#### (7) Task Area

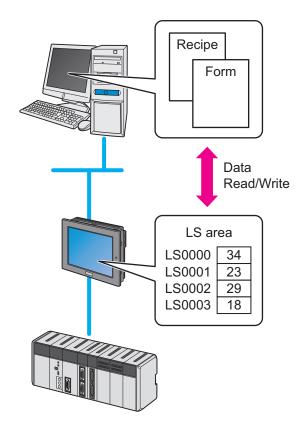
Displays the guide to each item pointed by mouse cursor. On the setting screen, this area is used as a setting area.

# 3.1.4 Before Learning

Device data to use in "Sample Wizard"

While the "Sample Wizard" can use device data of Device/PLCs, this chapter explains the process of accessing internal devices (LS Area) on the display unit to read and write data.

Before learning with the "Sample Wizard", ensure that the PC in which 'Pro-Server EX' is installed is connected to the display unit as shown below.



NOTE

You can use each menu to edit the contents set in the "Sample Wizard" after the wizard ends.

- Node ---- "Node" Menu
- Symbol ---- "Symbol" Menu
- Trigger Condition, Feature (ACTION) --- "Feature" Menu

# 3.2 Trial of New Form

# 3.2.1 What is a New Form Function?

Pro-Server EX allows creating various forms including a management chart and a report according to the purpose by writing production data and measurement data read from the Device/PLCs into the pre-created form template in 'Excel'.

'Pro-Studio EX' is provided with approximately 30 kinds of form formats as "Form Templates". These formats allow you to easily create various forms. The following shows one of those forms.

# Production Management Chart (Tabular form)

Production Management Board (per Day)									
Time	Cumulative Planned Num.	Cumulative Result Num.	Result Num./H	Difference/H	Problems				
Early Morning									
9	100								
10	200								
11	300								
12	400								
13	500								
14	600								
15	700								
16	800								
17	900								
Overtime									

You can edit the format of "Form Templates" as you desire using 'Excel'. You can also create a new template and add it to the existing templates.

For more details, see "5 Creating a Form Using Excel".

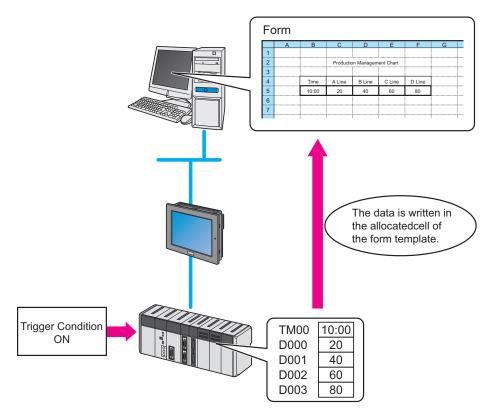
# Flow of Form Creation

(1) Decide which device address data in the Device/PLC should be written in each cell of the form template in 'Excel'. Allocate each cell for the data beforehand.

	А	В	С	D	E	F	G
1							
2							
3							
4		Time	A Line	B Line	C Line	D Line	
5							
6							
7							
8			Data for				
9			address "D000"				
10							

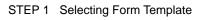
(2) Using 'Pro-Studio EX', execute action setting of the form creation function, including setting data of the device address to output and requirements for outputting forms.

(3) At a specific timing or at a specific interval, the data of each device address of the Device/PLC is written in the allocated cell of the form template.



# 3.2.2 Workflow from Settings to Form Creation

The following explains about the operation flow from setting to creating a sample form using the "Form Creation" wizard.



This step selects a form format to create from the form templates.

Creation of Network Project File (Operation of "Sample Wizard")

#### STEP 2 Registering Entry Nodes

This step selects a form format to create from the form templates.

STEP 3 Registering Symbols

This step registers device addresses of the display units as symbols.

STEP 4 Setting Trigger Condition

This step sets conditions for executing form output (trigger condition).

STEP 5 Setting Feature (ACTION)

This step sets an ACTION item and the output destination and file name of a form to create.

STEP 6 Verifying Setting Result and Form Template

This step verifies the setting result on the "Sample Wizard Setting Result" screen and templates.

STEP 7 Saving Network Project File

This step saves the current settings as a network project file and reloads.

STEP 8 Transferring Network Project File

This step transfers the saved network project file to the display unit.

STEP 9 Writing Device Data

This step writes the data to the output file after the trigger condition set in STEP4 has become effective.

# 3.2.3 For 'Microsoft Excel 2007' and 'Microsoft Excel 2010' Users

When using 'Microsoft Excel 2007' or 'Microsoft Excel 2010', refer to the following notes.

# Notes on Excel's Version Compatibility

In the "Form Creation" wizard, a template file is created with the extension (xls or xlt) for 'Microsoft Excel 2003' or older.

To use a function supported only by 'Microsoft Excel 2007' or 'Microsoft Excel 2010' while editing the template file created in the "Form Creation" wizard, you need to save the template file as xlsx (xlsm) or xltx (xltm). Save the template file again using the following steps as you cannot specify the file extension in the Form Creation Action.

- 1 Close the Excel Form Creation Action.
- **2** Check the template file with the following two points.
  - Whether it includes the macro program or not
  - File format (Book or Template)
- **3** Open the template file in 'Microsoft Excel 2007' or 'Microsoft Excel 2010' and save it again using the extensions in the table below.

Те	mplate File	Extensions used for saving			
Macro	File Format	With Excel 2007/2010 functions	Without Excel 2007/2010 functions		
Not included	Book Format	Extension for the template: xlsx	Extension for the template: xls		
Included		Extension for the output book: xlsx	Extension for the output book: xls		
	Template Format	Extension for the template: xltx	Extension for the template: xlt		
		Extension for the output book: xlsx	Extension for the output book: xls		
Included	Book Format	Extension for the template: xlsm	Extension for the template: xls		
		Extension for the output book: xlsm	Extension for the output book: xls		
Template Format		Extension for the template: xltm	Extension for the template: xlt		
		Extension for the output book: xlsm	Extension for the output book: xls		

4 Again, specify the file which has been saved again in step 3 as the template file in the Excel Form Action editing.

- **5** Set the extension for the output file according to the extension types above.
- **6** Edit the template file and save the Action.

• Use the compatibility check function to check that the form created using a function only supported by 'Microsoft Excel 2007' or 'Microsoft Excel 2010' can be opened in 'Microsoft Excel 2003' or earlier.

Refer to "5.8 Compatibility between 'Microsoft Excel 2007' or 'Microsoft Excel 2010' and 'Microsoft Excel 2003' or earlier" for more details.

# Notes on File Format

When using the following sample wizards including the functions specific to 'Microsoft Excel 2007' or 'Microsoft Excel 2010', you need to specify "xlsm" (book file format with macro enabled) as the extension for the output book.

- Setup Work Planning and Result Management Board
- Setup Work Transition Graph
- Monthly Equipment Short-Time Stop Transition Graph (daily/weekly/monthly/yearly)
- First Run Rate Transition Graph (daily/weekly/monthly/yearly)
- Reduction of Man-hour Transition Graph
- Production Process Stock Days Transition Graph
- Reduction of Production Cost Transition Graph

# Caution Regarding Incorrect Display of Excel Forms

When using 'Microsoft Excel 2010', there have been instances when the display of Excel forms is incorrect.

- When the sample wizard display is incorrect, from Excel's [Options], in the [Advanced] settings, select the [Cut, copy, and sort inserted objects with their parent cells] check box.
- When the date and time do not display in the correct format, install Office 2010 Service Pack 1.

# 3.2.4 Creating a Form

This section helps you to learn necessary settings efficiently for creating a form by simply following the instructions of the "Form Creation" wizard of the "Sample Wizard" to actually create a sample form.

Example of Sample Form Created with this Wizard

	A B C	D	E	F	G	Н	
1	Excel01	Production	n Manager	nent Boar	rd (per Day	()	
2						<i>.</i>	•
3	Time	Cumulative Planned Num.	Cumulative Result Num.	Result Num./H	Difference/H	Problems	
4	arly Mornin						
5	9	100					
6	10	200					
7	11	300					
8	12	400					
9	13	500					
10	14	600					
11	15	700					
12	16	800					
13	17	900					
14	Overtime						
15 16							
17	Time to set	t Result Num.					
	Readout Curnul	lative Result Num		Execute			
19							
20 21	Debug(Cumula	ative Result Num)					
22							
23 24	Debug(1	l'ime to set)					
25	1			•			

• Form creation needs 'Excel' preinstalled on the PC. Before getting started, ensure that 'Excel' is installed on the PC.

# STEP 1 Selecting Form Template

This step selects a form template to create.

1 On the start screen, click the [New Form] button in the [Sample Wizard].

🎨 P	ro-St	udio E	X 3	npx ?				
File	Edit	Tool	Pro	ogrammii	ng Ass	ist	Setti	ing
		Start	<b>&gt;&gt;</b>		No	ode	<b>&gt;&gt;</b>	1
A	new n	Wizaro ietwork sted. S	: will l	be a sampl	е.			
	è	Ne	ew Fo	orm		)		
	0 9	F	?ecip	e				
	<u>}</u>	Data	a Log	Iging				
	2	Se	end M	lail				

• Pointing each item button in the "Sample Wizard" with mouse cursor will display an explanation to the wizard of the pointed item in the task area.

2 The "New Form" wizard starts. The form template selection screen will appear. Scroll the screen by moving the scroll bar and select the form format you want to output.

In this example, select the "Production Management Per Day".

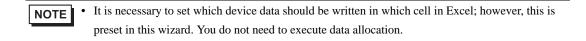
New Form
Sample: New Form
To actualize this sample, Node, Symbol, Action, and Trigger Condition must be set in the network project. This wizard automatically generates them.
Select a form you want to create.
Production Management Board (per Day)
Management table to organize the planned num. and result num.
O Production Management Board (per Month)
Management table to organize the planned num. and result num. of production per month.
Caution To use this feature, Microsoft Excel is required.
Next Cancel

<b>NOTE</b> • Clicking the form thumb nail display will enlarge the format on the monitor.	
--	--

Click the [Next] button.

i e ale		
C Production Manage	ment Board (per Month)	
St.         registration games         const.         const.         const.	Management table to organize the planned num. and result num. of production per month.	•
Caution To use this feat	ture, Microsoft Excel is required.     Next   Cancel	

This is the end of selecting a form template. The entry nodes setting screen will appear.



Proceed to "STEP 2 Registering Entry Nodes".

# STEP 2 Registering Entry Nodes

This step registers the PC and the display units as entry nodes in 'Pro-Studio EX' to allow the PC to read the data.

#### What is Entry Node?

In order to read and write the data of the Device/PLCs using 'Pro-Server EX', the information of the PC and the display units connected via network must be registered in the network beforehand. The PC and the display units registered are referred to as an "Entry node".

Pro-Server EX Node

Register the PC to be used for execution of various features of 'Pro-Server EX'.

SP-5B40/WinGP Node

Register the SP5000 Series Open Box (SP-5B40), WinGP, and Device/PLCs you want to read from and write to. You can register up to four protocols for each node. Depending on the protocol, you can register up to 64 connections for a single protocol.

• SP-5B10 Node

Register the SP5000 Series Power Box (SP-5B10), and Device/PLCs you want to read from and write to. You can register up to four protocols for each node. Depending on the protocol, you can register up to 64 connections for a single protocol.

GP4000/LT4000 Series Node

Register the GP4000 series, LT4000 series, and Device/PLCs you want to read from and write to. You can register up to four protocols for each node. Depending on the protocol, you can register up to 64 connections for a single protocol.

#### • GP3000 Series Node

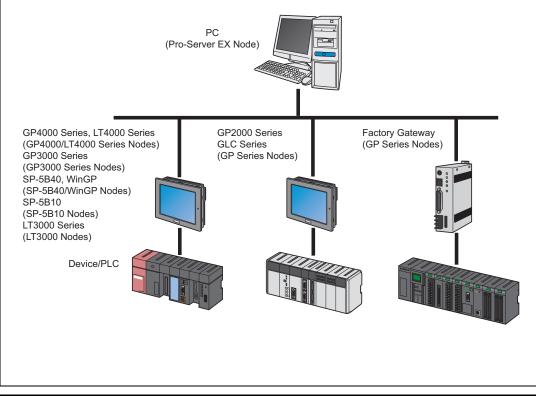
Register the GP3000 series and Device/PLCs you want to read from and write to. You can register up to four protocols for each node. Depending on the protocol, you can register up to 64 connections for a single protocol.

#### • LT3000 Node

Register the LT3000 series and Device/PLCs you want to read from and write to. You can register up to one protocols for each node. Depending on the protocol, you can register up to 32 connections for a single protocol.

• GP Series Node

Register the GP2000 series, GLC series, Factory Gateway, and Device/PLCs you want to read from and write to. You can register up to one protocols for each node.



1 Register the PC currently used (PC for creating a form) as an "Action Node".

In this wizard, select [Yes].

<ul> <li>To create a form, a PC on the network has to be specified for creation and registered as a participation node.</li> </ul>				
Do you want to create with this PC?				
Node Name PC1				
© No will be created with				
-A form is composed of two or more device values, and the node having the devices (Data Source Node) has to also be registered on the network as a participation node.				
As a Data Source Node				
⊙ A new NODE is registered. (Device/PLC is set to Memory Link.)				
Node Name Sample_Node IP Address 172, 21, 1, 102				
C A new NODE is registered. (Device/PLC is specified.)				

The PC currently used is set as an "Action Node", named as "PC1".

2 Register the display unit being connected as a "Data Source Node".Select the [A new NODE is registered. (Device/PLC is set to Memory Link)], and enter the IP address of the

Select the [A new NODE is registered. (Device/PLC is set to Memory Link)], and enter the IP address of the display unit.

-To create a form, a PC on the network has to be specified for creation and registered as a participation node.				
Do you want to create with this PC?				
No     will be created     with				
-A form is composed of two or more device values, and the node having the devices (Data Source Node) has to also be registered on the network as a participation node. As a Data Source Node				
• A new NODE is registered. (Device/PLC is set to Memory Link.)				
Node Name Sample_Node IP Address 192, 168, 0, 100				
○ A new NODE is registered. (Device/PLC is specified.)				

**NOTE** • For how to check IP address set in the display unit, see "2.4 Set the network of display unit".

• If you select a Device/PLC other than Memory Link, select [A new NODE is registered. (Device/ PLC is specified.)].

The "Data Source Node" is set to the address above.

### **3** Click the [Next] button.

A new NODE is registere Node Name Sample_N	d. (Device/PLC is set to Memory Link.)	
C A new NODE is registere	d. (Device/PLC is specified.)	•
🚱 Find Node	Back Next	Cancel

This is the end of registering entry nodes necessary for creating a form.

Proceed to "STEP 3 Registering Symbols".

### STEP 3 Registering Symbols

This step registers a device address including data necessary for creating a form as a "Symbol".

In this wizard, the display unit's internal device are registered as symbols.

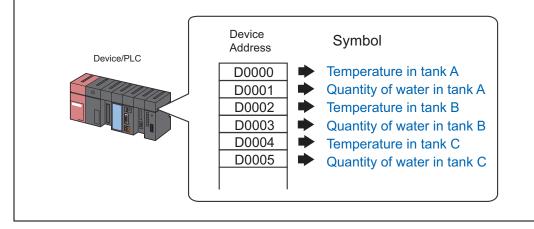
#### What is Symbol?

In controllers such as PLCs, an area to store data is referred to as a "Device address". Each company adopts its original code such as "D0001" and "DM001" to the device address.

'Pro-Studio EX' controls these addresses by naming the address (referred to as a "Symbol").

By registering the address as a symbol, you can access to the device by the symbol name.

The symbol could be a name such as "Valve A" and "Tank A\_Temperature", which will ease access to the device in a more understandable way.



1 Check the [The symbols will be registered as data-source-node symbols.] check box, and then enlarge or scroll the screen to confirm the preset symbol.

New Form			
Sample: New Form Production Management Board (per Day)			
>> 🟹 Node >> ≽ Symbol >> ≷ Feature >>			
Edit symbol details in the Symbol Screen			
after the sample wizard ends.			
•To create a form, two or more data source devices have to be specified. In the form of the selected sample, the devices have already been specified by their symbol names.			
Supplement: In the initial condition, the address or a registered symbol is set to the internal device of the data source node. In the sample, the internal device is assigned as a tentative setting.			
Back Next Cancel			

Symbol Name	Data Type	Address	
Excel01_Cumu	16Bit(Signed)	3001	
Excel01_Write	16Bit(Signed)	3002	
S Excel01 Uploa	Bit	300000	

**NOTE** • If you select a Device/PLC other than memory link, a temporary address is set.Click on the calculator icon and change it to the actual address.

Symbol Name	Data Type	Address	
S_Excel01_Cumu	16Bit(Signed)	D00000 I	
S_Excel01_Write	16Bit(Signed)	D00001 🗷	
S_Excel01_Uploa	Bit	×00000 I	
		$\Box$	

2 Click the [Next] button.

	Symbol Name	Data Type	Address	
	S_Excel01_Cumu	16Bit(Signed)	3001	
	S_Excel01_Write	16Bit(Signed)	3002	
	S_Excel01_Uploa	Bit	300000	
_		_	. (	
			Back	Next Cancel

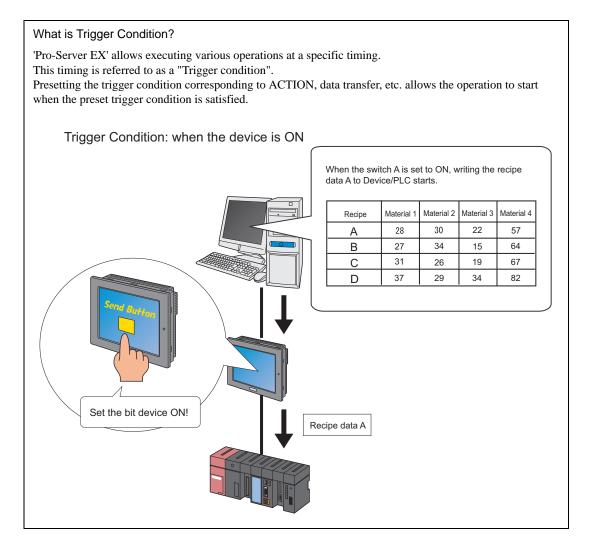
This is the end of registering symbols necessary for creating a form. The trigger condition setting screen will appear.

Proceed to "STEP 4 Setting Trigger Condition".

# STEP 4 Setting Trigger Condition

This step sets conditions for executing form output (trigger condition).

In this wizard, the trigger condition of detecting a rise of "Upload Start\_BIT" is preset.



1 Confirm the content of the trigger condition in the [Set Trigger Condition].

-In Pro-Server EX, various actions caused by arbitrary "Trigger Conditions" are available. Pro-Server EX manages the "Trigger Conditions" separately giving each of them an arbitrary name.			
Trigger Condition Name Set Trigger Condition	T_Excel01 When the Start Upload Bit turns ON, device data is inserted		
	×		

2 Click the [Next] button.

	actions caused by arbitrary "Trigger Conditions" are available. e "Trigger Conditions" separately giving each of them an
Trigger Condition Name	T_Excel01
Set Trigger Condition	When the Start Upload Bit turns DN, device data is inserted
	Back Cancel

This is the end of setting a trigger condition necessary for creating a form. The ACTION setting screen will appear.

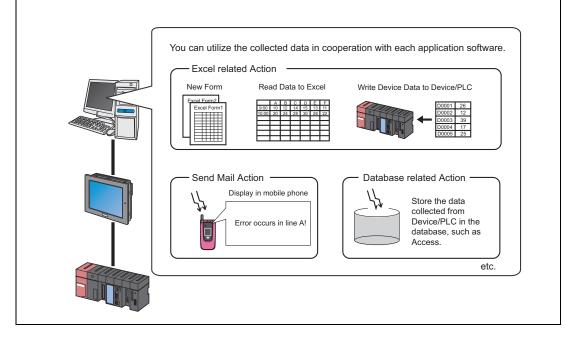
Proceed to "STEP 5 Setting Feature (ACTION)".

# STEP 5 Setting Feature (ACTION)

This step sets functions (ACTION) to use. This step sets an ACTION item and the output destination folder and file name of a form to create.

#### What is ACTION?

In addition to the access to the devices, 'Pro-Server EX' allows advanced processing using application software, for example creating a form using 'Excel' and creating a database using 'Access'. In the 'Pro-Server EX', the advanced processing in the PC using application software is referred to as "ACTION".



1 Enter the output destination (folder) of the file of a form to create in the [Form Destination Folder] field. Click the [Browse] button. On the "Refer to Folder" screen, specify the output destination folder.

-Pro-Server EX can execute any pre-registered ACTION.
This Sample Form is also executed as one of such ACTIONS
An ACTION requires an ACTION name. Specify an ACTION name.
ACTION Name Action1
Form Destination Folder Browse
Form Output File Name XYXMXD%h%m%s.xls

- The ACTION name can be an arbitrary name. However, in this wizard the name is preset. Changing this name in this trial may cause discrepancies. Accept the default provided by this wizard.
- \* You can type the folder name. In this case, begin the name with a drive name of the PC, e.g. "C:\My Documents".
- 2 Enter the output file name in the [Form Output File Name] field.

In this trial, enter "Production Management".

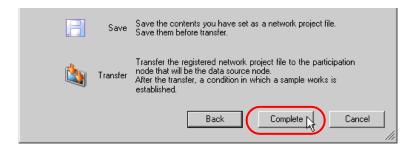
-	Pro-Server EX can execute any pre-registered ACTION.
	This Sample Form is also executed as one of such ACTIONS
	An ACTION requires an ACTION name. Specify an ACTION name.
	ACTION Name Action1
	Form Destination Folder C:\Documents and Settings\Administrator\Desktop Browse
	Form Dutput File Name ProductionManagement

**3** Click the [Next] button.

An ACTION requires an ACTION name. Specify an ACTION name.
ACTION Name Action1
Form Destination Folder C:\Documents and Settings\Administrator\Desktop Browse
Form Output File Name ProductionManagement
Back Cancel

This is the end of setting an ACTION item necessary for creating a form. The screen that explains the procedures to follow (saving and transferring network project file) will appear. You can read the explanations how to save and transfer the network project file on the screen.

4 Click the [Complete] button.



This completes the "Sample Wizard".

Then the save setting screen will appear.

Pro-Studio EX ?.npx		_ 🗆 >
	Setting Help	
对 Start ≫ 🟹 Node		Monito Statu
<u> </u>	Basic Info History Info	
Save		
Save/Reload	Network Project file Path	Browse
Create BAK File	Title	
	Related Document (Registered in the following area by dropping the file. Started by clic	king the file )
Input Password at Save Time	Relation-Info File Name Folder	,

At this time, the "Sample Wizard Setting Result" screen and the form template file (ProduceManagementPerDay.xlt) in Excel format are also created.

NOTE	•	The "Sample Wizard Setting Result" screen is of an HTML file. Starting this screen needs
·		'Microsoft Internet Explorer' preinstalled on the PC.

Proceed to "STEP 6 Verifying Setting Result and Form Template".

#### STEP 6 Verifying Setting Result and Form Template

This step opens the "Sample Wizard Setting Result" screen to verify the setting result.

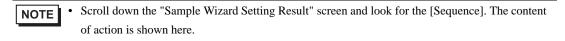
1 Click the "Sample Wizard" in the task bar of the PC.



The "Sample Wizard Setting Result" screen will appear.

Sample Wizard: - Microsoft Intern ile Edit View Favorites Tools	et Explorer Help									
🕞 Back 🖌 🍙 🖌 💌 😰 🔥	🔎 Search 🤺 Favorites 🧔	) 🗟 • 🌭 🖻 • 🗖								
ddress 🖉 E:\Documents and Settings\C	× × × × ×			▼ 🔁 Go Links						
Sample Wizard Setting Result										
Production Manager	nent Board (per Day	y)								
Creation Date and Time:Tuesday	November 13, 2007 6:24:47	PM								
Node	,									
	hr ( )r	hr ( m								
Operation Node	Node Name	Node Type	EV	IP Address						
Dperation Node Frigger Node	Sample Node	PC1         Pro-Server EX         172.21.3.3           Sample Node         GP3000 Series         172.21.3.3								
Symbol Symbol Name	Node Name	Data Type	Device Address	Comment						
5 Excel01 Upload BIT	Sample Node	Bit	300000	Bit to order the start of Upload						
5_Excel01_CumulativeNumber_		16Bit(Signed)	3001	Device storing the Cumulative Result Number						
5_Excel01_WriteDestination_W	ORD Sample_Node	16Bit(Signed)	3002	Device storing the Time Data to set the Cumulative Result Number						
rigger Condition										
Condition Name	Condition									
[_Excel01	When the Start Upload I	Bit turns ON, device data i	s inserted into the cell.							
ACTION										
ACTION Name	Action1									

 $2\,$  Scroll the screen and verify that the settings have been correctly entered.



**3** After having verified, click the [x] (close) button to close the screen and click the [-] (minimize) button to minimize the screen.

```
• When created, the "Sample Wizard Setting Result" file will be automatically saved in the output destination folder set in procedure 1 of "STEP 5 Setting Feature (ACTION)". The file name is "(the ACTION name set in procedure 1 of STEP 5).html".
```

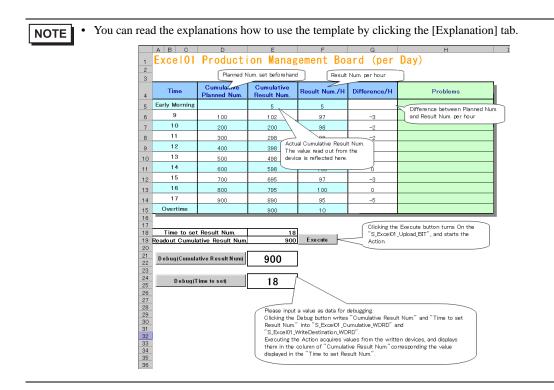
Proceed to opening the form template in 'Excel' to verify the setting result.

4 Open the form output destination folder set in procedure 1 of "STEP 5 Setting Feature (ACTION)" and doubleclick the Excel form template (ProductManagementPerDay.xlt).



Verify that the correct form template selected in "STEP 1 Selecting Form Template" is created.

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		- ProductManage									
	Ele Edit View Insert Format Iools Data Window Help										
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	A B C	( D	E	F	G	Н	I J K				
1	Excel01	Production	n Manager	nent Boa	rd (per Day	r)					
2						<i>.</i>					
3	Time	Cumulative Planned Num.	Cumulative Result Num.	Result Num./H	Difference/H	Problems					
4	arly Mornin										
5	9	100									
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8	12	400									
9	13	500									
10	14	600									
11	15	700									
12	16	800					_				
13	17	900					_				
14 15	Overtime						_				
16											
17		t Result Num.		-							
18 19	Readout Curnul	ative Result Num		Execute							
20		ative Result Num)									
21	Debug(Cumula	aqaa Hesnii (Num)									
22 23				1							
24	Debug(1	ime to set)									
25 26							-				
	( ) ) \Templ	ate / Explanation	/			<b> </b> • [					
Rea	ady						CAPS NUM				



Proceed to "STEP 7 Saving Network Project File".

### STEP 7 Saving Network Project File

This step saves the current settings as a network project file and reloads to 'Pro-Server EX'.

1 Enter a save destination folder and a save file name in the [Network Project file Path] field.

Click the [Browse] button to specify the save destination folder. On the "Save As" screen, enter the save file name in the [File Name] field, and then click the [Save] button.

Network Project       C:\Documents and Settings\Administrator\Desktop\productmanagement.npx       Browse         Title         Related Document (Registered in the following area by dropping the file. Started by clicking the file.)         Belation-Info       File Name	lasic Info History Inf	io			
Related Document (Registered in the following area by dropping the file. Started by clicking the file.)	Network Proje file Pa	ct [C:\Documents and : th	Settings\Administrator\	Desktop\productmanageme	nt.npx Browse
	Ti	tle			
Belation-Info File Name Folder	Related Documer	nt (Registered in the	following area by dr	opping the file. Started by	clicking the file.)
	Relation-Info	File Name	Folder		



2 Enter the title of the network project file in the [Title] field.

Basic Info History Inf	0			
Network Proje	et C:\Documents and !	Settings\Administrator	\Desktop\productmanagement.npx	Browse
file Pa	h <sup>,</sup>			
Tit	le productmanagemer	nt_071113		
	,			
Related Documer	t (Registered in the	following area by d	ropping the file. Started by clicking	the file.)
Relation-Info	File Name	Folder		

3 Click the [Save/Reload] button.

💱 Pro-Studio EX 🛛 project.npx												
File	File Edit Tool Programming Assist											
	💋 Start > 🟹 Node											
	Save											
$\square$	Save/Reload											
Create BAK File												
	Input Password at Save Time											
		S	et Pa	ssword								

The setting result is saved as a network project file.

What is Reload?
'Pro-Server EX' performs data read/write, etc according to the settings of the network project file. Reload is an operation to make 'Pro-Server EX' recognize the created network project file. Clicking the [Save/Reload] button activates 'Pro-Server EX', execute reload, and display the screen below.
Reload       Image: Constraint of the second se
Click the [OK] button.

At the same time, the "Action Report" screen will appear.

In this screen, working history such as how this ACTION output to the output file is always recorded.

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0000000		Excel - 20060413							1			×
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1				Action Re	роп							
2							Format	V1.00				
3		Template SI	heet Informa	tion								
4	No.	Template Sheet Name	Count of Additions	Sheet Name of Final Added								
5	1	Template	1	Template								
6	2	Explanation	1	Explanation								
7	ļ											- 11
8			<u>م</u>	Action Area Infor	mation							- 1
9		Template Sheet	Count of	Name of Last	mation	GROUP	Count of Data of					-
10	No.	Name	Writes	Sheet Written to	Area ID	Name	Last Sheet	Last Write Time				
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12												-
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4 Click the [Transfer] button.

					l.	
» 🖪	Save		Transfer	)	<b></b>	Monitor Status
ettings\Admini	strator\Des	ktop\produ	uctmanagen	nent.npx	Bro	iwse
t_060430						
ollowing area Folder	a by dropp	ing the file	e. Started	by clicking	the file.)	

The transfer setting screen will appear.

Proceed to "STEP 8 Transferring Network Project File".

### STEP 8 Transferring Network Project File

This step transfers the saved network project file to the display unit.

**1** Turn on the check box of the entry node to which the network project file will be transferred.

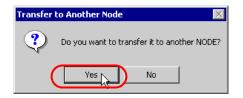
In this wizard, check "Sample\_Node", which is the data source node set in procedure 2 of "STEP 2 Registering Entry Nodes".

Node Name	IP Address	Actual Device	No.	Build No.	Last Transfe
Sample_Node	192.168.0.100	Unconfirmed			
Ť					

2 Click the [Transfer to Another Node] button.

铃 P	ro-St	udio E	X p	oroject.	прж	
File	Edit	Tool	Pro	ogrammin	g Assist	S
	1	Start	<b>&gt;&gt;</b>		Node	2
Transfer to Another Node						
Confirm Online Node						
						l
						l
						L

**3** On the "Transfer to Another Node" screen, click the [Yes] button.



The "Transfer Network Project" screen will appear, transferring the network project file to the entry node checked in procedure 1.

Transfer Network Project
Status:
[2007/11/13 18:17:37] Start Consistency Check of the Network Project. [2007/11/13 18:17:37] Check Symbol [2007/11/13 18:17:37] Network Project Size Pro-Server EX = 2416 bytes GP3000 Series / WinGP / LT3000 = 1348 bytes (max. 262144 bytes) [2007/11/13 18:17:37] The network project is normal. 1/1 Sample_Node:Transferring]
Each Node:
Total:
Close

Click the [Close] button to close the "Transfer Network Project" screen.

• The network project file cannot be transferred if each entry node is not in on-line status (if communication is not active). Before transfer, always click the [Confirm Online Node] button and confirm each node is in on-line status.

🎕 Pro-Studio EX 🛛 project.npx							
File	Edit	Tool	Pro	grammin	ng Assist	S	
	1	Start	<b>»</b>		Node	];	
Transfer to Another Node							
Confirm Online Node							
					Ŋ		

Proceed to "STEP 9 Writing Data to Forms".

#### STEP 9 Writing Data to Forms

This step writes the data to the output file after the trigger condition set in "STEP 4 Setting Trigger Condition" has become effective.

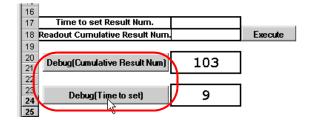
In this trial, you can confirm that the data will be written to the output file.

1 Open the output destination folder of the form set in procedure 1 of "STEP 5 Setting Feature (ACTION)" and then open the Excel file whose file name set in procedure 2.

	1icrosoft Excel	- ProductManage	mentPerDay1					
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2	EXCOUNT	roudeno	manager	nem bou	ia (per bay	7		
	Time	Cumulative	Cumulative	Result	Difference	Purch I amo		
3	TIME	Planned Num.	Result Num.	Num. /H	Difference/H	Problems		
4	Sarly Morning							
5	9	100						
6	10	200						
7	11	300						
8	12	400						
9	13	500						
10	14	600						
11	15 16	700						
12	16	800						
13	Overtime	900						
15								
16 17	Time to a d	t Result Num.						
		ative Result Num		Execute				
19								
20 21	Debug(Cumula	ative Result Num)						
22								
23 24	Debug(T	ime to set)						
24								
26		. (	(					
		ate / Explanation	/				NU INA	
Rea	auy					J	NUM	

2 Store the values for debugging in the display unit's internal device, "S\_Excel01\_Accum Qty\_WORD" and "S\_Excel01\_Write Destination\_WORD".

In this trial, enter any reasonable values in the "Debug (Cumulative Result Num)" and "Debug (Time to set)" and then click the each debug button. The values will then be stored "S\_Excel01\_Accum Qty\_WORD" and "S\_Excel01\_Write Destination\_WORD" of the display unit respectively.



• The values to input the Debug (Time to Set) field should be from 9 to 17. This value is used to specify the row to which the accumulative quantity will be written.

#### **3** Click the [Execute] button.

Trigger Condition bit "T\_Excel01" is automatically turned ON.

That allows Trigger Condition to set and New Form ACTION to operate, and then the output file is created. The values stored "S\_Excel01\_Accum Qty\_WORD" and "S\_Excel01\_Write Destination\_WORD" of the display unit will be written in Excel form. Verify that the cell of the accumulative quantity at 9 o'clock shows "103".

1	A B C D Excel01 Production		E n Manager	ہ nent Boar	় d (per Day	
2						
3	Time Cumulative Planned Num.		Cumulative Result Num.	Result Num./H	Difference/H	
4	arly Mornin					
5	9	100	103	103	3	
6	10 200					
7	11	300				

**4** After having verified the form, click the [x] (close) button.

This is the end of creating a sample form using the "Sample Wizard".

# 3.3 Trial of Recipe Function

# 3.3.1 What is a Recipe Function?

'Pro-Server EX' allows writing data created beforehand using application software such as 'Excel', or data in CSV format to an arbitrary device of the Device/PLC.

#### Flow of Recipe Creation

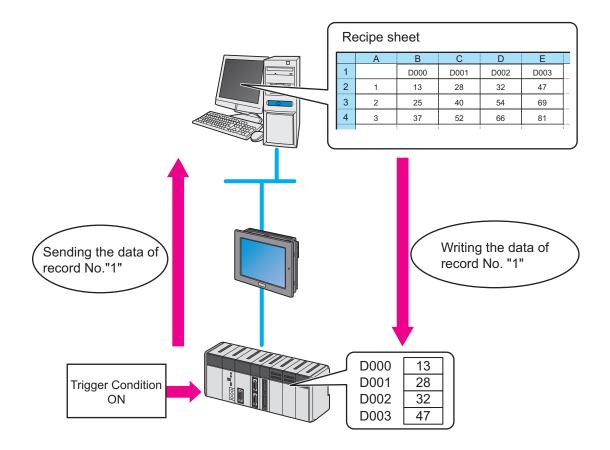
(1) Create a sheet (recipe sheet) of data to be written to the Device/PLC in Excel format.

		А	В	С	D	E	
	1		D000	D001	D002	D003	Device address
	2	1	13	28	32	47	
	3	2	25	40	54	69	
	4	3	37	52	66	81	
ľ		Record No.					1

(2) Execute action setting of the recipe function, for example setting a write destination of data and requirements for writing data using 'Pro-Studio EX'.

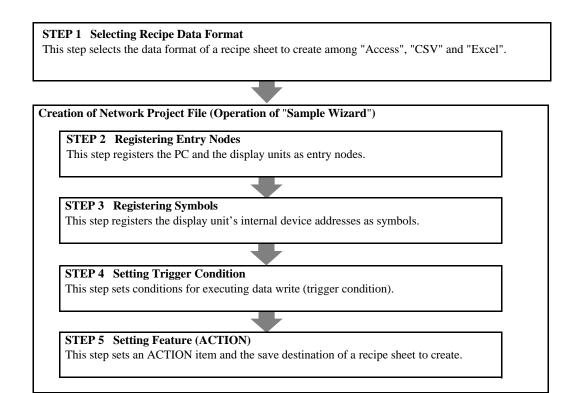
(3) At a specific timing or at a specific interval, the data of preset record No. in the recipe sheet is written to the device address of the Device/PLC.

(Example) Writing the data of record No. "1" of the recipe sheet to the device addresses "D000" to "D003".



## 3.3.2 Workflow from Settings to Write Data

The following explains about the operation flow from setting to device data write using the "Recipe" wizard.



#### STEP 6 Verifying Setting Result and Recipe Sheet

This step verifies the setting result on the "Sample Wizard Setting Result" screen and the created recipe sheet.

#### STEP 7 Saving Network Project File

This step saves the current settings as a network project file and reloads.

#### STEP 8 Transferring Network Project File

This step transfers the saved network project file to the display unit.

#### **STEP 9** Writing Device Data

This step writes the data to the output file after the trigger condition set in STEP 4 has become effective.

# 3.3.3 Writing the Device Data

This section helps you to learn necessary settings efficiently for writing data by simply following the instructions of the "Recipe" wizard of the "Sample Wizard" to actually write data to the display unit.

• Recipe sheet creation in Access format or Excel format needs 'Access' or 'Excel' preinstalled on the PC. Before getting started, ensure that necessary software is installed on the PC.

#### STEP 1 Selecting Data Format of Recipe Sheet

This step selects the data format of a recipe sheet to create.

In this trial, create a recipe sheet in 'Excel' format.

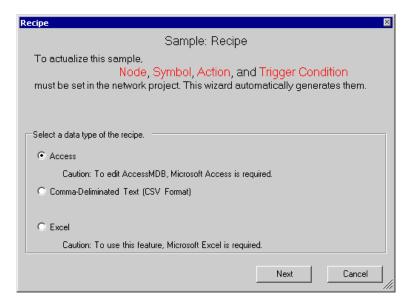
Creating Recipe Sheet (Sample)

Before using the recipe function, you must create a recipe sheet on which device data to be written to the Device/PLC are entered. In this wizard, the sample recipe sheet will be automatically created and stored in the folder specified by the wizard.

1 On the start screen, click the [Recipe] button in the [Sample Wizard].



The "Recipe" wizard starts. The data format selection screen will appear.



2 Select the data format of a recipe sheet to create. In this trial, select "Excel".

Select a data type of the recipe.	
C Access	
Caution: To edit AccessMDB, Microsoft Access is re-	quired.
C Comma-Deliminated Text (CSV Format)	
C Excel	
Caution: To use this feature, Microsoft Excel is requi	red.
	Next Cancel

Click the [Next] button.

Select a data type of the recipe.
C Access
Caution: To edit AccessMDB, Microsoft Access is required.
C Comma-Deliminated Text (CSV Format)
© Excel
Caution: To use this feature, Microsoft Excel is required.
Next Cancel

This is the end of selecting a data format. The entry nodes setting screen will appear.

• The following explanation assumes that "Excel" is selected on the data format selection screen. Note that if "Comma-Deliminated Text (CSV Format)" or "Access" is selected, the screens and settings are different from the followings.

Proceed to "STEP 2 Registering Entry Nodes".

#### STEP 2 Registering Entry Nodes

The setting items are the same as those in the "New Form" wizard above. See "STEP 2 Registering Entry Nodes" in "Creating a Form". If you have tried another wizard and registered entry nodes already, you can skip this procedure. Click the [Next] button and proceed to "STEP 3 Registering Symbols".

Proceed to "STEP 3 Registering Symbols".

#### STEP 3 Registering Symbols

This step registers the device address to which data will be written as a "Symbol".

In this wizard, the display unit's internal device are registered as symbols.

1 Check the [The symbols will be registered as data-source-node symbols.] check box, and then enlarge or scroll the screen to confirm the preset symbol.

Recipe
Sample: Recipe in Excel Format
>> 🟹 Node >> ≽ Symbol >> ≷ Feature >>
Edit symbol details in the Symbol Screen
after the sample wizard ends.
-To execute Recipe, two or more copy destination devices have to be specified. In the Recipe of the selected sample, the devices have already been specified by their symbol names.      The symbols will be registered as data-source-node symbols.      Supplement: In the initial condition, the address of a registered symbol is set to the internal device of the data source node. In the sample, the internal device is assigned as a tentative setting.
Back Next Cancel

Symbol Name	Data Type	Address	
S_Recipe03_Rec	16Bit(Signed)	2191	
S_Recipe03_Writ	16Bit(Signed)	2192	

2 Click the [Next] button.

Symbol Name	Data Type	Address	
S_Recipe03_Rec	16Bit(Signed)	2191	
S_Recipe03_Writ	16Bit(Signed)	2192	
S_Recipe03_Do	Bit	219000	
		Back	Next Next
	-	\_	

This is the end of registering symbols necessary for data write. The trigger condition setting screen will appear.

Proceed to "STEP 4 Setting Trigger Condition".

#### STEP 4 Setting Trigger Condition

This step sets conditions for executing data write (trigger condition).

1 Select a trigger condition in the [Set Trigger Condition] field. Here, select "Data is written to the device when the Start Download Bit turns ON".

	actions caused by arbitrary "Trigger Conditions" are available. le "Trigger Conditions" separately giving each of them an
Trigger Condition Name Set Trigger Condition	T_Recipe03 Data is written to the device every 10 seconds Data is written to the device at 12:00. Data is written to the device when the Start Download Bit tu ↓

# • The name of the trigger condition can be an arbitrary name. However, in this wizard the name is preset. Changing this name in this trial may cause discrepancies. Accept the default provided by this wizard.

2 Click the [Next] button.

Set Trigger Condition	Data is written to the device every 10 seconds. Data is written to the device at 12:00. Data is written to the device when the Start Download Bit tu	
	Back Next Cancel	

This is the end of setting a trigger condition necessary for data write. The ACTION setting screen will appear.

Proceed to "STEP 5 Setting Feature (ACTION)".

#### STEP 5 Setting Feature (ACTION)

This step sets functions (ACTION) to use. Specifically, this step sets the name of ACTION to use and the save destination of a recipe sheet to create as a sample.

1 Enter the folder of save destination of a recipe sheet in the [Folder of Recipe Excel] field.

This Becipe is also exec	uted as "Create form using Excel." ACTION	4.
·	ACTION name. Specify an ACTION name	
ACTION Name	Action 1	
Folder of Recipe Exce	C:\Documents and Settings\Administrator\	Desktop Brows
The sample wizard create	s the Excel file of the sample in this folder.	
	Back N	ext Can

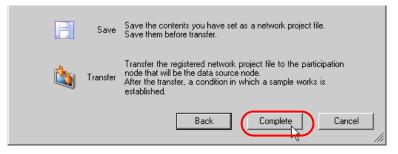
# • The ACTION name can be an arbitrary name. However, in this wizard the name is preset. Changing this name in this trial may cause discrepancies. Accept the default provided by this wizard.

2 Click the [Next] button.

	ACTION Name Action1
	Folder of Recipe Excel C:\Documents and Settings\Administrator\Desktop Browse
	The sample wizard creates the Excel file of the sample in this folder.
l	
	Back Next Cancel

This is the end of setting an ACTION item necessary for data write. The screen that explains the procedures to follow (saving and transferring network project file) will appear. You can read the explanations how to save and transfer the network project file on the screen.

**3** Click the [Complete] button.



This completes the "Sample Wizard".

Then the save setting screen will appear.

Pro-Studio EX ?.npx	
File Edit Tool Programming Assist	
Start ン 🟹 Node	
	Basic Info History Info
Save	
Save/Reload	Network Project Browse
Create BAK File	Tite
Input Password at Save Time	Related Document (Registered in the following area by dropping the file. Started by clicking the file.)
	Relation-Info File Name Folder
Set Password	

At this time, the "Sample Wizard Setting Result" screen and the recipe sheet file (Recipe\_Excel.xlt) in Excel format are also created.

• The "Sample Wizard Setting Result" screen is of an HTML file. Starting this screen needs 'Microsoft Internet Explorer' preinstalled on the PC.

Proceed to "STEP 6 Verifying Setting Result and Recipe Sheet".

#### STEP 6 Verifying Setting Result and Recipe Sheet

This step opens the "Sample Wizard Setting Result" screen to verify the setting result.

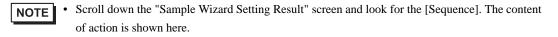
1 Click the "Sample Wizard" in the task bar of the PC.



The "Sample Wizard Setting Result" screen will appear.

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Commle Wi-	and Catt	in a Daar	.14	
Sample Wiz	ard Sell	ing Kesi	111	
1		U		
Recipe in Excel Format				
Creation Date and Time Tuesday, No	vember 13, 2007 6:26:35	PM		
Node				
	Node Name	Node Typ		IP Address
Operation Node	PC1	Pro-Server		172.21.3.38
Trigger Node	Sample_Node	GP3000 S	enes	172.21.3.39
Symbol				
Symbol Name	Node Name	Data Type	Device Address	Comment
Symbol Name S_Recipe03_Download_BIT	Sample_Node	Bit	219000	Bit to order the start of Download
Symbol Name S_Recipe03_Download_BIT S_Recipe03_RecordNumber_WORI	Sample_Node D Sample_Node	Bit 16Bit(Signed)	219000 2191	Bit to order the start of Download Device storing the Record No.
Symbol Name S_Recipe03_Download_BIT S_Recipe03_RecordNumber_WORI	Sample_Node D Sample_Node	Bit	219000	Bit to order the start of Download
Symbol Name S_Recipe03_Download_BIT S_Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR	Sample_Node D Sample_Node	Bit 16Bit(Signed)	219000 2191	Bit to order the start of Download Device storing the Record No.
Symbol Name S_Recipe03_Download_BIT S_Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR	Sample_Node D Sample_Node	Bit 16Bit(Signed)	219000 2191	Bit to order the start of Download Device storing the Record No.
Symbol Name S.Recipe03_Download_BIT S.Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR Trigger Condition	Sample_Node D Sample_Node	Bit 16Bit(Signed)	219000 2191	Bit to order the start of Download Device storing the Record No.
Symbol Name S. Recipe03_Download_BIT S_ Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR Trigger Condition Condition Name	Sample_Node D Sample_Node DSample_Node Condition	Bit 16Bit(Signed)	219000 2191 2192	Bit to order the start of Download Device storing the Record No.
Symbol Name S. Recipe03_Download_BIT S_Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR Trigger Condition Condition Name	Sample_Node D Sample_Node DSample_Node Condition	Bit 16Bit(Signed) 16Bit(Signed)	219000 2191 2192	Bit to order the start of Download Device storing the Record No.
Symbol Name Symbol Name S. Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR Trigger Condition Condition Name T_Recipe03	Sample_Node D Sample_Node DSample_Node Condition	Bit 16Bit(Signed) 16Bit(Signed)	219000 2191 2192	Bit to order the start of Download Device storing the Record No.
Symbol Name S. Recipe03_Download_BIT S_ Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR Trigger Condition Condition Name T_Recipe03 ACTION	Sample_Node ) Sample_Node DSample_Node Condition Data is written to the de	Bit 16Bit(Signed) 16Bit(Signed)	219000 2191 2192	Bit to order the start of Download Device storing the Record No.
Symbol Symbol Name S. Recipe03_Download_BIT S_Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR Trigger Condition Condition Name T_Recipe03 ACTION ACTION Name	Sample_Node DSample_Node DSample_Node Condition Data is written to the de Action1	Bit [16Bit(Signed) [16Bit(Signed) vice when the Start Down	219000 2191 2192 0ad Bit turns ON.	Bit to order the start of Download Device storing the Record No.
Symbol Name Symbol Name S. Recipe03_Download_BIT S_Recipe03_RecordNumber_WORI S_Recipe03_WriteDestination_WOR Trigger Condition Condition Name T_Recipe03 ACTION	Sample_Node DSample_Node DSample_Node Condition Data is written to the de Action1 E-Documents and Setti	Bit 16Bit(Signed) 16Bit(Signed)	219000 2191 2192 load Bit turns ON.	Bit to order the start of Download Device storing the Record No.

**2** Scroll the screen and verify that the settings have been correctly entered.



- **3** After having verified, click the [x] (close) button to close the screen and click the [-] (minimize) button to minimize the screen.
  - NOTE

• When created, the "Sample Wizard Setting Result" file will be automatically saved in the save destination folder of the recipe sheet set in procedure 2 of "STEP 5 Setting Feature (ACTION)". The file name is "(ACTION name).html".

Proceed to opening the recipe sheet in 'Excel' to verify the setting result.

4 Open the save destination folder of the recipe sheet set in procedure 1 of "STEP 5 Setting Feature (ACTION)" and double-click the recipe sheet (Recipe\_Excel.xlt) in 'Excel'.



Verify that the recipe sheet is created.

M	licrosoft Exc	el - Book1			
	<u>Eile E</u> dit <u>V</u> i	ew <u>I</u> nsert I	F <u>o</u> rmat <u>T</u> ool	s <u>D</u> ata <u>W</u> ir	ndow <u>t</u>
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	H9	•	=		
	A	В	С	D	E
1	1	2	3		
2	1111	111	11		
3	2222	222	22		
4	3333	333	33		
5	4444	444	44		
6	5555	555	55		
7					
8					
9					
10					

Proceed to "STEP 7 Saving Network Project File".

#### STEP 7 Saving Network Project File

This step saves the current settings as a network project file and reloads to 'Pro-Server EX'.

The setting items are the same as those in the "New Form" wizard above. See "STEP 7 Saving Network Project File" in "Creating a Form".

Proceed to "STEP 8 Transferring Network Project File".

#### STEP 8 Transferring Network Project File

This step transfers the saved network project file to the display unit.

The setting items are the same as those in the "New Form" wizard above. See "STEP 8 Transferring Network Project File" in "Creating a Form".

Proceed to "STEP 9 Writing Device Data".

#### STEP 9 Writing Device Data

This step writes the display unit's internal device data after the trigger condition set in "STEP 4 Setting Trigger Condition" has become effective.

In this trial, you can confirm that the data will be written to the display unit.

**1** Turn on the download start bit to effect the trigger condition.

**NOTE** You can turn ON the download start bit by:

- turning on the bit from the screen of the display unit; or
- turning on the bit on the "Device Monitor" or "Symbol Monitor".
- For more details, see 'GP-Pro EX Reference Manual' or "28 Simply Confirming On-site Status".
- 2 When Trigger Condition is enabled, check that the recipe sheet data corresponding to the record number stored in "S\_Recipe\_ record number \_WORD" is written in "S\_Recipe03\_Write Destination\_WORD".

This is the end of writing recipe data using the "Sample Wizard".

# 3.4 Trial of Logging Funtion

# 3.4.1 What is a Data Logging Function?

'Pro-Server EX' allows logging (continuously read) of data that has been collected in Device/PLCs over a period of time and at an arbitrary timing and writing the logged data in application software such as 'Excel'.

#### Flow of Data Logging

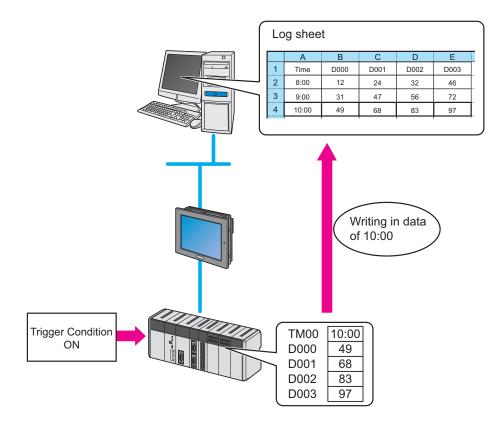
(1) Create a sheet (log sheet) in Excel format to which logged data will be written.

	А	В	С	D	E
1	Time	D000	D001	D002	D003
2	9:00				
3	10:00				
4	11:00				
5	12:00				

(2) Execute action setting of the data logging function, for example setting of a write destination of data and requirements for logging using 'Pro-Studio EX'.

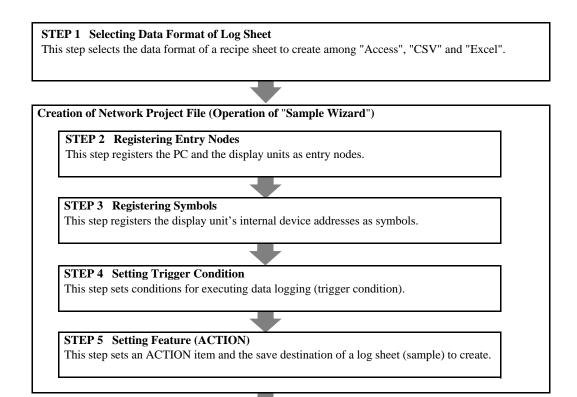
(3) At a specific timing or at a specific interval, data logging is executed and the data of the Device/PLC are written onto the log sheet.

(Example) Logging the data of the device addresses, "D000" to "D003" of the Device/PLC every one hour.



## 3.4.2 Workflow from Settings to Data Logging

The following explains about the operation flow from setting to data logging using the "Data Logging" wizard.



**STEP 6** Verifying Setting Result and Log Sheet This step verifies the setting result on the "Sample Wizard Setting Result" screen and the created log sheet.

STEP 7 Saving Network Project File

This step saves the current settings as a network project file and reloads.

**STEP 8** Transferring Network Project File This step transfers the saved network project file to the display unit.

#### **STEP 9** Logging Device Data

This step writes the device data of the display unit into the log sheet after the trigger condition set in STEP 4 has become effective.

# 3.4.3 Logging the Device Data

This section helps you to learn necessary settings efficiently for logging the data of the display unit by simply following the instructions of the "Data Logging" wizard of the "Sample Wizard" to actually log the data of the display unit.

• Log sheet creation in Access format or Excel format needs 'Access' or 'Excel' preinstalled on the PC. Before getting started, ensure that necessary software is installed on the PC. Before getting started, ensure that necessary software is installed on the PC.

#### STEP 1 Selecting Data Format of Log Sheet

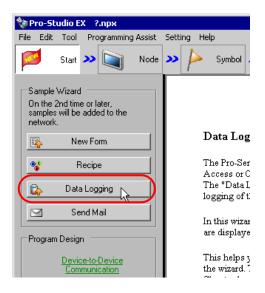
This step selects the data format of a log sheet to create.

In this trial, create a log sheet in Excel format.

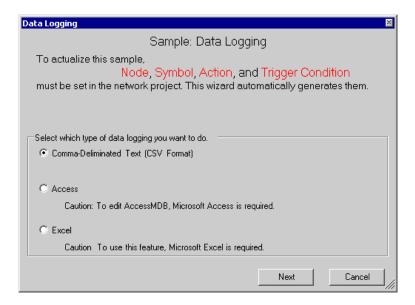
#### Creating Log Sheet (Sample)

Before using the recipe function, you must create a log sheet on which device data or logging time are entered. In this wizard, the sample log sheet will be automatically created and stored in the folder specified by the wizard.

1 On the start screen, click the [Data Logging] button in the [Sample Wizard].



The "Data Logging" wizard starts. The data format selection screen will appear.



2 Select the data format of a log sheet to create.

In this trial, select "Excel".

Select which type of data logging you want to do.
C Comma-Deliminated Text (CSV Format)
O Access
Caution: To edit AccessMDB, Microsoft Access is required.
Excel Caltion To use this feature, Microsoft Excel is required.
NextCancel

#### Click the [Next] button.

Select which type of data logging you want to do.
C Comma-Deliminated Text (CSV Format)
C Access
Caution: To edit AccessMDB, Microsoft Access is required.
Excel
Caution To use this feature, Microsoft Excel is required.

This is the end of selecting a data format. The entry nodes setting screen will appear.

NOTE • The following explanation assumes that "Excel" is selected on this screen. Note that if "Comma-Deliminated Text (CSV Format)" or "Access" is selected, the screens and settings are different from the followings.

Proceed to "STEP 2 Registering Entry Nodes".

#### STEP 2 Registering Entry Nodes

The setting items are the same as those in the "New Form" wizard above. See "STEP 2 Registering Entry Nodes" in "Creating a Form". If you have tried another wizard and registered entry nodes already, you can skip this procedure. Click the [Next] button and proceed to "STEP 3 Registering Symbols".

Proceed to "STEP 3 Registering Symbols".

#### STEP 3 Registering Symbols

This step registers the device address from which data will be read as a "Symbol".

In this wizard, the display unit's internal device are registered as symbols.

1 Check the [The symbols will be registered as data-source-node symbols.] check box, and then enlarge or scroll the screen to confirm the preset symbol.

Data Logging 🛛
Sample: Logging in Excel Format
>> 🐚 Node >> ≽ Symbol >> 💸 Feature >>
Edit symbol details in the Symbol Screen
after the sample wizard ends.
-To execute Data Logging, two or more copy source devices have to be specified. In the Data Logging of the selected sample, the devices have already been specified by their symbol names.
The symbols will be registered as data-source-pode symbols
Supplement: In the initial condition, the address of a registered symbol is set to the internal device of the data source node. In the sample, the internal device is assigned as a tentative setting.
Back Next Cancel

Symbol Name	Data Type	Address	
S_Logging03_Re	16Bit(Signed)	2291	)
<u>S Logaina03 Upl</u>	Bit	229000	/

2 Click the [Next] button.

Symbol Name	Data Type	Address		
S_Logging03_Re	16Bit(Signed)	2291		
S_Logging03_Upl	Bit	229000		
				<u> </u>
		Back 🛛	Next N	Cancel
	-	\		

This is the end of registering symbols necessary for data logging. The trigger condition setting screen will appear.

Proceed to "STEP 4 Setting Trigger Condition".

#### STEP 4 Setting Trigger Condition

This step sets conditions for executing data logging (trigger condition).

1 Select a trigger condition in the [Set Trigger Condition] field. Here, select "Device data read out every 10 seconds".

	actions caused by arbitrary "Trigger Conditions" are available. e "Trigger Conditions" separately giving each of them an
Trigger Condition Name Set Trigger Condition	T_Logging03  Device data is read out every 10 seconds.  Device data is read out at 12:00 Device data is read out when the Start Upload Bit turns ON.

- The name of the trigger condition can be an arbitrary name. However, in this wizard the name is preset. Changing this name in this trial may cause discrepancies. Accept the default provided by this wizard.
- 2 Click the [Next] button.

Set Trigger Condition	Device data is read out every 10 seconds. Device data is read out at 12:00. Device data is read out when the Start Upload Bit turns ON.
	Back Next Cancel

This is the end of setting a trigger condition necessary for data logging. The ACTION setting screen will appear.

Proceed to "STEP 5 Setting Feature (ACTION)".

#### STEP 5 Setting Feature (ACTION)

This step sets functions (ACTION) to use. This step sets functions (ACTION) to use. Specifically, this step sets the name of ACTION to use and the save destination of a log sheet to create as a sample.

1 Enter the folder of save destination of a log sheet in the [Data Log Storage Folder] field.

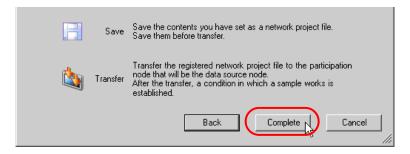
-Pro-Server	EX can execute any pre-registered ACTION.	
This Data I	Logging is also executed as "Create form using Excel."ACTION.	
An ACTIO	N requires an ACTION name. Specify an ACTION name.	
	CTIDN Name Action1 Storage Folder C:\Documents and Settings\Administrator\Desktop	Browse

- The ACTION name can be an arbitrary name. However, in this wizard the name is preset. Changing this name in this trial may cause discrepancies. Accept the default provided by this wizard.
- 2 Click the [Next] button.

	ACTION Name Action1 Data Log Storage Folder C:\Documents and Settings\Administrator\Desktop Browse	
L	Back Next Cancel	/11

This is the end of setting an ACTION item necessary for data logging. The screen that explains the procedures to follow (saving and transferring network project file) will appear.

3 Click the [Complete] button.



This completes the "Sample Wizard".

Then the save setting screen will appear.

🂱 Pro-Studio EX 🛛 ?.npx				- 🗆 ×
File Edit Tool Programming Assist Setting Help				
💋 Start ン 🟹 Node ン ≽ Symbol ン	Feature 🔉	📑 🛛 Save ⋗ 🆄	Transfer	Monitor Status
Basic Info History Info				
Save				
Save/Reload Network Project				
Save/Reload Network Project			Bro	wse
Create BAK File Title				_
				_
			file. Started by clicking the file.)	
Relation-Info	File Name	Folder		
Set Password				
				Monitor
				1

At this time, the "Sample Wizard Setting Result" screen and the log sheet file (Logging\_Excel) in Excel format are also created.

**NOTE** • The "Sample Wizard Setting Result" screen is of an HTML file. Starting this screen needs 'Microsoft Internet Explorer' preinstalled on the PC.

Proceed to "STEP 6 Verifying Setting Result and Log Sheet".

#### STEP 6 Verifying Setting Result and Log Sheet

This step opens the "Sample Wizard Setting Result" screen to verify the setting result.

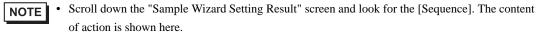
1 Click the "Sample Wizard" in the task bar of the PC.



The "Sample Wizard Setting Result" screen will appear.

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Sample V	Vizard Setti	ng Resul	t	
Logging in Excel F	format			
Creation Date and Time Tues	day, November 13, 2007 6:27:44 P	м		
	auy, 110001100110, 2007 0.27.111	11		
Node				
	Node Name	Node Type		IP Address
Operation Node	PC1	Pro-Server E		172.21.3.38
Trigger Node	Sample_Node	GP3000 Seri	BS .	172.21.3.39
·	Node Name	Data Type	Device Address	Comment
Symbol Name		Data Type 16Bit(Signed)	Device Address 2291	Comment Device storing the data to upload to an Excel file
Symbol Name S_Logging03_ReadSourceDa				Device storing the data to upload to
Symbol Symbol Name S_Logging03_ReadSourceDa Trigger Condition Condition Name				Device storing the data to upload to
Symbol Name S_Logging03_ReadSourceDa Trigger Condition	ata_WORDSample_Node	16Bit(Signed)		Device storing the data to upload to
Symbol Name S_Logging03_ReadSourceDa Trigger Condition Condition Name	ata_WORDSample_Node	16Bit(Signed)		Device storing the data to upload to
Symbol Name S_Logging03_ReadSourceDa Trigger Condition Condition Name T_Logging03	Condition Device data is read out ev Action1	16Bit(Signed)	2291	Device storing the data to upload to

2 Scroll the screen and verify that the settings have been correctly entered.



**3** After having verified, click the [x] (close) button to close the screen and click the [-] (minimize) button to minimize the screen.

```
• When created, the "Sample Wizard Setting Result" file will be automatically saved in the save destination folder of the recipe sheet set in procedure 2 of "STEP 5 Setting Feature (ACTION)". The file name is "(the ACTION name set in procedure 1 of STEP 5).html".
```

Proceed to opening the log sheet in 'Excel' to verify the setting result.

4 Open the save destination folder of the log sheet set in procedure 1 of "STEP 5 Setting Feature (ACTION)" and double-click the log sheet (Logging\_Excel.xlt) in 'Excel'.



Verify that the log sheet is created.

Microsoft Exce	Logging Fr	usalt							_ 🗆 ×
1				1-1-					_ 8 ×
Eile Edit Vie									
🗅 🖻 🖶 🔒	88	ס 🍓 ד כ	f≈ 🛃 🛍	. 😨 🗳 🖓	Arial	- 11	• B I	ū ≣ ≣	📃 + 🖄 + <b>?</b>
🔛 😭 🖓 🗵	🖬 🗆 💿		🖹 🗒 A 🛛	3 🕅 .					
B1	▼ =								
A	В	С	D	E	F	G	Н	I	J
1									
2									
3									
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Proceed to "STEP 7 Saving Network Project File".

#### STEP 7 Saving Network Project File

This step saves the current settings as a network project file.

The setting items are the same as those in the "New Form" wizard above. See "STEP 7 Saving Network Project File" in "Creating a Form".

Proceed to "STEP 8 Transferring Network Project File".

#### STEP 8 Transferring Network Project File

This step transfers the saved network project file to the display unit.

The setting items are the same as those in the "New Form" wizard above. See "STEP 8 Transferring Network Project File" in "Creating a Form".

Proceed to "STEP 9 Logging Device Data".

#### STEP 9 Logging Device Data

This step starts data logging after the trigger condition set in "STEP 4 Setting Trigger Condition" has become effective.

In this trial, you can confirm that the data will be logged at a preset interval in the log sheet.

- 1 Open the Data Log Check Destination Folder set in step 1 of "STEP 5 Setting Feature (ACTION)".
- 2 When 10 seconds elapse after transferring the Network Project File, the preset Trigger Condition becomes enabled, and the log sheet of the Excel file in which the data stored in "S\_Logging03\_Reading Source Data\_WORD" is written is created.

	A	В	С	D	Е	F	G	Н
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								

At every 10 seconds, new data will be written onto the log sheet.

	A	В	С	D	Е	F	G	Н
1	0							
2	0							
3	11							
4	11							
5	18							
6	22							
7	22							
8	44							
9	48							
10	48							
11								
12								
13								

**3** After having verified the log sheet, click the [x] (close) button.

This is the end of data logging using the "Sample Wizard".

# 3.5 Trial of Send Mail Function

## 3.5.1 What is a Send Mail Function?

Pro-Server EX allows e-mailing a preset message to a specific mail address when a preset event occurs such as change in data or trouble. You can send mail messages by:

- Sending a same message all the time;
- Sending a message created on the Device/PLC; and
- Sending a message preset on the Excel sheet.

#### Flow of Mail Send

(Example) E-mailing a massage preset on the Excel sheet.

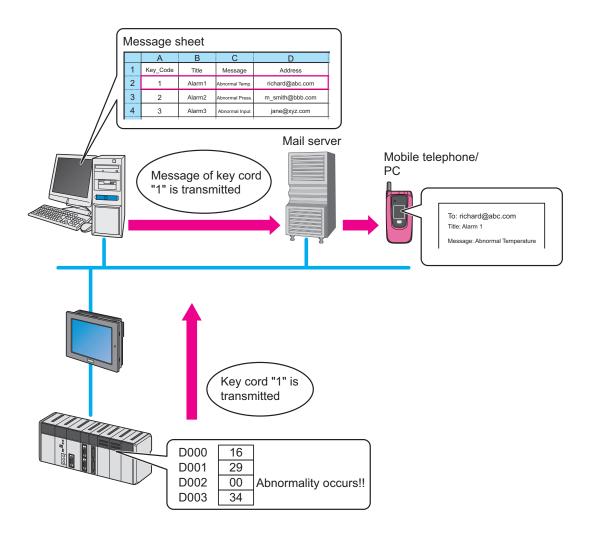
(1) Create an Excel sheet (message sheet) in which messages to send and the mail addresses of send destinations are entered.

	А	В	С	D
1	Key_Code	Title	Message	Address
2	1	Alarm1	Abnormal Temp.	richard@abc.com
3	2	Alarm2	Abnormal Press.	m_smith@bbb.com
4	3	Alarm3	Abnormal Input	jane@xyz.com

(2) Execute action setting of the Mail send function, for example setting of a mail server name and requirements for e-mailing using 'Pro-Studio EX'.

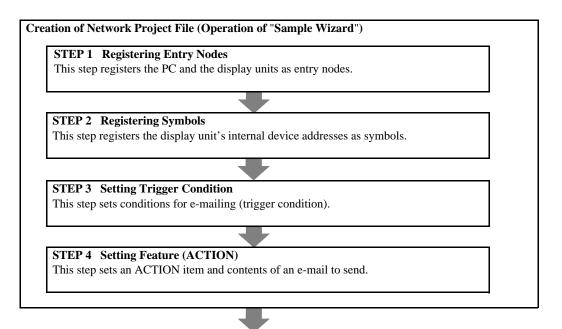
(3) When a preset event has occurred, the message of the key code corresponding to the occurred event on the message sheet will be sent to the recipient such as a cellular phone or a PC via the mail server.

(Example) Transmitting the content of "Alarm 1 Abnormal Temperature" of the key code "1" on the message sheet



## 3.5.2 Workflow from Settings to Send Mail

The following explains about the operation flow from setting to e-mailing using the "Mail Send" wizard.



#### STEP 5 Verifying Setting Result

This step verifies the setting result on the "Sample Wizard Setting Result" screen.

#### STEP 6 Saving Network Project File

This step saves the current settings as a network project file and reloads.

#### STEP 7 Transferring Network Project File

This step transfers the saved network project file to the display unit.

#### STEP 8 Sending E-Mail Messages

This step sends e-mail messages to the preset mail address after the trigger condition set in STEP 3 has become effective.

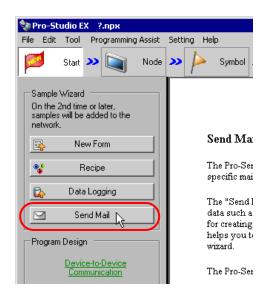
# 3.5.3 Sending a Message

This section helps you to learn necessary settings efficiently for sending mail messages by simply following the instructions of the "Mail Send" wizard of the "Sample Wizard" to actually send an e-mail message.

**NOTE** • An e-mail message cannot be sent if the PC is not connected to a mail server (SMTP server) via a network. Before getting started, confirm the connection environment of the PC.

#### STEP 1 Registering Entry Nodes

1 On the start screen, click the [Send Mail] button in the [Sample Wizard].



2 Click the [Next] button.



The entry node setting screen will appear.

Send Mail
Sample: Send Mail
> Node >> Symbol >> Zeature >>
>> Node >> /> Symbol >> <i>&gt;&gt; Feature &gt;&gt;</i>
Edit node details in the Node Screen after the sample wizard ends.
-To perform Send Mail maintenance, a PC on the network has to be specified as the
executing PC, and registered as a participation node.
Do you want to create with this PC?
Yes Node Name PC1
O No PC1 will be created with
YVKII
-Send Mail is executed when a condition occurs. The node generating the condition
(Condition Generating Node) has to also be pre-registered as a participation node.
As a Condition Generating Node
Node Sample_Node IP Address 192, 168, 0, 100 is registered.
○ Existing Sample_Node ▼ is used.
Back Next Cancel

The setting items are the same as those in the "Form Creation" wizard above. See "STEP 2 Registering Entry Nodes" in "Creating a Form". If you have tried another wizard and registered entry nodes already, you can skip this procedure. Click the [Next] button and proceed to "STEP 2 Registering Symbols".

Proceed to "STEP 2 Registering Symbols".

#### STEP 2 Registering Symbols

This step registers the device address from which data will be read as a "Symbol".

In this wizard, the display unit's internal device are registered as symbols.

1 Check the [The symbols will be registered as condition-generating-node symbols.] check box, and then enlarge or scroll the screen to confirm the preset symbol.

Send Mail	×
Sample: Send Mail	
Node 🍑 눧 Symbol ≫ ≷ Feature ≫	-
Edit symbol details in the Symbol Screen	
after the sample wizard ends.	
-To execute Send Mail, a source device for sending data has to be specified. In the Send Mail of the selected sample, a device has already been specified by its symbol name.	
Supplement: In the initial condition, the address of a registered symbol is set to the internal device of the data source node. In the sample, the internal device is assigned as a tentative setting.	-
Back Next Cancel	

S_Mail01_KeyCo 16Bit(Signed) 2351 S_Mail01_MailTitl String 2400	Symbol Name	Data Type	Address	
5 Mail01 MailTitl String 2400	_Mail01_KeyCo	16Bit(Signed)	2351	
	_Mail01_MailTitl	String	2400	
S Mail01 Start B Bit 235000	Mail01 Start B	Bit	235000	

2 Click the [Next] button.

Symbol Name	Data Type	Address		
S_Mail01_KeyCo	16Bit(Signed)	2351		
S_Mail01_MailTitl	String	2400		
S_Mail01_Start_B	Bit	235000		
		Back	Next Next	icel
	-	(		
			-	

This is the end of registering symbols necessary for data write. The trigger condition setting screen will appear.

Proceed to "STEP 3 Setting Trigger Condition".

#### STEP 3 Setting Trigger Condition

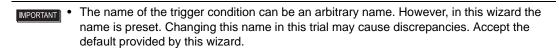
This step sets conditions for executing data send (trigger condition).

In this wizard, the trigger condition of detecting a rise of "Mail Send Start\_BIT" is preset.

1 Confirm the content of the trigger condition in the [Set Trigger Condition].

K, various actions caused by arbitrary "Trigger Conditions" are available. anages the "Trigger Conditions" separately giving each of them an
IT_Mail01 It Trigger The mail is sent when the Start Sending Mail_BIT turns ON.

#### 2 Click the [Next] button.



Set Trigger Condition	The mail is sent when the Start Sending Mail_BIT turns ON.	
	Back Next Cancel	

This is the end of setting a trigger condition necessary for mail send. The ACTION setting screen will appear.

Proceed to "STEP 4 Setting Feature (ACTION)".

#### STEP 4 Setting Feature (ACTION)

This step sets functions (ACTION) to use. Specifically, this step sets the name of ACTION to use and the save destination of a message sheet to create as a sample.

#### 1 Execute setting of mail server

Enter the name of the currently connected server for mail send (e.g. Mail.xxxx.co.jp) in the [SMTP Server Name] field in single-byte characters.

An ACTION requires an ACTION name. Specify an ACTION name.	
ACTION Name Action1	
-Set about the Mail Server and Mail Contents.	
Mail Server SMTP Server Name mail.co.jp	
Mail Source Address	
	•

• The ACTION name can be an arbitrary name. However, in this wizard the name is preset. Changing this name in this trial may cause discrepancies. Accept the default provided by this wizard.

#### SMTP Server

A server for delivering e-mail messages complying with SMTP (Simple Mail Transfer Protocol), a mail transfer protocol (standard for data communication). E-mail messages are sent or received through a computer called "Server" that is always on the Internet. There are two types of serves: for sending and for receiving. SMTP server is typically used to send messages from a mail client to a mail server.

Enter the mail address of the currently using PC (PC saved as an entry node in "STEP1 Registering Entry Nodes") in the [Mail Source Address] field.

An ACTION requires an ACTION name. Specify an ACTION name.	
ACTION Name Action1	
-Set about the Mail Server and Mail Contents.	
Mail Server	
SMTP Server Name mail.co.jp	
Mail Source Address abc@ddd.co.jp	
	-

## 2 Execute setting for mail message

Select the [Always Send the Same Message] to send the message preset in this wizard.

Mail Contents	7
Always Send the Same Message.	
Mail Destination	
Message to Send	
C Send the data sent from the trigger NODE as a message.	
Mail Destination Address	
O Send a prepared message in an Excel sheet to the destination.	
(A messages and a receiver can be specified from the Device/PLC.)	
	Always Send the Same Message.     Mail Destination     Address      Message to Send      Send the data sent from the trigger NODE as a message.     Mail Destination     Address      Send a prepared message in an Excel sheet to the destination.

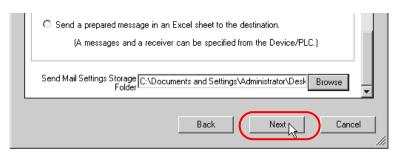
Enter the mail address of the recipient (PC or cellular phone) in the [Mail Destination Address] field, and a message you want to send in the [Message to Send] field in single-byte characters.

Mail Contents	
Always Send the Same Message.	
Mail Destination Address wyz@ddd.co.jp	
Message to Send Please contact us	

**3** Enter the save destination folder of the message sheet in the [Send Mail Setting Storage Folder] field.

I	Message to Send Please contact us	
C Send	the data sent from the trigger NODE as a message.	
	Mail Destination Address	
O Send	a prepared message in an Excel sheet to the destination.	
	(A messages and a receiver can be specified from the Device/PLC.)	
Send Mail	I Settings Storage C:\Documents and Settings\Administrator\Desk Brows Folder	

4 Click the [Next] button.



This is the end of setting an ACTION item necessary for mail send. The screen that explains the procedures to follow (saving and transferring network project file) will appear.

5 Click the [Complete] button.

.8	Save	Save the contents you have set as a network project file. Save them before transfer.
<b>\$</b>	Transfer	Transfer the registered network project file to the participation node that will be the data source node. After the transfer, a condition in which a sample works is established.
		Back Complete Cancel

This completes the "Sample Wizard".

**NOTE** • The encryption method SMTP over SSL, SMTP authentication, and POP authentication are disabled in the Sample Wizard's Send Mail command. To send mail using encryption and SMTP authentication, double-click the action created in the [Feature] step and configure the necessary settings. For details, refer to "15.2 Setting Guide".

Then the save setting screen will appear.

💱 Pro-Studio EX 🛛 ?.npx	
File Edit Tool Programming Assist	
Start ⋗ 🟹 Node	>> 🔑 Symbol >> 💐 Feature >> 📄 Save >> 🚵 Transfer 🐼 Status Basic Info History Info
Save	
Save/Reload	Network Project Browse
Create BAK File	Title
	Related Document (Registered in the following area by dropping the file. Started by clicking the file.)
Input Password at Save Time	Relation-Info File Name Folder
Set Password	

At this time, the "Sample Wizard Setting Result" screen is also created.

Proceed to "STEP 5 Verifying Setting Result".

#### STEP 5 Verifying Setting Result

This step opens the "Sample Wizard Setting Result" screen to verify the setting result.

1 Click the "Sample Wizard" in the task bar of the PC.



The "Sample Wizard Setting Result" screen will appear.

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ddress 🙋 E:\Documents and Settings\Ow	ner\Desktop\Action1.html			🗾 🛃 Go 🛛 Link
Sample Wi	zard Sett	ing Resu	ılt	
Send Mail				
reation Date and Time Tuesday. I	Narrombor 12, 2007 6:21:11	0 DM		
reauon Date and Lime:Luesday, I	ivovember 15, 2007 6:51:1;	s P IVI		
lode				
	Node Name	Node Type	•	IP Address
peration Node	PC1	Pro-Server		172.21.3.38
nigger Node	Sample_Node	GP3000 S	eries	172.21.3.39
ymbol Ymbol Name	Node Name	Data Type	Device Address	Comment
Mail01 Start BIT	Sample Node	Bit	235000	Bit to order the start of Sending Mail
	Sample Node	16Bit(Signed)	2351	Device storing the KeyCode to identify the Message Type
	Sample_140de			
	Sample_Node	String	2400	Device storing the Message Title
_Mail01_KeyCode_WORD _Mail01_MailTitle_STRING		String	2400	Device storing the Message Title
Mail01_KeyCode_WORD _Mail01_MailTitle_STRING rigger Condition ondition Name	Sample_Node			Device storing the Message Title
Mail01_KeyCode_WORD _Mail01_MailTitle_STRING rigger Condition ondition Name	Sample_Node	String ne Start Sending Mail_BIT		Device storing the Message Title
Mail01_KeyCode_WORD Mail01_MailTitle_STRING rigger Condition Condition Name Mail01	Sample_Node			Device storing the Message Title
	Sample_Node			Device storing the Message Title

- 2 Scroll the screen and verify that the settings have been correctly entered.
- **3** After having verified, click the [x] (close) button to close the screen and click the [-] (minimize) button to minimize the screen.

Proceed to "STEP 6 Saving Network Project File".

#### STEP 6 Saving Network Project File

This step saves the current settings as a network project file and reloads to 'Pro-Server EX'.

The setting items are the same as those in the "New Form" wizard above. See "STEP 7 Saving Network Project File" in "Creating a Form".

Proceed to "STEP 7 Transferring Network Project File".

#### STEP 7 Transferring Network Project File

This step transfers the saved network project file to the display unit.

The setting items are the same as those in the "New Form" wizard above. See "STEP 8 Transferring Network Project File" in "Creating a Form".

Proceed to "STEP 8 Sending E-Mail Messages".

#### STEP 8 Sending E-Mail Messages

When the trigger condition set in "STEP 3 Setting Trigger Condition" has become effective, the e-mail message set in the wizard will be sent to the specified mail address.

In this trial, you can confirm that an e-mail message will be sent to the specific mail address.

**1** Turn on the mail send start bit to effect the trigger condition.

NOTE

- You can turn ON the mail send start bit by:
- turning on the bit from the screen of the display unit; or
- turning on the bit on the "Device Monitor" or "Symbol Monitor".

For more details, see 'GP-Pro EX Reference Manual' or "28 Simply Confirming On-site Status".

2 When the trigger condition becomes effective, the content of the [Message to Send] field set in the procedure 3 of the "STEP 4 Setting Feature (ACTION)" will be transmitted.

This is the end of sending e-mail messages using the "Sample Wizard".