17 Writing the display unit's Filing Data to Excel

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17.1 Uploading the display unit's Filing Datal

NOTE • Refer to the 'GP-Pro Ex Reference Manual' for more details about filing data.

[Action Example]

Detect the rising of the trigger device (bit device: "M01") of Device/PLC, read filing data saved in the backup SRAM of display unit, and write the data into an Excel file.



This section describes the setting procedures for executing the above action (ACTION) as an example.

[Setting Procedure]

1	Starting 'Pro-Studio EX' (page17-4)	This step starts 'Pro-Studio EX'.
2	Registering Entry Nodes (page17-4)	This step registers the PC and the display units as entry nodes.
3	Registering Symbols (page17-5)	This step registers as a symbol the device of Device/ PLC which serves as a trigger condition (trigger).
4	Parameter Setting for Feature (ACTION) (page17-6)	 This step sets the following items: Reading Source GP Type Save File Saved File Name Save Form
	+	
5	Setting Trigger Conditions (page17-11)	This step sets conditions (trigger) to read filing data out.
6	Setting Data Received by ACTION (page17- 14)	This step sets data to transfer.
7	Setting ACTION Node/Process Completion Notification (page17-16)	This step sets the name of an ACTION node and the alert setting whether it should be tuned on or off when the ACTION is completed.
8	Verifying Setting Result (page17-18)t	This step verifies setting results on the setting content list screen.
9	Saving a Network Project File (page17-20)	This step saves the current settings as a network project file and reloads.
10	Transferring a Network Project File (page17- 20)	This step transfers a saved network project file to the display unit.
	+	
11	Executing ACTION (page17-21)	This step verifies that filing data is written in Excel format when the preset trigger condition has become effective.

17.1.1 Starting 'Pro-Studio EX'

This step starts 'Pro-Studio EX'.

Refer to "3 Trial of Pro-Server EX" for details about starting method.

17.1.2 Registering Entry Nodes

This step registers the PC and the display unit connected with network as nodes. Refer to "31 Node Registration" for details about entry nodes.



Node Name	:PC1
IP Address	:192.168.0.1



Node Name

:AGP1

IP Address :192.168.0.100

Device/PLC Information



Entry node	Setting item	Setting example	
PC	Node Name	PC1	
	IP Address	192.168.0.1	
	Туре	GP3000 series	
Display Unit	Node Name	AGP1	
	IP Address	192.168.0.100	

17.1.3 Registering Symbols

This step registers as a symbol the device address of Device/PLC which serves as a trigger condition. Refer to "32 Symbol Registration" for details about entry nodes.





Setting item	Setting content
Symbol Name	Start reading
Data Type	Bit
Device address for symbol registration	"M01" of Device/PLC (PLC1)
No. of Devices	1

17.1.4 Parameter Setting for Feature (ACTION)

This step makes settings to read filing data out. (Parameter settings) Refer to "17.2 Setting Guide" for more details about ACTION parameters.





Setting item	Setting content	
ACTION Name	Filing data upload	
Reading Source	Filing data in the backup SRAM of GP	
GP Туре	GP3000 series	
Save File	PC Desktop	
Saved File Name	%Y%M%D%h%m%s (Year/Month/Day/Hour/Minute/ Second)	
Zero Suppress	OFF	
Save Form	Excel file (.xls)	

1 Click the [Feature] icon on the status bar.

饕 Pro-Studio EX 🛛 t	est.npx				
File Edit Tool Pro	gramming Assist Sel	ting Help			
对 Start >	Node 🔊	► sy	mbol ×	Feature	B Save
Symbol		Node	Name AGP1	-nj-	Device Nam
Group	Ungroup	Sheet	Name Sheet3		
Insert	Delete		,		

2 Select [ACTION] from the tree display on the left of the screen, then click the [Add] button.

🎕 Pro-Studio EX 🛛 test.npx	
File Edit Tool Programming Assist	Setting Help
💋 Start ン 🟹 Node	🔉 눧 Symbol .
Add Import	
	ACTION
ACTION Trigger Condition Data Transfer Device Cache	In addition t using applic using Acce: In the Pro-S referred to a

3 Click the [ACTION Type] list button, and select "Automatic Upload of GP Filing Data". Then, enter the name of ACTION to set in the [ACTION Name] field. In this example, enter "Filing Data Upload".

Set ACTION Name/Parameter
Add a new ACTION. Specify an ACTION name, and set its parameter.
ACTION Type Automatic Upload of GP Filing Data.
ACTION Name Writes Data to E-Mail. Upload of GP Log Data. Writes Data to E-Mail. Upload to the database. Download from the database.
Automatic Upload of GP Filing Data
Next Cancel

4 Click the [Click here to set the ACTION parameter] button.



5 Check [Read filing data from GP Backup SRAM] in [Read from].

Setting Parameters		
Read from Read filing data from GP Backup SRAM Read filing data from CF Card Read filing data from GP FEPROM Save Folder:	GP type GP Series SP-5B4*/WinGP SP-5B10 GP4000/LT4000 Series GP3000 Series LT3000	EX Version 1.33
C:		
Save Name: %Y%M%D%h%m%s Zero Supress Reset	File's Save format. Excel file (.xls) File's Binary file (.bin) CSV file (.csv)	

6 In the [GP type] area, select the [SP-5B4*/WinGP / SP-5B10 / GP4000/LT4000 Series / GP3000 Series / LT3000] option.



7 Set "Desktop" for [Save Folder] as a folder to store the file to write data in, with the default file name "%Y%M%D%h%m%s".

Save Folder:	L'ancel
C: [C-DRIVEENG]	
C:\	
)
	File's Save format.
Save Name:	Excel file (.xls)
2Y%M%D%h%m%s	🔽 Binary file (.bin)
Zero Supress Reset	CSV file (.csv)

8 Turn off the [Zero Suppress] check box, if checked.

Save Folder:	Cancel
🖃 c: [C-DRIVEENG]	
C:\	
	File's Save format.
Save Name:	Excel file (.xls)
%Y%M%D%h%m%s	🔽 Binary file (.bin)
Reset	CSV file (.csv)

What is %Y%M%D%h%m%s?

Refers to the time when data has been written and this is saved in the format of "YearMonthDateHour/Minute/ Second".

(Example) The file name for which data was written at 9:50:15 on Dec. 15, 2007 becomes "20071215095015".

Refer to "37.1 Restrictions on Names" for more details.

9 Check [Excel file (.xls)] in [File's Save format.] for the format of the file to which data is written.

Save Folder:	L'ancel
🖃 c: [C-DRIVEENG]]
C:\ Documents and Settings Administrator Desktop	
Save Name: %Y%M%D%h%m%s	File's Save format
Zero Supress Reset	CSV file (.csv)

10 Click the [OK] button.

This is the end of the feature (ACTION) settings.

17.1.5 Setting Trigger Conditions

This step sets conditions (trigger bit ON) to read filing data out. Refer to "33 Trigger Conditions" for details about trigger conditions.



- Trigger Condition Name: Turn on read start bit
- Trigger Condition : When "Start reading" (M01) is ON

1 On the "Set ACTION Name/Parameter" screen, click the [Next] button.

Set ACTION Name/Parameter	×
Add a new ACTION. Specify an ACTION name, and set its parameter.	
ACTION Type Automatic Upload of GP Filing Data.	•
Display the Actions of the old version of Pro-Server	
ACTION Name FilingDataUpload	
	1
Click here to set the ACTION parameter.	
Next Cancel	

2 Click the [New Trigger Condition] button.

Set ACTION Trigger Condition					
ACTION Type Automatic Upload of GP Filing Data.					
ACTION Name FilingDataUpload					
Specify a trigger condition of the ACTION.					
Trigger Condition					
New Trigger Condition					
Edit					
Node					
Back Next Cancel					

3 Enter the trigger condition name "TurnOnReadStartBit" in [Trigger Condition Name], and select "AGP1" in [Node Name] which has the device to serve as the trigger condition.

Trigger Co		rBit		\
Node	Name PC1		t Add Node	Find Nod
	AGP1	dition		
Condition 1				
Specify th	e Trigger Condition.			
5	When Turned ON	While Device	e is ON	While Condition Satisfied
Ġ	Specified Time	While Device	is OFF 🛛 💦	When Condition Satisfied
۲	Constant Cycle	🚺 When Devi	ice ON 🛛 🔠	When Partner Node ON
	When Device Changes	When Devic	ce OFF 🛛 🎘	When Partner Node OFF
		Detail	Settings	OK Cance
Here, you	are to specify the	e node having the c	device to be	the trigger cond
ී "33 Ti	iaaer Condition	IS"		

4 Click the [When Device ON] button in the [Condition 1] tab and select "PLC1" for the device name.

Condition 1					
Specify the Trigger Condition.					
👫 When Turned ON 🔤 While Device is ON 🍡 While Condition Satisfied					
🙆 Specified Time 🚾 While Device is OFF 🖹 When Condition Satisfied					
Constant Cycle 🚺 When Device ON 🐮 When Partner Node ON					
🔯 When Device Changes 🔯 When Device OFF 🗏 When Partner Node OFF					
Device Name #INTERNAL Turn OFF the Specified Device Address after #INTERNAL Processing. Data Type 16Bit(Signed)					
Limited Time Offer Check Cycle Always					
Detail Settings OK Cancel					

5 Click the [Device Address] list button and select "StartRead" for the symbol name of the device which serves as the trigger.

5	When Turned ON		While Device is ON		While Condition Satisfied	
Ġ	Specified Time		While Device is OFF	1	When Condition Satisfied	
0	Constant Cycle		When Device ON		When Partner Node ON	
	When Device Changes		When Device OFF	*	When Partner Node OFF	
Device Name PLC1 Image: Processing. Device Address Processing.						
PLC1 Device A	Address	•	Turn OFF the Specified Processing.	Device	Address after	

[Data Type] automatically appears after selection, too.

	Device Name
	PLC1
	Device Address
	StartRead
	Data Type Bit
	Limited Time Offer
	0 🖶 hour 0 🖶 min - 0 🖶 hour
NOTE • You	can also set trigger conditions by combining 2 different types of conditions ("And" condition
or "(Dr" condition).
	,
	"33 Trigger Conditions"

6 Click the [OK] button.

This is the end of trigger condition settings.

17.1.6 Setting Data Received by ACTION

This step sets data to transfer in ACTION.

• If a data reading source is of a CF card or FEPROM, the transfer data set here is to be the file No. of the CF card or FEPROM. The file No. refers to the numerical value of ***** of "ZR*****.csv".



If you read from the backup SRAM, you can use any value for transfer data.



• Constant value to transfer: 1

1 On the "Set ACTION Trigger Condition" screen, click the [Next] button.

Set ACTION Trigger Condition	×				
ACTION Type Automatic Upload of GP Filing Data.					
ACTION Name FilingDataUpload					
Specify a trigger condition of the ACTION.					
Trigger Condition					
New Trigger Condition					
StartRead Edit					
Node AGP1					
When StartRead of Node AGP1 is Turned ON					
Back Cancel					

2 After clicking [Constant Value], enter "1" in the text box for the constant value to transfer and "1" in [No.].

Data settings to be received by ACTION	×				
ACTION Type Automatic Upload of GP Filing Data.					
ACTION Name FilingDataUpload					
From the trigger node, this ACTION					
Data of action					
is received as a data to do the ACTION. As the data value, the device value of the trigger node or a constant is available. Specify the data.					
Transfer Source					
Node					
AGP1					
Constant Value					
)				
Data Type 16Bit(Signed) No. 1 🛨)				
Back Next Cancel					

NOTE • You can transfer stored values as data by specifying a symbol or a device address.

This is the end of the setting of data received by ACTION.

17.1.7 Setting ACTION Node/Process Completion Notification

This step sets the name of an ACTION node and the alert setting whether it should be tuned on or off when the ACTION is completed.



- ACTION Node : PC1
- Receive Notification: OFF

1 On the "Data settings to be received by ACTION" screen, click the [Next] button.

O Device Address
Constant Value
1
Data Type 16Bit(Signed) No. 1
Back Nevt Cancel

2 Click the list button of [ACTION Node] and select "PC1" as a node where ACTION operates. Also, clear the check if [Receive Notification Exists] has been checked.

ACTION Node	cification Exists		
Please specify the notified device that will be informed of the execution of the ACTION. After the execution of the ACTION, it will be is turned on.			
	Device Name		
	#INTERNAL		
	Notified Device		
	x ·		
	Data Type Bit		

• When "Receive Notification Exists" is turned on, the specified bit device will be turned on when the ACTION is completed. This can be used as the trigger condition of the subsequent ACTION when you want to execute two or more ACTIONs sequentially.

"33 Trigger Conditions"

3 Click the [Complete] button.

The "Set ACTION Node/Process Completion Notification" screen will disappear. On the left of the screen, the ACTION and trigger condition name you set will appear.



This is the end of the settings of the ACTION node and process completion notification.

17.1.8 Verifying Setting Result

This step verifies setting results on the setting content list screen.

1 Select the ACTION name "FilingDataUpload" from the tree display on the left of the screen.



Confirm that the setting content appears on the right of the screen.

H	elp	
•	Symbol 🔌 ≷ Feature ≫ 📄 Save ᠉ 🆄	Transfer Monitor Status
	ACTION-Specific Trigger Condition/Process List	ACTION
	Add Edit Release	Delete ACTION
	Data Source Node AGP1	FilingDataUpload
	Trigger When StartRead of Node AGP1 is T	Rename
	Completion	Automatic Upload of GP Filing Data.
		Set Parameter
	L	ACTION Node
		PC1

2 Select the trigger condition name "TurnOnReadStartBit" from the tree display on the left of the screen.



Confirm that the setting content appears on the right of the screen.

lelp			
Symbol 🔉 ≷ Feature 🔉 📑	Save ≫ 🆄 Tra	ansfer	Monitor Status
Trigger Condition	Sequence [C	Diagram by ⁻ ondition	Frigger
	Collapse	Transfer	ACTION/Data
TurnOnRea 💌 🗕 Edit	Feature Source	Destinat	Receive/Proces
Node AGP1	FilingDat AGP1.#	-> PC1.Fili	
When StartRead of Node AGP1			

This is the end of the verification of the settings.

17.1.9 Saving a Network Project File

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

Refer to "25 Saving" for details about saving a network project file.

- 'Pro-Server EX' reads a created network project file, and then executes ACTION according to the settings in the file. The settings therefore need be saved in the network project file.
 - Be sure to reload the network project file to 'Pro-Server EX' If not, ACTION will not work.

Ex.

• Path of network project file

: Desktop\FilingData_upload.npx

• Title

: Filing data upload action

17.1.10 Transferring a Network Project File

This step transfers a saved network project file to entry nodes.

Refer to "26 Transferring" for details about transferring a network project file.

NOTE • Be sure to transfer a network project file. If not, ACTION will not work.

17.1.11 Executing ACTION

This step verifies that enabling a trigger condition activates ACTION and writes the filing data in backup SRAM of display unit on PC desktop as an Excel file.

	A	В	С	D	
1	FILING DA	TA			
2	Description	File no. 1			
3	No of Data	3			
4	No of Data	5			
5					
6	Data Forma	0			
7	Display For	0			
8	Code	0			
9	BlockO	Block1	Block2		
10	ProductA	ProductB	ProductC		
11	5	10	20		
12	10	20	40		
13	15	30	60		
14	20	40	80		
15	25	50	100		
16					
17					

This is the end of the explanation of this ACTION.

• If you want to achieve faster communication during ACTION, refer to "29 Tips for Faster Communication".

17.2 Setting Guide

This section explains how to set the parameters of ACTION.

Setting Parameters		
Read from Read filing data from GP Backup SRAM Read filing data from CF Card Read filing data from GP FEPROM Save Folder: C: C: Pio-face	GP type G GP Series SP-584*/WinGP SP-5810 G GP4000/LT4000 Series GP3000 Series LT3000	EX Version 1.33
Image: Save Name: Image: Save Name: Save Name: Image: Save Name: Save	File's Save format. ☐ Excel file (.xls) ☑ Binary file (.bin) ☐ CSV file (.csv)	

Setting item	Setting content	
Read from	 Select where to read the filing data from. Read filing data from GP Backup SRAM Read filing data on the display unit's backup memory (SRAM). Read filing data from CF Card Read filing data on the display unit's CF/SD Card. Transfer data defines the folder number. For example, when the transfer data is "2", read data from "ZE0002.BIN" on the CF Card. Read filing data from GP FEPROM Read filing data from the display unit's internal memory (screen area). Transfer data defines the folder number. For example, when the transfer data is "2", read data from folder "2" in internal memory. NOTE When the GP Type is SP-5B4*/WinGP, SP-5B10, GP4000/LT4000 Series, GP3000 Series or LT3000, you cannot select [Read filing data from GP FEPROM]. For models without a CF/SD Card slot, even if you select [Read filing data from CF Card", you cannot read filing data. 	
GP Туре	Select the display unit network node whose filing data you are reading.	
Save Folder	Selects a folder to save read out filing data. C drive (C:) folder is to appear for initial setting. To change the drive to display, click the list button to select new one.	

Setting item	Setting content	
Save Name	Sets a file name to save. "%Y%M%D%h%m%s" is to appear for initial setting. If you do not change the file name, time data of PC is to set for "%" position.	
	 NOTE By specifying a macro code for the file name to save, you can set the file name as a node name or device data. 	
	37.1 Restrictions on Names	
Zero Suppress	If you set the save file name as "%Y%M%D%h%m%s" and check this item, the digit 0 in "%" is not displayed. (Example) The file name which is written at 7:31 when specifying the save file name as "%h%m" Checked: •••731••• vls	
	Not checked: ••0731•••.xls	
Reset	Returns [Saved File Name] to default ("%Y%M%D%h%m%s").	
	Selects the saving format of read out filing data.	
File's Save format	• Excel file (.xls)	
	Saves in Excel book format.	
	• Binary file (.bin) Saves in binary file format. However, you cannot edit data saved in this format	
	 CSV file (.csv) Saves in CSV file format. 	
	 NOTE When saving in CSV file format, a PFG file storing the header information of a CSV file will be created in the folder where filing data is stored. An uploaded CSV file is saved in the folder of the same name as the PFG file. 	