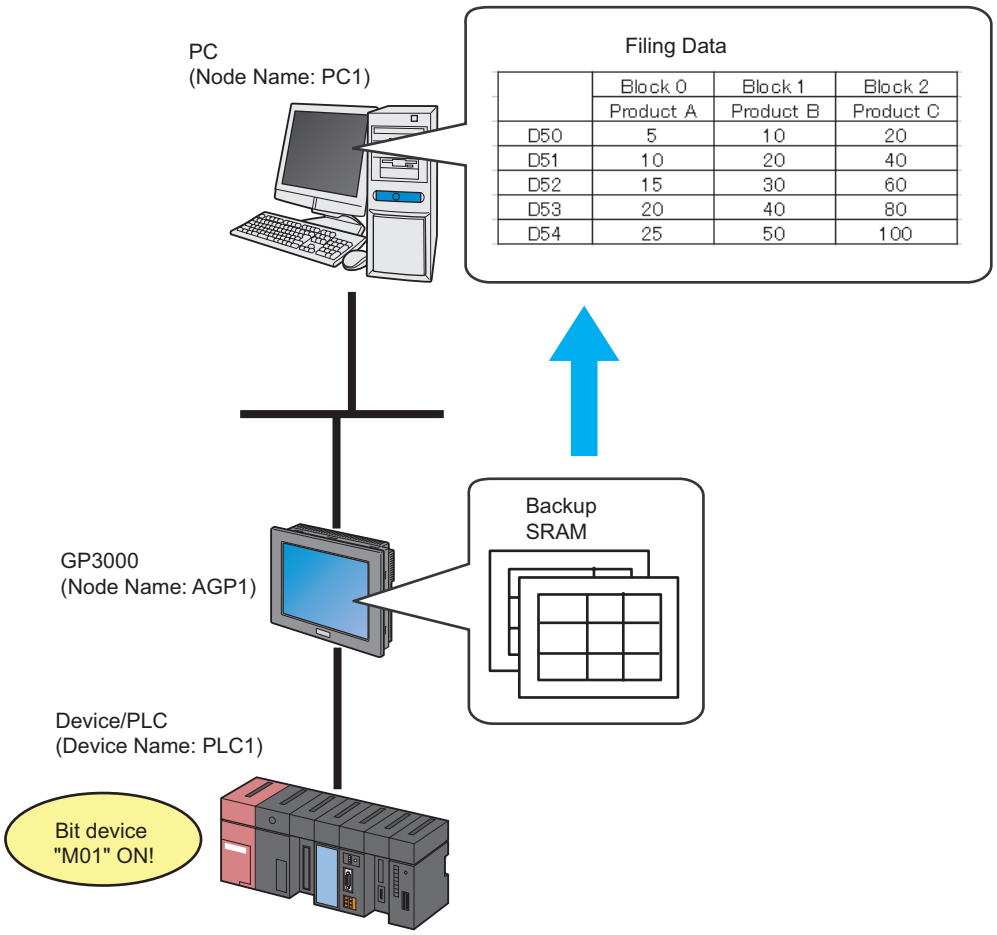
# 17 Writing GP Filing Data in Excel

# 17.1 Try to Write GP Filing Data in Excel

**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 GP, 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' | This step starts 'Pro-Studio EX'. |
| 2 | Registering Entry Nodes | This step registers the PC and the GPs as entry nodes. |
| 3 | Registering Symbols | This step registers as a symbol the device of Device/PLC which serves as a trigger condition (trigger). |
| 4 | Parameter Setting for Feature (ACTION) | This step sets the following items:<br>• Reading Source<br>• GP Type<br>• Save File<br>• Saved File Name<br>• Save Form |
| 5 | Setting Trigger Conditions | This step sets conditions (trigger) to read filing data out. |
| 6 | Setting Data Received by ACTION | This step sets data to transfer. |
| 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. |
| 8 | Verifying Setting Result | This step verifies setting results on the setting content list screen. |
| 9 | Saving a Network Project File | This step saves the current settings as a network project file and reloads. |
| 10 | Transferring a Network Project File | This step transfers a saved network project file to the GP. |
| 11 | Executing ACTION | 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.

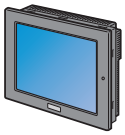
### 17.1.2 Registering Entry Nodes

This step registers the PC and the GP 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

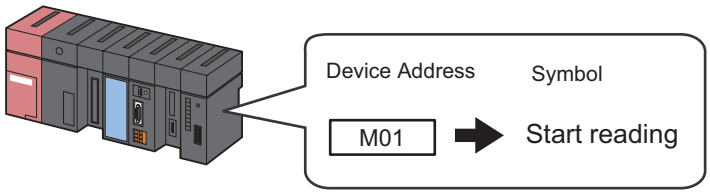
Ex.

| Entry node | Setting item | Setting example |
|---|---|---|
| PC | Node Name | PC1 |
| | IP Address | 192.168.0.1 |
| GP | Type | GP3000 series |
| | 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.



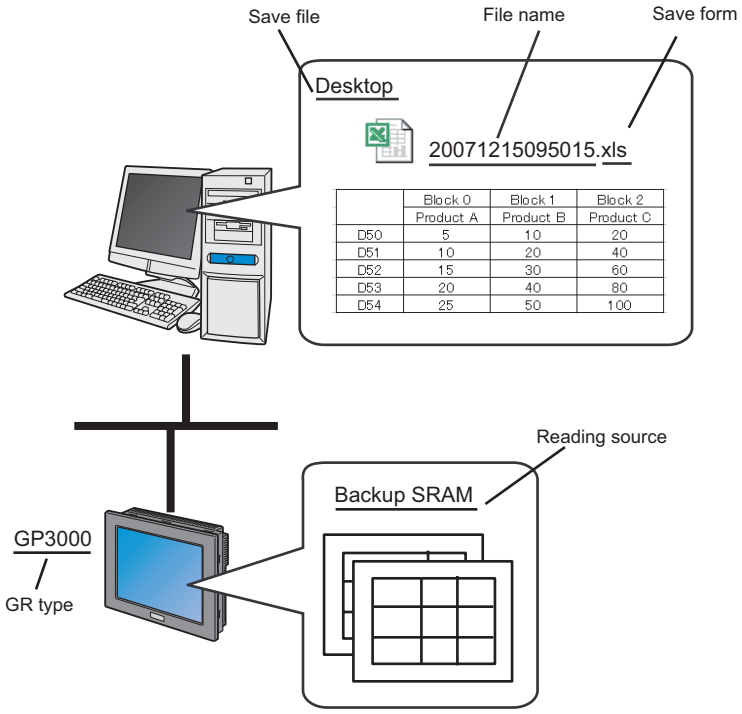

Ex.

| 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)

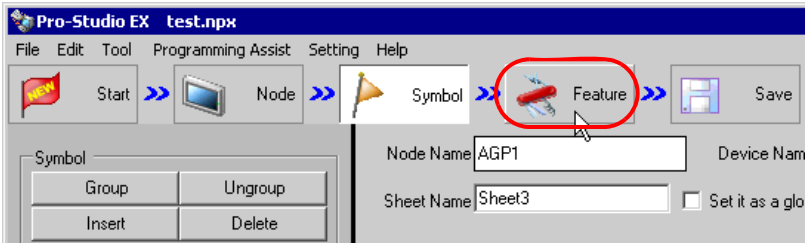
Refer to "17.2 Setting Guide" for more details about ACTION parameters.



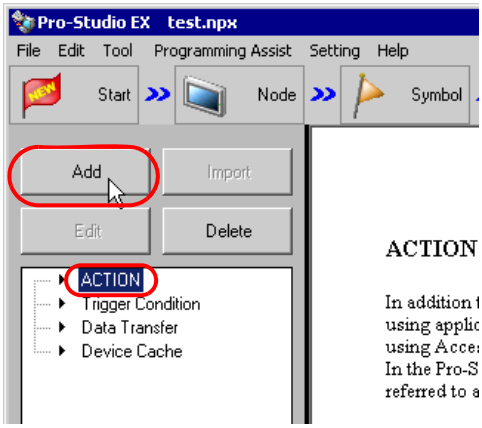

Ex.

| Setting item | Setting content |
|---|---|
| ACTION Name | Filing data upload |
| Reading Source | Filing data in the backup SRAM of GP |
| GP Type | 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) |

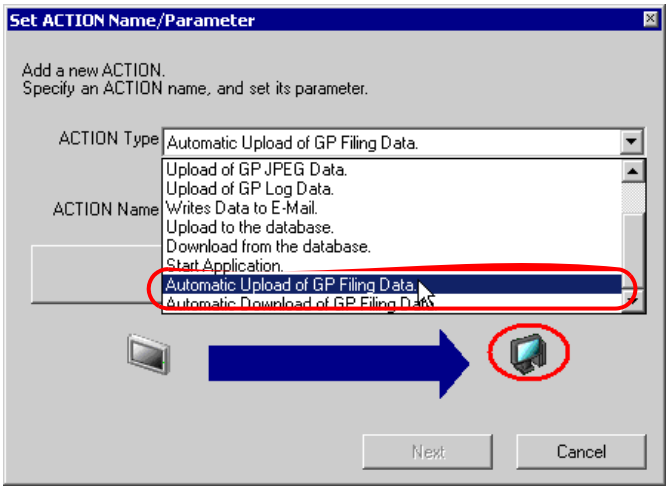
1 Click the [Feature] icon on the status bar.



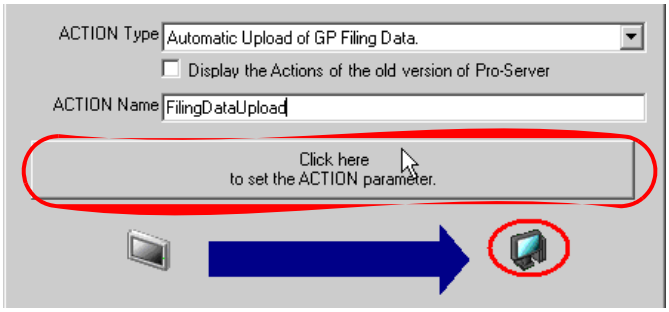

2 Select [ACTION] from the tree display on the left of the screen, then click the [Add] button.



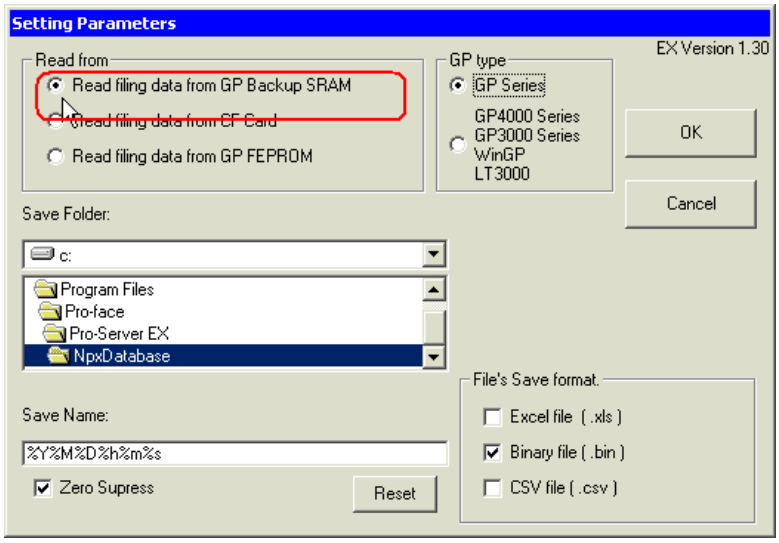

3 Click the [ACTION Type] list button, and select "Automatic Upload of GP Filing Data".
Then, enter the name of ACTION to set in the [ACTION Name] field. In this example, enter "Filing Data Upload".



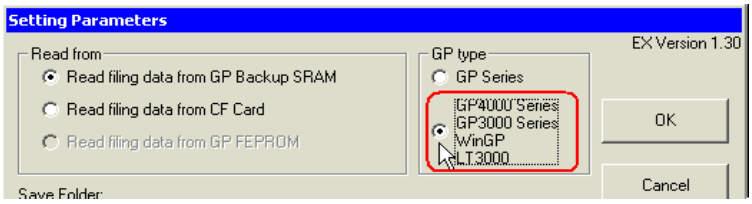
4 Click the [Click here to set the ACTION parameter] button.



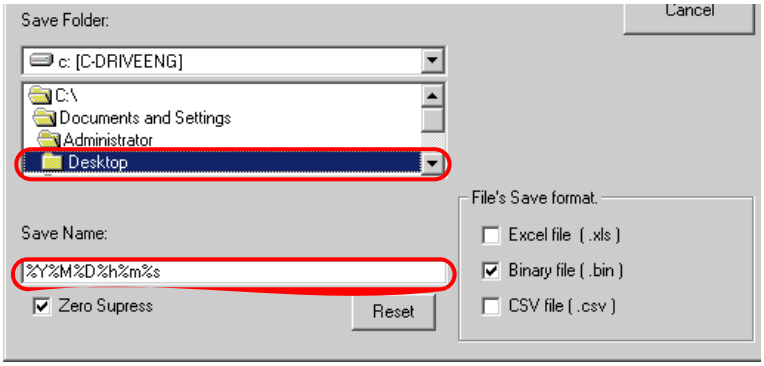

5 Check [Read filing data from GP Backup SRAM] in [Read from].



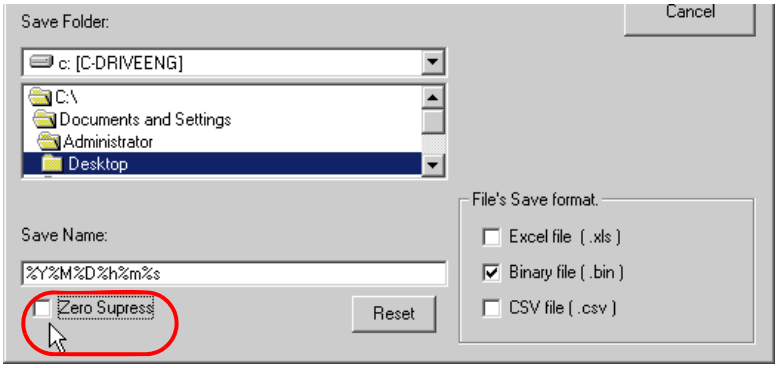

6 In the [GP type] area, select the [GP4000 Series/GP3000 Series/Win GP/LT3000] option.



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".



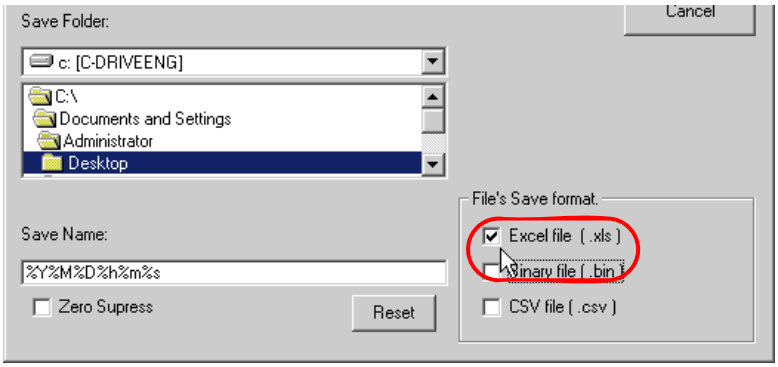

8 Turn off the [Zero Suppress] check box, if checked.




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.




10 Click the [OK] button.

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

## 17.1.5 Setting Trigger Conditions

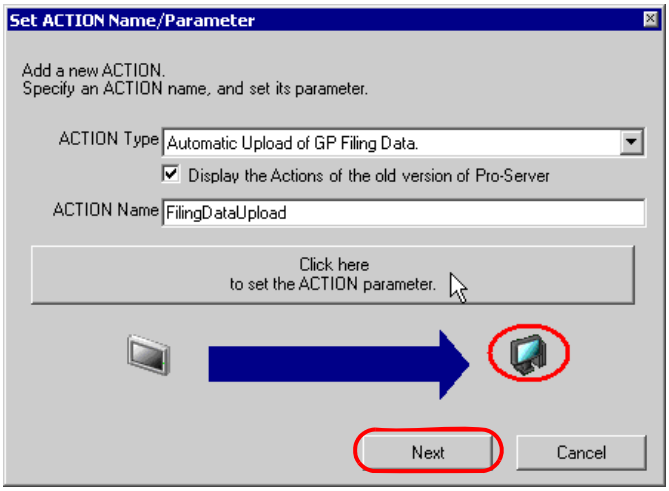
This step sets conditions (trigger bit ON) to read filing data out.

Refer to "33 Trigger Conditions" for details about trigger conditions.

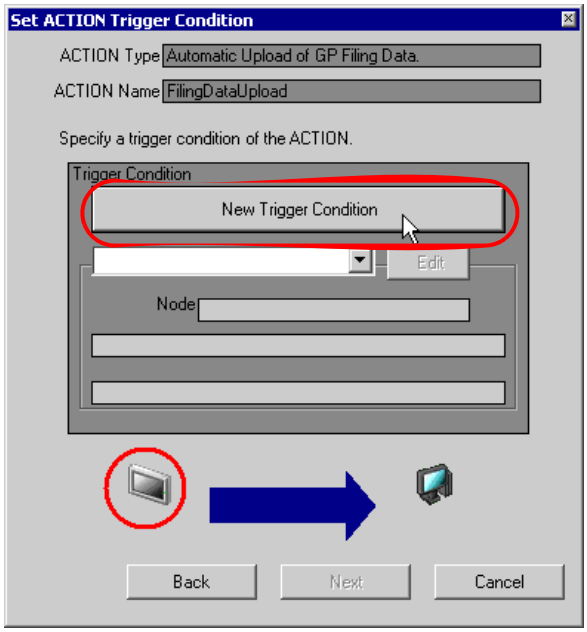
Ex.

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

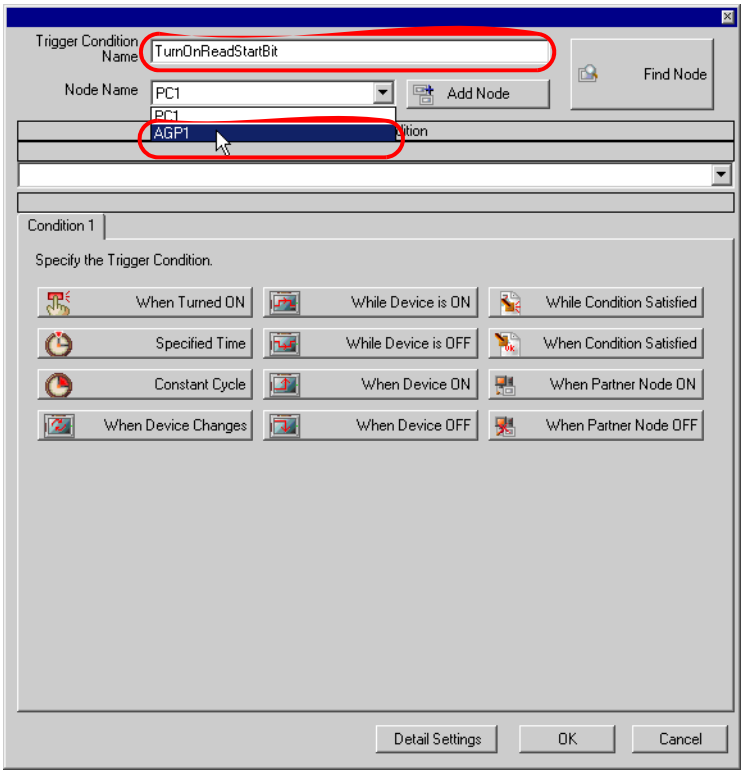
1 On the "Set ACTION Name/Parameter" screen, click the [Next] button.




2 Click the [New Trigger Condition] button.



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.

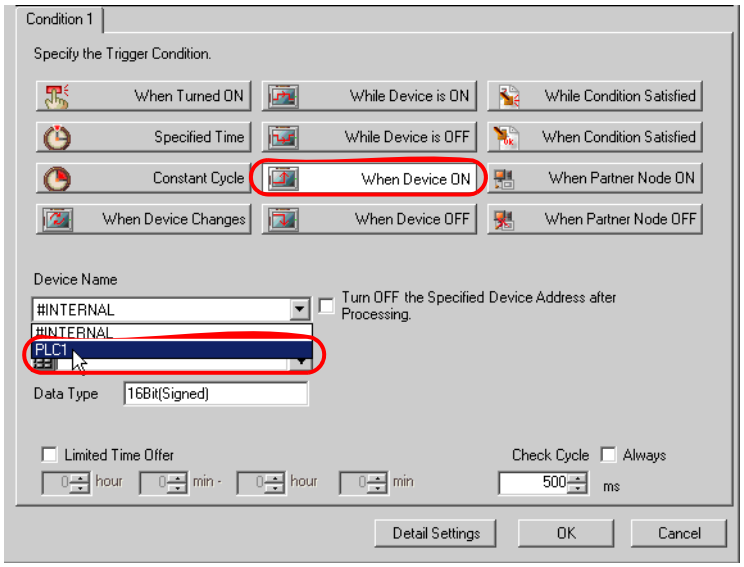



**NOTE**

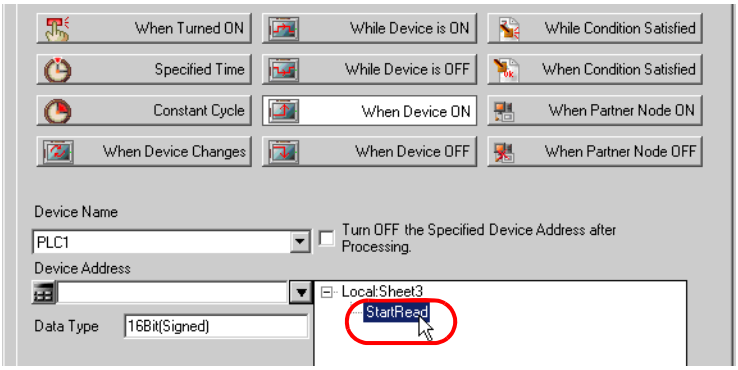
- Here, you are to specify the node having the device to be the trigger condition.

☞ "33 Trigger Conditions"

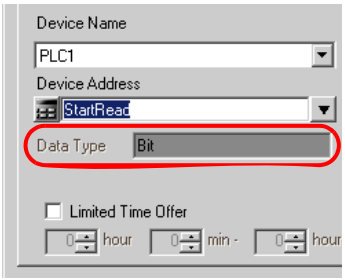
4 Click the [When Device ON] button in the [Condition 1] tab and select "PLC1" for the device name.



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




[Data Type] automatically appears after selection, too.




**NOTE**

- You can also set trigger conditions by combining 2 different types of conditions ("And" condition or "Or" condition).

  ☞ "33 Trigger Conditions"

6 Click the [OK] button.

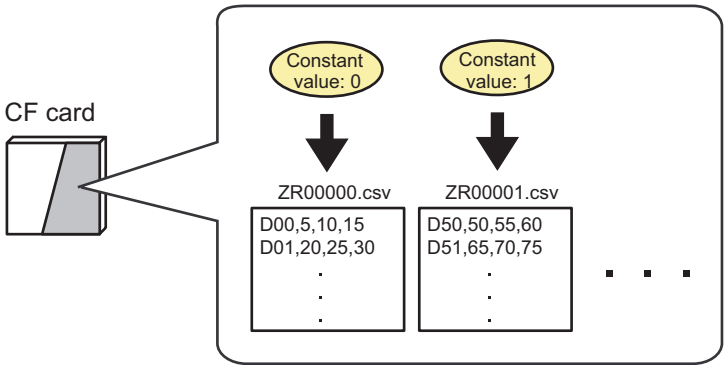
This is the end of trigger condition settings.

## 17.1.6 Setting Data Received by ACTION

This step sets data to transfer in ACTION.

**NOTE**

- 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".

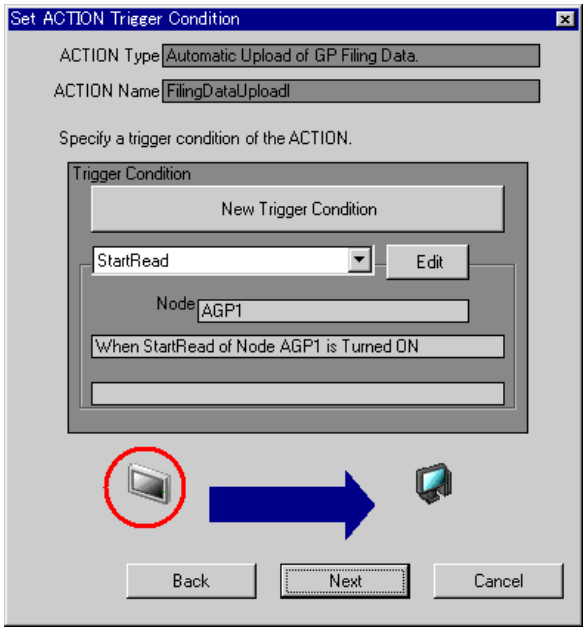



If you read from the backup SRAM, you can use any value for transfer data.

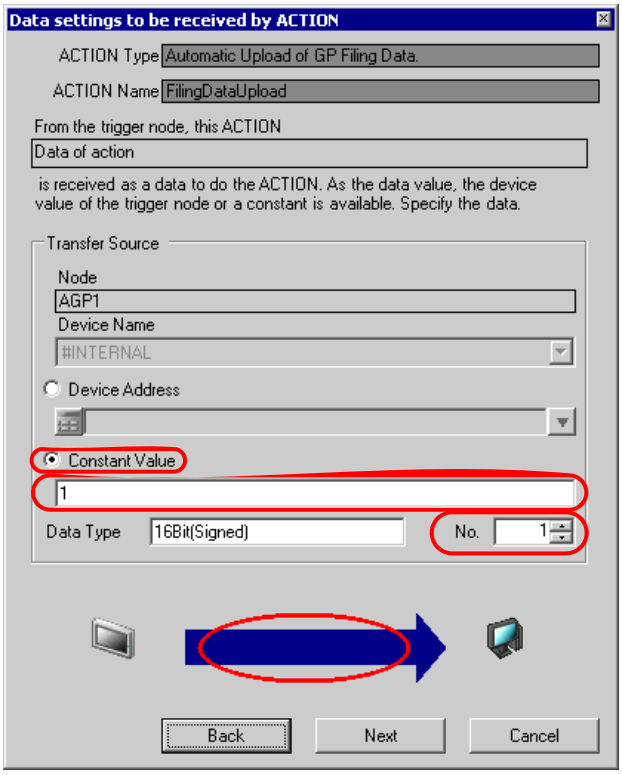
**Ex.**

- Constant value to transfer: 1

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



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




**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.

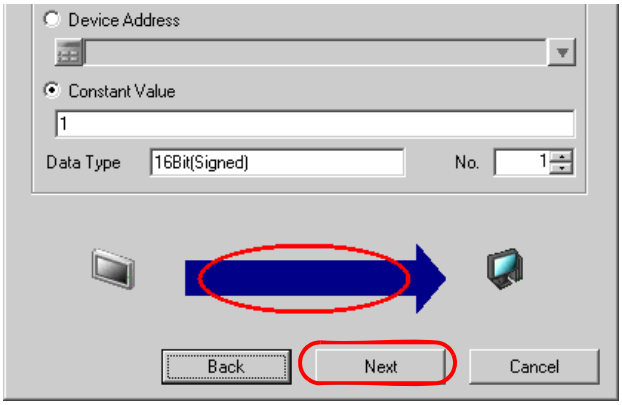
## 17.1.7 Setting ACTION Node/Process Completion Notification

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.

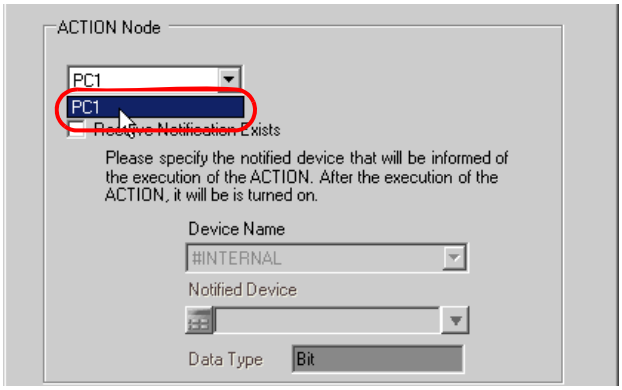
**Ex.**

- ACTION Node : PC1
- Receive Notification: OFF

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




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.



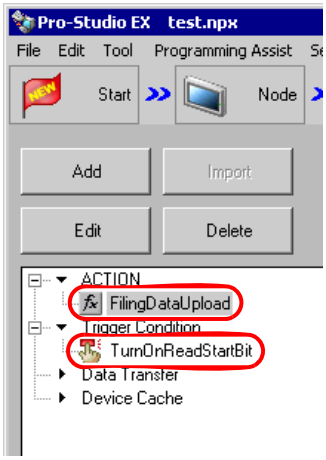

**NOTE**

- 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.

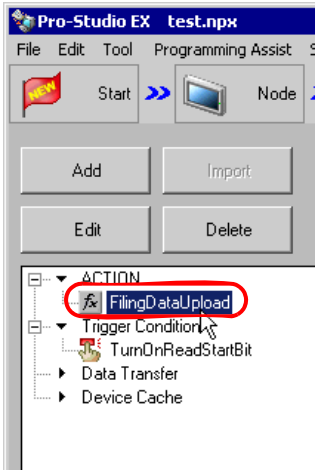



This is the end of the settings of the ACTION node and process completion notification.

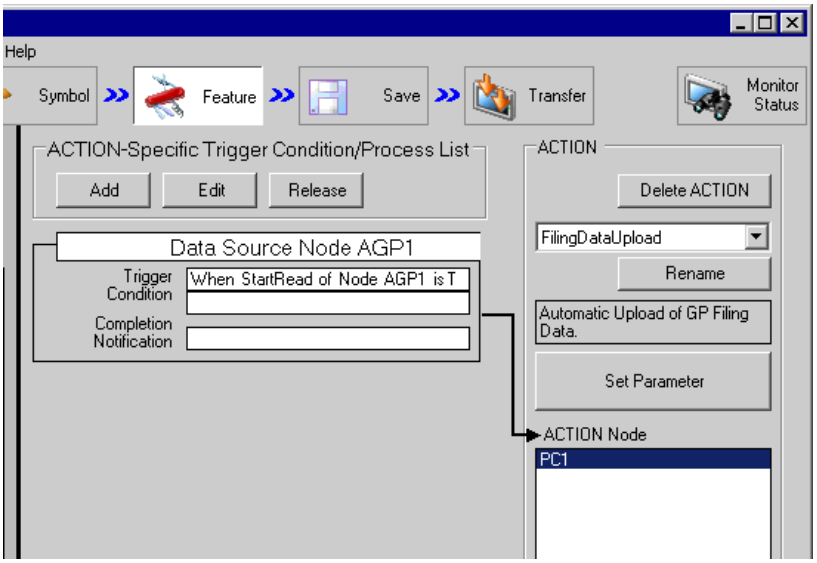
## 17.1.8 Verifying Setting Result

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

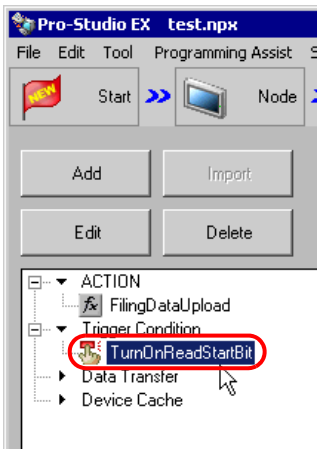
1 Select the ACTION name "FilingDataUpload" from the tree display on the left of the screen.



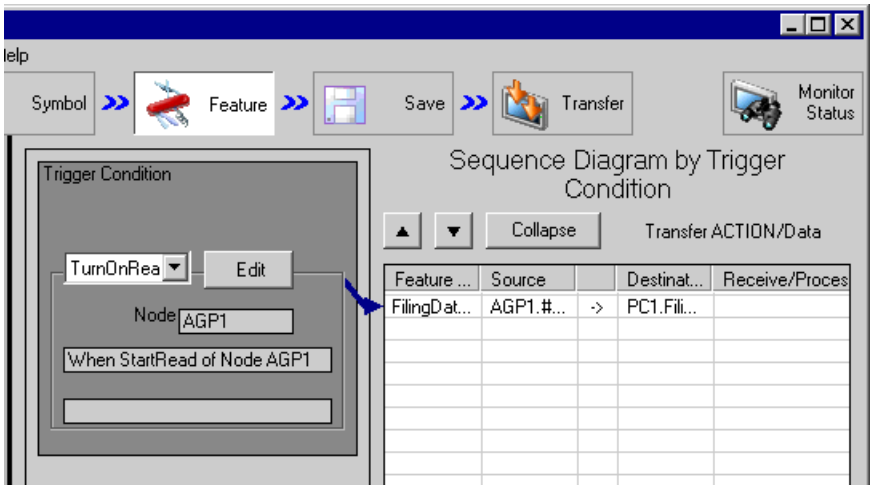

Confirm that the setting content appears on the right of the screen.



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.




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.

IMPORTANT
- '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

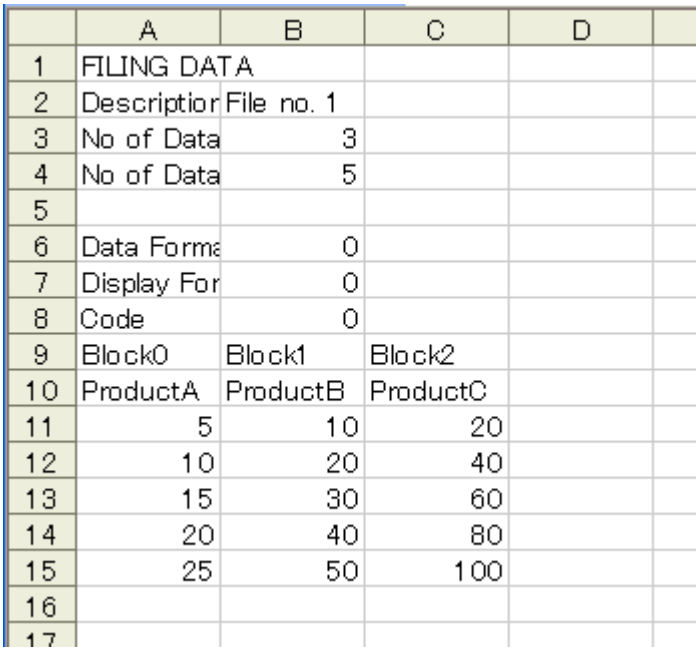
This step transfers a saved network project file to entry nodes.

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 backup SRAM filing data of GP on PC desktop as an Excel file.



| | A | B | C | D |
|---|---|---|---|---|
| 1 | FILING DATA | | | |
| 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 | Block0 | 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 | | | | |

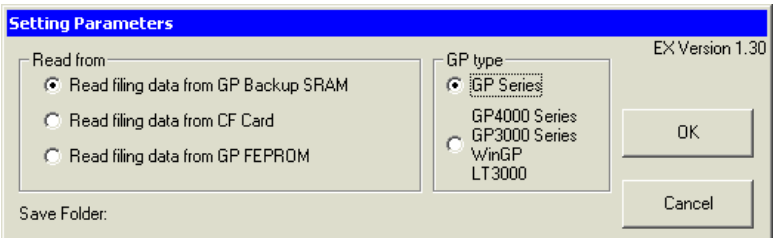
This is the end of the explanation of this ACTION.

**NOTE**

- 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 item | Setting content |
|---|---|
| Read from | Selects a read from filing data.<br>**NOTE**<br>• If read out from GP4000 Series/GP3000 Series/WinGP/LT3000, you cannot select [Read filing data from GP FEPROM].<br>• If you select [Read filing data from CF Card], the transfer data is to be the folder No. For example, if the transfer data is "2", the data of "ZE0002.BIN" in a CF card is read out.<br>• If you select [Read filing data from GP FEPROM], the transfer data is to be the folder No. For example, if the transfer data is "2", the data in folder No. "2" in internal memory is read out.<br>• Even if [Read filing data from CF Card] is selected, you cannot read filing data on models that do not have a CF/SD card slot. |
| GP Type | Selects the series name of the GP for reading filing data.<br>• GP Series<br>Selects if the reading source is of GP Series.<br>• GP4000 Series/GP3000 Series/WinGP/LT3000<br>Selects if the reading source is of GP4000 Series, GP3000 Series, WinGP, or LT3000. |
| Save Folder | Selects a folder to save read out filing data.<br>C drive (C:) folder is to appear for initial setting.<br>To change the drive to display, click the list button to select new one. |
| Save Name | Sets a file name to save.<br>"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.<br>**NOTE**<br>• By specifying a macro code for the file name to save, you can set the file name as a node name or device data.<br>☞ "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.<br>(Example)<br>The file name which is written at 7:31 when specifying the save file name as "%h%m"<br>Checked: •••731•••.xls<br>Not checked: ••0731•••.xls |
| Reset | Returns [Saved File Name] to default ("%Y%M%D%h%m%s"). |

| Setting item | Setting content |
|---|---|
| File's Save format | Selects the saving format of read out filing data.<br>• Excel file (.xls)<br>Saves in Excel book format.<br>• Binary file (.bin)<br>Saves in binary file format. However, you cannot edit data saved in this format.<br>• CSV file (.csv)<br>Saves in CSV file format.<br>**NOTE**<br>• 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.<br>An uploaded CSV file is saved in the folder of the same name as the PFG file. |