

Backing Up Retained Variable Memory (XML Format)

Steps

This section describes how to back up the memory of retained variables from the PLC (xml format).

The following retained variables can be acquired in the xml format.

- Present values of retain attribute variables
- Present values in the DM, EM, and Holding Memory area used for CJ-series Units
- Absolute encoder home offset value

* If you need the "Backup data of memory used for CJ-series Units" or "Absolute encoder home offset value", obtain a backup in the xml format.

In addition, if you want to check the contents of the xml format backup data, you need to restore it to the Controller.

<Steps>

- ① Go online with the PLC.
- ② Select to backup variables and memory and select the target retained variables.
- ③ Execute the backup.

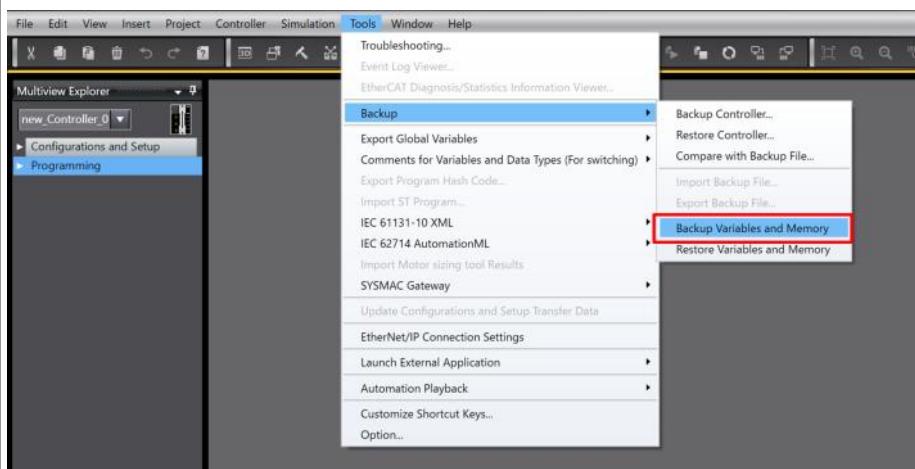
Detailed Steps

① Go online with the PLC.

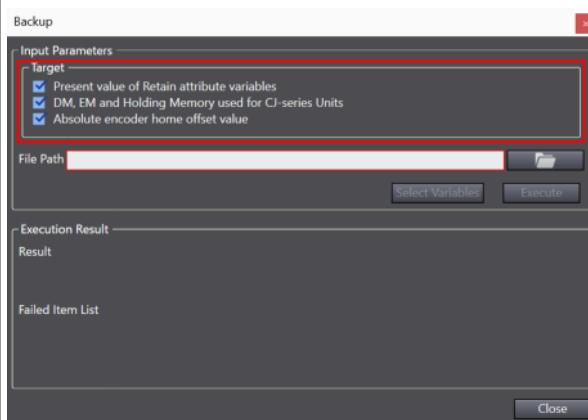
Refer to "[Going Online with an NJ/NX Controller](#)".

② Select to backup variables and memory and select the target retained variables.

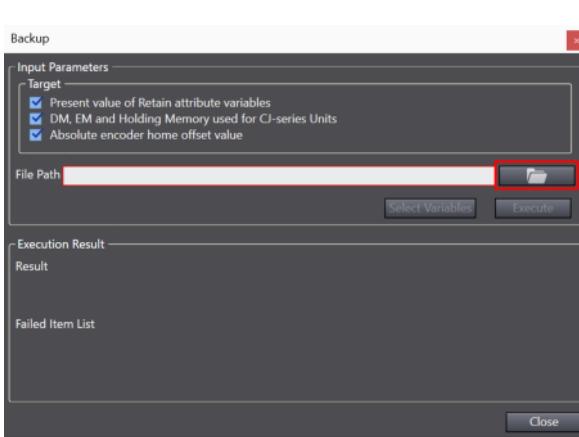
Click [Tools] - [Backup] - [Backup Variables and Memory] from the menu.



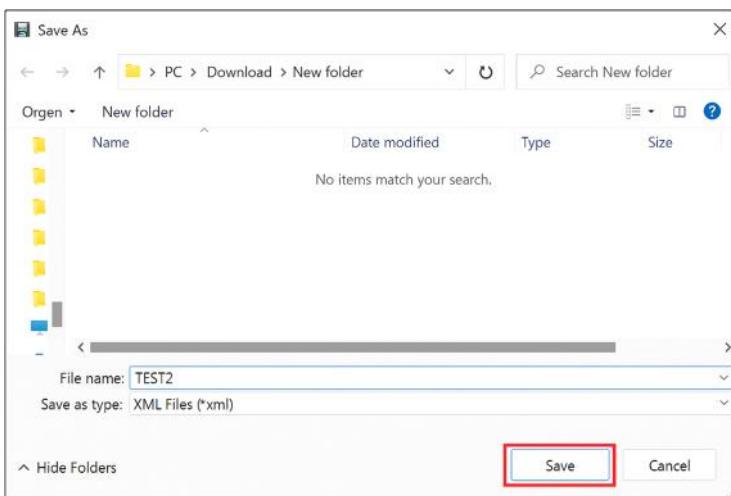
Select the check boxes for the target to acquire backup from the Input Parameters area.



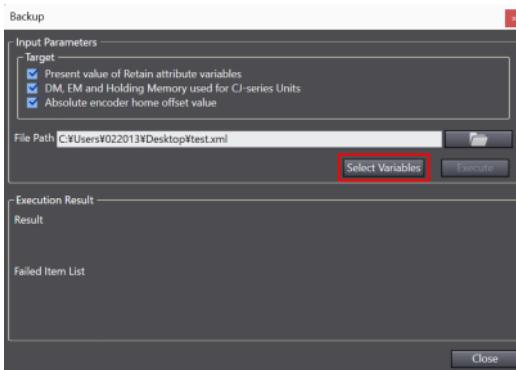
Click the button shown in the red frame in the figure below.



Enter the file name to be exported and select the "xml file" for the file format.



Click the [Select Variables] button.



Select the variables to acquire backup and press the [OK] button.

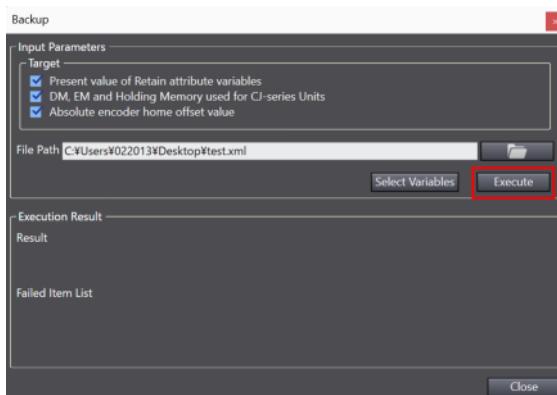
Program	Name	Data type
Global Variable	Card1PowerFail	BOOL
Global Variable	Card1PrgTransferCmc	Derivative
Global Variable	Card1RestoreCmd	Derivative
Global Variable	Card1RestoreCmdTan	BOOL
Global Variable	DeviceOutHoldCfg	WORD
Global Variable	PowerOnCount	UDINT
Global Variable	PowerOnHour	UDINT
Global Variable	Test1_BOOL	BOOL
Global Variable	Test2_INT	INT
Global Variable	Test3_REAL	REAL
Global Variable	Test4_LREAL	LREAL
Global Variable	Test5_ARRAY	Derivative
Global Variable	Test6_STRUCT	Derivative
Global Variable	Test7_STRING	Derivative
Global Variable	Test8_UNION	Derivative

OK

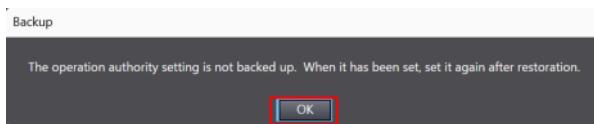
Cancel

③ Execute the backup.

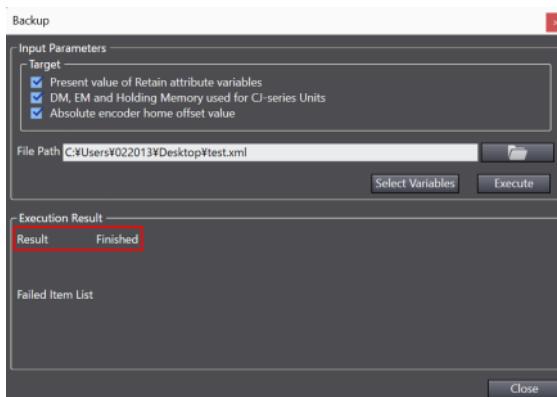
Click the [Execute] button.



Click the [OK] button.



If [Finished] is displayed in the Execution Result, it is finished. Click the [Close] button to close the window.



Remarks

• The Controller backup also contains backup data for the variable memory. Refer to [Obtaining Backups from NJ/NX](#). We recommend to use the xml format if you want to restore variables memory to another PLC, and if you need to restore data of the memory used for CJ-series and the absolute encoder home offset.

• The variables within the red frame in the figure below are system-defined variables held by the PLC. Those variables exist even though they are not defined by users.

Backup Option: Select Retain Attribute Variables to Ba...

Program	Name	Data type
Global Variable	_Card1PowerFail	BOOL
Global Variable	_Card1PrgTransferCmc	Derivative
Global Variable	_Card1RestoreCmd	Derivative
Global Variable	_Card1RestoreCmdTar	BOOL
Global Variable	_DeviceOutHoldCfg	WORD
Global Variable	_PowerOnCount	UDINT
Global Variable	_PowerOnHour	UDINT
Global Variable	Test1_BOOL	BOOL
Global Variable	Test2_INT	INT
Global Variable	Test3_REAL	REAL
Global Variable	Test4_LREAL	LREAL
Global Variable	Test5_ARRAY	Derivative
Global Variable	Test6_STRUCT	Derivative
Global Variable	Test7_STRING	Derivative
Global Variable	Test8_UNION	Derivative