

Uploading a Program from the NX to Sysmac Studio Quick Start Guide

Overview:

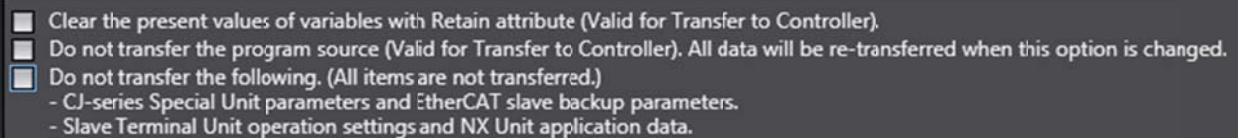
Sysmac Studio has several ways to upload programs from the standard and safety CPU to the computer. The method you select is dependent on the type of information you wish to retrieve.

1. Password is needed if one was used.
2. Need Sysmac Studio version 1.07 or higher.

Blank Program – Upload NJ and NX information

Use this method to upload everything into a blank program.

- 1.) Go online. (icon OR Menu -> controller -> online)
- 2.) Multiview explorer -> NJ CPU -> Menu -> Controller -> Synchronization
- 3.) Make sure the “Do not transfer the following” is not checked



- 4.) Transfer from controller -> yes -> yes -> recompare (everything should now be white) -> close
- 5.) Go offline

Existing Program – Upload only NX Safety (Connection thru NX)

This method is used when an existing program exists and you do not want to overwrite the NJ information.

- 1.) Disconnect the USB (cable to download program from computer to CPU) cable from the NJ side.
- 2.) Connect the USB cable to the coupler that has the NX CPU.
- 3.) In Sysmac Studio -> Multiview explorer -> Configurations and Setup -> EtherCAT -> Select node with the NX CPU -> right click -> Coupler Connection (USB) -> online -> OK -> OK -> OK
- 4.) Select node with CPU -> right click -> Coupler connection (USB) -> Transfer from coupler -> Yes -> OK -> OK
- 5.) Select node with CPU -> right click -> Coupler connection (USB) -> Offline

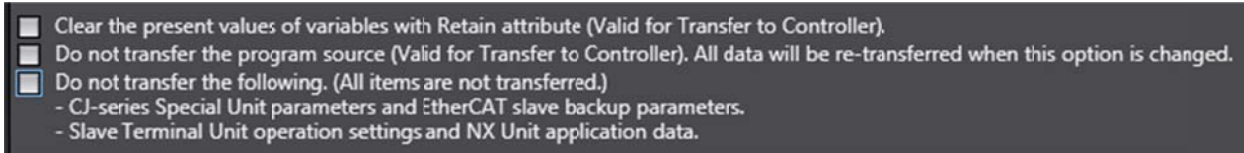
Existing Program – Upload only NX Safety (Connection through NJ)

This method is used when an existing program exists and you do not want to overwrite the NJ information.

- 1.) Select NJ CPU.



- 2.) Go online. (icon OR Menu -> controller -> online)
- 3.) Multiview explorer -> NJ CPU -> Menu -> Controller -> Synchronization
- 4.) Make sure “Do not transfer the following” is not selected.



- 5.) Select the box for the coupler with the NX CPU. All of the nodes on it will also automatically be selected.

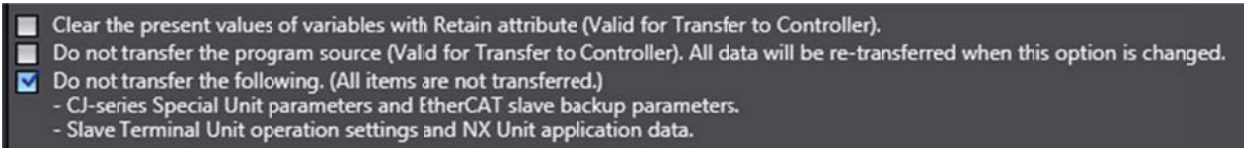
Synchronization						
	Computer: Data Name	Computer: Update Da	Controller: Update Da	Controller: Data Name	Compare	
<input type="checkbox"/>	▼ NIS01	1/23/2014 7:29:33 AM	1/23/2014 7:29:33 AM	▼ NIS01		
<input checked="" type="checkbox"/>	▼ EtherCAT	1/29/2014 8:07:58 AM	1/23/2014 7:29:33 AM	▼ EtherCAT		
<input checked="" type="checkbox"/>	▼ Node1 : NX-ECC201(E	1/29/2014 8:07:58 AM	1/23/2014 7:29:30 AM	▼ Node1 : NX-ECC201(E		
<input checked="" type="checkbox"/>	└ new_SafetyCPU0	7/2/2013 9:58:53 PM	7/2/2013 9:58:53 PM	└ new_SafetyCPU0		
<input checked="" type="checkbox"/>	└ Unit 2 : NX-SID800 (7/2/2013 9:58:53 PM	7/2/2013 9:58:53 PM	└ Unit 2 : NX-SID800 (
<input checked="" type="checkbox"/>	└ Unit 3 : NX-SIH400 (7/2/2013 9:59:14 PM	7/2/2013 9:59:14 PM	└ Unit 3 : NX-SIH400 (
<input checked="" type="checkbox"/>	└ Unit 4 : NX-SOD400	7/2/2013 9:59:18 PM	7/2/2013 9:59:18 PM	└ Unit 4 : NX-SOD400		
<input checked="" type="checkbox"/>	└ Unit 5 : NX-ID4342 (7/2/2013 9:59:57 PM	7/2/2013 9:59:57 PM	└ Unit 5 : NX-ID4342 (
<input checked="" type="checkbox"/>	└ Unit 6 : NX-OD4121	7/2/2013 10:00:02 PM	7/2/2013 10:00:02 PM	└ Unit 6 : NX-OD4121		
<input type="checkbox"/>	▼ CPU/Expansion Racks	1/23/2014 7:29:33 AM	1/23/2014 7:29:33 AM	▼ CPU/Expansion Racks		
<input type="checkbox"/>	▼ CPU Rack	7/2/2013 9:48:16 PM	7/2/2013 9:48:16 PM	▼ CPU Rack		
<input type="checkbox"/>	└ Units	7/2/2013 9:48:16 PM	7/2/2013 9:48:16 PM	└ Units		

- 6.) Transfer from Controller -> yes -> OK -> Recompare -> Close

Blank Program – Upload only NJ and hardware configuration

Use this method to upload the NJ information and hardware configuration into a blank program.

- 1.) Go online. (icon OR Menu -> controller -> online)
- 2.) Multiview explorer -> NJ CPU -> Menu -> Controller -> Synchronization
- 3.) Make sure the “Do not transfer the following” is checked.



- 4.) Transfer from controller -> yes -> yes -> recompare (everything should now be white) -> close
- 5.) Go offline.

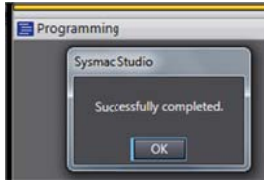
Blank Program – Backup program while NJ and NX are in operation

Use this method to backup program from the NJ and NX while they are running.

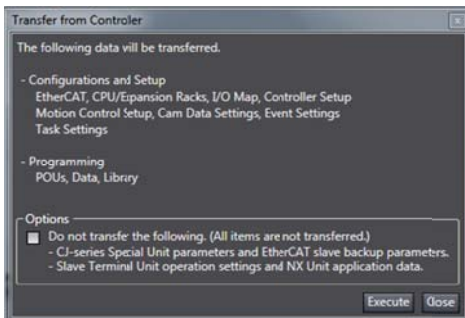
1. Connect USB or Ethernet cable from the computer to the NJ.
 - a. If using Ethernet, on NJ use Port 1, Ethernet I/P
 - b. If using USB, open door in upper right corner
2. Open up Sysmac Studio
3. Select “Connect to Controller”



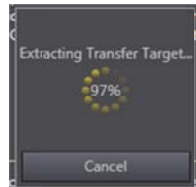
4. Select “OK” when the successfully completed popup appears and the yellow bar indicates it is online



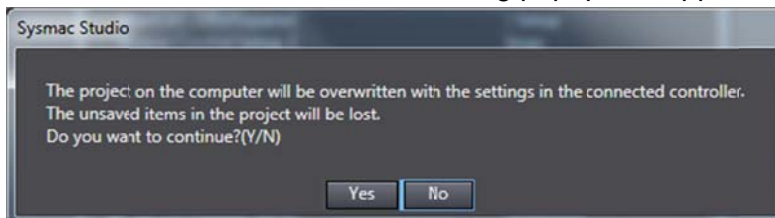
5. Menu bar -> Controller -> Transfer -> From controller (Ctrl + Shift + T)



6. Unselect the “Do not transfer the following” box in the options section
7. Execute
8. It will show this popup while connecting



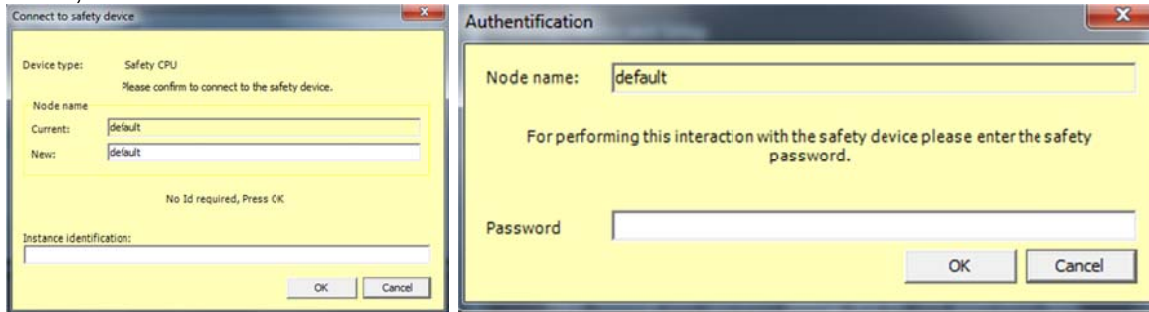
9. Select “Yes” when the override setting popup box appear



10. This popup will appear while it uploads



11. To upload the NX program, select "OK" for the following popup boxes. Enter password if one is being used, otherwise select OK.



12. Pop appears when completed. Select "OK"

