Downloading an NX-SL Safety Program

Steps

This section describes how to download a program to the Safety CPU Unit.

① Go online with the Safety CPU Unit.
② Change the operating mode 1 (RUN Mode => PROGRAM Mode)
③ Change the operating mode 2 (PROGRAM Mode => DEBUG Mode)
④ Validate safety.
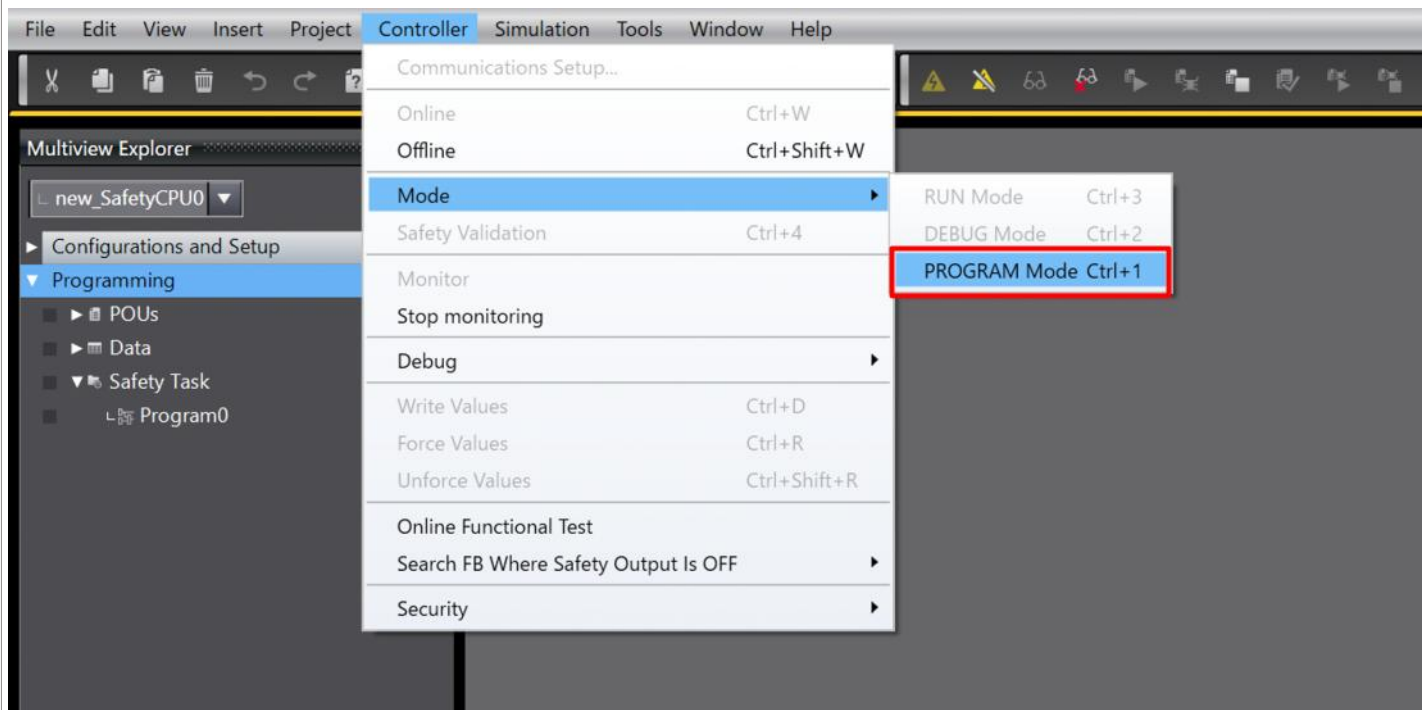⑤ Change the operating mode 3 (DEBUG Mode => RUN Mode)

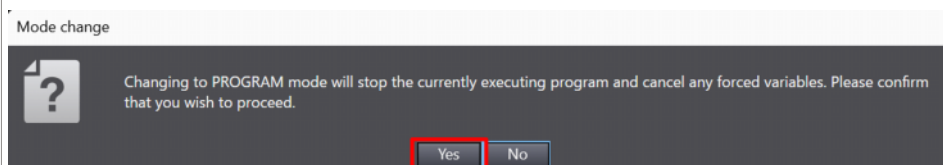| Detailed Steps |
|---|

① Go online with the Safety CPU Unit.
Refer to **Going Online with an NX-SL Safety CPU Unit** for the instructions to go online.

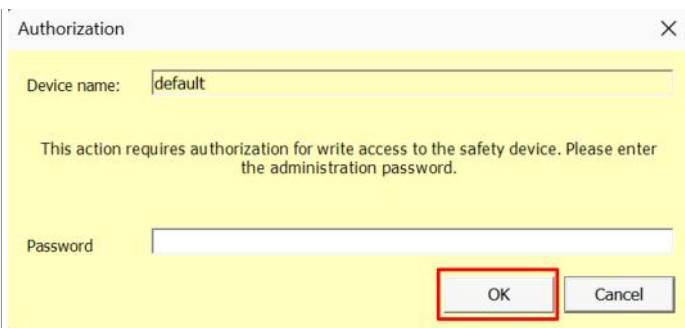**② Change the operating mode 1 (RUN Mode => PROGRAM Mode)**
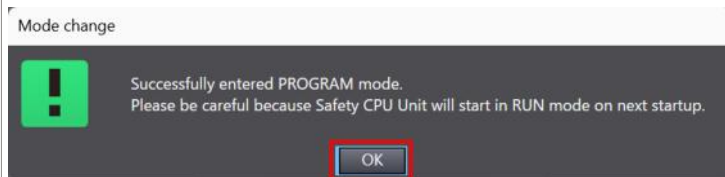Click [Controller] - [Mode] - [Program Mode] from the menu bar.

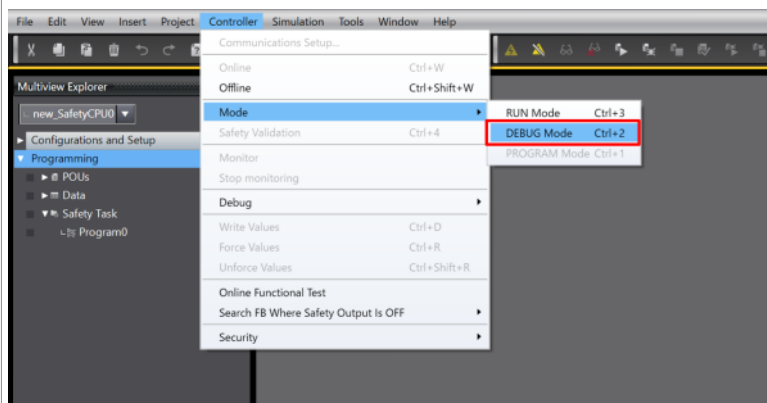Click the [Yes] button on the Mode change dialog box.

Enter the password on the password confirmation screen and click the [OK] button. If you have not set a password, click the [OK] button without entering anything.
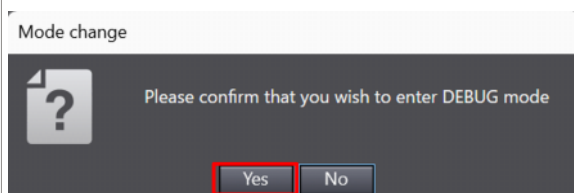
A dialog box that indicate successful switching to the PROGRAM Mode is displayed.
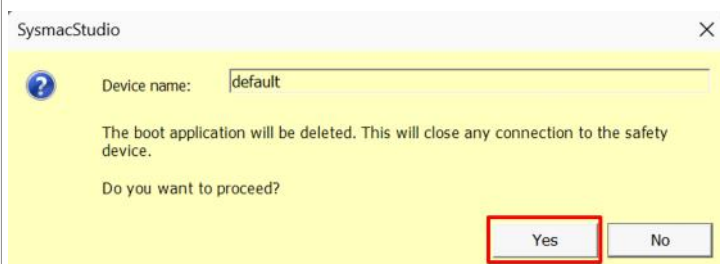

③ **Change the operating mode 2 (PROGRAM Mode => DEBUG Mode)**
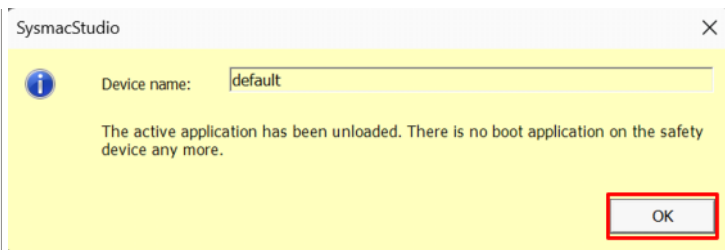Click [Controller] - [Mode] - [Debug Mode] from the menu bar.

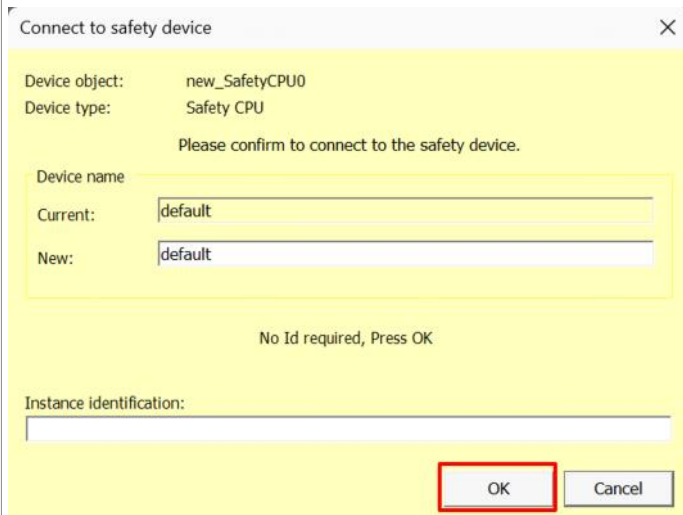Click the [Yes] button on the mode change dialog box.

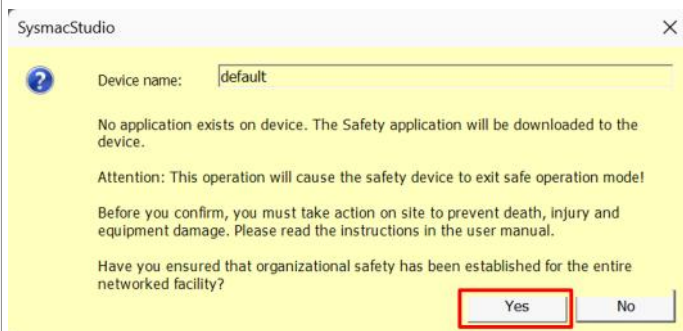Click the [Yes] button on the window shown below.
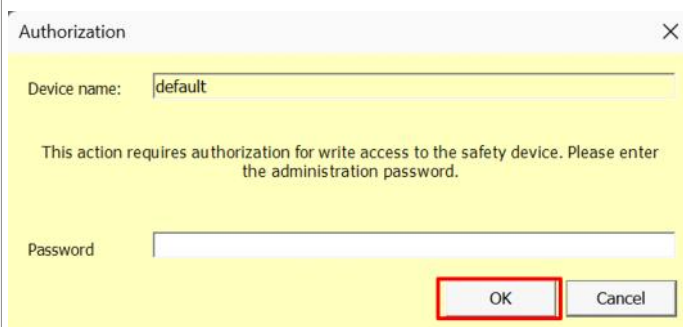

Click the [OK] button.
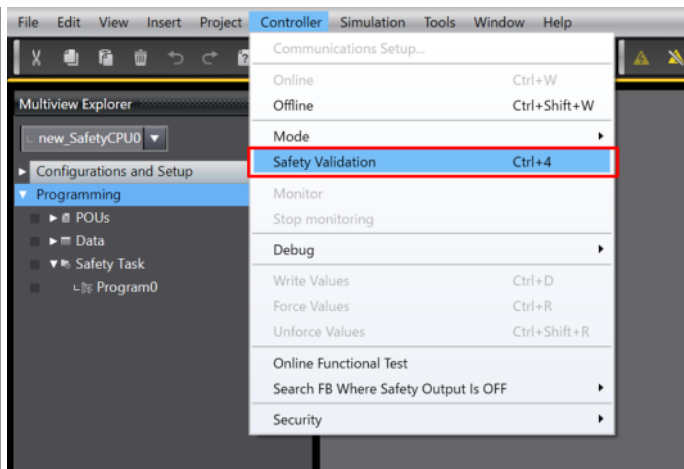
Click the [OK] button.

Click the [Yes] button.

Enter the password and click the [OK] button. If you have not set a password, click the [OK] button without entering anything.
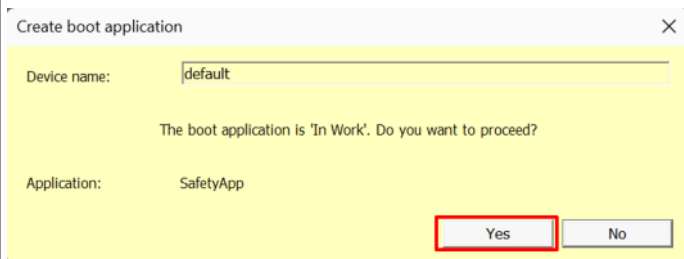

④ **Validate safety.**
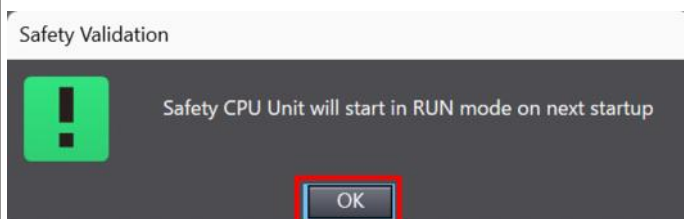Click [Controller] - [Safety Validation] from the menu bar.

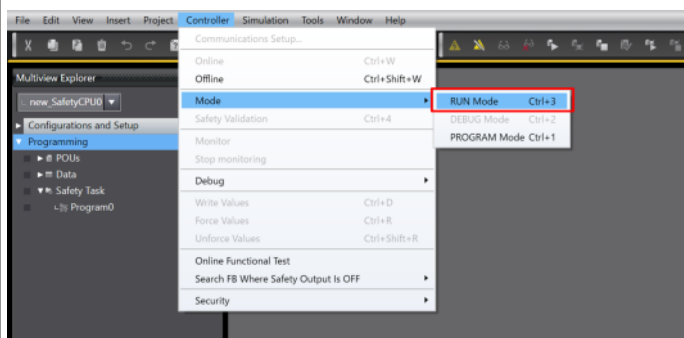Click the [Yes] button.
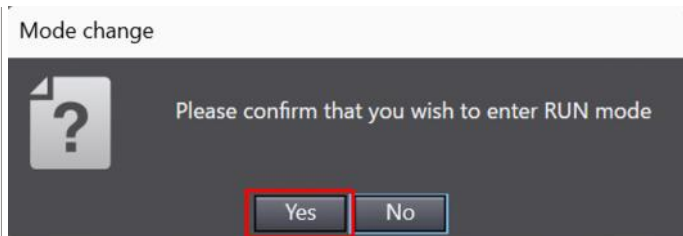

Click the [OK] button.

Click the [OK] button.

⑤ **Change the operating mode 3 (DEBUG Mode => RUN Mode)**
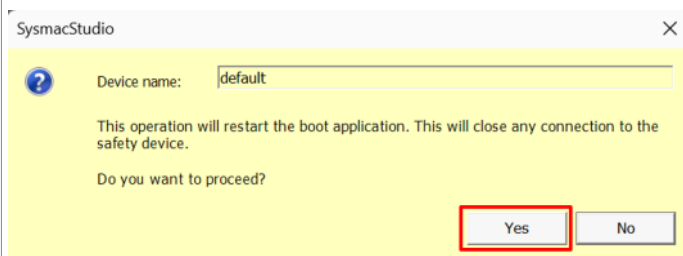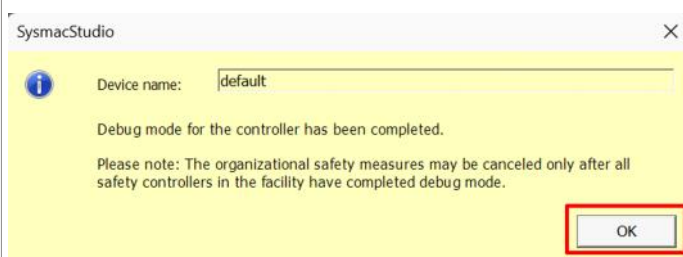Click [Controller] - [Mode] - [RUN Mode] from the menu bar.

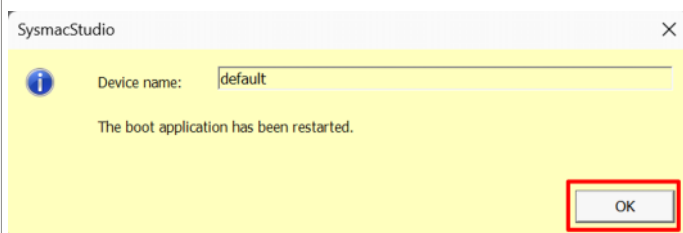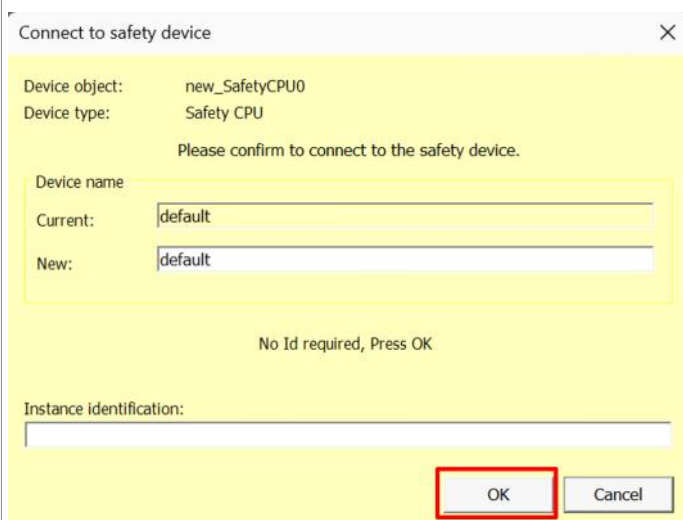Click the [Yes] button on the mode change dialog box.

Mode change

? Please confirm that you wish to enter RUN mode

[Yes] [No]

Click the [Yes] button.

SysmacStudio ✕

Device name: default

This operation will restart the boot application. This will close any connection to the safety device.

Do you want to proceed?

[Yes] [No]

Click the [OK] button.

SysmacStudio ✕

Device name: default

Debug mode for the controller has been completed.

Please note: The organizational safety measures may be canceled only after all safety controllers in the facility have completed debug mode.

[OK]

Click the [OK] button.

SysmacStudio ✕

Device name: default

The boot application has been restarted.

[OK]

Click the [OK] button.

Connect to safety device ✕

Device object: new_SafetyCPU0
Device type: Safety CPU

Please confirm to connect to the safety device.

Device name

Current: default

New: default

No Id required, Press OK

Instance identification:

[OK] [Cancel]

The download is now complete and the Safety CPU Unit is in RUN Mode.