



FT Sensor & Torque sensor



STEP 1.

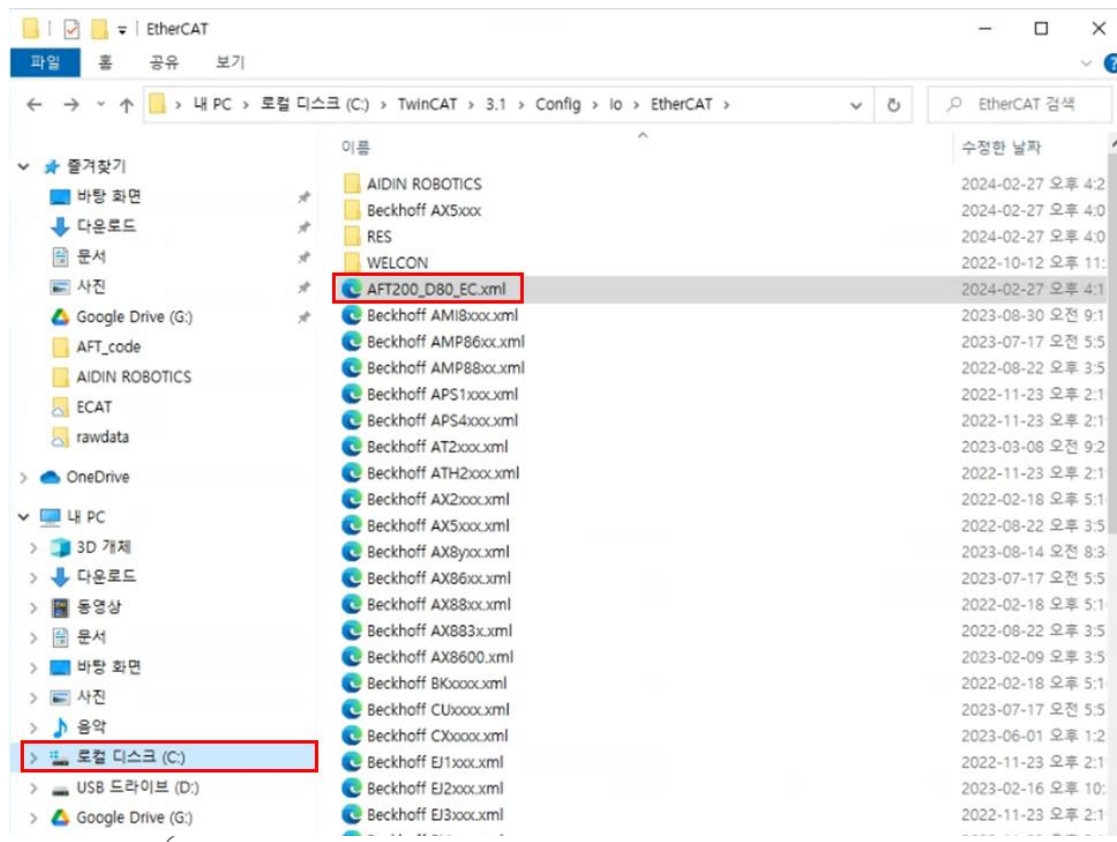
ESI(EtherCAT Slave Information) XML file for EtherCAT

- XML file name : AFT200-D80-EC.xml

- [AFT200 D80 EC.xml](#)

- Download the XML file and paste it to the installed directory of TwinCAT.

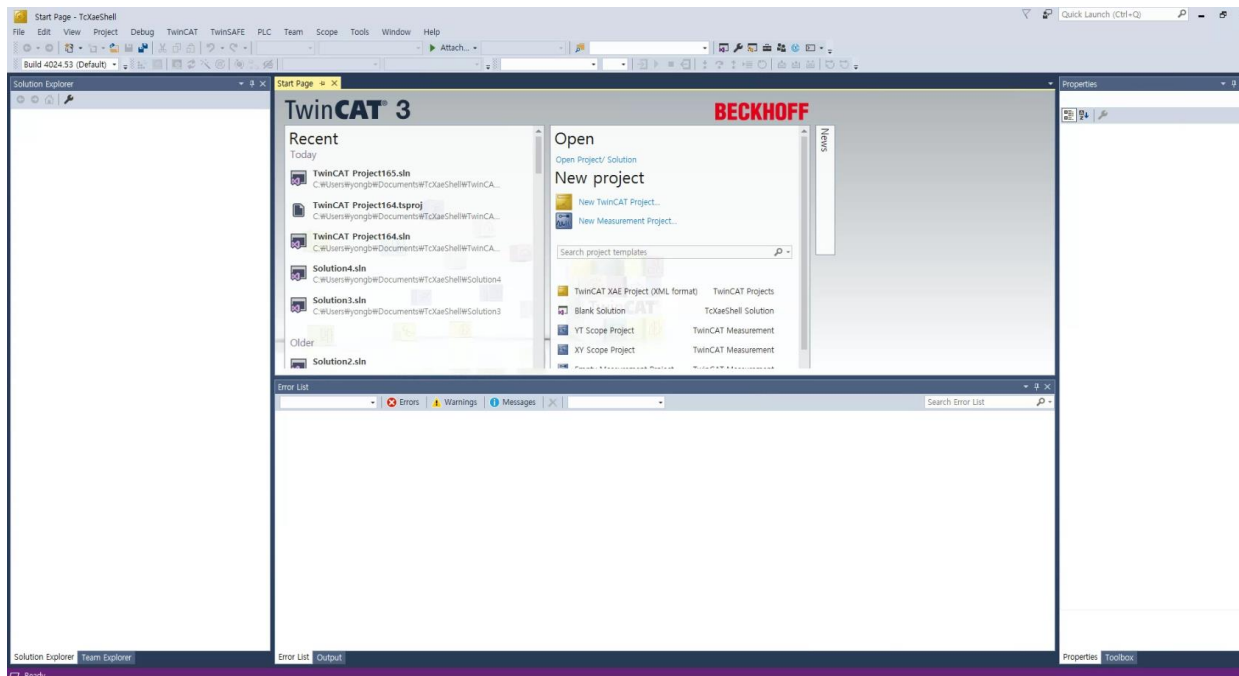
"C:/TwinCAT/3.1/Config/lo/EtherCAT"



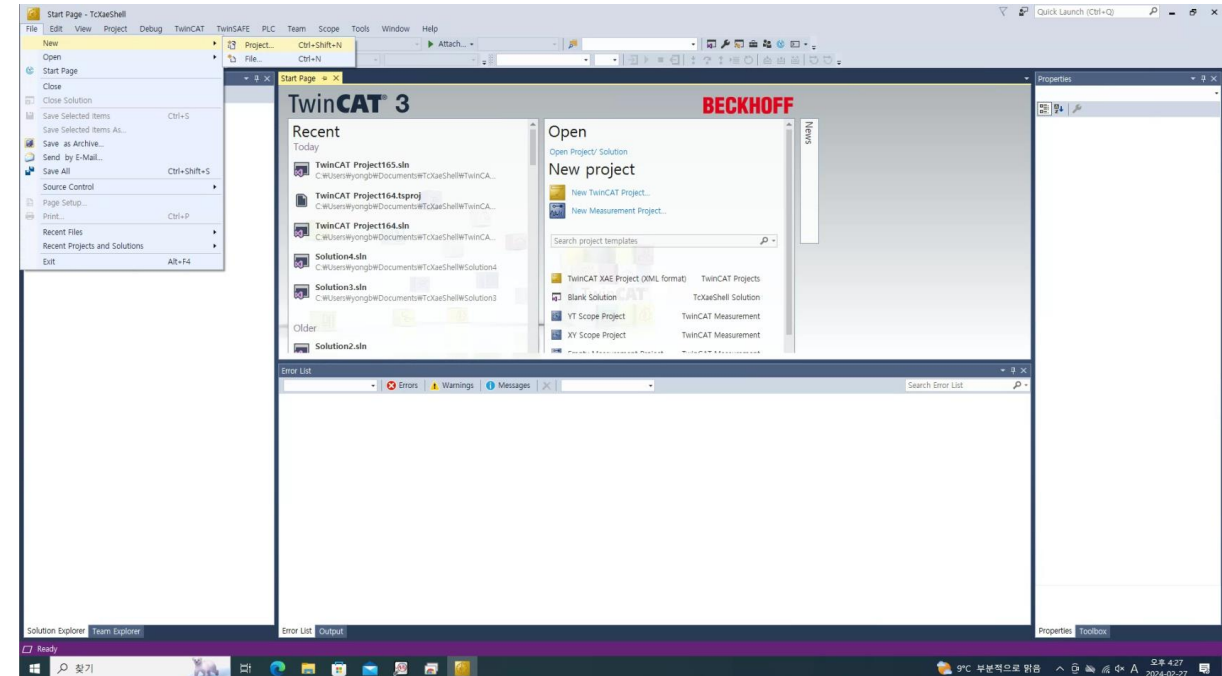
STEP 2.

- Run TwinCAT XAE Shell program
- Create a TwinCAT project using Visual Studio.
- Connect a LAN cable to EtherCAT Master (Ethernet adapter).
- Turn on AFT sensor.

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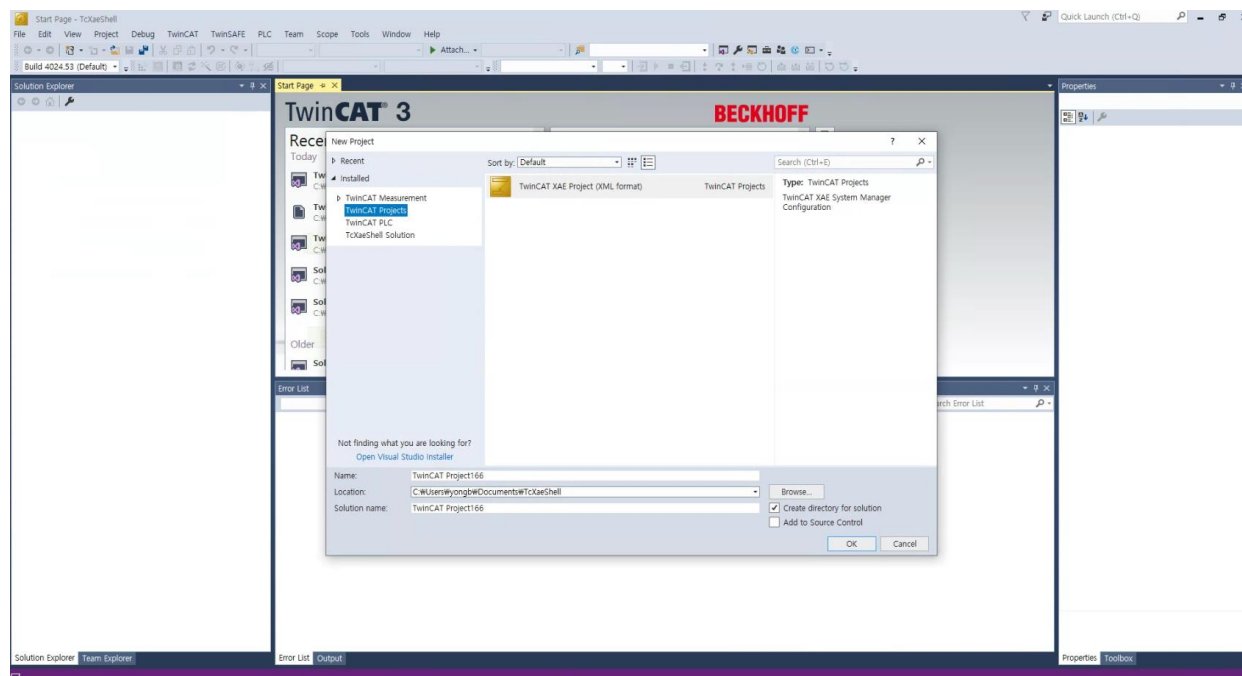
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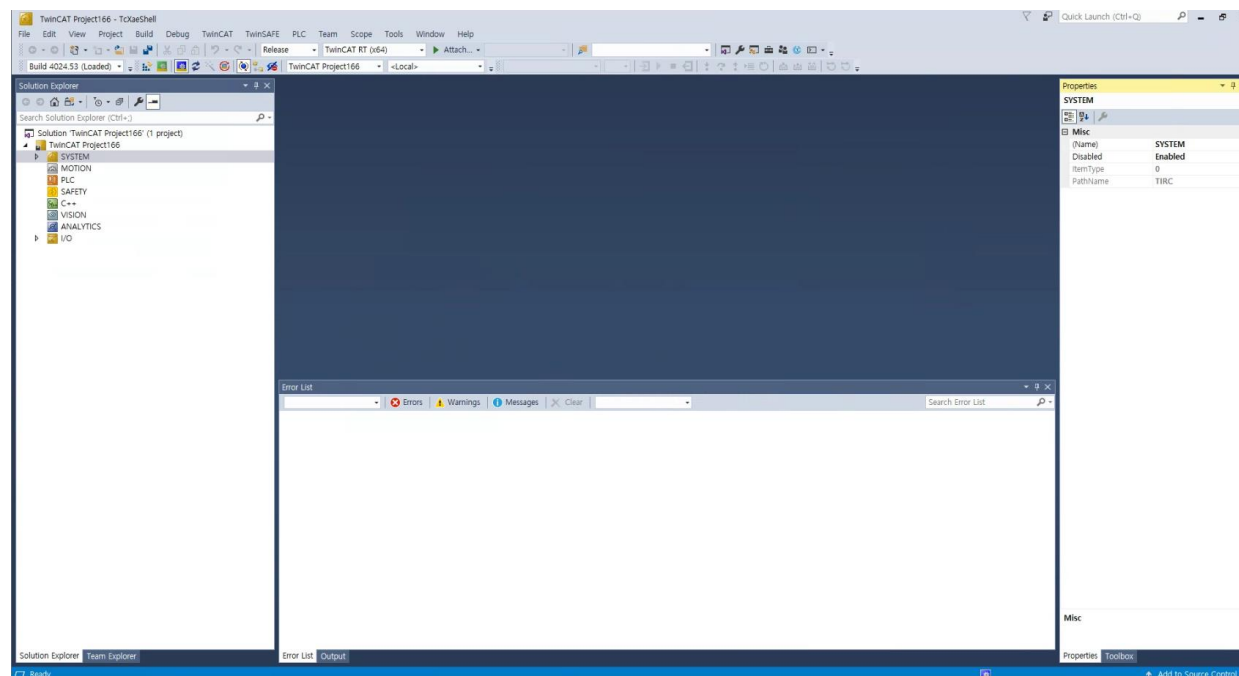
STEP 2.

- Create a TwinCAT project using Visual Studio.

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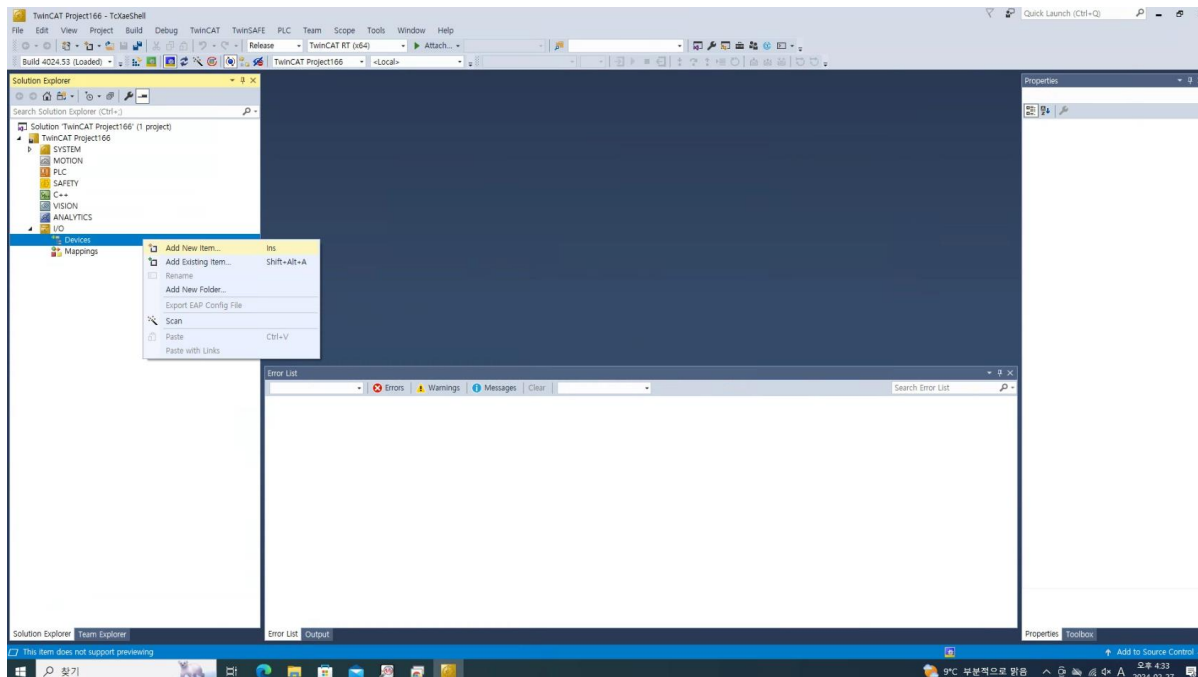
②



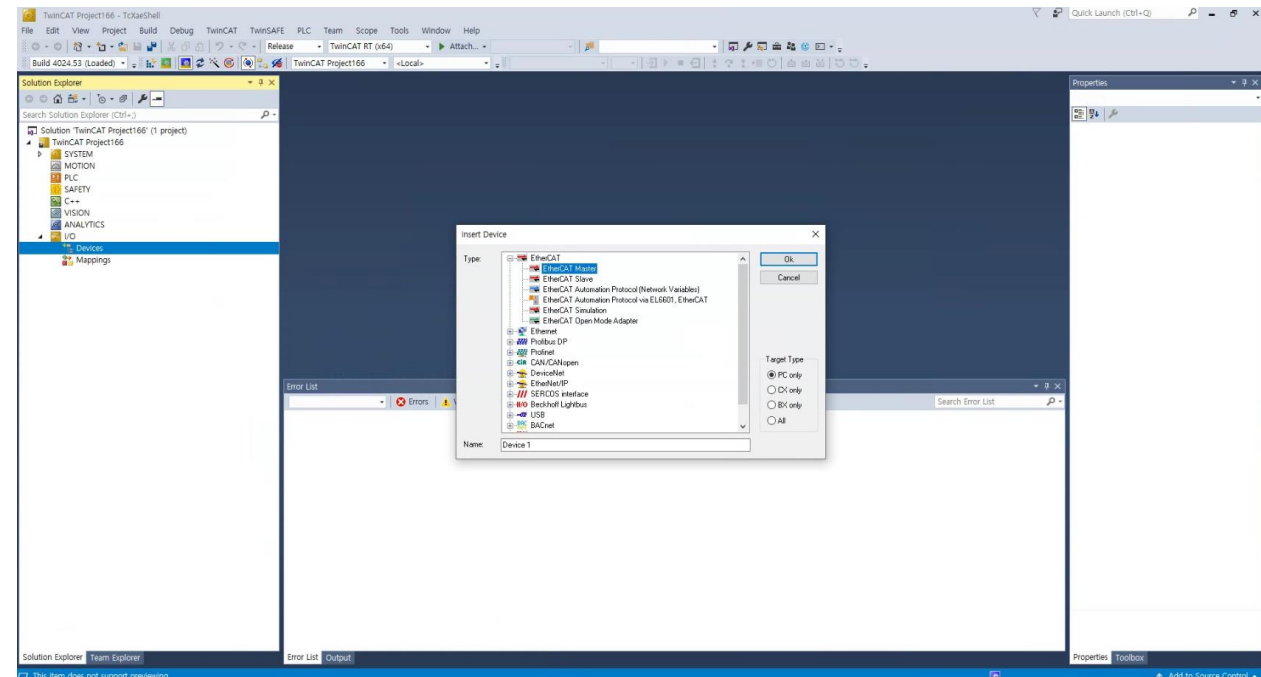
STEP 3.

- Select I/O / Devices / Add New item
- Click EtherCAT Master and then click Ok Button

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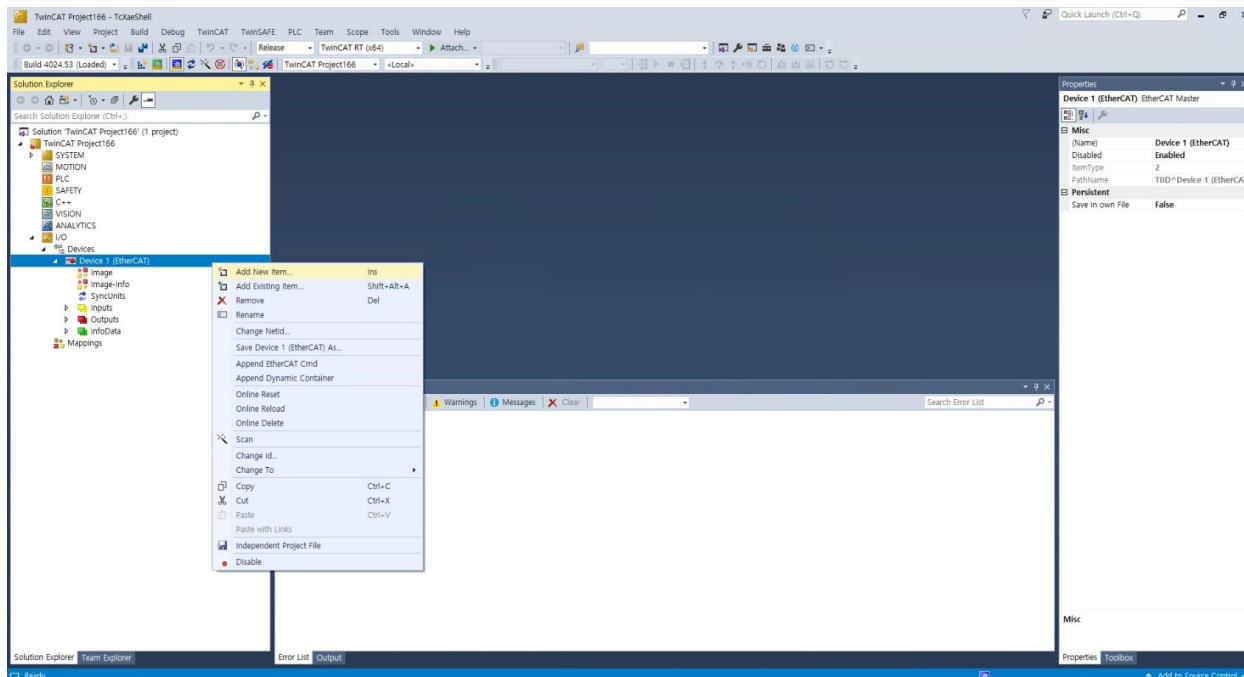
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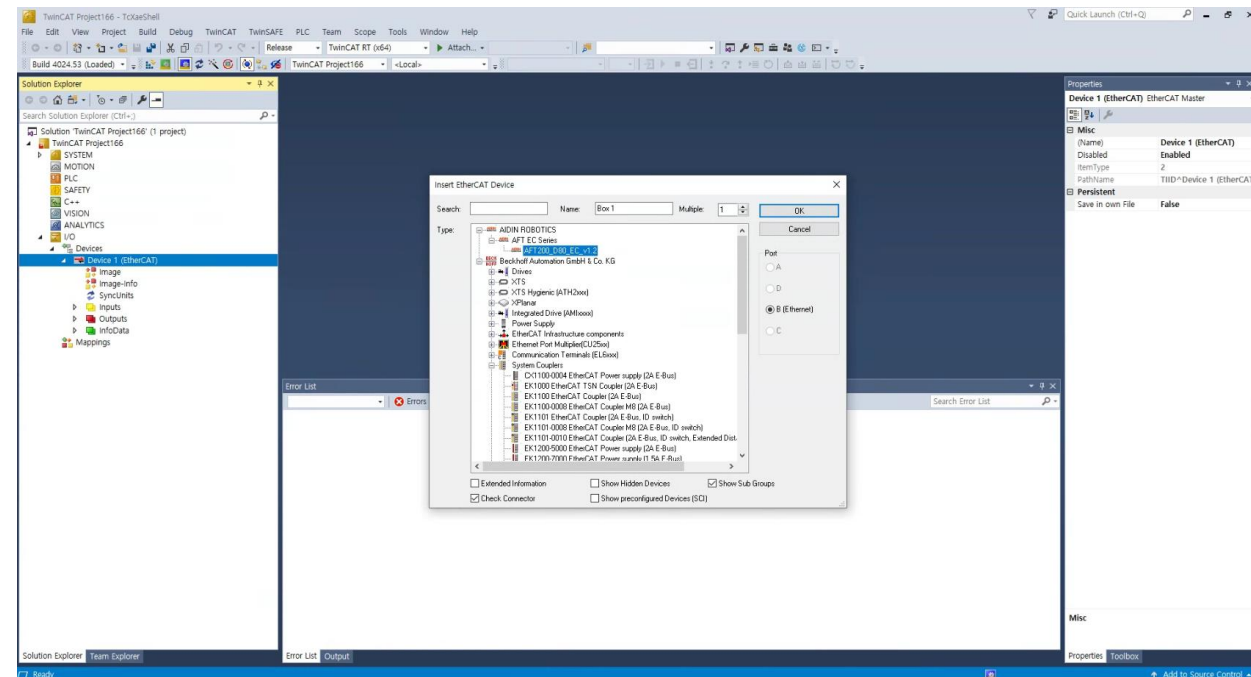
STEP 4.

- Select I/O / Devices / Device 1(EtherCAT) / Add New item
- Click AIDIN ROBOTICS / AFT EC Series / AFT200-D80-EC_v1.2 and then click Ok Button

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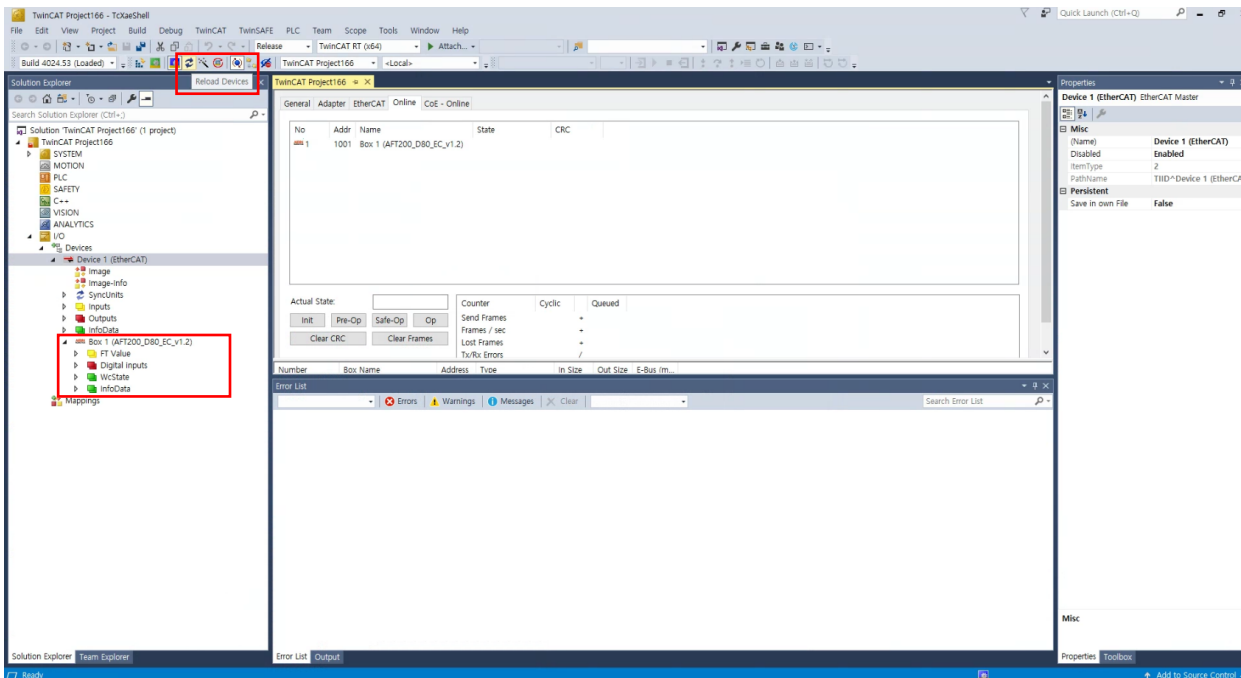
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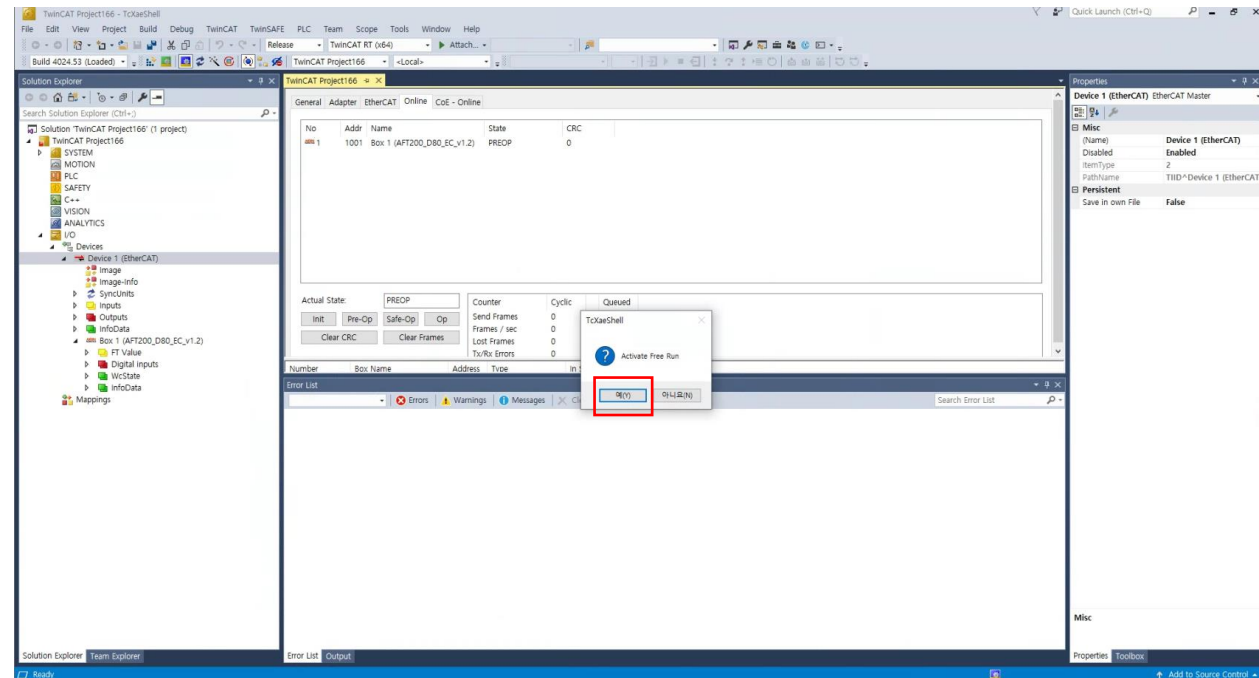
STEP 5.

- If it had progressed to step 4, the box 1 icon would have been created
- Click Yes in the TxXaeShell pop-up window

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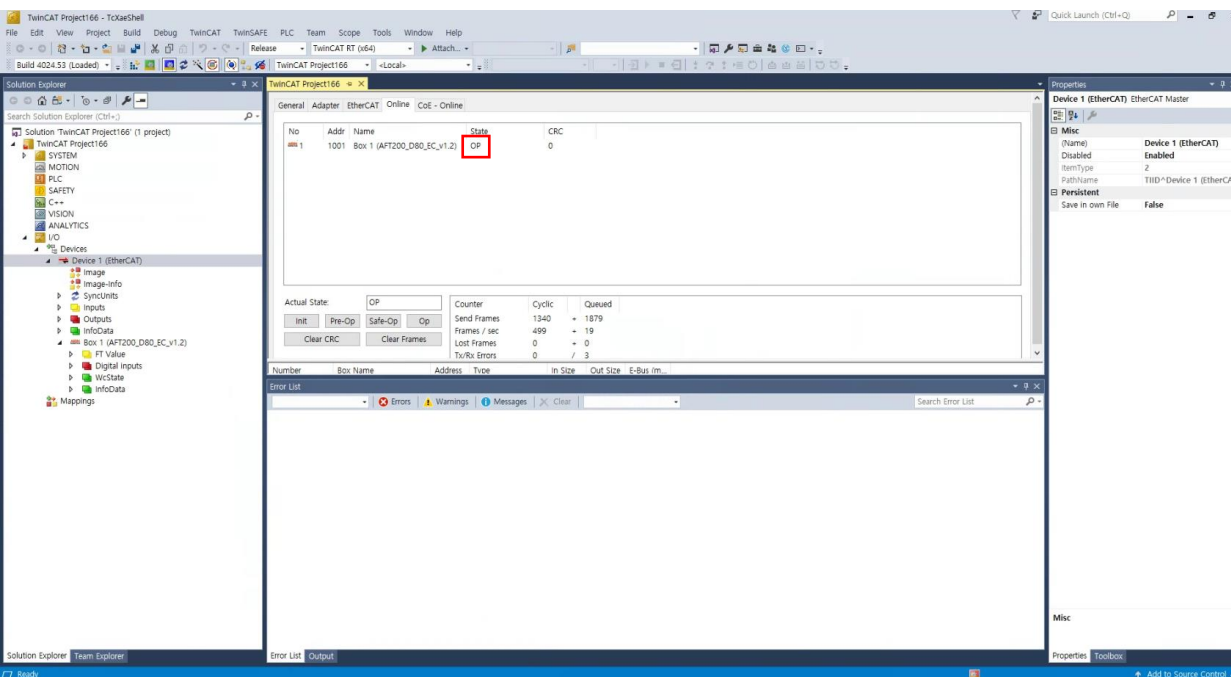
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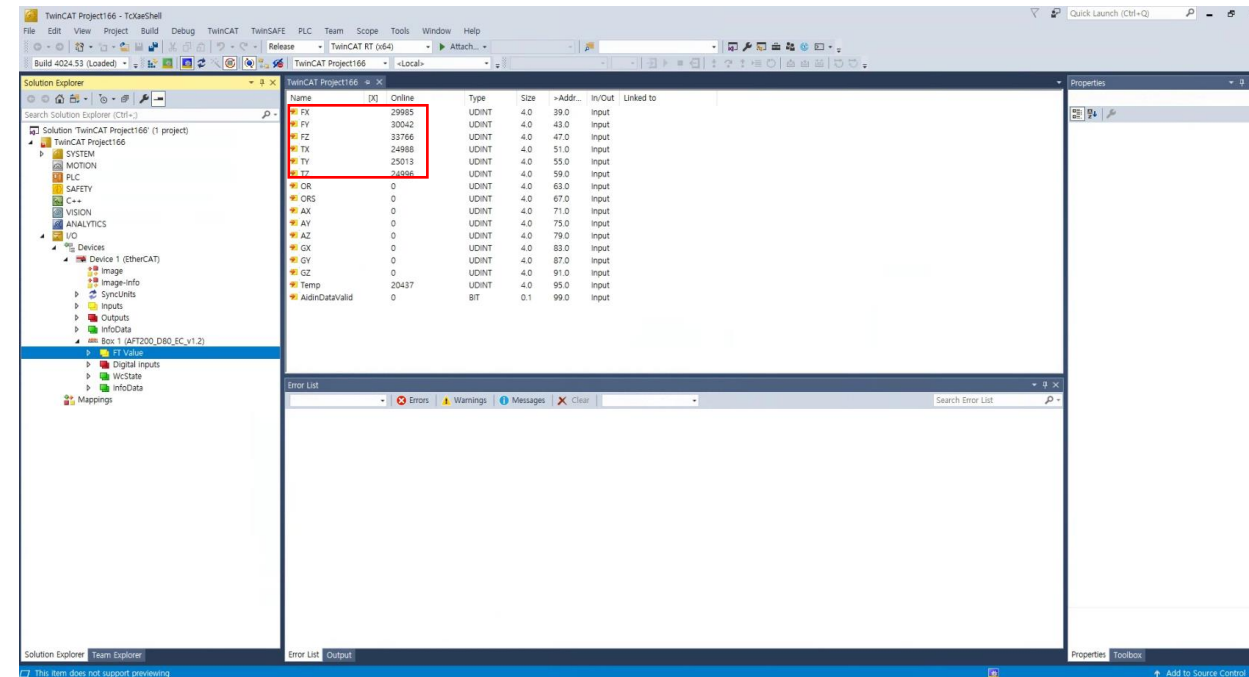
STEP 6.

- If it has progressed to step 5, check if the state of Box 1 has been changed to OP. If it shows as PREOP or INIT, you should check if the xml file is uploaded to the correct location and if the file is correct
- Verify that I/O / Devices / Device 1 (EtherCAT) / Box 1 (AFT200_D80_EC_v1.2) / FT value displays the following values
- Force [N] = Force output/100-300, Torque = Torque output/500-50

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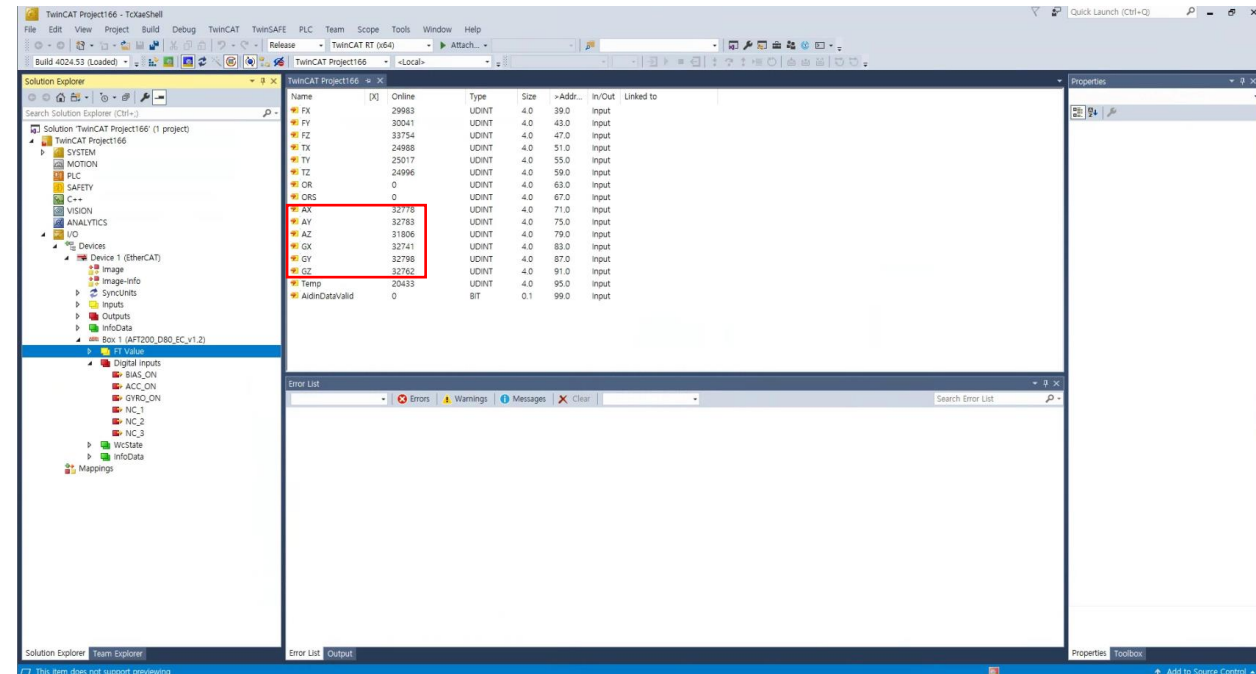
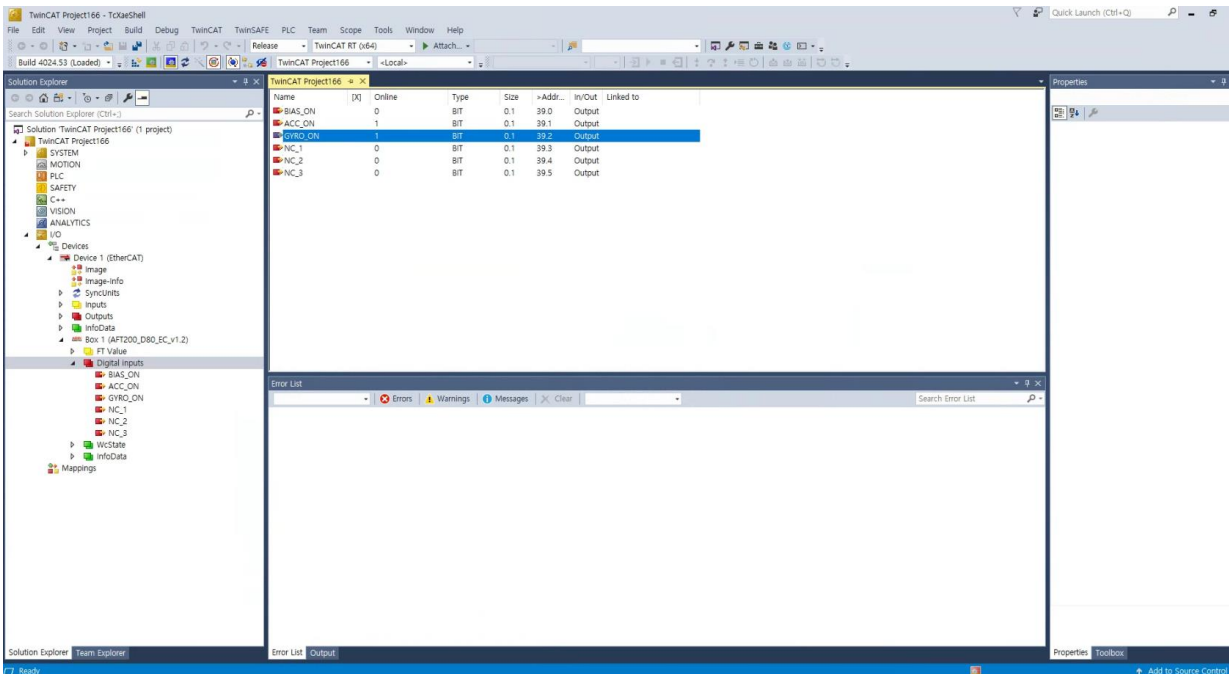


STEP 7.

- I/O / Devices / Device 1 (EtherCAT) / Box 1 (AFT200_D80_EC_v1.2) / Digital inputs are the comments sent to the sensor
 - BIAS_ON : zeroset the current sensor value
 - ACC_ON : Acceleration value activated
 - Acceleration = (Acceleration value – 32767)/1000
 - GYRO_ON : gyroscope value activated (NOT supported, To be updated)

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Thank you

AIDIN ROBOTICS

