

RTEC1616 – TwinCAT3.0 Quick Started V1.0



Prepare

- RETC1616
- TwinCAT installed in a windows system
- RJ45 cable
- 24V DC power supply

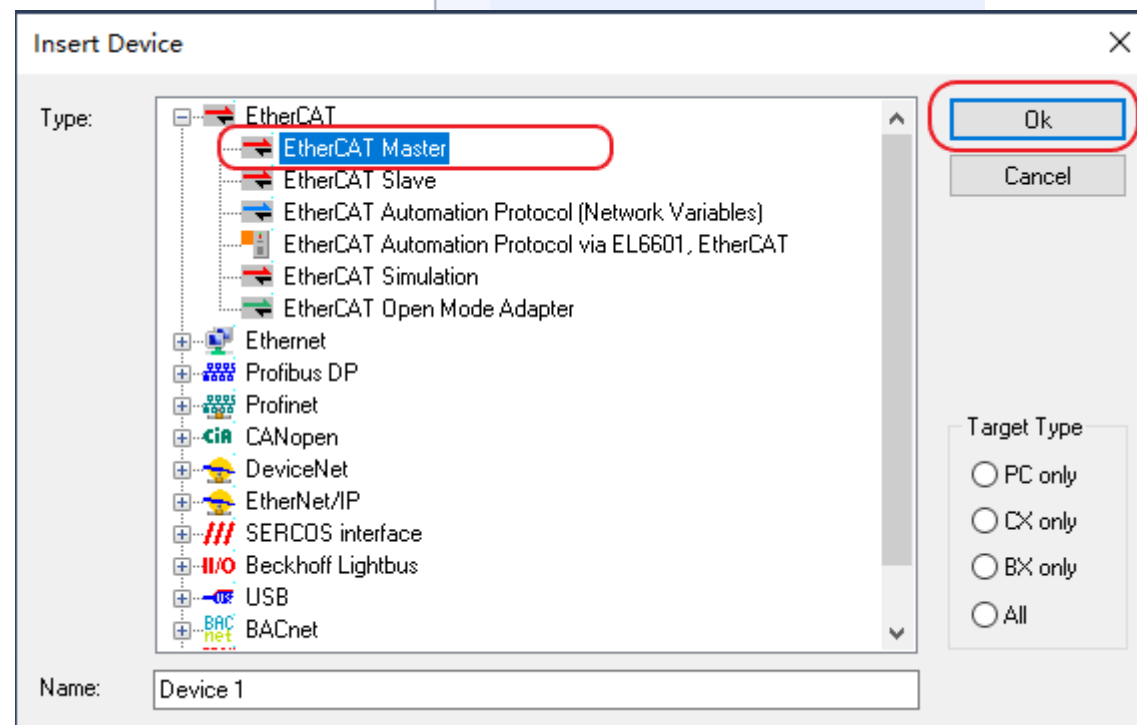
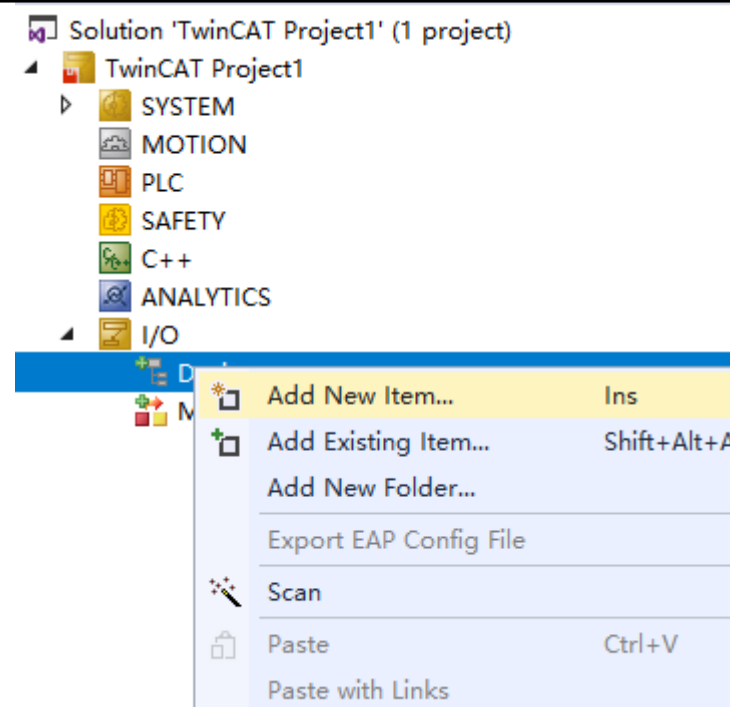




Actions

After starting the TwinCAT System Manager from windows start menu:

- ① Right Click I/O-Devices and select „Add New Item... “
- ② Create an EtherCAT master device by double click





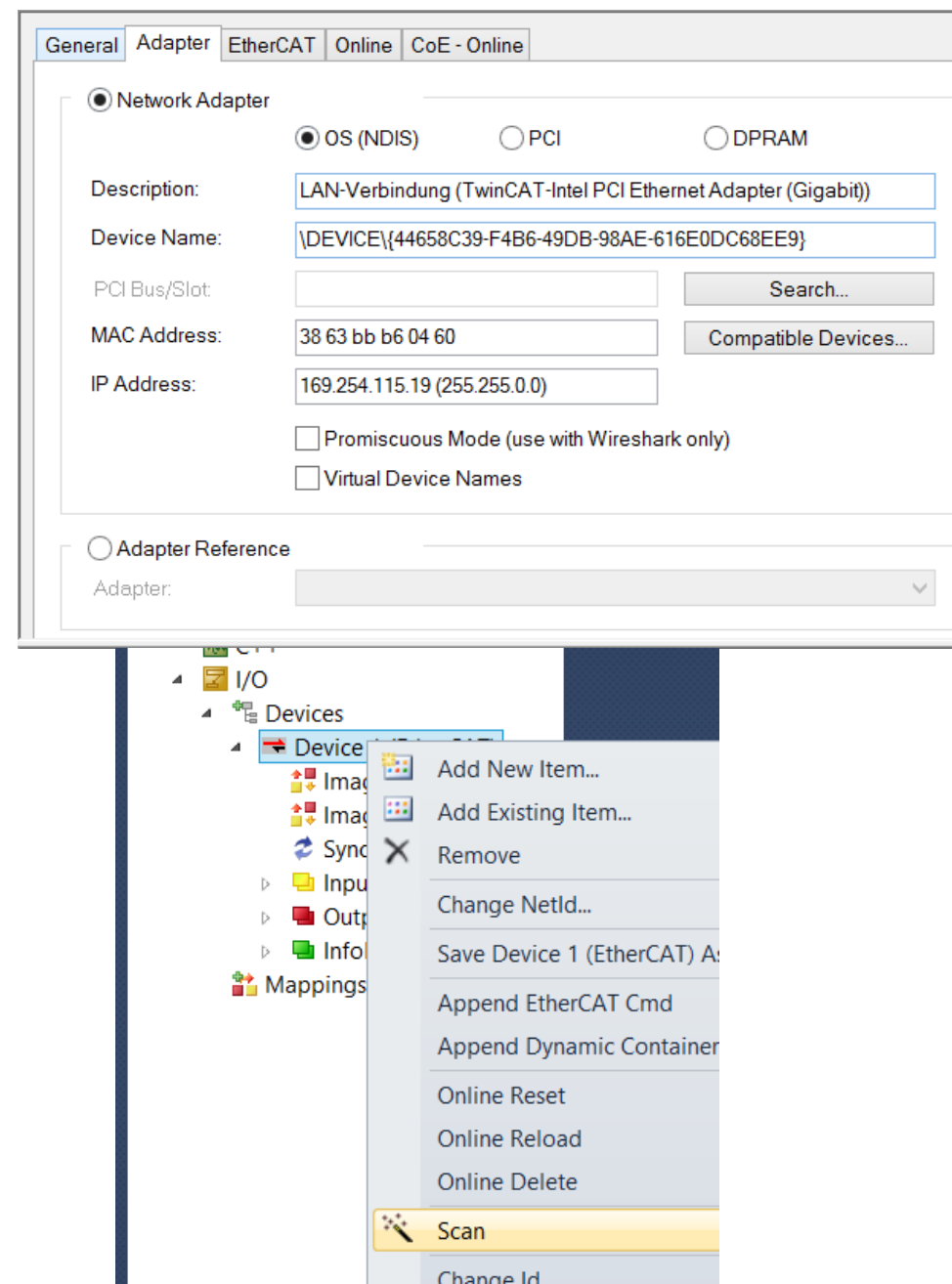
Actions

- ③ Select the network adapter you want to use (search and select).

Application hint:

In case the device is not found please install the respective device driver by following the instructions given by TwinCAT through the „Compatible Devices...” button.

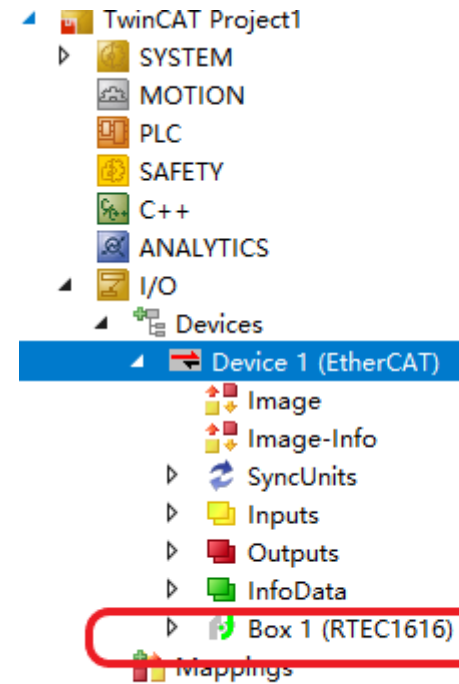
- ④ Right Click EtherCAT master and select „Scan Boxes...”





OBSERVATIONS

- ① The slave appears as a node on the EtherCAT master bus
- ② The RUN-LED is flashing indicating PREOP-state





OBSERVATIONS

- ③ EtherCAT master view:
Inside the EtherCAT master online state you see the queued frames counting up, the connected slave and its PREOP state.
- ④ EtherCAT slave view:
The PREOP-state of the slave is indicated within the TwinCAT system manager

The top screenshot shows the TwinCAT Project1 interface with the 'Online' tab selected. The 'EtherCAT' tab is also visible. The 'Device 1 (EtherCAT)' is highlighted in the Solution Explorer. The 'Actual State' is PREOP. The 'Queued' counter shows 34700. The 'Number' column shows 1, 'Box Name' is Box 1 (RTEC1616), 'Address' is 1001, 'Type' is RTEC1616, 'In Size' is 2.0, and 'Out Size' is 10.0.

The bottom screenshot shows the TwinCAT Project1 interface with the 'Online' tab selected. The 'EtherCAT' tab is also visible. The 'Device 1 (EtherCAT)' is highlighted in the Solution Explorer. The 'Box 1 (RTEC1616)' is highlighted in the Solution Explorer. The 'State Machine' shows 'Init' as the current state. The 'Current State' is PREOP and the 'Requested State' is PREOP. The 'DLL Status' shows Port A: Carrier / Open, Port B: No Carrier / Closed, Port C: No Carrier / Closed, and Port D: No Carrier / Closed. The 'File Access over EtherCAT' section shows 'Download...' and 'Upload...' buttons.



- 616 read input



Set output

Thanks