



Platform & Hardware

This quick start guide describes how to install and monitor the Emotron VSD device with the TwinCAT System Manager.

Install TwinCAT from Beckhoffs. The version's we have used in the example is:

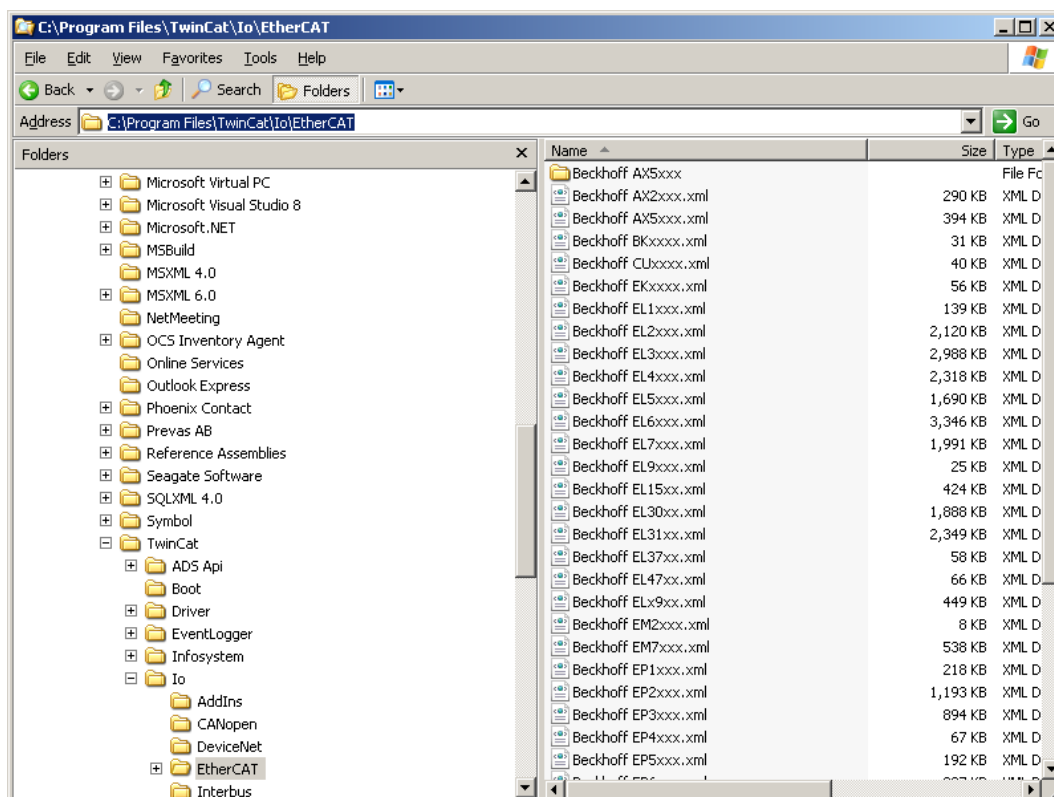
System manager V. 2.11.0 (Build 1572)

TwinCAT v2.11 (Build 1553)

PLC Control Version v2.11 (Build 1016)

Prepare

Copy the Emotron ESI file "*EtherCat_VSD_V_1_xx_Emotron.xml*" to `..\TwinCat\Io\EtherCat\` library.



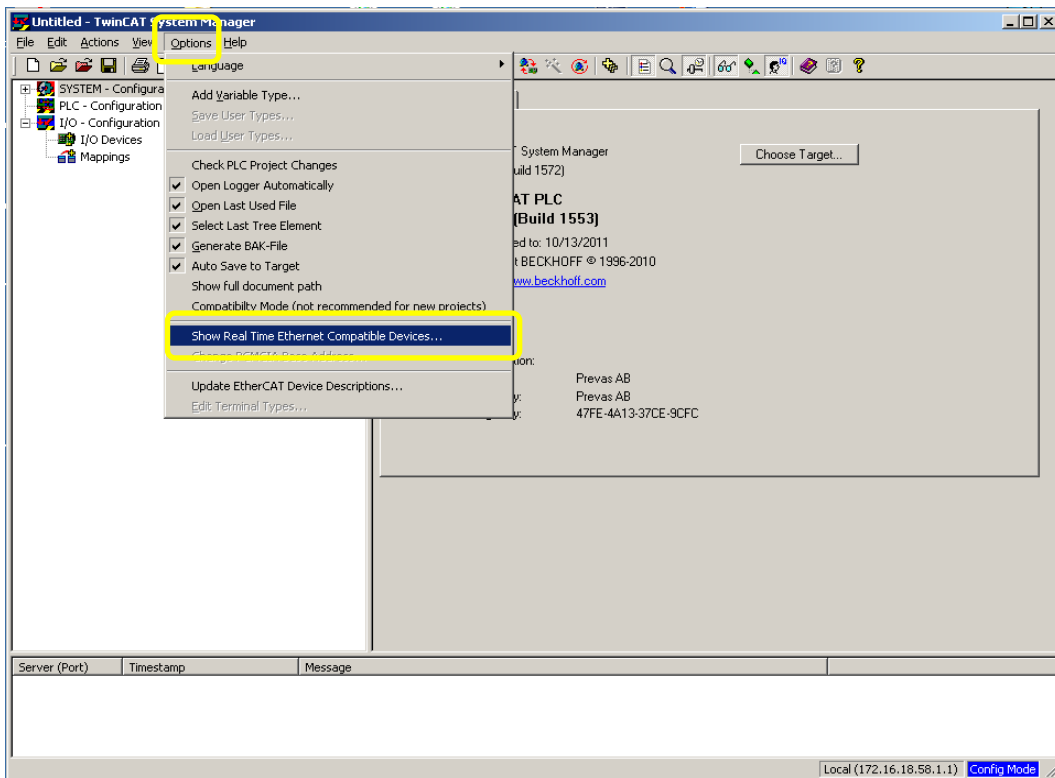
System Manager

Start the *TwinCATSystem Manager*.

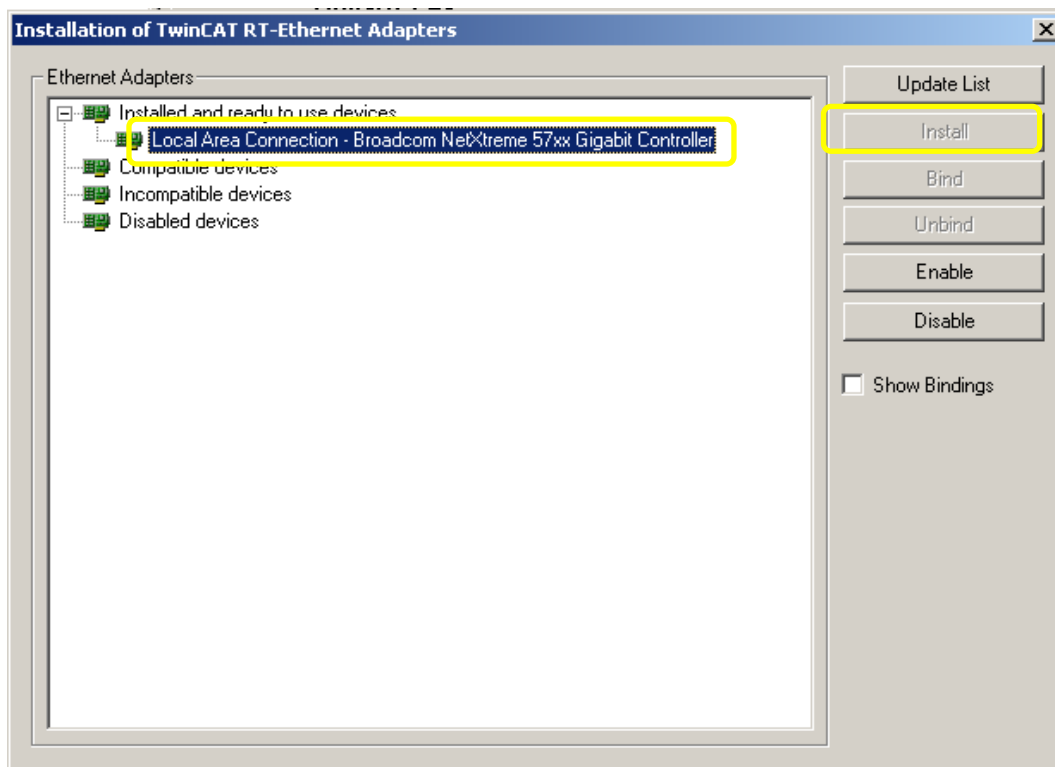
Install the Ethernet network device if you not already have it installed.

To Install the Network Device

Menu: Select *Option -> Show Real time Ethernet Compatible Devices...*

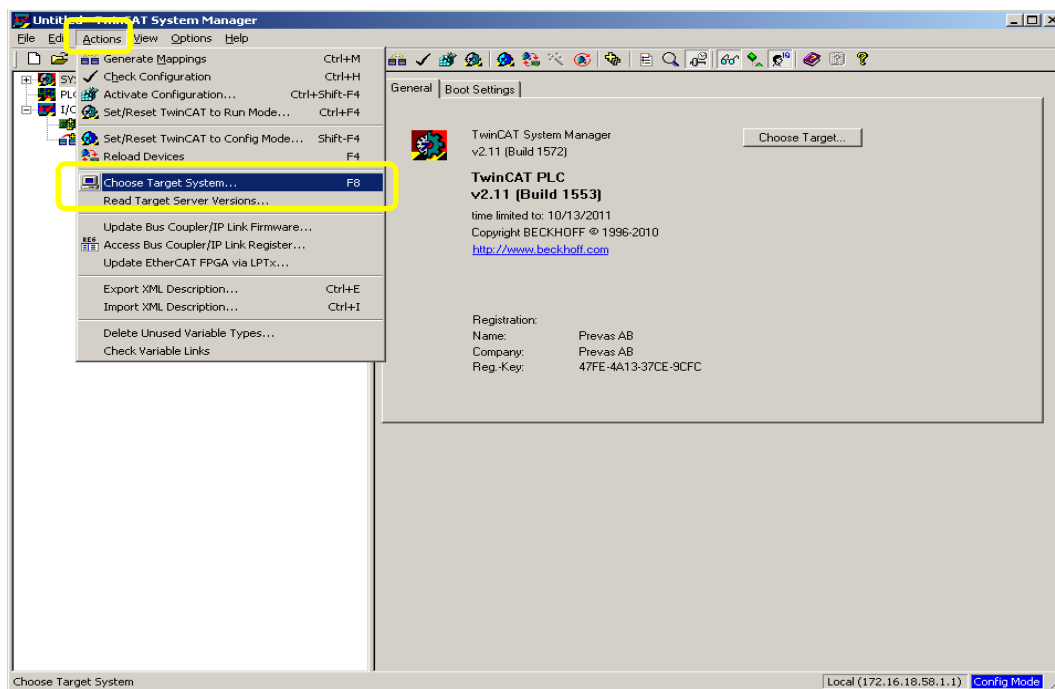


Select your Ethernet board and click on the *Install* button.



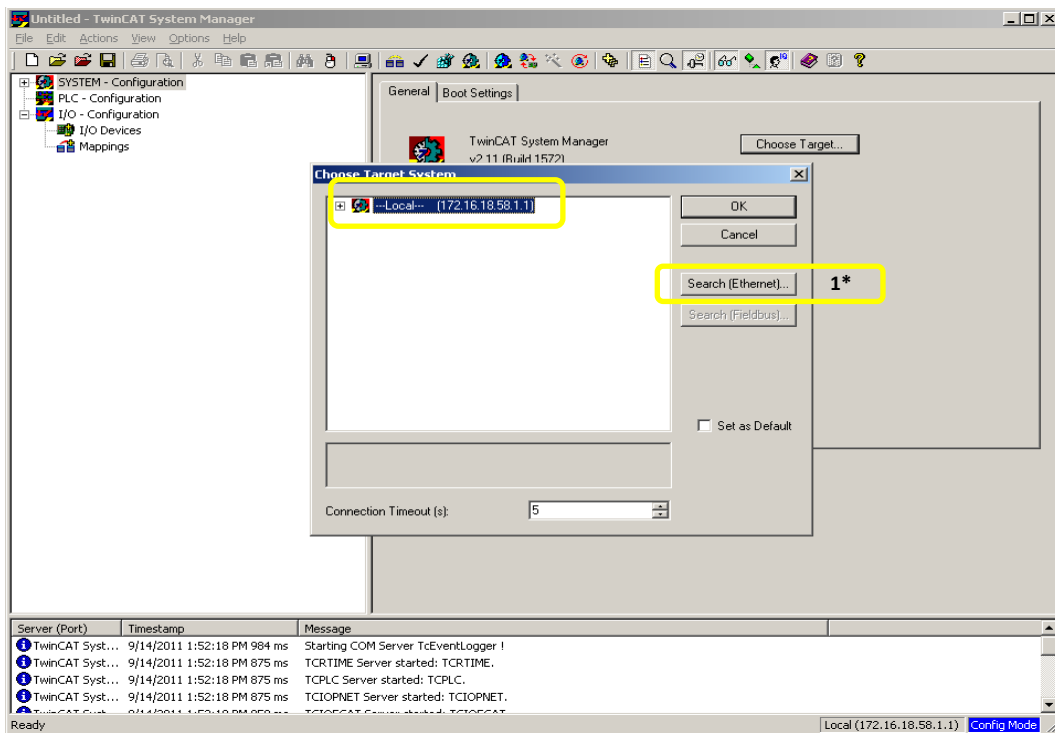
Check The Master

Select Menu: *Actions -> Choose Target System.*



Select the Target System

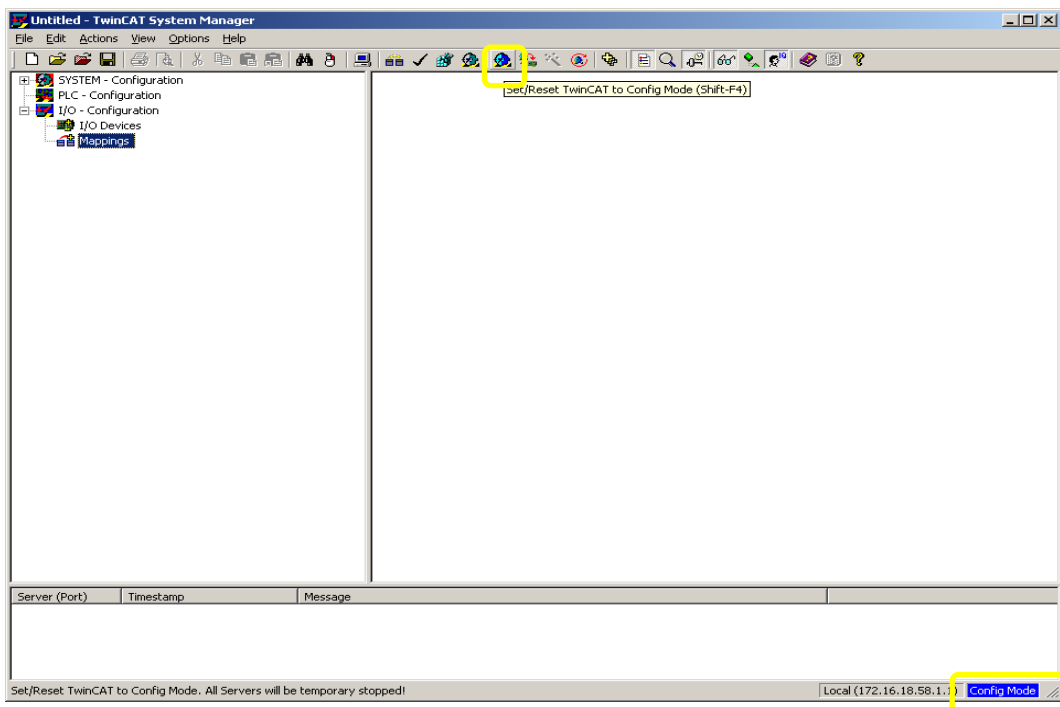
If you use several hosts on the network, select the Master via broadcast Search. You don't need to use the Broadcast Search if you only use one master in your application.



1* Broadcast Search

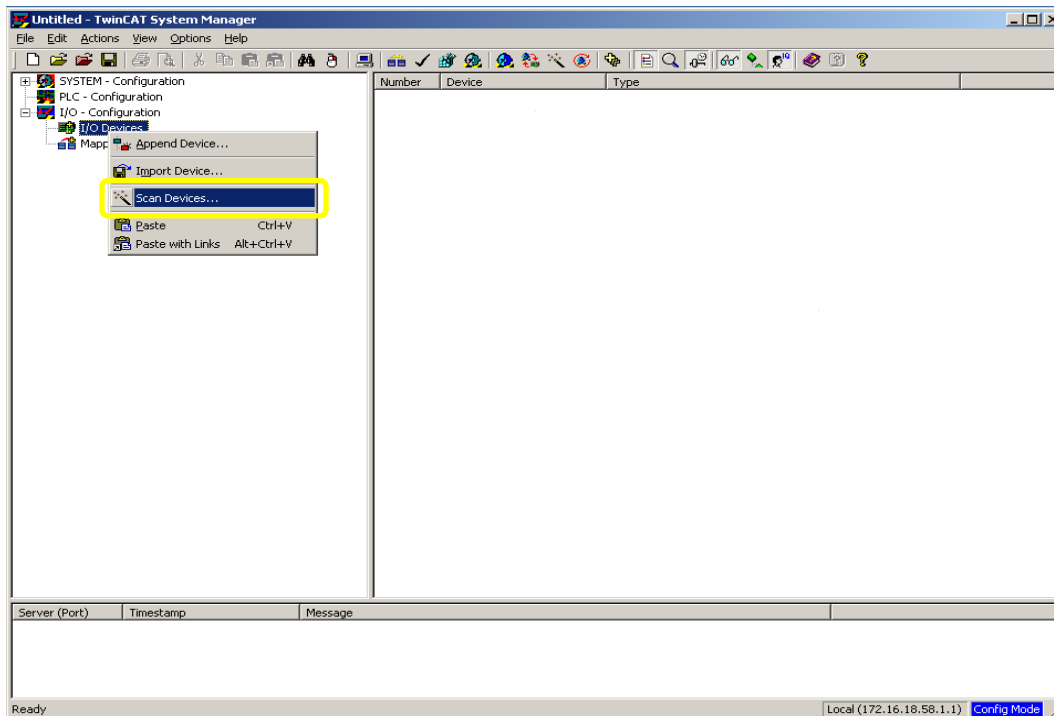
Config mode

Make sure that the system is in *Config mode*. If not goto config mode state by clicking on the icon *Set/Reset TwinCAT to Config mode (Shift+F4)*.

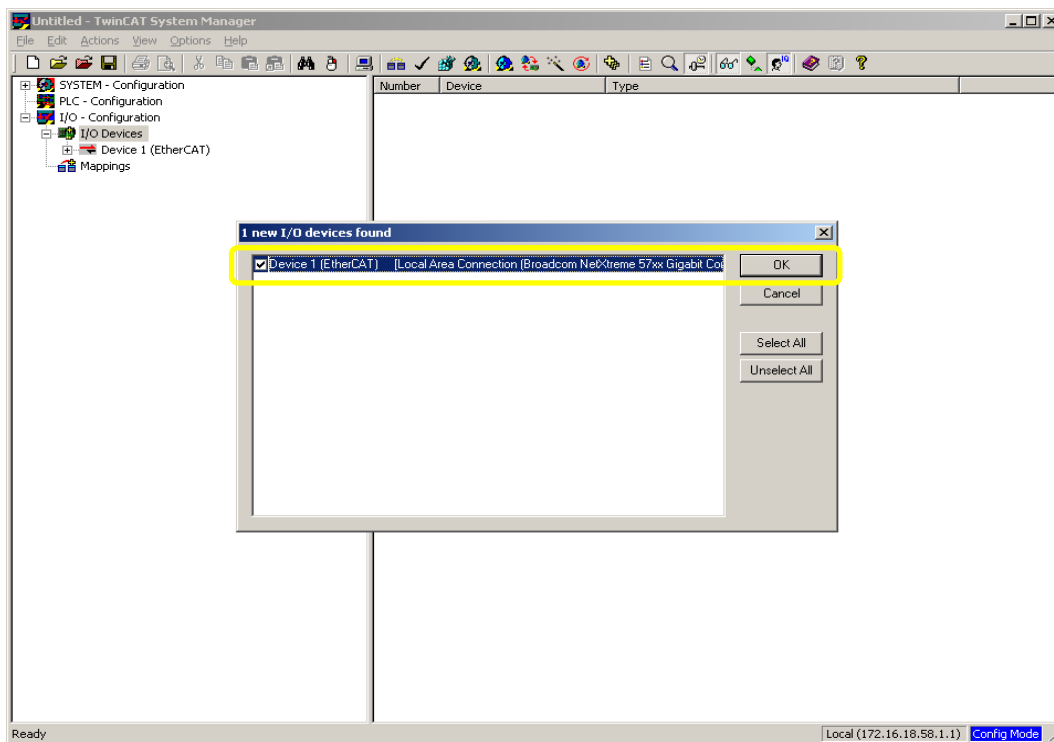


Install device

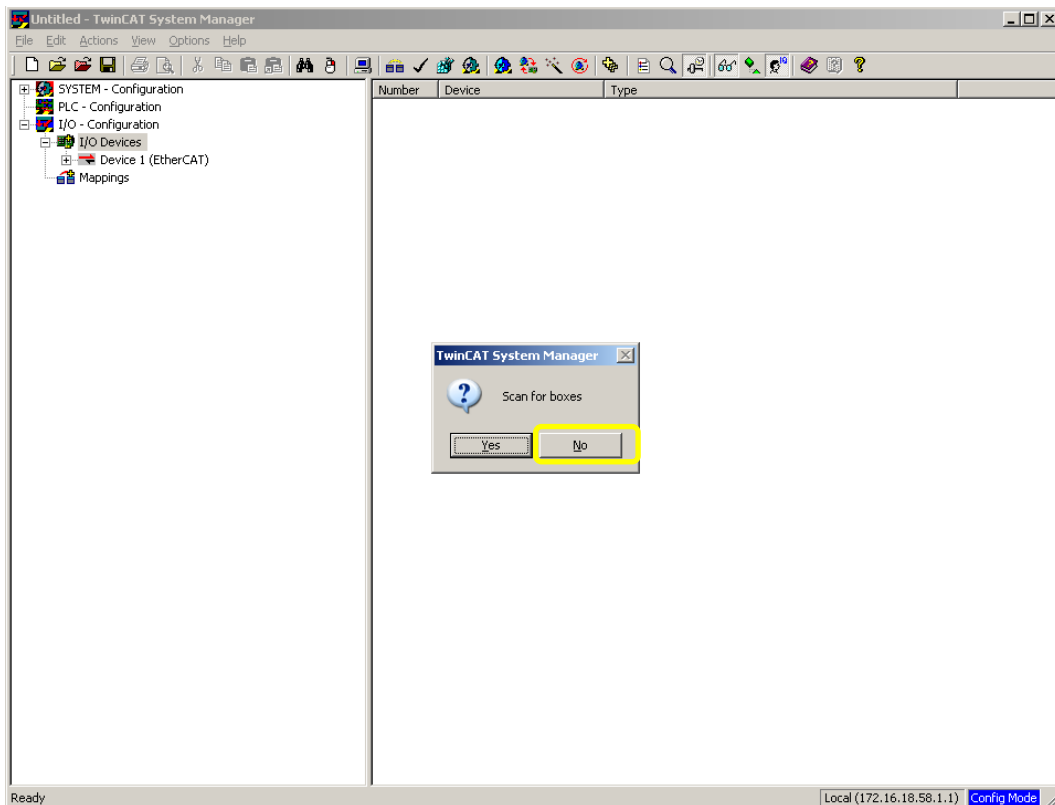
Right click on *I/O Devices* in explorer panel and select the *scan devices* wizard.



Select the I/O device and click *OK*.

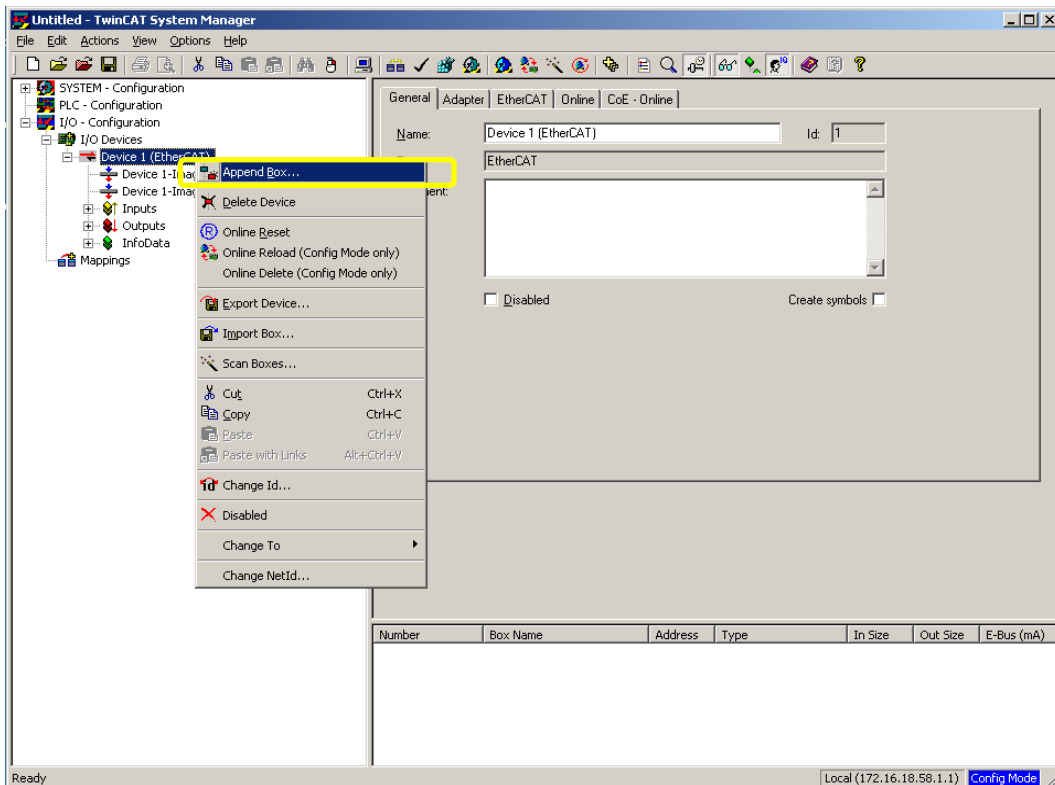


When the dialog “Scan for Boxes” appears click on *No* button. To manually configure the device.

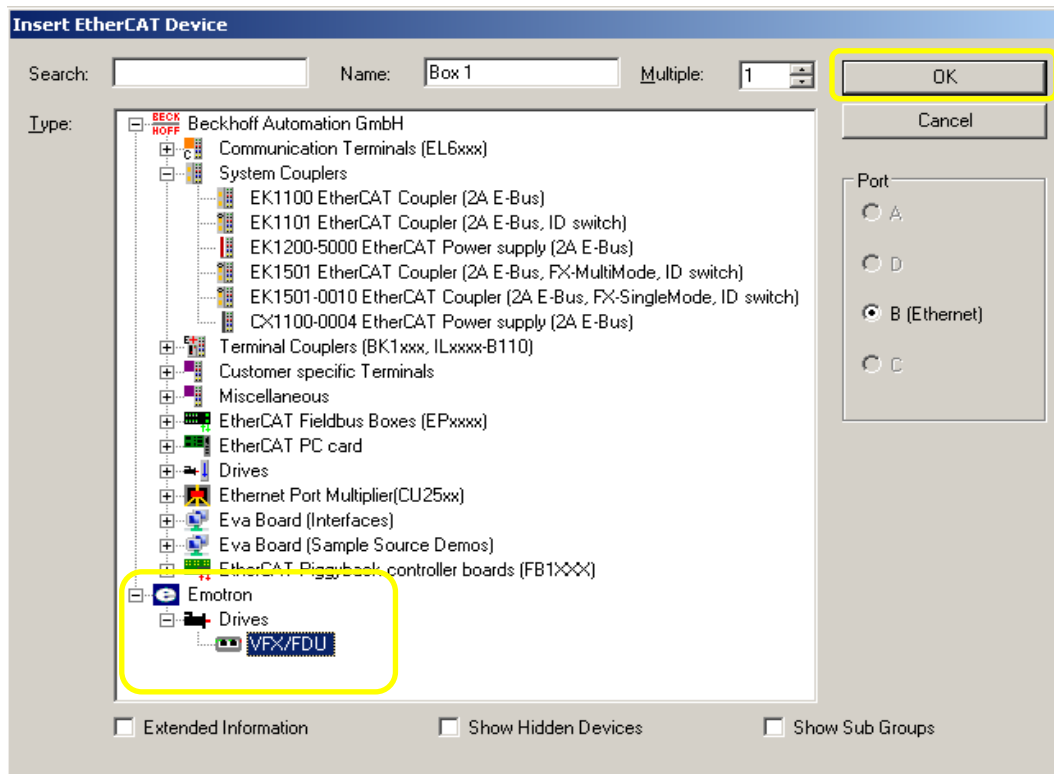


Install slave box

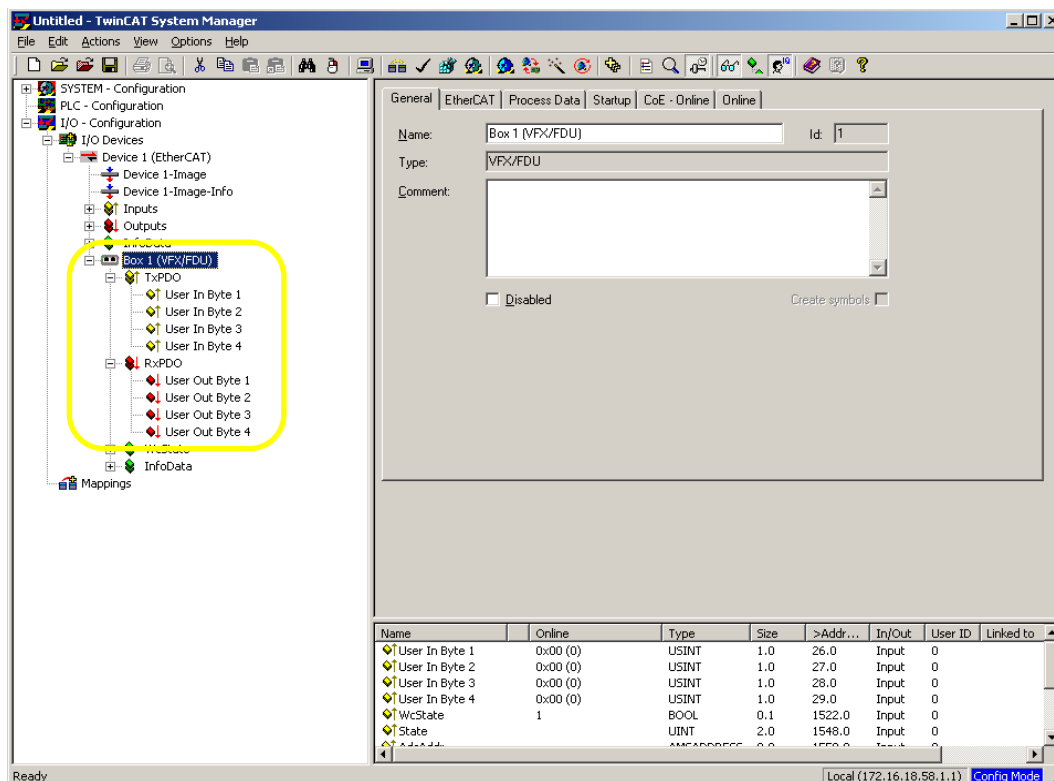
Right click on the *Device 1* and select *Append Box*.



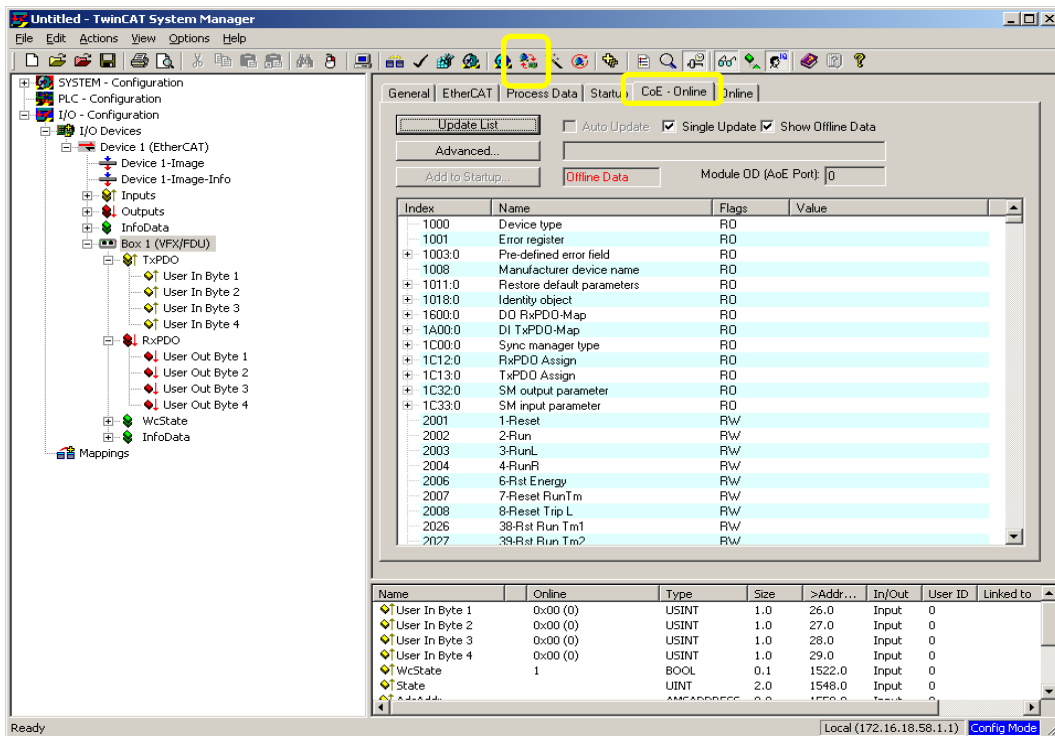
Expand the emotron node in the panel and select (highlight) the Emotron VFX/FDU device and click *OK*.



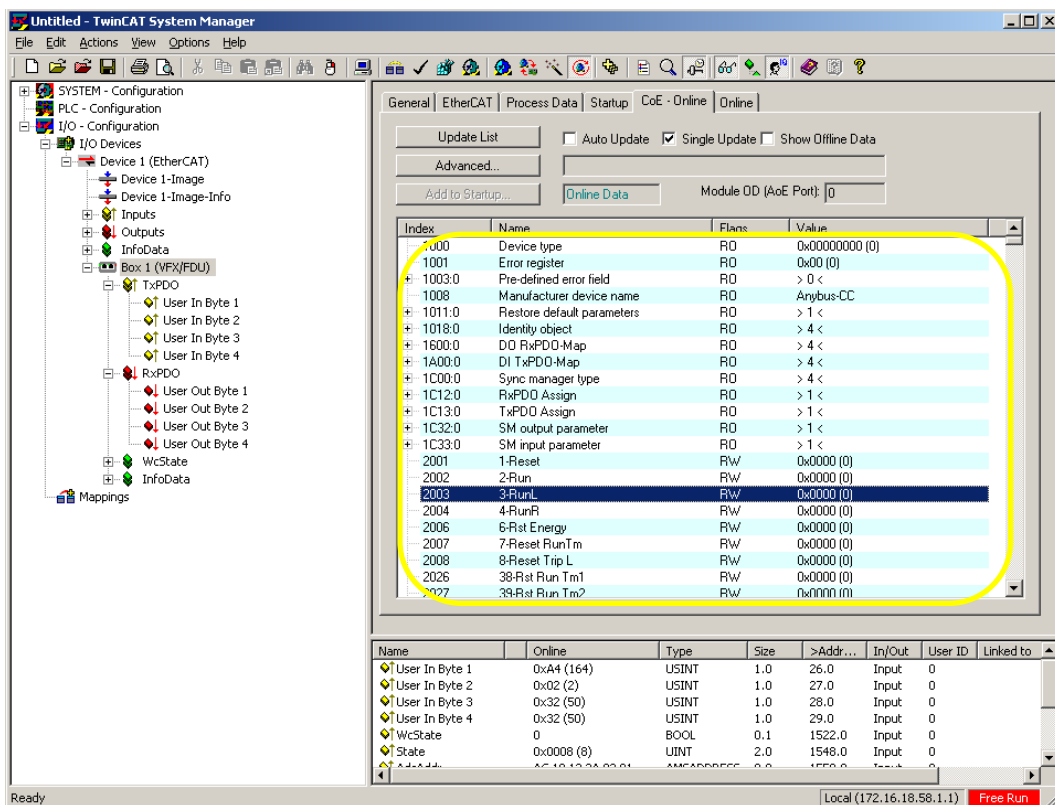
Expand the node *Box 1 (VFX/FDU)* and the TxPDO, RxPDO node. The VSD and the ESI file contain 4 bytes inputs and 4 bytes output basic cyclic process data.



Select *CoE-online* tab and press reload I/O device (F4) icon. To load I/O device and activate the free run mode.



The free run is active and the online data values are shown in the CoE panel.



Select the first input byte *User In Byte 1* from the device *Box 1 TxPDO*. Expand the node list and select the *online* tab to display the value.

