Updating Realtime Drivers for EtherCAT

Updating the network drivers to allow EtherCAT compatibility

Difficulty Easy

Duration 10 minute(s)

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Introduction

On the 6015 PC, it is often supplied without EtherCAT drivers. This tutorial describes how to install the drivers on a specific port to allow a "Device" to be found when scanning in a Visual Studio Project

Step 1 - Scan Devices



Step 2 - Check drivers

If you have I/O connected but do not see a device with (EtherCAT) then check that the drivers have been installed.

1 new I/O devices found	×
Device 1 (COM Port) [Bus 0 Slot 30 UART 0 (0xFE40E004)]	OK Cancel Select All Unselect All

Step 3 - Open the Network and Sharing Center



Step 4 - Click Change Adapter Settings

🗧 🔶 🕤 🛧 😫 > Control F	anel > All Control Panel Items > Network an	d Sharing Center		
Control Panel Home	View your basic network information and set up connections			
Change adapter settings	View your active networks			
Change advanced sharing	beckhoff.com	Access type: Internet		
settings	Public network	Connections: 🏺 Ethernet		
	Unidentified network	Access type: No network acces		
	Public network	Connections: Ethernet 2		

Step 5 - Check which is IO Port

The ethernet connection should be connected to the top port - this should display "Connected" The I/O (EtherCAT) port should be the other one. Rename this adaptor "EtherCAT"

Step 6 - Run TcRteInstall.exe

Open file explorer and navigate to C:\TwinCAT\3.1\System and open TcRteInstall.exe

	2 1110	(PC) 114-0400-0112 V.2018-31 (C:)) 1W	nCAT > 5.1 > System >			~ 0	search system	
		Name	Date modified	Туре	Size			
 Quick access 		Iscal	04/02/2020 13-33	File folder				
Desktop	*	Setup	12/11/2019 13:34	File folder				
🕹 Downloads	A	TCATSUSSIV.eve	17/04/2019 18:13	Application	766 KB			
Documents	*	Default.old	25/01/2021 19:02	OLD File	4 KB			
Pictures	*	Default.tos	25/01/2021 19:02	TPS File	4 KB			
Modules		TcAmsRemoteMgr.exe	19/12/2019 14:28	Application	479 KB			
		TcAmsSerial.dll	19/12/2019 14:28	Application extens	444 KB			
This PC		TCATGinaU10.dll	19/12/2019 13:18	Application extens	24 KB			
Desktop		TCATGinaU14.dll	19/12/2019 14:28	Application extens	46 KB			
Documents		TCATHooks.dll	19/12/2019 14:28	Application extens	288 KB			
Downloads		TCATSysSiv.exe	19/12/2019 14:28	Application	919 KB			
h Music		TCATUserManU10.dll	19/12/2019 13:19	Application extens	81 KB			
Pictures		TCATUserManU14.dll	19/12/2019 14:28	Application extens	137 KB			
I Midaan		TcComPortConnection.dll	19/12/2019 14:28	Application extens	102 KB			
videos		TcRteinstall.exe	19/12/2019 14:29	Application	182 KB			
IN-0406-0112	v.2018	TcStgEditor.exe	04/08/2004 22:02	Application	105 KB			
(D:)		TcSysULexe	19/12/2019 14:29	Application	640 KB			
(D:)		win8settick.bat	19/12/2019 12:11	Windows Batch File	1 KB			
Network								

Step 7 - Find Adaptor

You should see the relevant adapter (Whatever name you gave it in step5 - Ethernet 2 in this instance) under Compatible devices, select it and click the Install button.



Step 8 - Wait for install

After a brief pause you should see the adapter move to Installed and ready to use devices



Step 9 - Scan Devices again



Step 10 - EtherCAT device now listed

you should now see an EtherCAT device in the new I/O found list

3 new I/O devices found	×
Device 1 (EtherCAT Automation Protocol) Device 3 (EtherCAT) Device 2 (CUM Port) (Bus 0 Slot 30 UART 0 (0xFE40E004))	OK Cancel
	Select All Unselect All