TwinCat Connection Faults

A simple way to see where connections are lost on the etherbus/ethercat networks

Difficulty Easy

Ouration 5 minute(s)

Contents

Introduction Step 1 - Open TwinCat Step 2 - Open Project - Locate and open devices Step 3 - EtherCat - Topology - Online - Show Topology - Locate Fault Step 4 - Select Device - Online Step 5 - Healthy System Step 6 - Further Information Comments

Introduction

We are quite often faced with multiple Axis/Door Open/ Estop faults all being reported at the same time. More often than not this is caused by a bad connection on the TwinCat system somewhere. If there is any dropout of connection at any point in the system it will result in this error. You could spend some time crawling about on your hands and knees, opening electrical cabinets and trying to find the fault manualy, but by using TwinCat we can save some time and effort, and pinpoint the cause almost immediately.

Step 1 - Open TwinCat



Step 2 - Open Project - Locate and open devices



Step 3 - EtherCat - Topology - Online - Show Topology - Locate Fault



PdQ Z066 - Microsoft Visual Studio FILE EDIT VIEW PROJECT BUILD DEBUG TWINCAT TWINSAFE PLC TOOLS SCOPE WINDOW	₹ HELP	Quick Launch (Ctrl+G	م (- 5	×
RCc 0x2P3 (bc2P3 (bc2P	Хń	:	× Attach ▼	5.15	1 G1 Ç
Kolution fighter Search Solution Egyland () 2 A Arts) 2 A Arts) 2 A Arts) 2 A C.Rec) 2 A C.Rec) 2 A C.Rec		Online Configurati	on		
			ration (µs) .76	Map Id 0]
			ıs (m	-	÷
			n Pro	oject 11:58	ρ.
	in c	A B dx	her 1110 26	/05/2023	0

Step 4 - Select Device - Online

From here we can see there are no comms, and more importantly the devices name. This name can be cross referenced from the wiring diagrams to find where it is located.



Step 5 - Healthy System



Step 6 - Further Information

For more advanced information, see Diagnosing EtherCAT Issues - Advanced