Troubleshoot - Connecting Initial PLC Data Location

A couple of methods for fixing the PLC connection issue found on TwinCAT machines.

Contents

Comments

This error occurs when WinMulti cannot connect to the PLC. There are several reasons why here are the most common.

1.   **No Network** – best way to check if there's any network is to look on teamviewer to see if it's online. Confirm this with the operator by asking if the network icon in the bottom left has a warning on it.
First make sure the factory has a working network. It could be as simple as their network has faulted where nobody on their site will have internet access.
Get the operator to check all routers (netgear). If the lights on the routers are all off by the Ethernet plugs it is likely the power cable has faulted to the router. If a single plugs light is off it is likely the port on the router or the cable itself. It has been common for the power cables to fault on the netgear boxes.

2.   **IP Address Conflict** – if the PLC has gone offline/flickering on and off. The front end PC should be fine for this. It is most likely the IP address of the PLC has been taken by another device. To fix this we either need to find the device and take it off the network or change the IP address of the PLC. Remote desktop into the PLC (Start > Remote Desktop > [insert PLC name] > connect) and change the IP address. Work with the customer to confirm a reserved IP address that cannot be taken by another device. After this re-route the TwinCAT 3 link on the front end.
3.   **Licence not activated** - https://infosys.beckhoff.com/content/1033/tf6701_tc3_iot_communication_mqtt/63050395045796619.html?id=3072333591292829433
4.   The **network protocols** are most likely tampered with. Check that "Twincat Ethernet Protocol" is ticked in the network properties under EtherCAT and EtherNET.