Application Note – Integrating P+F Comtrol's IOLink Master into UA Expert – PDO

Detail: integration of block into OPCUA Client, and control of PDO device

Prerequisites:

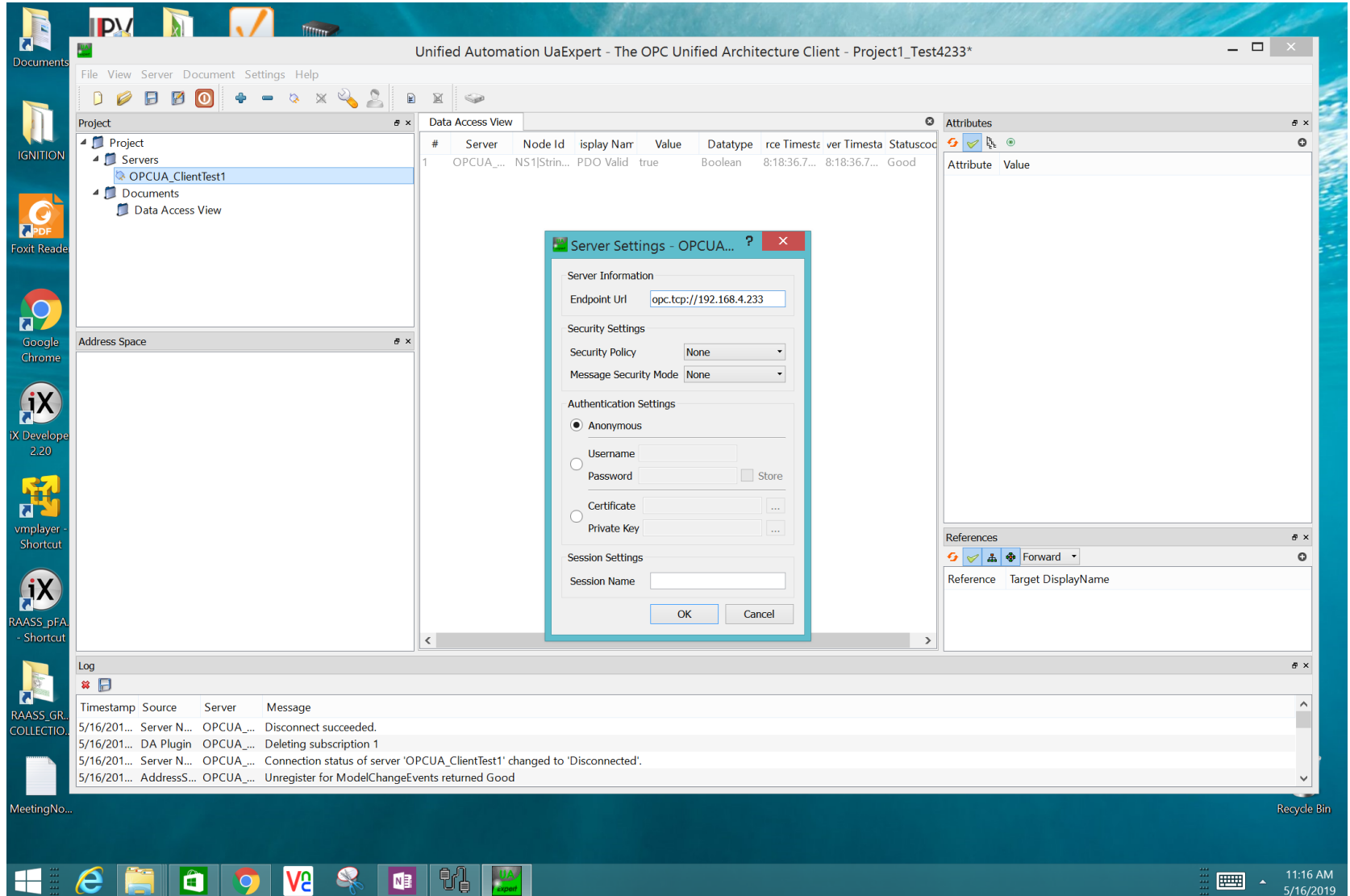Any model of IOLM that has the OPCUA service code and FW

All necessary cables and power supplies and sensors

Powered up with appropriate IP address

No network/security/rules interference between PLC/NIC/UA Expert

Date of Note (implies era of relevance): 5/16/19

1) Open UA Expert, right click Servers and choose "Add" Click Properties and Enter the URL
   Like this: opc.tcp://192.168.1.250 (or whatever your IP is set to.) Refer to OPCUA Guide titled
   "[Final - PDF] OPC UA - Technical Support Help Guide" for a more detailed discussion of this
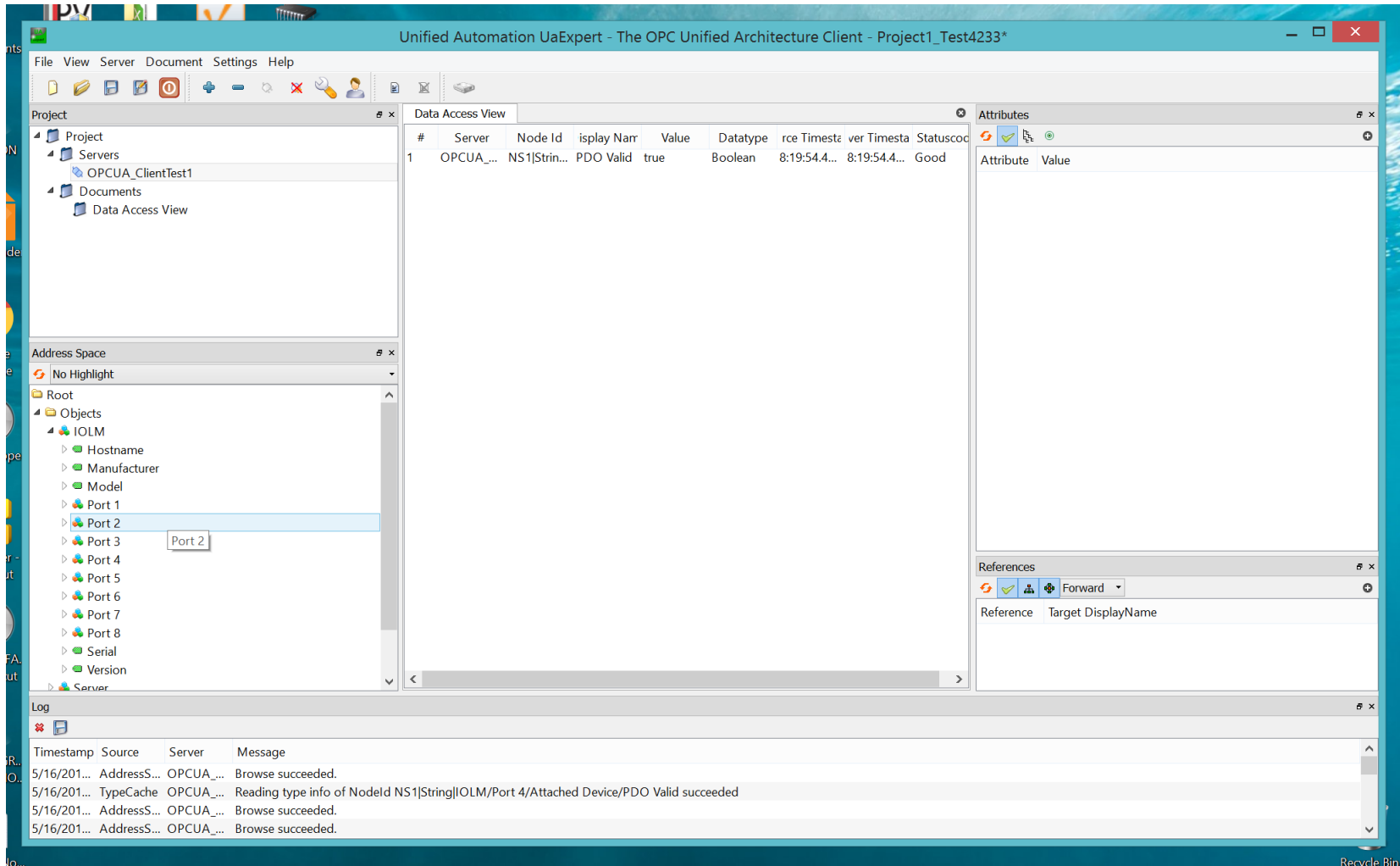
2) Hit Connect

3) Once the Client connects to the OPCUA server in the IOLM (note that the IOLM OPCUA server is disabled by default, and must be enabled. See above referenced PDF for more info.) You can now browse to a port of interest and see all the information of the device connected.

4) For several properties, try clicking them and then view the information on the right side. For example here, you can see the FW is at 1.4
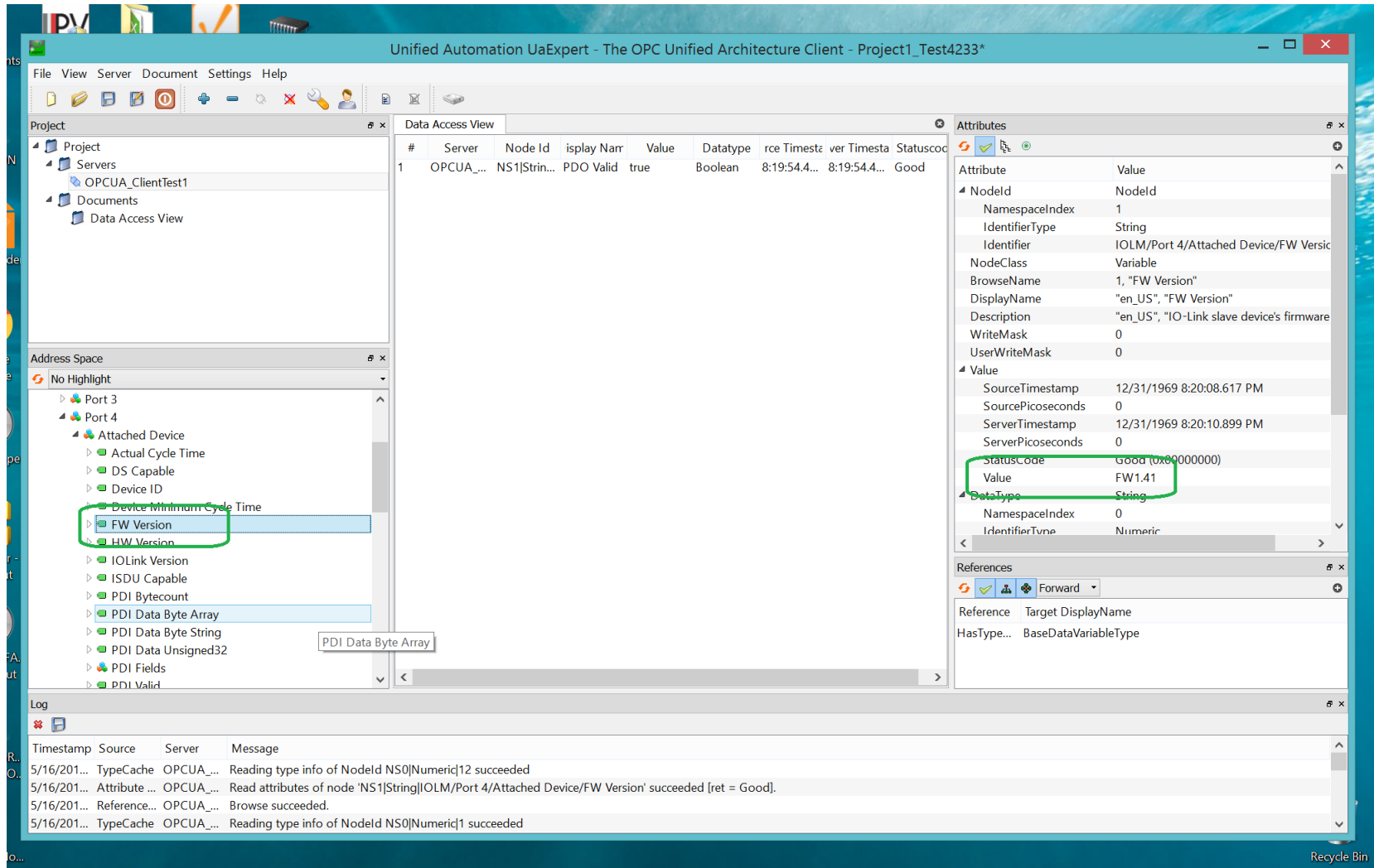
5) If you have the IODD file for the device installed, you will be able to see enhanced description names and better parsing rather than just the generic "PDI Data Byte Array" or "PDI Data Byte String." The same is true for PDO. The experience via OPCUA will always be better if an IODD file is installed. (Though it is not strictly necessary.)
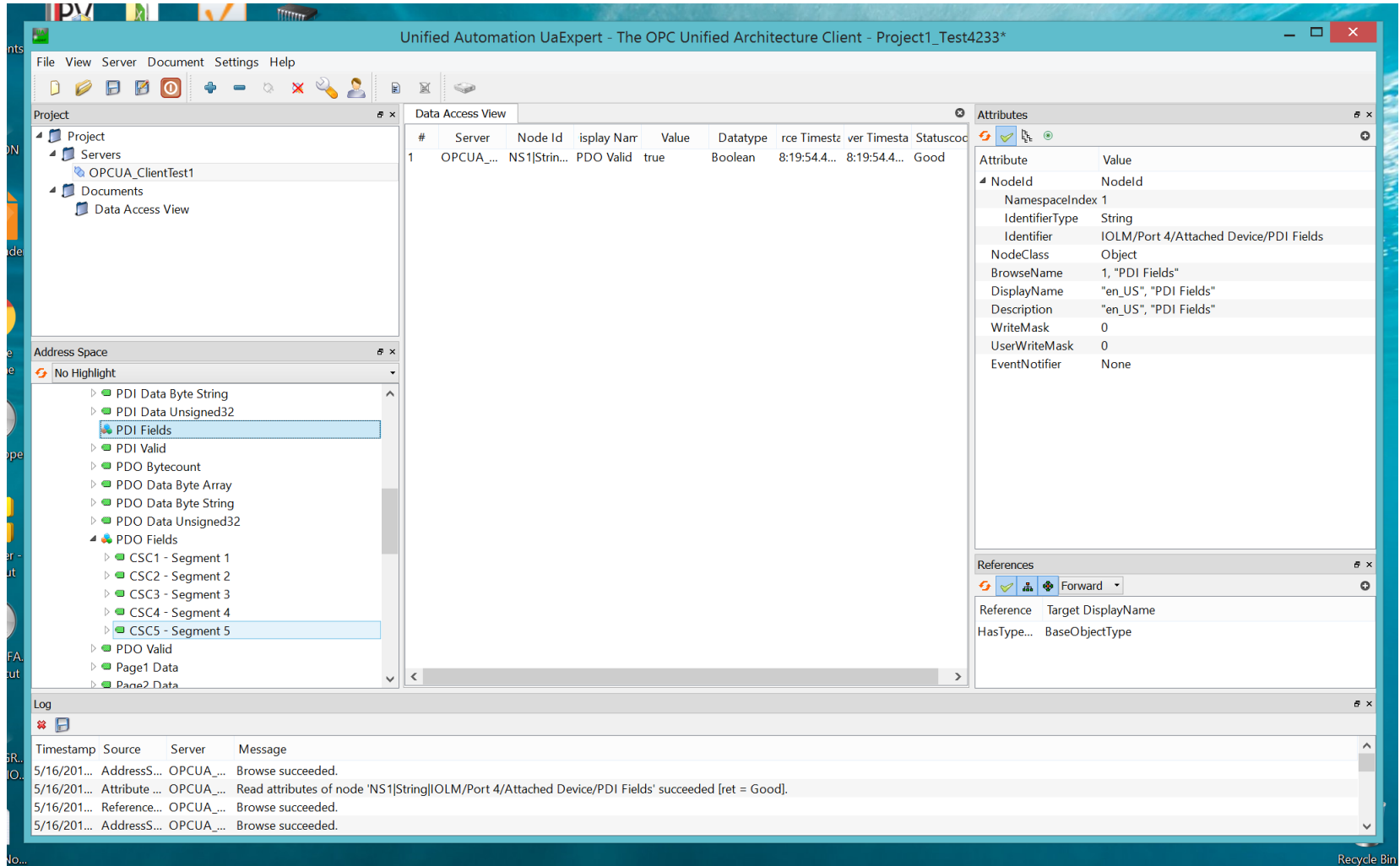
6) You must find "PDO Valid," and over on the right side, double click near "false" and check the box to make it "true." You can now control PDO.
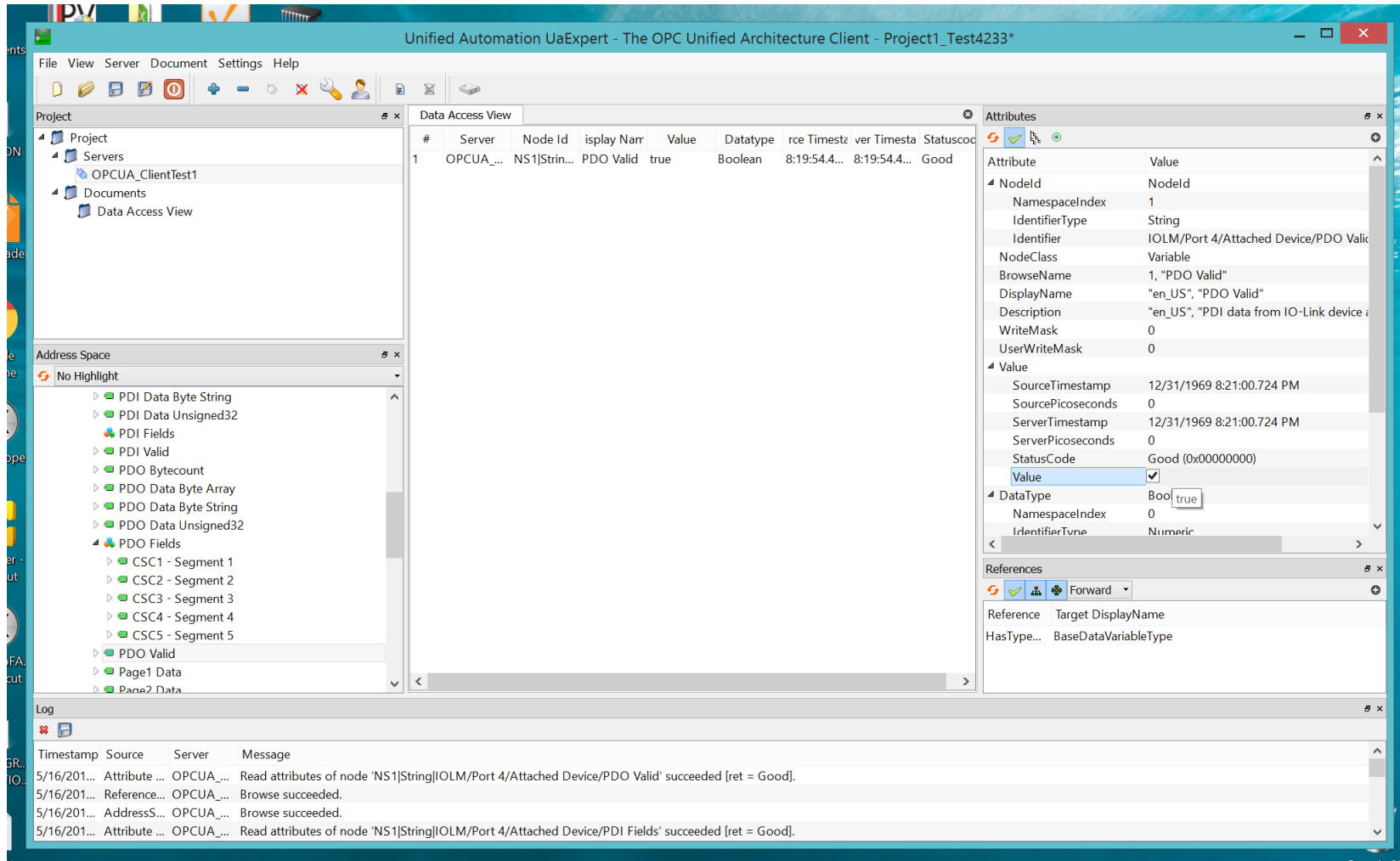
7) For each device, the options for PDO will vary widely. For the device featured in this note, you have several segments- each with a boolean value that can be toggled ON/OFF. You should be able to operate different light segments now!