APPLICATION NOTE

Product Family: GS Drives

Number: AN-GS-009

Date Issued: 8/04/03

Revision: Original

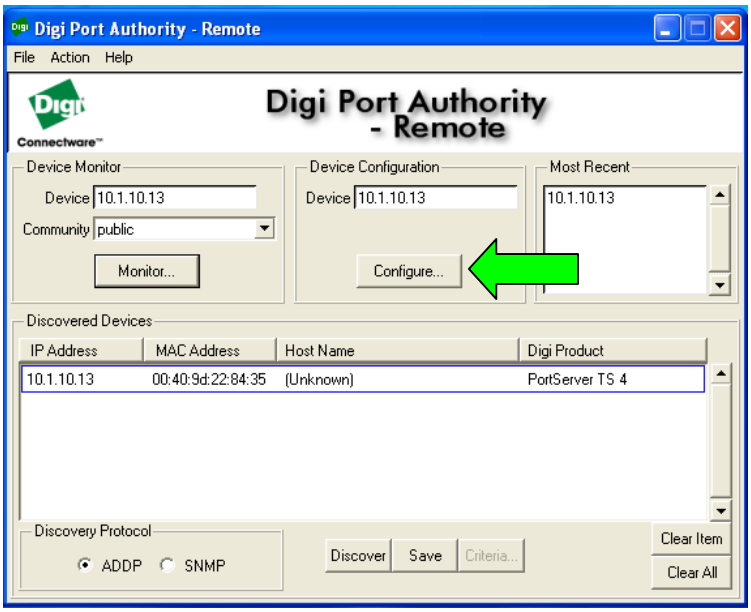
Subject: Connecting a GS drive as a Modbus Ethernet slave via Digi PortServer TS4 and KEPserverEX v4.0

Specifications

Drive:	Various GS series
Software:	Digi Port Authority – remote http://www.digi.com/
Ethernet to Serial Converter:	Digi Port server TS 4 MEI
OPC Server:	KEPserverEX v4.0 http://www.kepware.com/

Application Description

The user wants to connect GS drives over the Ethernet with other Modbus devices like loop controllers and meters without a PLC connected directly to a third party OPC/DDE compliant client software package. One method is to use the Digi port server TS4 MEI connected to KEPserver EX v4.0. This will allow the user to connect up to 4 GS drives on one port server. This will also allow the versatility of having mixed devices types in addition to the drive control.

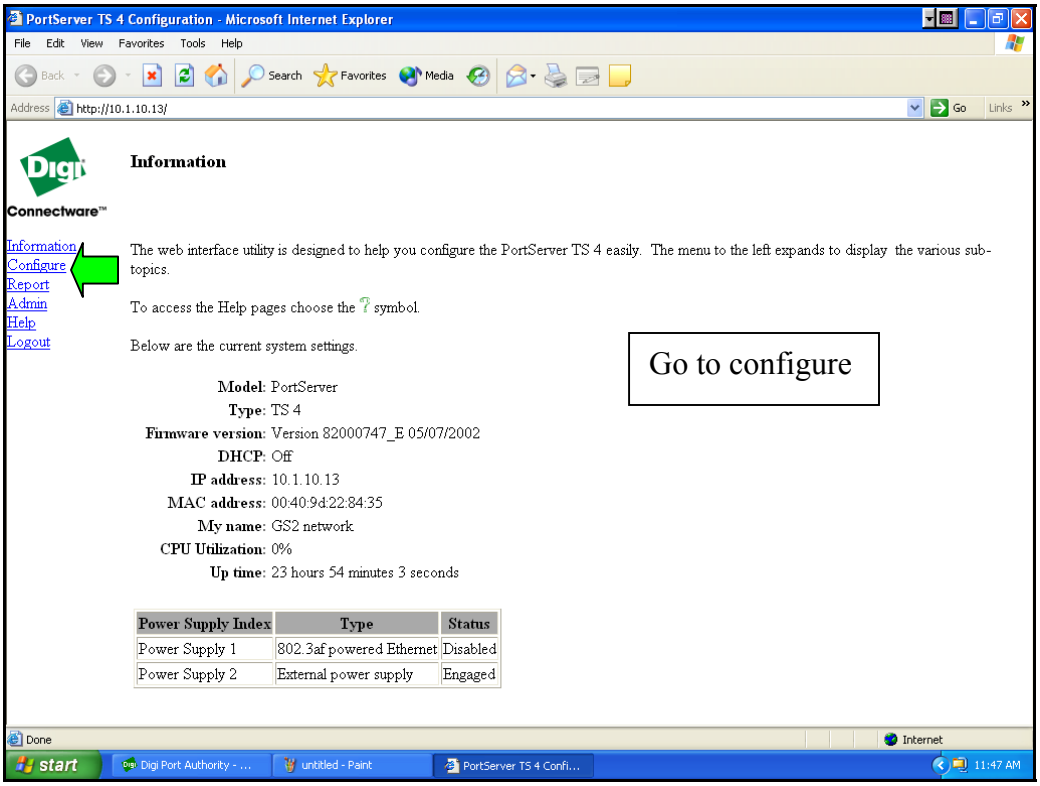


Follow the Digi Port manual in assigning an IP address to the Digi Port server TS4.

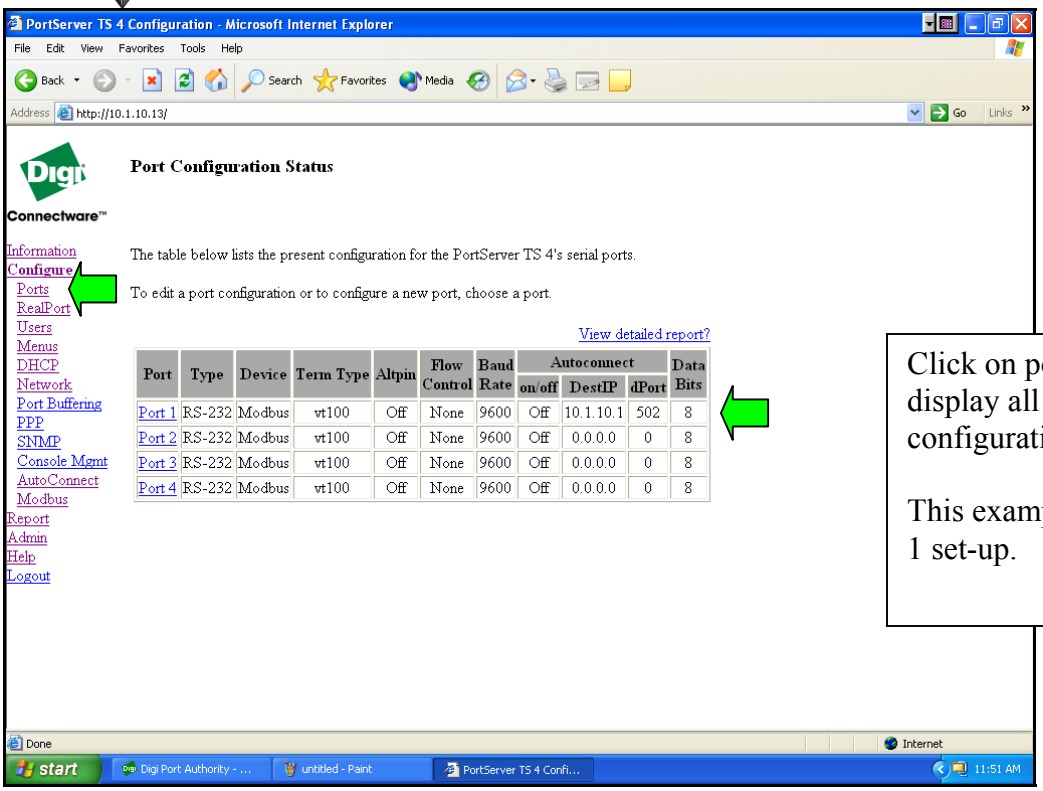
Go to configure to set-up up server for Modbus control.

Sign into the Port server with "root" being the user name and "dbps" being the password.

All the Port servers use this as a default user name and password.

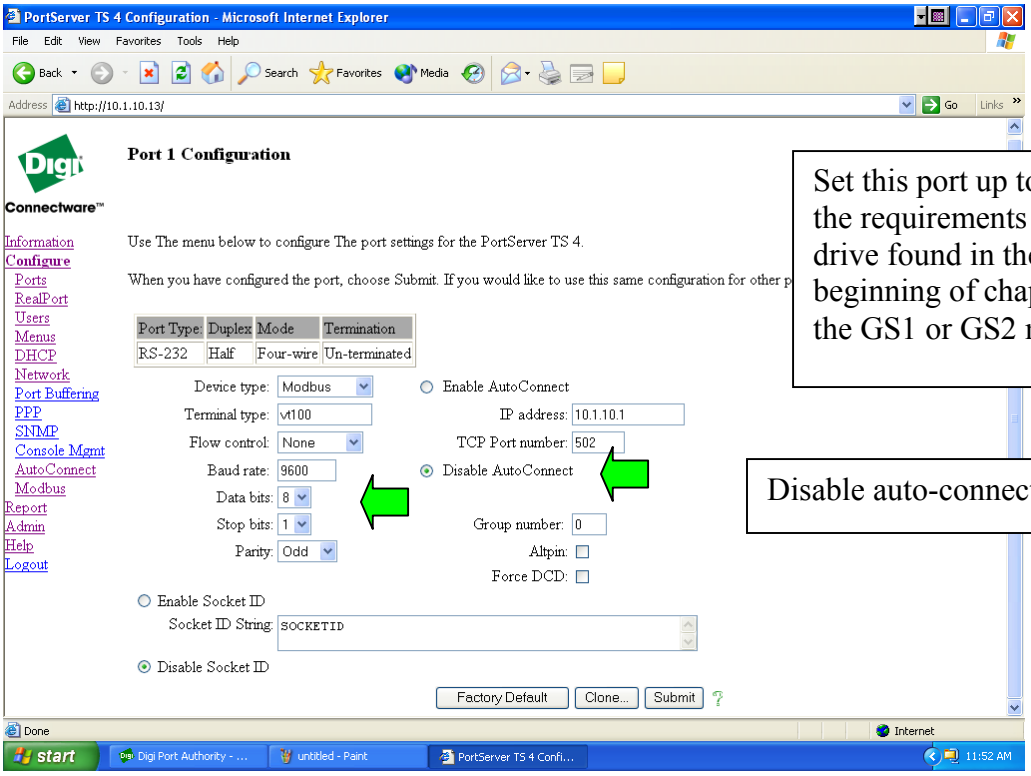


Go to configure



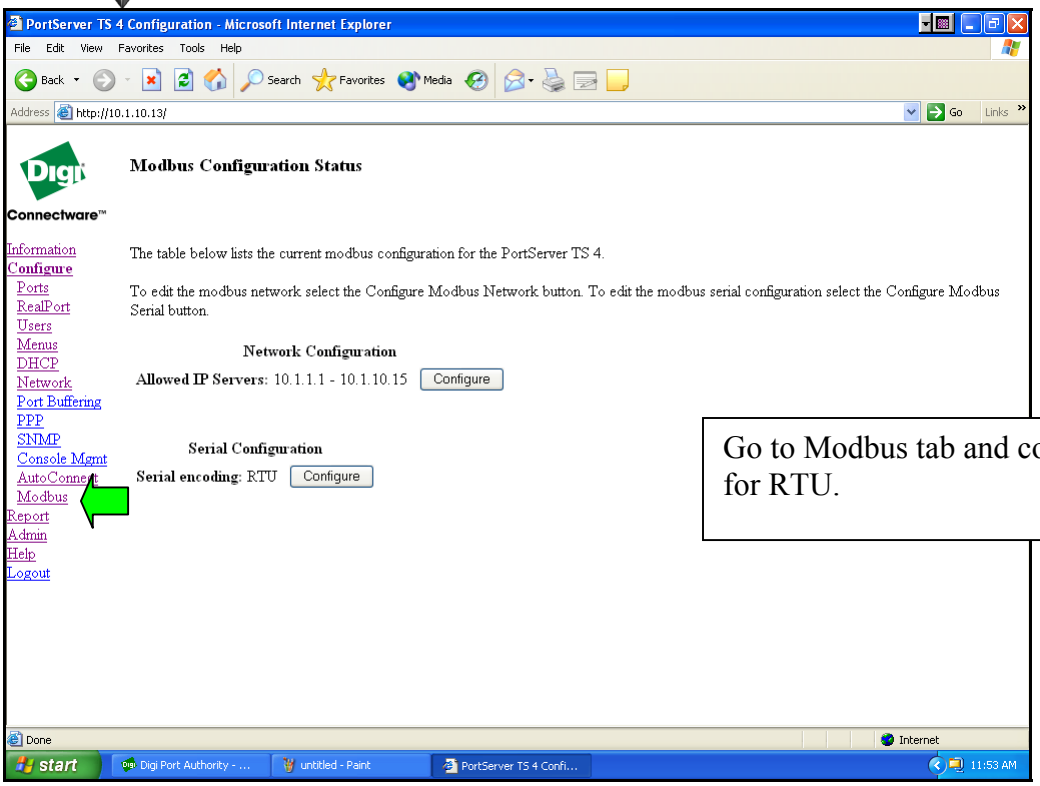
Click on ports and this will display all 4 ports current configuration.

This example only has port 1 set-up.

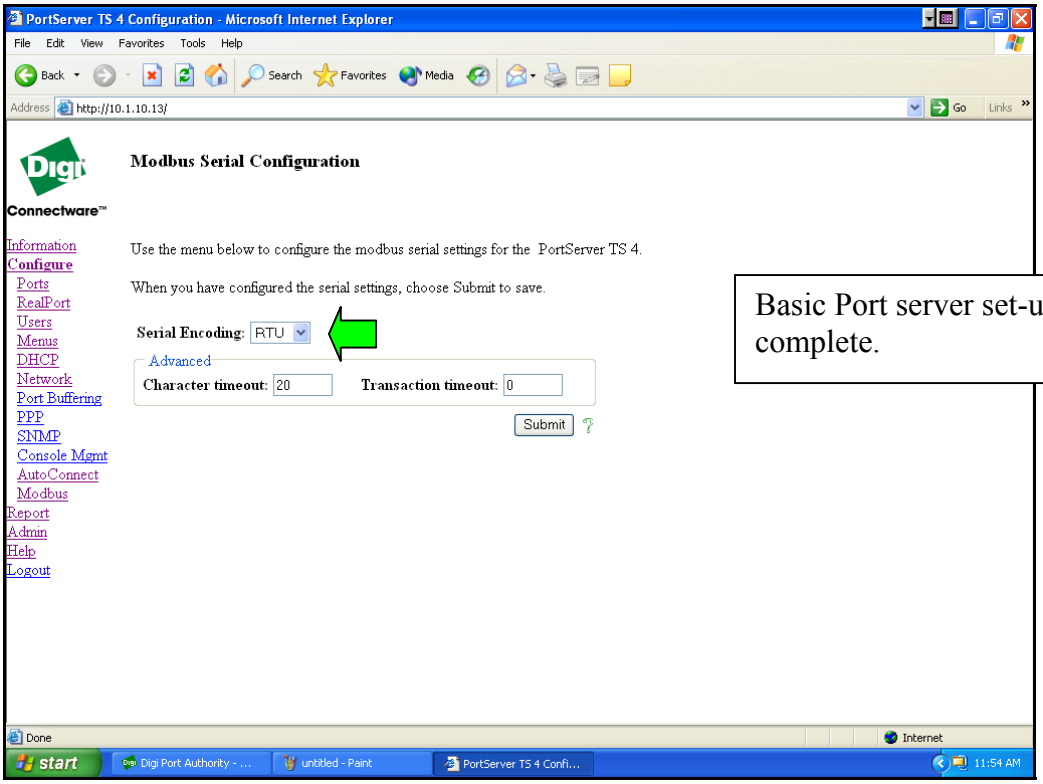


Set this port up to match the requirements of the drive found in the beginning of chapter 5 in the GS1 or GS2 manuals.

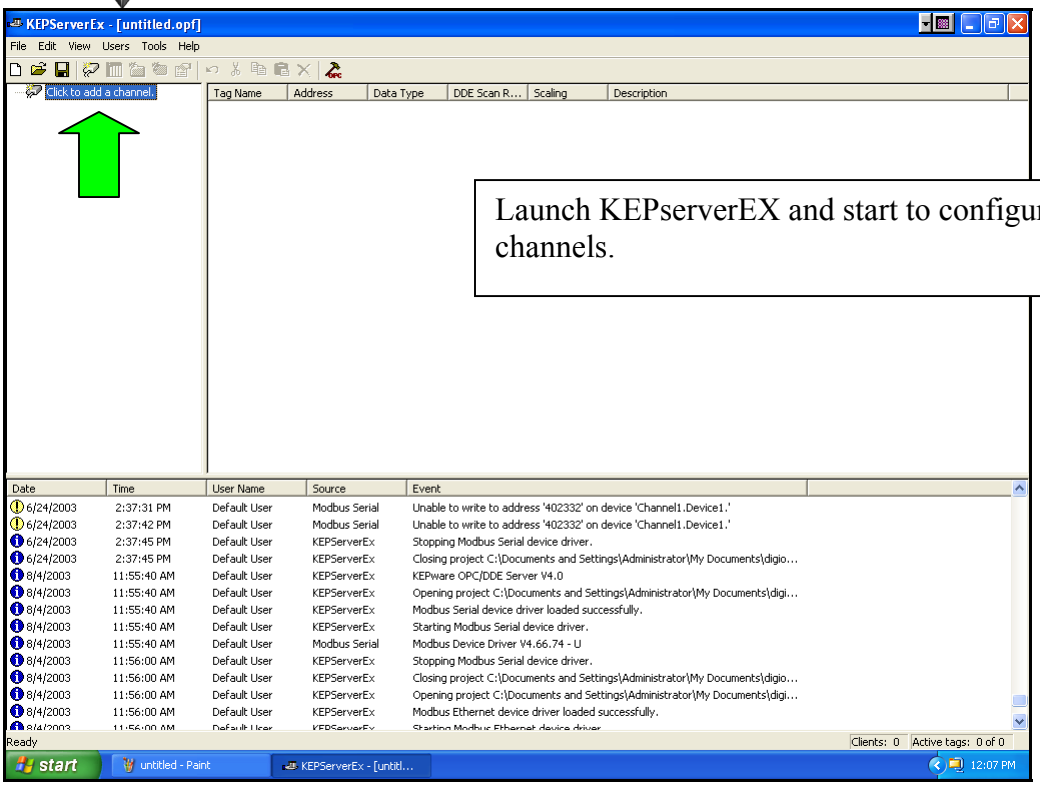
Disable auto-connect



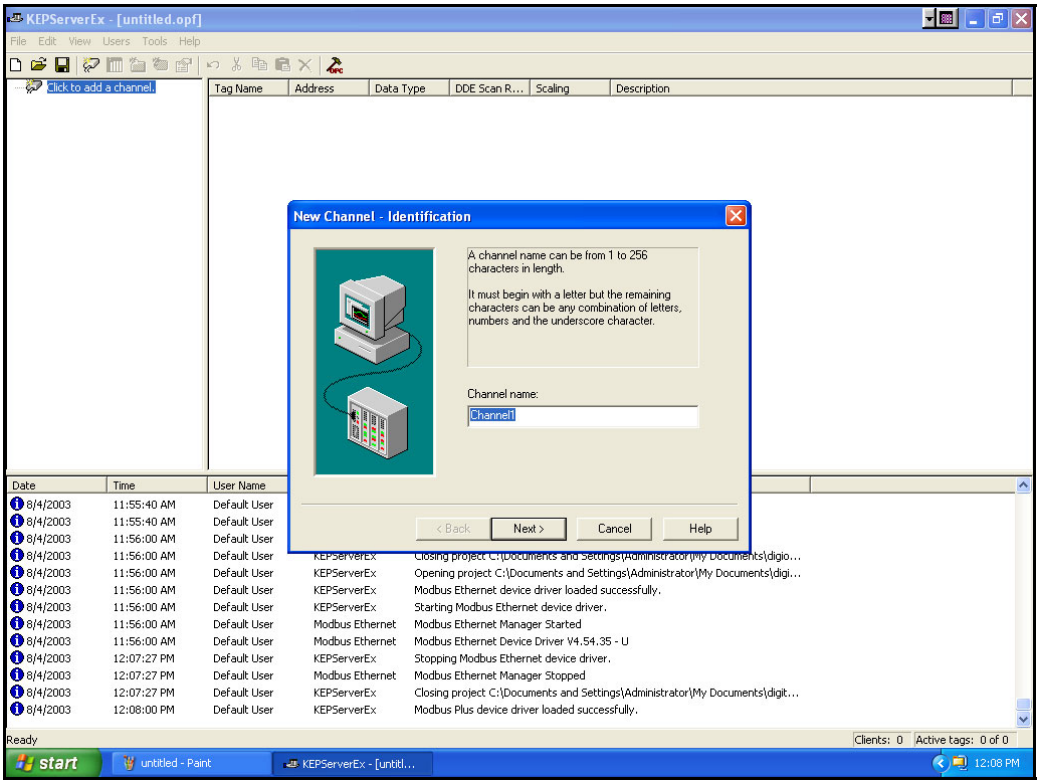
Go to Modbus tab and configure for RTU.

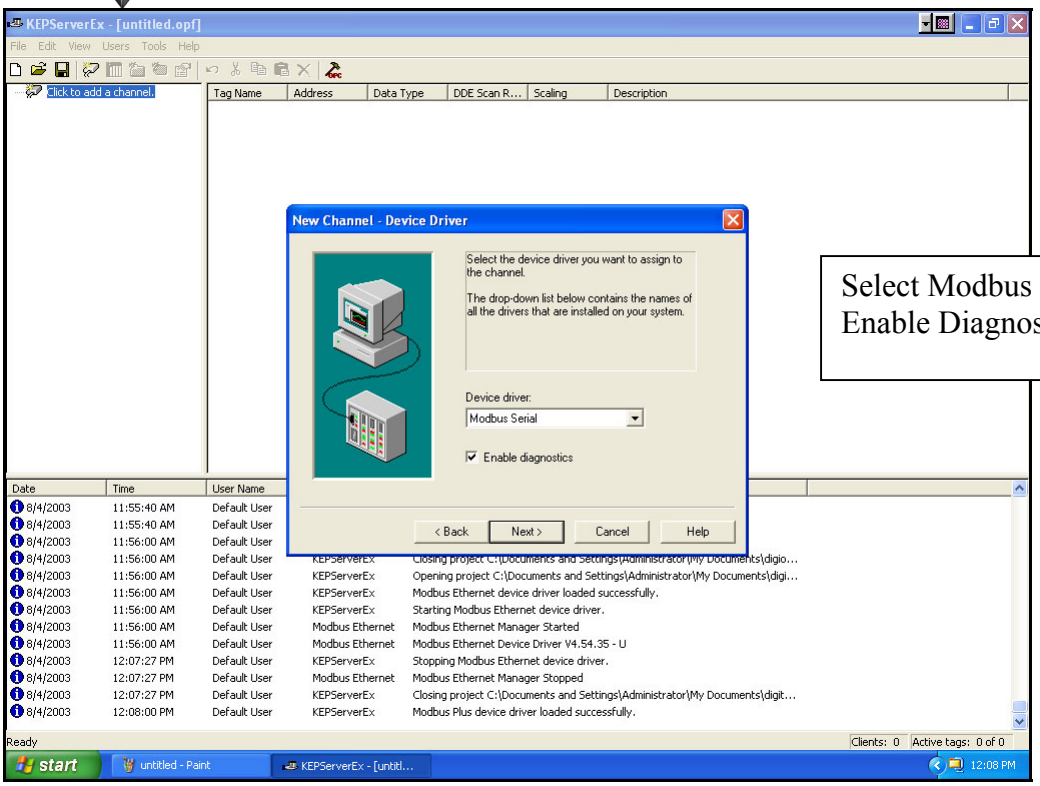


Basic Port server set-up is now complete.

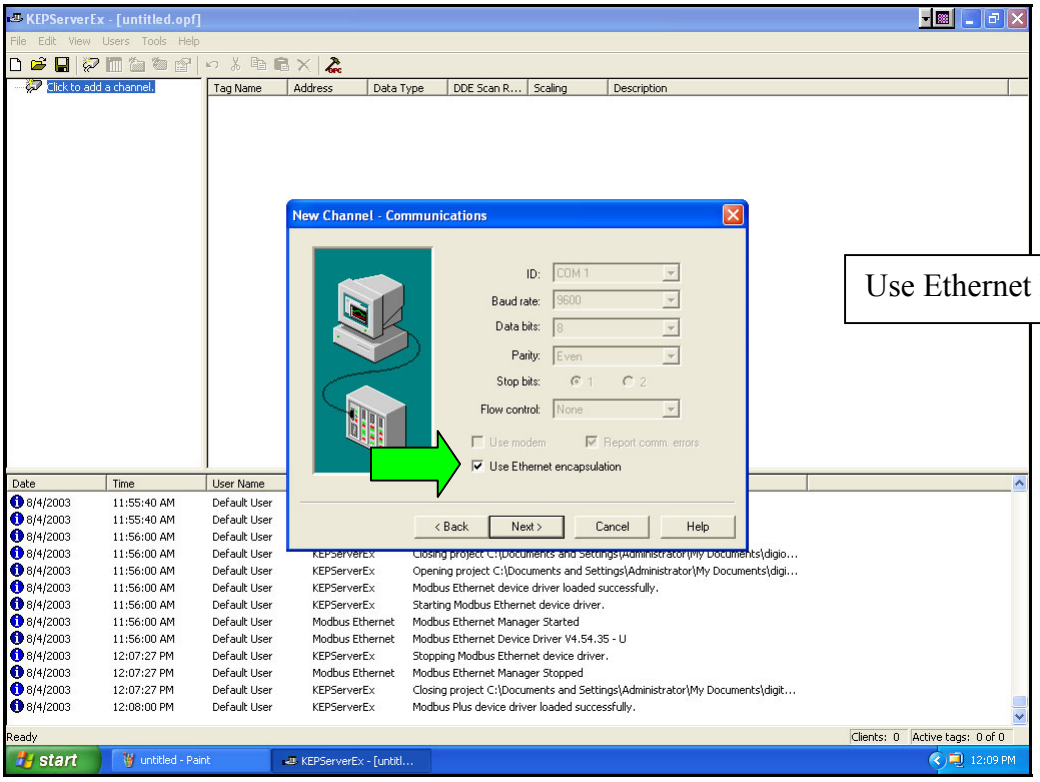


Launch KEPserverEX and start to configure channels.

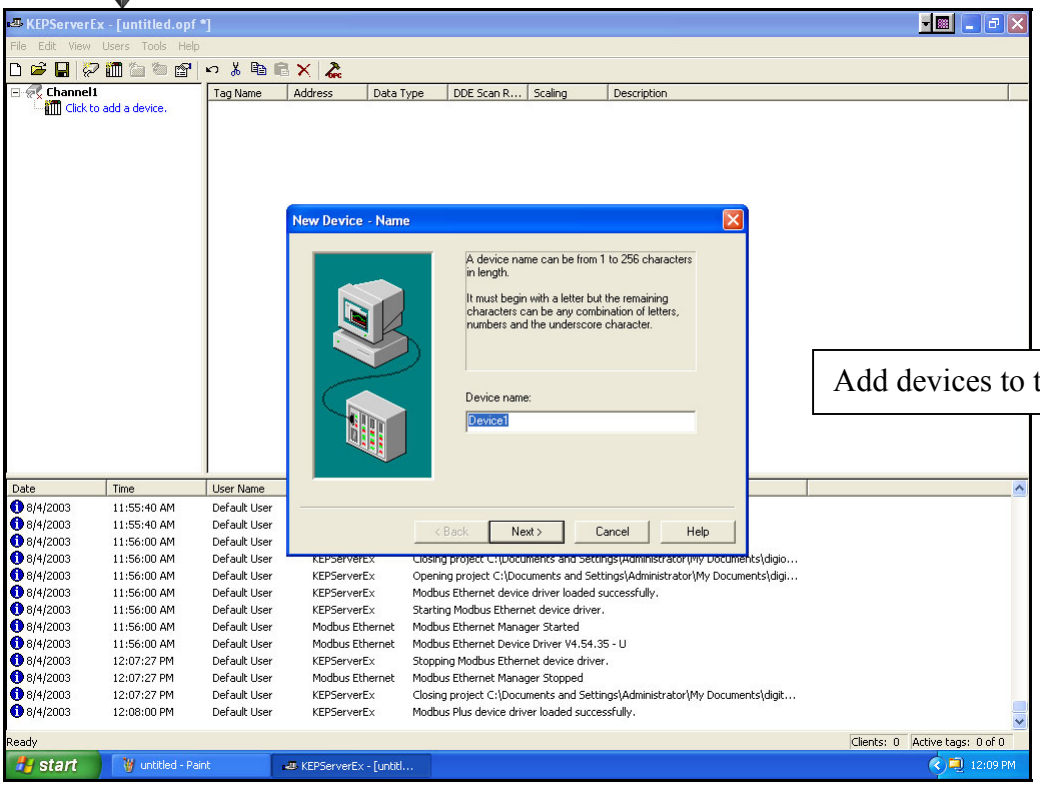




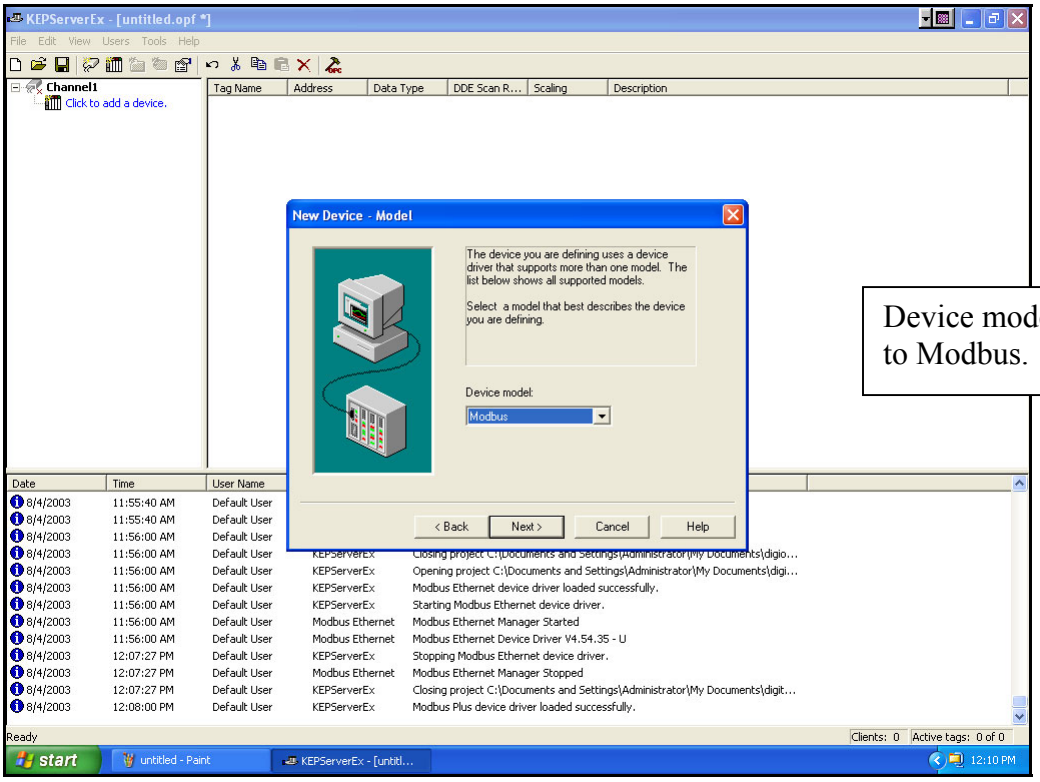
Select Modbus serial and Enable Diagnostics.



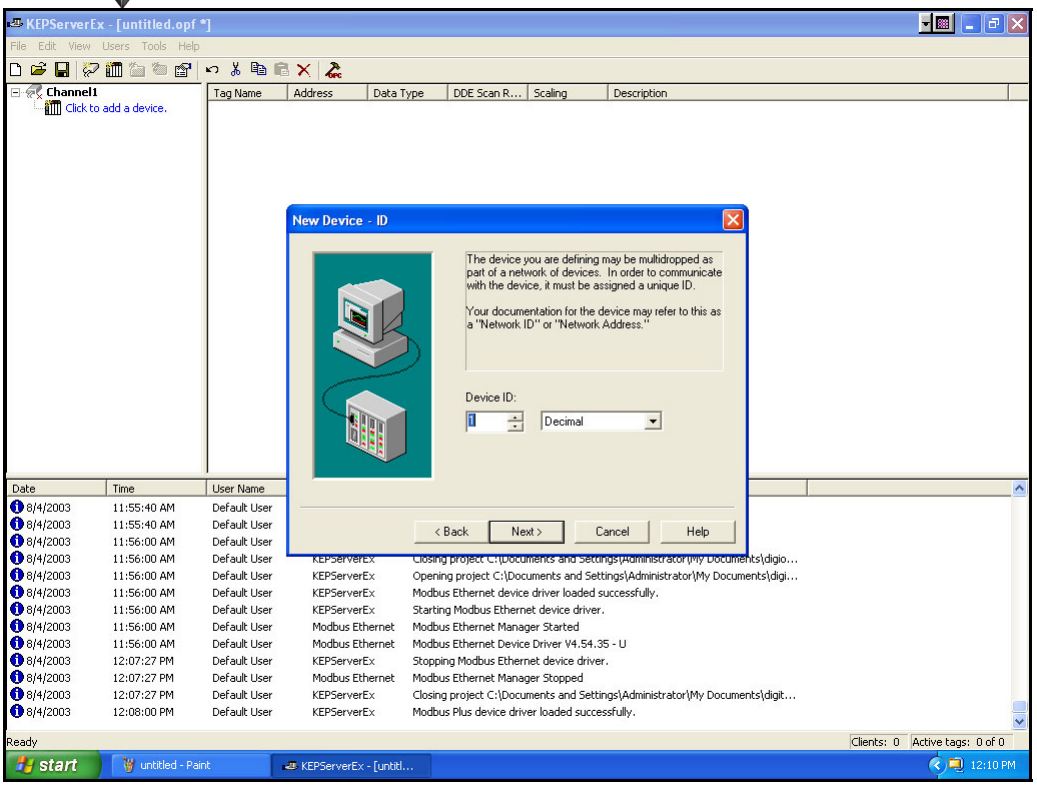
Use Ethernet Encapsulation.

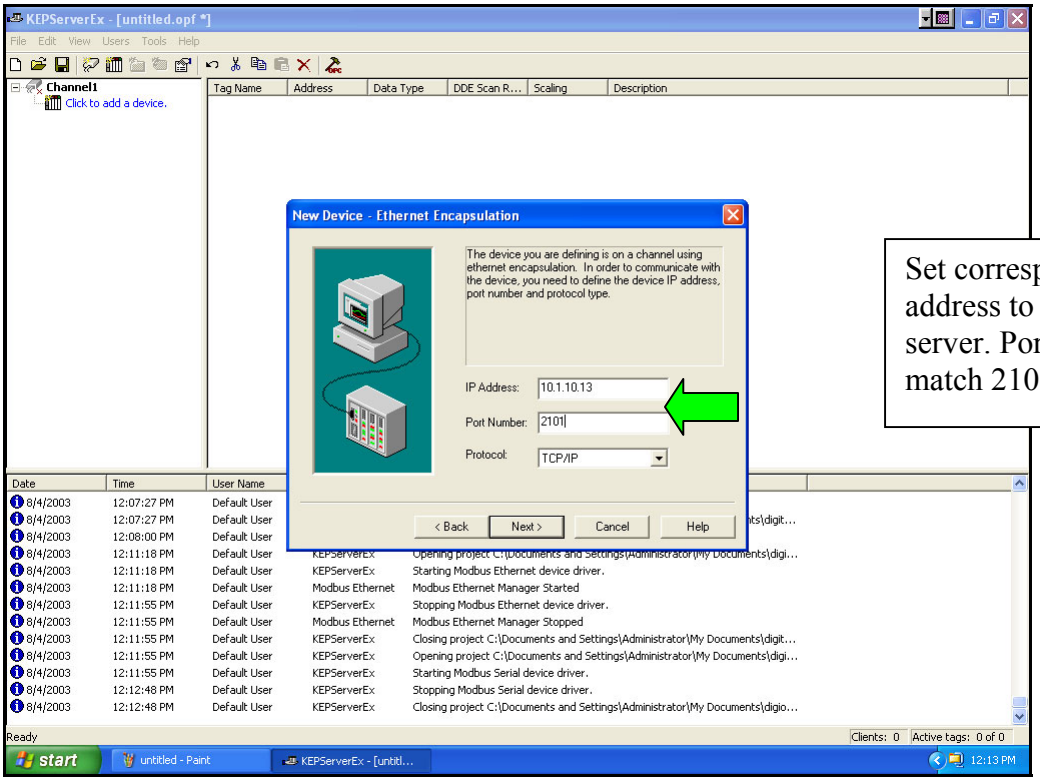


Add devices to the network.

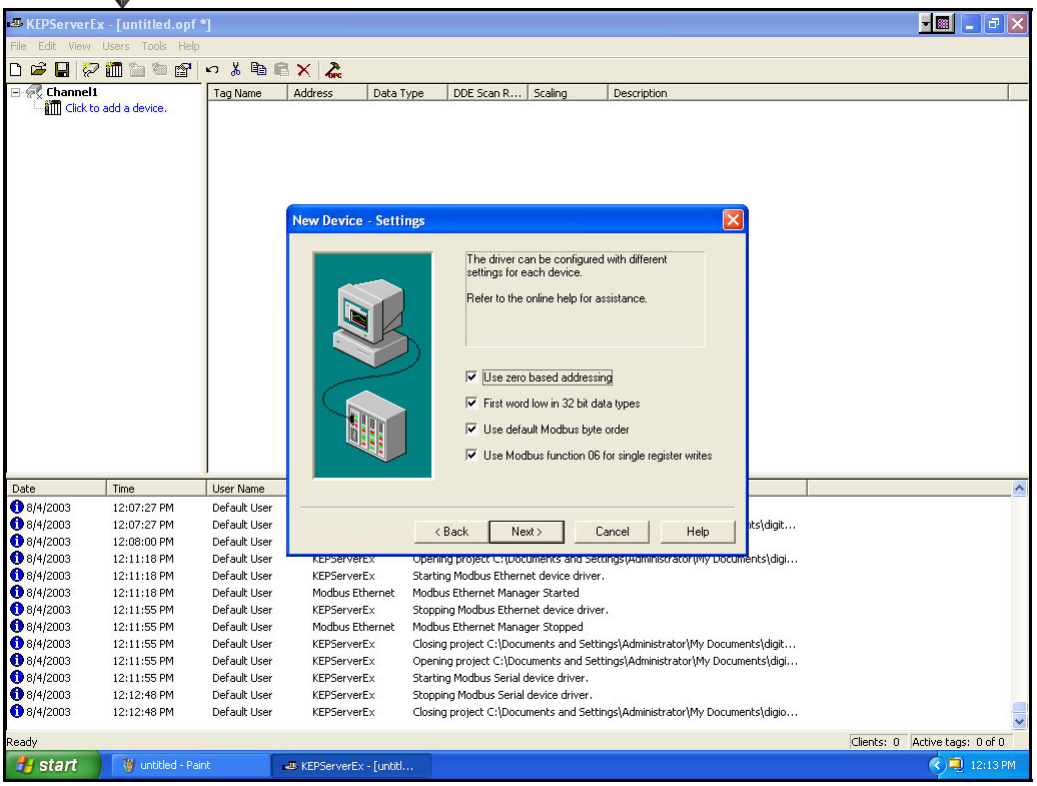


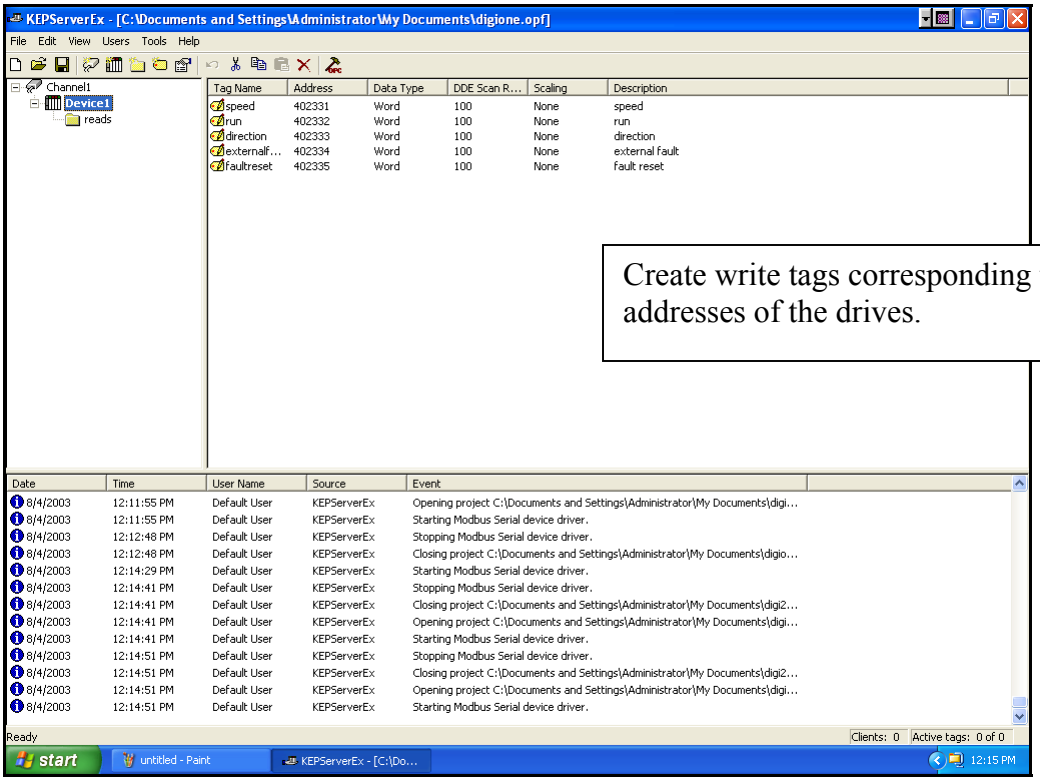
Device model is set to Modbus.



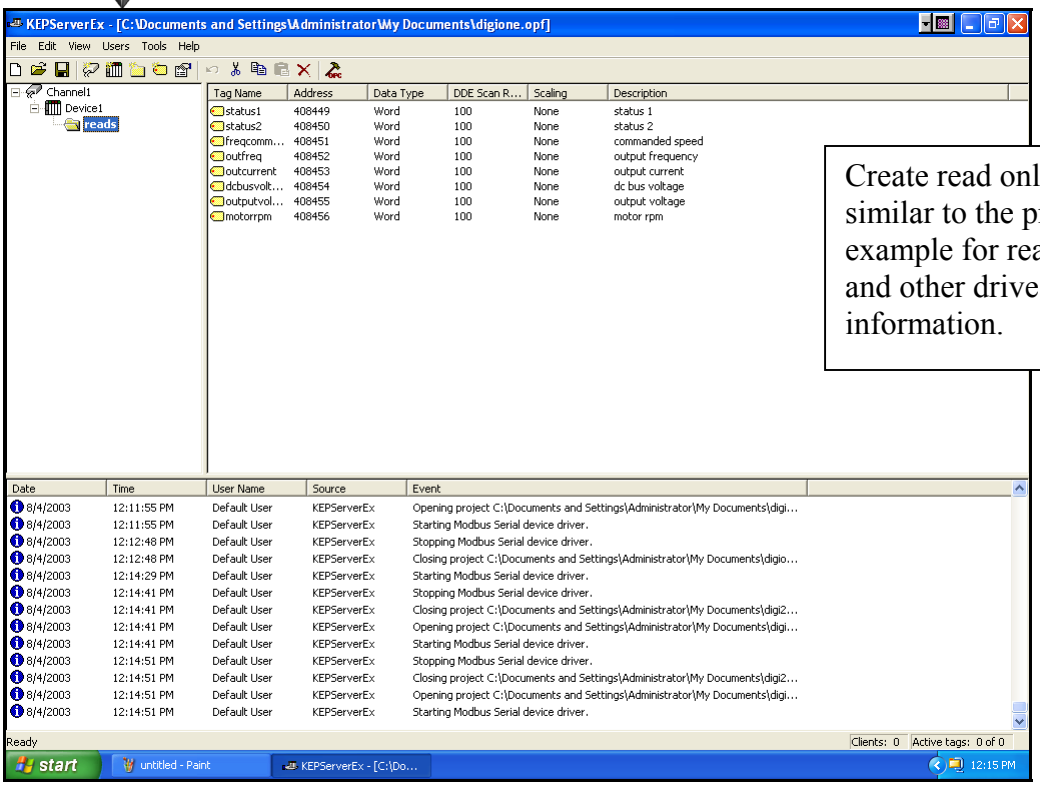


Set corresponding IP address to match the port server. Port number will match 2101.

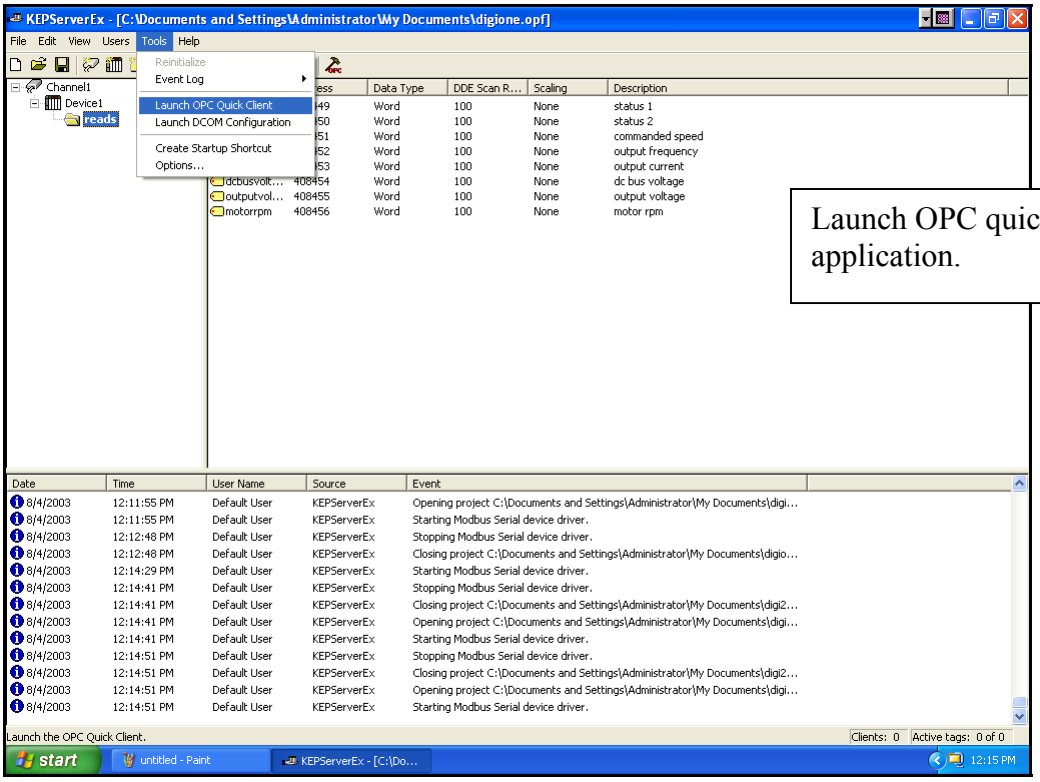




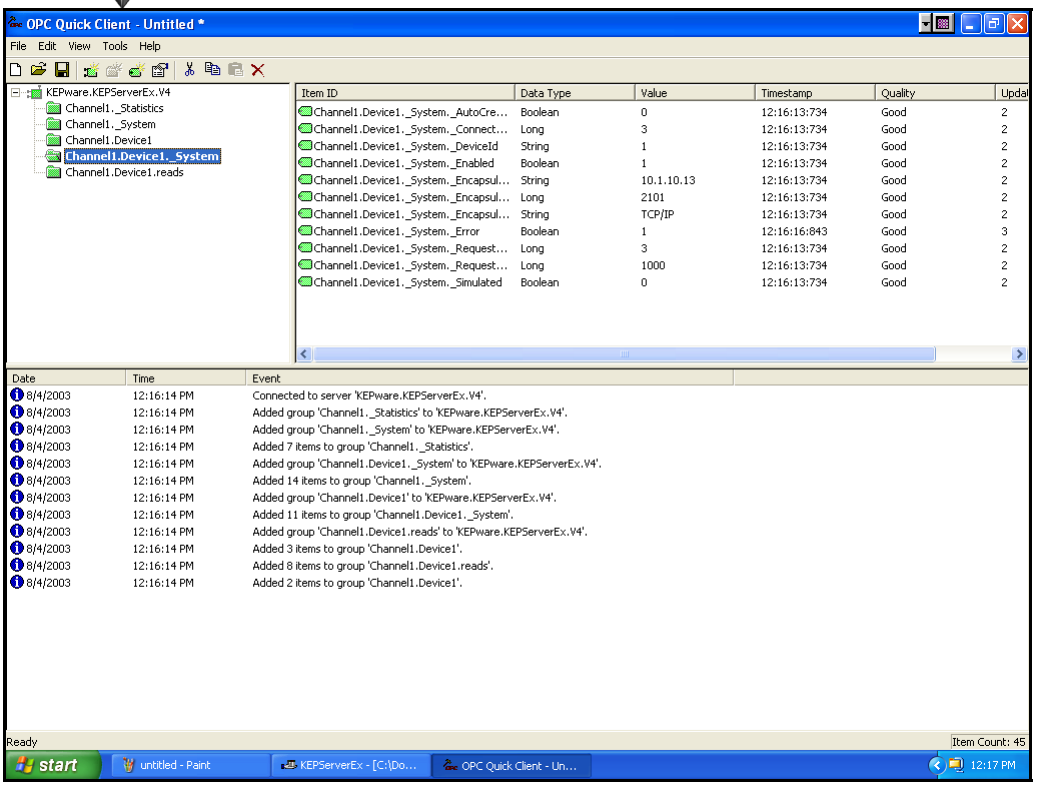
Create write tags corresponding to the Modbus addresses of the drives.



Create read only tags similar to the previous example for reading status and other drive feedback information.



Launch OPC quick client to test application.



Technical Assistance: If you have questions regarding this Application Note, please contact us at 770-844-4200 for further assistance.