Consultant ModbusTCP Howto

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ModbusTCP

This document is a guide to connecting a ModbusTCP device to a Mac running ConsultantX software from Control Plus.
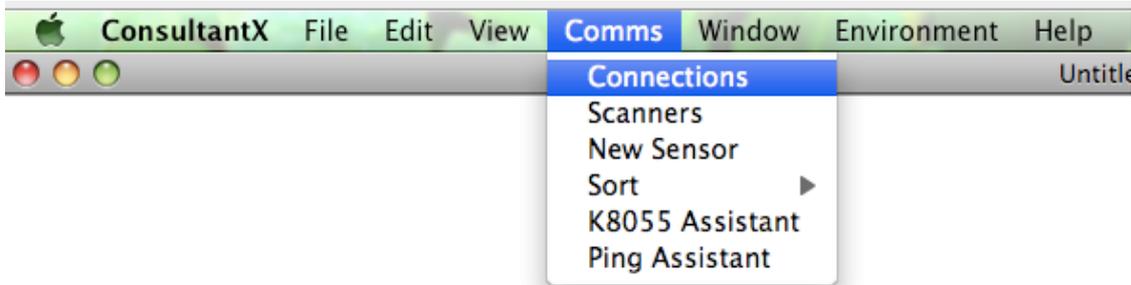
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You will learn :-

- How to create a connection to a modbus TCP device.
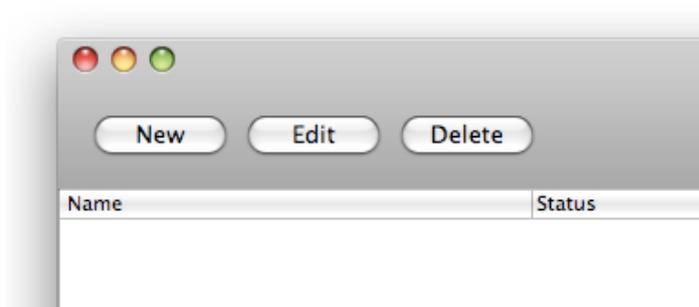- How to create a scanner that reads a block of data in the device.

Create a Connection.

A connection is the software object that handles all communications with the modbudTCP device. You must create one connection for each modbusTCP device.
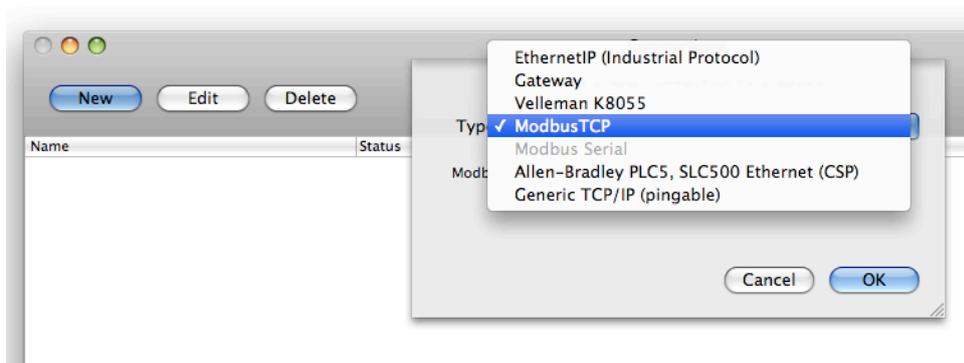
select *Connections* from the *Comms* menu.

Click the *New* button on the Connections window.

Select *ModbusTCP* from the menu.

You must now enter the IP address of the Modbus TCP device, in this example 192.168.0.102 is used.

You must give your connection a unique name. The name of the connection is used for identification by the scanners. This is very important when you have more than one Modbus TCP device and hence must have more than one Modbus TCP connection.

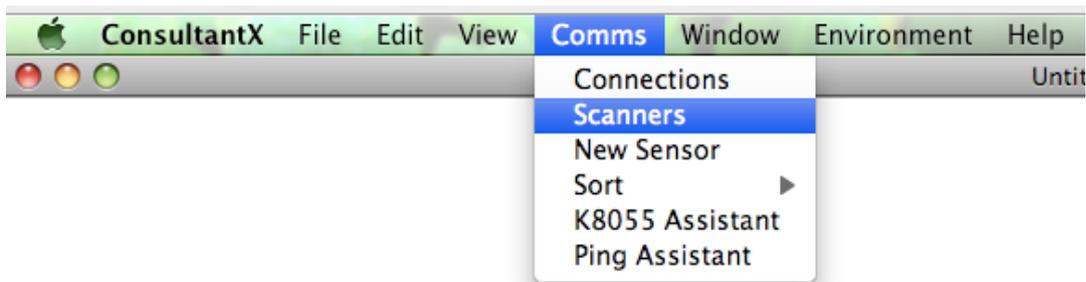In this example we will call the connection *Conveyor101*.
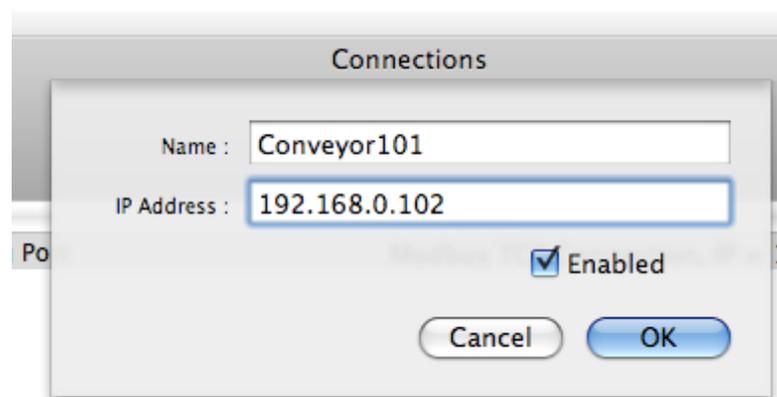
You have now created a ModbusTCP connection. If your ModbusTCP device is online and working the Connections window will show *Connected* in the *Status* column.

If ConsultantX cannot connect to the ModbusTCP device you have specified then the *Status* Column will show *Opening Port*
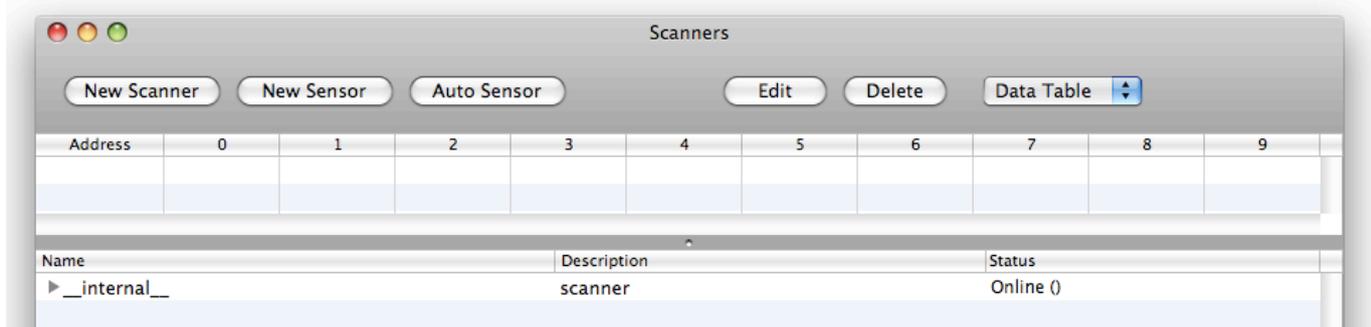
Creating a Scanner

Now that you have connected to the ModbusTCP device you can create a scanner that will read a block of data from the device.

Select *Scanners* from the *Comms* Menu.

Click the *New Scanner* button in the Scanners window.

In this example we have called this scanner *Analogs* and this scanner is going to use the connection *Conveyor101*.

It is going to read 5 elements from the holding registers starting at holding register 10. Thus, it will read a single block of data containing registers 10, 11, 12, 13 and 14.

This is only a simple example and in your application these settings will be different based on the configuration of your ModbusTCP device.
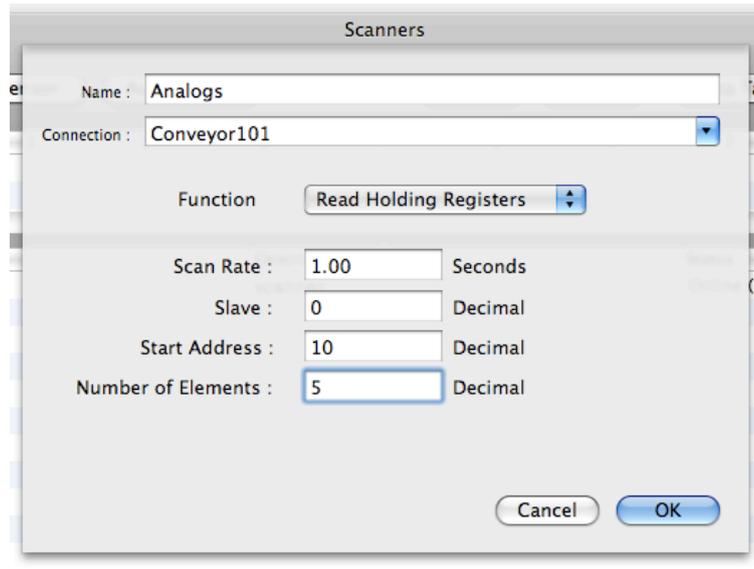
In the Scanner window select the new scanner you just created by clicking on its name in the list. The actual data read by this scanner will now be displayed in the table at the top of the window. This is a quick way to see that you are reading the correct data registers.
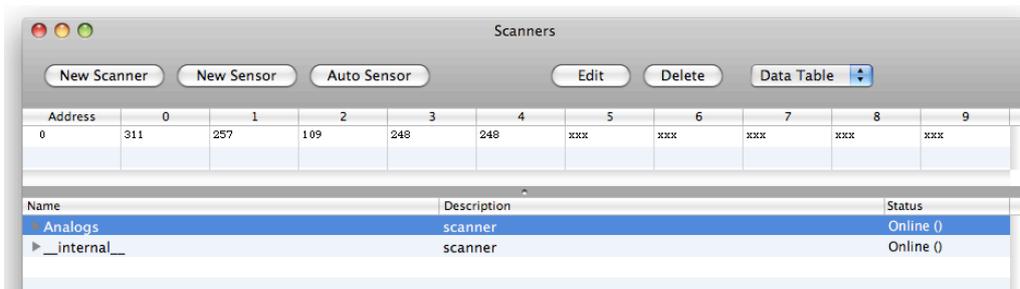
You are now ready to create sensors for this scanner. Please refer to the Howto document for creating sensors. Remember in this example the scanner is reading registers 10 to 14 so when you create a sensor to access register 10 it will be element 0 in the scanners data table. To access other data blocks in the same modbusTCP device just create another scanner that uses the same connection.

Howto's

To learn more about ConsultantX refer to the other ConsultantX

howto's