



Application Note

Using Wonderware's ABTCP driver with the EQ7000



Using Wonderware's ABTCP Driver

Overview

Wonderware's ABTCP IO Server is capable of reading and writing data to devices on the DH+ using the EQ7000. Before any data can be read or written, a new local host must be created in the host file and a topic must be defined in the ABTCP IO Server.

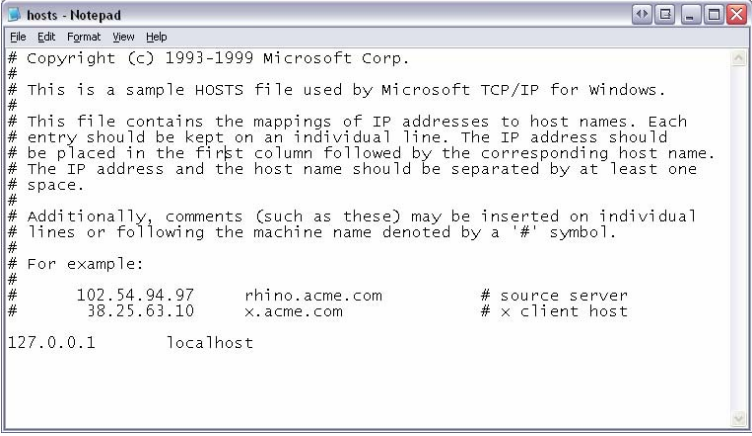
Configuring the Hosts File

The hosts file contains the names of local hosts and the IP addresses that are assigned to them. You must add a new entry to the hosts file with the IP address of the EQ7000. Below are the steps to adding a new entry to the hosts file.

1. Locate and open the hosts file. The host file can be found in the following directory.

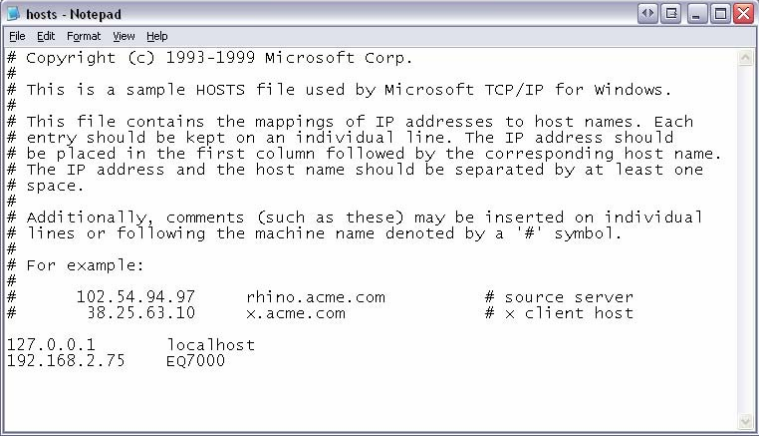
C:\WINDOWS\system32\drivers\etc

2. Open the hosts file using a text editor like Notepad. You will see the following.



```
hosts - Notepad
File Edit Format View Help
# Copyright (c) 1993-1999 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97   rhino.acme.com       # source server
#       38.25.63.10   x.acme.com         # x client host
127.0.0.1       localhost
```

3. Add a line at the end of the file specifying a new host name and IP address and then save the file. In the example below, the host name EQ7000 is added and has an IP address of 192.168.2.75.

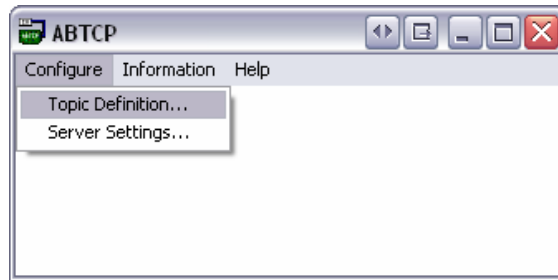


```
hosts - Notepad
File Edit Format View Help
# Copyright (c) 1993-1999 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
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# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#       102.54.94.97   rhino.acme.com       # source server
#       38.25.63.10   x.acme.com         # x client host
127.0.0.1       localhost
192.168.2.75    EQ7000
```

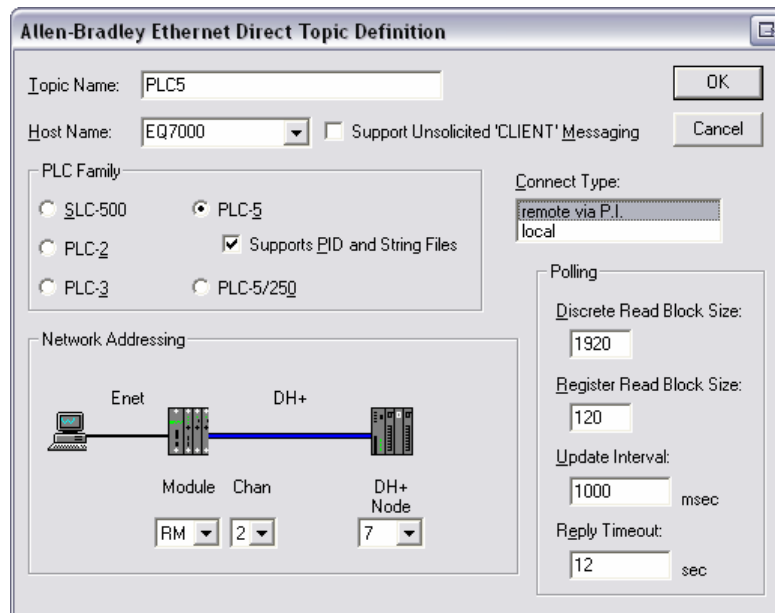
Configuring a Topic in the ABTCP IO Server

Below are the steps to configuring a topic in the ABTCP IO Server.

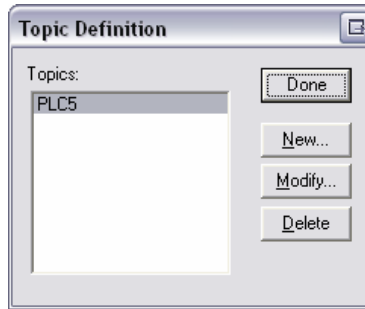
1. Open the ABTCP IO Server. Select the Configure Option and then select Topic Definition.



2. In the *Topic Definition* window that just opened, click *New* to create a new topic.
3. Configure the topic as shown below. In the example below we created a topic with the name **PLC5**. The *Host Name* used is the one defined in the hosts file: **EQ7000**. Under the *Connect Type*, select **remote via P.I.** in order to let the IO server know that the message will be for a device connected to the DH+ side of the EQ7000. In the *PLC Family*, select the type of device that you will be communicating with. In the *Network Addressing* section, select the **RM** for the *Module* and **2** for the *Chan*. The *DH+ Node* value will be the node on the DH+ that you want to communicate with.



4. After the topic is configured, click *OK* to complete the setup. You will now have the new topic show up in the *Topic Definition* window.



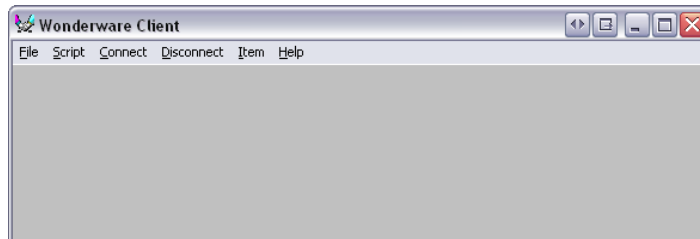
5. Click *Done* to finish with configuring the topic definition.

Now that the topic is defined in the ABTCP IO Server, the next step is to use the Wonderware Client to connect to the EQ7000 and to poll data from the device specified in the topic.

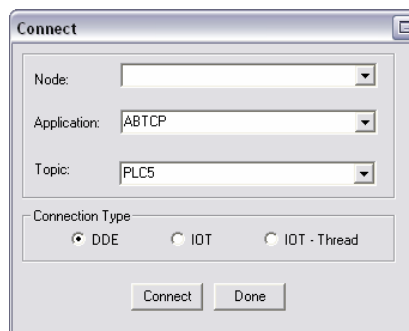
Connecting Using the Wonderware Client

After a topic has been defined in the ABTCP IO Server, the next step is to connect to the EQ7000 in order to read and write data to the device on the DH+ network. Below are the steps to connect to the EQ7000 using the Wonderware Client.

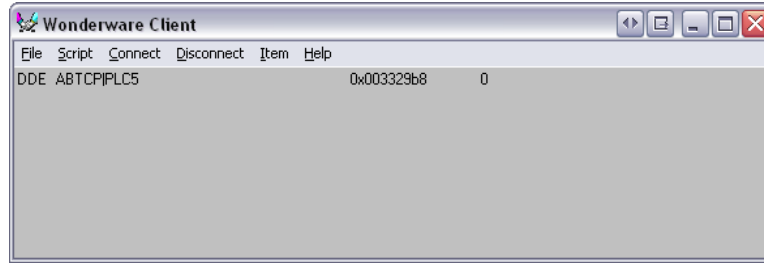
1. Open the Wonderware Client and the ABTCP IO Server if it is not already open.



2. Click on *Connect* and the following window will appear. Setup the connection as shown. Use **ABTCP** for the *Application* and enter the topic name for the topic that was created in the previous section. For this example **PLC5** is entered for the *Topic* since that was the topic created in the previous section. After this is configured, click the *Connect* button and then the *Done* button to close the window.



3. If the ABTCP IO Server successfully connected to the EQ7000 you will see the following in the Wonderware Client and ABTCP IO Server.

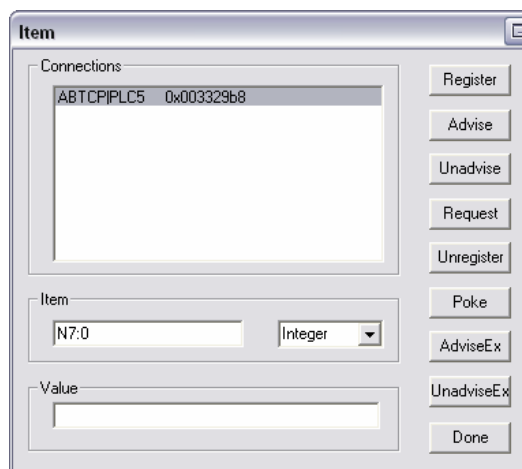


The Wonderware Client has now successfully connected to the EQ7000. The next step is to add items to read/write to the device on the DH+ network.

Reading and Writing Data

After the Wonderware Client has connected to the EQ7000, the next step is to acquire data from the device on the DH+ network that a topic was created to. Below are the steps to add data items that can be used to read/write data.

1. Open the Wonderware Client and connect to the EQ7000.
2. To add an item to read/write, click on *Item* and the following window will appear.



3. Add the datafile address that you wish to read. In the example above, the datafile **N7:0** is going to be added.
4. After the item is entered, click *AdviseEx* to add the item to the Wonderware Client.

5. Repeat step 4 to add more items. Click *Done* when finished adding items. Below is what the Wonderware Client will look like after an item is added. In the example below, the datafile N7:0 is being read.

