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# Connects Can't Locate any HART Modules or Field Devices Over the Ethernet Network

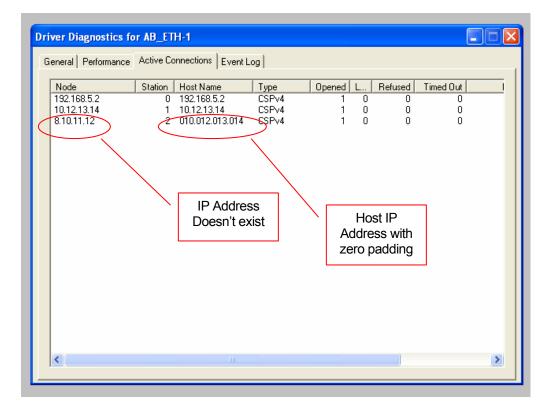
## Problem:

When using Connects and RSlinx over an Ethernet network, issues can arise with RSlinx not associating the host IP address with the proper physical IP address (Node). The problem is related to how RSlinx handles host IP addresses containing padded zeros. The padded zeros are inserted into the IP address when they are added to the search list within Connects. Figure 2 shows how the IP search list is created by Connects. Figure 1, shown below, was taken from the driver diagnostics screen of an "Ethernet Devices Driver" configured in RSlinx.

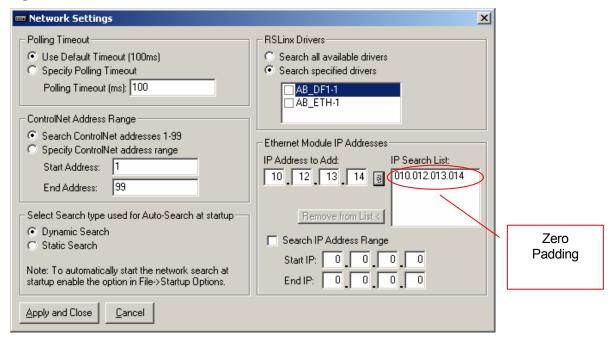
Note: The node address listed below doesn't exist.

Note: See Rockwell Automation Knowledgebase note **A6696** for more details regarding how RSLinx handles padded zeroes.

# Figure1



#### Figure 2



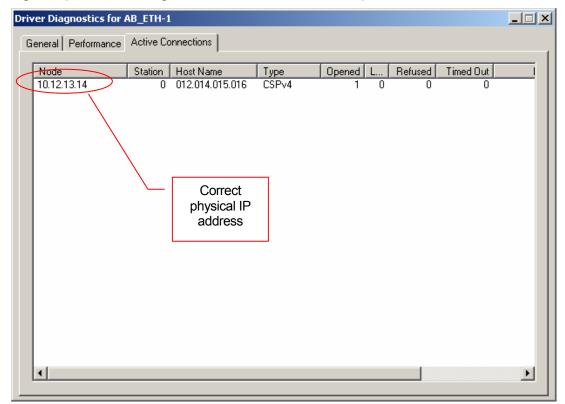
## Solution:

There are two choices:

- 1.) Remove the padded zeros from the IP address by assigning new IP addresses to the network nodes. For example, change the IP address 010.012.013.014 to 100.120.130.140.
- Add the Octal equivalent of the IP address you wish to enter, into the Connects IP search list. For example, if you want to enter IP address 10.12.13.14 then you will need to enter the octal address 12.14.15.16, into Connects. See figures 3 and 4 below.

# Figure 3 (Entering an Octal Address)

🚥 Network Settings	×	
Polling Timeout   ● Use Default Timeout (100ms)   ● Specify Polling Timeout   Polling Timeout (ms):   100   ControlNet Address Range   ● Search ControlNet addresses 1-99   ● Specify ControlNet address range   Start Address:   1   End Address:   99   Select Search type used for Auto-Search at startup   ● Dynamic Search   ● Static Search   Note: To automatically start the network search at startup enable the option in File->Startup Options.   ▲pply and Close Qancel	RSLinx Drivers   Search all available drivers   Search specified drivers   AB_DF1-1   AB_ETH-1   AB_ETH-1   AB_ETH-1   Ethernet Module IP Addresses   IP Address to Add:   I2_14_15_16   Remove from List    Remove from List    Search IP Address Range   Start IP: 0_0_0_0   0_0_0_0_0	Octal IP address = 10.12.13.14



## Figure 4 (RSLinx Showing Correct IP Address Association)

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