Troubleshooting your Windows PC to Symetrix Hardware Connection

If you are having problems connecting to your Symetrix device, here are some tips to help:

1. **Network cards.**
   If you have multiple network adapters installed on your computer, disable all of the adapters that are not being used to connect to the Symetrix device, i.e., if you are connecting via your Local Area Connection, you will want to disable your wireless network adapter.

2. **IP address of PC.**
   If your PC is directly connected to the Symetrix device without a network switch, ensure your PC is set to a 169.254.x.y IP address base. PC's generally will default to a 169.254.x.y address if there is no DHCP server present. If your PC already has an IP address because it was on a network with a DHCP server, you may need to release your PC's IP address once it is unplugged from the network or reboot the PC when not connected to a DHCP server. Unless previously set to a static IP address, the Symetrix device will default to a 169.254.x.y base address when no DHCP server is present. Use 255.255.0.0 for the Subnet Mask.

3. **Firewall.**
   Disable or add your Symetrix software to the firewall exceptions list if the firewall appears to be blocking the connection.

4. **Anti-virus software.**
   Temporarily disable or add your Symetrix software to the exceptions list as some settings may prevent connection.

5. **Multiple network interface cards (NICs).**
   Disable any auxiliary NICs or assign their priority order so that the NIC you are using to connect to your Symetrix device has the highest priority.

6. **Interconnects. Test or swap the CAT5 cable(s).**
   Test, swap, and/or power-cycle network switch/hub if used. When directly connected, either a straight-through or cross-over cable will work. The front panel Ethernet LED either flashes or has a solid green LED if there is connection to the Symetrix device. Here is a complete description of what the LEDs indicate:
   - The bi-color LED flashes green briefly when a Symetrix-related packet is received, including communication from the SymNet Composer software. If the LED is solid green it indicates constant network communication.
   - One exception relates to the Access Code (hardware security). If the access code is invalid, the Ethernet LED flashes red instead of green. The Ethernet LED will not flash for other types of network traffic such as ping, FTP, DHCP negotiations, Telnet, etc. The LEDs on the rear-panel surrounding the RJ-45 connector react to every type of network traffic.
   - In DHCP mode, during boot the Ethernet LED is amber when the device first queries the network for a DHCP IP address. The query can last up to 15 seconds. If the unit is assigned a DHCP IP address, the Ethernet LED will flash green for 1 second, and then enter the normal mode of flashing when a
Symetrix packet is received. If the unit is not assigned a DHCP IP address, the Ethernet LED will flash amber for 1 second, then default to a class B IP address of 169.254.x.y before entering the normal mode of flashing when a Symetrix packet is received. The Ethernet LED flashes red for 1 second when the Ethernet cable is removed and flashes green for 1 second when the Ethernet cable is inserted.

7. Proxy server settings.
Disable any proxy server settings, or specify the IP address of your Symetrix device as an exception.

8. Connection Wizard Advanced search is too narrow.
Use 255 for every octet of the IP address and subnet mask for the widest possible search, i.e., 255.255.255.255.

9. VLAN connection. VLAN connections require entering the exact IP address in the Advanced search in the Connection Wizard. For example, to find a device at 192.168.4.14, enter the values in the search fields as shown below.

10. Mac running Virtual Windows.
Ensure that the network adapter for the virtual machine is using ‘bridged’ not ‘NAT’ mode.

Tips: If the front panel of your unit contains an LCD screen, you can access the assigned IP address of the device in System Mode. Use the Left/Right Arrow buttons to show information including the currently assigned IP address of that device. If you are in ARC Mode, you can access System Mode by holding down the Menu button for approximately 5 seconds.

While the device is powered on, if you momentarily push the reset button on the pack panel (to the left of the Ethernet port) it will reset the unit to DHCP. If you are directly connected from your computer and DHCP is not available, then the unit will then default to its 169.254.x.y IP address.

A device’s default IP address can be calculated from its MAC address. The IP address will be a 169.254 base address. Convert the last 2 groups of numbers in the MAC address from hex to decimal to complete the last 2 groups of numbers for the IP address. For example, if the MAC address is 00:0C:0D:00:D0:7A, convert D0 and 7A from hex to decimal. The result is 208 and 122. So, the full default IP address of the unit is 169.254.208.122.