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EtherPath® SS-1R Single Port Serial Server Quick Start Guide – Nailed-Up Connection Mode

This document guides the new user through configuration of an EtherPath® single port serial server and demonstrates the “nailed-up connection mode”, in which a pair of devices maintain serial port communications through a pair of EtherPath units. Connect two PCs for serial port communications through two EtherPath units with an ethernet network between them, as diagrammed in Figure 1 below.

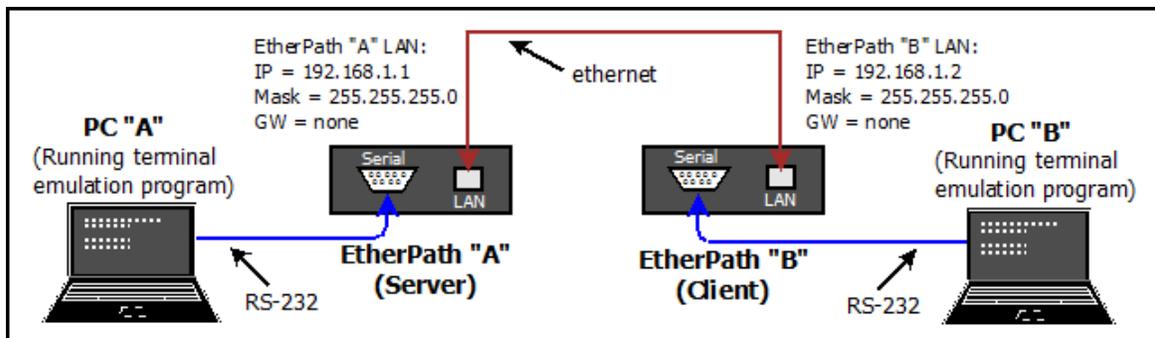


Figure 1 – Configuration for End-to-End Test, with Example IP Addresses on EtherPaths

Requirements

1. Two EtherPath units and knowledge of basic TCP/IP networking
2. Two PCs with a wired ethernet connection, Serial Port (or USB-to-Serial adapter cable) and any modern web browser
3. A LAN cable, either straight-through or crossover, to connect the LAN ports
4. Two null modem cables, to connect PC serial ports to each EtherPath

Step-by-Step Procedure

1: Open the first box and note the contents: The EtherPath single port serial server, power adapter and CDROM containing manual and Application Notes. Power up this unit (EtherPath “A”) *which is configured as a Server by default, with LAN settings as shown in Figure 1. No changes are needed.*

2: Open the second box and power up this unit (EtherPath “B”) which will be configured as a Client.

3: Configure one of the PCs for use on the default LAN subnet of the EtherPaths. Use the IP address 192.168.1.100 with a Subnet Mask of 255.255.255.0.

4: Connect the PC to EtherPath B's LAN port, open a browser (Internet Explorer, Firefox, Chrome, Safari), and enter <http://192.168.1.1> (NOTE that “http” is used, not https)

The **EtherPath Setup** screen should appear as in Figure 2:

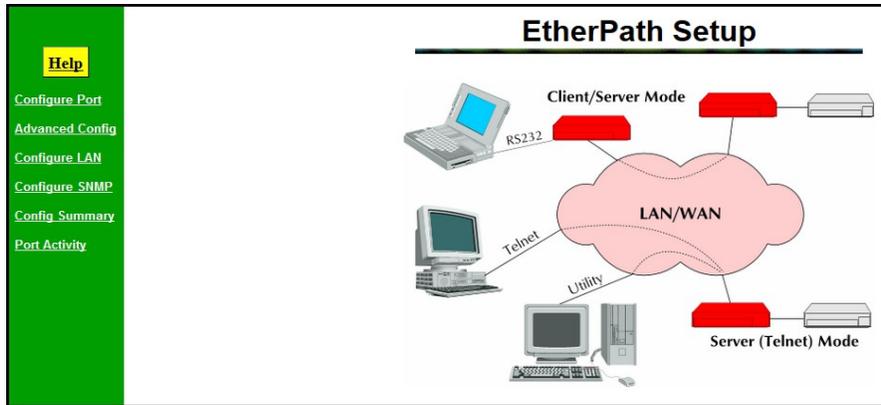


Figure 2 – EtherPath Setup Screen

5: Click on **Configure LAN** from the menu and use these values to configure EtherPath B:

IP Address = 192.168.1.2
Network Mask = 255.255.255.0
Gateway IP Address = 0.0.0.0

Mode = Client
Remote Device IP Address = 192.168.1.1

To make these changes active on EtherPath B, click the **Save** button near the bottom of the screen. A **Server Status Message** screen will appear while the unit reboots. Wait several seconds for the reboot to complete.

6: Disconnect the PC from EtherPath B and connect an ethernet cable between the LAN ports of EtherPath A and EtherPath B. Plug in the null modem serial port cables from PC A to EtherPath A and from PC B to EtherPath B.

Testing the Link

With the PCs connected to the serial ports of the EtherPaths, running terminal emulation programs, it should be possible for each PC to send characters to the terminal of the other across the link, as shown in Figure 3 below. You will not see the characters being typed on the local screen unless “Local Echo” is enabled.

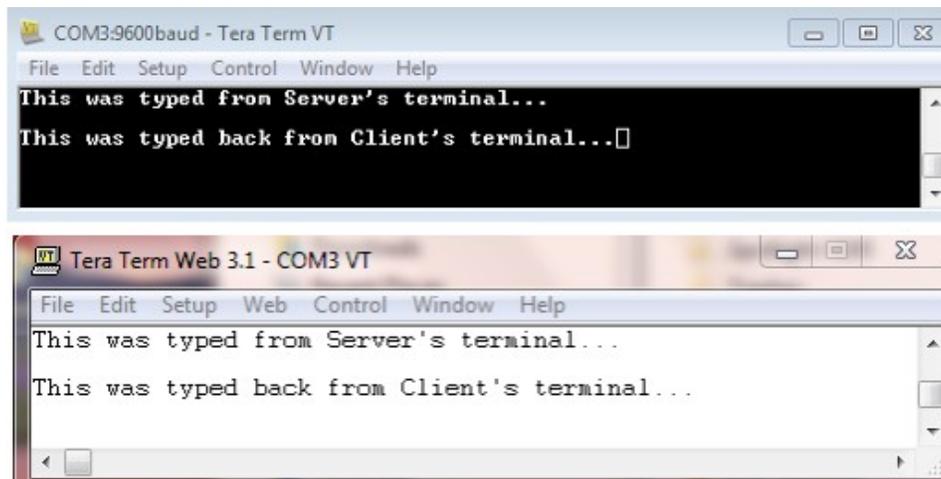


Figure 3 – Sample Terminal Output for PC A and PC B