

Testing an Osicom CSU/DSU

Frame Relay - Option

Back to Back

Materials needed for testing:

- a. 25 pin - 25 pin Serial Cables
- b. 2 - Wyse terminals
- c. 1 - Head to Head 8-wire Cable (Flat Satin or Cat. 5)

Setup Phase: (Using a Wyse Terminal)

To setup the Wyse Terminals correctly for testing the CSU/DSU's, you will need to configure the following settings on the Terminals. The receiving port on the Terminal needs to be set to 9600 Baud & the emulation should be set to a VT100. The final step will be to place the CSU/DSU(s) next to the Wyse terminal that it will be connected to when we begin the testing. Make sure that the appropriate power supplies are available.

Programming Phase: (Testing phase)

First, connect each end of the Head to Head 8-wire cable into both WAN ports located on the back of each CSU/DSU. As you begin your testing, your next step will be to plug a 25 pin serial cable into the CONSOLE port of each CSU/DSU with the other end of each cable to be plugged into the modem/primary port on each Wyse terminal. Each terminal should boot to the OSICOM Configuration MENU. At the menu choose VT100 terminal emulation. If you choose the wrong emulation, the CSU/DSU will need to be power cycled to reset and choose again. Determine which CSU/DSU will be connected to the server side of the network and begin there.

Server Side:

1. From the *MAIN MENU* - choose **CONFIGURATION**
2. Choose **CSU CONFIGURATION**
3. Choose **TIMING: INTERNAL** by pressing the **ENTER/CR** button, then press **X** to exit
4. You will be asked to confirm the changes
5. At the *CONFIGURATION MENU* choose **INTERFACE CONFIGURATION**
6. Choose the **LAN/PORT 0** interface
7. This should be enabled with the **ETHERNET** protocol
8. Exit back to the *INTERFACE CONFIGURATION MENU* and choose the **WAN/PORT**
9. This should be enabled with **FRAME RELAY – NO LMI** setting for testing
10. Exit back to the *INTERFACE CONFIGURATION MENU*
11. Exit back to the *CONFIGURATION MENU*
12. Choose the **PORT CONFIGURATION** option
13. Choose the **LAN/PORT 0** interface
14. Verify that the **INTERFACE: LAN** is set and that the **IP ROUTING: ENABLE** is set
15. Use the arrow keys to select the *IP ROUTING MENU*
16. Under the **PORT 0 IP** routing option, the address should be entered as the base network address with an appropriate IP number (i.e. 192.168.1.1 is generally a good choice for testing) the subnet should be 255.255.255.0 All other settings should be left as they are
17. Confirm changes and exit to the *PORT CONFIGURATION MENU*
18. Choose the **WAN-PORT 1** interface
19. Verify that the **INTERFACE: WAN1** is set and also **IP ROUTING: ENABLE** is set
20. Choose the *IP ROUTING MENU* and set the **MODE** to **NUMBERED** and insert the address base at 200.10.20.150 and the subnet mask to 255.255.255.0
21. After confirming changes, exit all the way back to the *CONFIGURATION MENU*
22. Choose the *GLOBAL CONFIGURATION MENU*.
23. Choose the **IP CONFIGURATION** option
24. Verify that the **DEFAULT ROUTE PORT: 1** is set
25. After confirming any changes, exit back to the *MAIN MENU*
26. Choose the **SAVE TO FLASH** menu option
27. Choose **YES** to save the configuration.

Remote Side:

1. From the *MAIN MENU* choose **CONFIGURATION**
2. Choose **CSU CONFIGURATION**
3. Choose **TIMING: REPEATER** by pressing the **ENTER/CR** button, then press **X** to exit
4. You will be asked to confirm the changes
5. At the *CONFIGURATION MENU* choose **INTERFACE CONFIGURATION**
6. Choose the **LAN/PORT 0** interface
7. This should be enabled with the **ETHERNET** protocol
8. Exit back to the *INTERFACE CONFIGURATION MENU*
9. Choose the **WAN/PORT 1** interface
10. This should be enabled with **FRAME RELAY – NO LMI** setting for testing
11. Exit back to the *INTERFACE CONFIGURATION MENU*
12. Exit to the *CONFIGURATION MENU*
13. Choose the **PORT CONFIGURATION** option
14. Choose the **LAN/PORT 0** interface
15. Verify that the **INTERFACE: LAN** is set and that the **IP ROUTING: ENABLED** is set
16. Use the arrow keys to select the *IP ROUTING MENU*
17. Under the **PORT 0 IP** routing option, the address should be entered as the base network address with an appropriate IP number (i.e. 192.168.3.1 is generally a good choice for testing.) The subnet should be 255.255.255.0 All other settings should be left as they are.
18. After confirming changes, exit back to the *PORT CONFIGURATION MENU*
19. Choose the **WAN-PORT 1** interface
20. Verify that the **INTERFACE: WAN 1** is set and also that the **IP ROUTING: ENABLE** is set
21. Choose *IP ROUTING MENU* and set the **MODE** to **NUMBERED** and insert the address base at 192.168.2.1 and the subnet mask to 255.255.255.0
22. After confirming changes, exit all the way back to the *CONFIGURATION MENU*
23. Choose the *GLOBAL CONFIGURATION MENU*
24. Choose the **IP GLOBAL CONFIGURATION** option
25. Verify that the **DEFAULT ROUTE PORT: 1** is set
26. After confirming any changes, exit back to the *MAIN MENU*
27. Choose the **SAVE TO FLASH** menu option
28. Choose **YES** to save the configuration.

Testing:

Testing from each terminal, you should be able to use the **STATUS AND TEST** option from the *MAIN MENU* and choose the **TCP/IP STATUS** menu option. Choose the **PING/TRACEROUTE** option and **PING** the 192.168.2.1 and 192.168.2.3 address to verify that the CSU/DSU's are communicating with each other. If a network is connected to the CSU/DSU's, **PING** the other network **TCP/IP** addresses to verify that the Ethernet interface is working properly.

Finalizing:

After testing the routers back to back, the host side CSU/DSU will need one change to make it ready for onsite usage.

From the *MAIN MENU* of the host side CSU/DSU, choose **CONFIGURATION**, and then choose **CSU CONFIGURATION**. Choose **TIMING: REPEATER** by pressing the **ENTER/CR** button, then press **X** to exit. You will be asked to confirm the changes. After confirming, exit back to the *MAIN MENU* and choose the **SAVE TO FLASH** menu option. Choose **YES** to save the configuration.

The CSU/DSU pair is now ready for usage. Each ethernet device (i.e. Spotline units) at the remote site will need to be programmed with the appropriate ip address base (i.e. 200.10.30.xxx) and the correct subnet mask of 255.255.255.0 as well as the gateway address (i.e. 200.10.30.150).

Grn02/02

OSICOM CSU/DSU

DUAL REMOTE STORE SETUP

