Introduction

This document describes the configuration of a Cisco Router as a terminal server and their usage of Menu options to manage the access of devices connected to the terminal server.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Terminal Server Setup
- Octal cables

Components Used

The information in this document is based on Integrated Service Routers Generation 2 (ISR G2) with an Async module like HWIC-8A.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Configure

Network Diagram
Configurations

Step 1. Configure a loopback interface on the Router and assign IP address to the same.

Step 2. Check the physical connections from the terminal server to the end devices and make a note of line number corresponds to each device. HWIC-8A provides 8 lines as you can see in the output.

Step 3. Configure IP host mappings for each device as in below example. Port numbers can be obtained by adding 2000 to the line number corresponds to each device. For example, line number for a device connected to port 0/0/1 is 4 as you can see in the preceding output. Port number for connecting to the device is 2004 (2000+4).

Step 4. In order to configure menu options, you can first configure a banner or title for the terminal server as shown in this example:

Step 5. This command needs to be configured to as it gives the options to make selections in a Menu.

Step 6. You have to configure line-mode to enforce the need to hit Enter after you select an option. Menu runs directly after the selection an option, if you don't use this command.

Step 7. In order to setup a new connection, these menu commands are used.

Step 8. This menu command opens a new connection or resumes the connection that exists to the configured host.

Step 9. In order to clear the screen after it enters the menu, this command is used.

Step 10. In order to display user status on the top of the screen, this command is used.

Step 11. These menu command needs to be configured for the exit from the menu.

Step 12. In order to quit a Terminal Server connection, use these menu commands.

Step 13. These commands are configured under the VTY lines for automatic menu execution, when a user login via Telnet or Secure Shell (SSH).

Verify

Use this section in order to confirm that your configuration works properly.

Telnet to R1

Telnet to R2

Exit from the Menu option
Exit from the Terminal Server

Troubleshoot

You may observe these error sometimes when you attempt to connect to an end device from a Terminal server

Terminalserver#telnet R1
Trying R1 (10.1.1.1, 2003)...
% Connection refused by remote host

In order to resolve this, you may need to clear the corresponding line from the Terminal Server as in this example:

Terminalserver#clear line 3
[confirm]
[OK]
Terminalserver#telnet R1
Trying R1 (10.1.1.1,2003)....open
R1>

Related Information

- Cisco Terminal Server Configuration
- Technical Support & Documentation - Cisco Systems