Applying Correct Terminal Emulator Settings for Console Connections

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Introduction

This document explains the correct settings to apply when you connect a PC to a router's console port. This document also details how to use the PC's Hyper Terminal to configure and monitor a router.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

This document is not restricted to specific software and hardware versions.

The information presented in this document was created from 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, ensure that you understand the potential impact of any command before you use it.

Conventions

For more information on document conventions, refer to the Cisco Technical Tips Conventions.

Background

When a console cable is connected from a PC's COM serial port to the router, a router prompt does not appear on the Hyper Terminal. Garbage characters appear on the Hyper Terminal, and the router no longer accepts keystrokes. It appears as if the router is hanging and is not responsive.

Solution

The settings in the Hyper Terminal need to be set correctly; otherwise, "strange-looking" or garbage characters may show up on the screen. When you set up the connection, use these settings:
Bits per sec : 9600  
Data bits : 8  
Parity : none  
Stop bits : 1  
Flow control : none

Here is a screenshot of how to configure these settings on a Windows-based PC running Hyper Terminal:

Without these settings, the router may display but does not accept any keystrokes. The router, therefore, appears as if it is hung or has crashed. With the correct settings, you can use Hyper Terminal to configure and monitor the router.

Note: On some routers the console speed has been changed in the configuration register, and a bits-per-second speed of 9600 does not work. However, this situation is not common. Valid speeds (other than 9600bps) include 1200, 2400, and 4800 bps. On some platforms, notably the 3600 Series Routers, 19200, 38400, 57600 and 115200 bps are supported. Try these if you fail to connect with the settings described in this document.

**Console Session Not Accepting Key Strokes**

This issue can be due to any of these reasons:

- Difference in baud rate and the bits per second value
- Bad console cable
- Scroll lock option is enabled on the keyboard (make sure that the scroll lock key is disabled on the Keyboard)
Related Information

- Troubleshooting Router Hangs
- Introduction to DIAL – ACCESS
- Product Support Page
- Technology Support Page
- Technical Support – Cisco Systems