Remote TTY Daemon for Unix/Linux

Application Guide

Version 1.0

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1. Overview

This user guide documents the **ttyd** remote modem daemon. The **ttyd** daemon is fully telnet compatible allowing programs to connect to any remote device such as networked modems and terminal servers as if they were local devices as long as the device utilizes the telnet protocol. The **ttyd** daemon also supports raw TCP protocol allowing programs to connect to any remote device through the raw TCP protocol.

2. Operation of Daemon

After opening a Master `Pseudo tty` device, the daemon will wait for some other process to open the corresponding slave device. Once the slave device is opened, a connection will be made, using the telnet or raw TCP protocol, to a remote server. The remote end may be any server supporting the telnet or raw TCP protocol such as a terminal server or network modem.

3. Unix O/S support

Currently the supported system types are AIX, FreeBSD, Linux, OSF, SCO5 and Sun/OS.

SCO	- SCO 5 host
OSF	- DEC host
AIX	- AIX host
LINUX	- LINUX host
FreeBSD	- Free BSD host
SunOS	- Sun host

4. Synosis

`ttyd –d pty-device [option] host port`

Where options

-b baud-rate :

Sets the initial baud-rate of the device.

-d pty-device :

Master Pseudo tty device to open and wait for a connection on. This option is not optional, it must be provided

-p port-settings :

Configures the port as specified by port settings.

If port-settings is present, the port will be configured to them.

Otherwise, the current settings will be used. The settings are specified by a string of one or more of the following concatenated together with no intervening spaces:

8 8 Bits / Character

7 7 Bits / Character

6 6 Bits / Character

5 5 Bits / Character

N No Parity

E Even Parity

O Odd Parity

C0 No H/W Flow Control

C1 H/W Flow Control

S0 No S/W Flow Control

S1 S/W Flow Control

-n :

No detach, do not run as a background process.

The **host** and **port** parameters specify the IP address of host and port number to connect to when the Slave Pseudo device is opened.

For reference, in Linux the Master Pseudo `tty` devices are the devices **`/dev/pty[a-ep-z][0-9a-f]`** and the slave devices are **`/dev/tty[a-ep-z][0-9a-f]`**.
Other Unices may have different naming schemes.

5. Examples

Let's assume IP address of the host and port number to connect as **192.168.100.3** and **7001** respectively. And also assume user wants to use 0-th Pseudo tty device as a local serial device on the Linux host.

If user runs the following command in the shell,

```
# ttyd -d /dev/ptyp0 -b 9600 -p 8NC0 192.168.100.3 7001
```

Then the daemon will wait for some other process to open the corresponding slave device(`/dev/ttyp0`). Once the slave device is opened, a connection will be made, using the telnet or raw TCP protocol, to a remote server. Users may make some script for batch process to connect multiple connection.