
How to use a IGW/800 or IGW/900 without a Serial Command Line Interface

The default Linux configuration of your IGW/800 or IGW/900 Linux Device Server offers a Serial Command Line (CLI) interface. This feature allows you to connect a terminal emulation program to the IGW/800 or IGW/900 COM1 serial port. When connected via a serial line you can interactively enter commands and see the results.

The problem for some user applications with this feature is that Linux uses the COM1 port also for showing user messages at boot time. If you connect COM1 to an external device for application-specific usages, this device can be confused about the boot-up messages over COM1.

If your application needs COM1, please download a Linux configuration without the CLI support. The DIL/NetPC DNP/528x Starter Kit CD-ROM offers a Linux O/S image file without CLI support.

- **1. Step:** Setup an Ethernet connection with a 10/100 Mbps switch and Ethernet patch cables between the IGW/800 or IGW/900 Linux Device Server and your PC. See also *mHTigw8-5.pdf: How to download a new Linux O/S Image to the IGW/800 or IGW/900 Flash* for more details.
- **2. Step:** Setup a serial link (**RS232 Serial Link**) between the IGW/800 or IGW/900 COM1 serial port and a serial port of your PC system. Use a null-modem cable and the RS232 interface cable for the physical connection between the COM1 port of the IGW/800 or IGW/900 and the PC COM port. For more details about this connection please use the *IGW/800 or IGW/900 Starter Kit User Manual*.
- **3. Step:** Run your terminal emulation program. Microsoft Windows-based PC systems offer *HyperTerminal* for this task. Linux-based systems come with *Minicom*.
- **4. Step:** Set the RCM cable bridge of your IGW/800 or IGW/900 Linux Device Server to boot the Motorola *dBUG* ROM Monitor program direct from the on-board flash memory. For more details about this cable bridge please use the *IGW/800 or IGW/900 Starter Kit User Manual*. Then provide the IGW/800 or IGW/900 with power.
- **5. Step:** Run a TFTP server on your host (e.g. your Windows-based PC). Make sure that the TFTP server has access to the Linux O/S image file `\uCLinux\Image\Rel3\WOC\image.bin`¹ of your DIL/NetPC DNP/528x Starter Kit CD-ROM.
- **6. Step:** Download and flash new Linux O/S image file. See also *mHTigw8-5.pdf: How to download a new Linux O/S Image to the IGW/800 or IGW/900 Flash* for more details about the necessary *dBUG* commands and steps.
- **7. Step:** Remove the power supply from your IGW/800 or IGW/900 Linux Device Server after the execution of the *dBUG fl* command. Then power up your IGW/800 or IGW/900 again.

¹ **Please note:** “WOC” stands for “**W**ith**O**ut **C**onsole” (without Serial Command Line interface).

Check for any Linux boot message over COM1.

- **8. Step:** Setup a Telnet session to your IGW/800 or IGW/900 Linux Device Server and check the Telnet-based command line interface. This is now the only way for interactively enter Linux commands and see the results.

That is all.