

Release Notes 93000221AA
for
PORTSERVER II Operating System
40001260Z
Version 3.1.7
Software Manual P/N 92000246C
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I. Introduction

These release notes provide information on PortServer II OS version 3.1.7.

II. Summary

- A. Pre-3.0 Incompatibility Notice
- B. Pre-Rev K Model ROM Limitations
- C. Limitations for Systems with 2 Mbytes of Memory
- D. Upgrading flash ROM.
- E. Bug fixes in this release.
- F. Enhancements in this release.

III. Details

A. Pre-3.0 Incompatibility Notice

This version (v3.1.7) of the PortServer II OS is incompatible with versions older than v3.0. Certain parts of the non-volatile storage formats used to store configuration information have been changed. Consequently, if you want to use this version of the OS and preserve your current configuration, you must use the 'cpconf' command to save your configuration to a host and then reload it once the new version of the PortServer II OS has been installed.

B. Pre-Rev K Model ROM Limitations

The addition of Frame Relay to v3.0 and later have caused the size of the boot image to exceed the space available in the PortServer II flash ROM for units built prior to the Rev K models. Consequently, if you want to use v3.0 or later OS with these older units, you must do one of the following:

- Boot PortServer II via TFTP over the Ethernet port.
- Acquire a smaller version of the OS, which does not have Frame Relay, this is available from the Digi ftp site.

Note: Versions above and including v3.1.0 will no longer be available in the smaller non-frame version.

C. Limitations for Systems with 2 Mbytes of Memory

Testing has determined that the PortServer II's previously standard 2 Mbytes of installed memory is inadequate in the following instances and is likely to require an expansion to at least 4 Mbytes.

- Full 64 port configurations in which more than 50 asynchronous and/or TCP users are simultaneously using the PortServer II. This includes users accessing the PortServer II via the Ethernet connection or any type of connection using the serial ports.
- Sites with heavy traffic on serial ports. The problem is simply throughput – degradation of performance may indicate that additional memory is called for.

D. Upgrading Flash ROM

In some instances parameters from previous releases (e.g. v3.1.6) may not translate properly into v3.1.7. In order to insure that the parameters are correct the user can save their parameters from the previous

releases by doing a 'cpconf tohost' and reload the parameters back into the PortServer II after 3.1.7 is loaded.

- The recommended procedure for upgrading Flash ROM is:
 1. Obtain the new version of the software from Digi and place it on your TFTP server.
 2. Save your current configuration using 'cpconf'. This is recommended to maintain a backup of your current configuration when re-writing a sizable portion of flash.
 3. Boot with the new OS (v.3.1.7) via TFTP by using 'set config boothost=<hostip> bootfile=<filename> tftpboot=yes', and then reboot your PortServer II. See command 'set config' in User's Guide and Reference Manual for more details. This step ensures that you have a good copy of the new OS, and also that you can still boot your PortServer II in the unlikely event that your flash image gets corrupted in the process of writing it.
 4. After booting your PortServer II via TFTP, load the new OS onto the flash ROM by using the command 'boot load=<host>:<filename>'. If all goes well, the PortServer II will reply "The image now in flash memory appears valid."
 5. Reset the PortServer II to factory default by using either the two-button reset or 'boot action=eewrite'.
Note: 'boot action=eewrite' will leave some IP configurations intact to insure the PSII can be reach and boot from the network.
 6. Configure the IP configuration settings. As a minimum define the PortServer II's IP Address and Submask.
 7. Load the 'cpconf' files from your TFTP server. Note: This may generate warnings.

E. Bug Fixes

1. 5506, 6352: The PortServer's Telnet Implementation was having problems handling 0xFF's in the data stream.
2. 5634: The command 'set port dev=rp' was not functionally equivalent to 'set port dev=prn'. The 'rp' device attributes have been extended to include 'prn' attributes.
3. 5766: The PortServer may flood the network with Gratuitous Arp requests at 49 day intervals. An internal timer not correctly handling a variable rollover caused this issue.
4. 5793: Removing a 'set route table' entry caused an invalid table entry to be created. This problem has been fixed.
5. 5808: The PortServer's Telnet login implementation did not timeout after 60 seconds and caused the 'PU Display' to be maximized. This problem has been fixed.
6. 5918: Switching the SNMP daemon on and off quickly and repeatedly caused a reboot. This issue has been resolved.
7. 5927: Using 'admin' caused the PortServer's 'PU Display' to be maximized. This problem has been fixed.
8. 5932: The 'traceroute' command was not correctly handling ICMP error messages. This has been fixed.
9. 5969: Serial ports were not processing framing errors correctly. The serial driver's error processing/pre-processing code has been cleaned up to solve this problem.

10. 6042: The “connect <serial#>” command was displaying control characters on startup. The command line option “connect <serial #>” has been changed so these control characters are not printed out.
11. 6083: When a command in excess of 128 characters is entered on the command line in combination with the use of Ctrl-P and Ctrl-N, a reboot may occur. This condition has been corrected.
12. 6233: The PortServer may reboot when used with an unstable router. Specifically the situation occurs as follows:
 - The Router accepts messages from a remote host and sends those messages to the PortServer
 - The Router sends the PortServer ICMP Host Unreachable messages when the PortServer tries to respond to the host.After several minutes the PortServer may reboot. This has been fixed.
13. 6265: Setting an 'altip' to be equal to the IP Address of the PortServer can cause problems. Now an 'altip' cannot be set to the IP Address of the PortServer.
14. 6267: The backspace key will function correctly when telneting from a server running Linux or a similar flavor of UNIX.
15. 6521: The “reconnect” command used with no arguments should connect the user to the latest active session. This has been fixed.
16. 6630: The use of the ‘connect’ command with a port setup for an incoming connection (i.e. incorrect usage) was causing the PortServer to occasionally reboot.
17. 6828: The command ‘set port’ parameter ‘screen’ was not working correctly. When ‘screen=0’ was specified no data was being displayed.
18. 6831: The management of ‘empty’ or ‘null’ strings caused problems when these strings were displayed.
19. 7036: Requesting help information about the ‘set command’ (i.e. typing ‘set ?’) was occasionally causing the PortServer to reboot.
20. 7061: IP Layer message handling routines were not reassembling message fragments correctly.
21. 7069: Telnet negotiations with messages that contain a ‘\r’ were occasionally causing the PortServer to reboot.
22. 7081: The use of the commands ‘telnet’ and ‘connect’ with port 0 (an incorrect port number) was causing the PortServer to reboot.

F. Enhancements

1. 6388: The ‘tcp socket base’ value has been changed to accept values divisible by 100.
2. 6086: The command line interface will now accept extra spaces. Extra spaces may now be added before and after each word, number, or symbol (e.g. ‘set line range = 3 - 5 , 7 baud= 9600’).
3. 6351: Lower baud rates are now available from PortServer EM Module Ports. The PortServer EM Module Ports can go as low as 40 baud. Standard PortServer II Ports can achieve baud rates as low as 75 baud.

- 6478: The 'disconnect' command has been added. The 'disconnect' command is used to hang-up a 'connect' session through a serial port. A successful disconnection will not display a confirmation message. To maintain consistency the close command will also not display a confirmation message on successful completion.

Command Syntax

Syntax `disconnect (serial# | hunt-group#)`

Field Descriptions

serial# - A particular PortServer Serial Port (values are 1 to 64).

group# - The hunt-group number assigned to a group of serial ports.

Command Examples

Disconnect serial port 4 `disconnect 4`

Disconnect last port used `disconnect`

- 6648: The 'kill' command's specifier 'tty=' has been made an optional part of this command. For example to terminate a connection on port 4 the following commands could be used: 'kill tty=4' or 'kill 4'.