ComOS® 3.7.1 Release Note

Introduction

The new Livingston Enterprises ComOS® 3.7.1 software release is now available for the PortMaster® 3 Integrated Access Server. This release note applies only to the PortMaster 3. This release is provided at no charge to all Livingston customers. This release note documents commands and features added between ComOS release 3.7 and 3.7.1 on the PortMaster 3. Note - You must use PMconsole™ 3.5.3 when upgrading to ComOS 3.7.1; see "Upgrade Instructions" below. If you are running Windows 95 or Windows NT 4.0 you must use PMconsole for Windows 3.5.1.4. ComOS 3.7.1 uses roughly the same amount of memory as ComOS 3.7. Read "Upgrade Instructions" thoroughly before upgrading.

Contents

New Features in ComOS 3.7.1

Australian ISDN Support

The command "set isdn-switch ts014" is now available, to support the TS014 ISDN switch used in Australia.

A-law Support

A-law pulse code modulation is now supported for V.34, V.42bis, and K56flex on the True Digital 56K Card.

DHCP Proxy

ComOS 3.7.1 supports the new "set dhcp-server Ipaddress" command. In previous releases (and by default in ComOS 3.7.1) the PortMaster replies directly to a BOOTP request from a dial-in client. In ComOS 3.7.1, if you set a Dynamic Host Configuration Protocol (DHCP) Server on the PortMaster, the PortMaster does not reply directly to BOOTP requests but instead forwards BOOTP and DHCP requests to the DHCP server, as described in RFC 1542 "Clarifications and Extensions for the Bootstrap Protocol."

Alternate ChoiceNet® Server is Now Supported

The "set choicenet 2 Ipaddress" command now sets an alternate ChoiceNet server. ChoiceNet requests for filter downloads are retransmitted every 15 seconds, site list requests are retransmitted every 5 seconds, and a global counter is incremented each time any request is retransmitted. At the fourth retransmission the PortMaster clears the counter and switches to using the other ChoiceNet server until the retransmission counter reaches four again.

Use the "set choicenet Ipaddress" command to set the primary ChoiceNet server to Ipaddress, and make it the active ChoiceNet server.

Access Filters Can Now Use ChoiceNet

Previously, ChoiceNet could be used only for packet filters. In ComOS 3.7.1, ChoiceNet can also be used for access filters for login users prompted for a host.

V.110 Support

V.110 is now supported over ISDN PRI lines on the PortMaster 3, when using the True Digital V.34 Card (MDM-PM3-8 and MDM-PM3-10). V.110 is not supported at this time on the True Digital 56K Card (MDM-56K-8 and MDM-56K-10), but you can use both types of cards in the same chassis and V.110 calls will be routed to the True Digital V.34 Cards for handling. When mixing cards for this purpose, put the True Digital 56K Cards in the low numbered slots (starting at 0 and counting up) and the True Digital V.34 Cards in the high numbered slots (starting at 5 and counting down). Slots are numbered from left to right and top to bottom. Slot 0 is the top left modem slot.

IPX Spoofing Now Supports Both Microsoft and Novell

ComOS supports IPX keepalive spoofing for on-demand IPX links. Previous releases supported IPX keepalive spoofing only for Novell NetWare clients and servers. ComOS 3.7.1 supports both Novell keepalives and now also Microsoft session keepalives.

ATE1 command added

In previous releases, when you attached to a dial-out port and issued a dial command with ATDT, the port would print "Dialing..." to indicate it was dialing. This caused problems for network com-port redirectors on Windows 95. In ComOS 3.7.1, by default dial-out ports do not print out anything when dialing. You can turn on the "Dialing..." message by entering the "ATE1" command before the "ATDT" command. "ATE0" turns off the message and is now the default.

Bug Fixes in ComOS 3.7.1

Modem Disconnects Fixed

In ComOS 3.7, certain modems (particularly the USR Sportster) dialing in to a PortMaster 3 with True Digital 56K Cards would hang up 5 to 10 minutes into an active session. The typical disconnection code reported for this behavior by the "show modem" command was "Exceeded LAPM retry limit." This problem has been fixed in ComOS 3.7.1.

Random No Modem Tones Fixed

In ComOS 3.7, certain modems dialing into a PortMaster 3 with "True Digital 56K Cards" would intermittently receive no modem tones. This is fixed in ComOS 3.7.1.

Proxy ARP Supernetting Supported

Proxy ARP is now supported for classless routing, as well as on classed boundaries. This feature allows supernetting and is compatible with variable-length subnet masks (VLSM). Previous ComOS releases only supported Proxy ARP on classed boundaries.

Multichassis PPP Idle Timer and Virtual Ports Fixed

Idle timers for Multichassis PPP now behave properly and no longer time out slave ports that have traffic. In addition, virtual ports no longer randomly show users who have logged out as still being logged in.

Call Type Detection Timer Extended

The time during which ComOS detects whether a call is from a modem or ISDN has been extended from 10 seconds to 90 seconds to support certain ISDN devices that do not identify themselves within the first 10 seconds. In previous releases, ComOS timed out after 10 seconds.

Frame Relay Subinterfaces Now Start Quickly

All Frame Relay subinterfaces are now available as soon as their primary Frame Relay interface becomes active. In previous releases, routing packets were sometimes received on the wrong interface because Frame Relay subinterfaces took as long as 15 seconds to become active.

RADIUS Connect-Info now reported even if no error protocol negotiated

The Connect-Info attribute is now included in RADIUS access-request and accounting-request messages even when the modems do not negotiate an error protocol. Connection speeds formerly reported as "50K" are now properly reported as "50000".

Upgrade Instructions

WARNING! YOU MUST USE PMINSTALL VERSION 3.5.3 OR LATER TO PERFORM THIS UPGRADE! If you are upgrading using PMconsole for Windows, you must use PMconsole for Windows version 3.5.1.4 or later.

If you are upgrading from ComOS 2.3 or 2.4 to ComOS 3.7.1, you must first upgrade to ComOS 3.0.4, reboot, and then upgrade to ComOS 3.7.

Note – If the upgrade fails, do NOT reboot! Contact Livingston Technical Support without rebooting.

The upgrade process on the PortMaster 3 erases the configuration area from nonvolatile memory and saves the current configuration into the nonvolatile memory. Never interrupt the upgrade process, or loss of configuration information can result. The upgrade does not otherwise affect your stored configuration in the PortMaster. If you want to back up your PortMaster configuration before upgrading, choose the Backup PortMaster button in PMconsole for Windows, or run pmreadconf on UNIX. The pmreadconf utility takes three arguments: the hostname or IP address of the PortMaster, the administrative password for the PortMaster, and the filename to place the configuration in. If you ever need to reload the configuration, move the backup file into the /usr/portmaster/data directory and run pminstall to reload it. Here is an example:

cd /usr/portmaster
pmreadconf Pmname Pmpassword data/Pmname.conf
chmod 600 data/Pmname.conf

The installation software can be retrieved by FTP from **ftp://ftp.livingston.com/pub/le/software/System/Tarfile.tar.Z**, replacing System and Tarfile.tar.Z with the names of the files. You can retrieve the upgrade image at the same time. The following example shows an administrator retrieving the SunOS pminstall and PortMaster 3 upgrade image:

```
umask 22
mkdir /usr/portmaster
cd /usr/portmaster
```

```
ftp ftp.livingston.com
(Enter anonymous)
(Enter your email address; it will not echo.)
binary
 cd /pub/le/software/sun4
get pm_3.5.3_sun4.tar.Z pm.tar.Z
cd /pub/le/upgrades
get pm3_3.7.1
quit
uncompress pm.tar.Z
tar xvf pm.tar
rm pm.tar
mv pm3_3.7.1 data
pminstall
```

PMconsole 3.5.1.4 for Windows 95 and Windows NT 4.0 is available on
ftp://ftp.livingston.com/pub/le/software/pc/pmw3514.exe in a self-extracting file.
Transfer that file via FTP, run the file to install PMconsole for Windows, move the
upgrade file into the data directory, run PMconsole for Windows, and click on the
Upgrade icon.

PMconsole for the following operating systems can be found under
ftp://ftp.livingston.com/pub/le/software

bsdi/pm_3.5.3_BSDOS_2.0.tar.Z	BSD/OS 2.0 and 2.1
sgi/pm_3.5.3_IRIX_5.2.tar.Z	SGI Irix 5.2
linux/pm_3.5.3_Linux.tar.Z	Linux 1.2.13 ELF
rs6000/pm_3.5.3_RS6000_4.1.tar.Z	RS6000 AIX 4.1
alpha/pm_3.53_RS6000)4.1.tar.Z	Digital Alpha OSF/1 T3.0
hp/pm_3.5.3_hp9000_10.01.tar.Z	HP 9000 HP/UX 10.01
sun4/pm_3.5.3_sun4.tar.Z	SunOS 4.1.4, 5.5.1 on Sparc
sun86/pm_3.5.3_sun86_5.5.tar.Z	Solaris x86 2.5.1
pc/pmw3514.exe	Windows 95 and Windows NT 4.0

The following upgrade image is available at

ftp://ftp.livingston.com/pub/le/upgrades

ComOS	Upgrade Image	Product
3.7.1	pm3_3.7.1	PortMaster 3

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Notices

Contacting Livingston Technical Support

Livingston provides technical support via voice, fax, and electronic mail. Technical support is available Monday through Friday from 6 a.m. through 5 p.m. Pacific Time (GMT-8). Please specify that you are running ComOS 3.7.1 if you are reporting problems with this release. To contact Livingston Technical Support by voice, dial 1-800-458-9966 within the US or 1-510-737-2100 outside the US; by fax, dial 1-510-737-2110; by electronic mail, send mail to support@livingston.com; and through the World Wide Web, access **http://www.livingston.com/**.