



PMTools 4.0 Release Note

Introduction

The PMTools are a group of Java programs that supplement certain PMVision™ functions. You can incorporate these utilities into your suite of scripts for PortMaster® management.

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Description of the PMTools

pmbackup	Backs up a PortMaster configuration to an ASCII file.
pmcommand	Sends commands to a PortMaster.
pmdial	Dials a location on a PortMaster.
pmdumpfilter	Saves the filters from a PortMaster to an ASCII file.
pmreset	Resets a port on a PortMaster.
pmupgrade	Upgrades the ComOS® on a PortMaster

The following sections describe the options associated with each utility. For backwards compatibility you can omit the **-h** and **-p** before <Hostname> and <Password> if they are given as the first two arguments and the <Username> is **!root**.

pmbackup

-h <Hostname>	PortMaster address.
-p <Password>	Password for the PortMaster.
-u <Username>	Username for the PortMaster. The default is !root .
-version	Displays the version and date.
-help	Displays a list of options and a description of each.
-f <Filename>	Name of the file to store the backup. If you do not specify a file, the backup information is displayed on standard output.

pmcommand

-h <Hostname>	PortMaster address.
-p <Password>	Password for the PortMaster.
-u <Username>	Username for the PortMaster. The default is !root .
-version	Displays the build version and date.
-help	Displays a list of options and a description of each.
-f <Filename>	Name of a file with a list of commands to send to the PortMaster.
-v	When used with -f , displays verbose output to standard output, echoing each command.
-nostop	When used with -f , specifies that errors caused by a command do not stop the other commands from being carried out.
-noreboot	When used with -f , instructs pmcommand to ignore any reboot commands. Setting this option might cause some commands to fail.
-prompt	When used with -f , instructs pmcommand to prompt you when it encounters a reboot command.
"command"	A single command to be sent to the PortMaster. If you are running from Microsoft Windows, you must enclose the command in quotation marks.

If you do not specify a file or command, **pmcommand** enters interactive mode, allowing you to type commands at a prompt.

pmdial

-h <Hostname>	PortMaster address.
-p <Password>	Password for the PortMaster.
-u <Username>	Username for the PortMaster. The default is !root .
-version	Displays the build version and date.
-help	Displays a list of options and a description of each.
-t <Minutes>	Idle timeout for the current session.
-v	Specifies verbose output.
<Location>	Name of the location to dial.

pmdumpfilter

-h <Hostname>	PortMaster address.
-p <Password>	Password for the PortMaster.
-u <Username>	Username for the PortMaster. The default is !root .
-version	Displays the build version and date.
-help	Displays a list of options and a description of each.
-toc	Displays a list of the names of filters on the PortMaster.
-filter "<Filterlist>"	Comma-separated list of filters to be dumped (for example "filter1,filter2"). If this option is not specified, all filters are dumped.
-F <Filename>	Name of a file to store the filters. If you do not specify a file, filters are displayed on standard output.

pmreset

-h <Hostname>	PortMaster address.
-p <Password>	Password for the PortMaster.
-u <Username>	Username for the PortMaster. The default is !root .
-version	Displays the build version and date.
-help	Displays a list of options and a description of each.
"<Ports>"	Ports to reset. A single port can be specified ("s1"), a comma-separated list can be specified ("s1,s2"), a range can be specified ("s1-s4"), or any combination ("s1,s4,s8-s12").

pmupgrade

-h <Hostname>	PortMaster address.
-p <Password>	Password for the PortMaster.
-u <Username>	Username for the PortMaster. The default is !root .
-version	Displays the build version and date.
-help	Displays a list of options and a description of each.
-r	Reboots the PortMaster after a successful upgrade.
-f <Filename>	ComOS image file to be used for the upgrade.
-at "mon/day/ year hour:min AM/PM"	Date and time at which you want the PortMaster to be upgraded. Enclose the entire date and time in quotation marks. Enter this option last if you include it.

System Requirements

The PMTools are written in Java and run on any platform that supports the Java Development Kit (JDK) or Java Runtime Environment (JRE) 1.1.4 or later. If you are a nondeveloper, Lucent recommends that you use the JRE. JDK 1.1.4 or JRE 1.1.4 or later is available for the following platforms and operating systems:

Windows NT 4.0	http://www.javasoft.com/products/jdk/1.1/
Windows 95	http://www.javasoft.com/products/jdk/1.1/
Solaris 2.5.1	http://www.javasoft.com/products/jdk/1.1/
Solaris x86 2.5.1	http://www.javasoft.com/products/jdk/1.1/
Linux 2.x	ftp://lagrange.la.asu.edu/pub/Linux_jdk/
FreeBSD	http://www.freebsd.org/java/
SGI IRIX 6.3	http://www.sgi.com/developers/devtools
HP-UX 10.02	http://www.hp.com/esy/go/java.html
Digital Alpha UNIX 4.0	http://www.digital.com/java/download/
IBM AIX 4.1	http://www.ibm.com/java/tools/jdk.html
Other Platforms	http://java.sun.com/cgi-bin/java-ports.cgi

Installing the PMTools

1. Download the following file from the Lucent Remote Access FTP site as follows:

```
ftp ftp.livingston.com
binary
cd pub/le/software/java
get pmtools40_solaris.tar    (for Solaris)
get pmtools40_unix.tar      (for other UNIX systems)
get pmtools40.zip           (for Windows)

quit
```

- 2a. For the UNIX systems, in your **.cshrc** file, define the path for **jre1.1.4/bin**.

For example, if you install **JRE1.1.4** in the **/usr/local/lib** directory, then the **.cshrc** file should have the following entry:

```
set path=( /usr/local/lib/jre1.1.4/bin $path )
```

Installing **JRE 1.1.6** sets the correct values for **PATH** and **CLASSPATH** on both Windows NT and Windows 95.

- 2b. For JRE or JDK 1.1.4 on Windows 95, edit **c:\autoexec.bat** and add

```
path=%PATH%;<JAVADIR>\bin
```

Replace **<JAVADIR>** with the location where the JRE is installed. If the JDK is installed instead of the JRE, the scripts need to be edited.

- 2c. For Windows NT 4.0, define the path for **JRE1.1.4** in the System Environment as follows:

- a. Open the Control Panel.
- b. Click the **System** icon.
- c. Click the Environment.
- d. On the display window, highlight and click the line with the word **Path**.
- e. Enter the installation path of the JDK or JRE in the **Value** window.
- f. Click the **Set** button.

Typically, the JDK or JRE is installed on **C:\jdk1.1.4** or **C:\jre1.1.4**. In this case, the correct path for JDK and JRE is **C:\jdk1.1.4\bin** or **C:\jre1.1.4\bin**.

3. Run the installation.

- For Solaris users, on the command line, enter the following command:

```
tar xvf pmtools40_solaris.tar  
./pmtools_install.bin  
cd <install directory>  
./setbits # This will set the executable bits
```

- For other UNIX users, on the command line, enter the following command:

```
mv pmtools40_unix.tar <install directory>  
cd <install directory>  
tar xvf pmtools40_unix.tar  
./setbits # This will set the executable bits
```

- For Windows users, unzip the **pmtools40.zip** file and run the **pmtools_install.exe** program.

Follow the instructions of the installation.

4. Run the tools.

- For Solaris and other UNIX users, the installation creates a set of shell scripts to run the PMTools. Make sure that the executable bit is set for each of these scripts. The script **setbits** will do this for you.
- For Windows users, the installation creates a set of batch files to run the PMTools. If you reference these batch files in any other scripts, make sure that you use the **CALL** command. For example, the following command calls the file **version.bat**:

```
CALL pmcommand -h <Hostname> -p<Password> "version"
```

To refer to the tools from outside their installation directory, edit the scripts and insert the full path to the jar file. For example:

```
jre -cp /fullpath/goes/here/pmtools.jar PMCommand $*
```

Limitations of the PMTools

pmbackup

Running **pmbackup** for a PortMaster running ComOS 3.7.2 or earlier incorrectly generates the following backup commands:

```
set call-check off  
set arp-proxy enable  
set reported-ip 0.0.0.0  
set C0 dtr_idle on
```

pmcommand

You cannot use the **version** option in conjunction with sending commands to a PortMaster.

On a PortMaster running ComOS 3.7.2 or earlier, the following commands from a backup file get sent to the PortMaster and generate errors:

```
set call-check off
set arp-proxy enable
set reported-ip 0.0.0.0
set CO dtr_idle on
```

The errors do not affect the rest of the commands or the PortMaster and can be ignored.

On Windows systems, a command of more than one word must be enclosed in quotation marks—for example, “**show table locations**”.

You must include the **-h** and **-p** options for multiple-word commands to work. For example, of the following commands only the second one works:

```
./pmcommand 198.168.0.0 password "show tab loc"
./pmcommand -h 198.168.0.0 -p password "show tab loc"
```

pmupgrade

On Windows systems, the **-at** option must have the time enclosed in quotation marks—for example: **-at "4/30/98 10:00 AM"**.

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Contacting Lucent Remote Access Technical Support

Lucent Technologies Remote Access Business Unit (previously Livingston Enterprises) provides technical support via voice, fax, electronic mail, or through the World Wide Web at **<http://www.livingston.com/>**.

Internet service providers (ISPs) and other end users in Europe, the Middle East, Africa, India, and Pakistan should contact their authorized Lucent Remote Access sales channel partner for technical support; see

<http://www.livingston.com/International/EMEA/distributors.html>.

For North and South America and Asia Pacific customers, technical support is available Monday through Friday from 7 a.m. to 5 p.m. U.S. Pacific Time (GMT -8). Dial 1-800-458-9966 within the United States (including Alaska and Hawaii), Canada, and the Caribbean, or 1-925-737-2100 from elsewhere, for voice support. Otherwise, fax to 1-925-737-2110, or send email to **support@livingston.com** (**asia-support@livingston.com** for Asia Pacific customers).