NAME
       pprd - LPD (network printer daemon) for DOS

SYNOPSIS
       pprd [-pport] [-n#] [-t] [-i] [-s] [-b#] [-#] [-ahostlist]
       [-dhostlist] [-lhost] [-j[port]]

DESCRIPTION
       pprd is a small program that turns an XT or AT running DOS
       into a dedicated LPD printer server. You can send jobs to
       the printers from any machine running LPR. It can handle
       up to 3 parallel printer ports. Serial printers can be
       handled by running the interrupt I/O driver TSRCOMM, which
       is in LPTCOM.ZIP and diverting LPTn to COMn.

       pprd supports an alternate protocol to LPD, called the
       Direct protocol here. It is invoked by specifying the -j
       flag. The job is sent as a TCP data stream ended by clos-
       ing the connection. The advantage of this protocol is
       that the size of the job does not need to be known in
       advance, which could be used to advantage in a print redi-
       rector. It is more efficient because there are fewer
       transactions than in the LPD protocol.

INSTALLATION
       pprd requires: Parallel or serial printer ports connected
       to printers, a network interface card and a FTP Software
       specification Packet Driver for it, and a valid WATTCP
       configuration file, WATTCP.CFG.

       To install, edit the file WATTCP.CFG, filling in the
       entries. Then edit your autoexec.bat file to load the
       packet driver, then pprd. Something like this:

       a:\pprd\ni5210 0x60 2 0x300 0xcc00
       rem If you wish to put your wattcp.cfg in a particular directory
       set wattcp_cfg=a:\pprd\wattcp.cfg
       a:\pprd\pprd

       Turn your printers on before starting pprd or it will not
       detect the printers. Alternatively, use the -n flag in
       pprd.

       pprd outputs tones (C,D,E) for as many printers as
       detected. pprd displays status on console, including
       changes in printer status. It responds to LPQ queries,
       returning status reports to the client.

       You can now send jobs from clients with LPR. The printers
       served are called lpt1 through lpt3, in any mixture of
       case. You can also set the printer names in WATTCP.CFG by
       assigning to PRINTER[123]NAME. pprd is multithreaded and
       can have as many connections as printers active. Control-
       F1   through   F3 can be used to abort jobs on the

       corresponding printers.

       It's probably best to install pprd in a Berkeley LPD envi-
       ronment as a printer accessed via a ifilter, rather than
       as a remote host. That way you can queue up jobs and
       implement any LPD filters on the client. A couple of Perl
       scripts for Berkeley LPD system are provided. Edit lpr.pl
       to configure and install it as ifilter. Banner.pl should
       be installed as ofilter. You should provide a dummy file
       for the lp attribute because LPD expects to be able to
       open and lock it. This file will not be printed to.

       You may wish to restrict access to pprd to certain
       machines only. The -a and -d options are for this. pprd
       allows connections only from machines on the same subnet
       (as determined from the subnet mask) by default; this can
       be disabled by the -s option.

OPTIONS
       -pport Listen on port instead of the default 515.

       -xy   Disable printers x and y (numbers between 1 and 3).

       -n#   # printers, no matter what BIOS claims.

       -t   Don't indicate available printers with tones.

       -i   Reinitialise printer via hardware line on job
              abort. This option also enables aborting the job
              by closing the connection from the client side. In
              its absence, what remains in the buffer is printed.

       -k   Don't abort job if client drops connection. By
              default, the buffer is flushed and the connection
              reinitialised if the client closes the connection
              before the final ack.

       -bxy   Print directly to hardware port of printers x and y
              instead of using the BIOS print service. This only
              works on real parallel ports, i.e. not redirected
              to serial ports, files or network connections, and
              is only likely to improve things with fast printer
              interfaces, in particular those with memory
              buffers, such as laser printers. On low speed
              printers, it isn't likely to make things faster
              since the bottleneck is the printer.

       -s   Indicates local subnet is not special. Before ver-

sion 1.99, setting this flag meant that no subnet
checking would be done at all, that is, any host
can connect regardless of the deny list. In ver-
sion 1.99 this changed to mean that the subnet of
the PPRD host is not treated specially and
addresses still have to either be in an allow list

or not be in a deny list, otherwise access is
denied. If you want the former behaviour of -s,
that is, open up access to the whole Internet, use
-dx.x.x.x alone, where x.x.x.x is an address that
will never be used by a client, for instance, the
address of the PPRD host.

-alist   Comma separated list of up to 20 domain names
allowed connection.

-dlist   Comma separated list of up to 20 domain names
denied connection.

-a and -d are mutually exclusive. Domain names can
also be network addresses, which have all 0s for
the hostid portion, as determined from the subnet
mask, in which all hosts on the network are
affected by the allow or deny.

-lhost   Log diagnostics via SYSLOG protocol to host.

-jport   Use Direct protocol to port (normally 9100) instead
of LPD protocol.

CONFIGURATION FILE SETTINGS
Assigning to PRINTER1NAME, PRINTER2NAME, and PRINTER3NAME
in WATTCP.CFG will give names other than the default
lpt[123] to the printers.

OTHER FILES
Two auxiliary programs are provided, jd.pl and jd.exe,
written in Perl and C respectively. These are sample
clients that use the Direct protocol.

Jd.exe reads additional configuration entries in
WATTCP.CFG, see jd documentation.

Another Perl script called jdlprd.pl is provided. If this
is run on a BSD Unix host, it provides a gateway from jd
jobs to the lpr system on Unix.

SEE ALSO (on Unix)

lpr(1), lpq(1), lpc(8), lpd(8)

FILES
         WATTCP.CFG, LPTCOM.ZIP

DIAGNOSTICS
         Hopefully self explanatory.

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         freely distribute the program provided the sources accom-
         pany, or are made available on request. See Artistic for

         details.

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