

NAME

nmbd - NetBIOS name server to provide NetBIOS over IP naming services to clients

SYNOPSIS

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nmbd [-D] [-F] [-S] [-a] [-i] [-o] [-h] [-V] [-d <debug level>] [-H <lmhosts file>] [-l <log directory>] [-p
<port number>] [-s <configuration file>]
```

DESCRIPTION

This program is part of the **samba**(7) suite.

nmbd is a server that understands and can reply to NetBIOS over IP name service requests, like those produced by SMB/CIFS clients such as Windows 95/98/ME, Windows NT, Windows 2000, Windows XP and LanManager clients. It also participates in the browsing protocols which make up the Windows "Network Neighborhood" view.

SMB/CIFS clients, when they start up, may wish to locate an SMB/CIFS server. That is, they wish to know what IP number a specified host is using.

Amongst other services, **nmbd** will listen for such requests, and if its own NetBIOS name is specified it will respond with the IP number of the host it is running on. Its "own NetBIOS name" is by default the primary DNS name of the host it is running on, but this can be overridden by the netbios name in *smb.conf*. Thus **nmbd** will reply to broadcast queries for its own name(s). Additional names for **nmbd** to respond on can be set via parameters in the **smb.conf**(5) configuration file.

nmbd can also be used as a WINS (Windows Internet Name Server) server. What this basically means is that it will act as a WINS database server, creating a database from name registration requests that it receives and replying to queries from clients for these names.

In addition, **nmbd** can act as a WINS proxy, relaying broadcast queries from clients that do not understand how to talk the WINS protocol to a WINS server.

OPTIONS

-D

If specified, this parameter causes **nmbd** to operate as a daemon. That is, it detaches itself and runs in the background, fielding requests on the appropriate port. By default, **nmbd** will operate as a daemon if launched from a command shell. **nmbd** can also be operated from the **inetd** meta-daemon, although this is not recommended.

-F If specified, this parameter causes the main **nmbd** process to not daemonize, i.e. double-fork and disassociate with the terminal. Child processes are still created as normal to service each connection request, but the main process does not exit. This operation mode is suitable for running **nmbd** under process supervisors such as **supervise** and **svscan** from Daniel J. Bernstein's **daemontools** package, or the AIX process monitor.

-S If specified, this parameter causes **nmbd** to log to standard output rather than a file.

-i If this parameter is specified it causes the server to run "interactively", not as a daemon, even if the server is executed on the command line of a shell. Setting this parameter negates the implicit daemon mode when run from the command line. **nmbd** also logs to standard output, as if the **-S** parameter had been given.

-h|--help

Print a summary of command line options.

-H <filename>

NetBIOS lmhosts file. The lmhosts file is a list of NetBIOS names to IP addresses that is loaded by the **nmbd** server and used via the name resolution mechanism name resolve order described in **smb.conf**(5) to resolve any NetBIOS name queries needed by the server. Note that the contents of this file are **NOT** used by **nmbd** to answer any name queries. Adding a line to this file affects name NetBIOS resolution from this host **ONLY**.

The default path to this file is */etc/samba/lmhosts*. See the **lmhosts**(5) man page for details on the

contents of this file.

-V

Prints the program version number.

-s <configuration file>

The file specified contains the configuration details required by the server. The information in this file includes server-specific information such as what printcap file to use, as well as descriptions of all the services that the server is to provide. See *smb.conf* for more information. The default configuration file name is determined at compile time.

-d|--debuglevel=level

level is an integer from 0 to 10. The default value if this parameter is not specified is zero.

The higher this value, the more detail will be logged to the log files about the activities of the server. At level 0, only critical errors and serious warnings will be logged. Level 1 is a reasonable level for day-to-day running - it generates a small amount of information about operations carried out.

Levels above 1 will generate considerable amounts of log data, and should only be used when investigating a problem. Levels above 3 are designed for use only by developers and generate HUGE amounts of log data, most of which is extremely cryptic.

Note that specifying this parameter here will override the

parameter in the *smb.conf* file.

-l|--logfile=logdirectory

Base directory name for log/debug files. The extension "**.progrname**" will be appended (e.g. log.smb-client, log.smbd, etc...). The log file is never removed by the client.

-p <UDP port number>

UDP port number is a positive integer value. This option changes the default UDP port number (normally 137) that **nmbd** responds to name queries on. Don't use this option unless you are an expert, in which case you won't need help!

FILES

/etc/inetd.conf

If the server is to be run by the **inetd** meta-daemon, this file must contain suitable startup information for the meta-daemon.

/etc/rc

or whatever initialization script your system uses).

If running the server as a daemon at startup, this file will need to contain an appropriate startup sequence for the server.

/etc/services

If running the server via the meta-daemon **inetd**, this file must contain a mapping of service name (e.g., netbios-ssn) to service port (e.g., 139) and protocol type (e.g., tcp).

/etc/samba/smb.conf

This is the default location of the **smb.conf(5)** server configuration file.

When run as a WINS server (see the wins support parameter in the **smb.conf(5)** man page), **nmbd** will store the WINS database in the file *wins.dat* in the *var/locks* directory configured under wherever Samba was configured to install itself.

If **nmbd** is acting as a

browse master (see the local master parameter in the **smb.conf(5)** man page, **nmbd** will store the browsing database in the file *browse.dat* in the *var/locks* directory configured under wherever Samba

was configured to install itself.

SIGNALS

To shut down an **nmbd** process it is recommended that SIGKILL (-9) **NOT** be used, except as a last resort, as this may leave the name database in an inconsistent state. The correct way to terminate **nmbd** is to send it a SIGTERM (-15) signal and wait for it to die on its own.

nmbd will accept SIGHUP, which will cause it to dump out its namelists into the file *namelist.debug* in the */var/run/samba* directory. This will also cause **nmbd** to dump out its server database in the *log.nmb* file.

The debug log level of **nmbd** may be raised or lowered using **smbcontrol**(1) (SIGUSR[1|2] signals are no longer used since Samba 2.2). This is to allow transient problems to be diagnosed, whilst still running at a normally low log level.

VERSION

This man page is correct for version 3.0 of the Samba suite.

SEE ALSO

inetd(8), **smbd**(8), **smb.conf**(5), **smbclient**(1), **testparm**(1), **testprns**(1), and the Internet RFC's *rfc1001.txt*, *rfc1002.txt*. In addition the CIFS (formerly SMB) specification is available as a link from the Web page <http://samba.org/cifs/>.

AUTHOR

The original Samba software and related utilities were created by Andrew Tridgell. Samba is now developed by the Samba Team as an Open Source project similar to the way the Linux kernel is developed.

The original Samba man pages were written by Karl Auer. The man page sources were converted to YODL format (another excellent piece of Open Source software, available at <ftp://ftp.icce.rug.nl/pub/unix/>) and updated for the Samba 2.0 release by Jeremy Allison. The conversion to DocBook for Samba 2.2 was done by Gerald Carter. The conversion to DocBook XML 4.2 for Samba 3.0 was done by Alexander Bokovoy.