NAME

mountd - service remote NFS mount requests

SYNOPSIS

mountd [-2delnRrS] [-h bindip] [-p port] [exportsfile ...]

DESCRIPTION

The **mountd** utility is the server for NFS mount requests from other client machines. It listens for service requests at the port indicated in the NFS server specification; see *Network File System Protocol Specification*, RFC1094, Appendix A and *NFS: Network File System Version 3 Protocol Specification*, RFC1813, Appendix I.

The following options are available:

- -2 Allow the administrator to force clients to use only the version 2 NFS protocol to mount file systems from this server.
- **-d** Output debugging information. **mountd** will not detach from the controlling terminal and will print debugging messages to stderr.
- **-e** Ignored; included for backward compatibility.

-h bindip

Specify specific IP addresses to bind to for TCP and UDP requests. This option may be specified multiple times. If no **-h** option is specified, **mountd** will bind to INADDR_ANY. Note that when specifying IP addresses with **-h**, **mountd** will automatically add 127.0.0.1 and if IPv6 is enabled, ::1 to the list.

- -l Cause all succeeded **mountd** requests to be logged.
- -n Allow non-root mount requests to be served. This should only be specified if there are clients such as PC's, that require it. It will automatically clear the vfs.nfsd.nfs_privport sysctl flag, which controls if the kernel will accept NFS requests from reserved ports only.

-p port

Force **mountd** to bind to the specified port, for both AF_INET and AF_INET6 address families. This is typically done to ensure that the port which **mountd** binds to is a known quantity which can be used in firewall rulesets. If **mountd** cannot bind to this port, an appropriate error will be recorded in the system log, and the daemon will then exit.

- -R Do not support the Mount protocol and do not register with rpcbind(8). This can be done for NFSv4 only servers, since the Mount protocol is not used by NFSv4. Useful for NFSv4 only servers that do not wish to run rpcbind(8). showmount(8) will not work, however since NFSv4 mounts are not shown by showmount(8), this should not be an issue for an NFSv4 only server.
- -r Allow mount RPCs requests for regular files to be served. Although this seems to violate the mount protocol specification, some diskless workstations do mount requests for their swapfiles and expect them to be regular files. Since a regular file cannot be specified in /etc/exports, the entire file system in which the swapfiles resides will have to be exported with the -alldirs flag.

exportsfile

Specify an alternate location for the exports file. More than one exports file can be specified.

-S Tell mountd to suspend/resume execution of the nfsd threads whenever the exports list is being reloaded. This avoids intermittent access errors for clients that do NFS RPCs while the exports are being reloaded, but introduces a delay in RPC response while the reload is in progress. If mountd crashes while an exports load is in progress, mountd must be restarted to get the nfsd threads running again, if this option is used.

When **mountd** is started, it loads the export host addresses and options into the kernel using the nmount(2) system call. After changing the exports file, a hangup signal should be sent to the **mountd** daemon to get it to reload the export information. After sending the SIGHUP (kill -s HUP 'cat /var/run/mountd.pid'), check the syslog output to see if **mountd** logged any parsing errors in the exports file.

If multiple instances of **mountd** are being run, either in multiple jails or both within and outside of a jail, care must be taken to export any given file system in only one of the instances. Note that the *allow.nfsd* jail parameter is required to allow **mountd** to run in a jail. See jail(8) for more information.

If **mountd** detects that the running kernel does not include NFS support, it will attempt to load a loadable kernel module containing NFS code, using kldload(2). If this fails, or no NFS KLD was available, **mountd** exits with an error. When run in a jail, the kldload(2) must be done outside the jail, typically by adding "nfsd" to *kld_list* in the rc.conf(5) file on the jail host.

FILES

/etc/exports the list of exported file systems
/var/run/mountd.pid the pid of the currently running mountd
/var/db/mountdtab the current list of remote mounted file systems

SEE ALSO

nfsstat(1), kldload(2), nfsv4(4), exports(5), rc.conf(5), jail(8), nfsd(8), rpcbind(8), showmount(8)

HISTORY

The **mountd** utility first appeared in 4.4BSD.