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Samba Configuration Option Quick Reference

The following pages list each of the Samba configuration options. If an option is applicable only to the global section, "[global]" will appear before its name. Any lists mentioned are space separated, except where noted. A glossary of terms follows the options.

admin users = user list

allowable values: user list   *default:* NULL

List of users who will be granted root permissions on the share by Samba.

allow hosts = host list

allowable values: any   *default:* NULL

Synonym for `hosts allow`. List of machines that may connect to a share.

alternate permissions = boolean

allowable values: YES, NO   *default:* NO

Obsolete. Has no effect in Samba 2. Files will be shown as read-only if the owner can't write them. In Samba 1.9 and earlier, setting this option would set the DOS filesystem read-only attribute on any file the user couldn't read. This in turn required the `delete readonly` option.

[global] announce as = system type

allowable values: NT, Win95, WfW   *default:* NT

Have Samba announce itself as something other than an NT server. Discouraged because it interferes with serving browse lists.

[global] announce version = number.number

allowable values: any   *default:* 4.2

Instructs Samba to announce itself as an older version SMB server. Discouraged.

[global] auto services = share list

allowable values: any shares   *default:* NULL

List of shares that will always appear in browse lists. A synonym is `preload`.

available = boolean

allowable values: YES, NO   *default:* YES

If set to NO, denies access to a share. Doesn't affect browsing.

[global] bind interfaces only = boolean

allowable values: YES, NO   *default:* NO

If set to YES, shares and browsing will be provided only on interfaces in an interfaces list
(see `interfaces`). New in Samba 1.9.18. If you set this option to YES, be sure to add 127.
0.0.1 to the interfaces list to allow *smbpasswd* to connect to the local machine to change
passwords. This is a convienence option; it does not improve security.

browsable = boolean

allowable values: YES, NO   *default:* YES

Allows a share to be announced in browse lists.

blocking locks = boolean

allowable values: YES, NO   *default:* YES

If YES, honors byte range lock requests with time limits for queuing the request and
retrying it until the time period expires. New in Samba 2.0.

[global] browse list = boolean

allowable values: YES, NO   *default:* YES

Turns on/off `browse list` from this server. Avoid changing.

[global] case sensitive = boolean

allowable values: YES, NO   *default:* NO

If YES, uses exactly the case the client supplied when trying to resolve a filename. If NO,
matches either upper- or lowercase name. Avoid changing.

[global] case sig names = boolean

allowable values: YES, NO   *default:* NO

Synonym for `case sensitive`.

[global] change notify timeout = number

allowable values: positive number   *default:* 60

Sets the number of seconds between checks when a client asks for notification of changes in a directory. Introduced in Samba 2.0 to limit the performance cost of the checks. Avoid lowering.

character set = name

allowable values: ISO8859-1, ISO8859-2, ISO8859-5, KOI8-R   *default:* NULL

If set, translates from DOS code pages to the Western European (ISO8859-1), Eastern European (ISO8859-2), Russian Cyrillic (ISO8859-5), or Alternate Russian (KOI8-R) character set. The `client code page` must be set to 850.

client code page = name

allowable values: See Table 8-4   *default:* 437 (US MS-DOS)

Sets the DOS code page explicitly, overriding any previous `valid chars` settings. Examples of values are 850 for European, 437 is the US standard, and 932 for Japanese Shift-JIS. Introduced in Samba 1.9.19.

coding system = code

allowable values: euc, cap, hex, hexN, sjis, j8bb, j8bj, jis8, j8bh, j8@b, j8@j, j8@h, j7bb, j7bj, jis7, j7bh, j7@b, j7@j, j7@h, jubb, jubj, junet, jubh, ju@b, ju@j, ju@h   *default:* NULL

Sets the coding system used, notably for Kanji. This is employed for filenames and should correspond to the code page in use. The `client code page` option must be set to 932 (Japanese Shift-JIS). Introduced in Samba 2.0.

comment = text

allowable values: a text string or NULL   *default:* NULL

Sets the comment that appears beside a share in a NET VIEW or the details list of a Microsoft directory window. See also the `server string` configuration option.

[global] config file = pathname

allowable values: Unix pathname   *default:* NULL

Selects an additional Samba configuration file to read instead of the current one. Used to relocate the configuration file, or used with %-variables to select custom configuration files for some users or machines.

copy = section name

allowable values: existing section's name   *default:* NULL

Copies the configuration of a previously seen share into the share where it appears. Used with %-variables to select custom configurations for machines, architectures and users. The copied section must be earlier in the configuration file. Copied options are of lesser priority than those explicitly listed in the section.

create mask = octal value

allowable values: octal permission bits, 0-0777   *default:* 0744

Also called `create mode`. Sets the maximum allowable permissions for new files (e.g., 0755). See also `directory mask`. To require certain permissions to be set, see `force create mask/force directory mask`. This option stopped affecting directories in Samba 1.9.17, and the default value changed in Samba 2.0.

create mode = octal permission bits

allowable values: octal permission bits, 0-0777   *default:* 0744

Synonym for `create mask`.

[global] deadtime = minutes

allowable values: minutes   *default:* 0

The time in minutes before an unused connection will be terminated. Zero means forever. Used to keep clients from tying up server resources forever. If used, clients will have to auto-reconnect after minutes of inactivity. See also `keepalive`.

[global] debug level = number

allowable values: number   *default:* 0

Sets the logging level used. Values of 3 or more slow Samba noticeably. A synonym is `log level`. Recommended value: 1.

[global] debug timestamp = boolean

allowable values: YES, NO   *default:* YES

Timestamps all log messages. Can be turned off when it's not useful (e.g., in debugging). New in Samba 2.0.

[global] default = name

allowable values: share name   *default:* NULL

Also called `default service`. The name of a service (share) to provide if someone requests a service they don't have permission to use or which doesn't exist. As of Samba 1.9.14, the path will be set from the name the client specified, with any "_" characters

changed to "/" characters, allowing access to any directory on the Samba server. Use is strongly discouraged.

default case = case

allowable values: LOWER, UPPER *default:* LOWER

Sets the case in which to store new filenames. LOWER indicates mixed case, UPPER indicates uppercase letters.

[global] default service = share name

allowable values: share name *default:* NULL

Synonym for `default`.

delete readonly = boolean

allowable values: NO, YES *default:* NO

Allow delete requests to remove read-only files. This is not allowed in DOS/Windows, but is normal in Unix, which has separate directory permissions. Used with programs like RCS, or with the older `alternate permissions` option.

delete veto files = boolean

allowable values: NO, YES *default:* NO

Allow delete requests for a directory containing files or subdirectories the user can't see due to the `veto files` option. If set to NO, the directory will not be deleted and will still contain invisible files.

deny hosts = host list

allowable values: host list *default:* NULL

A synonym is `hosts deny`. Specifies a list of machines from which to refuse connections or shares.

[global] dfree command = command

allowable values: shell command *default:* varies

A command to run on the server to return disk free space. Not needed unless the OS command does not work properly.

directory = pathname

allowable values: pathname *default:* NULL

Synonym for `path`. A directory provided by a file share, or used by a printer share. Set automatically in the `[homes]` share to user's home directory, otherwise defaults to */tmp*.

directory mask = octal permission bits

allowable values: octal value from 0 to 0777   *default:* 0755

Also called `directory mode`. Sets the maximum allowable permissions for newly created directories. To require certain permissions be set, see the `force create mask` and `force directory mask` options.

directory mode = octal permission bits

allowable values: octal value from 0 to 0777   *default:* 0755

Synonym for `directory mask`.

[global] dns proxy = boolean

allowable values: YES, NO   *default:* YES

If set to YES, and if `wins server = YES`, look up hostnames in DNS if they are not found using WINS.

[global] domain logons = boolean

allowable values: YES, NO   *default:* NO

Allow Windows 95/98 or NT clients to log on to an NT-like domain.

[global] domain master = boolean

allowable values: YES, NO   *default:* NO

Become a domain master browser list collector if possible for the entire workgroup/domain.

dont descend = comma-list

allowable values: comma-separated list of paths   *default:* NULL

Does not allow a change directory or search in the directories specified. This is a browsing convenience option; it doesn't provide any extra security.

dos filetimes = boolean

allowable values: YES, NO   *default:* NO

Allow non-owners to change file times if they can write to the file. See also `dos filetime resolution`.

dos filetime resolution = boolean

allowable values: YES, NO   *default:* NO

Set file times on Unix to match DOS standards (round to next even second). Recommended if using Visual C++ or a PC *make* program to avoid remaking the programs unnecesarily. Use with the `dos filetimes` option.

[global] encrypt passwords = boolean

allowable values: YES, NO   *default:* NO

Uses Windows NT-style password encryption. Requires an *smbpasswd* on the Samba server.

exec = command

allowable values: shell command   *default:* NULL

Synonym of `preexec`, a command to run as the user just before connecting to the share.

fake directory create times = boolean

allowable values: YES, NO   *default:* NO

Bug fix for users of Microsoft *nmake*. If set, Samba will set directory create times such that *nmake* won't remake all files every time.

fake oplocks = boolean

allowable values: YES, NO   *default:* NO

Return YES whenever a client asks if it can lock a file and cache it locally, but does not enforce lock on the server. Use only for read-only disks, as Samba now supports real `oplocks` and has per-file overrides. See also `oplocks` and `veto oplock files`.

follow symlinks = boolean

allowable values: YES, NO   *default:* YES

If YES, Samba will follow symlinks in a file share or shares. See the `wide links` option if you want to restrict symlinks to just the current share.

force create mask = octal permission bits

allowable values: octal value from 0 to 0777   *default:* 0

Provides bits that will be ORed into the permissions of newly created files. Used with the `create mode` configuration option.

force create mode = octal permission bits

allowable values: octal value from 0 to 0777   *default:* 0

Synonym for `force create mask`.

force directory mask = octal permission bits

allowable values: octal value from 0 to 0777   *default:* 0

Provides bits that will be ORed into the permissions of newly created directories, forcing those bits to be set. Used with `directory mode`.

force directory mode = octal permission bits

allowable values: octal value from 0 to 0777   *default:* 0

Synonym for `force directory mask`.

force group = unix group

allowable values: group   *default:* NULL

Sets the effective group name assigned to all users accessing a share. Used to override user's normal groups.

force user = name

allowable values: username   *default:* NULL

Sets the effective username assigned to all users accessing a share. Discouraged.

fstype = string

allowable values: NTFS, FAT, Samba   *default:* NTFS

Sets the filesystem type reported to the client.

[global] getwd cache = boolean

allowable values: YES, NO   *default:* NO

Cache current directory for performance. Recommended with the `wide links` option.

group = group

allowable values: unix group   *default:* NULL

An obsolete form of `force group`.

guest account = user

allowable values: username   *default:* NULL

Sets the name of the unprivileged Unix account to use for tasks like printing and for accessing shares marked with `guest ok`.

guest ok = boolean

allowable values: YES, NO   *default:* NO

If YES, passwords are not needed for this share. Synonym of `public`.

guest only = boolean

allowable values: YES, NO   *default:* NO

Forces user of a share to do so as the guest account. Requires `guest ok` or `public` to be `yes`.

hide dot files = boolean

allowable values: YES, NO *default:* YES

Treats files beginning with a dot in a share as if they had the DOS/Windows hidden attribute set.

hide files = slash-separated list

allowable values: list of patterns, separated by / characters *default:* NULL

List of file or directory names to set the DOS hidden attribute on. Names may contain ? or * pattern-characters and %-variables. See also `hide dot files` and `veto files`.

[global] homedir map = NIS map name

allowable values: NIS map name *default:* auto.home

Used with `nis homedir` to locate user's Unix home directory from Sun NIS (not NIS+).

hosts allow = host list

allowable values: list of hostnames *default:* NULL

Synonym of `allow hosts`, a list of machines that can access a share or shares. If NULL (the default) any machine can access the share unless there is a `hosts deny` option.

hosts deny = host list

allowable values: list of hostnames *default:* NULL

Synonym of `deny hosts`, a list of machines that cannot connect to a share or shares.

[global] hosts equiv = pathname

allowable values: pathname *default:* NULL

Path to a file of trusted machines from which password-less logins are allowed. Strongly discouraged, because Windows/NT users can always override the user name, the only security in this scheme.

include = pathname

allowable values: pathname *default:* NULL

Include the named file in *smb.conf* at the line where it appears. This option does not understand the variables `%u` (user), `%P` (current share's root directory), or `%S` (current share name), because they are not set at the time the file is read.

[global] interfaces = interface list

allowable values: IP addresses separated by spaces   *default:* NULL

Sets the interfaces to which Samba will respond. The default is the machine's primary interface only. Recommended on multihomed machines or to override erroneous addresses and netmasks.

invalid users = user list

allowable values: list of users   *default:* NULL

List of users that will not be permitted access to a share or shares.

[global] keepalive = number

allowable values: number of seconds   *default:* 0

Number of seconds between checks for a crashed client. The default of 0 causes no checks to be performed. Recommended if you want checks more often than every four hours. 3600 (10 minutes) is reasonable. See also `socket options` for another approach.

[global] kernel oplocks = boolean

allowable values: YES, NO   *default:* automatic

Break oplock when a Unix process accesses an *oplocked* file, preventing corruption. Set to YES on operating systems supporting this, otherwise set to NO. New in Samba 2.0; supported on SGI, and hopefully soon on Linux and BSD. Avoid changing.

[global] ldap filter = various

allowable values: various   *default:* varies

Options beginning with `ldap` are part of an experimental (circa Samba 2.0) use of the Lightweight Directory Access Protocol (LDAP) general directory/distributed database for user, name, and host information. This option is reserved for future use.

[global] ldap port = various

allowable values: various   *default:* various

Options beginning with `ldap` are part of an experimental (circa Samba 2.0) use of the Lightweight Directory Access Protocol (LDAP) general directory/distributed database for user, name, and host information. This option is reserved for future use.

[global] ldap root = various

allowable values: various   *default:* various

Options beginning with `ldap` are part of an experimental (circa Samba 2.0) use of the Lightweight Directory Access Protocol (LDAP) general directory/distributed database for user, name, and host information. This option is reserved for future use.

[global] ldap server = various

allowable values: various   *default:* various

Options beginning with `ldap` are part of an experimental (circa Samba 2.0) use of the Light-weight Directory Access Protocol (LDAP) general directory/distributed database for user, name, and host information. This option is reserved for future use.

[global] ldap suffix = various

allowable values: various   *default:* various

Options beginning with `ldap` are part of an experimental (circa Samba 2.0) use of the Light-weight Directory Access Protocol (LDAP) general directory/distributed database for user, name, and host information. This option is reserved for future use.

[global] load printers = boolean

allowable values: YES, NO   *default:* YES

Load all printer names from the system printer capabilities into browse list. Uses configuration options from the `[printers]` section.

[global] local master = boolean

allowable values: YES, NO   *default:* YES

Stands for election as the local master browser. See also `domain master` and `os level`.

[global] lm announce = value

allowable values: AUTO, YES, NO   *default:* AUTO

Produce OS/2 SMB broadcasts at an interval specified by the `lm interval` option. YES/NO turns them on/off unconditionally. AUTO causes the Samba server to wait for a LAN Manager announcement from another client before sending one out. Required for OS/2 client browsing.

[global] lm interval = seconds

allowable values: number   *default:* 60

Sets the time period, in seconds, between OS/2 SMB broadcast announcements.

[global] lock directory = pathname

allowable values: pathname   *default: /usr/local/samba/var/locks*

Set a directory to keep lock files in. The directory must be writable by Samba, readable by everyone.

locking = boolean

allowable values: YES, NO   *default:* YES

Perform file locking. If set to NO, Samba will accept lock requests but will not actually lock resources. Recommended only for read-only file systems.

[global] log file = pathname

allowable values: pathname   *default:* varies

Set name and location of the log file. Allows all %-variables.

[global] log level = number

allowable values: number   *default:* 0

A synonym of `debug level`. Sets the logging level used. Values of 3 or more slow the system noticeably.

[global] logon drive = drive

allowable values: DOS drive name   *default:* None

Sets the drive on Windows NT (only) of the `logon path`.

[global] logon home = path

allowable values: Unix pathname   *default:* \\%N\%U

Sets the home directory of a Windows 95/98 or NT Workstation user. Allows `NET USE H:/ HOME` from the command prompt.

[global] logon path = pathname

allowable values: Windows pathname   *default:* \\%N\%U*profile*

Sets path to Windows profile directory. This contains *USER.MAN* and/or *USER.DAT* profile files and the Windows 95 Desktop, Start Menu, Network Neighborhood, and programs folders.

[global] logon script = pathname

allowable values: pathname   *default:* NULL

Sets pathname relative to `[netlogin]` share of a DOS/NT script to run on the client at login time. Allows all %-variables.

lppause command = /absolute_path/command

allowable values: fully-qualfied Unix shell command   *default:* varies

Sets the command to pause a print job. Honors the `%p` (printer name) and `%j` (job number) variables.

lpresume command = /absolute_path/command

allowable values: fully-qualified Unix shell command   *default:* varies

Sets the command to resume a paused print job. Honors the `%p` (printer name) and `%j` (job number) variables.

[global] lpq cache time = seconds

allowable values: number of seconds   *default:* 10

Sets how long to keep print queue (`lpq`) status is cached, in seconds.

lpq command = /absolute_path/command

allowable values: fully-qualfied Unix shell command   *default:* varies

Sets the command used to get printer status. Usually initialized to a default value by the `printing` option. Honors the `%p` (printer name) variable.

lprm command = /absolute_path/command

allowable values: fully-qualified Unix shell command   *default:* varies

Sets the command to delete a print job. Usually initialized to a default value by the `printing` option. Honors the `%p` (printer name) and `%j` (job number) variables.

machine password timeout = seconds

allowable values: number of seconds   *default:* 604,800

Sets the period between (NT domain) machine password changes. Default is 1 week, or 604,800 seconds.

magic output = pathname

allowable values: Unix pathname   *default: script.out*

Sets the output file for the discouraged `magic scripts` option. Default is the script name, followed by the extension *.out*.

magic script = pathname

allowable values: Unix pathname   *default:* NULL

Sets a filename for execution via a shell whenever the file is closed from the client, to allow clients to run commands on the server.

mangle case = boolean

allowable values: allowable values: YES, NO   *default:* NO

Mangle a name if it is in mixed case.

mangled map = map list

allowable values: list of to-from pairs   *default:* NULL

Set up a table of names to remap (e.g., *.html* to *.htm*).

mangled names = boolean

allowable values: YES, NO   *default:* YES

Sets Samba to abbreviate names that are too long or have unsupported characters to the DOS 8.3 style.

mangling char = character

allowable values: character   *default:* ~

Sets the unique mangling character used in all mangled names.

[global] mangled stack = number

allowable values: number   *default:* 50

Sets the size of a cache of recently-mangled filenames.

map aliasname = pathname

allowable values: Unix pathname   *default:* NULL

Points to a file of Unix group/NT group pairs, one per line. This is used to map NT aliases to Unix group names. See also the configuration options `username map` and `map groupname`. Introduced in Samba 2.0.

map archive = boolean

allowable values: YES, NO   *default:* YES

If YES, Samba sets the executable-by-user (0100) bit on Unix files if the DOS archive attribute is set. Recommended: if used, the `create mask` must contain the 0100 bit.

map hidden = boolean

allowable values: YES, NO   *default:* NO

If YES, sets executable-by-other (0001) bit on Unix files if the DOS hidden attribute is set. If used, the `create mask` option must contain the 0001 bit.

map groupname = pathname

allowable values: pathname   *default:* NULL

Points to a file of Unix group/NT group, one per line. This is used to map NT group names to Unix group names. See also the configuration options `username map` and `map aliasname`. Introduced in Samba 2.0.

map system = boolean

allowable values: YES, NO   *default:* NO

If YES, Samba sets the executable-by-group (0010) bit on Unix files if the DOS system attribute is set. If used, the `create mask` must contain the 0010 bit.

max connections = number

allowable values: number   *default:* 0 (infinity)

Set maximum number of connections allowed to a share from each individual client machine.

[global] max disk size = number

allowable values: size in MB   *default:* 0 (unchanged)

Sets maximum disk size/free-space size (in megabytes) to return to client. Some clients or applications can't understand large maximum disk sizes.

[global] max log size = number

allowable values: size in KB   *default:* 5000

Sets the size (in kilobytes) at which Samba will start a new log file. The current log file will be renamed with an *.old* extension, replacing any previous file with that name.

[global] max mux = number

allowable values: number   *default:* 50

Sets the number of simultaneous operations that Samba clients may make. Avoid changing.

[global] max packet = number

allowable values: number   *default:* N/A

Synonym for `packet size`. Obsolete as of Samba 1.7. Use `max xmit` instead.

[global] max open files = number

allowable values: number   *default:* 10,000

Limits the number of files a Samba process will try to keep open at one time. Samba allows you to set this to less than the Unix maximum. This option is a workaround for a separate problem. Avoid changing. This option was introduced in Samba 2.0.

[global] max ttl = seconds

allowable values: time in seconds   *default:* 14400 (4 hrs)

Sets the time to keep NetBIOS names in *nmbd* cache while trying to perform a lookup on it. Avoid changing.

[global] max wins ttl = seconds

allowable values: time in seconds　　　　　　　　　　*default:* 259200 (3 days)

Limits time-to-live of a NetBIOS name in *nmbd* WINS cache, in seconds. Avoid changing.

[global] max xmit = bytes

allowable values: size in bytes　　　　　　　　　　*default:* 65535

Sets maximum packet size that will be negotiated by Samba. Tuning parameter for slow links and older client bugs. Values less than 2048 are discouraged.

[global] message command = /absolute_path/command

allowable values: shell command　　　　　　　　　　*default:* NULL

Sets the command on the server to run when a WinPopup message arrives from a client. The command must end in "&" to allow immediate return. Honors all %-variables except `%u` (user), and supports the extra variables `%s` (filename the message is in), `%t` (destination machine), and `%f` (from).

min print space = kilobytes

allowable values: space in KB　　　　　　　　　　*default:* 0 (unlimited)

Sets minimum spool space required before accepting a print request.

[global] min wins ttl = seconds

allowable values: time in seconds　　　　　　　　　　*default:* 21600 (6 hrs)

Sets minimum time-to-live of a NetBIOS name in *nmbd* WINS cache, in seconds. Avoid changing.

name resolve order = list

allowable values: list of lmhosts, wins, hosts and bcast　　　*default:* lmhosts wins hosts bcast

Sets order of lookup when trying to get IP address from names. The `hosts` parameter carrries out a regular name look up using the server's normal sources: */etc/hosts*, DNS, NIS, or a combination of them. Introduced in Samba 1.9.18p4.

[global] netbios aliases = list

allowable values: list of netbios names　　　　　　　　　　*default:* NULL

Adds additional NetBIOS names by which a Samba server will advertise itself.

netbios name = hostname

allowable values: host name　　　　　　　　　　*default:* varies

Sets the NetBIOS name by which a Samba server is known, or primary name if NetBIOS aliases exist.

[global] networkstation user login = boolean

allowable values: YES, NO   *default:* YES

If set to NO, clients will not do a full login when `security = server`. Avoid changing. Turning it off is a temporary workaround (introduced in Samba 1.9.18p3) for NT trusted domains bug. Automatic correction was introduced in Samba 1.9.18p10; the parameter may eventually be removed.

[global] nis homedir = boolean

allowable values: YES, NO   *default:* NO

If YES, the `homedir map` will be used to look up the user's home-directory server name and return it to the client. The client will contact that machine to connect to the share. This avoids mounting from a machine that doesn't actually have the disk. The machine with the home directories must be an SMB server.

[global] nt pipe support = boolean

allowable values: YES, NO   *default:* YES

Allows turning off NT-specific pipe calls. This is a developer/benchmarking option and may be removed in the future. Avoid changing.

[global] nt smb support = boolean

allowable values: YES, NO   *default:* YES

If YES, allow NT-specific SMBs to be used. This is a developer/benchmarking option and may be removed in the future. Avoid changing.

[global] null passwords = boolean

allowable values: YES, NO   *default:* NO

If YES, allows access to accounts that have null passwords. Strongly discouraged.

ole locking compatibility = boolean

allowable values: YES, NO   *default:* YES

If YES, locking ranges will be mapped to avoid Unix locks crashing when Windows uses locks above 32KB. You should avoid changing this option. Introduced in Samba 1.9.18p10.

only guest = boolean

allowable values: YES, NO   *default:* NO

A synonym for `guest only`. Forces user of a share to login as the guest account.

only user = boolean

allowable values: YES, NO   *default:* NO

Requires that users of the share be on a `username =` list.

oplocks = boolean

allowable values: YES, NO   *default:* YES

If YES, support local caching of *opportunistic* locked files on client. This option is recom-
mended because it improves performance by about 30%. See also `fake oplocks` and `veto
oplock files`.

[global] os level = number

allowable values: number   *default:* 0

Sets the candidacy of the server when electing a browse master. Used with the `domain
master` or `local master` options. You can set a higher value than a competing operating
system if you want Samba to win. Windows for Workgroups and Windows 95 use 1,
Windows NT client uses 17, and Windows NT Server uses 33.

[global] packet size = bytes

allowable values: number in bytes   *default:* 65535

Obsolete. Discouraged synonym of `max packet`. See `max xmit`.

[global] passwd chat debug = boolean

allowable values: YES, NO   *default:* NO

Logs an entire password chat, including passwords passed, with a log level of 100. For
debugging only. Introduced in Samba 1.9.18p5.

[global] passwd chat = command sequence

allowable values: Unix server commands   *default:* compiled-in value

Sets the command used to change passwords on the server. Supports the variables `%o` (old
password) and `%n` (new password) and allows `\r \n \t` and `\s` (space) escapes in the
sequence.

[global] passwd program = program

allowable values: Unix server program   *default:* NULL

Sets the command used to change user's password. Will be run as `root`. Supports `%u`
(user).

[global] password level = number

allowable values: number   *default:* 0

Specifies the number of uppercase letter permutations used to match passwords. Workaround for clients that change passwords to a single case before sending them to the Samba server. Causes repeated login attempts with passwords in different cases, which can trigger account lockouts.

[global] password server = netbios names

allowable values: list of NetBIOS names   *default:* NULL

A list of SMB servers that will validate passwords for you. Used with an NT password server (PDC or BDC) and the `security = server` or `security = domain` configuration options. Caution: an NT password server must allow logins from the Samba server.

panic action = /absolute_path/command

allowable values: fully-qualfied Unix shell command   *default:* NULL

Sets the command to run when Samba panics. For Samba developers and testers, `/usr/bin/X11/xterm -display :0 -e gdb /samba/bin/smbd %d` is a possible value.

path = pathname

allowable values: pathname   *default:* varies

Sets the path to the directory provided by a file share or used by a printer share. Set automatically in `[homes]` share to user's home directory, otherwise defaults to */tmp*. Honors the `%u` (user) and `%m` (machine) variables.

postexec = /absolute_path/command

allowable values: fully-qualified Unix shell command   *default:* NULL

Sets a command to run as the user after disconnecting from the share. See also the options `preexec`, `root preexec`, and `root postexec`.

postscript = boolean

allowable values: YES, NO   *default:* NO

Flags a printer as PostScript to avoid a Windows bug by inserting `%!` as the first line. Works only if printer actually is PostScript compatible.

preexec = /absolute_path/command

allowable values: fully-qualified Unix shell command   *default:* NULL

Sets a command to run as the user before connecting to the share. See also the options `postexec`, `root preexec`, and `root postexec`.

[global] preferred master = boolean

allowable values: YES, NO   *default:* NO

If YES, Samba is preferred to become the master browser. Causes Samba to call a browsing election when it comes online.

preload = share list

allowable values: list of services   *default:* NULL

Synonym of `auto services`. Specifies a list of shares that will always appear in browse lists.

preserve case = boolean

allowable values: YES, NO   *default:* NO

If set to YES, this option leaves filenames in the case sent by client. If no, it forces filenames to the case specified by the `default case` option. See also `short preserve case`.

print command = /absolute_path/command

allowable values: fully-qualified Unix shell command   *default:* varies

Sets the command used to send a spooled file to the printer. Usually initialized to a default value by the `printing` option. This option honors the `%p` (printer name), `%s` (spool file) and `%f` (spool file as a relative path) variables. Note that the command in the value of the option must include file deletion of the spool file.

print ok = boolean

allowable values: YES, NO   *default:* NO

Synonym of `printable`.

printable = boolean

allowable values: YES, NO   *default:* NO

Sets a share to be a print share. Required for all printers.

[global] printcap name = pathname

allowable values: pathname   *default: /etc/printcap*

Sets the path to the printer capabilities file used by the `[printers]` share. The default value changes to */etc/qconfig* under AIX and *lpstat* on System V.

printer = name

allowable values: printer name   *default:* `lp`

Sets the name of the Unix printer.

printer driver = printer driver name

allowable values: exact printer driver string used by Windows   *default:* NULL

Sets the string to pass to Windows when asked what driver to use to prepare files for a printer share. Note that the value is case sensitive.

[global] printer driver file = path

allowable values: Unix pathname   *default: samba-lib/printers.def*

Sets the location of a *msprint.def* file, usable by Windows 95/98.

printer driver location = path

allowable values: Windows network path   *default: \\server\PRINTER$*

Sets the location of the driver for a particular printer. The value is a pathname for a share that stores the printer driver files.

printer name = name

allowable values: name   *default:* NULL

Synonym of `printer`.

printing = style

allowable values: bsd, sysv, hpux, aix, qnx, plp, lprng   *default:* bsd

Sets printing style to one of the above, instead of the compiled-in value. This sets initial values of at least the `print command`, `print command`, `lpq command`, and `lprm command`.

[global] protocol = protocol

allowable values: NT1, LANMAN2, LANMAN1, COREPLUS, CORE   *default:* NT1

Sets SMB protocol version to one of the allowable values. Resetting is highly discouraged. Only for backwards compatibility with older-client bugs.

public = boolean

allowable values: YES, NO   *default:* NO

If YES, passwords are not needed for this share. A synonym is `guest ok`.

queuepause command = /absolute_path/command

allowable values: valid Unix command   *default:* varies

Sets the command used to pause a print queue. Usually initialized to a default value by the `printing` option. Introduced in Samba 1.9.18p10.

queueresume command = /absolute_path/command

allowable values: valid Unix command   *default:* varies

Sets the command used to resume a print queue. Usually initialized to a default value by the `printing` option. Introduced in Samba 1.9.18p10.

read bmpx = boolean

allowable values: YES, NO   *default:* NO

Obsolete. Do not change.

read list = comma-separated list

allowable values: comma-separated list of users   *default:* NULL

Specifies a list of users given read-only access to a writeable share.

read only = boolean

allowable values: YES, NO   *default:* NO

Sets a share to read-only. Antonym of `writable` and `write ok`.

[global] read prediction = boolean

allowable values: YES, NO   *default:* NO

Reads ahead data for read-only files. Obsolete; removed in Samba 2.0.

[global] read raw = boolean

allowable values: YES, NO   *default:* YES

Allows fast streaming reads over TCP using 64K buffers. Recommended.

[global] read size = bytes

allowable values: size in bytes   *default:* 2048

Sets a buffering option for servers with mismatched disk and network speeds. Requires experimentation. Avoid changing. Should not exceed 65536.

[global] remote announce = remote list

allowable values: list of remote addresses   *default:* NULL

Adds workgroups to the list on which the Samba server will announce itself. Specified as IP address/workgroup (for instance, 192.168.220.215/SIMPLE) with multiple groups separated by spaces. Allows directed broadcasts. The server will appear on those workgroup's browse lists. Does not require WINS.

[global] remote browse sync = address list

allowable values: IP-address list   *default:* NULL

Enables Samba-only browse list synchronization with other Samba local master browsers. Addresses can be specific addresses or directed broadcasts (i.e., ###.###.###.255). The latter will cause Samba to hunt down the local master.

revalidate = boolean

allowable values: YES, NO   *default:* NO

If set to YES, requires users to re-enter passwords even after a successful initial logon to a share with a password.

[global] root = pathname

allowable values: Unix pathname   *default:* NULL

Synonym for `root directory`.

[global] root dir = pathname

allowable values: Unix pathname   *default:* NULL

Synonym for `root directory`.

[global] root directory = pathname

allowable values: Unix pathname   *default:* NULL

Specifies a directory to `chroot()` to before starting daemons. Prevents any access below that directory tree. See also the `wide links` configuration option.

root postexec = /absolute_path/command

allowable values: fully-qualified Unix shell command   *default:* NULL

Sets a command to run as root after disconnecting from the share. See also `preexec`, `postexec`, and `root preexec` configuration options. Runs after the user's `postexec` command. Use with caution.

root preexec = /absolute_path/command

allowable values: fully-qualified Unix shell command   *default:* NULL

Sets a command to run as root before connecting to the share. See also `preexec`, `postexec`, and `root postexec` configuration options. Runs before the user's `preexec` command. Use with caution.

[global] security = value

allowable values: share, user, server, domain   *default:* share in Samba 1.0, user in 2.0

Sets password-security policy. If `security = share`, services have a shared password, available to everyone. If `security = user`, users have (Unix) accounts and passwords. If

security = server, users have accounts and passwords and a separate machine authenticates them for Samba. If security = domain, full NT-domain authentication is done. See also the password server and encrypted passwords configuration options.

[global] server string = text

allowable values: string   *default:* Samba %v in 2.0

Sets the name that appears beside a server in browse lists. Honors the %v (Samba version number) and %h (hostname) variables.

set directory = boolean

allowable values: YES, NO   *default:* NO

Allows DEC Pathworks client to use the *set dir* command.

[global] shared file entries = number

allowable values: number   *default:* 113

Obsolete; do not use.

shared mem size = bytes

allowable values: size in bytes   *default:* 102400

If compiled with FAST_SHARE_MODES (mmap), sets the shared memory size in bytes. Avoid changing.

[global] smb passwd file = path

allowable values: Unix pathname   *default: /usr/local/samba/private/smbpasswd*

Overrides compiled-in path to password file if encrypted passwords = yes.

[global] smbrun = /absolute_path/command

allowable values: smbrun command   *default:* compiled-in value

Overrides compiled-in path to *smbrun* binary. Avoid changing.

share modes = boolean

allowable values: YES, NO   *default:* YES

If set to YES, this option supports Windows-style whole-file (deny mode) locks.

short preserve case = boolean

allowable values: YES, NO   *default:* NO

If set to YES, leaves mangled 8.3-style filenames in the case sent by client. If no, it forces the case to that specified by the default case option. See also preserve case.

[global] socket address = IP address

allowable values: IP address   *default:* NULL

Sets address on which to listen for connections. Default is to listen to all addresses. Used to support multiple virtual interfaces on one server. Highly discouraged.

[global] socket options = socket option list

allowable values: list   *default:* NULL

Sets OS-specific socket options. `SO_KEEPALIVE` has TCP check clients every 4 hours to see if they are still accessible. `TCP_NODELAY` sends even tiny packets to keep delay low. Recommended wherever the operating system supports them. See Appendix B, *Samba Performance Tuning*, for more information.

[global] status = boolean

allowable values: YES, NO   *default:* YES

If YES, logs connections to a file (or shared memory) accessible to *smbstatus*.

strict sync = boolean

allowable values: YES, NO   *default:* NO

If set to YES, Samba will synchronize to disk whenever the client sets the sync bit in a packet. If set to NO, Samba flushes data to disk whenever buffers fill. Defaults to NO because Windows 98 Explorer sets the bit (incorrectly) in all packets. Introduced in Samba 1.9.18p10.

strict locking = boolean

allowable values: YES, NO   *default:* NO

If set to YES, Samba checks locks on every access, not just on demand and at open time. Not recommended.

[global] strip dot = boolean

allowable values: YES, NO   *default:* NO

Removes trailing dots from filenames. Use `mangled map` instead.

[global] syslog = number

allowable values: number   *default:* 1

Sets number of Samba log messages to send to *syslog*. Higher is more verbose. The *syslog.conf* file must have suitable logging enabled.

[global] syslog only = boolean

allowable values: YES, NO   *default:* NO

If set to YES, log only to *syslog,* not standard Samba log files.

sync always = boolean

allowable values: YES, NO   *default:* NO

If set to YES, Samba calls *fsync*(3) after every write. Avoid except for debugging crashing servers.

[global] time offset = minutes

allowable values: minutes   *default:* 0

Sets number of minutes to add to system time zone calculation. Provided to fix a client daylight-savings bug; not recommended.

[global] time server = boolean

allowable values: YES, NO   *default:* NO

If YES, *nmbd* will provide time service to its clients.

unix password sync = boolean

allowable values: YES, NO   *default:* NO

If set, will attempt to change the user's Unix password whenever the user changes his or her SMB password. Used to ease synchronization of Unix and Microsoft password databases. Added in Samba 1.9.18p4. See also `passwd chat`.

unix realname = boolean

allowable values: YES, NO   *default:* NO

If set, will provide the GCOS field of */etc/passwd* to the client as the user's full name.

update encrypted = boolean

allowable values: YES, NO   *default:* NO

Updates the Microsoft-format password file when a user logs in with unencrypted passwords. Provided to ease conversion to encryped passwords for Windows 95/98 and NT. Added in Samba 1.9.18p5.

user = comma-separated list

allowable values: comma-separated list of user names   *default:* NULL

Synonym for `username`.

username = comma-separated list

allowable values: comma-separated list of user names   *default:* NULL

Sets a list of users to try to log in as for a share or shares with share-level security. Synonyms are `user` and `users`. Discouraged. Use `NET USE \\`*server*`\`*share*`%`*user* from the client instead.

username level = number

allowable values: number   *default:* 0

Number of uppercase letter permutations allowed to match Unix usernames. Workaround for Windows feature (single-case usernames). Use is discouraged.

[global] username map = pathname

allowable values: pathname   *default:* NULL

Names a file of Unix-to-Windows name pairs; used to map different spellings of account names and those Windows usernames longer than eight characters.

valid chars = list

allowable values: list of numeric values   *default:* NULL

Semi-obsolete. Adds national characters to a character set map. Overridden by `client code page`.

valid users = user list

allowable values: list of users   *default:* NULL (everyone)

List of users that can log in to a share.

veto files = slash-list

allowable values: slash-separated list of filenames   *default:* NULL

List of files not to allow the client to see when listing a directory's contents. See also `delete veto files`.

veto oplock files = slash-list

allowable values: slash-separated list of filenames   *default:* NULL

List of files not to oplock (and cache on clients). See also `oplocks` and `fake oplocks`.

volume = share name

allowable values: string   *default:* NULL

Sets the volume label of a disk share, notably a CD-ROM.

wide links = boolean

allowable values: YES, NO   *default:* YES

If set to YES, Samba will follow symlinks out of the current disk share(s). See also the `root dir` and `follow symlinks` options.

[global] wins proxy = boolean

allowable values: YES, NO   *default:* NO

If set to YES, *nmbd* will proxy resolution requests to WINS servers on behalf of old clients, which use broadcasts. WINS server is typically on another subnet.

[global] wins server = host

allowable values: hostname   *default:* NULL

Sets the DNS name or IP address of the WINS server.

[global] wins support = boolean

allowable values: YES, NO   *default:* NO

If set to YES, Samba activates WINS service. The `wins server` option must not be set if `wins support = yes`.

[global] workgroup = name

allowable values: workgroup name   *default:* compiled-in

Sets the workgroup to which things will be served. Overrides compiled-in value. Choosing a name other than `WORKGROUP` is strongly recommended.

writable = boolean

allowable values: YES, NO   *default:* YES

Antonym for `read only`; synonym of `write ok`.

write list = comma-separated list

allowable values: comma-separated list of users   *default:* NULL (everyone)

List of users that are given read-write access to a read-only share. See also `read list`.

write ok = boolean

allowable values: YES, NO   *default:* YES

Synonym of the `writable` configuration option.

[global] write raw = boolean

allowable values: YES, NO   *default:* YES

Allows fast streaming writes over TCP, using 64KB buffers. Recommended.

Glossary of Configuration Values

Address list

A space-separated list of IP addresses in *###.###.###.###* format.

Comma-separated list

A list of items separated by commas.

Command

A Unix command, with full path and parameters.

Host list

A space-separated list of hosts. Allows IP addresses, address masks, domain names, ALL, and EXCEPT

Interface list

A space-separated list of interfaces, in either address/netmask or address/n-bits format. For example, 192.168.2.10/24 or 192.168.2.10/255.255.255.0

Map list

A space-separated list of file-remapping strings such as `(*.html *.htm)`.

Remote list

A space-separated list of subnet-broadcast-address/workgroup pairs. For example, 192.168.2.255/SERVERS 192.168.4.255/STAFF.

Service (share) list

A space-separated list of share names, without the enclosing square brackets.

Slash-list

A list of filenames, separated by "/" characters to allow embedded spaces. For example, `/.*/fred flintstone/*.frk/`.

Text

One line of text.

User list

A space-separated list of usernames. In Samba 1.9, `@group-name` will include everyone in Unix group `group-name`. In Samba 2.0, `@group-name` includes whomever is in the NIS netgroup `group_name` if one exists, otherwise whomever is in the Unix group `group_name`. In addition, `+group_name` is a Unix group, `&group_name` is an NIS netgroup, and `&+` and `+&` cause an ordered search of both Unix and NIS groups.

Configuration File Variables

Table C-1 lists of Samba configuration file variables.

Table C-1. Variables in Alphabetic Order

Name	Meaning
`%a`	Client's architecture (one of Samba, WfWg, WinNT, Win95, or UNKNOWN)
`%d`	Current server process's processID
`%f`	Print-spool file as a relative path (printing only)
`%f`	User from which a message was sent (messages only)
`%G`	Primary group name of `%U` (requested username)
`%g`	Primary group name of `%u` (actual username)
`%H`	Home directory of `%u` (actual username)
`%h`	Samba server's (Internet) hostname
`%I`	Client's IP address
`%j`	Print job number (printing only)
`%L`	Samba server's NetBIOS name (virtual servers have multiple names)
`%M`	Client's (Internet) hostname
`%m`	Client's NetBIOS name
`%n`	New password (password change only)
`%N`	Name of the NIS home directory server (without NIS, same as `%L`)
`%o`	Old password (password change only)
`%P`	Current share's root directory (actual)
`%p`	Current share's root directory (in an NIS homedir map)
`%p`	Print filename (printing only)
`%R`	Protocol level in use (one of CORE, COREPLUS, LANMAN1, LANMAN2, or NT1)
`%S`	Current share's name
`%s`	Filename the message is in (messages only)
`%s`	Print-spool file name (printing only)
`%T`	Current date and time
`%t`	Destination machine (messages only)
`%u`	Current share's username
`%U`	Requested username for current share
`%v`	Samba version