

## **Configuration Directive List**

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# Configuration Directive List

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### 1. List of Directives

AccessDenyMsg -- Customise the response on failed authentication  
AccessGrantMsg -- Customise the response on successful authentication  
Allow -- Access control directive  
AllowAll -- Allow all clients  
AllowClass -- Class based allow rules  
AllowFilter -- Regular expression of command arguments to be accepted  
AllowForeignAddress -- Control the use of the PORT command  
AllowGroup -- Group based allow rules  
AllowLogSymlinks -- Permit logging to symlinked files  
AllowOverride -- Toggles handling of .ftppass files  
AllowOverwrite -- Enable files to be overwritten  
AllowRetrieveRestart -- Allow clients to resume downloads  
AllowStoreRestart -- Allow clients to resume uploads  
AllowUser -- User based allow rules  
AnonRatio -- Ratio directive  
AnonRejectPasswords -- Block certain anonymous user passwords  
AnonRequirePassword -- Make anonymous users supply a valid password  
Anonymous -- Define an anonymous server  
AnonymousGroup -- Treat group members as anonymous users  
AuthAliasOnly -- Allow only aliased login names  
AuthGroupFile -- Specify alternate group file  
AuthOrder -- Configure auth module checking order  
AuthPAM -- Enable/Disable PAM authentication  
AuthPAMConfig -- Select PAM service name  
AuthUserFile -- Specify alternate passwd file  
AuthUsingAlias -- Authenticate via Alias-name instead of mapped username  
Bind -- Bind the server or Virtualhost to a specific IP address [deprecated]  
ByteRatioErrMsg -- Ratio directive  
CapabilitiesEngine -- Enable/disable mod\_cap  
CapabilitiesSet -- Configure the set of Linux capabilities processed  
CDPath -- Sets "search paths" for the cd command  
Class -- Define a class of client connections  
CommandBufferSize -- Limit the maximum command length  
CreateHome -- Create and populate users' home directories as needed  
CreateHome -- Create and populate users' home directories as needed  
CwdRatioMsg -- Ratio directive  
DebugLevel -- Set the debugging output level  
DefaultAddress -- Set the address for the server to listen on  
DefaultChdir -- Set starting directory for FTP sessions  
DefaultRoot -- Sets default chroot directory  
DefaultServer -- Set the default server  
DefaultTransferMode -- Set the default method of data transfer  
DeferWelcome -- Don't show welcome message until user has authenticated  
Define -- Initialises Defines for IfDefine  
DelayEngine -- Control the use of mod\_delay

## Configuration Directive List

DelayTable -- Sets the name and path of the file used as the timing table  
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Deny -- Access control directive  
DenyAll -- Deny all clients  
DenyClass -- Class based deny rules  
DenyFilter -- Regular expression of command arguments to be blocked  
DenyGroup -- Group based deny rules  
DenyUser -- User based deny rules  
Directory -- Directory-limited configuration directives  
DirFakeGroup -- Hide real file/directory group  
DirFakeMode -- Hide real file/directory permissions  
DirFakeUser -- Hide real file/directory owner  
DisplayChdir -- Set the file to display when entering a directory  
DisplayConnect -- Sets connect banner file  
DisplayFileTransfer -- FIXFIXFIX  
DisplayFirstChdir -- Set the file to display when first entering a directory [deprecated]  
DisplayGoAway -- Set the file to display to a rejected connection  
DisplayLogin -- Set the file to display on login  
DisplayQuit -- Set the file to display on quit  
DisplayReadme -- Enable display of file modification times on a file pattern  
ExtendedLog -- Specify custom logfiles  
FileRatioErrMsg -- (docs incomplete)  
Global -- Set some directives to apply across the entire daemon  
Group -- Set the group the server normally runs as  
GroupOwner -- Change default group for new files and directories  
GroupPassword -- Set a group-wide password  
GroupRatio -- Ratio directive  
HiddenStor -- Enables more safe file uploads [deprecated]  
HiddenStores -- Enables more safe file uploads  
HideFiles -- Enable hiding of files based on regular expressions  
HideGroup -- Enable hiding of files based on group owner  
HideNoAccess -- Block the listing of directory entries to which the user has no access permissions  
HideUser -- Enable hiding of files based on user owner  
HostRatio -- Ratio directive  
IdentLookups -- Toggle ident lookups  
IfDefine -- To control the use of sections of the configuration  
IfModule -- Parse a section of config based on module name  
IgnoreHidden -- Treat 'hidden' files as if they don't exist  
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LDAPAliasDereference -- Specify how LDAP alias dereferencing is done  
LDAPAttr -- Map LDAP Attributes to something non standard  
LDAPAuthBinds -- (docs incomplete)  
LDAPDefaultAuthScheme -- Set the authentication scheme/hash that is used when no leading {hashname} is present.  
LDAPDefaultGID -- Set the default GID to be assigned to users when no uidNumber attribute is found.  
LDAPDefaultUID -- Set the default UID to be assigned to users when no uidNumber attribute is found.  
LDAPDNInfo -- Set DN information to be used for initial bind  
LDAPDoAuth -- Enable LDAP authentication

## Configuration Directive List

LDAPDoGIDLookups -- Enable LDAP lookups for user group membership and GIDs in directory listings

LDAPDoQuotaLookups -- Enable LDAP quota limit support

LDAPDoUIDLookups -- Enable LDAP lookups for UIDs in directory listings

LDAPForceDefaultGID -- Force all LDAP-authenticated users to use the same GID.

LDAPForceDefaultUID -- Force all LDAP-authenticated users to use the same UID.

LDAPForceGeneratedHomedir -- Force all LDAP-authenticated users to use the default HomeDironDemand prefix/suffix.

LDAPForceHomedirOnDemand -- Force all LDAP-authenticated users to use the default HomeDironDemand prefix/suffix. [deprecated]

LDAPGenerateHomedir -- Enable the creation of user home directories on demand

LDAPGenerateHomedirPrefix -- Enable the creation of user home directories on demand

LDAPGenerateHomedirPrefixNoUsername -- (docs incomplete)

LDAPHomedirOnDemand -- Enable the creation of user home directories on demand [deprecated]

LDAPHomedirOnDemandPrefix -- Enable the creation of user home directories on demand [deprecated]

LDAPHomedirOnDemandPrefixNoUsername -- (docs incomplete)

LDAPHomedirOnDemandSuffix -- Specify an additional directory to be created inside a user's home directory on demand. [deprecated]

LDAPNegativeCache -- Enable negative caching for LDAP lookups

LDAPProtocolVersion -- Set the LDAP protocol version

LDAPQueryTimeout -- Set a timeout for LDAP queries

LDAPSearchScope -- Specify the search scope used in LDAP queries

LDAPServer -- Specify the LDAP server to use for lookups

LDAPUseTLS -- Enable TLS/SSL connections to the LDAP server.

LeechRatioMsg -- Sets the 'over ratio' error message

Limit -- Set the commands/actions to be controlled

ListOptions -- Configure options used when listing directories

LogFormat -- Specify a logging format

LoginPasswordPrompt -- Configure to display the password prompt or not

MasqueradeAddress -- Configure the server address presented to clients

MaxClients -- Limits the number of users that can connect

MaxClientsPerClass -- Limit the number of connections per class

MaxClientsPerHost -- Limits the connections per client machine

MaxClientsPerUser -- Limit the number of connections per userid

MaxConnectionRate -- Maximum TCP socket connection rate

MaxConnectionsPerHost -- Limits the unauthenticated connections per client machine

MaxHostsPerUser -- Limit the number of connections per userid

MaxInstances -- Sets the maximum number of child processes to be spawned

MaxLoginAttempts -- Sets how many password attempts are allowed before disconnection

MaxRetrieveFileSize -- Restrict size of downloaded files

MaxStoreFileSize -- Restrict size of uploaded files

MultilineRFC2228 -- Enable RFC2228 multiline response mode

Order -- Configures the precedence of the Limit directives

PassivePorts -- Specify the ftp-data port range to be used

PathAllowFilter -- Only allow new files which match a specified pattern

PathDenyFilter -- Disallow new files which match a specified pattern

PersistentPasswd -- Sets handling of unix auth files

PidFile -- Set the filepath to hold the pid of the master server

Port -- Set the port for the control socket

RadiusAcctServer -- Setup RADIUS accounting details

## Configuration Directive List

RadiusAuthServer -- Setup RADIUS authenticator details  
RadiusEngine -- Enable RADIUS support  
RadiusLog -- Specify the logfile for reporting / debugging  
RadiusRealm -- Setup the authentication realm  
RadiusUserInfo -- Configure login information via RADIUS  
RatioFile -- Ratio directive  
Ratios -- (docs incomplete)  
RatioTempFile -- Ratio directive  
RequireValidShell -- Allow connections based on /etc/shells  
RewriteCondition -- Define a rule condition  
RewriteEngine -- Enable/disable mod\_rewrite  
RewriteLock -- Set the filename for synchronization lockfile  
RewriteLog -- Specify a log file for mod\_rewrite reporting  
RewriteMap -- Define a rewrite map  
RewriteRule -- Define a rewrite rule  
RLimitCPU -- Configure the maximum CPU time in seconds used by a process  
RLimitMemory -- Configure the maximum memory in bytes used by a process  
RLimitOpenFiles -- Configure the maximum number of open files used by a process  
RootLogin -- Permit root user logins  
RootRevoke -- Drop root privileges completely  
SaveRatios -- FIXME FIXME  
ScoreboardFile -- Sets the name and path of the scoreboard file  
ServerAdmin -- Set the address for the server admin  
ServerIdent -- Set the message displayed on connect  
ServerLog -- Configure logs on a per-server basis  
ServerName -- Configure the name displayed to connecting users  
ServerType -- Set the mode proftpd runs in  
SetEnv -- (docs incomplete)  
ShowSymlinks -- Toggle the display of symlinks  
SocketBindTight -- Controls how TCP/IP sockets are created  
SocketOptions -- Tune socket-level options  
SQLAuthenticate -- Specify authentication methods and what to authenticate  
Group Table Structure  
SQLAuthTypes -- Specify the allowed authentication types and their check order  
SQLBackend -- Set the SQL backend module  
SQLConnectInfo -- Specify connection information for the backend  
SQLDefaultGID -- Configure the default GID for users  
SQLDefaultHomedir -- Configure the default homedir  
SQLDefaultUID -- Configure the default UID for users  
SQLEngine -- Configure how mod\_sql will operate  
SQLGroupInfo -- Configure the group table and fields that hold group information  
SQLGroupWhereClause -- Configure a WHERE clause for every group query  
SQLHomedirOnDemand -- Have mod\_sql create home directories as needed [deprecated]  
SQLLog -- Log information to a database table  
SQLLogFile -- Specify a log file for mod\_sql reporting and debugging  
SQLMinID -- Set SQLMinUserGID and SQLMinUserID in one place  
SQLMinUserGID -- Set a minimum GID  
SQLMinUserUID -- Set a minimum UID  
SQLNamedQuery -- Specify a query and an identifier for SQLShowInfo and SQLLog  
SQLNegativeCache -- Enable negative caching for SQL lookups  
SQLRatios -- (docs incomplete)

## Configuration Directive List

[SQLRatioStats](#) -- (docs incomplete)  
[SQLShowInfo](#) -- Create a message to be sent to the user after any successful command  
[SQLUserInfo](#) -- Configure the user table and fields that hold user information  
[SQLUserWhereClause](#) -- Configure a WHERE clause for every user query<  
[StoreUniquePrefix](#) -- Set the prefix to be added to uniquely generated filenames  
[SyslogFacility](#) -- Set the facility level used for logging  
[SyslogLevel](#) -- Set the verbosity level of system logging  
[SystemLog](#) -- Redirect syslogging to a file  
[TCPAccessFiles](#) -- Sets the access files to use  
[TCPAccessSyslogLevels](#) -- Sets the logging levels for mod\_wrap  
[tcpBackLog](#) -- Control the tcp backlog in standalone mode  
[TCPGroupAccessFiles](#) -- Sets the access files to use  
[tcpNoDelay](#) -- Control the use of TCP\_NODELAY  
[TCPServiceName](#) -- Configures the name proftpd will use with mod\_wrap  
[TCPUserAccessFiles](#) -- Sets the access files to use  
[TimeoutIdle](#) -- Sets the idle connection timeout  
[TimeoutLinger](#) -- Sets the timeout used for lingering closes  
[TimeoutLogin](#) -- Sets the login timeout  
[TimeoutNoTransfer](#) -- Sets the connection without transfer timeout  
[TimeoutSession](#) -- Sets a timeout for an entire session  
[TimeoutStalled](#) -- Sets the timeout on stalled downloads  
[TimesGMT](#) -- Toggle time display between GMT and local  
[TLSCACertificateFile](#) -- Define a CA certificate used to verify your client certificates  
[TLSCACertificatePath](#) -- Define a path to the CAs used to verify your client certificates  
[TLSCARevocationFile](#) -- Define a file with your CA revocation certificates  
[TLSCARevocationPath](#) -- Define a path to your CA revocation certificates  
[TLSCertificateChainFile](#) -- Define an all in one certification file  
[TLSCipherSuite](#) -- Define a cipher list  
[TLSDHParamFile](#) -- Define a file used in Diffie-Hellman key exchange  
[TLSDSACertificateFile](#) -- Point to the file containing the DSA certificate  
[TLSDSACertificateKeyFile](#) -- Point to the file containing the private DSA key  
[TLSEngine](#) -- Enable TLS/SSL connections  
[TLSLog](#) -- Specify a logfile for mod\_tls's reporting on a per-server basis  
[TLSOptions](#) -- Configure optional behaviour of mod\_tls  
[TLSPassPhraseProvider](#) -- FIXFIXFIX  
[TLSProtocol](#) -- Define the SSL/TLS protocol version mod\_tls should use  
[TLSRandomSeed](#) -- Define a file for PRNG seeding  
[TLSRenegotiate](#) -- Configure SSL renegotiations  
[TLSRequired](#) -- Require SSL/TLS on the control and/or data channel  
[TLRSACertificateFile](#) -- Point to the file containing the RSA certificate  
[TLRSACertificateKeyFile](#) -- Point to the file containing the private RSA key  
[TLSVerifyClient](#) -- Configure how to handle certificates presented by clients --  
[TLSVerifyDepth](#) -- Define how deeply mod\_tls should verify a client certificate  
[TransferLog](#) -- Specify the path to the transfer log  
[TransferRate](#) -- Configure upload, download transfer rates  
[Umask](#) -- Set the default Umask  
[UnsetEnv](#) -- (docs incomplete)  
[UseFtpUsers](#) -- Block based on /etc/ftpusers  
[UseGlobbing](#) -- Toggles use of glob() functionality  
[UseIPv6](#) -- Disable IPv6 support  
[User](#) -- Set the user the daemon will run as

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UserAlias -- Alias a username to a system user  
UserDirRoot -- Set the chroot directory to a subdirectory of the anonymous server  
UseReverseDNS -- Toggle rDNS lookups  
UserOwner -- Set the user ownership of new files / directories  
UserPassword -- Creates a hardcoded username/password pair  
UserRatio -- Ratio directive  
UseSendfile -- Toggles use of sendfile() functionality  
UseUTF8 -- FIXFIXFIX  
VirtualHost -- Define a virtual ftp server  
WtmpLog -- Toggle logging to wtmp

### 2. List of modules

mod\_auth -- Authentication module  
--  
mod\_core -- Core module  
mod\_delay -- Prevent information leak through timing attacks  
mod\_ldap -- LDAP authentication support  
mod\_log -- Logging support  
mod\_ls -- file listing functionality  
mod\_radius -- RADIUS based authentication support  
mod\_ratio -- FIX ME FIX ME  
mod\_readme -- "README" file support  
--  
mod\_sql -- SQL support module  
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---

# Chapter 1. List of Directives

# AccessDenyMsg

## Name

AccessDenyMsg -- Customise the response on failed authentication

## Synopsis

**AccessDenyMsg** [ "message" ]

Default

Dependent on login type

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

1.2.2 and later

## Description

Normally, a 530 response message is sent to an FTP client immediately after a failed authentication attempt, with a standard message indicating the the reason of failure. In the case of a wrong password, the reason is usually "Login incorrect." This message can be customized with the AccessDenyMsg directive. In the message argument, the magic cookie '%u' is replaced with the username specified by the client during login.

## See also

## Examples

AccessDenyMsg "Guest access denied for %u."



# AccessGrantMsg

## Name

AccessGrantMsg -- Customise the response on successful authentication

## Synopsis

**AccessGrantMsg** [ "message" ]

Default

Dependent on login type

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

0.99.0p15 and later

## Description

Normally, a 230 response message is sent to an FTP client immediately after authentication, with a standard message indicating that the user has either logged in or that anonymous access has been granted. This message can be customized with the AccessGrantMsg directive. In the message argument, the magic cookie '%u' is replaced with the username specified by the client during login.

## See also

## Examples

AccessGrantMsg "Guest access granted for %u."

# Allow

## Name

Allow -- Access control directive

## Synopsis

```
Allow [ ["from"] "all"|"none"|host|network[,host|network[,...]]]
```

Default

Allow from all

Context

<Limit>

Module

mod\_core

Compatibility

0.99.0pl6 and later

## Description

The Allow directive is used inside a <Limit> context to explicitly specify which hosts and/or networks have access to the commands or operations being limited. Allow is typically used in conjunction with Order and Deny in order to create sophisticated (or perhaps not-so-sophisticated) access control rules. Allow takes an optional first argument; the keyword from. Using from is purely cosmetic. The remaining arguments are expected to be a list of hosts and networks which will be explicitly granted access. The magic keyword all can be used to indicate that all hosts will explicitly be granted access (analogous to the AllowAll directive, except with a lower priority). Additionally, the magic keyword none can be used to indicate that no hosts or networks will be explicitly granted access (although this does not prevent them from implicitly being granted access). If all or none is used, no other hosts or networks can be supplied. Host and network addresses can be specified by name or numeric address. For security reasons, it is recommended that all address information be supplied numerically. Relying solely on named addresses causes security to depend a great deal upon DNS servers which may themselves be vulnerable to attack or spoofing. Numeric addresses which specify an entire network should end in a trailing period (i.e. 10.0.0. for the entire 10.0.0 subnet). Named addresses which specify an entire network should begin with a leading period (i.e. .proftpd.net for the entire proftpd.net domain).

## See also

[Allow](#) [Order](#) [Limit](#)

## Examples

```
<Limit LOGIN>  
Order allow,deny  
Allow from 128.44.26.,128.44.26.,myhost.mydomain.edu,.trusted-domain.org  
Deny from all  
</Limit>
```

# AllowAll

## Name

AllowAll -- Allow all clients

## Synopsis

**AllowAll** [ AllowAll ]

Default

Default is to implicitly AllowAll, but not explicitly

Context

<Directory>, <Anonymous>, <Limit>, .ftpassess

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The AllowAll directive explicitly allows access to a <Directory>, <Anonymous> or <Limit> block. Although proftpd's default behavior is to allow access to a particular object, the default is an implicit allow. AllowAll creates an explicit allow, overriding any higher level denial directives.

## See also

[DenyAll](#)

## Examples

# AllowClass

## Name

AllowClass -- Class based allow rules

## Synopsis

**AllowClass** [ ["AND" | "OR" | "regex"] class-expression]

Default

None

Context

<Limit>

Module

mod\_core

Compatibility

1.2.10rc1 and later

## Description

AllowClass specifies a class-expression that is specifically permitted access within the context of the <Limit> block it is applied to. class-expression has a similar syntax as that used in AllowGroup, in that it should contain a comma delimited list of classes or "not" classes (by prefixing a class name with the `!' character) that are to be allowed access to the block.

By default, the expression is parsed as a boolean "OR" list, meaning that ANY elements of the expression must evaluate to logically true in order for the explicit allow to apply. In order to treat the expression as a boolean "AND" list, meaning that ALL of the elements must evaluate to logically true, use the optional "AND" keyword. Similarly, to treat the expression as a regular expression, use the "regex" keyword.

## See also

[AllowUser](#) [DenyUser](#) [AllowGroup](#) [DenyGroup](#) [DenyClass](#)

## Examples

```
# A regular expression AllowClass directive
AllowClass regex ^known

# An AND-evaluated ClassUser directive
DenyClass AND bad,scanner
```

# AllowFilter

## Name

AllowFilter -- Regular expression of command arguments to be accepted

## Synopsis

**AllowFilter** [ regular-expression]

Default

None

Context

server config, <VirtualHost>, <Global>, <Anonymous>, <Directory>, .ftppass

Module

mod\_core

Compatibility

1.2.0pre7 and later

## Description

AllowFilter allows the configuration of a regular expression that must be matched for all command arguments sent to ProFTPD. It is extremely useful in controlling what characters may be sent in a command to ProFTPD, preventing some possible types of attacks against ProFTPD. The regular expression is applied against the arguments to the command sent by the client, so care must be taken when creating a proper regex. Commands that fail the regex match result in a "Forbidden command" error being returned to the client. If the regular-expression argument contains whitespace, it must be enclosed in quotes.

## See also

[DenyFilter](#)

## Examples

```
# Only allow commands containing alphanumeric characters and whitespace
AllowFilter "[a-zA-Z0-9 ,]*"
```

# AllowForeignAddress

## Name

AllowForeignAddress -- Control the use of the PORT command

## Synopsis

**AllowForeignAddress** [ on|off ]

Default

AllowForeignAddress off

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

1.1.7 and later

## Description

Normally, proftpd disallows clients from using the ftp PORT command with anything other than their own address (the source address of the ftp control connection), as well as preventing the use of PORT to specify a low-numbered (< 1024) port. In either case, the client is sent an "Invalid port" error and a message is syslog'd indicating either "address mismatch" or "bounce attack". By enabling this directive, proftpd will allow clients to transmit foreign data connection addresses that do not match the client's address. This allows such tricks as permitting a client to transfer a file between two FTP servers without involving itself in the actual data connection. Generally it's considered a bad idea, security-wise, to permit this sort of thing.

AllowForeignAddress only affects data connection addresses; not tcp ports. There is no way (and no valid reason) to allow a client to use a low-numbered port in its PORT command.

## See also

## Examples

# AllowGroup

## Name

AllowGroup -- Group based allow rules

## Synopsis

**AllowGroup** [ [ "AND" | "OR" | "regex" ] group-expression ]

Default

None

Context

<Limit>

Module

mod\_core

Compatibility

1.1.1 and later

## Description

AllowGroup specifies a group-expression that is specifically permitted within the context of the <Limit> block it is applied to. group-expression has the same format as that used in DefaultRoot, in that it should contain a comma separated list of groups or "not" groups (by prefixing a group name with the `!' character) that are to be allowed access to the block.

By default, the expression is parsed as a boolean "AND" list, meaning that ALL elements of the expression must evaluate to logically true in order to the explicit allow to apply. In order to treat the expression as a boolean "OR" list, meaning that ANY of the elements must evaluate to logically true, use the optional "AND" keyword. Similarly, to treat the expression as a regular expression, use the "regex" keyword.

## See also

[DenyGroup](#), [DenyUser](#), [AllowUser](#)

## Examples

```
# An OR-evaluated AllowGroup directive
AllowGroup OR www,doc

# A regular expression DenyGroup directive
DenyGroup regex ^sys
```



# AllowLogSymlinks

## Name

AllowLogSymlinks -- Permit logging to symlinked files

## Synopsis

**AllowLogSymlinks** [ "on" | "off" ]

Default

AllowLogSymlinks off

Context

server config, <VirtualHost>, <Global>

Module

mod\_log

Compatibility

1.2.2rc2 and later

## Description

By default, the server will the path of any configured SystemLog, any configured TransferLogs, and any configured ExtendedLogs to see if they are symbolic links. If the paths are symbolic links, the server will refuse to log to that link unless explicitly configured to do so via this directive.

## Security note:

Security note: this behaviour should not be allowed unless for a very good reason. By allowing the server to open symbolic links with its root privileges, you are allowing a potential symlink attack where the server could be tricked into overwriting arbitrary system files. You have been warned.

## See also

## Examples

AllowLogSymlinks on

# AllowOverride

## Name

AllowOverride -- Toggles handling of .ftpaccess files

## Synopsis

**AllowOverride** [ on|off [ "user"|"group"|"class" expression]]

Default

on

Context

server config, <Global>, <VirtualHost>, <Anonymous>

Module

mod\_core

Compatibility

1.2.7rc1 and later

## Description

Normally, the server will look for and parse any files in the encountered directories called ".ftpaccess". The files provide a functionality similar to Apache's .htaccess files -- mini-configuration files. This directive controls when those .ftpaccess files will be parsed.

The optional parameters are used to restrict the use of .ftpaccess files only to specific users. If the "user" restriction is given, then expression is a user-expression specifying to which users the rule applies. Similarly for the "group" restriction. For the "class" restriction, the expression is simply the name of connection class for whom the rule will apply.

## See also

# AllowOverwrite

## Name

AllowOverwrite -- Enable files to be overwritten

## Synopsis

**AllowOverwrite** [ on | off ]

Default

AllowOverwrite off

Context

server config, <VirtualHost>, <Anonymous>, <Directory>, <Global>, .ftpaccess

Module

mod\_xfer

Compatibility

0.99.0 and later

## Description

The AllowOverwrite directive permits newly transfered files to overwrite existing files. By default, ftp clients cannot overwrite existing files.

## See also

## Examples

# AllowRetrieveRestart

## Name

AllowRetrieveRestart -- Allow clients to resume downloads

## Synopsis

**AllowRetrieveRestart** [ on | off ]

Default

AllowRetrieveRestart on

Context

server config, <VirtualHost>, <Anonymous>, <Directory>, <Global>, .ftppass

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The AllowRetrieveRestart directive permits or denies clients from performing "restart" retrieve file transfers via the FTP REST command. By default this is enabled, so that clients may resume interrupted file transfers at a later time without losing previously collected data.

## See also

[AllowStoreRestart](#)

## Examples

# AllowStoreRestart

## Name

AllowStoreRestart -- Allow clients to resume uploads

## Synopsis

**AllowStoreRestart** [ on | off ]

Default

AllowStoreRestart off

Context

server config, <VirtualHost>, <Anonymous>, <Directory>, <Global>, .ftpaccess

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The AllowStoreRestart directive permits or denies clients from "restarting" interrupted store file transfers (those sent from client to server). By default restarting (via the REST command) is not permitted when sending files to the server. Care should be taken to disallow anonymous ftp "incoming" transfers to be restarted, as this will allow clients to corrupt or increase the size of previously stored files (even if not their own).

The REST (Restart STOR) command is automatically blocked when HiddenStores is enabled, with the server returning a 501 error code to the client.

## See also

[AllowRetrieveRestart](#) [DeleteAbortedStores](#) [HiddenStores](#)

## Examples

# AllowUser

## Name

AllowUser -- User based allow rules

## Synopsis

**AllowUser** [ [ "AND" | "OR" | "regex" ] user-expression]

Default

None

Context

<Limit>

Module

mod\_core

Compatibility

1.1.7 and later

## Description

AllowUser specifies a user-expression that is specifically permitted access within the context of the <Limit> block it is applied to. user-expression has a similar syntax as that used in AllowGroup, in that it should contain a comma delimited list of users or "not" users (by prefixing a user name with the `!' character) that are to be allowed access to the block.

By default, the expression is parsed as a boolean "OR" list, meaning that ANY elements of the expression must evaluate to logically true in order to the explicit allow to apply. In order to treat the expression as a boolean "AND" list, meaning that ALL of the elements must evaluate to logically true, use the optional "AND" keyword. Similarly, to treat the expression as a regular expression, use the "regex" keyword.

## See also

[DenyUser](#) [AllowGroup](#) [DenyGroup](#)

## Examples

```
# A regular expression AllowUser directive
AllowUser regex ^ftp

# An AND-evaluated DenyUser directive
DenyUser AND system,test
```

# AnonRatio

## Name

AnonRatio -- Ratio directive

## Synopsis

**AnonRatio** [ *foo1* *foo2* *foo3* ]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftppass

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The AnonRatio directive ....

## See also

AnonRatio

## Examples

# AnonRejectPasswords

## Name

AnonRejectPasswords -- Block certain anonymous user passwords

## Synopsis

**AnonRejectePasswords** [ regex]

Default

None

Context

<Anonymous>

Module

mod\_auth

Compatibility

1.2.9rc1 and later

## Description

The AnonRejectPasswords directive configures a regular expression filter for passwords given for anonymous logins. If the given anonymous password matches the configured regular expression, the anonymous login is denied.

## See also

[AnonRequirePassword](#)

## Examples

```
# Reject all <Anonymous> logins that use "evil.org" as part of the password
AnonRejectPasswords @evil\.org$
```



# AnonRequirePassword

## Name

AnonRequirePassword -- Make anonymous users supply a valid password

## Synopsis

**AnonRequirePassword** [ on | off ]

Default

AnonRequirePassword off

Context

<Anonymous>

Module

mod\_auth

Compatibility

0.99.0 and later

## Description

Normally, anonymous FTP logins do not require the client to authenticate themselves via the normal method of a transmitted cleartext password which is hashed and matched against an existing system user's password. Instead, anonymous logins are expected to enter their e-mail address when prompted for a password. Enabling the AnonRequirePassword directive requires anonymous logins to enter a valid password which must match the password of the user that the anonymous daemon runs as. However using AuthUsingAlias authentication can be matched against the password of the login username. This can be used to create "guest" accounts, which function exactly as normal anonymous logins do (and thus present a "chrooted" protected file system to the client), but require a valid password on the server's host system.

## See also

[AnonymousGroup](#) [AuthAliasOnly](#) [AuthUsingAlias](#)

# Anonymous

## Name

Anonymous -- Define an anonymous server

## Synopsis

**Anonymous** [ root-directory]

Default

None

Context

server config,<VirtualHost>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The Anonymous configuration block is used to create an anonymous FTP login, and is terminated by a matching `</Anonymous>` directive. The root-directory parameters specifies which directory the daemon will first `chdir` to, and then `chroot`, immediately after login. Once the `chroot` operation successfully completes, higher level directories are no longer accessible to the running child daemon (and thus the logged in user). By default, `proftpd` assumes an anonymous login if the remote client attempts to login as the currently running user; unless the current user is root, in which case anonymous logins are not allowed regardless of the presence of an `<Anonymous>` block. To force anonymous logins to be bound to a user other than the current user, see the `User` and `Group` directives. In addition, if a `User` or `Group` directive is present in an `<Anonymous>` block, the daemon permanently switches to the specified uid/gid before `chroot()`ing. Normally, anonymous logins are not required to authenticate with a password, but are expected to enter a valid e-mail address in place of a normal password (which is logged). If this behavior is undesirable for a given `<Anonymous>` configuration block, it can be overridden via the `AnonRequirePassword` directive.

Note: `Chroot()`ed anonymous directories do not need to have supplemental system files in them, nor do they need to have any sort of specific directory structure. This is because `proftpd` is designed to acquire as much system information as possible before the `chroot`, and to leave open those files which are needed for normal operation and reside outside the new root directory.

## See also

## Examples

Example of a typical anonymous FTP configuration:

```
<Anonymous /home/ftp>
# After anonymous login, daemon runs as user/group ftp.
User ftp
Group ftp

# The client login 'anonymous' is aliased to the "real" user 'ftp'.
UserAlias anonymous ftp

# Deny write operations to all directories, except for 'incoming' where
# 'STOR' is allowed (but 'READ' operations are prohibited)

<Directory *>
  <Limit WRITE>
    DenyAll
  </Limit>
</Directory>

<Directory incoming>
  <Limit READ >
    DenyAll
  </Limit>
  <Limit STOR>
    AllowAll
  </Limit>
</Directory>

</Anonymous>
```

# AnonymousGroup

## Name

AnonymousGroup -- Treat group members as anonymous users

## Synopsis

**AnonymousGroup** [ group-expression]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.1.3 and later

## Description

The AnonymousGroup directive specifies a group-expression to which all matching users will be considered anonymous logins. The group-expression argument is a boolean logically ANDed list of groups to which the user must be a member of (or non-member if the group name is prefixed with a `!' character). For more information on group-expressions see the DefaultRoot directive. If the authenticating user is matched by an AnonymousGroup directive, no valid password is required, and a special dynamic anonymous configuration is created, with the user's home directory as the default root directory. If a DefaultRoot directive also applies to the user, this directory is used instead of the user's home dir. Great care should be taken when using AnonymousGroup, as improper configuration can open up user home directories to full read/write access to the entire world.

## See also

[AuthAliasOnly](#) [AuthUsingAlias](#) [AnonRequirePassword](#) [DefaultRoot](#)

## Examples

# AuthAliasOnly

## Name

AuthAliasOnly -- Allow only aliased login names

## Synopsis

**AuthAliasOnly** [ on | off ]

Default

AuthAliasOnly off

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

1.1.3 and later

## Description

AuthAliasOnly restricts authentication to "aliased" logins only; i.e. those usernames provided by clients which are "mapped" to a real userid by the UserAlias directive. Turning AuthAliasOnly `on' in a particular context will cause proftpd to completely ignore all non-aliased logins for the entire context. If no contexts are available without AuthAliasOnly set to `on', proftpd rejects the client login and sends an appropriate message to syslog.

## See also

[AnonymousGroup](#) [AuthUsingAlias](#) [AnonRequirePassword](#) [UserAlias](#)

## Examples

# AuthGroupFile

## Name

AuthGroupFile -- Specify alternate group file

## Synopsis

**AuthGroupFile** [ path]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_auth\_file

Compatibility

1.0.3/1.1.1 and later

## Description

AuthGroupFile specifies an alternate groups file, having the same format as the system `/etc/group` file, and if specified is used during authentication and group lookups for directory/access control operations. The path argument should be the full path to the specified file. AuthGroupFile can be configured on a per-VirtualHost basis, so that virtual FTP servers can each have their own authentication database (most often used in conjunction with AuthUserFile).

Note that this file need not reside inside a chroot()ed directory structure for Anonymous or DefaultRoot logins, as it is held open for the duration of client connections.

## See also

[AuthUserFile](#)

## Examples

# AuthOrder

## Name

AuthOrder -- Configure auth module checking order

## Synopsis

**AuthOrder** [ module-name...]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.8rc1 and later

## Description

The AuthOrder directive configures the names of auth modules, and the order in which they will be checked when authenticating a user.

At least one module name must be given; there is no maximum number of modules that can be listed. The listed module names must be the full name of the source file, e.g. "mod\_auth\_unix.c". To see a full list of module names, use "proftpd -l". Do not use "mod\_auth.c", as that module is the authentication front end module, and is necessary. Also, do not use "mod\_auth\_pam.c", as that module does not provide, by itself, all of the information proftpd needs.

## Examples

```
# Use only AuthUserFiles when authenticating, and not the system's /etc/passwd
AuthOrder mod_auth_file.c
```

```
# If the user's information is not in LDAP, they're not a user to use
# this server.
AuthOrder mod_ldap.c
```

```
# Use SQL tables first, then LDAP, for authentication
AuthOrder mod_sql.c mod_ldap.c
```

# AuthPAM

## Name

AuthPAM -- Enable/Disable PAM authentication

## Synopsis

**AuthPAM** [ on | off ]

Default

on

Context

server config,<VirtualHost>, <Global>

Module

mod\_auth\_pam

Compatibility

1.2.0rc1 and later

## Description

This directive determines whether PAM is used as an authentication method by ProFTPD. Enabled by default to fit in with the design policy of using PAM as the primary authentication mechanism.

## See also

## Examples



# AuthPAMConfig

## Name

AuthPAMConfig -- Select PAM service name

## Synopsis

**AuthPAMConfig** [ service]

Default  
    ftp  
Context  
    server config,<VirtualHost>, <Global>  
Module  
    mod\_auth\_pam  
Compatibility  
    1.2.0rc1 and later

## Description

This directive allows you to specify the PAM service name used in authentication. PAM allows you to specify a service name to use when authenticating. This allows you to configure different PAM service names to be used for different virtual hosts. The directive was renamed from PAMConfig post 1.2.0 pre10.

## See also

## Examples

```
# Virtual host foobar authenticates differently than the rest

AuthPAMConfig foobar

# This assumes, that you have a PAM service named foobar
# configured in your /etc/pam.conf file or /etc/pam.d directory.
```

# AuthUserFile

## Name

AuthUserFile -- Specify alternate passwd file

## Synopsis

**AuthUserFile** [*path*]

Default

None

Context

server config,<VirtualHost>, <Global>

Module

mod\_auth\_file

Compatibility

1.0.3/1.1.1 and later

## Description

AuthUserFile specifies an alternate passwd file, having the same format as the system /etc/passwd file, and if specified is used during authentication and user lookups for directory/access control operations. The path argument should be the full path to the specified file. AuthUserFile can be configured on a per-VirtualHost basis, so that virtual FTP servers can each have their own authentication database (most often used in conjunction with AuthGroupFile).

Note that this file need not reside inside a chroot()ed directory structure for Anonymous or DefaultRoot logins, as it is held open for the duration of client connections.

## See also

[AuthGroupFile](#)

## Examples

# AuthUsingAlias

## Name

AuthUsingAlias -- Authenticate via Alias-name instead of mapped username

## Synopsis

**AuthUsingAlias** [ on | off ]

Default

AuthUsingAlias off

Context

<Anonymous>

Module

mod\_auth

Compatibility

1.2.0pre9 and later

## Description

AuthUsingAlias disables the resolving of mapped usernames for authentication purposes. For example, if you have mapped the username anonymous to the "real" user ftp, the password gets checked against the user "anonymous". When AuthUsingAlias is disabled, the checked username would be "ftp".

## See also

[AnonymousGroup](#) [AuthAliasOnly](#) [AnonRequirePassword](#)

## Examples

```
An example of an Anonymous configuration using
AuthUsingAlias
# Basic Read-Only Anonymous Configuration.
<Anonymous /home/ftp>
UserAlias          anonymous  nobody
UserAlias          ftp       nobody
AuthAliasOnly      on
<Limit WRITE>
DenyAll
</Limit>
</Anonymous>
# Give Full Read-Write Anonymous Access to certain users
<Anonymous /home/ftp>
AnonRequirePassword on
AuthAliasOnly      on
AuthUsingAlias      on
```

## Configuration Directive List

```
# The list of authorized users.
# user/pass lookup is for each user, not password entry
# of server uid ('nobody' in this example).
UserAlias          fred          nobody
UserAlias          joe           nobody
<Limit ALL>
AllowAll
</Limit>
</Anonymous>
```

# Bind

## Name

Bind -- Bind the server or Virtualhost to a specific IP address [deprecated]

## Synopsis

**Bind** [ IP address]

Default

None

Context

server config, <VirtualHost>

Module

mod\_core

Compatibility

1.1.6 - 1.3.0rc1

## Description

Cause of too much confusion this directive has been deprecated with ProFTPD 1.3.0rc1. Please take a look at the [VirtualHost](#) and [DefaultAddress](#) directive. The Bind directive allows additional IP addresses to be bound to a main or VirtualHost configuration. Multiple Bind directives can be used to bind multiple addresses. The address argument should be either a fully qualified domain name or a numeric dotted-quad IP address. Incoming connections destined to an additional address added by Bind are serviced by the context containing the directive. Additionally, if SocketBindTight is set to on, a specific listen connection is created for each additional address.

## See also

[VirtualHost](#) [DefaultAddress](#)

## Examples

# ByteRatioErrMsg

## Name

ByteRatioErrMsg -- Ratio directive

## Synopsis

**ByteRatioErrMsg** [ foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The ByteRatioErrMsg directive .... Example: ByteRatioErrMsg

## See also

## Examples

# CapabilitiesEngine

## Name

CapabilitiesEngine -- Enable/disable mod\_cap

## Synopsis

**CapabilitiesEngine** [ on off]

Default

CapabilitiesEngine On, if running on a Linux hosts that supports capabilities

Context

server config, <VirtualHost>, <Global>

Module

mod\_cap

Compatibility

1.2.8rc1 and later

## Description

The CapabilitiesEngine directive enables or disables the module's runtime capabilities engine. If set to off, this module does no runtime capabilities processing at all. Use this directive to disable the module.

# CapabilitiesSet

## Name

CapabilitiesSet -- Configure the set of Linux capabilities processed

## Synopsis

**CapabilitiesSet** [ [+/-] capability...]

Default

CapabilitiesSet +CAP\_CHOWN

Context

server config, <VirtualHost>, <Global>

Module

mod\_cap

Compatibility

1.2.8rc1 and later

## Description

By default, mod\_cap removes all but two capabilities from the session-handling process: CAP\_NET\_BIND\_SERVICE, for binding to ports lower than 1024 (required for active data transfers), and CAP\_CHOWN, for allowing a process to change a file's ownership to a different user. The latter capability is only strictly necessary if the UserOwner configuration directive is in use; if not being used, the CAP\_CHOWN capability is best removed. The CapabilitiesSet directive is used to manipulate the set of capabilities that mod\_cap grants.

To remove a capability, prefix the name with a '-'; to enable a capability, use '+'. At present, this directive only supports one capability: CAP\_CHOWN.

## Example

```
<IfModule mod_cap.c> CapabilitiesEngine on CapabilitiesSet -CAP_CHOWN </IfModule>
```



# CDPath

## Name

CDPath -- Sets "search paths" for the cd command

## Synopsis

**CDPath** [ directory]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

1.2.0pre2 and later

## Description

Adds an entry to a search path that is used when changing directories. For example: CDPath /home/public  
CDPath /var/devel This allows a user to cd into any directory directly under /home/public or /var/devel, provided they have the appropriate rights. So, if /home/public/proftpd exists, cd proftpd will bring the user to that directory, regardless of where they currently are in the directory tree.

## See also

## Examples

# Class

## Name

Class -- Define a class of client connections

## Synopsis

**VirtualHost** [ <Class name>]

Default

None

Context

server config

Module

mod\_core

Compatibility

1.2.10rc1 and later

## Description

When configuring proftpd, it is sometimes nice, or even necessary, to tag or label a client as belonging to some group, based on that client's IP address or DNS hostname. A "class" is the name for such connection-based groupings in ProFTPD terms. A class is defined to have a name, and as having certain criteria such as IP addresses, IP subnets/masks, and DNS hostnames. A client that connects to the daemon that has matching characteristics is then labeled as belonging to that class.

Within a <Class> section, the From directive is used to list the IP addresses, IP subnet/masks, and DNS names that make up the class.

## See also

From

## Examples

```
From 192.168.0.0/16
```

This defines a class named "internal"; any client connecting from 192.168.0.0/16 will belong to this class. And if you wanted to define a class for all clients not connecting from 192.168.0.0/16 address space:

```
From !192.168.0.0/16
```

A more complicated class might include matching DNS names as well:

Class

## Configuration Directive List

From 1.2.3.4 From proxy.\*.com From my.example.com From 5.6.7.8

# CommandBufferSize

## Name

CommandBufferSize -- Limit the maximum command length

## Synopsis

**CommandBufferSize** [ *size*]

Default

512

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.0pre7 and later

## Description

The CommandBufferSize directive controls the maximum command length permitted to be sent to the server. This allows you to effectively control what the longest command the server may accept it, and can help protect the server from various Denial of Service or resource-consumption attacks.

## See also

## Examples

# CreateHome

## Name

CreateHome -- Create and populate users' home directories as needed

## Synopsis

**CreateHome** [*off*|*on*] [*<mode>*] [*skel <path>*] [*dirmode <mode>*]]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

1.2.8rc2 and later

## Description

The CreateHome directive configures the server to automatically create a user's home directory, if that directory does not exist, during the login process.

The mode parameter is used to configure the absolute mode of the home directory created. If not specified, the mode will default to 700.

The optional skel path parameter can be used to configure an /etc/skel-like directory containing account initialization files and directories. The parameter must be the full path to the directory. The directory must not be world-writable. Files copied from this directory into the new home directory will have the UID and GID of the logging-in user. Note that sockets and FIFOs in the skeleton directory will not be copied; any setuid or setgid bits on files will be removed from the copied files in the target home directory.

The optional dirmode parameter can be used to specify the mode for intermediate directories that may need to be created in order to create the target home directory. By default, the mode for such intermediate directories will be 711. NOTE: using a mode that does not allow for the execute bit to be enabled can cause havoc. You have been warned.

## Examples

```
# Use the CreateHome default settings CreateHome on
```

```
# Specify a skeleton directory CreateHome on skel /etc/ftpd/skel
```

```
# No skeleton, but make sure that intermediate directories have 755 # permissions. CreateHome on dirmode
```

## Configuration Directive List

755

# Skeleton directory, with 700 intermediate directories CreateHome on skel /etc/ftpd/skel dirmode 700

# CreateHome

## Name

CreateHome -- Create and populate users' home directories as needed

## Synopsis

**CreateHome** [`off` | `on` [`<mode>`] [`skel` `<path>`] [`dirmode` `<mode>`]]

Default

None

Context

server config, `<VirtualHost>`, `<Global>`

Module

mod\_auth

Compatibility

1.2.8rc2 and later

## Description

The CreateHome directive configures the server to automatically create a user's home directory, if that directory does not exist, during the login process.

The mode parameter is used to configure the absolute mode of the home directory created. If not specified, the module will default to 700.

The optional skel path parameter can be used to configure an /etc/skel-like directory containing account initialization files and directories. The parameter must be the full path to the directory. The directory must not be world-writeable. Files copied from this directory into the new home directory will have the UID and GID of the logging-in user. Note that sockets and FIFOs in the skeleton directory will not be copied; any setuid or setgid bits on files will be removed from the copied files in the target home directory.

The optional dirmode parameter can be used to specify the mode for intermediate directories that may need to be created in order to create the target home directory. By default, the mode for such intermediate directories will be 711. NOTE: using a mode that does not allow for the execute bit to be enabled can cause havoc. You have been warned.

## Examples

```
# Use the CreateHome default settings CreateHome on
```

```
# Specify a skeleton directory CreateHome on skel /etc/ftpd/skel
```

```
# No skeleton, but make sure that intermediate directories have 755 # permissions. CreateHome on dirmode
```

## Configuration Directive List

755

# Skeleton directory, with 700 intermediate directories CreateHome on skel /etc/ftpd/skel dirmode 700



# CwdRatioMsg

## Name

CwdRatioMsg -- Ratio directive

## Synopsis

**CwdRatioMsg** [ foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The CwdRatioMsg directive .... Example: CwdRatioMsg

## See also

## Examples

# DebugLevel

## Name

DebugLevel -- Set the debugging output level

## Synopsis

**DebugLevel** [ level ]

Default

DebugLevel 0

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.8rc1 and later

## Description

The DebugLevel directive configures the debugging level the server will use when logging. The level parameter must be between 0 (lowest) and 10 (highest). This configuration directive will take precedence over any command-line debugging options used.

# DefaultAddress

## Name

DefaultAddress -- Set the address for the server to listen on

## Synopsis

**DefaultAddress** [ dns-names | ip-addresses seperated with spaces ]

```
Default
    none
Context
    server config
Module
    mod_core
Compatibility
    1.2.7rc1 and later
```

## Description

This directive sets the the address the main server instance will bind to, the default behaviour is to select whatever IP the system reports as being the primary IP.

Starting with ProFTPD 1.3.0rc1 it's possible to use more than one FQDN or IP Address. With this change the old Bind directive has been deprecated.

## See also

[VirtualHost](#)

## Examples

```
ServerName "Default FTP Server"
Port 21
```

```
# We want the main server instance to listen on a specific IP
DefaultAddress 192.168.10.30
```

```
## Since 1.3.0rc1 it's also possible to use the following:
# DefaultAddress 192.168.10.30 my.domain.tld
```

# DefaultChdir

## Name

DefaultChdir -- Set starting directory for FTP sessions

## Synopsis

**DefaultChdir** [directory [group-expression]]

Default

~

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

1.2.0pre2 and later

## Description

Determines the directory a user is placed in after logging in. By default, the user is put in their home directory. The specified directory can be relative to the user's home directory. NOTE: If the specified directory is not available then DefaultChdir is treated as if it wasn't there in the first place. In particular, in this case the directory a user is placed in after logging in is determined by the other settings in proftpd.conf.

## See also

[DefaultRoot](#)

## Examples

# DefaultRoot

## Name

DefaultRoot -- Sets default chroot directory

## Synopsis

**DefaultRoot** [directory [group-expression]]

Default  
    DefaultRoot /  
Context  
    server config, <VirtualHost>, <Global>  
Module  
    mod\_auth  
Compatibility  
    0.99.0p17 and later

## Description

The DefaultRoot directive controls the default root directory assigned to a user upon login. If DefaultRoot is set to a directory other than "/", a chroot operation is performed immediately after a client authenticates. This can be used to effectively isolate the client from a portion of the host system filesystem. The specified root directory must begin with a / or can be the magic character '~'; meaning that the client is chroot jailed into their home directory.

When the specified chroot directory is a symlink this will be resolved to its parent first before setting up the chroot. This can have unwanted side effects. For example if a user has write access to the symlink he could modify it so that it points to '/'. Thus the chroot would be the root directory of the server, resulting in insufficient or no restrictions.

If the DefaultRoot directive specifies a directory which disallows access to the logged-in user's home directory, the user's current working directory after login is set to the DefaultRoot instead of their normal home directory. DefaultRoot cannot be used in <Anonymous> configuration blocks, as the <Anonymous> directive explicitly contains a root directory used for Anonymous logins. The special character '~' is replaced with the authenticating user's home directory immediately after login. Note that the default root may be a subdirectory of the home directory, such as "~/anon-ftp".

The optional group-expression argument can be used to restrict the DefaultRoot directive to a unix group, groups or subset of groups. The expression takes the format: [!]group-name1[,[!]group-name2[,...]]. The expression is parsed in a logical boolean AND fashion, such that each member of the expression must evaluate to logically TRUE in order for the DefaultRoot directive to apply. The special character '!' is used to negate group membership.

Care should be taken when using DefaultRoot. Chroot "jails" should not be used as methods for implementing general system security as there are potentially ways that a user can "escape" the jail.

## See also

## Examples

Example of a DefaultRoot configuration:

```
ServerName "A test ProFTPD Server"
ServerType inetd
User ftp
Group ftp
#
# This causes proftpd to perform a chroot into the authenticating user's directory
# immediately after login.
# Once this happens, the user is unable to "see" higher level directories.
# Because a group-expression is included, only users who are a member of
# the group 'users' and NOT a member of 'staff' will have their default
# root directory set to '~'.
DefaultRoot ~ users,!staff
...
```

# DefaultServer

## Name

DefaultServer -- Set the default server

## Synopsis

**DefaultServer** [ on | off ]

Default  
    DefaultServer off  
Context  
    server config,<VirtualHost>  
Module  
    mod\_core  
Compatibility  
    0.99.0pl6 and later

## Description

The DefaultServer directive controls which server configuration is used as the default when an incoming connection is destined for an IP address which is neither the host's primary IP address or one of the addresses specified in a <VirtualHost> configuration block. Normally such "unknown" connections are issued a "no server available to service your request" message and disconnected. When DefaultServer is turned on for either the primary server configuration or a virtual server, all unknown destination connections are serviced by the default server. Only a single server configuration can be set to default.

## See also

## Examples

# DefaultTransferMode

## Name

DefaultTransferMode -- Set the default method of data transfer

## Synopsis

**DefaultTransferMode** [ *ascii|binary*]

Default  
    DefaultTransferMode *ascii*  
Context  
    server config, <VirtualHost>, <Global>  
Module  
    mod\_core  
Compatibility  
    1.2.0pre9 and later

## Description

DefaultTransferMode sets the default transfer mode of the server. By default, carriage-return/linefeed translation will be performed (ASCII mode).

## See also

## Examples



# DeferWelcome

## Name

DeferWelcome -- Don't show welcome message until user has authenticated

## Synopsis

**DeferWelcome** [*DeferWelcome on|off*]

Default

DeferWelcome off

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The DeferWelcome directive configures a master or virtual server to delay transmitting the ServerName and address to new connections, until a client has successfully authenticated. If enabled, the initial welcome message will be exceedingly generic and will not give away any type of information about the host that the daemon is actively running on. This can be used by security-conscious administrators to limit the amount of "probing" possible from non-trusted networks/hosts.

## See also

[ServerIdent](#) [ServerName](#)

## Examples

# Define

## Name

Define -- Initialises Defines for IfDefine

## Synopsis

**Define** [ parameter-name]

Default

none

Context

any context

Module

mod\_core

Compatibility

1.2.6rc1 and later

## Description

This directive is used to initialise defines for use in conjunction with the IfDefine directive

## See also

[IfDefine](#), [IfModule](#)

## Examples

IfDefine LoadLimiting

IfDefine HighPerformanceSetup

# DelayEngine

## Name

DelayEngine -- Control the use of mod\_delay

## Synopsis

**DelayEngine** [ on | off ]

Default

DelayEngine on

Context

server config

Module

mod\_delay

Compatibility

1.3.0rc1 and later

## Description

The DelayEngine directive enables or disables the module's runtime delaying calculations. If it is set to off this module does no delaying. Use this directive to disable the module.

## See also

[DelayTable](#)

## Examples

```
<IfModule mod_delay.c>
    DelayEngine off
</IfModule>
```

# DelayTable

## Name

DelayTable -- Sets the name and path of the file used as the timing table

## Synopsis

**DelayTable** [ path ]

Default

DelayTable var/proftpd/proftpd.delay

Context

server config

Module

mod\_delay

Compatibility

1.3.0rc1 and later

## Description

The DelayTable directive configures a path to a file that mod\_delay uses for storing its timing data. The given path must be an absolute path. It is recommended that this file not be on an NFS mounted partition.

Note that timing data is kept across daemon stop/starts. When new <VirtualHost>s are added to the configuration, though, mod\_delay will detect that it does not have a suitable DelayTable for the new configuration, and will clear all stored data.

## See also

[DelayEngine](#)

## Examples

# DeleteAbortedStores

## Name

DeleteAbortedStores -- Enable automatic deletion of partially uploaded HiddenStores files

## Synopsis

**DeleteAbortedStores** [ DeleteAbortedStores on|off]

Default

off

Context

server, <VirtualHost>, <Directory>, <Anonymous>, <Global>, .ftppaccess

Module

mod\_xfer

Compatibility

1.2.0rc2 and later

## Description

The DeleteAbortedStores directive controls whether ProFTPD deletes partially uploaded HiddenStores files if the transfer is stopped via the ABOR command rather than a connection failure.

## See also

[HiddenStores](#)

## Examples

# Deny

## Name

Deny -- Access control directive

## Synopsis

```
Deny [ Deny [ "from" ] "all" | "none" | host | network [, host | network [, ...]] ]
```

Default

None

Context

<Limit>

Module

mod\_core

Compatibility

0.99.0pl6 and later

## Description

The Deny directive is used to create a list of hosts and/or networks which will explicitly be denied access to a given <Limit> context block. The magic keywords "ALL" and "NONE" can be used to indicate that all hosts are denied access, or that no hosts are explicitly denied (respectively). For more information on the syntax and usage of Deny see: [Allow](#) and [Order](#).

## See also

[Allow](#) [Order](#) [Limit](#)

## Examples

# DenyAll

## Name

DenyAll -- Deny all clients

## Synopsis

**DenyAll** [ DenyAll ]

Default

None

Context

<Directory>, <Anonymous>, <Limit>, .ftppass

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The DenyAll directive is analogous to a combination of "order deny,allow <cr> deny from all", with the exception that it has a higher precedence when parsed. It is provided as a convenient method of completely denying access to a directory, anonymous ftp or limit block. Because of its precedence, it should not be intermixed with normal Order/Deny directives. The DenyAll directive can be overridden at a lower level directory by using AllowAll. DenyAll and AllowAll are mutually exclusive.

## See also

[AllowAll](#)

## Examples

# DenyClass

## Name

DenyClass -- Class based deny rules

## Synopsis

**DenyClass** [ ["AND" | "OR" | "regex"] class-expression]

Default

None

Context

<Limit>

Module

mod\_core

Compatibility

1.2.10rc1 and later

## Description

DenyClass specifies a class-expression that is specifically denied access within the context of the <Limit> block it is applied to. class-expression has a similar syntax as that used in AllowGroup, in that it should contain a comma delimited list of classes or "not" classes (by prefixing a class name with the `!' character) that are to be denied access to the block.

By default, the expression is parsed as a boolean "OR" list, meaning that ANY elements of the expression must evaluate to logically true in order for the explicit deny to apply. In order to treat the expression as a boolean "AND" list, meaning that ALL of the elements must evaluate to logically true, use the optional "AND" keyword. Similarly, to treat the expression as a regular expression, use the "regex" keyword.

## See also

[AllowUser](#) [DenyUser](#) [AllowGroup](#) [DenyGroup](#) [AllowClass](#)

## Examples

```
# A regular expression AllowClass directive
AllowClass regex ^known

# An AND-evaluated ClassUser directive
DenyClass AND bad,scanner
```



# DenyFilter

## Name

DenyFilter -- Regular expression of command arguments to be blocked

## Synopsis

**DenyFilter** [DenyFilter regular-expression]

Default

None

Context

server config, <VirtualHost>, <Global>, <Anonymous>, <Directory>, .ftpaccess

Module

mod\_core

Compatibility

1.2.0pre7 and later

## Description

Similar to AllowFilter, DenyFilter specifies a regular expression which must not match any of the command arguments. If the regex does match, a "Forbidden command" error is returned to the client. This can be especially useful for forbidding certain command argument combinations from ever reaching ProFTPD.

*Notes:* The 'PASV' command cannot be blocked using this directive.

## See also

AllowFilter

## Examples

```
# We don't want to allow any commands with % being sent to the server
DenyFilter "%"
```

# DenyGroup

## Name

DenyGroup -- Group based deny rules

## Synopsis

**DenyGroup** [ ["AND" | "OR" | "regex"] group-expression]

Default  
    None  
Context  
    <Limit>  
Module  
    mod\_core  
Compatibility  
    1.1.1 and later

## Description

DenyGroup specifies a group-expression that is specifically denied within the context of the <Limit> block it is applied to. group-expression has the same format as that used in DefaultRoot, in that it should contain a comma separated list of groups or "not" groups (by prefixing a group name with the `!' character) that are to be denied access to the block.

By default, the expression is parsed as a boolean "AND" list, meaning that ALL elements of the expression must evaluate to logically true in order to the explicit deny to apply. In order to treat the expression as a boolean "OR" list, meaning that ANY of the elements must evaluate to logically true, use the optional "AND" keyword. Similarly, to treat the expression as a regular expression, use the "regex" keyword.

## See also

[DenyUser](#), [AllowUser](#) [AllowGroup](#)

## Examples

```
# An OR-evaluated AllowGroup directive
AllowGroup OR www,doc

# A regular expression DenyGroup directive
DenyGroup regex ^sys
```

# DenyUser

## Name

DenyUser -- User based deny rules

## Synopsis

**DenyUser** [ ["AND" | "OR" | "regex"] user-expression]

Default

None

Context

<Limit>

Module

mod\_core

Compatibility

1.1.7 and later

## Description

DenyUser specifies a user-expression that is specifically denied within the context of the <Limit> block it is applied to. user-expression is a comma delimited list of users or "not" users (by prefixing a user name with the `!' character).

By default, the expression is parsed as a boolean "OR" list, meaning that ANY elements of the expression must evaluate to logically true in order to the explicit deny to apply. In order to treat the expression as a boolean "AND" list, meaning that ALL of the elements must evaluate to logically true, use the optional "AND" keyword. Similarly, to treat the expression as a regular expression, use the "regex" keyword.

## See also

[DenyGroup](#), [AllowUser](#) [AllowGroup](#)

## Examples

```
# A regular expression AllowUser directive
AllowUser regex ^ftp
```

```
# An AND-evaluated DenyUser directive
DenyUser AND system,test
```

# Directory

## Name

Directory -- Directory-limited configuration directives

## Synopsis

**Directory** [ <Directory pathname>]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

This directive creates a block of configuration directives which applies only to the specified directory and its sub-directories. The block is ended with `</Directory>`. Per-directory configuration is enabled during run-time with a "closest" match algorithm, meaning that the `<Directory>` directive with the closest matching path to the actual pathname of the file or directory in question is used. Per-directory configuration is inherited by all sub-directories until a closer matching `<Directory>` is encountered, at which time the original per-directory configuration is replaced with the closer match. Note that this does not apply to `<Limit>` `</Limit>` blocks, which are inherited by all sub-directories until a `<Limit>` block is reached in a closer match.

A trailing slash and wildcard (`/*`) can be appended to the directory, specifying that the configuration block applies only to the contents (and sub-contents), not to the actual directory itself. Such wildcard matches always take precedence over non-wildcard `<Directory>` configuration blocks. `<Directory>` blocks cannot be nested (they are automatically nested at run-time based on their pathnames). Pathnames must always be absolute (except inside `<Anonymous>`), and should not reference symbolic links. Pathnames inside an `<Anonymous>` block can be relative, indicating that they are based on the anonymous root directory.

[Notes for ProFTPD 1.1.3 and later only] Pathnames that begin with the special character `'~'` and do not specify a username immediately after `~` are put into a special deferred mode. When in deferred mode, the directory context is not hashed and sorted into the configuration tree at boot time, but rather this hashing is deferred until a user authenticates, at which time the `'~'` character is replaced with the user's home directory. This allows a global `<Directory>` block which applies to all user's home directories, or sub-directories thereof.

## See also

[Limit](#)

## Examples

```
#Default usage of the directory directive
<Directory /users/robroy/private>
    HideNoAccess on
</Directory>
```

```
#Example with username-expanding
<Directory ~/anon-ftp>
    <Limit WRITE>
        DenyAll
    </Limit>
</Directory>
```

# DirFakeGroup

## Name

DirFakeGroup -- Hide real file/directory group

## Synopsis

**DirFakeGroup** [DirFakeGroup On|Off [groupname]]

Default

DirFakeGroup Off

Context

server config, <VirtualHost>, <Global>, <Anonymous>, <Directory>, .ftpaccess

Module

mod\_ls

Compatibility

1.1.5

## Description

DirFakeGroup can be used to hide the true group of files (including directories, fifos, etc.) in a directory listing. If simply turned On, DirFakeGroup will display all files as being owned by group 'ftp'. Optionally, the groupname argument can be used to specify a specific group other than 'ftp'. "~" can be used as the argument in order to display the primary group name of the current user.

Both DirFakeGroup and DirFakeUser are completely cosmetic; the groupname or username specified don't need to exist on the system, and neither directive affects permissions, real ownership or access control in any way.

## See also

[DirFakeUser](#) [DirFakeMode](#)

## Examples

# DirFakeMode

## Name

DirFakeMode -- Hide real file/directory permissions

## Synopsis

**DirFakeMode** [DirFakeMode octal-mode]

Default

None

Context

server config, <VirtualHost>, <Global>, <Anonymous>, <Directory>

Module

mod\_ls

Compatibility

1.1.6

## Description

The DirFakeMode directive configures a mode (or permissions) which will be displayed for ALL files and directories in directory listings. For each subset of permissions (user, group, other), the "execute" permission for directories is added in listings if the "read" permission is specified by this directive. As with DirFakeUser, and DirFakeGroup, the "fake" permissions shown in directory listings are cosmetic only, they do not affect real permissions or access control in any way.

## See also

[DirFakeUser](#) [DirFakeGroup](#)

## Examples

```
DirFakeMode 0640
```

Will result in:

```
-rw-r----- ... arbitrary.file
drwxr-x--- ... arbitrary.directory
```

# DirFakeUser

## Name

DirFakeUser -- Hide real file/directory owner

## Synopsis

**DirFakeUser** [ DirFakeUser On|Off [username]]

Default

DirFakeUser Off

Context

server config, <VirtualHost>, <Global>, <Anonymous>, <Directory>, .ftpaccess

Module

mod\_ls

Compatibility

1.1.5

## Description

DirFakeUser can be used to hide the true user owners of files (including directories, fifos, etc.) in a directory listing. If simply turned On, DirFakeUser will display all files as being owned by user 'ftp'. Optionally, the username argument can be used to specify a specific user other than 'ftp'. "~" can be used as the argument in order to display the current user's username.

Both DirFakeGroup and DirFakeUser are completely cosmetic; the groupname or username specified don't need to exist on the system, and neither directive affects permissions, real ownership or access control in any way.

## See also

[DirFakeGroup](#) [DirFakeMode](#)

## Examples



# DisplayChdir

## Name

DisplayChdir -- Set the file to display when entering a directory

## Synopsis

**DisplayChdir** [DisplayChdir filename [ true ]]

Default

None

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Directory>

Module

mod\_core

Compatibility

1.3.1rc1 and later

## Description

The DisplayFirstChdir directive configures an ASCII text filename which will be displayed to the user everytime he changes into a directory. If you would like to have the old behaviour of DisplayFirstChdir back you've to use the option "true". Then the file will only be displayed on the first time the user changes into the directory or if proftpd detects that its last modification time has changed since the previous CWD into a given directory. If the filename is relative, it is looked for in the new directory that the user has changed into. Note that for anonymous ftp logins (see <Anonymous>), the file must reside inside the chroot()ed file system space. If the file cannot be found or accessed, no error occurs and nothing is logged or displayed to the client.

DisplayChdir, DisplayConnect, DisplayLogin and DisplayQuit support the following "magic cookies" (only in 0.99.0pl10 and later), which are replaced with their respective strings before being displayed to the user.

%C	Current working directory
%E	Server admin's e-mail address
%F	Available space on file system, in bytes
%f	Available space on file system, with units
%i	The number of files uploaded (input) in this session
%K	Total number of bytes transferred
%k	Total number of bytes transferred, in units
%L	Local host name
%M	Max number of authenticated clients
%N	Current number of authenticated clients

## Configuration Directive List

<code>%o</code>	The number of files downloaded (output) in this session
<code>%R</code>	Remote host name
<code>%T</code>	Current Time
<code>%t</code>	The number of files transfered (uploaded and downloaded) in this session
<code>%U</code>	Username originally used in login
<code>%u</code>	Username reported by ident protocol
<code>%V</code>	Name of virtual host (if any)
<code>%x</code>	The name of the user's class
<code>%y</code>	Current number of connections from the user's class
<code>%z</code>	Max number of connections from the user's class
<code>%{total_bytes_in}</code>	The number of bytes uploaded (input) in this session
<code>%{total_bytes_out}</code>	The number of bytes downloaded (output) in this session
<code>%{total_bytes_xfer}</code>	The number of bytes transferred (uploaded and downloaded) in this session
<code>%(total_files_in)</code>	The number of files uploaded (input) in this session
<code>%(total_files_out)</code>	The number of files downloaded (output) in this session
<code>%(total_files_xfer)</code>	The number of files transferred (uploaded and downloaded) in this session

NOTE: not all of these may have a rational value, depending on the context in which they're used (e.g., `%u` if ident lookups are off).

## See also

[DisplayConnect](#) [DisplayLogin](#) [DisplayQuit](#)

## Examples

```
#Old way in the spirit of DisplayFirstChdir
DisplayChdir /home/ftp/filetodisplay true
```

# DisplayConnect

## Name

DisplayConnect -- Sets connect banner file

## Synopsis

**DisplayConnect** [DisplayConnect filename]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.0pre2 and later

## Description

The DisplayConnect directive configures an ASCII text filename which will be displayed to the user when they initially connect but before they login. The filename can be either relative or absolute. In the case of a relative filename, the file is searched for starting in the home directory of the user the server is running as. As this can lead confusion, absolute pathnames are suggested. If the file cannot be found or accessed, no error occurs and nothing is logged or displayed to the client.

## See also

[DisplayFirstChdir](#)

## Examples

# DisplayFileTransfer

## Name

DisplayFileTransfer -- FIXFIXFIX

## Synopsis

**DisplayFileTransfer** [ "name" limit|regex|ip value]

Default

FIXFIXFIX

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Limit>, .ftppaccess

Module

mod\_xfer

Compatibility

1.3.1rc1 and later

## Description

FIX FIX FIX

## See also

## Examples

FIXFIXFIX

FIXFIX

# DisplayFirstChdir

## Name

DisplayFirstChdir -- Set the file to display when first entering a directory [deprecated]

## Synopsis

**DisplayFirstChdir** [ DisplayFirstChdir filename]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Directory>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later, magic cookies only in 0.99.0p110 and later up to 1.3.1rc1

## Description

This directive has been deprecated with ProFTPD 1.3.1rc1. Please use [DisplayChdir](#) instead.

The DisplayFirstChdir directive configures an ASCII text filename which will be displayed to the user the first time they change into a directory (via CWD) per a given session. The file will also be displayed if proftpd detects that its last modification time has changed since the previous CWD into a given directory. If the filename is relative, it is looked for in the new directory that the user has changed into. Note that for anonymous ftp logins (see <Anonymous>), the file must reside inside the chroot(ed) file system space. If the file cannot be found or accessed, no error occurs and nothing is logged or displayed to the client.

DisplayFirstChdir, DisplayConnect, DisplayLogin and DisplayQuit support the following "magic cookies" (only in 0.99.0p110 and later), which are replaced with their respective strings before being displayed to the user.

%C	Current working directory
%E	Server admin's e-mail address
%F	Available space on file system, in bytes
%f	Available space on file system, with units
%i	The number of files uploaded (input) in this session
%K	Total number of bytes transferred
%k	Total number of bytes transferred, in units
%L	Local host name

## Configuration Directive List

%M	Max number of authenticated clients
%N	Current number of authenticated clients
%o	The number of files downloaded (output) in this session
%R	Remote host name
%T	Current Time
%t	The number of files transfered (uploaded and downloaded) in this session
%U	Username originally used in login
%u	Username reported by ident protocol
%V	Name of virtual host (if any)
%x	The name of the user's class
%y	Current number of connections from the user's class
%z	Max number of connections from the user's class
%{total_bytes_in}	The number of bytes uploaded (input) in this session
%{total_bytes_out}	The number of bytes downloaded (output) in this session
%{total_bytes_xfer}	The number of bytes transferred (uploaded and downloaded) in this session
%(total_files_in)	The number of files uploaded (input) in this session
%(total_files_out)	The number of files downloaded (output) in this session
%(total_files_xfer)	The number of files transferred (uploaded and downloaded) in this session

NOTE: not all of these may have a rational value, depending on the context in which they're used (e.g., %u if ident lookups are off).

## See also

[DisplayChdir](#) [DisplayConnect](#) [DisplayLogin](#) [DisplayQuit](#)

## Examples

# DisplayGoAway

## Name

DisplayGoAway -- Set the file to display to a rejected connection

## Synopsis

**DisplayGoAway** [DisplayGoAway filename]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

1.2.0pre8 and later

## Description

The DisplayGoAway directive specifies an ASCII text filename which will be displayed to the user if the class they're a member of has too many users logged in and their login request has been denied. DisplayGoAway supports the same "magic cookies" as DisplayFirstChdir.

## See also

[DisplayFirstChdir](#)

## Examples

# DisplayLogin

## Name

DisplayLogin -- Set the file to display on login

## Synopsis

**DisplayLogin** [DisplayLogin filename]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The DisplayLogin directive configures an ASCII text filename which will be displayed to the user when they initially login. The filename can be either relative or absolute. In the case of a relative filename, the file is searched for in the initial directory a user is placed in immediately after login (home directory for unix user logins, anonymous-root directory for anonymous logins). Note: that for jailed logins, the file must reside inside the chroot()ed file system space. If the file cannot be found or accessed, no error occurs and nothing is logged or displayed to the client. DisplayLogin supports the same "magic cookies" as DisplayFirstChdir.

## See also

[DisplayFirstChdir](#)

## Examples



# DisplayQuit

## Name

DisplayQuit -- Set the file to display on quit

## Synopsis

**DisplayQuit** [DisplayQuit filename]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

1.2.0pre8 and later

## Description

DisplayQuit configures an ASCII text filename which will be displayed to the user when they quit. The filename can be either relative or absolute. In the case of a relative filename, the file is searched for in current directory a user is in when they logout -- for this reason, a absolute filename is usually preferable. NOTE: for jailed logins, the file must reside inside the chroot()ed file system space. If the file cannot be found or accessed, no error occurs and nothing is logged or displayed to the client. DisplayQuit supports the "magic cookies" listed under DisplayFirstChdir.

## See also

[DisplayFirstChdir](#)

## Examples

# DisplayReadme

## Name

DisplayReadme -- Enable display of file modification times on a file pattern

## Synopsis

**DisplayReadme** [DisplayReadme filename or pattern]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_readme

Compatibility

1.2.0pre8 and later

## Description

Module: mod\_readme The DisplayReadme directive notifies the user of the last change date of the specified file or pattern. Only a single DisplayReadme directive is allowed per configuration scope. DisplayReadme README Will result in: Please read the file README it was last modified on Sun Oct 17 10:36:14 1999 - 0 days ago Being displayed to the user on a cwd. DisplayReadmePattern README\* Will result in: Please read the file README it was last modified on Tue Jan 25 04:47:48 2000 - 0 days ago Please read the file README.first it was last modified on Tue Jan 25 04:48:04 2000 - 0 days ago Being displayed to the user on a cwd.

## See also

## Examples

# ExtendedLog

## Name

ExtendedLog -- Specify custom logfiles

## Synopsis

**ExtendedLog** [ filename [[command-classes] format-nickname]]

Default

None

Context

server config, <VirtualHost>, <Anonymous> <Global>

Module

mod\_log

Compatibility

1.1.6pl1 and later

## Description

The ExtendedLog directive allows customizable logfiles to be generated, either globally or per VirtualHost. The filename argument must contain an absolute pathname to a logfile which will be appended to when proftpd starts; the pathname should not be to a file in a nonexistent directory, to a world-writeable directory, or be a symbolic link (unless AllowLogSymlinks is set to on). Multiple logfiles (potentially with different command classes and formats) can be created. Optionally, the command-classes argument can be used to control which types of commands are logged. If not command classes are specified, proftpd logs all commands by default (passwords are hidden). command-classes is a comma delimited (no whitespace!) list of which commands to log.

The following are valid classes: NONE No commands AUTH Authentication commands (ACCT, PASS, REIN, USER) INFO Informational commands (FEAT, HELP, MDTM, QUIT, PWD, STAT, SIZE, SYST, XPWD) DIRS Directory commands (CDUP, CWD, LIST, MKD, NLST, RMD, XCWD, XCUP, XMKD, XRMD) READ File reading (RETR) WRITE File/directory writing or creation (APPE, MKD, RMD, RNFR, RNTD, STOR, STOU, XMKD, XRMD) MISC Miscellaneous commands (ABOR, ALLO, EPRT, EPSV, MODE, NOOP, OPTS, PASV, PORT, REST, RNFR, RNTD, SITE, SMNT, STRU, TYPE) SEC RFC2228-related security FTP commands ALL All commands (default)

If a format-nickname argument is supplied, ExtendedLog will use the predefined logformat (created by LogFormat). Otherwise, the default format of "%h %l %u %t \"%r\" %s %b" is used.

## See also

[AllowLogSymlinks](#), [LogFormat](#), [TransferLog](#)

## Examples

For example, to log all read and write operations to `/var/log/ftp.log` (using the default format), you could:

```
ExtendedLog /var/log/ftp.log read,write
```

# FileRatioErrMsg

## Name

FileRatioErrMsg -- (docs incomplete)

## Synopsis

**FileRatioErrMsg** [ FileRatioErrMsg foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The FileRatioErrMsg directive .... Example: FileRatioErrMsg

## See also

## Examples

# Global

## Name

Global -- Set some directives to apply across the entire daemon

## Synopsis

**Global** [ <Global>]

Default

None

Context

server config, <VirtualHost>

Module

mod\_core

Compatibility

1.1.6 and later

## Description

The Global configuration block is used to create a set of configuration directives which is applied universally to both the main server configuration and all VirtualHost configurations. Most, but not all other directives can be used inside a Global block.

In addition, multiple <Global> blocks can be created. At runtime, all Global blocks are merged together and finally into each server's configuration. Global blocks are terminated by a matching </Global> directive.

## See also

## Examples

# Group

## Name

Group -- Set the group the server normally runs as

## Synopsis

**Group** [Group groupid]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The Group directive configures which group the server daemon will normally run at. See User for more details.

## See also

## Examples

# GroupOwner

## Name

GroupOwner -- Change default group for new files and directories

## Synopsis

**GroupOwner** [ GroupOwner groupname]

Default  
    None  
Context  
    <Anonymous>, <Directory>, .ftpaccess  
Module  
    mod\_core  
Compatibility  
    0.99.0 and later

## Description

The GroupOwner directive configures which group all newly created directories and files will be owned by, within the context that GroupOwner is applied to. The group ID of groupname cannot be 0. Note that GroupOwner cannot be used to override the host OS/file system user/group paradigm. If the current user is not a member of the specified group, new files and directories will not be able to be chown()ed to the GroupOwner group. If this happens, file STOR (send file from client to server) and MKD/XMKD (mkdir) operations will succeed normally, however the new directory entries will be owned by the current user's default group (a warning message is also logged) instead of by the desired group. If you also use UserOwner in the same context, this restriction is lifted.

## See also

[UserOwner](#)

## Examples



# GroupPassword

## Name

GroupPassword -- Set a group-wide password

## Synopsis

**GroupPassword** [GroupPassword groupid hashed-password]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

0.99.0pl5 and later

## Description

The GroupPassword directive creates a special "group" password which allows all users in the specified group to authenticate using a single password. The group/password supplied is only effective inside the context to which GroupPassword is applied. The hashed-password argument is a standard cleartext password which has been passed through the standard unix crypt() library function. Extreme care should be taken when using GroupPassword, as serious security problems may arise if group membership is not carefully controlled.

## See also

UserPassword

## Examples

# GroupRatio

## Name

GroupRatio -- Ratio directive

## Synopsis

**GroupRatio** [`GroupRatio` `foo1` `foo2` `foo3`]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpassess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The GroupRatio directive .... Example: GroupRatio

## See also

## Examples

# HiddenStor

## Name

HiddenStor -- Enables more safe file uploads [deprecated]

## Synopsis

**HiddenStor** [`HiddenStor on|off`]

Default

`HiddenStor off`

Context

`<Directory>`, `<Anonymous>`, `<VirtualHost>`, `<Global>`

Module

`mod_xfer`

Compatibility

1.2.0pre5 up to 1.3.1rc1

## Description

This directive has been deprecated with ProFTPD 1.3.1rc1. Please use [HiddenStores](#) instead.

This directive is just an alias for [HiddenStores](#) and might be removed in the future entirely.

## See also

[HiddenStores](#)

# HiddenStores

## Name

HiddenStores -- Enables more safe file uploads

## Synopsis

**HiddenStores** [`HiddenStores on|off`]

Default

`HiddenStores off`

Context

`server config, <Global>, <VirtualHost>, <Anonymous>, >`

Module

`mod_xfer`

Compatibility

`1.2.7rc1 and later`

## Description

The HiddenStores directive enables two-step file uploads: files are uploaded as ".in.filename." and once the upload is complete, renamed to just "filename". This provides a degree of atomicity and helps prevent 1) incomplete uploads and 2) files being used while they're still in the progress of being uploaded.

Note: if the temporary file name is already in use (e.g., a server crash during upload), it will prevent the file from being uploaded

The REST (Restart STOR) command is automatically blocked when HiddenStores is enabled, with the server returning a 501 error code to the client.

## See also

[AllowStoreRestart](#) [DeleteAbortedStores](#)

# HideFiles

## Name

HideFiles -- Enable hiding of files based on regular expressions

## Synopsis

```
HideFiles [ [!] regexp | "none" [ "user" | "group" | "class" expression ] ]
```

Default

None

Context

<Directory>, .ftpassess

Module

mod\_core

Compatibility

1.2.7rc1 and later

## Description

The HideFiles directive configures a <Directory> section to hide all directory entries, e.g. its files and sub-directories, that match the given regular expression. These files can still be operated on by other FTP commands (DELE, RETR, etc), as constrained by any applicable <Limit>s, but this can be modified using the IgnoreHidden directive. Note that this directive manipulates a file's "hidden-ness", but doesn't do any hiding by itself. A <Limit> section, with IgnoreHidden enabled, does the actual hiding of the files from the <Limit>ed commands.

As <Directory> configurations are inherited by sub-directories, the "none" parameter can be used to disable any inherited file hiding within a sub-directory, usually through the use of a .ftpassess file.

The optional parameters are used to restrict the rule for hiding files only to specific users. If "user" restriction is given, then expression is a user-expression specifying to which users the rule applies. Similarly for the "group" restriction. For the "class" restriction, the expression is simply the name of connection class for whom the rule will apply.

An unrestricted HideFiles directive and an unrestricted ShowFiles directive cannot be used simultaneously in the same context.

## Examples:

```
# Hide configuration and passwd files from view
HideFiles "(\\.conf|passwd)$"

# ...or the same regex, without the quotes
HideFiles (\\.conf|passwd)$

# Hide those same files from everyone _except_ a special user
```

## Configuration Directive List

```
HideFiles (\.conf|passwd)$ user !tj
```

```
# Using the ! prefix to "invert" the regular expression matching,  
# allow only .txt and .html files to be seen  
HideFiles !(\.txt|\.html)$
```

```
# Only let users of the webmaster group see HTML files, but nothing else  
HideFiles !(\.htm|\.html)$ group webmaster
```

See Also: [HideGroup](#), [HideUser](#), [HideNoAccess](#)

# HideGroup

## Name

HideGroup -- Enable hiding of files based on group owner

## Synopsis

**HideGroup** [`HideGroup groupid`]

Default

None

Context

<Directory>, <Anonymous>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The HideGroup directive configures a <Directory> or < Anonymous> block to hide all directory entries owned by the specified group, unless the group is the primary group of the currently logged-in, authenticated user . Normally, hidden directories and files cannot be seen via LIST or NLST commands but can be operated on via other FTP commands (CWD, DELE, RETR, etc). This behavior can be modified via the IgnoreHidden directive.

## See also

See Also: HideUser, HideNoAccess, IgnoreHidden

## Examples

# HideNoAccess

## Name

HideNoAccess -- Block the listing of directory entries to which the user has no access permissions

## Synopsis

**HideNoAccess** [ HideNoAccess on|off]

Default

None

Context

<Directory>,<Anonymous>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The HideNoAccess directive configures a <Directory> or <Anonymous> block to hide all directory entries in a directory listing (via the LIST or NLST FTP commands) to which the current logged-in, authenticated user has no access. Normal Unix-style permissions always apply, so that although a user may not be able to see a directory entry that has HideNoAccess applied, they will receive a normal "Permission denied" error message when attempting to blindly manipulate the file system object. The directory or file can be made completely invisible to all FTP commands by applying IgnoreHidden in conjunction with HideNoAccess.

## See also

See Also: HideUser, HideGroup, IgnoreHidden

## Examples



# HideUser

## Name

HideUser -- Enable hiding of files based on user owner

## Synopsis

**HideUser** [ HideUser userid]

Default

None

Context

<Directory>, <Anonymous>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The HideUser directive configures a <Directory> or <Anonymous> block to hide all directory entries owned by the specified user, unless the owning user is the currently logged-in, authenticated user. Normally, hidden directories and files cannot be seen via LIST or NLST commands but can be operated on via other FTP commands (CWD, DELE, RETR, etc). This behavior can be modified via the IgnoreHidden directive.

## See also

HideGroup, HideNoAccess, IgnoreHidden

## Examples

# HostRatio

## Name

HostRatio -- Ratio directive

## Synopsis

**HostRatio** [`HostRatio foo1 foo2 foo3`]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpassess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The HostRatio directive .... Example: HostRatio

## See also

## Examples

# IdentLookups

## Name

IdentLookups -- Toggle ident lookups

## Synopsis

**IdentLookups** [ IdentLookups on|off]

Default

IdentLookups on

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.1.5 and later

## Description

Normally, when a client initially connects to proftpd, the ident protocol (RFC1413) is used to attempt to identify the remote username. This can be controlled via the IdentLookups directive.

## See also

## Examples

# IfDefine

## Name

IfDefine -- To control the use of sections of the configuration

## Synopsis

**IfDefine** [ [!]define-label]

Default

none

Context

any

Module

mod\_core

Compatibility

1.2.6rc1 and later

## Description

The `<IfDefine test>...</IfDefine>` section is used to mark directives that are conditional. The directives within an IfDefine section are only processed if the test is true. If the test is false, everything between the start and end markers is ignored.

The test in the `<IfDefine>` section directive can be one of two forms: 'parameter-name' or '!parameter-name'

In the former case, the directives between the start and end markers are only processed if the parameter named parameter-name is defined. The second format reverses the test, and only processes the directives if parameter-name is not defined.

The parameter-name argument is a define as given on the command line via `-Dparameter-name`, at the time the server was started.

`<IfDefine>` sections are nest-able, which can be used to implement simple multiple-parameter tests.

## See also

[Define](#), [IfModule](#)

## Examples

```
$ proftpd -DDoSomething
```

## Configuration Directive List

```
--[ proftpd.conf ]--  
<IfDefine DoSomething>  
# do something here  
</IfDefine>  
--[ end ]--
```

# IfModule

## Name

IfModule -- Parse a section of config based on module name

## Synopsis

**IfModule** [ [!]module-name]

Default

none

Context

any

Module

mod\_core

Compatibility

1.2.6rc1 and later

## Description

The <IfModule test>...</IfModule> section is used to mark directives that are conditional. The directives within an IfModule section are only processed if the test is true. If the test is false, everything between the start and end markers is ignored.

The test in the <IfModule> section directive can be one of two forms: "module name" or "!module name"

In the former case, the directives between the start and end markers are only processed if the module named module name is compiled in to ProFTPD. The second format reverses the test, and only processes the directives if module name is not compiled in.

The module name argument is a module name as given as the file name of the module, at the time it was compiled. For example, mod\_sql.c.

<IfModule> sections are nest-able, which can be used to implement simple multiple-module tests.

## See also

Define, IfDefine

## Examples

```
<IfModule mod_load.c>
```

```
MaxLoad          10 "Access denied, server load too high"
```

```
IfModule
```

</IfModule>

# IgnoreHidden

## Name

IgnoreHidden -- Treat 'hidden' files as if they don't exist

## Synopsis

**IgnoreHidden** [ IgnoreHidden on|off]

Default

IgnoreHidden off

Context

<Limit>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

Normally, files hidden via HideNoAccess, HideUser or HideGroup can be operated on by all FTP commands (assuming Unix file permissions allow access), even though they do not appear in directory listings. Additionally, even when normal file system permissions disallow access, proftpd returns a "Permission denied" error to the client, indicating that the requested object does exist, even if it cannot be acted upon. IgnoreHidden configures a <Limit> block to completely ignore any hidden directory entries for the set of limited FTP commands. This has the effect of returning an error similar to "No such file or directory" when the client attempts to use the limited command upon a hidden directory or file.

## See also

## Examples



# Include

## Name

Include -- Load additional configuration directives from a file

## Synopsis

**Include** [ Include file]

Default

None

Context

server config, <Directory>, <Anonymous>, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.0 and later

## Description

This directive allows you to include another configuration file within your current configuration file. The given file argument must be the full path to the file to be included.

## See also

## Examples

# LDAPAliasDereference

## Name

LDAPAliasDereference -- Specify how LDAP alias dereferencing is done

## Synopsis

**LDAPAliasDereference** [ never find search always ]

Default

LDAPAliasDereference never

Context

server config, <Global>, <VirtualHost>

Module

mod\_ldap

Compatibility

2.8.16 and later

## Description

Should be one of never, always, search, or find to specify that aliases are never dereferenced, always dereferenced, dereferenced when searching, or dereferenced only when locating the base object for the search.

## Examples

LDAPAliasDereference always

# LDAPAttr

## Name

LDAPAttr -- Map LDAP Attributes to something non standard

## Synopsis

**LDAPAttr** [ uid uidNumber gidNumber homeDirectory userPassword loginShell cn  
memberUid ftpQuota] [ "NewAttribute"]

Default  
Context

server config, <Global>, <VirtualHost>

Module

mod\_ldap

Compatibility

2.8.13 and later

## Description

FIXMEFIXMEFIXME

This directive has to be set before any of the LDAPDo\* directives.

## See also

## Examples

FIXFIXFIX

FIXFIX

# LDAPAuthBinds

## Name

LDAPAuthBinds -- (docs incomplete)

## Synopsis

**Syntax:** LDAPAuthBinds [ on off ]

(docs incomplete)

Default

LDAPAuthBinds off in mod\_ldap <= 2.7.6, LDAPAuthBinds on in mod\_ldap >= 2.8

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.5 and later

## Description

By default, the DN specified by LDAPDNInfo will be used to bind to the LDAP server to obtain user information, including the userPassword attribute. If LDAPAuthBinds is set to on, the DN specified by LDAPDNInfo will be used to fetch all user information except the userPassword attribute. Then, mod\_ldap will bind to the LDAP server as the user who is logging in via FTP with the user-supplied password. If this bind succeeds, the user is considered authenticated and is allowed to log in. This method of LDAP authentication has the added benefit of supporting any password encryption scheme that your LDAP server supports.

## See also

## Examples

# LDAPDefaultAuthScheme

## Name

LDAPDefaultAuthScheme -- Set the authentication scheme/hash that is used when no leading {hashname} is present.

## Synopsis

**LDAPDefaultAuthScheme** [ crypt clear ]

Default

LDAPDefaultAuthScheme "crypt"

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

Specifies the authentication scheme used for passwords with no {prefix} in the LDAP database. For example, if you are using something like userPassword: mypass in your LDAP database, you would want to set LDAPDefaultAuthScheme to clear.

## See also

## Examples

# LDAPDefaultGID

## Name

LDAPDefaultGID -- Set the default GID to be assigned to users when no uidNumber attribute is found.

## Synopsis

**LDAPDefaultGID** [ default-gid ]

Default  
    None  
Context  
    server config, <VirtualHost>, <Global>  
Module  
    mod\_ldap  
Compatibility  
    mod\_ldap v2.0 and later

## Description

This directive is useful primarily in virtual-user environments common in large-scale ISPs and hosting organizations. If a user does not have a LDAP gidNumber attribute, the LDAPDefaultGID is used. This allows one to have a large number of users in an LDAP database without gidNumber attributes; setting this configuration directive will automatically assign those users a single GID.

## See also

## Examples

# LDAPDefaultUID

## Name

LDAPDefaultUID -- Set the default UID to be assigned to users when no uidNumber attribute is found.

## Synopsis

**LDAPDefaultUID** [ default-uid ]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

This directive is useful primarily in virtual-user environments common in large-scale ISPs and hosting organizations. If a user does not have a LDAP uidNumber attribute, the LDAPDefaultUID is used. This allows one to have a large number of users in an LDAP database without uidNumber attributes; setting this configuration directive will automatically assign those users a single UID.

## See also

## Examples

# LDAPDNInfo

## Name

LDAPDNInfo -- Set DN information to be used for initial bind

## Synopsis

**LDAPDNInfo** [ LDAPDNInfo "ldap-dn" "dn-password" ]

Default

LDAPDNInfo "" "" (anonymous bind)

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

This directive specifies the LDAP DN and password to use when binding to the LDAP server. If this configuration directive is not specified, anonymous binds are used.

## See also

## Examples



# LDAPDoAuth

## Name

LDAPDoAuth -- Enable LDAP authentication

## Synopsis

**LDAPDoAuth** [ on off ] [ "auth-base-dn" ] [ "search-filter-template" ]

Default

LDAPDoAuth off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

This configuration directive activates LDAP authentication. The second argument to this directive is the LDAP base DN to use for authentication. The third argument is a template to be used for the search filter; %v will be replaced with the username that is being authenticated. By default, the search filter template "(&(uid=%v)(objectclass=posixAccount))" is used. The uid for the the search filter is taken from the [LDAPAttr](#) directive. Search filter templates are only supported in mod\_ldap v2.7 and later.

## See also

[LDAPAttr](#)

## Examples

# LDAPDoGIDLookups

## Name

LDAPDoGIDLookups -- Enable LDAP lookups for user group membership and GIDs in directory listings

## Synopsis

```
LDAPDoGIDLookups [ on off ] [ "gid-base-dn" ] [ "cn-filter-template" ] [ "gid-number-filter-template" ] [ "member-uid-filter-template" ]
```

Default

LDAPDoGIDLookups off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

This configuration directive activates LDAP GID-to-name lookups in directory listings. The second argument to this directive is the LDAP base DN to use for GID-to-name lookups. The third through fifth arguments are templates to be used for the search filter; %v will be replaced with the GID that is being looked up.

By default, the search filter templates look like this:

```
cn_filter: "(cn=%v)(objectclass=posixGroup)", gidnumber_filter:
"(gidNumber=%v)(objectclass=posixGroup)", memberuid_filter:
"(memberUid=%v)(objectclass=posixGroup)".
```

The attribute names used in the default search filters are taken from the [LDAPAttr](#) directive.

Filter templates are only supported in mod\_ldap v2.8.3 and later.

## See also

[LDAPAttr](#)

## Examples

# LDAPDoQuotaLookups

## Name

LDAPDoQuotaLookups -- Enable LDAP quota limit support

## Synopsis

```
LDAPDoQuotaLookups [ on off ] [ "base-dn" ] [ "quota-filter-template" ] [
"default-quota" ]
```

Default

LDAPDoQuotaLookups off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.8.12 and later

## Description

This configuration directive activates LDAP quota lookups. The second argument to this directive is the LDAP base DN to use for quota limit search. The third argument is a template to be used for the search filter; %v will be replaced with the username that is being authenticated. By default, the search filter template "(&(LDAPAttr\_uid=%v)(objectclass=posixAccount))" is used. The uid for the the search filter is taken from the [LDAPAttr](#) directive Search filter templates are only supported in mod\_ldap v2.7 and later.

If specified, the default-quota argument specifies the quota limits to use if a user does not have a ftpQuota attribute. This argument is formatted the same way as the ftpQuota LDAP attribute.

## See also

[LDAPAttr](#)

## Examples

# LDAPDoUIDLookups

## Name

LDAPDoUIDLookups -- Enable LDAP lookups for UIDs in directory listings

## Synopsis

**LDAPDoUIDLookups** [ on off ] [ "uid-base-dn" ] [ "uid-filter-template" ]

Default

LDAPDoUIDLookups off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

This configuration directive activates LDAP UID-to-name lookups in directory listings. The second argument to this directive is the LDAP base DN to use for UID-to-name lookups. The third argument is a template to be used for the search filter; %v will be replaced with the UID that is being looked up. By default, the search filter template "(&(LDAPAttr\_uidNumber=%v)(objectclass=posixAccount))" is used. The uid for the the search filter is taken from the [LDAPAttr](#) directive Search filter templates are only supported in mod\_ldap v2.7 and later.

## See also

[LDAPAttr](#)

## Examples

# LDAPForceDefaultGID

## Name

LDAPForceDefaultGID -- Force all LDAP-authenticated users to use the same GID.

## Synopsis

**Syntax:** LDAPForceDefaultGID [ on off ]

Default  
LDAPForceDefaultGID off  
Context  
server config, <VirtualHost>, <Global>  
Module  
mod\_ldap  
Compatibility  
mod\_ldap v2.8 and later

## Description

Even when a LDAPDefaultGID is configured, mod\_ldap will allow individual users to have gidNumber attributes that will override this default GID. With LDAPForceDefaultGID enabled, all LDAP-authenticated users are given the default GID; GIDs may not be overridden by gidNumber attributes.

## See also

## Examples

# LDAPForceDefaultUID

## Name

LDAPForceDefaultUID -- Force all LDAP-authenticated users to use the same UID.

## Synopsis

**Syntax:** LDAPForceDefaultUID [ on off ]

Default  
LDAPForceDefaultUID off  
Context  
server config, <VirtualHost>, <Global>  
Module  
mod\_ldap  
Compatibility  
mod\_ldap v2.8 and later

## Description

Even when a LDAPDefaultUID is configured, mod\_ldap will allow individual users to have uidNumber attributes that will override this default UID. With LDAPForceDefaultUID enabled, all LDAP-authenticated users are given the default UID; UIDs may not be overridden by uidNumber attributes.

## See also

## Examples

# LDAPForceGeneratedHomedir

## Name

LDAPForceGeneratedHomedir -- Force all LDAP-authenticated users to use the default HomeDironDemand prefix/suffix.

## Synopsis

**LDAPForceGeneratedHomedir** [ on off ] [ directory-mode ]

Default

LDAPForceGeneratedHomedir off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.8.13 and later

## Description

Even when a [LDAPGenerateHomedirPrefix](#) is configured, mod\_ldap will allow individual users to have homeDirectory attributes that will override the default. With LDAPForceHomeDironDemand enabled, all LDAP-authenticated users are given the default prefix and/or suffix; homedirs may not be overridden by LDAP homeDirectory attributes.

## See also

[LDAPGenerateHomedir](#) [LDAPGenerateHomedirPrefix](#) [LDAPGenerateHomedirPrefixNoUsername](#)

## Examples

# LDAPForceHomedirOnDemand

## Name

LDAPForceHomedirOnDemand -- Force all LDAP-authenticated users to use the default HomeDironDemand prefix/suffix. [deprecated]

## Synopsis

**LDAPForceHomedirOnDemand** [ on off ] [ directory-mode ]

Default

LDAPForceHomedirOnDemand off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.8.11 and later

## Description

This directive has been deprecated with mod\_ldap v2.8.13. Please take a look at LDAPForceGenerateHomedir

Even when a [LDAPHomeDironDemandPrefix](#) is configured, mod\_ldap will allow individual users to have homeDirectory attributes that will override the default. With LDAPForceHomeDironDemand enabled, all LDAP-authenticated users are given the default prefix and/or suffix; homedirs may not be overridden by LDAP homeDirectory attributes.

## See also

LDAPForceGenerateHomedir

## Examples



# LDAPGenerateHomedir

## Name

LDAPGenerateHomedir -- Enable the creation of user home directories on demand

## Synopsis

**LDAPGenerateHomedir** [ on off ] [ directory-mode ]

Default

LDAPGenerateHomedir off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.8.13 and later

## Description

LDAPGenerateHomedir activates on-demand home directory creation. If a user logs in and does not yet have a home directory, a home directory is created automatically.

In mod\_ldap <= 2.7.6, the home directory will be owned by the same user and group that ProFTPD runs as (see the User and Group configuration directives). mod\_ldap >= 2.8 can create home directories for users with any UID/GID, not just those with the same UID/GID as the main ProFTPD server.

The second argument allows you to specify the mode (default permissions) to use when creating home directories on demand, subject to ProFTPD's umask (see the Umask directive). If no directory mode is specified, the default of 0755 is used. Directory mode setting is only supported in mod\_ldap v2.7 or later.

## See also

[LDAPForceGeneratedHomedir](#) [LDAPGenerateHomedirPrefix](#) [LDAPGenerateHomedirPrefixNoUsername](#)

## Examples

%

# LDAPGenerateHomedirPrefix

## Name

LDAPGenerateHomedirPrefix -- Enable the creation of user home directories on demand

## Synopsis

**LDAPGenerateHomedirPrefix** [ leading-path ]

Default

LDAPGenerateHomedirPrefix off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.8.13 and later

## Description

LDAPGenerateHomedirPrefix enables a prefix to be specified for on-demand home directory creation. This is most useful if mod\_ldap is being used to authenticate against an LDAP directory that does not return a homeDirectory attribute, either because it cannot (Microsoft Active Directory, for example) or because you do not wish to extend your existing directory schema.

For example, setting this directive to "/home" and logging in as the user "joe" would result in his home directory being created as "/home/joe". The directory will be created with the mode specified in [LDAPGenerateHomedir](#). To use this directive, [LDAPGenerateHomedir](#) must be enabled.

## See also

[LDAPForceGeneratedHomedir](#) [LDAPGenerateHomedir](#) [LDAPGenerateHomedirPrefixNoUsername](#)

## Examples

# LDAPGenerateHomedirPrefixNoUsername

## Name

LDAPGenerateHomedirPrefixNoUsername -- (docs incomplete)

## Synopsis

**LDAPGenerateHomedirPrefixNoUsername** [ on off]

Default

(docs incomplete)

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Limit>, .ftppass

Module

mod\_ldap

Compatibility

mod\_ldap 2.8.13 and later

## Description

(docs incomplete)

## See also

[LDAPForceGeneratedHomedir](#) [LDAPGenerateHomedir](#) [LDAPGenerateHomedirPrefix](#)

# LDAPHomedirOnDemand

## Name

LDAPHomedirOnDemand -- Enable the creation of user home directories on demand [deprecated]

## Synopsis

**LDAPHomedirOnDemand** [ on off ] [ directory-mode ]

Default

LDAPHomedirOnDemand off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

This directive has been deprecated with mod\_ldap v2.8.13. Please take a look at [LDAPGenerateHomedir](#)

LDAPHomedirOnDemand activates on-demand home directory creation. If a user logs in and does not yet have a home directory, a home directory is created automatically.

In mod\_ldap <= 2.7.6, the home directory will be owned by the same user and group that ProFTPD runs as (see the User and Group configuration directives). mod\_ldap >= 2.8 can create home directories for users with any UID/GID, not just those with the same UID/GID as the main ProFTPD server.

The second argument allows you to specify the mode (default permissions) to use when creating home directories on demand, subject to ProFTPD's umask (see the Umask directive). If no directory mode is specified, the default of 0755 is used. Directory mode setting is only supported in mod\_ldap v2.7 or later.

## See also

[LDAPGenerateHomedir](#)

## Examples

# LDAPHomedirOnDemandPrefix

## Name

LDAPHomedirOnDemandPrefix -- Enable the creation of user home directories on demand [deprecated]

## Synopsis

**LDAPHomedirOnDemandPrefix** [ *leading-path* ]

Default

LDAPHomedirOnDemandPrefix off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.8 and later

## Description

This directive has been deprecated with mod\_ldap v2.8.13. Please take a look at [LDAPGenerateHomedirPrefix](#)

LDAPHomedirOnDemandPrefix enables a prefix to be specified for on-demand home directory creation. This is most useful if mod\_ldap is being used to authenticate against an LDAP directory that does not return a homeDirectory attribute, either because it cannot (Microsoft Active Directory, for example) or because you do not wish to extend your existing directory schema.

For example, setting this directive to "/home" and logging in as the user "joe" would result in his home directory being created as "/home/joe". The directory will be created with the mode specified in [LDAPHomedirOnDemand](#). To use this directive, [LDAPHomedirOnDemand](#) must be enabled.

## See also

[LDAPGenerateHomedirPrefix](#)

## Examples

# LDAPHomedirOnDemandPrefixNoUsername

## Name

LDAPHomedirOnDemandPrefixNoUsername -- (docs incomplete)

## Synopsis

**LDAPHomedirOnDemandPrefixNoUsername** [ "name" limit|regex|ip value]

Default

(docs incomplete)

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Limit>, .ftpaccess

Module

mod\_ldap

Compatibility

1.2.5rc1 and later

## Description

This directive has been deprecated with mod\_ldap v2.8.13. Please take a look at [LDAPGenerateHomedirPrefixNoUsername](#)

(docs incomplete)

## See also

[LDAPGenerateHomedirPrefixNoUsername](#)

# LDAPHomedirOnDemandSuffix

## Name

LDAPHomedirOnDemandSuffix -- Specify an additional directory to be created inside a user's home directory on demand. [deprecated]

## Synopsis

**LDAPHomedirOnDemandSuffix** [ additional-directory1 additional-directory2 additional-directory3 ]

Default

LDAPHomedirOnDemandSuffix ""

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.6 and later.

## Description

This directive is deprecated and was removed from mod\_ldap v2.8.13. It has no replacement option.

to be created within a user's home directory when it is created on demand. For example, if a user's home directory is "/home/user", setting this configuration directive to "public\_html" will also create "/home/user/public\_html" on demand. In mod\_ldap v2.7.6 and earlier, you must also activate LDAPHomedirOnDemand in your configuration.

mod\_ldap >= 2.8 supports multiple suffix arguments and does not require LDAPHomedirOnDemand to be enabled.

mod\_ldap >= 2.8.11 supports additional mode information; you can add ":octal-mode" to a directory argument to have it created with that mode. For example, LDAPHomedirOnDemandSuffix foo:700 will create the suffix directory foo with the mode 700.

## See also

## Examples

# LDAPNegativeCache

## Name

LDAPNegativeCache -- Enable negative caching for LDAP lookups

## Synopsis

**LDAPNegativeCache** [ on off ]

Default

LDAPNegativeCache off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v1.1 and later

## Description

LDAPNegativeCache specifies whether or not to cache negative responses from the LDAP server when using LDAP for UID/GID lookups. This option is useful if you also use/are in transition from another authentication system; if there are many users in your old authentication system that aren't in the LDAP database, there can be a significant delay when a directory listing is performed as the UIDs not in the LDAP database are repeatedly looked up in an attempt to present usernames instead of UIDs in directory listings. With LDAPNegativeCache set to on, negative ("not found") responses from the LDAP server will be cached and speed will improve on directory listings that contain many users not present in the LDAP database.

## See also

## Examples



# LDAPProtocolVersion

## Name

LDAPProtocolVersion -- Set the LDAP protocol version

## Synopsis

**LDAPProtocolVersion** [ 2 | 3]

Default

3

Context

server config, <Global>, <VirtualHost>

Module

mod\_ldap

Compatibility

2.8.13 and later

## Description

FIX FIX FIX

## See also

## Examples

FIXFIXFIX

FIXFIX

# LDAPQueryTimeout

## Name

LDAPQueryTimeout -- Set a timeout for LDAP queries

## Synopsis

**LDAPQueryTimeout** [ timeout-seconds ]

Default

LDAPQueryTimeout default-api-timeout

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.0 and later

## Description

Sets the timeout used for LDAP directory queries. The default is the default timeout used by your LDAP API.

## See also

## Examples

# LDAPSearchScope

## Name

LDAPSearchScope -- Specify the search scope used in LDAP queries

## Synopsis

**LDAPSearchScope** [ onelevel subtree ]

Default

LDAPSearchScope subtree

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.6 and later

## Description

Set the scope used for LDAP searches. The default setting, subtree, searches for all entries in the tree from the current level down. Setting this directive to onelevel searches only one level deep in the LDAP tree.

## See also

## Examples

# LDAPServer

## Name

LDAPServer -- Specify the LDAP server to use for lookups

## Synopsis

**LDAPServer** [ "hostname1:port1 hostname2:port2" ]

Default

LDAPServer "localhost"

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v1.0 and later

## Description

LDAPServer allows you to specify the hostname(s) and port(s) of the LDAP server(s) to use for LDAP authentication. If no LDAPServer configuration directive is present, the default LDAP servers specified by your LDAP API will be used.

## See also

## Examples

# LDAPUseTLS

## Name

LDAPUseTLS -- Enable TLS/SSL connections to the LDAP server.

## Synopsis

**Syntax:** LDAPUseTLS [ on off ]

Default

LDAPUseTLS off

Context

server config, <VirtualHost>, <Global>

Module

mod\_ldap

Compatibility

mod\_ldap v2.8 and later

## Description

By default, mod\_ldap connects to the LDAP server via a non-encrypted connection. Enabling this option causes mod\_ldap to use an encrypted (TLS/SSL) connection to the LDAP server. If a secure connection to the LDAP server fails, mod\_ldap will not authenticate users (mod\_ldap will *\*not\** fall back to an unsecure connection).

## See also

## Examples

# LeechRatioMsg

## Name

LeechRatioMsg -- Sets the 'over ratio' error message

## Synopsis

**LeechRatioMsg** [ LeechRatioMsg foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The LeechRatioMsg directive defines the response message sent back to the client upon breaking their quota limits.

## See also

## Examples

```
LeechRatioMsg "please upload as well as download"
```

# Limit

## Name

Limit -- Set the commands/actions to be controlled

## Synopsis

**Limit** [ <Limit command|command-group [command2 ..]>]

Default

None

Context

server config, <VirtualHost>, <Directory>, <Anonymous>, <Global>, .ftpaccess

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The Limit configuration block is used to place access restrictions on one or more FTP commands, within a given context. Limits flow downward, so that a Limit configuration in the server config context applies to all <Directory> and <Anonymous> blocks that also reside in the configuration; until it is overridden by a "lower" <Limit> block. Any number of command parameters can be specified, against which the contents of the <Limit> block will be applied. command can be any valid FTP command, but is generally one of the following: CWD (Change Working Directory) Sent by client when changing directories. MKD / XMKD (MaKe Directory) Sent by client to create a new directory. RNFR (ReName FRom), RNT0 (ReName TO) Sent as a pair by client to rename a directory entry. DELE (DELEte) Sent by client to delete a file. RMD / XRMD (ReMove Directory) Sent by client to remove a directory. RETR (RETRieve) Transfer a file from the server to the client. STOR (STORe) Transfer a file from the client to the server. In addition, the following command-groups are accepted. They have a lower precedence than real commands, meaning that a real command limit will always be applied instead of the command-group. READ All FTP commands which deal with file reading (directory listing not included): RETR, SITE, SIZE, STAT WRITE All FTP commands which deal with file or directory write/creation/deletion: APPE, DELE, MKD, RMD, RNT0, STOR, XMKD, XRMD DIRS All FTP commands which deal with directory listing: CDUP, CWD, LIST, MDTM, NLST, PWD, RNFR, XCUP, XCWD, XPWD ALL ALL FTP commands (identical to READ WRITE DIRS). Note this group has the lowest precedence of all; it will not override a limit imposed by another command-group (e.g. DIRS). Finally, a special command is allowed which can be used to control login access: LOGIN Connection or login to the server. Applying a <Limit> to this pseudo-command can be used to allow or deny initial connection or login to the context. It has no effect, and is ignored, when used in a context other than server config, <VirtualHost> or <Anonymous> (i.e. using it in a <Directory> context is meaningless). <Limit> command restrictions should not be confused with file/directory access permission. While limits can be used to restrict a command on a certain directory, they cannot be used to override the file permissions inherent to the base operating/file system. The following FTP commands cannot be restricted via <Limit>: ABOR HELP MODE (not implemented, always S) NOOP PASS (use <Limit LOGIN>) PASV PORT QUIT REST (use AllowRetrieveRestart, AllowStoreRestart) STRU (not implemented, always F) SYST TYPE

USER (use <Limit LOGIN>)

## See also

See Also: IgnoreHidden

## Examples



# ListOptions

## Name

ListOptions -- Configure options used when listing directories

## Synopsis

**ListOptions** [ "options string" ] [ ["strict"] ]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>, <Directory>, .ftpaccess

Module

mod\_ls

Compatibility

1.2.8rc1 and later

## Description

Normally, FTP commands involving directory listings (NLST, LIST and STAT) use the arguments (options) passed by the client to determine what files are displayed and the format they are displayed in. The ListOptions directive can alter the behaviour of such listings by making it such that a certain option (or options) is always in effect, or is always disabled.

In addition to the normal dash-prefixed options that the builtin ls takes, the directive allows for plus-prefixed options. The plus-prefixed options allow for their dash-prefixed equivalents, potentially given by a user, to be disabled, while still allowing other options to function normally.

```
-l List one file per line

-A List all files except "." and ".."

-a List all files including those whose names start with "."

-C List entries by columns

-d List directory entries instead of directory contents

-F Append file type indicator (one of "*", "/", "=", "@ or "|") to names

-h Print file sizes in human-readable format (e.g. 1K, 234M, 2G)

-L List files pointed to by symlinks

-l Use a long listing format

-n List numeric UIDs/GIDs instead of user/group names

-R List subdirectories recursively
```

## Configuration Directive List

```
-r Sort filenames in reverse order  
-S Sort by file size  
-t Sort by modification time
```

If the optional "strict" keyword is used, then the configured options will override any options given by the user (i.e. the user's options will be ignored). In addition to "strict" the following keywords are supported:

```
maxfiles Sets a maximum limit on the number of files listed in one directory listing  
maxdirs Sets a maximum limit on the number of directories listed in one directory listing  
maxdepth Sets a maximum recursion depth, if the -R option is allowed
```

## See also

## Examples

```
# Force directory listings to always show dotfiles ListOptions "-a"
```

```
# To prevent anyone from doing recursive listings, but still allowing # other user options, use +R to disable  
any -R option given by users ListOptions "+R"
```

```
# To allow only the basic listing, no options, always ListOptions "" strict
```

```
#limit maximum files given back to 2000 and recurse in to a max #depth of 3 directories ListOptions -a  
maxfiles 2000 maxdepth 3
```

# LogFormat

## Name

LogFormat -- Specify a logging format

## Synopsis

**LogFormat** [LogFormat nickname "format-string"]

Default

LogFormat default "%h %l %u %t \"%r\" %s %b"

Context

server config

Module

mod\_log

Compatibility

1.1.6pl1 and later

## Description

The LogFormat directive can be used to create a custom logging format for use with the ExtendedLog directive. Once created, the format can be referenced by the specified nickname. The format-string argument can consist of any combination of letters, numbers and symbols. The special character % is used to start a meta-sequence (see below). To insert a literal % character, use %%.

The following meta sequences are available and are replaced as indicated when logging.

%a	Remote client IP address
%A	Anonymous username (password given), or UNKNOWN if non-anonymous
%b	Bytes sent for request
%d	Directory name (not full path) for CDUP, CWD, MKD, RMD, XCWD, XCUP, XMKD, XRMD
%D	Directory name (full path) for CDUP, CWD, MKD, RMD, XCWD, XCUP, XMKD, XRMD
%{FOOBAR}e	Contents of environment variable FOOBAR. Note that the server does not set any
%f	Filename stored or retrieved, absolute path (not chrooted)
%F	Filename stored or retrieved, as the client sees it
%h	Remote client DNS name
%J	Command arguments received from client, e.g. file.txt
%l	Remote username (from ident), or UNKNOWN if ident lookup failed
%L	Local server IP address
%m	Command (method) name received from client, e.g. RETR
%p	Local server port number
%P	Local server process id (pid)
%r	Full command line received from client
%s	Numeric FTP response code (status)
%S	Response message send from the client (avaible since v1.3.1rc1)
%t	Current local time
%{format}t	Current local time formatted (strftime(3) format)
%T	Time taken to transmit/receive file, in seconds
%u	Local authenticated userid
%U	USER name originally sent by the client

## Configuration Directive List

<code>%v</code>	ServerName of server handling session
<code>%V</code>	DNS name of server handling session
<code>%{version}</code>	Print ProFTPD Version

## See also

[ExtendedLog](#), [TransferLog](#)

## Examples

# LoginPasswordPrompt

## Name

LoginPasswordPrompt -- Configure to display the password prompt or not

## Synopsis

**LoginPasswordPrompt** [ LoginPasswordPrompt on|off]

Default

LoginPasswordPrompt on

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

1.2.0pre1 and later

## Description

If set to off, ProFTPD will skip the password request if the login will be denied regardless of password, e.g., if a <Limit LOGIN> directive forbids the connection.

## See also

## Examples

# MasqueradeAddress

## Name

MasqueradeAddress -- Configure the server address presented to clients

## Synopsis

**MasqueradeAddress** [ MasqueradeAddress ip-address|dns-hostname]

Default

none

Context

server config, <VirtualHost>

Module

mod\_core

Compatibility

1.2.2 and later

## Description

MasqueradeAddress causes the server to display the network information for the specified IP address or DNS hostname to the client, on the assumption that that IP address or DNS host is acting as a NAT gateway or port forwarder for the server.

## See also

## Examples

MasqueradeAddress nat-gw.mydomain.com

# MaxClients

## Name

MaxClients -- Limits the number of users that can connect

## Synopsis

**MaxClients** [MaxClients number|none [message]]

Default

MaxClients none

Context

server config, <Anonymous>, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

0.99.0 and later

## Description

The MaxClients directive configures the maximum number of authenticated clients which may be logged into a server or anonymous account. Once this limit is reached, additional clients attempting to authenticate will be disconnected. The special value none may be supplied which removes all maximum connection limits from the applicable configuration context. Additionally, an optional message argument may be used which will be displayed to a client attempting to exceed the maximum value; immediately before disconnection. The message argument is parsed for the magic string "%m", which is replaced with the configured maximum value. If message is not supplied, a system-wide default message is used. Example: MaxClients 5 "Sorry, the maximum number of allowed users are already connected (%m)" Results in: 500 Sorry, the maximum number of allowed users are already connected (5)

## See also

## Examples

# MaxClientsPerClass

## Name

MaxClientsPerClass -- Limit the number of connections per class

## Synopsis

```
MaxClientsPerClass [MaxClientsPerClass name number|"none" [message]]
```

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

1.2.10rc1 and later

## Description

The MaxClientsPerClass directive configures the maximum number of clients that may be connected at any given time from the same Class. The optional argument message may be used which will be displayed to a client attempting to exceed the maximum value. If message is not supplied, a default message of "Sorry, the maximum number of clients (%m) from your class are already connected."

## See also

[MaxClients](#), [MaxClientsPerHost](#) [MaxClientsPerUser](#) [MaxHostsPerUser](#)

## Examples

```
MaxClientsPerClass foo 1 "Only one such client at a time."  
Results in: 530 Only one such client at a time.
```



# MaxClientsPerHost

## Name

MaxClientsPerHost -- Limits the connections per client machine

## Synopsis

**MaxClientsPerHost** [MaxClientsPerHost number|none [message]]

Default

MaxClientsPerHost none

Context

server config, <Anonymous>, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

1.1.7 and later

## Description

The MaxClientsPerHost directive configures the maximum number of clients allowed to connect per host. The optional argument message may be used which will be displayed to a client attempting to exceed the maximum value. If message is not supplied, a default message of "Sorry, the maximum number clients (%m) from your host are already connected." is used.

## See also

MaxClients, MaxHostsPerUser

## Examples

```
MaxClientsPerHost 1 "Sorry, you may not connect more than one time."
Results in: 530 Sorry, you may not connect more than one time.
```

# MaxClientsPerUser

## Name

MaxClientsPerUser -- Limit the number of connections per userid

## Synopsis

**MaxClientsPerUser** [MaxClientsPerUser number|none [message]]

Default

MaxClientsPerUser none

Context

server config, <VirtualHost>, <Global>, <Anonymous>

Module

mod\_auth

Compatibility

1.2.7rc1 and later

## Description

The MaxClientsPerUser directive configures the maximum number of clients that may be connected at any given time using the same user name. The optional argument message may be used which will be displayed to a client attempting to exceed the maximum value. If message is not supplied, a default message of "Sorry, the maximum number of clients (%m) for this user already connected."

## See also

[MaxClients](#), [MaxClientsPerHost](#) [MaxHostsPerUser](#)

## Examples

```
MaxClientsPerUser 1 "Only one such user at a time."  
Results in: 530 Only one such user at a time.
```

# MaxConnectionRate

## Name

MaxConnectionRate -- Maximum TCP socket connection rate

## Synopsis

**MaxConnectionRate** [connections per second]

Default

none

Context

server config

Module

mod\_core

Compatibility

1.2.7rc1 and later

## Description

Set the maximum rate at which new TCP connections are accepted, this applies to the entire server, therefore too low a value on a high traffic server can result in all VirtualHosts being made unavailable due to normal traffic levels.

The value is the number of connections in a given second at which the block comes into effect, thus a value of "1" will result in all connections being blocked.

## See also

## Examples

MaxConnectionRate 4

# MaxConnectionsPerHost

## Name

MaxConnectionsPerHost -- Limits the unauthenticated connections per client machine

## Synopsis

**MaxConnectionsPerHost** [MaxConnectionsPerHost number|none [message]]

Default

MaxConnectionsPerHost none

Context

server config, <Anonymous>, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

1.2.11rc1 and later

## Description

The MaxConnectionsPerHost directive configures the maximum number of unauthenticated clients allowed to connect per host. The optional argument message may be used which will be displayed to a client attempting to exceed the maximum value. If message is not supplied, a default message of "Sorry, the maximum number of connections (%m) from your host are already connected." is used.

## See also

MaxClients, MaxClientsPerHost, MaxHostsPerUser

## Examples

```
MaxConnectionsPerHost 1 "Sorry, you may not connect more than one time."  
Results in: 530 Sorry, you may not connect more than one time.
```

# MaxHostsPerUser

## Name

MaxHostsPerUser -- Limit the number of connections per userid

## Synopsis

**MaxHostsPerUser** [MaxHostsPerUser number|none [message]]

Default

MaxHostsPerUser none

Context

server config, <Anonymous>, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

1.2.4 and later

## Description

The MaxHostsPerUser directive configures the maximum number of times different hosts, using a given login, can connect at any given time. The optional argument message may be used which will be displayed to a client attempting to exceed the maximum value. If message is not supplied, a default message of "Sorry, the maximum number of hosts (%m) for this user already connected."

## See also

[MaxClients](#), [MaxClientsPerHost](#)

## Examples

```
MaxHostsPerUser 1 "Sorry, you may not connect more than one time."
Results in: 530 Sorry, you may not connect more than one time.
```

# MaxInstances

## Name

MaxInstances -- Sets the maximum number of child processes to be spawned

## Synopsis

**MaxInstances** [MaxInstances number]

Default

MaxInstances none

Context

server config

Module

mod\_core

Compatibility

1.1.6pl1

## Description

The MaxInstances directive configures the maximum number of child processes that may be spawned by a parent proftpd process in standalone mode. The directive has no effect when used on a server running in inetd mode. Because each child proftpd process represents a single client connection, this directive also controls the maximum number of simultaneous connections allowed. Additional connections beyond the configured limit are syslog'd and silently disconnected. The MaxInstances directive can be used to prevent undesirable denial-of-service attacks (repeatedly connecting to the ftp port, causing proftpd to fork-bomb). By default, no limit is placed on the number of child processes that may run at one time.

## See also

## Examples

# MaxLoginAttempts

## Name

MaxLoginAttempts -- Sets how many password attempts are allowed before disconnection

## Synopsis

**MaxLoginAttempts** [MaxLoginAttempts number]

Default

MaxLoginAttempts 3

Context

server config, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

0.99.0 and later

## Description

The MaxLoginAttempts directive configures the maximum number of times a client may attempt to authenticate to the server during a given connection. After the number of attempts exceeds this value, the user is disconnected and an appropriate message is logged via the syslog mechanism.

## See also

## Examples

# MaxRetrieveFileSize

## Name

MaxRetrieveFileSize -- Restrict size of downloaded files

## Synopsis

**MaxRetrieveFileSize** [ number | "\*" units [ "user" | "group" | "class" expression ] ]

Default

None

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Directory>, .ftppass

Module

mod\_xfer

Compatibility

1.2.7rc1 and later

## Description

When downloading files to clients (eg serving a RETR request), the server will check for any configured limit against the size of the file being requested, and abort any transfers if the requested file's size exceeds the configured limit.

A single "\*" argument configures unlimited file sizes, and is used primarily to override any inherited restrictions from higher contexts. The given number is the number of bytes for the limit, and is followed by a units specifier of (case-insensitive) "Gb" (Gigabytes), "Mb" (Megabytes), "Kb" (Kilobytes), or "B" (bytes). The given number of bytes is multiplied by the appropriate factor.

The optional parameters are used to restrict the file size limits only to specific users. If the "user" restriction is given, then expression is a user-expression specifying to which users the rule applies. Similarly for the "group" restriction. For the "class" restriction, the expression is simply the name of connection class for whom the rule will apply. If no matching user, group, or class expression is found for the current user (in that order), then a limit with no expression (i.e. no "user", "group", or "class" identifier) is applied.

See Also: MaxStoreFileSize

## See also

## Examples

```
# Restrict downloads to only 1 gigabyte
MaxRetrieveFileSize 1 Gb
```



## Configuration Directive List

```
# Restrict downloads for user fred, but allow unlimited download size for  
# everyone else  
MaxStoreFileSize 50 Kb user fred  
MaxStoreFileSize *
```

# MaxStoreFileSize

## Name

MaxStoreFileSize -- Restrict size of uploaded files

## Synopsis

**MaxStoreFileSize** [number|"\*" units ["user"|"group"|"class" expression]]

Default

None

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Directory>, .ftppass

Module

mod\_xfer

Compatibility

1.2.7rc1 and later

## Description

When uploading files from a client (eg serving a STOR request), the server will check for any configured limit against the size of the file being sent, and abort any transfers if/when the given file's size exceeds the configured limit.

A single "\*" argument configures unlimited file sizes, and is used primarily to override any inherited restrictions from higher contexts. The given number is the number of bytes for the limit, and is followed by a units specifier of (case-insensitive) "Gb" (Gigabytes), "Mb" (Megabytes), "Kb" (Kilobytes), or "B" (bytes). The given number of bytes is multiplied by the appropriate factor.

The optional parameters are used to restrict the file size limits only to specific users. If the "user" restriction is given, then expression is a user-expression specifying to which users the rule applies. Similarly for the "group" restriction. For the "class" restriction, the expression is simply the name of connection class for whom the rule will apply. If no matching user, group, or class expression is found for the current user (in that order), then a limit with no expression (ie no "user", "group", or "class" identifier) is applied.

See Also: MaxRetrieveFileSize

## See also

## Examples

```
# Restrict upload to only 3 megabytes
MaxStoreFileSize 3 Mb
```

## Configuration Directive List

```
# Restrict anonymous uploads to 50k, but allow unlimited upload size for  
# everyone else  
MaxStoreFileSize 50 Kb user anonymous  
MaxStoreFileSize *
```

# MultilineRFC2228

## Name

MultilineRFC2228 -- Enable RFC2228 multiline response mode

## Synopsis

**MultilineRFC2228** [`MultilineRFC2228 on|off`]

Default

MultilineRFC2228 off

Context

server config

Module

mod\_core

Compatibility

1.2.0pre3 and later

## Description

By default, proftpd sends multiline responses as per RFC 959, i.e.: 200-First line More lines... 200 Last line RFC 2228 specifies that "6xy" response codes will be sent as follows: 600-First line 600-More lines... 600 Last line Note that 2228 ONLY specifies this for response codes starting with '6'. Enabling this directive causes ALL responses to be sent in this format, which may be more compatible with certain web browsers and clients. Also note that this is NOT the same as wu-ftp's multiline responses, which do not comply with any RFC. Using this method of multilines is more likely to be compatible with all clients, although it isn't strictly RFC, and is thus not enabled by default.

## See also

## Examples

# Order

## Name

Order -- Configures the precedence of the Limit directives

## Synopsis

**Order** [ Order allow,deny|deny,allow]

Default

Order allow,deny

Context

<Limit>

Module

mod\_core

Compatibility

0.99.0pl6 and later

## Description

The Order directive configures the order in which Allow and Deny directives are checked inside of a <Limit> block. Because Allow directives are permissive, and Deny directives restrictive, the order in which they are examined can significantly alter the way security functions. If the default setting of allow,deny is used, "allowed" access permissions are checked first. If an Allow directive explicitly allows access to the <Limit> context, access is granted and any Deny directives are never checked. If Allow did not explicitly permit access, Deny directives are checked. If any Deny directive applies, access is explicitly denied. Otherwise, access is granted. When deny,allow is used, "deny" access restrictions are checked first. If any restriction applies, access is denied immediately. If nothing is denied, Allow permissions are checked. If an Allow explicitly permits access, access to the entire context is permitted; otherwise access is implicitly denied. For clarification, the following illustrates the steps used when checking Allow/Deny access: Order allow,deny Check Allow directives. If one or more apply, exit with result: ALLOW Check Deny directives. If one or more apply, exit with result: DENY Exit with default implicit ALLOW Order deny,allow Check Deny directives. If one or more apply, exit with result: DENY Check Allow directives. If one or more apply, exit with result: ALLOW Exit with default implicit: DENY

## See also

## Examples

# PassivePorts

## Name

PassivePorts -- Specify the ftp-data port range to be used

## Synopsis

**PassivePorts** [*PassivePorts* min-pasv-port max-pasv-port]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.0rc2 and later

## Description

PassivePorts restricts the range of ports from which the server will select when sent the PASV command from a client. The server will randomly choose a number from within the specified range until an open port is found. Should no open ports be found within the given range, the server will default to a normal kernel-assigned port, and a message logged.

The port range selected must be in the non-privileged range (eg. greater than or equal to 1024); it is **STRONGLY RECOMMENDED** that the chosen range be large enough to handle many simultaneous passive connections (for example, 49152-65534, the IANA-registered ephemeral port range).

## See also

## Examples

```
# Use the IANA registered ephemeral port range
PassivePorts 49152 65534
```

# PathAllowFilter

## Name

PathAllowFilter -- Only allow new files which match a specified pattern

## Synopsis

**PathAllowFilter** [PathAllowFilter regular-expression]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>, <Directory>, .ftpaccess

Module

mod\_core

Compatibility

1.1.7 and later

## Description

PathAllowFilter allows the configuration of a regular expression that must be matched for all newly uploaded (stored) files. The regular expression is applied against the entire pathname specified by the client, so care must be taken when creating a proper regex. Paths that fail the regex match result in a "Forbidden filename" error being returned to the client. If the regular-expression argument contains whitespace, it must be enclosed in quotes.

## See also

[PathDenyFilter](#)

## Examples

```
# Only allow a-z 0-9 . - _ in file names,  
PathAllowFilter ^[a-z0-9._-]+$
```

```
# as above but with upper case characters as well  
PathAllowFilter ^[A-Za-z0-9._-]+$
```

# PathDenyFilter

## Name

PathDenyFilter -- Disallow new files which match a specified pattern

## Synopsis

**PathDenyFilter** [ PathDenyFilter regular-expression]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>, <Directory>, .ftpaccess

Module

mod\_core

Compatibility

1.1.7 and later

## Description

Similar to PathAllowFilter, PathDenyFilter specifies a regular expression which must not match any uploaded pathnames. If the regex does match, a "Forbidden filename" error is returned to the client. This can be especially useful for forbidding .ftpaccess or .htaccess files.

## See also

[PathAllowFilter](#)

## Examples

```
# We don't want .ftpaccess or .htaccess files to be uploaded
PathDenyFilter "(\\.ftpaccess|\\.htaccess)$"
```



# PersistentPasswd

## Name

PersistentPasswd -- Sets handling of unix auth files

## Synopsis

**PersistentPasswd** [`PersistentPasswd on|off`]

Default

Platform dependent

Context

server config

Module

mod\_auth\_unix

Compatibility

1.1.5 and later

## Description

The `PersistentPasswd` directive controls how `proftpd` handles authentication, user/group lookups, and user/group to name mapping. If set to "on", `proftpd` will attempt to open the system-wide `/etc/passwd`, `/etc/group` (and `/etc/shadow`, potentially) files itself, holding them open even during a `chroot()`ed login. Note that `/etc/shadow` is never held open, for security reasons). On some platforms, you must turn this option on, as the `libc` functions are incapable of accessing these databases from inside of a `chroot()`. At configure-time, the configuration script will attempt to detect whether or not you need this support, and make it the default. However, such "guessing" may fail, and you will have to manually enable or disable the feature. If you cannot see user or group names when performing a directory listing inside an anonymous `chrooted` login, this indicates you must enable the directive. Use of the `AuthUserFile` or `AuthGroupFile` directives will force partial support for persistent user or group database files, regardless of `PersistentPasswd`'s setting.

Note: NIS/NIS+ and NSS users will most likely want to disable this feature, regardless of `proftpd`'s detected configuration defaults. Failure to disable this will make your NIS/NIS+ maps and NSS lookups not work! On certain systems, you may also need to compile `ProFTPD` with the `--enable-autoshadow` option in order to authenticate both users from NIS maps or NSS lookups, and local users.

## See also

## Examples

# PidFile

## Name

PidFile -- Set the filepath to hold the pid of the master server

## Synopsis

**PidFile** [PidFile filename]

Default

none

Context

server config, <Global>

Module

mod\_core

Compatibility

1.2.0rc2 and later

## Description

The PidFile directive sets the file to which the server records the process id of the daemon. The filename should be relative to the system root, ie /var/run/proftpd/pidfile. The PidFile is only used in standalone mode. It is often useful to be able to send the server a signal, so that it closes and then reopens its ErrorLog and TransferLog, and re-reads its configuration files. This is done by sending a SIGHUP (kill -1) signal to the process id of the master daemon listed in the PidFile.

## See also

## Examples

# Port

## Name

Port -- Set the port for the control socket

## Synopsis

**Port** [Port port-number]

Default

Port 21

Context

server config, <VirtualHost>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The Port directive configures the TCP port which proftpd will listen on while running in standalone mode. It has no effect when used upon a server running in inetd mode (see ServerType). The directive can be used in conjunction with <VirtualHost> in order to run a virtual server on the same IP address as the master server, but listening on a different port.

For any server, either <VirtualHost> or server config, setting Port 0 effectively turns off that server.

## See also

## Examples

# RadiusAcctServer

## Name

RadiusAcctServer -- Setup RADIUS accounting details

## Synopsis

**RadiusAcctServer** [ server[:port] shared-secret [timeout]]

Default

none

Context

server config, <Global>, <VirtualHost>

Module

mod\_radius

Compatibility

1.2.7rc1 and later

## Description

The RadiusAcctServer is used to specify a RADIUS server to be used for accounting. The server parameter may be either an IP address or a DNS hostname. If not specified, the port used will be the IANA-registered 1813. The optional timeout parameter is used to tell mod\_radius how long to wait for a response from the server; it defaults to 30 seconds.

Multiple RadiusAcctServers may be configured; each will be tried, in order of appearance in the configuration file, until that server times out or mod\_radius receives a response.

If no RadiusAcctServers are configured, mod\_radius will not use RADIUS for accounting.

## See also

[RadiusAuthServer](#)

# RadiusAuthServer

## Name

RadiusAuthServer -- Setup RADIUS authenticator details

## Synopsis

**RadiusAuthServer** [server[:port] shared-secret [timeout]]

Default

none

Context

server config, <Global>, <VirtualHost>

Module

mod\_radius

Compatibility

1.2.7rc1 and later

## Description

The RadiusAcctServer is used to specify a RADIUS server to be used for accounting. The server parameter may be either an IP address or a DNS hostname. If not specified, the port used will be the IANA-registered 1813. The optional timeout parameter is used to tell mod\_radius how long to wait for a response from the server; it defaults to 30 seconds.

Multiple RadiusAcctServers may be configured; each will be tried, in order of appearance in the configuration file, until that server times out or mod\_radius receives a response.

If no RadiusAcctServers are configured, mod\_radius will not use RADIUS for accounting.

## See also

[RadiusAuthServer](#)

# RadiusEngine

## Name

RadiusEngine -- Enable RADIUS support

## Synopsis

**RadiusEngine** [ on | off ]

Default

off

Context

server config, <Global>, <VirtualHost>

Module

mod\_radius

Compatibility

1.2.7rc1 and later

## Description

The RadiusEngine directive enables or disables the module's runtime RADIUS engine. If it is set to off this module does no RADIUS authentication or accounting at all. Use this directive to disable the module instead of commenting out all mod\_radius directives.

## See also

# RadiusLog

## Name

RadiusLog -- Specify the logfile for reporting / debugging

## Synopsis

**RadiusLog** [ "file" | none]

```
Default
    none
Context
    server config, <Global>, <VirtualHost>
Module
    mod_radius
Compatibility
    1.2.7rc1 and later
```

## Description

The RadiusLog directive is used to specify a log file for mod\_radius reporting and debugging, and can be done on a per-server basis. The file parameter must be the full path to the file to use for logging. Note that this path must not be to a world-writeable directory and, unless AllowLogSymlinks is explicitly set to on (generally a bad idea), the path must not be a symbolic link.

If file is "none", no logging will be done at all; this setting can be used to override a RadiusLog setting inherited from a <Global> context.

## See also

# RadiusRealm

## Name

RadiusRealm -- Setup the authentication realm

## Synopsis

**RadiusRealm** [ *realm*]

Default

none

Context

server config, <Global>, <VirtualHost>

Module

mod\_radius

Compatibility

1.2.7rc1 and later

## Description

The RadiusRealm directive configures a realm string that will be added to the username in the constructed RADIUS packets.

## See also

## Examples

RadiusRealm .castaglia.org



# RadiusUserInfo

## Name

RadiusUserInfo -- Configure login information via RADIUS

## Synopsis

**RadiusUserInfo** [uid gid home shell [suppl-group-names suppl-group-ids]]

Default

none

Context

server config, <Global>, <VirtualHost>

Module

mod\_radius

Compatibility

1.2.7rc1 and later

## Description

The RadiusUserInfo directive is used to configure login information used for every user authenticated via RADIUS. The optional suppl-group-names and suppl-group-ids parameters are used to specify supplemental group membership for each user; the number of names and IDs must match if these parameters are used.

In order to support RADIUS servers that may use custom attributes in their Access-Accept response packets to supply user information back to the RADIUS client (mod\_radius in this case), this directive allows the following syntax for some of its parameters:

\$(attribute-id:default-value)

where the enclosing \$() signals that the parameter is to be supplied by the RADIUS server, attribute-id is the custom attribute ID for which to search in the response packet, and default-value is the value to use in case the requested attribute is not present in the response packet. This syntax is not supported for the suppl-group-names or suppl-group-ids parameters.

If RadiusUserInfo is not used, mod\_radius will perform pure "yes/no" authentication only, in the style of PAM. The information that would have been configured via this directive will be pulled from other sources (e.g. /etc/passwd, AuthUserFiles, MySQL tables, etc).

## See also

# RatioFile

## Name

RatioFile -- Ratio directive

## Synopsis

**RatioFile** [RatioFile foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The RatioFile directive .... Example: RatioFile

## See also

## Examples

# Ratios

## Name

Ratios -- (docs incomplete)

## Synopsis

**Ratios** [**Ratios** foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The Ratios directive .... Example: Ratios

## See also

## Examples

# RatioTempFile

## Name

RatioTempFile -- Ratio directive

## Synopsis

**RatioTempFile** [**RatioTempFile** foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The RatioTempFile directive .... Example: RatioTempFile

## See also

## Examples

# RequireValidShell

## Name

RequireValidShell -- Allow connections based on /etc/shells

## Synopsis

**RequireValidShell** [ RequireValidShell on|off]

Default

RequireValidShell on

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

0.99.0 and later

## Description

The RequireValidShell directive configures the server, virtual host or anonymous login to allow or deny logins which do not have a shell binary listed in /etc/shells. By default, proftpd disallows logins if the user's default shell is not listed in /etc/shells. If /etc/shells cannot be found, all default shells are assumed to be valid.

## See also

## Examples

# RewriteCondition

## Name

RewriteCondition -- Define a rule condition

## Synopsis

**RewriteCondition** [ condition pattern]

Default

None

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Directory>

Module

mod\_rewrite

Compatibility

1.2.6rc1 and later

## Description

The RewriteCondition directive defines a rule condition. Precede a [RewriteRule](#) directive with one or more RewriteCondition directives. The following rewriting rule is only used if its pattern matches the current state of the FTP command and if these additional conditions apply too.

Condition is a string which can contain the following expanded constructs in addition to plain text:

- **RewriteRule backreferences**

These are backreferences of the form:

**\$N**

(0 <= N <= 9) which provide access to the grouped parts (parentheses!) of the pattern from the corresponding RewriteRule directive (the one following the current bunch of RewriteCondition directives). Note that \$0 will refer back to the entire original string being matched.

- **RewriteCondition backreferences**

These are backreferences of the form:

**%N**

(0 <= N <= 9) which provide access to the grouped parts (parentheses!) of the pattern from the previous RewriteCondition attached to this RewriteRule.

- **RewriteMap expansions:**

These are expansions of the form:

**`${map-name:lookup-key|default-value}`**

See the documentation for [RewriteMap](#) for more details.

- **Variable substitutions:**

These are substitutions of the form:

- ◆ **%a** client IP address
- ◆ **%c** name of Class for current session
- ◆ **%f** filename
- ◆ **%F** transfer path, as seen by the client (only useful for upload/download commands)
- ◆ **%g** primary group of authenticated user
- ◆ **%G** supplemental groups of authenticated user
- ◆ **%h** client DNS name
- ◆ **%m** FTP command
- ◆ **%p** port of server handling the session
- ◆ **%u** name of authenticated user
- ◆ **%U** name of user sent by client via USER
- ◆ **%v** ServerName of server handling the session

Pattern is the condition pattern, i.e., a regular expression which is applied to the current instance of the condition, i.e., condition is evaluated and then matched against pattern. You can prefix the pattern string with a '!' character (exclamation mark) to specify a non-matching pattern.

## See also

[RewriteRule](#) [RewriteMap](#)

## Examples



# RewriteEngine

## Name

RewriteEngine -- Enable/disable mod\_rewrite

## Synopsis

**RewriteEngine** [ on | off ]

Default

off

Context

server config, <Global>, <VirtualHost>

Module

mod\_rewrite

Compatibility

1.2.6rc1 and later

## Description

The RewriteEngine directive enables or disables the module's runtime rewriting engine. If it is set to off this module does no parsing or rewriting at all. Use this directive to disable the module instead of commenting out all mod\_rewrite directives.

## See also

# RewriteLock

## Name

RewriteLock -- Set the filename for synchronization lockfile

## Synopsis

**RewriteLock** [ filename]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_rewrite

Compatibility

1.2.6rc1 and later

## Description

The RewriteLock directive sets the filename for a synchronization lockfile which mod\_rewrite needs to communicate with RewriteMaps of type fifo. Set file to a local absolute path (not on a NFS-mounted device) when you want to use a rewriting FIFO. It is not required for other types of rewriting maps.

## See also

# RewriteLog

## Name

RewriteLog -- Specify a log file for mod\_rewrite reporting

## Synopsis

**RewriteLog** [ file | "none" ]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_rewrite

Compatibility

1.2.6rc1 and later

## Description

The RewriteLog directive is used to specify a log file for mod\_rewrite reporting and debugging, and can be done on a per-server basis. The file parameter must be the full path to the file to use for logging. Note that this path must **not** be to a world-writeable directory and, unless AllowLogSymlinks is explicitly set to on (generally a bad idea), the path must **not** be a symbolic link. In general, this directive should only be used for debugging your mod\_rewrite configuration, and should be removed once debugging is completed; **do not use this directive in a production configuration.**

If file is "none", no logging will be done at all; this setting can be used to override a RewriteLog setting inherited from a <Global> context.

## See also

# RewriteMap

## Name

RewriteMap -- Define a rewrite map

## Synopsis

**RewriteMap** [ map-name map-type:map-source]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_rewrite

Compatibility

1.2.6rc1 and later

## Description

The RewriteMap directive defines a rewriting map which can be used inside rule substitution strings by the mapping-functions to insert/substitute fields through a key lookup. The source of this lookup can be of various types.

The map-name is the name of the map and will be used to specify a mapping-function for the substitution strings of a rewriting rule via one of the following constructs:

**`${ map-name : lookup-key }`**

**`${ map-name : lookup-key | default-value }`**

When such a construct occurs the map map-name is consulted and the key lookup-key is resolved. If the key is found, the map-function construct is substituted by subst-value. If the key is not found then it is substituted by default-value or by the empty string if no default-value was specified.

The following combinations for map-type and map-src can be used:

- **Standard Plain Text**

map-type: txt, map-src: Unix filesystem path to valid regular file.

This is the standard rewriting map feature where the map-src is a plain ASCII file containing either blank lines, comment lines (starting with a '#' character) or pairs like the following - one per line.

**matching-key subst-value**

### Example 1-1. Example Usermap

```
# -----
# usermap.txt -- map for rewriting user names
# -----

Dave.Admin      dave      # The Uber-admin
root            anonymous  # no one should be logging in as root anyway
```

And, to configure this map to be used:

```
RewriteMap real-to-user txt:/path/to/file/usermap.txt
```

### • FIFO/Named Pipe

map-type: fifo, map-src: Unix filesystem path to valid FIFO.

For this rewriting map, map-src is a FIFO (a.k.a. named pipe). To create it, you can use the `mkfifo(1)` command. An external program that opens the FIFO for reading and writing **must** be started before `proftpd` is started. This program can communicate with the rewriting engine via the FIFO. For each mapping lookup, it can read the key to lookup as a newline-terminated string from the FIFO. It then has to write back to the FIFO the looked-up value as a newline-terminated string, or just simply newline character (denoting an empty string) if there is no corresponding value for the given key).

An example program which will implement a 1:1 mapping (i.e., key == value) could be:

### Example 1-2. Example FIFO/Named Pipe 1:1 mapping

```
#!/usr/bin/perl
use strict;

use File::Basename qw(basename);
use Getopt::Long;
use IO::Handle;
use IO::Select;

my $default_delay = 0.5;
my $program = basename($0);
my %opts = ();

GetOptions(\%opts, 'delay=f', 'fifo=s', 'help', 'verbose');

usage() if $opts{'help'};

my $delay = $opts{'delay'} ? $opts{'delay'} : $default_delay;

die "$program: missing required --fifo parameter\n" unless $opts{'fifo'};
my $fifo = $opts{'fifo'};

my $verbose = $opts{'verbose'} ? 1 : 0;

open(my $fifo_fh, "+> $fifo") or die "$program: unable to open $fifo: $!\n";

# Instantiate a Select object for knowing when to read from and write to
# the FIFO.
my $sel = IO::Select->new();
```

## Configuration Directive List

```
while (1) {

    # Blocking select() for reading.
    $sel->add($fifo_fh);

    print STDERR "$program: selecting for reading\n" if $verbose;
    my ($rfh) = $sel->can_read();

    my $key = <$rfh>;
    print STDERR "$program: read '$key'\n" if $verbose;

    # Lookup a value for the given key.
    my $value = lookup_value($key);

    # Clear the Select object's filehandles.
    $sel->remove();

    print $fifo_fh "$value\n" if $verbose;
    $fifo_fh->flush();

    print STDERR "$program: wrote '$value'\n" if $verbose;

    # Wait for the buffer's byte to be cleared before reading again.
    wait_fifo($fifo_fh);
}

close($fifo_fh);
print STDOUT "$program: done\n" if $verbose;

exit 0;

# -----
sub lookup_value {
    my ($key) = @_;

    # NOTE: do something to obtain a value for the given key here.
    chomp(my $value = $key);

    return $value;
}

# -----
sub usage {
    print STDOUT <<END_OF_USAGE;

usage: $program [options]

    --delay          Configure the buffer check delay.
                     The default is $default_delay seconds.

    --fifo           Configure the path to the FIFO.  Required.

    --help           Displays this message.

    --verbose        Enables verbose output while $program runs.

END_OF_USAGE

    exit 0;
}
```

## Configuration Directive List

```
# -----
sub wait_fifo {
    my ($fh) = @_;

    # Now we get tricky. Use ioctl(2) to poll the number of bytes to
    # be read from the FIFO filehandle. When the number drops to zero,
    # it means that the data we just wrote has been read from the buffer
    # by some other process, so we can go back to the top of this loop.
    # Otherwise, if this program loops faster than the reader/writer on
    # the other end of the FIFO, we'd end up reading the data we just
    # wrote. Quite annoying, actually.
    #
    # Note: this value must be manually extracted from the system header files
    # using the following program:
    #
    # ----- fionread.c -----
    # #include <sys/ioctl.h>
    #
    # int main(int argc, char *argv[]) {
    #     printf("%#08x\n", FIONREAD);
    #     return 0;
    # }
    # -----
    #
    # > cc -o fionread fionread.c
    # > ./fionread

    my $FIONREAD = 0x00541b;

    my $size = pack('L', 0);
    ioctl($fh, $FIONREAD, $size) or die "$program: unable to use ioctl: $!\n";
    $size = unpack('L', $size);

    while ($size != 0) {
        print STDERR "$program: waiting for buffer to be read\n" if $verbose;
        select(undef, undef, undef, $delay);

        $size = pack('L', 0);
        ioctl($fh, $FIONREAD, $size) or die "$program: unable to use ioctl: $!\n";
        $size = unpack('L', $size);
    }
}
```

To make use of this example script, simply implement your lookup code in the `lookup_value()` subroutine. Be very careful with such scripts, though:

1. "Keep it simple, stupid" (KISS), because if this program hangs it will hang `proftpd` when the rule occurs. Well, keep it as simple as possible...
2. Avoid one common mistake: avoid buffered I/O if possible. This can cause a deadlock. If necessary, be sure to flush the filehandle before reading, and after writing.
3. Use the `RewriteLock` directive to define a lockfile `mod_rewrite` can use to synchronize the communication to the FIFO program. By default no such synchronization takes place.

### • Internal Function

`map-type`: int, `map-src`: Internal `mod_rewrite` function.

## Configuration Directive List

Here the map-src is a mod\_rewrite built-in function. Currently you cannot create your own, but the following functions already exist:

- ◆ **toupper**

Converts the looked up key to all upper case.

- ◆ **tolower**

Converts the looked up key to all lower case.

- ◆ **unescape**

Translates hex-encodings in the looked up key back to special characters.

- ◆ **utf8trans**

Translates UTF-8 encodings in the lookup up key into Latin-1 characters.

The RewriteMap directive can occur more than once. For each mapping-function use one RewriteMap directive to declare its rewriting map name.

**Note:** For plain text files the looked-up keys are cached in-core until the mtime of the text map file changes or the server does a restart. This way you can have map-functions in rules which are used for **every** request. This is no problem, because the parsing of the text files only happens once!

## See also

[RewriteCondition](#)



# RewriteRule

## Name

RewriteRule -- Define a rewrite rule

## Synopsis

**RewriteRule** [pattern substitution]

Default

None

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Directory>

Module

mod\_rewrite

Compatibility

1.2.6rc1 and later

## Description

The RewriteRule directive is the real rewriting workhorse. The configuration directive can occur more than once. Each directive defines a single rewriting rule. The order of definition of these rules is important, because this order is used when applying the rules at run-time.

Pattern can be POSIX regular expression which gets applied to the current FTP command argument(s).

Some hints about the syntax of regular expressions:

- **Text:**

.	Any single character
[chars]	Character class: one of chars
[^chars]	Character class: none of chars
text1 text2	Alternative: text1 or text2

- **Quantifiers:**

?	0 or 1 of the preceding text
*	0 or N of the preceding text (N > 0)
+	1 or N of the preceding text (N > 1)

- **Grouping:**

(text)	Grouping of text
	(either to set the borders of an alternative or for making backreferences where the Nth group can be used on the RHS of a RewriteRule with \$N)

- **Anchors:**

## Configuration Directive List

<code>^</code>	Start of line anchor
<code>\$</code>	End of line anchor

### • Escaping:

<code>\char</code>	Escape that particular char (for instance to specify the chars <code>".[]()"</code> etc.)
--------------------	--

For more information about regular expressions have a look at your local `regex(3)` manpage. If you are interested in more detailed information about regular expressions and their variants (POSIX regex, Perl regex, etc.) have a look at the following dedicated book on this topic:

Mastering Regular Expressions Jeffrey E.F. Friedl Nutshell Handbook Series O'Reilly & Associates, Inc.  
1997 ISBN 1-56592-257-3

Additionally in `mod_rewrite` the NOT character (!) is a possible pattern prefix. This gives you the ability to negate a pattern; to say, for instance: "if the current argument(s) does NOT match this pattern". This can be used for exceptional cases, where it is easier to match the negative pattern, or as a last default rule.

**Notice:** When using the NOT character to negate a pattern you cannot have grouped wildcard parts in the pattern. This is impossible because when the pattern does NOT match, there are no contents for the groups. In consequence, if negated patterns are used, you cannot use `$N` in the substitution string.

Substitution of a rewriting rule is the string which is substituted for (or replaces) the original argument(s) for which pattern matched. Beside plain text you can use:

1. `$N` backreferences to the RewriteRule pattern
2. `%N` backreferences to the last matched RewriteCondition pattern
3. variables as in RewriteCondition test strings
4. map function calls (`${map-name:lookup-key|default-value}`)

Backreferences are `$N` (`N=0..9`) identifiers which will be replaced by the contents of the `N`th group of the matched pattern. The variables are the same as for the condition of a [RewriteCondition](#) directive, with two additions:

- `%P` process ID
- `%t` Unix time since the epoch, in seconds

The map functions come from the [RewriteMap](#) directive and are explained there. These four types of variables are expanded in the order of the above list.

All of the rewriting rules are applied to substitution. The command argument(s) is completely replaced by the substitution.

## See also

[RewriteCondition](#) [RewriteMap](#)

## Examples

# RLimitCPU

## Name

RLimitCPU -- Configure the maximum CPU time in seconds used by a process

## Synopsis

```
RLimitCPU [ RLimitCPU [ "daemon" | "session" | "none" ] soft-limit | "max"
[hard-limit | "max"] ]
```

Default

System defaults

Context

server config

Module

mod\_core

Compatibility

1.2.1rc1 and later

## Description

RLimitCPU takes from one to three parameters. The first parameter may be one of "daemon" (applies the limit only to the daemon process), "session" (applies the limit only to child processes handling each FTP session), or "none" (disables any possibly inherited limits). Note that if "daemon" is used, the directive may then only occur in the "server config" context. If none of these keywords are used, the limit is assumed to apply to both daemon and session processes. After any potential keyword, the resource limit must be set. The next parameter is also optional, and sets the maximum resource limit. Either limit parameter can be a number, or "max" to indicate to the server that the limit should be set to the maximum allowed by the operating system.

CPU resource limits are expressed in seconds per process.

## See Also:

[RLimitMemory](#), [RLimitOpenFiles](#)

## Examples

# RLimitMemory

## Name

RLimitMemory -- Configure the maximum memory in bytes used by a process

## Synopsis

```
RLimitMemory [ RLimitMemory ["daemon"|"session"|"none"]  
soft-limit[units]|"max" [hard-limit[units]|"max"] ]
```

Default

None

Context

server config

Module

mod\_core

Compatibility

1.2.1rc1 and later

## Description

RLimitMemory takes from one to three parameters. The first parameter may be one of "daemon" (applies the limit only to the daemon process), "session" (applies the limit only to child processes handling each FTP session), or "none" (disables any possibly inherited limits). Note that if "daemon" is used, the directive may then only occur in the "server config" context. If none of these keywords are used, the limit is assumed to apply to both daemon and session processes. After any potential keyword, the resource limit must be set. The next parameter is also optional, and sets the maximum resource limit. Either limit parameter can be a number, or "max" to indicate to the server that the limit should be set to the maximum allowed by the operating system.

Memory resource limits are expressed in bytes per process. An optional case-insensitive units specifier may follow the number of bytes given: G (Gigabytes), M (Megabytes), K (Kilobytes), or B (bytes). If the units specifier is used, the given number of bytes is multiplied by the appropriate factor.

## See Also

RLimitCPU, RLimitOpenFiles

# RLimitOpenFiles

## Name

RLimitOpenFiles -- Configure the maximum number of open files used by a process

## Synopsis

```
RLimitOpenFiles [ RLimitOpenFiles [ "daemon" | "session" | "none" ]  
soft-limit | "max" [ hard-limit | "max" ] ]
```

Default

None

Context

server config

Module

mod\_core

Compatibility

1.2.1rc1 and later

## Description

RLimitOpenFiles takes from one to three parameters. The first parameter may be one of "daemon" (applies the limit only to the daemon process), "session" (applies the limit only to child processes handling each FTP session), or "none" (disables any possibly inherited limits). Note that if "daemon" is used, the directive may then only occur in the "server config" context. If none of these keywords are used, the limit is assumed to apply to both daemon and session processes. After any potential keyword, the resource limit must be set. The next parameter is also optional, and sets the maximum resource limit. Either limit parameter can be a number, or "max" to indicate to the server that the limit should be set to the maximum allowed by the operating system.

File resource limits are expressed in number of files per process.

## See Also:

RLimitCPU, RLimitMemory

# RootLogin

## Name

RootLogin -- Permit root user logins

## Synopsis

**RootLogin** [ RootLogin on|off]

Default

RootLogin off

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

1.1.5 and later

## Description

Normally, proftpd disallows root logins under any circumstance. If a client attempts to login as root, using the correct password, a special security message is sent to syslog. When the RootLogin directive is turned On, the root user may authenticate just as any other user could (assuming no other access control measures deny access); however the root login security message is still syslogged. Obviously, extreme care should be taken when using this directive.

The use of RootLogin in the Anonymous context is only valid when the User / Group defined in the Anonymous block is set to 'root'

## See also

## Examples

# RootRevoke

## Name

RootRevoke -- Drop root privileges completely

## Synopsis

**RootRevoke** [`RootRevoke on|off`]

Default

RootRevoke off

Context

server config, <VirtualHost>, <Global>, <Anonymous>

Module

mod\_auth

Compatibility

1.2.9rc1 and later

## Description

The RootRevoke directive causes all root privileges to be dropped once a user is authenticated. This will also cause active transfers to be disabled, if the server is listening on a port less than 1025. Note that this only affects active transfers; passive transfers will not be blocked.

## See also

## Examples



# SaveRatios

## Name

SaveRatios -- FIXME FIXME

## Synopsis

**SaveRatios** [ SaveRatios foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpaccess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The SaveRatios directive .... Example: SaveRatios

## See also

## Examples

# ScoreboardFile

## Name

ScoreboardFile -- Sets the name and path of the scoreboard file

## Synopsis

**ScoreboardFile** [ path ]

Default

ScoreboardFile /usr/local/var/proftpd.scoreboard

Context

server config

Module

mod\_core

Compatibility

1.2.7rc1 and later

## Description

The ScoreboardFile directive sets the path to the file where the daemon will store its run-time "scoreboard" session information. This file is necessary for MaxClients to work properly, as well as other utilities (such as ftpwho and ftpcount). Note that the directory containing the scoreboard cannot be world-writable.

This directive deprecates ScoreboardPath.

## See also

## Examples

ScoreboardFile /var/run/proftpd.scoreboard

# ServerAdmin

## Name

ServerAdmin -- Set the address for the server admin

## Synopsis

**ServerAdmin** [ ServerAdmin "admin-email-address"]

Default

ServerAdmin root@[ServerName]

Context

server config, <VirtualHost>

Module

mod\_core

Compatibility

0.99.0pl10 and later

## Description

The ServerAdmin directive sets the email address of the administrator for the server or virtualhost. This address is displayed in magic cookie replacements (see DisplayLogin and DisplayFirstChdir).

## See also

## Examples

# ServerIdent

## Name

ServerIdent -- Set the message displayed on connect

## Synopsis

**ServerIdent** [ ServerIdent off|on [identification string]]

Default

ServerIdent on "ProFTPD [version] Server (server name) [hostname]"

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.0pre2 and later

## Description

The ServerIdent directive sets the default message displayed when a new client connects. Setting this to off displays "[hostname] FTP server ready." If set to on, the directive can take an optional string argument, which will be displayed instead of the default text. Sites desiring to give out minimal information will probably want a setting like ServerIdent on "FTP Server ready.", which won't even reveal the hostname.

## See also

## Examples

ServerIdent on "Welcome to ftp.linux.co.uk"

# ServerLog

## Name

ServerLog -- Configure logs on a per-server basis

## Synopsis

**ServerLog** [ path]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_log

Compatibility

1.2.8rc1 and later

## Description

The ServerLog directive disables the daemon's use of the syslog mechanism and instead redirects all logging output for the server to the specified filename. The filename argument must contain an absolute path. Use of this directive overrides any facility set by the SyslogFacility directive, as well as overriding any configured SystemLog.

# ServerName

## Name

ServerName -- Configure the name displayed to connecting users

## Synopsis

**ServerName** [ ServerName "name" ]

Default

ServerName "ProFTPD Server [version]"

Context

server config, <VirtualHost>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The ServerName directive configures the string that will be displayed to a user connecting to the server (or virtual server if the directive is located in a <VirtualHost> block). See Also: <VirtualHost>

## See also

## Examples

# ServerType

## Name

ServerType -- Set the mode proftpd runs in

## Synopsis

**ServerType** [ServerType type-identifier]

Default

ServerType standalone

Context

server config

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The ServerType directive configures the server daemon's operating mode. The type-identifier can be one of two values: inetd The daemon will expect to be run from the inetd "super server." New connections are passed from inetd to proftpd and serviced immediately. standalone The daemon starts and begins listening to the configured port for incoming connections. New connections result in spawned child processes dedicated to servicing all requests from the newly connected client.

## See also

## Examples

# SetEnv

## Name

SetEnv -- (docs incomplete)

## Synopsis

**SetEnv** [key value]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.10rc1 and later

## Description

(docs incomplete)

## See also

## Examples

(docs incomplete)



# ShowSymlinks

## Name

ShowSymlinks -- Toggle the display of symlinks

## Synopsis

**ShowSymlinks** [ ShowSymlinks on|off]

Default

(versions 1.1.5 and beyond) ShowSymlinks On

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_ls

Compatibility

## Description

Compatibility: 0.99.0pl6 and later Symbolic links (if supported on the host OS and filesystem) can be either shown in directory listings (including the target of the link) or can be "hidden" (proftpd dereferences symlinks and reports the target's permissions and ownership). The default behavior is to show all symbolic links when normal users are logged in, and hide them for anonymous sessions. If a symbolic link cannot be dereferenced for any reason (permissions, target does not exist, etc) and ShowSymlinks is off, proftpd displays the link as a directory entry of type 'l' (link) with the ownership and permissions of the actual link. Under ProFTPD versions 1.1.5 and higher, the default behavior in regard to ShowSymlinks has been changed so that symbolic links are always displayed as such (in all cases), unless ShowSymlinks off is explicitly set.

## See also

## Examples

# SocketBindTight

## Name

SocketBindTight -- Controls how TCP/IP sockets are created

## Synopsis

**SocketBindTight** [ SocketBindTight on|off]

Default

SocketBindTight off

Context

server config

Module

mod\_core

Compatibility

0.99.0p16 and later

## Description

The SocketBindTight directive controls how proftpd creates and binds its initial tcp listen sockets in standalone mode (see ServerType). The directive has no effect upon servers running in inetd mode, because listen sockets are not needed or created. When SocketBindTight is set to off (the default), a single listening socket is created for each port that the server must listen on, regardless of the number of IP addresses being used by <VirtualHost> configurations. This has the benefit of typically requiring a relatively small number of file descriptors for the master daemon process, even if a large number of virtual servers are configured. If SocketBindTight is set to on, a listen socket is created and bound to a specific IP address for the master server and all configured virtual servers. This allows for situations where an administrator may wish to have a particular port be used by both proftpd (on one IP address) and another daemon (on a different IP address). The drawback is that considerably more file descriptors will be required if a large number of virtual servers must be supported. Example: Two servers have been configured (one master and one virtual), with the IP addresses 10.0.0.1 and 10.0.0.2, respectively. The 10.0.0.1 server runs on port 21, while 10.0.0.2 runs on port 2001. SocketBindTight off #default # proftpd creates two sockets, both bound to ALL available addresses. # one socket listens on port 21, the other on 2001. Because each socket is # bound to all available addresses, no other daemon or user process will be # allowed to bind to ports 21 or 2001. ... SocketBindTight on # proftpd creates two sockets again, however one is bound to 10.0.0.1, port 21 # and the other to 10.0.0.2, port 2001. Because these sockets are "tightly" # bound to IP addresses, port 21 can be reused on any address OTHER than # 10.0.0.1, and visa-versa with 10.0.0.2, port 2001. One side-effect of setting SocketBindTight to on is that connections to non-bound addresses will result in a "connection refused" message rather than the typical "500 Sorry, no server available to handle request on xxx.xxx.xxx.xxx.", due to the fact that no listen socket has been bound to the particular address/port pair. This may or may not be aesthetically desirable, depending on your circumstances.

**See also**

**Examples**

# SocketOptions

## Name

SocketOptions -- Tune socket-level options

## Synopsis

**SocketOptions** [ [maxseg <size>] [rcvbuf <size>] [sndbuf <size>]]

Default

None

Context

"server config", <VirtualHost>

Module

mod\_core

Compatibility

1.2.9rc1 and later

## Description

The rcvbuf and sndbuf parameters are used for setting the TCP send/receive window sizes. The maxseg parameter is used for setting a MSS (Maximum Segment Size) via setsockopt(2)'s TCP\_MAXSEG option. If the MSS is larger than the interface's MTU, it is ignored and has no effect.

If the send/receive window size is increased, it is helpful for performance to increase the internal buffer size. See the --enable-buffer-size argument to ./configure.

# SQLAuthenticate

## Name

SQLAuthenticate -- Specify authentication methods and what to authenticate

## Synopsis

**SQLAuthenticate** {on | off}

or

**SQLAuthenticate** [ users ] [ groups ] [ userset [fast] ] [ groupset [fast] ]

Default

SQLAuthenticate on

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

The SQLAuthenticate directive configures mod\_sql's authentication behavior, controlling whether to provide user and/or group information during authentication, and how that provisioning is performed. The parameters may appear in any order.

The available parameter values are:

- **on**

Shorthand for SQLAuthenticate users groups userset groupset.

- **off**

Disables all mod\_sql authentication functions.

- **users**

If present, mod\_sql will do user lookups. If not present, mod\_sql will do no user lookups at all, including the {set|get|end}pwent() calls (see below).

- **groups**

If present, mod\_sql will do group lookups. If not present, mod\_sql will do no group lookups at all, including the {set|get|end}grent() calls (see below).

- **userset[fast]**

## Configuration Directive List

If present, `mod_sql` will process the potentially expensive `{set|get|end}pwent()` calls. If not present, `mod_sql` will not process these calls. Adding the suffix "fast" tells `mod_sql` to process the users as a single large query, rather than making a query per user. This may significantly reduce the number of queries against the database at the expense of increased memory use. This parameter will have no effect if "users" is not specified.

- **groupset[fast]**

If present, `mod_sql` will process the potentially expensive `{set|get|end}grent()` calls. If not present, `mod_sql` will not process these calls. Adding the suffix "fast" tells `mod_sql` to process the groups as a single large query, rather than making a query per group. This may significantly reduce the number of queries against the database at the expense of increased memory use. This parameter will have no effect if "groups" is not specified.

The `SQLLog` and `SQLShowInfo` directives will always be processed by `mod_sql`. The `SQLAuthenticate` directive only affects the user and group lookup/authentication portions of the module.

Turning off (i.e. by not including) the `userset` or `groupset` parameters affects the functionality of `mod_sql`. Not allowing these lookups may remove the ability to control access or control functionality by group membership, depending on your other authentication handlers and the data available to them. At the same time, choosing not to do these lookups may dramatically speed login for many large sites.

The "fast" suffix is not appropriate for every site. Normally, `mod_sql` will retrieve a list of users and groups, and get information from the database on a per-user or per-group basis. This is query intensive: it requires  $(n + 1)$  queries, where  $n$  is the number of users or groups to lookup. By choosing "fast" lookups, `mod_sql` will make a single `SELECT` query to get information from the database.

In exchange for the radical reduction in the number of queries, the single query will increase the memory consumption of the process; all group or user information will be read at once rather than in discrete chunks.

## Group Table Structure

Normally **mod\_sql** allows multiple group members per row, and multiple rows per group. If you use the "fast" option for `groupset`, you **must** use only one row per group. For example, normally `mod_sql` treats the following three tables in exactly the same way:

```
|-----|
| GROUPNAME | GID | MEMBERS          |
|-----|
| group1    | 1000 | naomi                |
| group1    | 1000 | priscilla            |
| group1    | 1000 | gertrude             |
|-----|

|-----|
| GROUPNAME | GID | MEMBERS          |
|-----|
| group1    | 1000 | naomi, priscilla    |
| group1    | 1000 | gertrude            |
|-----|
```

## Configuration Directive List

```
|-----|  
| GROUPNAME | GID | MEMBERS          |  
|-----|  
| group1    | 1000 | naomi, priscilla, gertrude |  
|-----|
```

If you use the "fast" option, `mod_sql` assumes that all entries are structured like the last example.

## See also

[SQLUserInfo](#) [SQLGroupInfo](#)

## Examples

# SQLAuthTypes

## Name

SQLAuthTypes -- Specify the allowed authentication types and their check order

## Synopsis

```
SQLAuthTypes [ [OpenSSL]] [ [Crypt]] [ [Backend]] [ [Plaintext]] [ [Empty]]
```

Default

none

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.0 and later

## Description

This directive deprecates 'SQLEmptyPasswords', 'SQLScrambledPasswords', 'SQLSSLHashedPasswords', 'SQLPlaintextPasswords', and 'SQLEncryptedPasswords'.

The SQLAuthTypes directive specifies which authentication method are to be allowed, and their order of use. **You must specify at least one authentication method.**

The current supported authentication methods are:

- **Backend**

Allows database-specific backend passwords. Not all backend databases support this option. For example, MySQL databases use this option to authenticate MySQL 'PASSWORD()' encrypted passwords. The Postgres backend, however, does nothing. **Caveat** : if your MySQL activity log is world-readable, the user password **will be visible** . You have been warned.

- **Crypt**

Allows passwords in the database to be of Unix crypt(3) form.

- **Empty**

Allows empty passwords in the database, which match against **any** password the user may give. The database field must be a truly empty string; NULL values are not acceptable as empty passwords. **Be very careful if using this authentication method.**

- **OpenSSL**

Allows passwords in the database to be of the form '{digest-name}hashed-value', where hashed-value is the base64-encoded digest of the password. Only available if you define HAVE\_OPENSSL when



you compile proftpd and you link with OpenSSL's libcrypto library.

- **Plaintext**

Allows passwords in the database to be in plaintext.

## See also

## Examples

SQLAuthTypes Crypt Empty

configures mod\_sql to first attempt to verify the password using the Unix crypt(3) function, then, if that fails, determine if the password in the database is empty (thus matching any given password). If all of the configured authentication methods fail, mod\_sql will fail to authenticate the user.

# SQLBackend

## Name

SQLBackend -- Set the SQL backend module

## Synopsis

**SQLBackend** [ backend]

Default

Depends

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.3.0rc1 and later

## Description

In 1.3.0rc1, the mod\_sql module gained the ability to be compiled with multiple backend modules supported, e.g. to have both mod\_sql\_mysql and mod\_sql\_postgres usable in the same proftpd daemon. The SQLBackend directive configures which of these different database backends should be used.

If there is only one backend module compiled in, the SQLBackend directive is not needed. If there are multiple backend modules compiled and no SQLBackend directive is specified, then mod\_sql will default to using the first backend module listed. For instance, if you configured proftpd using a configure command such as: ./configure --with-modules=mod\_sql:mod\_sql\_postgres:mod\_sql\_mysql ... then mod\_sql would default to using mod\_sql\_postgres as the backend module to use.

You might have multiple <VirtualHost> sections which use different SQL backends. Use "mysql" for the mod\_sql\_mysql module, and "postgres" for the mod\_sql\_postgres module.

## See also

## Examples

```
<VirtualHost 1.2.3.4>
  SQLBackend mysql
  ...
</VirtualHost>
```

```
<VirtualHost 5.6.7.8>
```

## Configuration Directive List

```
SQLBackend postgres
...
</VirtualHost>
```

# SQLConnectInfo

## Name

SQLConnectInfo -- Specify connection information for the backend

## Synopsis

```
SQLConnectInfo [ connection-info ] [ [username] ] [ [password] ] [ [policy] ]
```

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.0 and later

## Description

This directive deprecates 'MySQLInfo', 'PostgresInfo', and 'PostgresPort'.

The SQLConnectInfo directive configures the information necessary to connect to the backend database. The connection-info parameter specifies the database, host, port, and other backend-specific information. The optional username and password parameters specify a username and password to use when connecting to the database. Both default to NULL, which the backend will treat in some backend-specific manner. If you specify a password, you **must** specify a username. If no SQLConnectInfo directive is specified, mod\_sql will disable itself.

Any given database backend has the opportunity, though not necessarily the responsibility, to check for syntax errors in the connection-info field at server startup, but you should not expect semantic errors (i.e., cannot connect to the database) to be caught until mod\_sql attempts to connect for a given host.

A given database connection is governed by a connection policy that specifies when a connection should be opened and when it should be closed. There are three options:

- **PERSESSION**

Open a database connection at the start of the session and close the database connection at the end of the session.

- number (**TIMED**)

Timed database connections that close themselves after number seconds of inactivity.

If a connection policy is not specified, if the policy is not a number or is a number less than 1, or if the policy is the string "PERSESSION", the PERSESSION policy will be used.

## Configuration Directive List

If the connection policy is any number greater than 0, it specifies the number of seconds that a connection will be held open without activity. After that many seconds of database inactivity, the connection to the database will be closed. As soon as database activity starts again, the connection will be opened and the timer will restart.

The MySQL and Postgres backends' connection-info is expected to be of the form:

database[@hostname][:port]

hostname will default to a backend-specific hostname (which happens to be 'localhost' for both the MySQL and Postgres backends), and port will default to a backend-specific default port (3306 for the MySQL backend, 5432 for the Postgres backend).

From the MySQL documentation:

the value of host may be either a hostname or an IP address. If host is NULL or the string "localhost", a connection to the local host is assumed. If the OS supports sockets (Unix) or named pipes (Windows), they are used instead of TCP/IP to connect to the server.

From the PostgreSQL documentation:

If [the hostname] begins with a slash, it specifies Unix-domain communication rather than TCP/IP communication; the value is the name of the directory in which the socket file is stored. The default is to connect to a Unix-domain socket in /tmp.

If you plan to use the TIMED connection policy, consider the effect of directives such as DefaultRoot on local socket communication: once a user has been chroot(ed), the local socket file will probably not be available within the chroot directory tree, and attempts to reopen communication will fail. One way around this may be to use hardlinks within the user's directory tree. PERSESSION connections are not affected by this because the database will be opened prior to the chroot() call, and held open for the life of the session. Network communications are not affected by this problem. For example, while localhost would not work for MySQL since the MySQL client library will try to use socket communications for that host, 127.0.0.1 will work (as long as your database is setup to accept these connections).

## See also

## Examples

```
# Connect to the database 'ftpusers' via the default port at host
# 'foo.com'. Use a NULL username and NULL password when connecting.
# A connection policy of PERSESSION is used.
SQLConnectInfo ftpusers@foo.com
```

```
# Connect to the database 'ftpusers' via port 3000 at host 'localhost'.
# Use the username 'admin' and a NULL password when connecting.
# A connection policy of PERSESSION is used.
SQLConnectInfo ftpusers:3000 admin
```

## Configuration Directive List

```
# Connect to the database 'ftpusers' via port 3000 at host 'foo.com'.  
# Use the username 'admin' and password 'mypassword' when connecting.  
# A connection policy of PERSESSION is used.  
SQLConnectInfo ftpusers@foo.com:3000 admin mypassword
```

```
# Connect to the database 'ftpusers' via port 3000 at host 'foo.com'.  
# Use a username of 'admin' and a password of 'mypassword' when  
# connecting. A 30 second timer of connection inactivity is activated.  
SQLConnectInfo ftpusers@foo.com:3000 admin mypassword 30
```

Backends may require different information in the connection-info field; check your backend module for more detailed information.

# SQLDefaultGID

## Name

SQLDefaultGID -- Configure the default GID for users

## Synopsis

**SQLDefaultGID** [ defaultgid]

Default  
65533  
Context  
server config, <Global>, <VirtualHost>  
Module  
mod\_sql  
Compatibility  
1.2.0 and later

## Description

Sets the default GID for users. Must be greater than SQLMinID.

## See also

[SQLMinID](#) [SQLMinUserGID](#)

# SQLDefaultHomedir

## Name

SQLDefaultHomedir -- Configure the default homedir

## Synopsis

**SQLDefaultHomedir** [ path]

Default  
    None  
Context  
    server config, <Global>, <VirtualHost>  
Module  
    mod\_sql  
Compatibility  
    1.2.5rc1 and later

## Description

The SQLDefaultHomedir directive configures a default home directory for all users authenticated with this module, overriding any (deprecated) SQLHomedirField directive. If no home directory is set with either directive, authentication fails. This directive does not change the data retrieved from the database: if you specify a home directory field to SQLUserInfo, that field's data will be returned as the user's home directory, whether that data is a legal directory, or an empty string, or NULL.

## See also

[SQLUserInfo](#)

## Examples



# SQLDefaultUID

## Name

SQLDefaultUID -- Configure the default UID for users

## Synopsis

**SQLDefaultUID** [ defaultuid]

Default  
65533  
Context  
server config, <Global>, <VirtualHost>  
Module  
mod\_sql  
Compatibility  
1.2.0 and later

## Description

Sets the default UID for users. Must be greater than SQLMinID.

## See also

[SQLMinID](#) [SQLMinUserID](#)

# SQLiteEngine

## Name

SQLiteEngine -- Configure how mod\_sql will operate

## Synopsis

**SQLiteEngine** [ on | off | auth | log ]

Default

SQLiteEngine on

Context

server config, <Global>, <VirtualHost>, <Anonymous>

Module

mod\_sql

Compatibility

1.3.0rc1 and later

## Description

The SQLiteEngine directive is used to specify how mod\_sql will operate. By default, SQLiteEngine is on, and mod\_sql will operate as normal. Setting SQLiteEngine to off will effectively disable the module.

In addition to on and off, SQLiteEngine accepts two other values: auth and log. If you wish to use mod\_sql for authentication and not for logging (via SQLLog), use auth. Conversely, to do only SQLLog-type logging, and no authentication, use log.

This directive can be used to have <Anonymous> sections that do not use mod\_sql (see the example below).

## See also

## Examples

```
<Anonymous ~ftp>
...
SQLiteEngine off
...
</Anonymous>
```

# SQLGroupInfo

## Name

SQLGroupInfo -- Configure the group table and fields that hold group information

## Synopsis

**SQLGroupInfo** [group-table group-name gid members]

Default  
    "groups groupname gid members"  
Context  
    server config, <Global>, <VirtualHost>  
Module  
    mod\_sql  
Compatibility  
    1.2.5rc1 and later

## Description

The SQLGroupInfo directive configures the group table and fields that hold group information. The parameters for this directive are described below:

- **grouptable**  
    Specifies the name of the table that holds group information.
- **groupname**  
    Specifies the field in the group table that holds the group name.
- **gid**  
    Specifies the field in the group table that holds the group's GID.
- **members**  
    Specifies the field in the group table that holds the group members.

If you need to change any of these field names from the default, you need to specify all of them.

## See also

## Examples

# SQLGroupWhereClause

## Name

SQLGroupWhereClause -- Configure a WHERE clause for every group query

## Synopsis

**SQLGroupWhereClause** [ where-clause]

Default  
    off  
Context  
    server config, <Global>, <VirtualHost>  
Module  
    mod\_sql  
Compatibility  
    1.2.5rc1 and later

## Description

The directive is used to configure a WHERE clause that is added to every group query. The WHERE clause must contain all relevant punctuation, and must not contain a leading "and".

Starting with ProFTPD 1.3.1rc1 the SQLGroupWhereClause also supports the variables supported by [SQLNamedQuery](#) except for the "%{n}" variable

## See also

[SQLNamedQuery](#)

## Examples

As an example of a possible use for this directive, imagine if your group table included a "LoginAllowed" field:

```
SQLGroupWhereClause "LoginAllowed = 'true'"
```

would be appended to every group-related query as the string:

```
" WHERE (LoginAllowed = 'true')"
```

# SQLHomedirOnDemand

## Name

SQLHomedirOnDemand -- Have mod\_sql create home directories as needed [deprecated]

## Synopsis

**SQLHomedirOnDemand** [ on|off]

Default

off

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.0 up to 1.3.1rc1

## Description

This directive has been deprecated with ProFTPD 1.3.1rc1. Please use [CreateHome](#) instead.

The SQLHomedirOnDemand directive configures mod\_sql to automatically create a user's home directory if that directory does not exist during the login process.

# SQLLog

## Name

SQLLog -- Log information to a database table

## Synopsis

**SQLLog** [cmd-set query-name ["IGNORE\_ERRORS"]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

This directive is used to log information to a database table. Multiple SQLLog directives can be in effect for any command; for example, a user changing directories can trigger multiple logging statements.

The first parameter to SQLLog, the cmd-set, is a comma-separated (no spaces) list of FTP commands for which this log command will trigger. The list of commands is too long to list in entirety; commands include CWD, DELE, HELP, LIST, MKD, MODE, NLST, PASS, PASV, PORT and many more. For the complete list check the FTP RFCs. Normally mod\_sql will log events after they have completed successfully; in the case of the QUIT command, mod\_sql logs prior to the server's processing of the command. (Note, however, that the client may not issue a QUIT before logging out; in this case, use a command of EXIT rather than QUIT. EXIT is not a real FTP command, but it is used here to provide a means for having SQLLog work whenever a session ends.)

FTP commands in the command set will only be logged if they complete successfully. Prefixing any command with "ERR\_" will cause logging to occur only if there was an error in the command's processing. To log both errors and successful completion of a given command X, therefore, you'll need both "X" and "ERR\_X" in your cmd-set.

The special command "\*" matches all FTP commands, while "ERR\_\*" matches all errors.

The second parameter is the name of a query defined by a SQLNamedQuery directive. The query must be an UPDATE, INSERT, or FREEFORM type query; explicit SELECT queries will not be processed.

The third parameter is optional. If you add "IGNORE\_ERRORS" as the third parameter, SQLLog will not check for errors in the processing of the named query. Any value for this parameter other than the string "IGNORE\_ERRORS" (case-insensitive) will not cause errors to be ignored.

## Configuration Directive List

Normally, SQLLog directives are considered important enough that errors in their processing will cause mod\_sql to abort the client session. References to non-existent named queries will not abort the client session, but may result in database corruption (in the sense that the expected database UPDATE or INSERT will not occur). Check your directives carefully.

## See also

## Examples

SQLLog PASS updatecount

SQLNamedQuery updatecount UPDATE "count=count+1 WHERE userid='%u'" users

together, these replicate the deprecated "SQLLoginCountField count" directive; if the current user was "joe", this would translate into the query "UPDATE users SET count=count+1 WHERE userid='joe'". This query would run whenever a user was first authenticated.

SQLLog CWD updatedir

SQLNamedQuery updatedir UPDATE "cwd='%d' where userid='%u'" users

together these replicate the logging side of the deprecated "SQLLogDirs cwd" directive; if the current user was "joe" and the current working directory were /tmp, this would translate into the query "UPDATE users SET cwd='/tmp' WHERE userid='joe'". This query would run whenever a user changed directories.

SQLLog RETR,STOR insertfileinfo

SQLNamedQuery insertfileinfo INSERT "'%f', %b, '%u@%v', now()" filehistory

would log the name of any file stored or retrieved, the number of bytes transferred, the user and host doing the transfer, and the time of transfer (at least in MySQL). This would translate into a query like: "INSERT INTO filehistory VALUES ('somefile', 12345, 'joe@joe.org', '21-05-2001 20:01:00')"



# SQLLogFile

## Name

SQLLogFile -- Specify a log file for mod\_sql reporting and debugging

## Synopsis

**SQLLogFile** [ file]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.8rc2 and later

## Description

The SQLLogFile directive is used to specify a log file for mod\_sql reporting and debugging, and can be done on a per-server basis. The file parameter must be the full path to the file to use for logging. Note that this path must not be to a world-writable directory and, unless AllowLogSymlinks is explicitly set to on (generally a bad idea), the path must not be a symbolic link.

If file is "none", no logging will be done at all; this setting can be used to override a SQLLogFile setting inherited from a <target> context.

## See also

## Examples

# SQLMinID

## Name

SQLMinID -- Set SQLMinUserGID and SQLMinUserID in one place

## Synopsis

**SQLMinID** [minimum-id]

Default

999

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.0 and later

## Description

SQLMinID is a quick way of setting both SQLMinUserGID and SQLMinUserID. These values are checked whenever retrieving a user's GID or UID.

## See also

[SQLMinUserGID](#) [SQLMinUserID](#)

# SQLMinUserGID

## Name

SQLMinUserGID -- Set a minimum GID

## Synopsis

**SQLMinUserGID** [ minimum-gid]

Default

999

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

SQLMinUserGID is checked whenever retrieving a user's GID. If the retrieved value for GID is less than the value of SQLMinUserGID, it is reported as the value of SQLDefaultGID.

## See also

## Examples

# SQLMinUserUID

## Name

SQLMinUserUID -- Set a minimum UID

## Synopsis

**SQLMinUserUID** [minimum-uid]

Default  
999  
Context  
server config, <Global>, <VirtualHost>  
Module  
mod\_sql  
Compatibility  
1.2.5rc1 and later

## Description

SQLMinUserUID is checked whenever retrieving a user's UID. If the retrieved value for UID is less than the value of SQLMinUserUID, it is reported as the value of SQLDefaultUID.

## See also

## Examples

# SQLNamedQuery

## Name

SQLNamedQuery -- Specify a query and an identifier for SQLShowInfo and SQLLog

## Synopsis

**SQLNamedQuery** [ "name" limit|regex|ip value]

Default

(docs incomplete)

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Limit>, .ftpaccess

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

SQLNamedQuery specifies a query and an identifier (name) for later use by SQLShowInfo and SQLLog.

It is strongly recommended that you read documentation on the LogFormat and ExtendedLog directives, as the meta-sequences available to SQLNamedQuery are largely equivalent.

The first parameter, name, should be unique across all named queries and must not contain spaces. The result of re-using a name is undefined.

The second parameter, type, is the type of query, either "SELECT", "UPDATE", "INSERT", or "FREEFORM". See the note below for information on FREEFORM type queries.

The third parameter is the substance of the database query itself; this should match the form of the second parameter. The meta-sequences accepted are exactly equivalent to the LogFormat directive except the following are not accepted:

- `%{FOOBAR}e`

For LogFormat, this logs the content of environment variable "FOOBAR". This is not available in mod\_sql.

- `%{format}t` and `%t`

These two meta-sequences logged the local server time; they are not available in mod\_sql. Your database undoubtedly provides another way to get the time; for example, MySQL provides the now() function.

and the following is in addition to the LogFormat meta-sequences:

- %d

The current working directory or "-" if none.

- %{n}

This meta-sequence is used internally by mod\_sql and other third-party modules and patches to pass information to the database. Using this meta-sequence in anything other than an INSERT or UPDATE query is an error, and using this meta-sequence unless directed to by a third-party module or patch is also an error.

- %{env:VAR}

Starting with ProFTPD 1.3.1rc1 the SQLNamedQuery directive is able to make use of environment variables in the format "%{env:VAR}". The value of the environment variable VAR will be substituted into the SQL statement.

The correct form of a query will be built from the directive arguments, except in the case of FREEFORM queries which will be sent directly to the database. The examples below show the way queries are built from the arguments.

The fourth parameter, table, is only necessary for UPDATE or INSERT type queries, but is required for those types.

Note: FREEFORM queries are a necessary evil; the simplistic query semantics of the UPDATE, INSERT, and SELECT type queries do not sufficiently expose the capabilities of most backend databases. At the same time, using a FREEFORM query makes it impossible for mod\_sql to check whether the query type is appropriate, making sure that a SELECT query is not used in a SQLLog directive, for instance. Wherever possible, it is recommended that a specific query type be used.

## See also

[SQLShowInfo](#) [SQLLog](#) [LogFormat](#) [ExtendedLog](#)

## Examples

```
SQLNamedQuery count SELECT "count from users where userid='%u'"
```

creates a query named "count" which could be used by SQLShowInfo to inform a user of their login count. The actual query would look something like "SELECT count FROM users WHERE userid='matilda'" for user "matilda".

```
SQLNamedQuery updatecount UPDATE "count=count+1 WHERE userid='%u'" users
```

creates a query named "updatecount" which could be used by SQLLog to update a user login counter in the table users. The actual query would look something like "UPDATE users SET count=count+1 WHERE

## Configuration Directive List

userid='persephone'" for user "persephone".

SQLNamedQuery accesslog INSERT "now(), '%u'" accesslog

creates a query named "accesslog" which could be used by SQLLog to track access times by clients. The actual query would look something like "INSERT INTO accesslog VALUES (now(), 'pandora')" for user "pandora". Note that this may be too simplistic for your table structure, since most databases require data for all columns to be provided in an INSERT statement of this form. See the following FREEFORM query for an example of something which may suit your needs better.

SQLNamedQuery accesslog FREEFORM "INSERT INTO accesslog(date, user) VALUES (now(), '%u')"

creates a query named "accesslog" which could be used by SQLLog to track access times by clients. The actual query would look something like "INSERT INTO accesslog(date, user) VALUES (now(), 'tilda')" for user "tilda".

# SQLNegativeCache

## Name

SQLNegativeCache -- Enable negative caching for SQL lookups

## Synopsis

**SQLNegativeCache** [ on off ]

Default

SQLNegativeCache off

Context

server config, <VirtualHost>, <Global>

Module

mod\_sql

Compatibility

mod\_sql v4.10 and later

## Description

SQLNegativeCache specifies whether or not to cache negative responses from SQL lookups when using SQL for UID/GID lookups. Depending on your SQL tables, there can be a significant delay when a directory listing is performed as the UIDs not in the SQL database are repeatedly looked up in an attempt to present usernames instead of UIDs in directory listings. With SQLNegativeCache set to on, negative ("not found") responses from SQL queries will be cached and speed will improve on directory listings that contain many users not present in the SQL database.

## See also

## Examples



# SQLRatios

## Name

SQLRatios -- (docs incomplete)

## Synopsis

**SQLRatios** [ "name" limit|regex|ip value]

Default

None

Context

server config, <Global>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

mod\_ratio is currently lacking a module maintainer. This directive is left over and not officially supported.

## See also

## Examples

(docs incomplete)

# SQLRatioStats

## Name

SQLRatioStats -- (docs incomplete)

## Synopsis

**SQLRatioStats** [ "name" limit|regex|ip value]

Default

None

Context

server config, <Global>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

mod\_ratio is currently lacking a module maintainer. This directive is left over and not officially supported.

## See also

## Examples

(docs incomplete)

# SQLShowInfo

## Name

SQLShowInfo -- Create a message to be sent to the user after any successful command

## Synopsis

**SQLShowInfo** [cmd-set numeric query-string]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

This directive creates a message to be sent to the user after any successful command.

The first parameter, the cmd-set, is a comma separated (no spaces) list of FTP commands for which this log command will trigger. The list of commands is too long to list in entirety; commands include: CWD, DELE, HELP, LIST, MKD, MODE, NLST, PASS, PASV, PORT and many more. For the complete list check the FTP RFCs.

FTP commands in the command set will only be triggered if they complete successfully. Prefixing any command with "ERR\_" will show information only if there was an error in command processing. To send a message on both errors and successful completion of a given command X, therefore, you'll need both "X" and "ERR\_X" in your cmd-set.

The special command "\*" matches all FTP commands, while "ERR\_\*" matches all errors.

The second parameter, numeric, specifies the numeric value of the message returned to the FTP client. Do not choose a number blindly: message numbers may be parsed by clients. In most cases you will want to use 214, the "Help message" numeric. It specifies that the information is only meant to be human readable.

The third parameter, query-string, is exactly equivalent to the query-string parameter to the SQLLog directive, with one addition:

- %{name}

The first return value from the SQLNamedQuery identified by "name". There is currently no way to retrieve more than one value from the database at a time.

## Configuration Directive List

Any references to non-existent named queries, non-SELECT or -FREEFORM type queries, or references to queries which return a NULL first value, will be replaced with the string "{null}".

## See also

## Examples

```
SQLNamedQuery count SELECT "count from users where userid='%u'"
SQLShowInfo PASS "230" "You've logged on %{count} times, %u"
```

As long as the information is in the database, these two directives specify that the user will be greeted with their login count each time they successfully login. Note the use of the "230" numeric, which means "User logged in, proceed". "230" is appropriate in this case because the message will be sent immediately after their password has been accepted and the session has started.

# SQLUserInfo

## Name

SQLUserInfo -- Configure the user table and fields that hold user information

## Synopsis

**SQLUserInfo** [user-table user-name passwd uid gid home-dir shell]

Default

"users userid passwd uid gid homedir shell"

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

The SQLUserInfo directive configures the user table and fields that hold user information. If you need to change any of these field names from the default, you must specify all of them, whether NULL or not. The parameters are described below:

- **usertable**

Specifies the name of the table that holds user information.

- **username**

Specifies the field in the user table that holds the username.

- **passwd**

Specifies the field in the user table that holds the user's password.

- **uid**

Specifies the field in the user table that holds the user's UID. When a UID is retrieved from the database it is checked against the value of SQLMinUserID. If the field name is specified as "NULL" the database will not be queried for this value and the user's UID will be set to the value of SQLDefaultUID.

- **gid**

Specifies the field in the user table that holds the user's GID. When a GID is retrieved from the database it is checked against the value of SQLMinUserGID. If the field name is specified as "NULL" the database will not be queried for this value and the user's GID will be set to the value of SQLDefaultGID.

- **homedir**

## Configuration Directive List

Specifies the field in the user table that holds the user's home directory. If the fieldname is specified as "NULL" the database will not be queried for this value and the user's home directory will be set to the value of SQLDefaultHomedir. If no home directory is set with either directive, user authentication will be automatically turned off.

- shell

Specifies the field in the user table that holds the user's shell. If the fieldname is specified as "NULL" the database will not be queried and the shell will be reported as an empty string ("").

As of 1.2.9rc1, the SQLUserInfo directive accepts an alternate syntax:

SQLUserInfo custom:/name

where name refers to a configured SELECT SQLNamedQuery. This named query must return one row, and return the following columns, in this order: username, passwd, uid, gid, homedir, shell. The configured query may make use of the variables mentioned in the SQLLog description. This syntax allows the administrator a flexible way of constructing queries as needed. Note that if you want use the given USER name, you should use the %U variable, not %u; the latter requires the locally authenticated user name, which is exactly what SQLUserInfo is meant to provide.

## See also

[SQLLog](#) [SQLNamedQuery](#)

## Examples

# SQLUserWhereClause

## Name

SQLUserWhereClause -- Configure a WHERE clause for every user query<

## Synopsis

**SQLUserWhereClause** [ where-clause]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_sql

Compatibility

1.2.5rc1 and later

## Description

The directive is used to configure a WHERE clause that is added to every user query. The WHERE clause must contain all relevant punctuation, and must not contain a leading "and".

Starting with ProFTPD 1.3.1rc1 the SQLUserWhereClause also supports the variables supported by [SQLNamedQuery](#) except for the "%{n}" variable

## See also

[SQLNamedQuery](#)

## Examples

As an example of a possible use for this directive, imagine if your user table included a "LoginAllowed" field:

```
SQLUserWhereClause "LoginAllowed = 'true'"
```

would be appended to every user-related query as the string:

```
" WHERE (LoginAllowed = 'true')"
```

# StoreUniquePrefix

## Name

StoreUniquePrefix -- Set the prefix to be added to uniquely generated filenames

## Synopsis

**StoreUniquePrefix** [ "prefix" ]

Default

none

Context

server config, <Global>, <VirtualHost>, <Global>, <Anonymous>, <Directory> .ftppass

Module

mod\_xfer

Compatibility

1.2.6rc1 and later

## Description

The StoreUniquePrefix is used to configure a prefix for the generated unique random filenames used for the STOU FTP command. The last six characters of the filename will be random. Slashes are not allowed in the prefix string.

All valid filename characters are allowed except '/'

## See also

## Examples

StoreUniquePrefix "Wibble"



# SyslogFacility

## Name

SyslogFacility -- Set the facility level used for logging

## Synopsis

**SyslogFacility** [`SyslogFacility facility-level`]

Default

None

Context

server config

Module

mod\_core

Compatibility

1.1.6 and later

## Description

Proftpd logs its activity via the Unix syslog mechanism, which allows for several different general classifications of logging messages, known as "facilities." Normally, all authentication related messages are logged with the AUTHPRIV (or AUTH) facility [intended to be secure, and never seen by unwanted eyes], while normal operational messages are logged with the DAEMON facility. The SyslogFacility directive allows ALL logging messages to be directed to a different facility than the default. When this directive is used, ALL logging is done with the specified facility, both authentication (secure) and otherwise. The facility-level argument must be one of the following: AUTH (or AUTHPRIV), CRON, DAEMON, KERN, LPR, MAIL, NEWS, USER, UUCP, LOCAL0, LOCAL1, LOCAL2, LOCAL3, LOCAL4, LOCAL5, LOCAL6 or LOCAL7. See Also: SystemLog

## See also

## Examples

# SyslogLevel

## Name

SyslogLevel -- Set the verbosity level of system logging

## Synopsis

**SyslogLevel** [ SyslogLevel emerg|alert|crit|error|warn|notice|info|debug]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.0rc2+cvs and later

## Description

SyslogLevel adjusts the verbosity of the messages recorded in the error logs. The following levels are available, in order of decreasing significance: Level Description emerg Emergencies - system is unusable. alert Action must be taken immediately. crit Critical Conditions. error Error conditions. warn Warning conditions. notice Normal but significant condition. info Informational. debug Debug-level messages When a particular level is specified, messages from all other levels of higher significance will be reported as well. E.g., when SyslogLevel info is specified, then messages with log levels of notice and warn will also be posted. Using a level of at least crit is recommended.

## See also

## Examples

# SystemLog

## Name

SystemLog -- Redirect syslogging to a file

## Synopsis

**SystemLog** [ SystemLog filename|NONE]

Default

None

Context

server config

Module

mod\_log

Compatibility

1.1.6pl1 and later

## Description

The SystemLog directive disables proftpd's use of the syslog mechanism and instead redirects all logging output to the specified filename. The filename argument should contain an absolute path, and should not be to a file in a nonexistent directory, in a world-writeable directory, or be a symbolic link (unless AllowLogSymlinks is set to on). Use of this directive overrides any facility set by the SyslogFacility directive. Additionally, the special keyword NONE can be used which disables all syslog style logging for the entire configuration.

## See also

[AllowLogSymlinks](#)

## Examples

# TCPAccessFiles

## Name

TCPAccessFiles -- Sets the access files to use

## Synopsis

**TCPAccessFiles** [ allow-filename deny-filename ]

Default

none

Context

server config, <VirtualHost>, <Global>, <Anonymous>

Module

mod\_wrap

Compatibility

1.2.1 and later

## Description

TCPAccessFiles specifies two files, an allow and a deny file, each of which contain the IP addresses, networks or name-based masks to be allowed or denied connections to the server. The files have the same format as the standard tcpwrappers hosts.allow/deny files.

Both file names are required. Also, the paths to both files must be the full path, with two exceptions: if the path starts with ~/, the check of that path will be delayed until a user requests a connection, at which time the path will be resolved to that user's home directory; or if the path starts with ~user/, where user is some system user. In this latter case, mod\_wrap will attempt to resolve and verify the given user's home directory on start-up.

The service name for which mod\_wrap will look in the indicated access files is proftpd by default; this can be configured via the TCPServiceName directive. There is a built-in precedence to the TCPAccessFiles, TCPGroupAccessFiles, and TCPUserAccessFiles directives, if all are used. mod\_wrap will look for applicable TCPUserAccessFiles for the connecting user first. If no applicable TCPUserAccessFiles is found, mod\_wrap will search for TCPGroupAccessFiles which pertain to the connecting user. If not found, mod\_wrap will then look for the server-wide TCPAccessFiles directive. This allows for access control to be set on a per-server basis, and allow for per-user or per-group access control to be handled without interfering with the server access rules.

## See also

[TCPGroupAccessFiles](#), [TCPServiceName](#), [TCPUserAccessFiles](#)

## Examples

# server-wide access files TCPAccessFiles /etc/ftpd.allow /etc/ftpd.deny # per-user access files, which are to be found in the user's home directory TCPAccessFiles ~/my.allow ~/my.deny

# TCPAccessSyslogLevels

## Name

TCPAccessSyslogLevels -- Sets the logging levels for mod\_wrap

## Synopsis

**TCPAccessSyslogLevels** [allow-level deny-level]

Default

TCPAccessSyslogLevels info warn

Context

server config, <VirtualHost>, <Global>, <Anonymous>

Module

mod\_wrap

Compatibility

1.2.1 and later

## Description

ProFTPD can log when a connection is allowed, or denied, as the result of rules in the files specified in TCPAccessFiles, to the Unix syslog mechanism. A discussion on the syslog levels which can be used is given in the SyslogLevel directive.

The allow-level parameter sets the syslog level at which allowed connections are logged; the deny-level parameter sets the syslog level for denied connections.

## See also

[SyslogLevel](#)

## Examples

TCPAccessSyslogLevels debug warn

# tcpBackLog

## Name

tcpBackLog -- Control the tcp backlog in standalone mode

## Synopsis

**tcpBackLog** [ tcpBackLog backlog-size]

Default

tcpBackLog 5

Context

server config

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The tcpBackLog directive controls the tcp "backlog queue" when listening for connections in standalone mode (see ServerType). It has no affect upon servers in inetd mode. When a tcp connection is established by the tcp/ip stack inside the kernel, there is a short period of time between the actual establishment of the connection and the acceptance of the connection by a user-space program. The duration of this latency period is widely variable, and can depend upon several factors (hardware, system load, etc). During this period tcp connections cannot be accepted, as the port that was previously "listening" has become filled with the new connection. Under heavy connection load this can result in occasional (or even frequent!) "connection refused" messages returned to the incoming client, even when there is a service available to handle requests. To eliminate this problem, most modern tcp/ip stacks implement a "backlog queue" which is simply a pre-allocation of resources necessary to handle backlog-size connections during the latency period. The larger the backlog queue, the more connections can be established in a very short time period. The trade-off, of course, is kernel memory and/or other kernel resources. Generally it is not necessary to use a tcpBackLog directive, unless you intend to service a large number of virtual hosts (see <VirtualHost>), or have a consistently heavy system load. If you begin to notice or hear of "connection refused" messages from remote clients, try setting a slightly higher value to this directive.

## See also

## Examples

# TCPGroupAccessFiles

## Name

TCPGroupAccessFiles -- Sets the access files to use

## Synopsis

**TCPGroupAccessFiles** [ group-expression allow-filename deny-filename ]

Default

none

Context

server config, <VirtualHost>, <Global>

Module

mod\_wrap

Compatibility

1.2.1 and later

## Description

TCPGroupAccessFiles allows for access control files, the same types of files required by TCPAccessFiles, to be applied to select groups. The given group-expression is a logical AND expression, which means that the connecting user must be a member of all the groups listed for this directive to apply. Group names may be negated with a ! prefix.

The rules for the filename paths are the same as for TCPAccessFiles settings.

## See also

[TCPAccessFiles](#), [TCPUserAccessFiles](#)

## Examples

```
# every member of group wheel must connect from restricted locations TCPGroupAccessFiles wheel
/etc/ftpd-strict.allow /etc/ftpd-strict.deny # everyone else gets the standard access rules TCPGroupAccessFiles
!wheel /etc/hosts.allow /etc/hosts.deny
```



# tcpNoDelay

## Name

tcpNoDelay -- Control the use of TCP\_NODELAY

## Synopsis

**tcpNoDelay** [ tcpNoDelay on|off]

Default

tcpNoDelay on

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.0pre3a and later

## Description

The tcpNoDelay directive controls the use of the TCP\_NODELAY socket option (which disables the Nagle algorithm). ProFTPD uses TCP\_NODELAY by default, which usually is a benefit but this can occasionally lead to problems with some clients, so tcpNoDelay is provided as a way to disable this option. You will not normally need to use this directive but if you have clients reporting unusually slow connections, try setting this to off.

## See also

## Examples

# TCPServiceName

## Name

TCPServiceName -- Configures the name proftpd will use with mod\_wrap

## Synopsis

**TCPServiceName** [ name]

Default

TCPServiceName proftpd

Context

server config, <VirtualHost>, <Global>

Module

mod\_wrap

Compatibility

1.2.1 and later

## Description

TCPServiceName is used to configure the name of the service under which mod\_wrap will check the allow/deny files. By default, this is the name of the program started, i.e. "proftpd". However, some administrators may want to use a different, more generic service name, such as "ftpd"; use this directive for such needs.

## See also

# TCPUserAccessFiles

## Name

TCPUserAccessFiles -- Sets the access files to use

## Synopsis

**TCPUserAccessFiles** [user-expression allow-filename deny-filename]

Default

none

Context

server config, <VirtualHost>, <Global>

Module

mod\_wrap

Compatibility

1.2.1 and later

## Description

TCPUserAccessFiles allows for access control files, the same types of files required by TCPAccessFiles, to be applied to select users. The given user-expression is a logical AND expression. Listing multiple users in a user-expression does not make much sense; however, this type of AND evaluation allows for expressions such as "everyone except this user" with the use of the ! negation prefix.

The rules for the filename paths are the same as for TCPAccessFiles settings.

## See also

[TCPAccessFiles](#), [TCPGroupAccessFiles](#)

## Examples

```
# user admin might be allowed to connect from anywhere TCPUserAccessFiles admin
/etc/ftpd-anywhere.allow /etc/ftpd-anywhere.deny # while every other user has to connect from LAN
addresses TCPUserAccessFiles !admin /etc/ftpd-lan.allow /etc/ftpd-lan.deny
```

# TimeoutIdle

## Name

TimeoutIdle -- Sets the idle connection timeout

## Synopsis

**TimeoutIdle** [ TimeoutIdle seconds]

Default

TimeoutIdle 600

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The TimeoutIdle directive configures the maximum number of seconds that proftpd will allow clients to stay connected without receiving any data on either the control or data connection. If data is received on either connection, the idle timer is reset. Setting TimeoutIdle to 0 disables the idle timer completely (clients can stay connected for ever, without sending data). This is generally a bad idea as a "hung" tcp connection which is never properly disconnected (the remote network may have become disconnected from the Internet, etc) will cause a child server to never exit (at least not for a considerable period of time) until manually killed See Also: TimeoutLogin, TimeoutNoTransfer

## See also

## Examples

# TimeoutLinger

## Name

TimeoutLinger -- Sets the timeout used for lingering closes

## Synopsis

**TimeoutLinger** [TimeoutLinger seconds]

Default

TimeoutLinger 180

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.10rc2 and later

## Description

The TimeoutLinger directive configures the maximum number of seconds that proftpd will wait (or "linger") when closing a data connection. Once the data connection is closed, proftpd will send a message on the control connection indicating the closure. This delay is necessary for properly handling some FTP clients.

If the client aborts a transfer and there is a long delay, this lingering close is the most likely culprit. So if you encounter this delay, set TimeoutLinger to a low number to remove the delay.

## See also

## Examples

# TimeoutLogin

## Name

TimeoutLogin -- Sets the login timeout

## Synopsis

**TimeoutLogin** [ TimeoutLogin seconds]

Default

TimeoutLogin 300

Context

server config, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

0.99.0 and later

## Description

The TimeoutLogin directive configures the maximum number of seconds a client is allowed to spend authenticating. The login timer is not reset when a client transmits data, and is only removed once a client has transmitted an acceptable USER/PASS command combination. See Also: TimeoutIdle, TimeoutNoTransfer

## See also

## Examples

# TimeoutNoTransfer

## Name

TimeoutNoTransfer -- Sets the connection without transfer timeout

## Synopsis

**TimeoutNoTransfer** [ TimeoutNoTransfer seconds]

Default

TimeoutNoTransfer 300

Context

server config, <VirtualHost>, <Global>

Module

mod\_xfer

Compatibility

0.99.0 and later

## Description

The TimeoutNoTransfer directive configures the maximum number of seconds a client is allowed to spend connected, after authentication, without issuing a command which results in creating an active or passive data connection (i.e. sending/receiving a file, or receiving a directory listing). See Also: TimeoutIdle, TimeoutLogin

## See also

## Examples

# TimeoutSession

## Name

TimeoutSession -- Sets a timeout for an entire session

## Synopsis

**TimeoutSession** [ seconds [ "user" | "group" | "class" expression ] ]

Default

None

Context

server config, <VirtualHost>, <Global>, <Anonymous>

Module

mod\_auth

Compatibility

1.2.6rc1 and later

## Description

The TimeoutSession directive sets the maximum number of seconds a control connection between the proftpd server and an FTP client can exist after the client has successfully authenticated. If the seconds argument is set to 0, sessions are allowed to last indefinitely (the default).

The optional parameters are used to restrict the session time limit only to specific users. If "user" restriction is given, then expression is a user-expression specifying to which users the time limit applies. Similarly for the "group" restriction. For the "class" restriction, the expression is simply the name of connection class for whom the time limit will apply. Note that use of the "user" or "group" classifiers within an <Anonymous> context will not make much sense.

Example: # set a draconian session time limit TimeoutSession 60 # set session time limits for everyone except a few privileged users TimeoutSession 300 user !bob,!dave,!jenni

## See also

## Examples

```
# Kick the user off after 60 minutes
TimeoutSession 3600
```



# TimeoutStalled

## Name

TimeoutStalled -- Sets the timeout on stalled downloads

## Synopsis

**TimeoutStalled** [ TimeoutStalled seconds]

Default

TimeoutStalled 3600

Context

server config, <VirtualHost>, <Global>

Module

mod\_xfer

Compatibility

1.1.6 and later

## Description

The TimeoutStalled directive sets the maximum number of seconds a data connection between the proftpd server and an FTP client can exist but have no actual data transferred (i.e. "stalled"). If the seconds argument is set to 0, data transfers are allowed to stall indefinitely.

## See also

## Examples

# TimesGMT

## Name

TimesGMT -- Toggle time display between GMT and local

## Synopsis

**TimesGMT** [ TimesGMT on|off]

Default

(versions 1.2.0pre9 and beyond) on

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

## Description

Compatibility: 1.2.0pre9 and later The TimesGMT option causes the server to report all ls and MDTM times in GMT and not local time.

## See also

## Examples

# TLSCACertificateFile

## Name

TLSCACertificateFile -- Define a CA certificate used to verify your client certificates

## Synopsis

**TLSCACertificateFile** [CA certificate filename]

Default  
    None  
Context  
    server config, <Global>, <VirtualHost>  
Module  
    mod\_tls  
Compatibility  
    1.2.7rc1 and later

## Description

The TLSCACertificateFile directive configures one file where you can assemble the certificates of Certification Authorities (CA) for your clients. The CA certificates in the file are then used to verify client certificates, if presented. Such a file is merely the concatenation of the various PEM-encoded CA certificates, in order of preference. This directive can be used in addition to, or as an alternative for, TLSCACertificatePath.

If neither TLSCACertificateFile nor TLSCACertificatePath are specified, the following message will appear in the TLSLog:

using default OpenSSL verification locations (see \$SSL\_CERT\_DIR)

This means that the SSL\_CERT\_DIR environment variable, if set, will be used to determine the location of a CA certificate directory, to be used when verifying clients.

## See also

[TLSCACertificatePath](#)

## Examples

TLSCACertificateFile /etc/ftpd/ca-bundle.pem

# TLSCACertificatePath

## Name

TLSCACertificatePath -- Define a path to the CAs used to verify your client certificates

## Synopsis

**TLSCACertificatePath** [Path to your CA certificates]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSCACertificatePath directive sets the directory for the certificates of Certification Authorities (CAs) for your clients. These are used to verify the client certificates presented. This directive may be used in addition to, or as alternative for, TLSCACertificateFile.

The files in the configured directory have to be PEM-encoded, and are accessed through hash filenames. This means one cannot simply place the CA certificates there: one also has to create symbolic links named hash-value.N. The `c_rehash` utility that comes with OpenSSL can be used to create the necessary symlinks.

If neither TLSCACertificateFile nor TLSCACertificatePath are specified, the following message will appear in the TLSLog:

```
using default OpenSSL verification locations (see $SSL_CERT_DIR)
[1]
```

This means that the `SSL_CERT_DIR` environment variable, if set, will be used to determine the location of a CA certificate directory, to be used when verifying clients.

## See also

[TLSCACertificateFile](#)

## Examples

TLSCACertificatePath /etc/ftpd/ca/

# TLSCARevocationFile

## Name

TLSCARevocationFile -- Define a file with your CA revocation certificates

## Synopsis

**TLSCARevocationFile** [CA revocation filename]

Default

Define a file holding your Certificate Revocation Lists

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSCARevocationFile directive configures one file that can contain the Certificate Revocation Lists (CRL) of Certification Authorities (CA) for your clients. These CRLs are used during the verification of client certificates, if presented. Such a file is merely the concatenation of the various PEM-encoded CRL files, in order of preference. This directive can be used in addition to, or as an alternative for, TLSCARevocationPath.

## See also

[TLSCARevocationPath](#)

## Examples

TLSCARevocationFile /etc/ftpd/ca-crl-bundle.pem

# TLSCARevocationPath

## Name

TLSCARevocationPath -- Define a path to your CA revocation certificates

## Synopsis

**TLSCARevocationPath** [Path to a directory with CA revocation certificates]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSCARevocationPath directive sets the directory for the Certificate Revocation Lists (CRL) of Certification Authorities (CAs) for your clients. These are used during the verification of client certificates, if presented. This directive may be used in addition to, or as alternative for, TLSCARevocationFile.

The files in the configured directory have to be PEM-encoded, and are accessed through hash filenames. This means one cannot simply place the CRLs there: one also has to create symbolic links named hash-value.N. The `c_rehash` utility that comes with OpenSSL can be used to create the necessary symlinks.

## See also

[TLSCARevocationFile](#)

## Examples

TLSCARevocationPath /etc/ftpd/crl/

# TLSCertificateChainFile

## Name

TLSCertificateChainFile -- Define an all in one certification file

## Synopsis

**TLSCertificateChainFile** [ TLSCertificateChainFile filename]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSCertificateChainFile directive sets the optional all-in-one file where you can assemble the certificates of Certification Authorities (CA) which form the certificate chain of the server certificate. This starts with the issuing CA certificate of the server certificate and can range up to the root CA certificate. Such a file is simply the concatenation of the various PEM-encoded CA Certificate files in certificate chain order. This server certificate chain is sent to the client, in addition to the server's certificate.

If TLSCertificateChainFile is not used, and TLSCACertificatePath is used, the certificate chain is built from the certificates in that path. TLSCertificateChainFile should be used as an alternative to TLSCACertificatePath for explicitly constructing the server certificate chain. It is especially useful to avoid conflicts with CA certificates when using client authentication. For although placing a CA certificate of the server certificate chain into the TLSCACertificatePath has the same effect for the certificate chain construction, it has the side-effect that client certificates issued by this same CA certificate are also accepted on client authentication. This is usually not what one expects.

Be careful: providing the certificate chain works only if you are using a single (either RSA or DSA) based server certificate. If you are using a coupled RSA+DSA certificate pair, this will work only if actually both certificates use the same certificate chain. Otherwise, clients will become confused.

## See also

[TLSCACertificateFile](#) [TLSCACertificatePath](#)



## Examples

`TLSertificateChainFile /etc/ftpd/client-ca-list.pem`

# TLSCipherSuite

## Name

TLSCipherSuite -- Define a cipher list

## Synopsis

**TLSCipherSuite** [ cipher-list ]

Default

ALL:!ADH

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

How to put together a cipher list parameter:

Key Exchange Algorithms:

"kRSA"     RSA key exchange  
"kDHR"     Diffie-Hellman key exchange (key from RSA cert)  
"kDHD"     Diffie-Hellman key exchange (key from DSA cert)  
"kEDH"     Ephemeral Diffie-Hellman key exchange (temporary key)

Authentication Algorithm:

"aNULL"    No authentication  
"aRSA"     RSA authentication  
"aDSS"     DSS authentication  
"aDH"     Diffie-Hellman authentication

Cipher Encoding Algorithm:

"eNULL"    No encoding  
"DES"     DES encoding  
"3DES"     Triple DES encoding  
"RC4"     RC4 encoding  
"RC2"     RC2 encoding  
"IDEA"     IDEA encoding

MAC Digest Algorithm:

"MD5"     MD5 hash function  
"SHA1"     SHA1 hash function  
"SHA"     SHA hash function (should not be used)

## Configuration Directive List

Aliases:

"ALL"	all ciphers
"SSLv2"	all SSL version 2.0 ciphers (should not be used)
"SSLv3"	all SSL version 3.0 ciphers
"EXP"	all export ciphers (40-bit)
"EXPORT56"	all export ciphers (56-bit)
"LOW"	all low strength ciphers (no export)
"MEDIUM"	all ciphers with 128-bit encryption
"HIGH"	all ciphers using greater than 128-bit encryption
"RSA"	all ciphers using RSA key exchange
"DH"	all ciphers using Diffie-Hellman key exchange
"EDH"	all ciphers using Ephemeral Diffie-Hellman key exchange
"ADH"	all ciphers using Anonymous Diffie-Hellman key exchange
"DSS"	all ciphers using DSS authentication
"NULL"	all ciphers using no encryption

Each item in the list may include a prefix modifier:

"+"	move cipher(s) to the current location in the list
"-"	remove cipher(s) from the list (may be added again by a subsequent list entry)
"!"	kill cipher from the list (it may not be added again by a subsequent list entry)

If no modifier is specified the entry is added to the list at the current position. "+" may also be used to combine tags to

The OpenSSL command

```
openssl ciphers -v <list of ciphers>
```

may be used to list all of the ciphers and the order described by a specific .

## See also

## Examples

For example, all available ciphers not including ADH key exchange:

```
ALL:!ADH:RC4+RSA:+HIGH:+MEDIUM:+LOW:+SSLv2:+EXP
```

All algorithms including ADH and export but excluding patented algorithms:

```
HIGH:MEDIUM:LOW:EXPORT56:EXP:ADH:!kRSA:!aRSA:!RC4:!RC2:!IDEA
```

# TLSDHParamFile

## Name

TLSDHParamFile -- Define a file used in Diffie-Hellman key exchange

## Synopsis

**TLSDHParamFile** [Absolute path to the Diffie-Hellman param file]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSDHParamFile directive is used to configure a file that mod\_tls will use when engaging in a Diffie-Hellman key exchange. Such a key exchange can be computationally intensive, in terms for parameter generation; to help speed up the process, the parameters used may be generated in advance, and stored in a file. The dhparam utility that comes with OpenSSL may be used to generate an appropriate file for this directive. The file parameter must be an absolute path.

## See also

## Examples

# TLSDSACertificateFile

## Name

TLSDSACertificateFile -- Point to the file containing the DSA certificate

## Synopsis

**TLSDSACertificateFile** [ TLSDSACertificateFile filename]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSDSACertificateFile directive points to the PEM-encoded file containing the DSA certificate file for the server and optionally also the corresponding DSA private key file.

If the contained private key is encrypted, the administrator will be prompted for the passphrase when the daemon starts up, and when the daemon is restarted.

## See also

[TLSDSACertificateKeyFile](#)

## Examples

TLSDSACertificateKeyFile /etc/ftpd/server-dsa-key.pem

# TLSDSACertificateKeyFile

## Name

TLSDSACertificateKeyFile -- Point to the file containing the private DSA key

## Synopsis

**TLSDSACertificateKeyFile** [ TLSDSACertificateKeyFile filename]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSDSACertificateKeyFile directive points to the PEM-encoded private key file for the server. If the private key is not combined with the certificate in the TLSDSACertificateFile, use this additional directive to point to the file with the standalone private key. When TLSDSACertificateFile is used and the file contains both the certificate and the private key, this directive need not be used. However, this practice is strongly discouraged. Instead we recommend you to separate the certificate and the private key.

If the contained private key is encrypted, the administrator will be prompted for the passphrase when the daemon starts up, and when the daemon is restarted.

## See also

[TLSDSACertificateKeyFile](#)

## Examples

TLSDSACertificateKeyFile /etc/ftpd/server-dsa-key.pem

# TLSEngine

## Name

TLSEngine -- Enable TLS/SSL connections

## Synopsis

**TLSEngine** [ [ on off ] ]

Default

off

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSEngine directive toggles the use of the SSL/TLS protocol engine (e.g. mod\_tls). This is usually used inside a <VirtualHost> section to enable SSL/TLS sessions for a particular virtual host. By default mod\_tls is disabled for both the main server and all configured virtual hosts.

## See also

## Examples

# TLSTLog

## Name

TLSTLog -- Specify a logfile for mod\_tls's reporting on a per-server basis

## Synopsis

**TLSTLog** [ TLSTLog filename]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSTLog directive is used to specify a log file for mod\_tls's reporting on a per-server basis. The file parameter given must be the full path to the file to use for logging.

## See also

## Examples



# TLSOptions

## Name

TLSOptions -- Configure optional behaviour of mod\_tls

## Synopsis

```
TLSOptions [ [ AllowDotLogin ] [ Allow PerUser ] [ ExportCertData ] [
NoCertRequest ] [ StdEnvVars ] [ dNSNameRequired ] [ iPAddressRquired ] ]
```

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSOptions directive is used to configure various optional behavior of mod\_tls. The currently implemented options are:

- AllowDotLogin

By default, mod\_tls still requires that a user supply a password for authentication, even if a valid client certificate is presented. If this option is enabled, mod\_tls will check in the user's home directory for a .tlslogin file, which should contain one or more PEM-encoded certificates. If the certificate presented by the client, if any, matches a certificate in this .tlslogin file, the user will be considered authenticated. The server will still prompt for a password, and if the user's .tlslogin does not exist, or does not contain the client's certificate, then the server will fallback to using the password for authentication.

- AllowPerUser

This option affects how mod\_tls evaluates any TLSRequired directives. Usually mod\_tls will reject any FTP commands, when TLSRequired on or TLSRequired ctrl is in effect, if the client has not successfully negotiated a SSL/TLS handshake. The FTPS specification requires that the SSL/TLS handshake occur, via the AUTH FTP command, before the USER and PASS commands. This means that mod\_tls does not know the identity of the connecting client when enforcing TLSRequired. If this AllowPerUser is used, mod\_tls will wait until after the PASS command has been processed to enforce any TLSRequired settings.

Important: if AllowPerUser is used, even if TLSRequired on or TLSRequired ctrl are in effect, it will be possible for the connecting client to send usernames and password unprotected before mod\_tls rejects the connection. This results in a slightly weaker security policy enforcement; please consider

## Configuration Directive List

carefully if this tradeoff is acceptable for your site.

- ExportCertData

Sets the following environment variables, if applicable. Note that doing so increases the memory size of the process quite a bit:

**Table 1-1. Enviroment variables**

TLS_SERVER_CERT	Server certificate, PEM-encoded
TLS_CLIENT_CERT	Client certificate, PEM-encoded
TLS_CLIENT_CERT_CHAINn	PEM-encoded certificates in client certificate chain

- NoCertRequest

Some FTP clients are known to be buggy when handling a server's certificate request. This option causes the server not to include such a request during an SSL handshake.

- StdEnvVars

Sets the following environment variables, if applicable. These environment variables are then available for use, such as in LogFormats. Note that doing so increases the memory size of the process quite a bit: increases the memory size of the process quite a bit:

**Table 1-2. Enviroment variables**

FTPS	Present if FTP over SSL/TLS is being used
TLS_PROTOCOL	SSL protocol version (e.g. SSLv3, TLSv1)
TLS_SESSION_ID	Hex-encoded SSL session ID
TLS_CIPHER	Cipher specification name
TLS_CIPHER_EXPORT	Present if cipher is an export cipher
TLS_CIPHER_KEYSIZE_POSSIBLE	Number of cipher bits possible
TLS_CIPHER_KEYSIZE_USED	Number of cipher bits used
TLS_LIBRARY_VERSION	OpenSSL version
TLS_CLIENT_M_VERSION	Client certificate version
TLS_CLIENT_M_SERIAL	Client certificate serial number
TLS_CLIENT_S_DN	Subject DN of client certificate
TLS_CLIENT_S_DN_x509	Component of client certificate's Subject DN, where x509 is a component of a X509 DN: C,CN,D,I,G,L,O,OU,S,ST,T,UID,Email
TLS_CLIENT_I_DN	Issuer DN of client certificate
TLS_CLIENT_I_DN_x509	Component of client certificate's Issuer DN, where x509 is a component of a X509 DN: C,CN,D,I,G,L,O,OU,S,ST,T,UID,Email
TLS_CLIENT_V_START	Start time of client certificate validity
TLS_CLIENT_V_END	End time of client certificate validity
TLS_CLIENT_A_SIG	Client certificate's signature algorithm

## Configuration Directive List

TLS_CLIENT_A_KEY	Client certificate's public key algorithm
TLS_CLIENT_CERT	Client certificate, PEM-encoded
TLS_CLIENT_CERT_CHAINn	PEM-encoded certificates in client certificate chain
TLS_SERVER_M_VERSION	Server certificate version
TLS_SERVER_M_SERIAL	Server certificate serial number
TLS_SERVER_S_DN	Subject DN of server certificate
TLS_SERVER_S_DN_x509	Component of server certificate's Subject DN, where x509 is a component of a X509 DN: C,CN,D,I,G,L,O,OU,S,ST,T,UID,Email
TLS_SERVER_I_DN	Issuer DN of server certificate
TLS_SERVER_I_DN_x509	Component of server certificate's Issuer DN, where x509 is a component of a X509 DN: C,CN,D,I,G,L,O,OU,S,ST,T,UID,Email
TLS_SERVER_V_START	Start time of server certificate validity
TLS_SERVER_V_END	End time of server certificate validity
TLS_SERVER_A_SIG	Server certificate's signature algorithm
TLS_SERVER_A_KEY	Server certificate's public key algorithm
TLS_SERVER_CERT	Server certificate, PEM-encoded

- **dNSNameRequired**

This option will cause `mod_tls` to perform checks on a client's certificate once the SSL handshake has been completed: the client's certificate will be searched for the `subjectAltName X509v3` extension, and, in that extension, the `dNSName` value will be looked up. Unless a `dNSName` value is present, and the value matches the DNS name to which the client's IP address resolves, the SSL session is closed. This check is only performed during SSL handshakes on the control channel. Note that if `UseReverseDNS` is off, this option is automatically disabled.

- **iPAddressRequired**

This option will cause `mod_tls` to perform checks on a client's certificate once the SSL handshake has been completed: the client's certificate will be searched for the `subjectAltName X509v3` extension, and, in that extension, the `iPAddress` value will be looked up. Unless an `iPAddress` value is present, and the value matches the IP address of the client, the SSL session is closed. This check is only performed during SSL handshakes on the control channel.

## See also

## Examples

`TLSEOptions iPAddressRequired StdEnvVars`

# TLSPassPhraseProvider

## Name

TLSPassPhraseProvider -- FIXFIXFIX

## Synopsis

**TLSPassPhraseProvider** [ "name" limit|regex|ip value]

Default

FIXFIXFIX

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Limit>, .ftpaccess

Module

mod\_tls

Compatibility

1.3.1rc1 and later

## Description

FIX FIX FIX

## See also

## Examples

FIXFIXFIX

FIXFIX

# TLSProtocol

## Name

TLSProtocol -- Define the SSL/TLS protocol version mod\_tls should use

## Synopsis

**TLSProtocol** [ [ SSLv23 SSLv3 TLSv1 ] ]

Default

SSLv23

Context

server config

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSProtocol directive is used to configure the SSL/TLS protocol versions that mod\_tls should use when establishing SSL/TLS sessions. Clients can then only connect using the configured protocol.

Since the protocol version used by mod\_tls is set only once, when the daemon starts, the TLSProtocol directive is only allowed in the "server config" context.

The allowed protocols are:

SSLv23 Compatibility mode, used to allow both SSLv3 and TLSv1

SSLv3 Allow only SSLv3

TLSv1 Allow only TLSv1

All use of SSLv2 is disabled. SSLv2 should not be used.

## See also

## Examples

# TLSRandomSeed

## Name

TLSRandomSeed -- Define a file for PRNG seeding

## Synopsis

**TLSRandomSeed** [Absolute path to the file]

Default

openssl-dir /.rnd

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSRandomSeed directive configures the file that mod\_tls will use for seeding the PRNG. seed must be an absolute path.

When the daemon shuts down, any random data left will be written out to the random seed file, so that that data may be used for seeding when the daemon is started again.

## See also

## Examples

TLSRandomSeed /etc/ftpd/server.rnd

# TLSRenegotiate

## Name

TLSRenegotiate -- Configure SSL renegotiations

## Synopsis

**TLSRenegotiate** [ ["ctrl" secs] ["data" Kbytes] ["timeout" secs] ["required" on|off] | "none"]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLSRenegotiate directive is used to configure when SSL renegotiations are to occur. Renegotiations, and thus this directive, are only supported by mod\_tls if the version of OpenSSL installed is 0.9.7 or greater.

If supported, renegotiations will occur on control channels that have been established for four hours by default, and on data channels that have transferred over one gigabyte of data by default. When renegotiations are requested, the client is given a timeout of 30 seconds, by default, to perform the renegotiation. To change the default control channel renegotiation timeout, use ctrl followed by a number, greater than zero, in seconds. Use data followed by a number, greater than zero, of kilobytes to change the default data channel renegotiation threshold. The timeout parameter, followed by a positive number of seconds, is used to change the length of time given to a client to complete a requested renegotiation, after which the SSL session will be shutdown. By default, mod\_tls will require that the client comply with the requested renegotiation within the TLSRenegotiate timeout. If, however, the client is unwilling or unable to do so, and the daemon needs to support these clients, set required to off. Doing so will cause renegotiations to be requested, but not required.

By default, mod\_tls will perform renegotiations if supported, on the control channel after 4 hours, and on the data channel after one gigabyte of transferred data. The default timeout for a renegotiation is 30 seconds.

Use none to disable all renegotiation requirements.

## See also

## Examples

# Change renegotiations to occur on control channels after 1 hour  
TLSRenegotiate ctrl 3600

# Change renegotiations to occur on data channels after 500 MB  
TLSRenegotiate data 512000

# Change renegotiations so that they are not required, only requested  
TLSRenegotiate required off

# Change only the timeout for renegotiations to be 5 minutes  
TLSRenegotiate timeout 300

# Change all of the above renegotiation thresholds using one directive  
TLSRenegotiate ctrl 3600 data 512000 required off timeout 300

# To disable renegotiations entirely  
TLSRenegotiate none



# TLSRequired

## Name

TLSRequired -- Require SSL/TLS on the control and/or data channel

## Synopsis

**TLSRequired** [on | off | ctrl | data | auth | auth+data]

Default

off

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

1.3.1rc1 and later provide the auth and auth+data options

## Description

The TLSRequired directive is used to define a basic security policy, one that dictates whether the control channel, or data channel, or both, of an FTP session must occur over SSL/TLS.

The "on" parameter enables SSL/TLS requirements on both control and data channels; "off" disables the requirements on both channels. Use "ctrl" and "data" to require SSL/TLS on either channel individually.

The "auth" parameter requires that SSL/TLS be used on the control channel, but only for authentication. To use this setting and require SSL/TLS for data transfers, use the "auth+data" parameter.

This "auth+data" parameter allows a very specific security policy: authentication via the USER/PASS commands must be protected via SSL/TLS, as must the data channel, but after authenticating, the client can request that protection be removed from the control channel. This policy allows clients to use the CCC (Clear Command Channel) command, which in turn enables SSL/TLS protected data transfers that operate better with firewalls that monitor the FTP control channel.

## See also

## Examples

```
# Require SSL/TLS on the control channel, so that passwords are not sent
# in the clear.
```

## Configuration Directive List

TLSRequired ctrl

# Require SSL/TLS on both channels.

TLSRequired on

# Allow the client to use the CCC command to remove SSL/TLS from the  
# control channel, but only after authentication has been performed.

# Still enforce the policy of using SSL/TLS for data transfers.

#

# Note that if we did not need to protect data transfers, we would

# set 'TLSRequired auth' instead of using 'TLSRequired auth+data'.

TLSRequired auth+data

# TLRSRACertificateFile

## Name

TLRSRACertificateFile -- Point to the file containing the RSA certificate

## Synopsis

**TLRSRACertificateFile** [ TLRSRACertificateFile filename]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLRSRACertificateFile directive points to the PEM-encoded file containing the RSA certificate file for the server and optionally also the corresponding RSA private key file.

If the contained private key is encrypted, the administrator will be prompted for the passphrase when the daemon starts up, and when the daemon is restarted.

## See also

[TLRSRACertificateKeyFile](#)

## Examples

TLRSRACertificateFile /etc/ftpd/server-rsa-cert.pem

# TLRSRACertificateKeyFile

## Name

TLRSRACertificateKeyFile -- Point to the file containing the private RSA key

## Synopsis

**TLRSRACertificateKeyFile** [ TLRSRACertificateKeyFile filename]

Default

None

Context

server config, <Global>, <VirtualHost>

Module

mod\_tls

Compatibility

1.2.7rc1 and later

## Description

The TLRSRACertificateKeyFile directive points to the PEM-encoded private key file for the server. If the private key is not combined with the certificate in the TLRSRACertificateFile, use this additional directive to point to the file with the standalone private key. When TLRSRACertificateFile is used and the file contains both the certificate and the private key, this directive need not be used. However, this practice is strongly discouraged. Instead we recommend you to separate the certificate and the private key.

If the contained private key is encrypted, the administrator will be prompted for the passphrase when the daemon starts up, and when the daemon is restarted.

## See also

## Examples

TLRSRACertificateKeyFile /etc/ftpd/server-rsa-key.pem

# TLSVerifyClient

## Name

TLSVerifyClient -- Configure how to handle certificates presented by clients --

## Synopsis

**TLSVerifyClient** [ on off]

Default  
    off  
Context  
    server config, <Global>, <VirtualHost>  
Module  
    mod\_tls  
Compatibility  
    1.2.7rc1 and later

## Description

The TLSVerifyClient directive configures how mod\_tls handles certificates presented by clients. If off, the module will accept the certificate and establish an SSL/TLS session, but will not verify the certificate. If on, the module will verify a client's certificate and, furthermore, will fail all SSL handshake attempts unless the client presents a certificate when the server requests one. Note that the server can be configured to not request a client certificate via the TLSOptions directive's "NoCertRequest" parameter.

## See also

## Examples

# TLSVerifyDepth

## Name

TLSVerifyDepth -- Define how deeply mod\_tls should verify a client certificate

## Synopsis

**TLSVerifyDepth** [ depth]

Default  
    9  
Context  
    server config, <Global>, <VirtualHost>  
Module  
    mod\_tls  
Compatibility  
    1.2.7rc1 and later

## Description

The TLSVerifyDepth directive sets how deeply mod\_tls should verify before deciding that the client does not have a valid certificate. The depth actually is the maximum number of intermediate certificate issuers, i.e. the number of CA certificates which are allowed to be followed while verifying the client certificate. A depth of 0 means that only self-signed client certificates are accepted, a depth of 1 means the client certificate can be self-signed or has to be signed by a CA which is directly known to the server (i.e. the CA's certificate is under TLSCACertificatePath), etc.

## See also

## Examples

TLSVerifyDepth 10

# TransferLog

## Name

TransferLog -- Specify the path to the transfer log

## Synopsis

**TransferLog** [TransferLog filename|NONE]

Default

TransferLog /var/log/xferlog

Context

server config, <Anonymous>, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.1.4 and later

## Description

The TransferLog directive configures the full path to the "wu-ftp style" file transfer log. Separate log files can be created for each Anonymous and/or VirtualHost. Additionally, the special keyword NONE can be used, which disables wu-ftp style transfer logging for the context in which the directive is used (only applicable to version 1.1.7 and later). See Also: ExtendedLog, LogFormat

## See also

## Examples

# TransferRate

## Name

TransferRate -- Configure upload, download transfer rates

## Synopsis

**TransferRate** [ cmds ] [ kilobytes-per-sec [: free-bytes] ] [ ["user" | "group" | "class" expression] ]

Default

None

Context

server config, <VirtualHost>, <Global>, <Anonymous>, <Directory>, .ftppaccess

Module

mod\_xfer

Compatibility

1.2.8rc1 and later

## Description

The TransferRate directive is used to set transfer rates limits on the transfer of data. This directive allows for transfer rates to be set in a wide variety of contexts, on a per-command basis, and for certain subsets of users. Note that this limit only applies to a single connection, and not to the overall transfer rate of the server.

The cmds parameter may be an comma-separated list of any of the following commands: APPE, RETR, STOR, and STOU.

The kilobytes-per-sec parameter is the actual transfer rate to be applied.

The free-bytes parameter, if configured, allows that many bytes to be transferred before the rate controls are applied. This allows for clients transferring small files to be unthrottled, but for larger files, such as MP3s and ISO images, to be throttled.

The optional parameters are used to restrict the application of the rate controls only to specific users. If the "user" restriction is given, then expression is a user-expression specifying to which users the rate applies. Similarly for the "group" restriction. For the "class" restriction, the expression is simply the name of connection class for whom the rate will apply.

## Examples

```
# Limit downloads for everyone except the special group of users
TransferRate RETR 1.5 group !special-users
```



## Configuration Directive List

# Limit uploads (and appends!) to the prolific users in the # lotsofuploadfiles.net domain. This presumes that a Class has been defined # for that domain, and that that Class has been named "uploaders". Let them # upload small files without throttling, though. TransferRate APPE,STOR 8.0:1024 class uploaders

# Umask

## Name

Umask -- Set the default Umask

## Synopsis

**Umask** [Umask file octal-mask [directory octal-mask]]

Default

None

Context

server config, <Anonymous>, <VirtualHost>, <Directory>, <Global>, .ftpaccess

Module

mod\_core

Compatibility

0.99.0 and later

## Description

Umask sets the mask applied to newly created file and directory permissions within a given context. By default, the Umask in the server configuration, <VirtualHost> or <Anonymous> block is used, unless overridden by a "per-directory" Umask setting. Any arguments supplied must be an octal number, in the format 0xxx. An optional second argument can specify a Umask to be used when creating directories. If a second argument isn't specified, directories are created using the default Umask in the first argument. For more information on umasks, consult your operating system documentation/man pages.

Proftpd will not create files that have the execution bit turned on, this is a security driven design decision. The permissions of the uploaded file can be changed by issuing a SITE CHMOD command can be used to change the mode of the uploaded file. Syntax of the command is: SITE CHMOD <mode> <file>.

## See also

## Examples

# UnsetEnv

## Name

UnsetEnv -- (docs incomplete)

## Synopsis

**UnsetEnv** [ *key*]

Default

None

Context

server config, <VirtualHost>, <Global>

Module

mod\_core

Compatibility

1.2.10rc1 and later

## Description

(docs incomplete)

## See also

## Examples

(docs incomplete)

# UseFtpUsers

## Name

UseFtpUsers -- Block based on /etc/ftpusers

## Synopsis

**UseFtpUsers** [UseFtpUsers on|off]

Default

UseFtpUsers on

Context

server config, <Anonymous>, <VirtualHost>, <Global>

Module

mod\_auth

Compatibility

0.99.0 and later

## Description

Legacy FTP servers generally check a special authorization file (typically /etc/ftpusers) when a client attempts to authenticate. If the user's name is found in this file, FTP access is denied. For compatibility sake, proftpd defaults to checking this file during authentication. This behavior can be suppressed using the UseFtpUsers configuration directive.

## See also

## Examples

# UseGlobbing

## Name

UseGlobbing -- Toggles use of glob() functionality

## Synopsis

**UseGlobbing** [ on | off ]

Default

UseGlobbing on

Context

server config, <VirtualHost>, <Global>, <Anonymous>

Module

mod\_ls

Compatibility

1.2.5rc1 and later

## Description

The UseGlobbing directive controls use of glob() functionality, which is needed for supporting wildcard characters such as \*.

## See also

# UseIPv6

## Name

UseIPv6 -- Disable IPv6 support

## Synopsis

**UseIPv6** [ "on" | "off" ]

Default

UseIPv6 on

Context

server config

Module

mod\_core

Compatibility

1.3.1rc1 and later

## Description

This directive enables or disables the IPv6 support within proftpd. It's also possible to control this behaviour with command-line options.

-4, --ipv4    Support IPv4 functionality only

-6, --ipv6    Support IPv6 functionality

## See also

## Examples

```
proftpd -4
```

Start Proftpd only with IPv4 functionality enabled.

# User

## Name

User -- Set the user the daemon will run as

## Synopsis

**User** [User userid]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The User directive configures which user the proftpd daemon will normally run as. By default, proftpd runs as root which is considered undesirable in all but the most trustful network configurations. The User directive used in conjunction with the Group directive instructs the daemon to switch to the specified user and group as quickly as possible after startup. On some unix variants, the daemon will occasionally switch back to root in order to accomplish a task which requires super-user access. Once the task is completed, root privileges are relinquished and the server continues to run as the specified user and group. When applied to a <VirtualServer> block, proftpd will run as the specified user/group on connections destined for the virtual server's address or port. If either User or Group is applied to an <Anonymous> block, proftpd will establish an anonymous login when a user attempts to login with the specified userid, as well as permanently switching to the corresponding uid/gid (matching the User/Group parameters found in the anonymous block) after login. Note: When an authorized unix user is authenticated and logs in, all former privileges are released, the daemon switches permanently to the logged in user's uid/gid, and is never again capable of switching back to root or any other user/group.

## See also

## Examples

# UserAlias

## Name

UserAlias -- Alias a username to a system user

## Synopsis

**UserAlias** [ login-user real-user ]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

0.99.0 and later

## Description

ProFTPD requires a real username/uid when authenticating users as provided by PAM, AuthUserFile or another authentication mechanism. There are however times when additional aliases are required but it is undesirable to provide additional login accounts.

UserAlias provides a mechanism to do this, a typical and common example is within Anonymous configuration blocks. It is normal for the server to use 'ftp' as the primary authentication user, however it is common practice for users to login using "anonymous". This is achieved by adding the following to the config file.

## See also

## Examples

UserAlias anonymous ftp



# UserDirRoot

## Name

UserDirRoot -- Set the chroot directory to a subdirectory of the anonymous server

## Synopsis

**UserDirRoot** [ UserDirRoot on|off]

Default

off

Context

<Anonymous>

Module

mod\_auth

Compatibility

1.2.0pre2 and later

## Description

When set to true, the chroot base directory becomes a subdirectory of the anonymous ftp directory, based on the username of the current user. For example, assuming user "foo" is aliased to "ftp", logging in as "foo" causes proftpd to run as real user ftp, but to chroot into ~ftp/foo instead of just ~ftp.

## See also

## Examples

# UseReverseDNS

## Name

UseReverseDNS -- Toggle rDNS lookups

## Synopsis

**UseReverseDNS** [ UseReverseDNS on|off]

Default

UseReverseDNS on

Context

server config

Module

mod\_core

Compatibility

1.1.7 and later

## Description

Normally, incoming active mode data connections and outgoing passive mode data connections have a reverse DNS lookup performed on the remote host's IP address. In a chroot environment (such as <Anonymous> or DefaultRoot), the /etc/hosts file cannot be checked and the only possible resolution is via DNS. If for some reason, DNS is not available or improperly configured this can result in proftpd blocking ("stalling") until the libc resolver code times out. Disabling this directive prevents proftpd from attempting to reverse-lookup data connection IP addresses.

## See also

## Examples

# UserOwner

## Name

UserOwner -- Set the user ownership of new files / directories

## Synopsis

**UserOwner** [UserOwner username]

Default

None

Context

<Anonymous>, <Directory>

Module

mod\_core

Compatibility

1.2pre11 and later

## Description

The UserOwner directive configures which user all newly created directories and files will be owned by, within the context that UserOwner is applied to. The user ID of username cannot be 0 (root). Where it is used, the GroupOwner directive is not restricted to groups that the current user is a member of.

## See also

[GroupOwner](#)

## Examples

# UserPassword

## Name

UserPassword -- Creates a hardcoded username/password pair

## Synopsis

**UserPassword** [ UserPassword userid hashed-password]

Default

None

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_auth

Compatibility

0.99.0p15 and later

## Description

The UserPassword directive creates a password for a particular user which overrides the user's normal password in /etc/passwd (or /etc/shadow). The override is only effective inside the context to which UserPassword is applied. The hashed-password argument is a cleartext string which has been passed through the standard unix crypt() function. Do NOT use a cleartext password. This can be useful when combined with UserAlias to provide multiple logins to an Anonymous FTP site. See Also: GroupPassword

## See also

## Examples

# UserRatio

## Name

UserRatio -- Ratio directive

## Synopsis

**UserRatio** [UserRatio foo1 foo2 foo3]

Default

None known

Context

<Directory>, <Anonymous>, <Limit>,.ftpassess

Module

mod\_ratio

Compatibility

at least 1.2.0 and later

## Description

The UserRatio directive .... Example: UserRatio

## See also

## Examples

# UseSendfile

## Name

UseSendfile -- Toggles use of sendfile() functionality

## Synopsis

**UseSendfile** [ on | off ]

Default

UseSendfile on

Context

server config, <VirtualHost>, <Global>

Module

mod\_xfer

Compatibility

1.3.0rc1 and later

## Description

The UseSendfile directive controls use of sendfile functionality, which is an optimization for sending files to clients. Use of sendfile functionality avoids separate read and send operations, and buffer allocations. But on some platforms or within some filesystems, it is better to disable this feature to avoid operational problems:

- \* Some platforms may have broken sendfile support that the build system did not detect, especially if the binaries were built on another box and moved to such a machine with broken sendfile support.
- \* On Linux the use of sendfile triggers TCP-checksum offloading bugs on certain networking cards when using IPv6.
- \* With a network-mounted directories (e.g. NFS or SMB), the kernel may be unable to serve the network file through its own cache.

Note that if sendfile support is enabled, tools like ftpwho and ftptop will not show the transfer rate for downloads. These tools work by reading the ScoreboardFile, and the ScoreboardFile is updated periodically during uploads and downloads. However, when sendfile support is used, the ScoreboardFile does not have a chance to be updated. This is only true for downloads; the tools will continue to show the transfer rate for uploads.

# UseUTF8

## Name

UseUTF8 -- FIXFIXFIX

## Synopsis

**UseUTF8** [ "name" limit|regex|ip value]

Default

FIXFIXFIX

Context

server config, <Global>, <VirtualHost>, <Anonymous>, <Limit>, .ftpaccess

Module

mod\_core

Compatibility

1.3.1rc1 and later

## Description

FIX FIX FIX

## See also

## Examples

FIXFIXFIX

FIXFIX

# VirtualHost

## Name

VirtualHost -- Define a virtual ftp server

## Synopsis

**VirtualHost** [ <VirtualHost addresses seperated by spaces>]

Default

None

Context

server config

Module

mod\_core

Compatibility

0.99.0 and later

## Description

The VirtualHost configuration block is used to create an independent set of configuration directives that apply to a particular hostname or IP address. It is often used in conjunction with system level IP aliasing or dummy network interfaces in order to establish one or more "virtual" servers which all run on the same physical machine. The block is terminated with a </VirtualHost> directive. By utilizing the Port directive inside a VirtualHost block, it is possible to create a virtual server which uses the same address as the master server, but listens on a separate tcp port (incompatible with ServerType inetd). When proftpd starts, virtual server connections are handled in one of two ways, depending on the ServerType setting: inetd The daemon examines the destination address and port of the incoming connection handed off from inetd. If the connection matches one of the configured virtual hosts, the connection is serviced based on the appropriate configuration. If no virtual host matches, and the main server does not match, the client is informed that no server is available to service their requests and disconnected. standalone After parsing the configuration file, the daemon begins listening for connections on all configured ports, spawning child processes as necessary to handle connections for either the main server or any virtual servers. Because of the method that the daemon uses to listen for connections when in standalone mode, it is possible to support an exceedingly large number of virtual servers, potentially exceeding the number of per-process file descriptors. This is due to the fact that a single file descriptor is used to listen to each configured port, regardless of the number of addresses being monitored. Note that it may be necessary to increase the tcpBackLog value on heavily loaded servers in order to avoid kernel rejected client connections ("Connection refused").

Starting with ProFTPD 1.3.0rc1 it's possible to use more than one FQDN or IP Address. With this change the old Bind directive has been deprecated.



## See also

[DefaultAddress](#)

## Examples

```
<VirtualHost host1.domain.com host2.domain.com> ... </VirtualHost>
```

# WtmpLog

## Name

WtmpLog -- Toggle logging to wtmp

## Synopsis

**WtmpLog** [ WtmpLog on|off|NONE]

Default

WtmpLog on

Context

server config, <VirtualHost>, <Anonymous>, <Global>

Module

mod\_core

Compatibility

1.1.7 and later

## Description

The WtmpLog directive controls proftpd's logging of ftp connections to the host system's wtmp file (used by such commands as `last'). By default, all connections are logged via wtmp. Please report any corrections or additions via <http://bugs.proftpd.net/>

## See also

## Examples

---

## Chapter 2. List of modules

# mod\_auth

## Name

mod\_auth -- Authentication module

## Synopsis

mod\_auth

## Description

FIXME FIXME FIXME

## See also

[AccessDenyMsg](#) [AccessGrantMsg](#) [AnonRejectPasswords](#) [AnonRequirePassword](#) [AuthAliasOnly](#)  
[AuthGroupFile](#) [AuthPAM](#) [AuthPAMConfig](#) [AuthUserFile](#) [AuthUsingAlias](#) [CreateHome](#) [#CreateHome#](#)  
[DefaultChdir](#) [DefaultRoot](#) [GroupPassword](#) [LoginPasswordPrompt](#) [MaxClients](#) [MaxClientsPerClass](#)  
[MaxClientsPerHost](#) [MaxClientsPerUser](#) [MaxConnectionsPerHost](#) [MaxHostsPerUser](#) [MaxLoginAttempts](#)  
[PersistentPasswd](#) [RequireValidShell](#) [RootLogin](#) [RootRevoke](#) [TimeoutLogin](#) [TimeoutSession](#) [UseFtpUsers](#)  
[UserAlias](#) [UserDirRoot](#) [UserPassword](#)

CapabilitiesEngineCapabilitiesSet

# mod\_core

## Name

mod\_core -- Core module

## Synopsis

mod\_core

## Description

This module provides all the core functionality ProFTPD needs to function, this module must be compiled in.

## See also

[Allow](#) [AllowAll](#) [AllowClass](#) [AllowFilter](#) [AllowForeignAddress](#) [AllowGroup](#) [AllowOverride](#) [AllowRetrieveRestart](#) [AllowStoreRestart](#) [AllowUser](#) [Anonymous](#) [AnonymousGroup](#) [AuthOrder](#) [Bind](#) [CDPath](#) [Class](#) [CommandBufferSize](#) [DebugLevel](#) [DefaultAddress](#) [DefaultServer](#) [DefaultTransferMode](#) [DeferWelcome](#) [Define](#) [Deny](#) [DenyAll](#) [DenyClass](#) [DenyFilter](#) [DenyGroup](#) [DenyUser](#) [Directory](#) [DisplayChdir](#) [DisplayConnect](#) [DisplayFirstChdir](#) [DisplayGoAway](#) [DisplayLogin](#) [DisplayQuit](#) [Global](#) [Group](#) [GroupOwner](#) [HideFiles](#) [HideGroup](#) [HideNoAccess](#) [HideUser](#) [IdentLookups](#) [IfDefine](#) [IfModule](#) [IgnoreHidden](#) [Include](#) [Limit](#) [MasqueradeAddress](#) [MaxConnectionRate](#) [MaxInstances](#) [MultilineRFC2228](#) [Order](#) [PassivePorts](#) [PathAllowFilter](#) [PathDenyFilter](#) [PidFile](#) [Port](#) [RLimitCPU](#) [RLimitMemory](#) [RLimitOpenFiles](#) [ScoreboardFile](#) [ServerAdmin](#) [ServerIdent](#) [ServerName](#) [ServerType](#) [SetEnv](#) [SocketBindTight](#) [SocketOptions](#) [SyslogFacility](#) [SyslogLevel](#) [tcpBackLog](#) [tcpNoDelay](#) [TimeoutIdle](#) [TimeoutLinger](#) [TimesGMT](#) [TransferLog](#) [Umask](#) [UnsetEnv](#) [UseIPv6](#) [User](#) [UseReverseDNS](#) [UserOwner](#) [UseUTF8](#) [VirtualHost](#) [WtmpLog](#)

# mod\_delay

## Name

mod\_tls -- Prevent information leak through timing attacks

## Synopsis

**mod\_delay**

## Description

When proftpd processes the USER and PASS FTP commands from a client, it has to perform checks against configured ACLs, look up user and group information, etc. These checks are not done if the given username is known to not exist for the server, in order to not tie up system resources needlessly. However, this does mean that more work is done when handling "good" users than when handling "bad" users. This difference can be detected in the time it takes for proftpd to send a response to the USER and PASS commands. This means it is possible for an attacker to look for these statistical timing differences, and determine which users are "good" and which are "bad". From there, a determined attacker can focus their attention on the known good usernames. Note that the timings will vary depending on server load, number of users in the user base, type of storage of user data (e.g. LDAP directories, SQL tables, RADIUS servers, flat files, etc).

The mod\_delay module attempts to prevent such timing differences by keeping track of the time taken to process the USER and PASS commands. It does this for the most recent USER and PASS commands. The timing data are stored in the module's DelayTable. If the module detects that proftpd has not taken enough time to handle one of these commands, compared to its past response times, a small delay will be added to the response cycle. The amount of delay is determined by the difference between the current time spent handling the command and the median time spent handling the same command in the past.

## Installation

The mod\_delay module is distributed with ProFTPD and compiled in by default.

## See also

[DelayEngine](#) [DelayTable](#)

# mod\_ldap

## Name

mod\_ldap -- LDAP authentication support

## Synopsis

mod\_ldap

## Description

mod\_ldap provides LDAP authentication support for ProFTPD. It supports many features useful in "toaster" environments such as default UID/GID and autocreation/autogeneration of home directories.

## See also

[LDAPAliasDereference](#) [LDAPAttr](#) [LDAPAuthBinds](#) [LDAPDefaultAuthScheme](#) [LDAPDefaultGID](#) [LDAPDefaultUID](#) [LDAPDNInfo](#) [LDAPDoAuth](#) [LDAPDoGIDLookups](#) [LDAPDoQuotaLookups](#) [LDAPDoUIDLookups](#) [LDAPForceDefaultGID](#) [LDAPForceDefaultUID](#) [LDAPForceGeneratedHomedir](#) [LDAPForceHomedirOnDemand](#) [LDAPGenerateHomedir](#) [LDAPGenerateHomedirPrefix](#) [LDAPGenerateHomedirPrefixNoUsername](#) [LDAPHomedirOnDemand](#) [LDAPHomedirOnDemandPrefix](#) [LDAPHomedirOnDemandPrefixNoUsername](#) [LDAPHomedirOnDemandSuffix](#) [LDAPNegativeCache](#) [LDAPProtocolVersion](#) [LDAPQueryTimeout](#) [LDAPSearchScope](#) [LDAPServer](#) [LDAPUseTLS](#)



# mod\_log

## Name

mod\_log -- Logging support

## Synopsis

**mod\_log**

## Description

Logging support, including enhanced formatting options.

## See also

[AllowLogSymlinks](#) [ExtendedLog](#) [LogFormat](#) [ServerLog](#) [SystemLog](#)

# mod\_ls

## Name

mod\_ls -- file listing functionality

## Synopsis

mod\_ls

## Description

FIXME FIXME FIXME

## See also

[DirFakeGroup](#) [DirFakeMode](#) [DirFakeUser](#) [ListOptions](#) [ShowSymlinks](#) [UseGlobbing](#)

# mod\_radius

## Name

mod\_radius -- RADIUS based authentication support

## Synopsis

**mod\_radius**

## Description

This module provides RADIUS authentication and accounting support.

Strong authentication is in demand for Internet services. For many, this means using the RADIUS (Remote Authentication Dial-In User Service) protocol.

However, there are caveats to using RADIUS for authentication. RADIUS packets are sent in the clear, which means that they can easily be sniffed. First, do not have your authenticating RADIUS servers exposed to the Internet; keep them protected within your LAN. Second, it is highly recommended to use separate RADIUS servers for each of your services.

## RADIUS Authentication

The RADIUS protocol can be used for answering the question "Should this user be allowed to login?" However, the "yes/no" answer is not everything that proftpd needs to log a user in; the server also requires the UID and GID to use for the authenticated user, home directory, and shell. This information is usually not available from the RADIUS servers, which means that using RADIUS to provide all the necessary login information can be problematic. The RadiusUserInfo directive is meant to be used to address this issue, to provide the missing information.

In those cases where the RADIUS servers can provide that additional login information, via custom attributes, the RadiusUserInfo directive can also be used obtain that information as well.

## RADIUS Accounting

While RADIUS is primarily used for authentication, the protocol also allows for accounting of user activities. The mod\_radius module makes use of this ability, using RADIUS accounting packets to transmit the following data:

\* Acct-Authentic: How the user was authenticated (e.g. locally, or via RADIUS) \* Acct-Session-Id: The process ID of the FTP session \* Acct-Session-Time: The duration of the FTP session, in seconds \* Acct-Input-Octets: The number of bytes uploaded (includes appending to files) \* Acct-Output-Octets: The

## Configuration Directive List

number of bytes downloaded Merely configuring a RadiusAcctServer enables the module's accounting capabilities. Common Attributes The following RADIUS attributes are sent with every RADIUS packet generated by mod\_radius: \* User-Name: The name of the logging-in user \* NAS-Identifier: Always "ftp" \* NAS-IP-Address: IP address of FTP server \* NAS-Port: Port of FTP server \* NAS-Port-Type: Always Virtual. \* Calling-Station-Id: IP address of connecting FTP client

## See also

[RadiusAcctServer](#) [RadiusAuthServer](#) [RadiusEngine](#) [RadiusLog](#) [RadiusRealm](#) [RadiusUserInfo](#)

# mod\_ratio

## Name

mod\_ratio -- FIX ME FIX ME

## Synopsis

mod\_ratio

## Description

FIXME FIXME FIXME

## See also

[AnonRatio](#) [ByteRatioErrMsg](#) [CwdRatioMsg](#) [FileRatioErrMsg](#) [GroupRatio](#) [HostRatio](#) [LeechRatioMsg](#) [RatioFile](#) [Ratios](#) [RatioTempFile](#) [SaveRatios](#) [UserRatio](#)

# mod\_readme

## Name

mod\_readme -- "README" file support

## Synopsis

**mod\_readme**

## Description

FIXME FIXME FIXME

## See also

[DisplayReadme](#)

RewriteConditionRewriteEngineRewriteLockRewriteLogRewriteMapRewriteRule

# mod\_sql

## Name

mod\_sql -- SQL support module

## Synopsis

mod\_sql

## Description

This module provides the necessary support for SQL based authentication, logging and other features as required. It replaces the SQL modules which were shipped with 1.2.0rc2 and earlier.

## See also

[SQLAuthenticate](#) [SQLAuthTypes](#) [SQLBackend](#) [SQLConnectInfo](#) [SQLDefaultGID](#) [SQLDefaultHomedir](#) [SQLDefaultUID](#) [SOLEngine](#) [SQLGroupInfo](#) [SQLGroupWhereClause](#) [SQLHomedirOnDemand](#) [SQLLog](#) [SQLLogFile](#) [SQLMinID](#) [SQLMinUserGID](#) [SQLMinUserUID](#) [SQLNamedQuery](#) [SQLNegativeCache](#) [SQLRatios](#) [SQLRatioStats](#) [SQLShowInfo](#) [SQLUserInfo](#) [SQLUserWhereClause](#)



# mod\_tls

## Name

mod\_tls -- TLS/SSL support module

## Synopsis

mod\_tls

## Description

This module provides the necessary support for encrypting you ftp sessions.

## Installation

The mod\_tls module is distributed with ProFTPD. Simply follow the normal steps for using third-party modules in proftpd: ./configure --with-modules=mod\_tls make make install You may need to specify the location of the OpenSSL header and library files in your configure command, e.g.: ./configure --with-modules=mod\_tls \ --with-includes=/usr/local/openssl/include \ --with-libraries=/usr/local/openssl

## See also

[TLSCACertificateFile](#) [TLSCACertificatePath](#) [TLSCARevocationFile](#) [TLSCARevocationPath](#)  
[TLSCertificateChainFile](#) [TLSCipherSuite](#) [TLSDHParamFile](#) [TLSDSACertificateFile](#)  
[TLSDSACertificateKeyFile](#) [TLSEngine](#) [TLSLog](#) [TLSOptions](#) [TLSPassPhraseProvider](#) [TLSProtocol](#)  
[TLSRandomSeed](#) [TLSRenegotiate](#) [TLSRequired](#) [TLSRSACertificateFile](#) [TLSRSACertificateKeyFile](#)  
[TLSVerifyClient](#) [TLSVerifyDepth](#)

# mod\_wrap

## Name

mod\_wrap -- Interface to libwrap

## Synopsis

**mod\_wrap**

## Description

It enables the daemon to use the common tcpwrappers access control library while in standalone mode, and in a very configurable manner. It is not compiled by default.

If not installed on your system, the TCP wrappers library, required by this module, can be found here, on Wietse Venema's site. Once installed, it highly recommended that the `hosts_access(3)` and `hosts_access(5)` man pages be read and understood.

Many programs will automatically add entries in the common allow/deny files, and use of this module will allow a ProFTPD daemon running in standalone mode to adapt as these entries are added. The `portsentry` program does this, for example: when illegal access is attempted, it will add hosts to the `/etc/hosts.deny` file.

## See also

[TCPAccessFiles](#) [TCPAccessSyslogLevels](#) [TCPGroupAccessFiles](#) [TCPServiceName](#) [TCPUserAccessFiles](#)

# mod\_xfer

## Name

mod\_xfer -- FIX ME FIX ME

## Synopsis

mod\_xfer

## Description

FIXME FIXME FIXME

## See also

[AllowOverwrite](#) [DeleteAbortedStores](#) [DisplayFileTransfer](#) [HiddenStor](#) [HiddenStores](#) [MaxRetrieveFileSize](#) [MaxStoreFileSize](#) [StoreUniquePrefix](#) [TimeoutNoTransfer](#) [TimeoutStalled](#) [TransferRate](#) [UseSendfile](#)

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## **Chapter 3. List of configuration contexts**

# server config

## Name

server config -- server config

## Synopsis

**server config**

## Description

FIXME FIXME FIXME

## See also

# Global

## Name

Global -- Global

## Synopsis

Global

## Description

FIXME FIXME FIXME

## See also

# VirtualHost

## Name

VirtualHost -- VirtualHost

## Synopsis

VirtualHost

## Description

FIXME FIXME FIXME

## See also

# Anonymous

## Name

Anonymous -- Anonymous

## Synopsis

Anonymous

## Description

FIXME FIXME FIXME

## See also

[AccessDenyMsg](#) [AccessGrantMsg](#) [AllowAll](#) [AllowFilter](#) [AllowForeignAddress](#) [AllowOverride](#) [AllowOverwrite](#) [AllowRetrieveRestart](#) [AllowStoreRestart](#) [AnonRatio](#) [AnonRejectPasswords](#) [AnonRequirePassword](#) [AuthAliasOnly](#) [AuthUsingAlias](#) [ByteRatioErrMsg](#) [CDPath](#) [CwdRatioMsg](#) [DefaultChdir](#) [DeleteAbortedStores](#) [DenyAll](#) [DenyFilter](#) [Directory](#) [DirFakeGroup](#) [DirFakeMode](#) [DirFakeUser](#) [DisplayChdir](#) [DisplayFileTransfer](#) [DisplayFirstChdir](#) [DisplayGoAway](#) [DisplayLogin](#) [DisplayQuit](#) [DisplayReadme](#) [ExtendedLog](#) [FileRatioErrMsg](#) [Group](#) [GroupOwner](#) [GroupPassword](#) [GroupRatio](#) [HiddenStor](#) [HiddenStores](#) [HideGroup](#) [HideNoAccess](#) [HideUser](#) [HostRatio](#) [Include](#) [LDAPGenerateHomedirPrefixNoUsername](#) [LDAPHomedirOnDemandPrefixNoUsername](#) [LeechRatioMsg](#) [Limit](#) [ListOptions](#) [LoginPasswordPrompt](#) [MaxClients](#) [MaxClientsPerHost](#) [MaxClientsPerUser](#) [MaxConnectionsPerHost](#) [MaxHostsPerUser](#) [MaxRetrieveFileSize](#) [MaxStoreFileSize](#) [PathAllowFilter](#) [PathDenyFilter](#) [RatioFile](#) [Ratios](#) [RatioTempFile](#) [RequireValidShell](#) [RewriteCondition](#) [RewriteRule](#) [RootLogin](#) [RootRevoke](#) [SaveRatios](#) [ShowSymlinks](#) [SQLEngine](#) [SQLNamedQuery](#) [StoreUniquePrefix](#) [TCPAccessFiles](#) [TCPAccessSyslogLevels](#) [TimeoutSession](#) [TimesGMT](#) [TLSPassPhraseProvider](#) [TransferLog](#) [TransferRate](#) [Umask](#) [UseFtpUsers](#) [UseGlobbing](#) [User](#) [UserAlias](#) [UserDirRoot](#) [UserOwner](#) [UserPassword](#) [UserRatio](#) [UseUTF8](#) [WtmpLog](#)



# Limit

## Name

Limit -- Limit

## Synopsis

Limit

## Description

FIXME FIXME FIXME

## See also

[Allow](#) [AllowAll](#) [AllowClass](#) [AllowGroup](#) [AllowUser](#) [AnonRatio](#) [ByteRatioErrMsg](#) [CwdRatioMsg](#) [Deny](#) [DenyAll](#) [DenyClass](#) [DenyGroup](#) [DenyUser](#) [DisplayFileTransfer](#) [FileRatioErrMsg](#) [GroupRatio](#) [HostRatio](#) [IgnoreHidden](#) [LDAPGenerateHomedirPrefixNoUsername](#) [LDAPHomedirOnDemandPrefixNoUsername](#) [LeechRatioMsg](#) [Order](#) [RatioFile](#) [Ratios](#) [RatioTempFile](#) [SaveRatios](#) [SOLNamedQuery](#) [TLSPassPhraseProvider](#) [UserRatio](#) [UseUTF8](#)

# **.ftppaccess**

## **Name**

`.ftppaccess -- .ftppaccess`

## **Synopsis**

`.ftppaccess`

## **Description**

FIXME FIXME FIXME

## **See also**

[AllowAll](#) [AllowFilter](#) [AllowOverwrite](#) [AllowRetrieveRestart](#) [AllowStoreRestart](#) [AnonRatio](#) [ByteRatioErrMsg](#) [CwdRatioMsg](#) [DeleteAbortedStores](#) [DenyAll](#) [DenyFilter](#) [DirFakeGroup](#) [DirFakeUser](#) [DisplayFileTransfer](#) [FileRatioErrMsg](#) [GroupOwner](#) [GroupRatio](#) [HideFiles](#) [HostRatio](#) [LDAPGenerateHomedirPrefixNoUsername](#) [LDAPHomedirOnDemandPrefixNoUsername](#) [LeechRatioMsg](#) [Limit](#) [ListOptions](#) [MaxRetrieveFileSize](#) [MaxStoreFileSize](#) [PathAllowFilter](#) [PathDenyFilter](#) [RatioFile](#) [Ratios](#) [RatioTempFile](#) [SaveRatios](#) [SQLNamedQuery](#) [StoreUniquePrefix](#) [TLSPassPhraseProvider](#) [TransferRate](#) [Umask](#) [UserRatio](#) [UseUTF8](#)

## **Notes**

[1]