mod_ftpd Manual

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Introduction

This is a FTP Protocol Server module for Apache 2.0 and 2.1. It is based loosely on the mod_pop3 code base, so many thanks to the author of mod_pop3. This is still a developmental module, and directives and features may change without notice from release to release. There is a sample con guration provided at the end of this document.

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Credits / Contributors

In this document, I have the pleasure of acknowledging:

- Paul Querna <chip force-elite.com>   for testing and bouncing ideas off of and writing DBI provider.

Feedback

Feedback is most certainly welcome for this document. Send your additions, comments and criticisms to the following email address <urkle <at> outoforder <dot> cc>   .

Translations

Currently I there are no translations of this document. However if you would like to translate this document into other languages please do so and submit them to this email address <urkle <at> outoforder <dot> cc>   .

Building and Installation

1. ./con gure --with-apxs=/path/to/apxs

2. make

3. su -c "make install"

Sample Con guration

Example 1. A sample Apaceh 2.0 con guration

```
LoadModule ftpd_module modules/mod_ftpd.so
# Load any of the provider modules here (for user specific chroots)
#LoadModule ftpd_dbm_module modules/mod_ftpd_dbm.so
#LoadModule ftpd_dbi_module modules/mod_ftpd_dbi.so
LoadModule ftpd_default_module modules/mod_ftpd_default.so
#LoadModule ftpd_fail_module modules/mod_ftpd_fail.so

Listen 21
<VirtualHost *:21>
        DocumentRoot /var/ftp
        FtpProtocol On
        FtpShowRealPermissions Off
        FtpAllowActive On
        FtpPasvMinPort 1024
        FtpPasvPaxPort 65535
        FtpLimitOrder default
        FtpDefaultMaxLogins 100
        <Directory /var/ftp>
                AuthUserFile /usr/local/httpd/ftp
                Anonymous_Authoritative On
                AuthAuthoritative Off
                Anonymous_NoUserID Off
                Anonymous_MustGiveEmail Off
                Anonymous_VerifyEmail Off
                Anonymous_LogEmail Off
                Anonymous anonymous
                AuthName ftp
                AuthType Basic
                require valid-user
                order allow,deny
                allow from all
        </Directory>
# only allow changing, retrieving files, and listing on the site
        <Location />
                <LimitExtept CHDIR GET LIST>
                        deny from all
                </LimitExcept>
        </Location>
# allow making directories, listing, chdir, and uploading files.
# But don't allow retrieving files.
        <Location /upload>
                <LimitExcept LIST PUT MKCOL CHDIR>
                        deny from all
                </LimitExcept>
                FtpAllowOverWrite Off
        </Location>
</VirtualHost>
```

Con guration Directives

Main Module Directives

FtpProtocol   Whether this server is serving the FTP protocol. The default is Off

FtpShowRealPermissions Show Real Permissions of les? the default is Off. When Off les will show as mode
                         644, and directories as 755.

FtpFakeGroup   If FTPShowRealPermissions is OFf then this is the group name that is displayed in
                           directory listings. The default is ftp.

FtpFakeUser   If FTPShowRealPermissions is OFf then this is the user name that is displayed in
                           directory listings. The default is ftp.

FtpAllowActive   Allow active(PORT) data transfers from the server. The default is On.

FtpAllowFXP   Allow FXP transfer mode. That is to allow using two control connections to two
                           different server and have them transfer les directly to each other. If this is off then data
                           connections are only allowed to come from the client that has the control connection.
                           The default is Off.

FtpPasvMinPort   Minimum PASV port to use for Data connections. The default value is 1024. This value
                           must be less than FTPPasvMaxPort.

FtpPasvMaxPort   Maximum PASV port to use for Data connections. The default value is 65535. This
                           value must be greater than FTPPasvMinPort.

FtpPasvOverrideAddr   Override the Passive source port (the ftp server) returned to the client with this IP. The
                           default is to use the IP based on incoming connection.

FtpPasvOverrideAddrExclusion   CIDR formatted (ip/{mask or # of bits) netblock that will NOT be overriden when
                           FtpPasvOverrideAddr is set. Example: 192.168.1.0/24

FtpChrootOrder   This is the chroot provider order to use for determining what chroot dir the user should be
                           locked into. The providers are separate modules that must be loaded after mod_ftpd.so
                           (dbm, dbi, default, and fail are included). The default is to do no chroot mapping. A
                           value of none empties the chroot order list.

FtpLimitOrder   This is the limit provider order to use for determining when too many users are logged
                           into the FTP server. Currently there is only the default provider. As with the Chroot
                           providers, these are separate modules that must be loaded after mod_ftpd.so. The default
                           is to do no limiting. A value of none empties the limit order list.

FtpServerAnnounce   Setting this to Off will prevent the mod_ftpd/VERSION tag from being added to the
                           server header in Apache HTTP requests. This does not change the initial server response
                           when a client connects via FTP to the server. The default value is On.

FtpAllowOverwrite   Setting this to On will prevent an ftp client from overwriting an existing le. In order for
                           the le to be replaced, it must be deleted from the server rst (DELETE method rights).
                           This is good for an upload only directory where you do not want users overwriting
                           existing les. The default value is On.

<Limit>, <LimitExcept> methods   To limit what users can and cannot do in directories the Limit and LimitExcept
                           must be used.

                           CHDIR   ability to change into this directory (required for login)

                           GET   ability to download a le

LIST	ability to get a directory listing
APPEND	ability to upload a le
APPEND	ability to append to an existing le (either APPE, or STOR with REST)
DELETE	ability to delete a le
MKCOL	ability to make a directory
XRMD	ability to delete a directory
MOVE	ability to move les or directories

FTP Default provider

LoadModule ftpd_default_module modules/mod_ftpd_default.so

This module is useful to provide a fail-back chroot path if other modules do not provide one for the user attempting to login.

| FtpDefaultChroot | This is the path that this module will return as the chroot.. It will ALWAYS return this path and no other. The default is empty, and the server will use the DocumentRoot as the chroot. |
| FtpDefaultMaxLogins | This is the maximum number of logins to allow when this module is listed in the FtpLimitOrder directive. The default is 20, and the value must be greater than zero. |

FTP Fail provider

LoadModule ftpd_fail_module modules/mod_ftpd_fail.so

There is no con guration for this module.. Just add it to FtpChrootOrder and any user that hits this module will immediately fail and not be allowed to login. Use this in a chain of modules and this as a fail-back to deny logins if they do not have a chroot assigned.

FTP DBM provider

LoadModule ftpd_dbm_module modules/mod_ftpd_dbm.so

| FtpDBMFile | The lename of the database to use. Can be absolute or relative to the server root. |
| FtpDBMType | The type of Database the le is (default,DB,GDBM,NDBM,SDBM) |

FTP DBI provider

LoadModule ftpd_dbi_module modules/mod_ftpd_dbi.so

| FtpDbiDriver | Database Driver to use from libdbi |

FtpDbiDriverDir	Directory containing the libdbi database drivers. The default value is from set at compile time
FtpDbiHost	Hostname of the Database Server to connect to
FtpDbiUsername	The username for the database connection
FtpDbiPassword	The password for the database connection
FtpDbiName	The name of the database containing the tables
FtpDbiTable	The name of the table containing the usernames and password hashes
FtpDbiUsernameField	The table eld that contains the username
FtpDbiChrootField	The table eld that contains the password
FtpDbiChrootQuery	The SQL query to pick the chroot value from
FtpDbiIsActiveField	The table eld that contains the active account ag
FtpDbiConnMin	The Minimum Number of Database Connections
FtpDbiConnSoftMax	The Soft Maximum Number of Database Connections
FtpDbiConnHardMax	The Hard Maximum Number of Database Connections
FtpDbiConnTTL	The Database Pool Time To Live for Each Connection
FtpDbiServerCon g	The name of the con guration to use for this section

Knwon issues and limitations

These are some of the known issues and limitations of the module. Also check the TODO le for any issues that did not make their way into this document. And of course, if you feel the urge to actually implement something on my TODO list feel free to submit a uni ed diff patch to the following email address: surkle <at> outoforder <dot> cc> .

- This module has been build using Apache 2.0.48. I have had people test it on 2.0.47 and 2.1 CVS HEAD.. But I have not of cially tested it on 2.1 yet. When an of cial release of 2.1 is out, then I will test and modify my module for this branch of Apache.

- Transferred les do NOT currently go through apache lters and bucket brigades.. When I gure them out, I will support that feature.. (dynamic FTP content..)

- I have not load tested this at all.. So I do not know how well it will stand up to stress testing. Can some people run dkftpbench on this thing?

- The code has not been thoroughly tested for security related issues.. However, the code is relatively simple, and all ACL checks go through one function, which passes everything to Apache. The source is also available and can be audited by anyone who wishes to.

- I do not support the ABOR command, currently, nor do I check for the Telnet command sequences.. Can someone give me an example client that uses these?

- There is code in there for un nished features, just ignore it.. It will be either nished or removed in future releases.

- There are no timeouts of any sort currently.. I am trying to nd a portable way of doing it, however the apr_poll functions seem to be of no use as I can not get access to the connection socket.

- content providers SHOULD check FTP_PLUGIN_VERSION and if it is not the same bailout and refuse to compile as the API is going to be different.

- I need to write documentation on the provider interface. However, the header mod_ftpd.h   is quite self documented.

Contact Information

You can contact me via the following mediums.

- nickname urkle on irc.freenode.net [irc://irc.freenode.net/] in the #apache-modules channel.

- My website http://www.outoforder.cc/.

- email: <urkle <at> outoforder <dot> cc>

- mailing list: <mod_ftpd@lists.outoforder.cc>   You can subscribe to the mod_ftpd mailing list by sending an e-mail to <mod_ftpd-subscribe@lists.outoforder.cc>   .

Please use a meaningful subject line for e-mail, otherwise your e-mail may be silently deposited in my junk mail folder by my SPAM lters and possibly never seen by me. Use something like "mod_ftpd patch to implement feature X" would be quite acceptable, however, "PLEASE READ THIS NOW" is quite unacceptable and will most likely never be read.