README & CLARIFICATION

Please implement the following before running our framework:

1. Please kindly change the path fields in the config files:
    a. ROOTDIR to your personal absolute path of testing_environment directory path
    b. AUTO_CHODIR to your personal absolute path of testing_environment directory
    c. FILE_AUTH = your personal absolute path of password_list file
    d. PATH_BFTPDUTMP = <absolute path to testing_environment>/bftpdutmp
2. Test cases that create data connections must use the following format:
    <client_num>:data <client_to_connect_to>
    Ex: 2:data 1
3. The framework will create an empty directory named "temp" under testing_environment when tests are conducted. Please make sure not to make a directory named "temp" because the framework will automatically remove the directory named "temp" when the test cases are running.

bftpdBug0:

Issue: Command "USER cs408"
Missing "503 Username already given."

Input:
bftpd.conf
1:USER cs408
1:USER cs408
1:quit

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
503 Username already given.
221 See you later…

Actual output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.

bftpdBug1:

Issue:

Input:

Expected output:

Actual output:

bftpdBug2:

Issue: Command "PASS cs408"
Bug 2 binary file will not kick the second user out of the telnet connection when changing USERLIMIT_GLOBAL to 1

Input:
bftpd6.conf
1:USER cs408
1:PASS cs408
2:USER cs408
2:PASS cs408

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
421 There are already 1 users logged in.

Actual output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.

bftpdBug3:

Issues: Command "NLST"
Bug3 returns wrong output for "NLST"

Input:
bftpd.conf
1:USER cs408
1:PASS cs408
1:PASV
2:Telnet data connection to 1
1:NLST

1:quit

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
227 Entering Passive Mode (127,0,0,1,?,?)
150 BINARY data connection established.
226 Directory list has been submitted.
configurations
testcases
password_list
temp
221 See you later…

Actual output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
227 Entering Passive Mode (127,0,0,1,?,?)
150 BINARY data connection established.
226 Directory list has been submitted.
drwx------   2 678327   678327   4096 Feb 23 12:26 configurations
drwx------   3 678327   678327   4096 Feb 23 12:53 testcases
-rw-------   1 678327   678327   39 Feb 22 16:35 password_list
drwx------   2 678327   678327   4096 Feb 23 13:57 temp
221 See you later...

bftpdBug4:
Issue: command "CWD abcba"
output code incorrect. 415 instead of 451.

Input:
bftpd.conf
1:USER cs408
1:PASS cs408
1:CWD abcba
1:quit

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.

451 Error: No such file or directory.
221 See you later...

Actual output:
Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
415 Error: No such file or directory.
221 See you later…

bftpdBug5:

Issue: Command "MKD aaa"
returns and create a directory named "pathname" instead of "aaa"

Input:
bftpd.conf
1:USER cs408
1:PASS cs408
1:MKD aaa
1:RMD aaa
1:quit

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
257 "aaa" has been created.
250 OK
221 See you later...

Actual output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
257 "pathname" has been created.
250 OK
221 See you later...

bftpdBug6:

Issue: Command "REST"
offset 1 instead of 0

Input:
bftpd.conf
1:USER cs408
1:PASS cs408
1:REST
1:quit

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
350 Restarting at offset 0.
221 See you later...

Actual output:
Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
350 Restarting at offset 1.
221 See you later…

bftpdBug7:

Issue: command "SITE"
it is missing "is disabled", instead it shows unknown command 'SITE'

Input:
bftpd.conf
1:USER cs408
1:PASS cs408
1:SITE
1:quit

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
550 The command 'SITE' is disabled.
221 See you later...

Actual output:

220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
550 Unknown command: 'SITE '.
221 See you later…

bftpdBug8:
Issue: Command "retr ha"
It should be 226 success instead of 426 transfer abort

Input:
bftpd.conf
1:USER cs408
1:PASS cs408
1:CWD temp
1:PASV
2:Telnet data connection to 1
1:STOR ha
2:hahaha
1:PASV
1:PASV
3:Telnet data connection to 1
1:retr ha

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
250 OK
227 Entering Passive Mode (127,0,0,1,?,?)
150 BINARY data connection established.
227 Entering Passive Mode (127,0,0,1,?,?)
150 BINARY data connection established.
226 File transmission successful.
hahaha

Actual output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
250 OK
227 Entering Passive Mode (127,0,0,1,?,?)

150 BINARY data connection established.
227 Entering Passive Mode (127,0,0,1,?,?)
150 BINARY data connection established.
426 Transfer aborted.
hahaha

bftpdBug9:

Issue: Command "PASV"
Passive mode should always be (127,0,0,1,?,?) instead of (127,0,0,11,?,?)

Input:
bftpd.conf
1:user cs408
1:pass cs408
1:PASV

Expected output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
227 Entering Passive Mode (127,0,0,1,?,?)

Actual output:
220 bftpd 5.6 at 127.0.0.1 ready.
331 Password please.
230 User logged in.
227 Entering Passive Mode (127,0,0,11,?,?)