

Appendix: DEBUG Mode Message Format

1. Server Message Format

When running in *DEBUG* mode, the server should display the following as a response to each command received from a client:

`<userName> <command>
<status>`

Here is a list of `<status>` corresponding to each command:

1. cd `<directoryName>`

Status	Meaning
Success	Command was executed with no error.
Invalid directory name	<code><directoryName></code> is not a valid path name.
Permission denied	The user does not have permission to access the directory.

2. create `<filename>`

Status	Meaning
Success	Command was executed with no error.
File already exists	A file with that name already exists in the current directory.
Permission denied	The user does not have permission to create the file.

3. delete `<filename>`

Status	Meaning
Success	Command was executed with no error.
File does not exist	There is no file with <code><filename></code> in the current directory.
Permission denied	The user does not have permission to delete the file.

4. upload `<filename>`

Status	Meaning
Success	Command was executed with no error.
File already exists	A file with that name already exists in the current directory.
Permission denied	The user does not have permission to create the file.

5. append `<filename> <string>`

Status	Meaning
Success	Command was executed with no error.
File does not exist	There is no file with <code><filename></code> in the current directory.
Permission denied	The user does not have permission to append.

6. more `<filename>`

Status	Meaning
Success	Command was executed with no error.
File does not exist	There is no file with <filename> in the current directory.
Permission denied	The user does not have permission to access the file.

7. ls

Status	Meaning
Success	Command was executed with no error.
Permission denied	The user does not have permission to access the current directory.

8. add o|r|a <username> [<filename>|<directoryName>]

Status	Meaning
Success	Command was executed with no error.
File does not exist	There is no file/directory with <filename>/<directoryName> in the current directory.
Invalid user name	The username does not exist.
Permission denied	The user does not have permission to access the file/directory.

9. sub o|r|a <username> [<filename>|<directoryName>]

Status	Meaning
Success	Command was executed with no error.
File does not exist	There is no file/directory with <filename>/<directoryName> in the current directory.
Invalid user name	The username does not exist.
Permission denied	The user does not have permission to access the file/directory.

10. script <filename>

This command is not executed at the server side. So there is no status is displayed for this command at the server side. Of course the server should display the status of each individual command inside the script.

2. Client Message Format

When running in *DEBUG* mode, the client should display the status received from the server as defined above. In *ls* and more *commands*, the client should not display the directory/file contents when running in *DEBUG* mode.