

# Command-Line Interface fs\_cli

## About

The fs\_cli program is a Command-Line Interface that allows a user to connect to a running FreeSWITCH™ instance. The fs\_cli program can connect to the FreeSWITCH™ process on the local machine or on a remote system. (Network connectivity to the remote system is, of course, required.) The fs\_cli program uses FreeSWITCH™'s event socket to send commands issued by the user and to collect the server responses to send to the display. A C-based socket library, ESL, was developed for use with fs\_cli although a programmer could use this library for any C language program that needs to connect to the event socket. With the -x switch (see below) fs\_cli can issue a command to the server, get a response, and then disconnect.

The fs\_cli program can connect to FreeSWITCH™ whether it is running as a [daemon](#) or in console mode, regardless of operating system or if running in [screen](#).

---

## Requirements

Note the fs\_cli *requires* the [mod\\_event\\_socket](#) to be loaded in order to connect to the FreeSWITCH™ server.

The default [mod\\_event\\_socket](#) configuration binds to ::, which will work on ipv4 or ipv6, this will need to be changed to be able to connect from remote servers. There are security risks to doing this, so you should also limit access via a firewall and/or [ACL](#), as well as never using the default password.

## Install

### Server

The FreeSWITCH™ server will build and install the fs\_cli client by default.

### Client

The client can also be built without needing to build the entire FreeSWITCH™ server.

To build:

```
make current
cd libs/esl
make
```

To run:

```
./fs_cli
```

## Usage

### Launching fs\_cli

The usage for fs\_cli is:

## command syntax

-?, -h --help	Usage Information
-H, --host=hostname	Host to connect (default is 127.0.0.1)
-P, --port=port	Port to connect (default is "8021")
-u, --user=user@domain	user@domain
-p, --password=password	Password (default is "ClueCon")
-i, --interrupt	Allow Control-c to interrupt
-x, --execute=command	Execute Command and Exit
-l, --loglevel=command	Log Level (default is debug)
-U, --log-uuid	Include UUID in log output
-S, --log-uuid-short	Include shortened UUID in log output
-q, --quiet	Disable logging
-r, --retry	Retry connection on failure every two seconds until connected (or until 2 minutes has passed)
-R, --reconnect	Reconnect if disconnected
-d, --debug=level	Debug Level (0 - 7)
-b, --batchmode	Batch mode
-t, --timeout	Timeout for API commands (in milliseconds)
-T, --connect-timeout	Timeout for socket connection (in milliseconds)
-n, --no-color	Disable color

## While Connected

While connected the user can issue any command normally available on the FreeSWITCH™ command line. Additionally, there are several commands that can be issued using a forward slash (/) character. The following commands all disconnect from the FreeSWITCH™ command line:

- /quit
- /bye
- /exit

Other "slash" commands correspond to [mod\\_event\\_socket](#) commands:

- /event - Enable events ([More Info](#))
- /noevents - Disable all events previously enabled with /event
- /nixevent - Enable all but one type of event ([More Info](#))
- /log - set loglevel of the FreeSWITCH™ daemon (e.g. /log info or /log alert) ([More Info](#))
- /nolog - Disable logging ([More Info](#))
- /uuid - Filter logs for a single call uuid
- /filter ([More Info](#))
- /help - List fs\_cli commands

Additional command available only in fs\_cli

- /logfilter <string> - Displays only lines in /log containing <string>. /logfilter without argument disables logfilter

For command-line editing, see "Command-Line Editing" section of [mod\\_console](#). The details are the same as of [SVN r13964](#).

## Configuration Options

Optional configuration files can be set up. The config file uses a simple INI-style layout and allows for multiple profiles. This allows one to access many FreeSWITCH™ systems from a single workstation.

There is /etc/fs\_cli.conf for system-wide settings and ~/.fs\_cli\_conf for user-specific settings.

## fs\_cli.conf options

host => <hostname>	Host to connect (default is 127.0.0.1)
port => <port>	Port to connect (default is "8021")
user => <username>	user@domain
password => <password>	Password (default is "ClueCon")
interrupt => true   false	Allow Control-c to interrupt
execute => <command>	Execute Command and Exit
loglevel => console   alert   crit   err   warning   notice   info   debug	Log Level (default is debug)
log-uuid => true   false	Include UUID in log output
log-uuid-short => true   false	Include shortened UUID in log output
quiet => true   false	Disable logging
retry => true   false	Retry connection on failure every two seconds until connected (or until 2 minutes has passed)
reconnect => true   false	Reconnect if disconnected
debug => <0 .. 7>	Debug Level (0 - 7)
batchmode => true   false	Batch mode
timeout => <milliseconds>	Timeout for API commands (in milliseconds)
connect-timeout => <milliseconds>	Timeout for socket connection (in milliseconds)
no-color => true   false	Disable color

An example file:

```
[default]
; Put me in /etc/fs_cli.conf or ~/.fs_cli_conf
;override any default options here
loglevel => 6
log-uuid => false
quiet => false
key_f1 => help
key_f2 => status
key_f3 => show channels
key_f4 => show calls
key_f5 => sofia status
key_f6 => reloadxml
key_f7 => /log console
key_f8 => /log debug
key_f9 => sofia status profile internal
key_f10 => sofia global siptrace on
key_f11 => sofia global siptrace off
key_f12 => version

[profile1]
host      => 192.168.1.10
port      => 8021
password  => secret_password
debug     => 7

[profile2]
host      => 192.168.1.11
port      => 8021
password  => someother_password
loglevel  => info
```

## Usage Examples

### Simple

```
fs_cli
```

Launches fs\_cli which connects to local machine using default username, password, and debug level.

### With Profile

```
fs_cli My_profile
```

Launches fs\_cli using profile named "My\_profile" found in .fs\_cli\_conf file.

## Sending a command and then logging off

```
fs_cli -x "sofia status profile internal"
```

Launches fs\_cli and sends a command before logging off. The output of the above command looks like this:

```
fs_cli -x "sofia status"
      Name                Type                Data                State
=====
      external            profile             sip:mod_sofia@71.6.70.229:5080  RUNNING (0)
      example.com          gateway             sip:joeuser@example.com       NOREG
      internal             profile             sip:mod_sofia@192.168.50.229:5060  RUNNING (0)
      192.168.50.229       alias              internal              ALIASED
      internal-ipv6        profile             sip:mod_sofia[::1]:5060        RUNNING (0)
      default              alias              internal              ALIASED
      nat                  alias              external              ALIASED
      outbound             alias              external              ALIASED
=====
3 profiles 4 aliases
```

## Wish List

- Option to see all output to include FS console output.
- Option to see all output from all fs\_cli instances connected to the FS box, plus the console.
- Option to connect to more than one FS box.

## See Also

- [mod\\_event\\_socket](#)
- [Event Socket Library](#)
- [Event list](#)
- [Fs\\_gui](#)