

# Table of Contents

Introduction  
Summary

# Fallen-cli - Little helper

This command line tool was developed for educational purposes. Use it with care!

Summary article describes general ideas and concepts that are used in this tool. It describes several steps:

- Basic
- Extended
- Additions - We are here!

These were iterations in fcli development that reflect respective practical lessons.

# Summary

## Basic

Tools:

add - appends new command to the known commands list and persists it.

- name - explicitly specifies command name.
- options - adds command line options (ignored for urls).
- (supported command type) - explicitly specifies command type.

remove - deletes command from persistence.

- all - removes all known commands (confirmation mandatory).
- yes - skip confirmation for one single command delete.

list - displays all known commands (uses arg as filter and shows all commands if no flag given).

- script - displays all scripts.
- url - displays all websites.
- exe - displays all executables.

run - execute specified command or path, but does not persist the action (requires command type explicitly specified).

- exe - run as executable.
- url - run as website.
- script - run as a shell script (requires supported shell type as value).

Shell types:

Bash, Powershell, Cmd.

Supported command types:

Executable, Website, Script.

## Extended

Tools:

config - manipulates dynamic configuration.

- locale - overrides system local.
- formatter -
  - inline - formats messages as is.
  - pretty - prettifies messages with colors and additional info.
- encrypt
  - true - uses encryption to store user data.
  - false - stores user data as plain text.
- purge - deletes persisted user config (requires confirmation).

group - manipulates command groups (requires name).

- name - specify group name.
- remove - removes group (confirmation).
- override - overrides existing command (confirmation).

- yes - skips confirmation.

change - manipulates a known command (displays command info if no flag is given).

- name - changes name to given.
- path - changes path to given.
- options - changes options to given.
- type - changes type (confirmation).

Shell types:

Fish.

Supported command types:

Dir, Group.

## Additions

Tools

prime - finds out the amount of primes under the given limit.

- time - prints out the execution time.
- parallel - sets limit on amount of threads to be used.
- no-parallel - executes synchronous.

mail - allows to send email and read mail from you inbox.

- to - specifies receiver contact or email address.
- sbj - set's message subject.
- list - lists recent mail from inbox.
- read - displays the contents of the email.
- remove - delete email.

identity - manages contacts and root user.

- override - overrides existing contact.
- remove - deletes contact (doesn't work for root).
- aliases - sets aliases (doesn't work for root).
- name - sets name.
- email - sets email.
- list - lists all known contacts.

## Supported command types:

- exe - Windows executable (Linux treats as script).
- url - opens link in the default browser.
- script - executes as a specified shell script (requires supported shell type as value).
- shell - considered a shell command (one line, requires supported shell).
- dir - file system folder (assumes explorer if nothing is specified).
  - explorer - opens in default file explorer.
  - (supported shell name) - opens in specified shell.

## Supported shell types

- bash - standard Linux shell (Windows via WSL).

- powershell - new Windows shell (Optionally available on Linux).
- cmd - old Windows shell (not on Linux).
- fish - optional Linux shell (not on Windows).

## Examples

```
fcli add C:\awesome --exe
fcli add C:\directory
fcli add C:\directory --dir bash
fcli add C:\awesome.exe
fcli add C:/awesome --script bash
fcli add c:/awesome.ps1 --script
fcli add "http://awesome" --url
fcli add https://awesome.com
```

```
fcli list
fcli list awesome
fcli list --scripts
```

```
fcli remove awesome
fcli remove awesome --yes
```

```
fcli run "http://awesome" --url
fcli run C:/awesome --script bash
```

```
fcli config --locale ua --formatter pretty
fcli config --purge --yes
```

```
fcli group "awesome google" --name some-name --override
fcli group some-name --remove --yes
fcli group --name some-group --remove
```

```
fcli change awesome --name new-name
fcli ch google
```

```
fcli prime 1000000 --time fcli pr 1000000 --no-parallel --time
```

```
fcli mail "Message body" --to mary@gmail.com --sbj "Message sbj" fcli mail "Message body" --to mary fcli mail 10 --list fcli mail 122 --read fcli mail 122 --remove
```

```
fcli identity root fcli id mary --aliases "mar sor" --email mary@gmail.com fcli id mari --override --email mary@outlook.com fcli id mari --remove fcli id root --override --name fallen --password passwd fcli id --list
```

## Defined objects

Flag - pair of key and value (flag param).

ParsedArgs - contains possible selector, possible arg, and Flags. \

Tool - represents action that manipulates known commands. Requires arg and Flags. Command - contains a user-defined action. Requires arg. Group - a collection of commands that need to be executed sequentially.

Contact - a representation of known email destination.

## Extended features

Logging, localization, testability.

# Additions features

Parallel, async, crypto.