

tldr pages

Simplified and community-driven man pages

Generated on Fri Dec 11 20:44:21 2020

Common

7z

A file archiver with high compression ratio.

More information: <https://www.7-zip.org/>.

- Archive a file or directory:

```
7z a {{archived.7z}} {{path/to/file_or_directory}}
```

- Encrypt an existing archive (including headers):

```
7z a {{encrypted.7z}} -p{{password}} -mhe=on {{archived.7z}}
```

- Extract an existing 7z file with original directory structure:

```
7z x {{archived.7z}}
```

- Extract an archive with user-defined output path:

```
7z x {{archived.7z}} -o{{path/to/output}}
```

- Extract an archive to stdout:

```
7z x {{archived.7z}} -so
```

- Archive using a specific archive type:

```
7z a -t{{zip|gzip|bzip2|tar}} {{archived.7z}} {{path/to/file_or_directory}}
```

- List available archive types:

```
7z i
```

- List the contents of an archive file:

```
7z l {{archived.7z}}
```

7za

A file archiver with high compression ratio.

A standalone version of **7z** with support for fewer archive types.

More information: <https://www.7-zip.org/>.

- Archive a file or directory:

```
7za a {{archived.7z}} {{path/to/file_or_directory}}
```

- Extract an existing 7z file with original directory structure:

```
7za x {{archived}}
```

- Archive using a specific archive type:

```
7za a -t{{zip|gzip|bzip2|tar}} {{archived}} {{path/to/file_or_directory}}
```

- List available archive types:

```
7za i
```

- List the contents of an archive file:

```
7za l {{archived}}
```

7zr

A file archiver with high compression ratio.

A standalone version of **7z** that only supports .7z files.

More information: <https://www.7-zip.org/>.

- Archive a file or directory:

`7zr a {{archived.7z}} {{path/to/file_or_directory}}`

- Extract an existing 7z file with original directory structure:

`7zr x {{archived.7z}}`

- List the contents of an archive file:

`7zr l {{archived.7z}}`

R

R language interpreter.

More information: <https://www.r-project.org>.

- Start an R interactive shell (REPL):

`R`

- Check R version:

`R --version`

- Start R in vanilla mode (i.e. a blank session that doesn't save the workspace at the end):

`R --vanilla`

- Execute a file:

`R -f {{path/to/file.R}}`

- Execute an R expression and then exit:

`R -e {{expr}}`

- Run R with a debugger:

`R -d {{debugger}}`

- Check R packages from package sources:

`R CMD check {{path/to/package_source}}`

aapt

Android Asset Packaging Tool.

Compile and package an Android app's resources.

- List files contained in an APK archive:

```
aapt list {{path/to/app.apk}}
```

- Display an app's metadata (version, permissions, etc.):

```
aapt dump badging {{path/to/app.apk}}
```

- Create a new APK archive with files from the specified directory:

```
aapt package -F {{path/to/app.apk}} {{path/to/directory}}
```

ab

Apache Benchmarking tool. The simplest tool to perform a load testing.

More information: <https://httpd.apache.org/docs/2.4/programs/ab.html>.

- Execute 100 HTTP GET requests to a given URL:

```
ab -n {{100}} {{url}}
```

- Execute 100 HTTP GET requests, processing up to 10 requests concurrently, to given URL:

```
ab -n {{100}} -c {{10}} {{url}}
```

- Use keep alive:

```
ab -k {{url}}
```

- Set the maximum number of seconds to spend for benchmarking:

```
ab -t {{60}} {{url}}
```

- Execute 100 HTTP POST requests to a given URL, using a JSON payload from a file:

```
ab -n {{100}} -T {{application/json}} -p {{data.json}} {{url}}
```

abduco

Terminal session manager.

More information: <http://www.brain-dump.org/projects/abduco/>.

- List sessions:

`abduco`

- Attach to a session, creating it if it doesn't exist:

`abduco -A {{name}} {{bash}}`

- Attach to a session with `dvtm`, creating it if it doesn't exist:

`abduco -A {{name}}`

- Detach from a session:

`Ctrl + \`

- Attach to a session in read-only mode:

`abduco -Ar {{name}}`

ack

A search tool like grep, optimized for programmers.

More information: <https://beyondgrep.com/documentation/>.

- Find files containing "foo":

```
ack {{foo}}
```

- Find files of a specific type:

```
ack --ruby {{foo}}
```

- Count the total number of matches for the term "foo":

```
ack -ch {{foo}}
```

- Show the file names containing "foo" and number of matches in each file:

```
ack -cl {{foo}}
```

- Search a file for a specified string:

```
ack bar "{{foo bar}}" {{path/to/file}}
```

- Search a file for the specified regex pattern:

```
ack bar "{{[bB]ar \d+}}" {{path/to/file}}
```

- List all valid types:

```
ack --help-types
```

act

Execute GitHub Actions locally using Docker.

More information: <https://github.com/nektos/act>.

- List the available actions:

```
act -l
```

- Run the default event:

```
act
```

- Run a specific event:

```
act {{event_type}}
```

- Run a specific action:

```
act -a {{action_id}}
```

- Do not actually run the actions (i.e. a dry run):

```
act -n
```

- Show verbose logs:

```
act -v
```

adb install

Android Debug Bridge Install: Push packages to an Android emulator instance or connected Android devices.

More information: <https://developer.android.com/studio/command-line/adb>.

- Push an Android application to an emulator/device:

```
adb install {{path/to/file.apk}}
```

- Reinstall an existing app, keeping its data:

```
adb install -r {{path/to/file.apk}}
```

- Grant all permissions listed in the app manifest:

```
adb install -g {{path/to/file.apk}}
```

- Quickly update an installed package by only updating the parts of the APK that changed:

```
adb install --fastdeploy {{path/to/file.apk}}
```

adb reverse

Android Debug Bridge Reverse: reverse socket connections from an Android emulator instance or connected Android devices.

More information: <https://developer.android.com/studio/command-line/adb>.

- List all reverse socket connections from emulators and devices:

```
adb reverse --list
```

- Reverse a TCP port from an emulator or device to localhost:

```
adb reverse tcp:{{remote_port}} tcp:{{local_port}}
```

- Remove a reverse socket connections from an emulator or device:

```
adb reverse --remove tcp:{{remote_port}}
```

- Remove all reverse socket connections from all emulators and devices:

```
adb reverse --remove-all
```

adb shell

Android Debug Bridge Shell: Run remote shell commands on an Android emulator instance or connected Android devices.

More information: <https://developer.android.com/studio/command-line/adb>.

- Start a remote interactive shell on the emulator/device:

```
adb shell
```

- Get all the properties from emulator or device:

```
adb shell getprop
```

- Revert all runtime permissions to their default:

```
adb shell pm reset-permissions
```

- Revoke a dangerous permission for an application:

```
adb shell pm revoke {{package}} {{permission}}
```

- Trigger a key event:

```
adb shell input keyevent {{keycode}}
```

- Clear the data of an application on an emulator or device:

```
adb shell pm clear {{package}}
```

- Start an activity on emulator/device:

```
adb shell am start -n {{package}}/{{activity}}
```

- Start the home activity on an emulator or device:

```
adb shell am start -W -c android.intent.category.HOME -a android.intent.action.MAIN
```

adb

Android Debug Bridge: communicate with an Android emulator instance or connected Android devices.

More information: <https://developer.android.com/studio/command-line/adb>.

- Check whether the adb server process is running and start it:

```
adb start-server
```

- Terminate the adb server process:

```
adb kill-server
```

- Start a remote shell in the target emulator/device instance:

```
adb shell
```

- Push an Android application to an emulator/device:

```
adb install -r {{path/to/file.apk}}
```

- Copy a file/directory from the target device:

```
adb pull {{path/to/device_file_or_directory}} {{path/to/local_destination_directory}}
```

- Copy a file/directory to the target device:

```
adb push {{path/to/local_file_or_directory}} {{path/to/device_destination_directory}}
```

- Get a list of connected devices:

```
adb devices
```

AdGuardHome

A network-wide software for blocking ads & tracking.

More information: <https://github.com/AdguardTeam/AdGuardHome>.

- Run AdGuard Home:

`AdGuardHome`

- Run AdGuard Home with a specific config:

`AdGuardHome --config {{path/to/AdGuardHome.yaml}}`

- Set the work directory for data to be stored in:

`AdGuardHome --work-dir {{path/to/directory}}`

- Install or uninstall AdGuard Home as a service:

`AdGuardHome --service {{install|uninstall}}`

- Start the AdGuard Home service:

`AdGuardHome --service start`

- Reload the configuration for the AdGuard Home service:

`AdGuardHome --service reload`

- Stop or restart the AdGuard Home service:

`AdGuardHome --service {{stop|restart}}`

ag

The Silver Searcher. Like ack, but aims to be faster.

More information: https://github.com/ggreer/the_silver_searcher.

- Find files containing "foo", and print the line matches in context:

```
ag {{foo}}
```

- Find files containing "foo" in a specific directory:

```
ag {{foo}} {{path/to/directory}}
```

- Find files containing "foo", but only list the filenames:

```
ag -l {{foo}}
```

- Find files containing "FOO" case-insensitively, and print only the match, rather than the whole line:

```
ag -i -o {{FOO}}
```

- Find "foo" in files with a name matching "bar":

```
ag {{foo}} -G {{bar}}
```

- Find files whose contents match a regular expression:

```
ag '{{^ba(r|z)$}}'
```

- Find files with a name matching "foo":

```
ag -g {{foo}}
```

airmon-ng

Activate monitor mode on wireless network devices.

More information: <https://www.aircrack-ng.org/doku.php?id=airmon-ng>.

- List wireless devices and their statuses:

```
sudo airmon-ng
```

- Turn on monitor mode for a specific device:

```
sudo airmon-ng start {{wlan0}}
```

- Kill disturbing processes that use wireless devices:

```
sudo airmon-ng check kill
```

- Turn off monitor mode for a specific network interface:

```
sudo airmon-ng stop {{wlan0mon}}
```

airpaste

Share messages and files on the same network.

- Wait for message and display when received:

```
airpaste
```

- Send text:

```
echo {{text}} | airpaste
```

- Send file:

```
airpaste < {{path/to/file}}
```

- Receive file:

```
airpaste > {{path/to/file}}
```

- Create/Join channel:

```
airpaste {{channel_name}}
```

ajson

Executes JSONPath on JSON objects.

More information: <https://github.com/spyzhov/ajson>.

- Read JSON from a file and execute a specified JSONPath expression:

```
ajson '{{$.json[?(@.path)]}}' {{path/to/file.json}}
```

- Read JSON from stdin and execute a specified JSONPath expression:

```
cat {{path/to/file.json}} | ajson '{{$.json[?(@.path)]}}'
```

- Read JSON from a URL and evaluate a specified JSONPath expression:

```
ajson '{{avg(..price)}}' '{{https://example.com/api/}}'
```

- Read some simple JSON and calculate a value:

```
echo '{{3}}' | ajson '{{2 * pi * $}}'
```

alacritty

Cross-platform, GPU-accelerated terminal emulator.

More information: <https://github.com/jwilm/alacritty>.

- Open a new alacritty window:

```
alacritty
```

- Run in a specific directory:

```
alacritty --working-directory {{path/to/directory}}
```

- Run a command in a new alacritty window:

```
alacritty -e {{command}}
```

- Specify alternative configuration file (defaults to \$XDG_CONFIG_HOME/alacritty/alacritty.yml):

```
alacritty --config-file {{path/to/config.yml}}
```

- Run with live config reload enabled (can also be enabled by default in alacritty.yml):

```
alacritty --live-config-reload --config-file {{path/to/config.yml}}
```

alex

A tool that catches insensitive, inconsiderate writing.

It helps you find gender favouring, polarising, race related, religion inconsiderate, or other unequal phrasing in text.

More information: <https://github.com/get-alex/alex>.

- Analyze text from `stdin`:

```
echo {{His network looks good}} | alex --stdin
```

- Analyze all files in the current directory:

```
alex
```

- Analyze a specific file:

```
alex {{textfile.md}}
```

- Analyze all markdown files except `example.md`:

```
alex *.md !{{example.md}}
```

alias

Creates aliases -- words that are replaced by a command string.

Aliases expire with the current shell session, unless they're defined in the shell's configuration file, e.g. `~/.bashrc`.

- List all aliases:

```
alias
```

- Create a generic alias:

```
alias {{word}}="{{command}}"
```

- View the command associated to a given alias:

```
alias {{word}}
```

- Remove an aliased command:

```
unalias {{word}}
```

- Turn `rm` into an interactive command:

```
alias {{rm}}="{{rm -i}}"
```

- Create `la` as a shortcut for `ls -a`:

```
alias {{la}}="{{ls -a}}"
```

amass db

Interact with an Amass database.

More information: https://github.com/OWASP/Amass/blob/master/doc/user_guide.md#the-db-subcommand.

- List all performed enumerations in the database:

```
amass db -dir {{path/to/database_directory}} -list
```

- Show results for a specified enumeration index and domain name:

```
amass db -dir {{path/to/database_directory}} -d  
{{domain_name}} -enum {{index_from_list}} -show
```

- List all found subdomains of a domain within an enumeration:

```
amass db -dir {{path/to/database_directory}} -d  
{{domain_name}} -enum {{index_from_list}} -names
```

- Show a summary of the found subdomains within an enumeration:

```
amass db -dir {{path/to/database_directory}} -d  
{{domain_name}} -enum {{index_from_list}} -summary
```

amass enum

Find subdomains of a domain.

More information: https://github.com/OWASP/Amass/blob/master/doc/user_guide.md#the-enum-subcommand.

- Passively find subdomains of a domain:

```
amass enum -passive -d {{domain_name}}
```

- Find subdomains of a domain and actively verify them attempting to resolve the found subdomains:

```
amass enum -active -d {{domain_name}} -p {{80,443,8080}}
```

- Do a brute force search for subdomains:

```
amass enum -brute -d {{domain_name}}
```

- Save the results to a text file:

```
amass enum -o {{output_file}} -d {{domain_name}}
```

- Save the results to a database:

```
amass enum -o {{output_file}} -dir {{path/to/ database_directory}}
```

amass intel

Collect open source intel on an organisation like root domains and ASNs.

More information: https://github.com/OWASP/Amass/blob/master/doc/user_guide.md#the-intel-subcommand.

- Find root domains in an IP address range:

```
amass intel -addr {{192.168.0.1-254}}
```

- Use active recon methods:

```
amass intel -active -addr {{192.168.0.1-254}}
```

- Find root domains related to a domain:

```
amass intel -whois -d {{domain_name}}
```

- Find ASNs belonging to an organisation:

```
amass intel -org {{organisation_name}}
```

- Find root domains belonging to a given Autonomous System Number:

```
amass intel -asn {{asn}}
```

- Save results to a text file:

```
amass intel -o {{output_file}} -whois -d {{domain_name}}
```

amass track

Track differences between enumerations of the same domain.

More information: https://github.com/OWASP/Amass/blob/master/doc/user_guide.md#the-track-subcommand.

- Show the difference between the last two enumerations of the specified domain:

```
amass track -dir {{path/to/database_directory}} -d  
{{domain_name}} -last 2
```

- Show the difference between a certain point in time and the last enumeration:

```
amass track -dir {{path/to/database_directory}} -d  
{{domain_name}} -since {{01/02 15:04:05 2006 MST}}
```

amass viz

Visualize gathered information in a network graph.

More information: https://github.com/OWASP/Amass/blob/master/doc/user_guide.md#the-viz-subcommand.

- Generate a D3.js visualization based on database data:

```
amass viz -d3 -dir {{path/to/database_directory}}
```

- Generate a DOT file based on database data:

```
amass viz -dot -dir {{path/to/database_directory}}
```

- Generate a Gephi Graph Exchange XML Format (GEXF) file based on database data:

```
amass viz -gexf -dir {{path/to/database_directory}}
```

- Generate a Graphistry JSON file based on database data:

```
amass viz -graphistry -dir {{path/to/database_directory}}
```

- Generate a Maltego CSV file based on database data:

```
amass viz -maltego -dir {{path/to/database_directory}}
```

amass

In-depth Attack Surface Mapping and Asset Discovery tool.

More information: <https://github.com/OWASP/Amass>.

- Check the Amass version:

```
amass -version
```

- Show general help:

```
amass -help
```

- Show help on an Amass subcommand (like `intel`, `enum`, etc.):

```
amass -help {{subcommand}}
```

- Execute an Amass subcommand:

```
amass {{subcommand}}
```

androguard

Reverse engineering tool for Android applications. Written in Python.

More information: <https://github.com/androguard/androguard>.

- Display Android app manifest:

```
androguard axml {{path/to/app.apk}}
```

- Display app metadata (version and app ID):

```
androguard apkid {{path/to/app.apk}}
```

- Decompile Java code from an app:

```
androguard decompile {{path/to/app.apk}} --output {{path/to/directory}}
```

ansible-doc

Display information on modules installed in Ansible libraries.

Display a terse listing of plugins and their short descriptions.

More information: <https://docs.ansible.com/ansible/latest/cli/ansible-doc.html>.

- List available action plugins (modules):

```
ansible-doc --list
```

- List available plugins of a specific type:

```
ansible-doc --type {{plugin_type}} --list
```

- Show information about a specific action plugin (module):

```
ansible-doc {{plugin_name}}
```

- Show information about a plugin with a specific type:

```
ansible-doc --type {{plugin_type}} {{plugin_name}}
```

- Show the playbook snippet for action plugin (modules):

```
ansible-doc --snippet {{plugin_name}}
```

- Show information about an action plugin (module) as JSON:

```
ansible-doc --json {{plugin_name}}
```

ansible-galaxy

Create and manage Ansible roles.

More information: <https://docs.ansible.com/ansible/latest/cli/ansible-galaxy.html>.

- Install a role:

```
ansible-galaxy install {{username.role_name}}
```

- Remove a role:

```
ansible-galaxy remove {{username.role_name}}
```

- List installed roles:

```
ansible-galaxy list
```

- Search for a given role:

```
ansible-galaxy search {{role_name}}
```

- Create a new role:

```
ansible-galaxy init {{role_name}}
```

ansible-playbook

Execute tasks defined in playbook on remote machines over SSH.

More information: <https://docs.ansible.com/ansible/latest/cli/ansible-playbook.html>.

- Run tasks in playbook:

```
ansible-playbook {{playbook}}
```

- Run tasks in playbook with custom host inventory:

```
ansible-playbook {{playbook}} -i {{inventory_file}}
```

- Run tasks in playbook with extra variables defined via the command line:

```
ansible-playbook {{playbook}} -e "{{variable1}}={{value1}}  
{{variable2}}={{value2}}"
```

- Run tasks in playbook with extra variables defined in a json file:

```
ansible-playbook {{playbook}} -e "@{{variables.json}}"
```

- Run tasks in playbook for the given tags:

```
ansible-playbook {{playbook}} --tags {{tag1,tag2}}
```

- Run tasks in a playbook starting at a specific task:

```
ansible-playbook {{playbook}} --start-at {{task_name}}
```

ansible-pull

Pull ansible playbooks from a VCS repo and executes them for the local host.

More information: <https://docs.ansible.com/ansible/latest/cli/ansible-pull.html>.

- Pull a playbook from a VCS and execute a default local.yml playbook:

```
ansible-pull -U {{repository_url}}
```

- Pull a playbook from a VCS and execute a specific playbook:

```
ansible-pull -U {{repository_url}} {{playbook}}
```

- Pull a playbook from a VCS at a specific branch and execute a specific playbook:

```
ansible-pull -U {{repository_url}} -C {{branch}} {{playbook}}
```

- Pull a playbook from a VCS, specify hosts file and execute a specific playbook:

```
ansible-pull -U {{repository_url}} -i {{hosts_file}} {{playbook}}
```

ansible-vault

Encrypts & decrypts values, data structures and files within Ansible projects.

More information: https://docs.ansible.com/ansible/latest/user_guide/vault.html#id17.

- Create a new encrypted vault file with a prompt for a password:

```
ansible-vault create {{vault_file}}
```

- Create a new encrypted vault file using a vault key file to encrypt it:

```
ansible-vault create --vault-password-file={{password_file}}  
{{vault_file}}
```

- Encrypt an existing file using an optional password file:

```
ansible-vault encrypt --vault-password-file={{password_file}}  
{{vault_file}}
```

- Encrypt a string using Ansible's encrypted string format, displaying interactive prompts:

```
ansible-vault encrypt_string
```

- View an encrypted file, using a password file to decrypt:

```
ansible-vault view --vault-password-file={{password_file}}  
{{vault_file}}
```

- Re-key already encrypted vault file with a new password file:

```
ansible-vault rekey --vault-password-  
file={{old_password_file}} --new-vault-password-  
file={{new_password_file}} {{vault_file}}
```

ansible

Manage groups of computers remotely over SSH.

Use the /etc/ansible/hosts file to add new groups/hosts.

More information: <https://www.ansible.com/>.

- List hosts belonging to a group:

```
ansible {{group}} --list-hosts
```

- Ping a group of hosts by invoking the ping module:

```
ansible {{group}} -m ping
```

- Display facts about a group of hosts by invoking the setup module:

```
ansible {{group}} -m setup
```

- Execute a command on a group of hosts by invoking command module with arguments:

```
ansible {{group}} -m command -a '{{my_command}}'
```

- Execute a command with administrative privileges:

```
ansible {{group}} --become --ask-become-pass -m command -a  
'{{my_command}}'
```

- Execute a command using a custom inventory file:

```
ansible {{group}} -i {{inventory_file}} -m command -a  
'{{my_command}}'
```

ansiweather

A shell script for displaying the current weather conditions in your terminal.

More information: <https://github.com/fcambus/ansiweather>.

- Display a forecast using metric units for the next five days for Rzeszow, Poland:

```
ansiweather -u {{metric}} -f {{5}} -l {{Rzeszow,PL}}
```

- Display a forecast showing symbols and daylight data for your current location:

```
ansiweather -s {{true}} -d {{true}}
```

- Display a forecast showing wind and humidity data for your current location:

```
ansiweather -w {{true}} -h {{true}}
```

ant

Apache Ant.

Tool for building and managing Java-based projects.

More information: <https://ant.apache.org>.

- Build a project with default build file `build.xml`:

`ant`

- Build a project using build file other than `build.xml`:

`ant -f {{buildfile.xml}}`

- Print information on possible targets for this project:

`ant -p`

- Print debugging information:

`ant -d`

- Execute all targets that do not depend on fail target(s):

`ant -k`

apg

Creates arbitrarily complex random passwords.

- Create random passwords (default password length is 8):

`apg`

- Create a password with at least 1 symbol (S), 1 number (N), 1 uppercase (C), 1 lowercase (L):

`apg -M SNCL`

- Create a password with 16 characters:

`apg -m {{16}}`

- Create a password with maximum length of 16:

`apg -x {{16}}`

- Create a password that doesn't appear in a dictionary (the dictionary file has to be provided):

`apg -r {{dictionary_file}}`

apktool

Reverse engineer APK files.

More information: <https://ibotpeaches.github.io/Apktool/>.

- Decode an APK file:

```
apktool d {{file.apk}}
```

- Build a folder into an APK file:

```
apktool b {{path/to/directory}}
```

- Install and store frameworks:

```
apktool if {{framework.apk}}
```

apm

Atom editor Package Manager.

See [atom](#).

More information: <https://github.com/atom/apm>.

- Install packages from <http://atom.io/packages> and themes from <http://atom.io/themes>:

```
apm install {{package_name}}
```

- Remove packages/themes:

```
apm remove {{package_name}}
```

- Upgrade packages/themes:

```
apm upgrade {{package_name}}
```

apropos

Search in manpages, for example to find a new command.

- Search for keyword:

```
apropos {{regular_expression}}
```

- Search without restricting output to terminal width:

```
apropos -l {{regular_expression}}
```

- Search for pages that only contain all of the expressions given (AND search):

```
apropos {{regular_expression_1}} -a {{regular_expression_2}}  
-a {{regular_expression_3}}
```

ar

Create, modify, and extract from archives (.a, .so, .o).

- Extract all members from an archive:

```
ar -x {{libfoo.a}}
```

- List the members of an archive:

```
ar -t {{libfoo.a}}
```

- Replace or add files to an archive:

```
ar -r {{libfoo.a}} {{foo.o}} {{bar.o}} {{baz.o}}
```

- Insert an object file index (equivalent to using **ranlib**):

```
ar -s {{libfoo.a}}
```

- Create an archive with files and an accompanying object file index:

```
ar -rs {{libfoo.a}} {{foo.o}} {{bar.o}} {{baz.o}}
```

arc

Arcanist: A CLI for Phabricator.

More information <https://secure.phabricator.com/book/phabricator/article/arcanist/>.

- Send the changes to Differential for review:

`arc diff`

- Show pending revision information:

`arc list`

- Update Git commit messages after review:

`arc amend`

- Push Git changes:

`arc land`

arch

Display the name of the system architecture.

See also [uname](#).

- Display the system's architecture:

[arch](#)

aria2

A lightweight multi-protocol & multi-source command-line download utility.

Supports HTTP, HTTPS, FTP, SFTP, BitTorrent and Metalink.

More information: <https://aria2.github.io/>.

- Download a web resource:

```
aria2c {{http://example.org/myLinux.iso}}
```

- Download a resource from multiple sources:

```
aria2c {{http://mirror1.org/myLinux.iso}} {{http://mirror2.org/myLinux.iso}}
```

- Download using 2 connections per host:

```
aria2c -x{{2}} {{http://example.org/myLinux.iso}}
```

- Download from a Metalink URI:

```
aria2c {{http://example.org/myLinux.metalink}}
```

- Download from a BitTorrent URI:

```
aria2c {{http://example.org/myLinux.torrent}}
```

- Download from a BitTorrent Magnet URI:

```
aria2c {{'magnet:?xt=urn:btih:248D0A1CD08284299DE78D5C1ED359BB46717D8C'}}
```

- Download URIs from a file:

```
aria2c -i {{uris.txt}}
```

aria2c

Fast download utility.

Supports HTTP(S), FTP, SFTP, BitTorrent, and Metalink.

More information: <https://aria2.github.io>.

- Download a URI to a file:

```
aria2c {{url}}
```

- Download the contents of an URL to a file:

```
aria2c -o {{filename}} {{url}}
```

- Download from multiple sources:

```
aria2c {{url_1}} {{url_2}}
```

- Download the URIs listed in a file:

```
aria2c -i {{filename}}
```

- Download with multiple connections:

```
aria2c -s {{connections_num}} {{url}}
```

- FTP download with username and password:

```
aria2c --ftp-user={{username}} --ftp-passwd={{password}}
{{url}}
```

- Limit download speed in bytes/s:

```
aria2c --max-download-limit={{speed}} {{url}}
```

arp

Show and manipulate your system's ARP cache.

- Show current arp table:

```
arp -a
```

- Clear the entire cache:

```
sudo arp -a -d
```

- Delete a specific entry:

```
arp -d {{address}}
```

- Create an entry:

```
arp -s {{address}} {{mac_address}}
```

arping

Discover and probe hosts in a network using the ARP protocol.

Useful for MAC address discovery.

More information: <https://github.com/ThomasHabets/arping>.

- Ping a host by ARP request packets:

```
arping {{host_ip}}
```

- Ping a host on a specific interface:

```
arping -I {{interface}} {{host_ip}}
```

- Ping a host and stop at the first reply:

```
arping -f {{host_ip}}
```

- Ping a host a specific number of times:

```
arping -c {{count}} {{host_ip}}
```

- Broadcast ARP request packets to update neighbours' ARP caches:

```
arping -U {{ip_to_broadcast}}
```

- Detect duplicated IP addresses in the network by sending ARP requests with a 3 seconds timeout:

```
arping -D -w {{3}} {{ip_to_check}}
```

asar

A file archiver for the Electron platform.

More information: <https://github.com/electron/asar>.

- Archive a file or directory:

```
asar pack {{path/to/file_or_directory}} {{archived.asar}}
```

- Extract an archive:

```
asar extract {{archived.asar}}
```

- Extract a specific file from an archive:

```
asar extract-file {{archived.asar}} {{file}}
```

- List the contents of an archive file:

```
asar list {{archived.asar}}
```

asciinema

Record and replay terminal sessions, and optionally share them on asciinema.org.

More information: <https://asciinema.org/>.

- Associate the local install of `asciinema` with an asciinema.org account:

```
asciinema auth
```

- Make a new recording (once finished, user will be prompted to upload it or save it locally):

```
asciinema rec
```

- Make a new recording and save it to a local file:

```
asciinema rec {{path/to/file}}.cast
```

- Replay a terminal recording from a local file:

```
asciinema play {{path/to/file}}.cast
```

- Replay a terminal recording hosted on asciinema.org:

```
asciinema play https://asciinema.org/a/{{cast_id}}
```

- Make a new recording, limiting any idle time to at most 2.5 seconds:

```
asciinema rec -i {{2.5}}
```

- Print the full output of a locally saved recording:

```
asciinema cat {{path/to/file}}.cast
```

- Upload a locally saved terminal session to asciinema.org:

```
asciinema upload {{path/to/file}}.cast
```

asdf

Command line interface for managing versions of different packages.

More information: <https://asdf-vm.com>.

- List all available plugins:

```
asdf plugin-list-all
```

- Install a plugin:

```
asdf plugin-add {{name}}
```

- List all available versions for a package:

```
asdf list-all {{name}}
```

- Install a specific version of a package:

```
asdf install {{name}} {{version}}
```

- Set global version for a package:

```
asdf global {{name}} {{version}}
```

- Set local version for a package:

```
asdf local {{name}} {{version}}
```

assimp

Command-line client for the Open Asset Import Library.

Supports loading of 40+ 3D file formats, and exporting to several popular 3D formats.

More information: <http://www.assimp.org/>.

- List all supported import formats:

```
assimp listtext
```

- List all supported export formats:

```
assimp listexport
```

- Convert a file to one of the supported output formats, using the default parameters:

```
assimp export {{input_file.stl}} {{output_file.obj}}
```

- Convert a file using custom parameters (the dox_cmd.h file in assimp's source code lists available parameters):

```
assimp export {{input_file.stl}} {{output_file.obj}}
{{parameters}}
```

- Display a summary of a 3D file's contents:

```
assimp info {{path/to/file}}
```

- List all supported subcommands ("verbs"):

```
assimp help
```

- Get help on a specific subcommand (e.g. the parameters specific to it):

```
assimp {{subcommand}} --help
```

astronomer

Tool that detects illegitimate stars from bot accounts on GitHub projects.

More information: <https://github.com/Ullaakut/astronomer>.

- Scan a repository:

```
astronomer {{tldr-pages/tldr-node-client}}
```

- Scan the maximum amount of stars in the repository:

```
astronomer {{tldr-pages/tldr-node-client}} --stars {{50}}
```

- Scan a repository including comparative reports:

```
astronomer {{tldr-pages/tldr-node-client}} --verbose
```

astyle

Source code indenter, formatter, and beautifier for the C, C++, C# and Java programming languages.

Upon running, a copy of the original file is created with an ".orig" appended to the original file name.

More information: <http://astyle.sourceforge.net/>.

- Apply the default style of 4 spaces per indent and no formatting changes:

```
astyle {{source_file}}
```

- Apply the java style with attached braces:

```
astyle --style=java {{path/to/file}}
```

- Apply the allman style with broken braces:

```
astyle --style=allman {{path/to/file}}
```

- Apply a custom indent using spaces. Choose between 2 and 20 spaces:

```
astyle --indent=spaces={{number_of_spaces}} {{path/to/file}}
```

- Apply a custom indent using tabs. Choose between 2 and 20 tabs:

```
astyle --indent=tab={{number_of_tabs}} {{path/to/file}}
```

at

Execute commands once at a later time.

Service `atd` (or `atrun`) should be running for the actual executions.

- Execute commands from standard input in 5 minutes (press `Ctrl + D` when done):

```
at now + 5 minutes
```

- Execute a command from standard input at 10:00 AM today:

```
echo "{{./make_db_backup.sh}}" | at 1000
```

- Execute commands from a given file next Tuesday:

```
at -f {{path/to/file}} 9:30 PM Tue
```

atom

A cross-platform pluggable text editor.

Plugins are managed by **apm**.

More information: <https://atom.io/>.

- Open a file or directory:

```
atom {{path/to/file_or_directory}}
```

- Open a file or directory in a new window:

```
atom -n {{path/to/file_or_directory}}
```

- Open a file or directory in an existing window:

```
atom --add {{path/to/file_or_directory}}
```

- Open Atom in safe mode (does not load any additional packages):

```
atom --safe
```

- Prevent Atom from forking into the background, keeping Atom attached to the terminal:

```
atom --foreground
```

- Wait for Atom window to close before returning (useful for git commit editor):

```
atom --wait
```

atoum

A simple, modern and intuitive unit testing framework for PHP.

More information: <http://atoum.org>.

- Initialise a configuration file:

```
atoum --init
```

- Run all tests:

```
atoum
```

- Run tests using the specified configuration file:

```
atoum -c {{path/to/file}}
```

- Run a specific test file:

```
atoum -f {{path/to/file}}
```

- Run a specific directory of tests:

```
atoum -d {{path/to/directory}}
```

- Run all tests under a specific namespace:

```
atoum -ns {{namespace}}
```

- Run all tests with a specific tag:

```
atoum -t {{tag}}
```

- Load a custom bootstrap file before running tests:

```
atoum --bootstrap-file {{path/to/file}}
```

atq

Show jobs scheduled by **at** or **batch** commands.

- Show the current user's scheduled jobs:

```
atq
```

- Show jobs from queue named 'a' (queues have single-character names):

```
atq -q {{a}}
```

- Show jobs of all users (run as super user):

```
sudo atq
```

atrm

Remove jobs scheduled by **at** or **batch** commands.

To find job numbers use **atq**.

- Remove job number 10:

```
atrm {{10}}
```

- Remove many jobs, separated by spaces:

```
atrm {{15}} {{17}} {{22}}
```

autoflake

A tool to remove unused imports and variables from Python code.

More information: <https://github.com/myint/autoflake>.

- Remove unused variables from a single file and display the diff:

```
autoflake --remove-unused-variables {{file.py}}
```

- Remove unused imports from multiple files and display the diffs:

```
autoflake --remove-all-unused-imports {{file1.py}}  
{{file2.py}} {{file3.py}}
```

- Remove unused variables from a file, overwriting the file:

```
autoflake --remove-unused-variables --in-place {{file.py}}
```

- Remove unused variables recursively from all files in a directory, overwriting each file:

```
autoflake --remove-unused-variables --in-place --recursive  
{{path/to/directory}}
```

autojump

Quickly jump among the directories you visit the most.

Aliases like `j` or `jc` are provided for even less typing.

More information: <https://github.com/wting/autojump>.

- Jump to a directory that contains the given pattern:

`j {{pattern}}`

- Jump to a sub-directory (child) of the current directory that contains the given pattern:

`jc {{pattern}}`

- Open a directory that contains the given pattern in the operating system file manager:

`jo {{pattern}}`

- Remove non-existing directories from the autojump database:

`j --purge`

- Show the entries in the autojump database:

`j -s`

autossh

Runs, monitors and restarts SSH connections.

Auto-reconnects to keep port forwarding tunnels up. Accepts all ssh flags.

More information: <https://harding.motd.ca/autossh>.

- Open an SSH session, restarting when a monitoring port fails return data:

```
autossh -M {{monitor_port}} {{ssh_command}}
```

- Open an SSH session which forwards a local port to a remote one, restarting if necessary:

```
autossh -M {{monitor_port}} -L {{local_port}}:localhost:{{remote_port}} {{user}}@{{host}}
```

- Fork before executing ssh (runs in the background) and don't open a remote shell:

```
autossh -f -M {{monitor_port}} -N {{ssh_command}}
```

- Run autossh in the background, with no monitoring port, instead relying on SSH keep-alives every 10 seconds to detect failure:

```
autossh -f -M 0 -N -o "ServerAliveInterval 10" -o "ServerAliveCountMax 3" {{ssh_command}}
```

- Run autossh in the background, with no monitoring port, no remote shell, exiting if the port forward fails:

```
autossh -f -M 0 -N -o "ServerAliveInterval 10" -o "ServerAliveCountMax 3" -o ExitOnForwardFailure=yes -L {{local_port}}:localhost:{{remote_port}} {{user}}@{{host}}
```

- Run autossh in the background with debug output logged to a file and ssh verbose output logged to a second file:

```
AUTOSSH_DEBUG=1 AUTOSSH_LOGFILE={{log_file}} autossh -f -M {{monitor_port}} -v -E {{ssh_log_file}} {{ssh_command}}
```

avrdu~~e~~

Driver program for Atmel AVR microcontrollers programming.

More information: [https://www.nongnu.org/avrdu~~e~~/](https://www.nongnu.org/avrdue/).

- Read AVR microcontroller:

```
avrdue -p {{AVR_device}} -c {{programmer}} -U flash:r:  
{{file.hex}}:i
```

- Write AVR microcontroller:

```
avrdue -p {{AVR_device}} -c {{programmer}} -U flash:w:  
{{file.hex}}
```

- List available AVR devices:

```
avrdue -p \?
```

- List available AVR programmers:

```
avrdue -c \?
```

awk

A versatile programming language for working on files.

More information: <https://github.com/onetrueawk/awk>.

- Print the fifth column (a.k.a. field) in a space-separated file:

```
awk '{print $5}' {{filename}}
```

- Print the second column of the lines containing "something" in a space-separated file:

```
awk '/{{something}}/ {print $2}' {{filename}}
```

- Print the last column of each line in a file, using a comma (instead of space) as a field separator:

```
awk -F ',' '{print $NF}' {{filename}}
```

- Sum the values in the first column of a file and print the total:

```
awk '{s+=$1} END {print s}' {{filename}}
```

- Print every third line starting from the first line:

```
awk 'NR%3==1' {{filename}}
```

- Print different values based on conditions:

```
awk '{if ($1 == "foo") print "Exact match foo"; else if ($1 ~ "bar") print "Partial match bar"; else print "Baz"}' {{filename}}
```

- Print all lines where the 10th column value equals the specified value :

```
awk '($10 == value)'
```

- Print all the lines which the 10th column value is between a min and a max :

```
awk '($10 >= min_value && $10 <= max_value)'
```

aws ec2

CLI for AWS EC2.

Provides secure and resizable computing capacity in the AWS cloud to enable faster development and deployment of applications.

More information: <https://awscli.amazonaws.com/v2/documentation/api/latest/reference/ec2/index.html>.

- Show list of all available EC2 commands:

```
aws ec2 help
```

- Show help for specific EC2 subcommand:

```
aws ec2 {{subcommand}} help
```

- Display information about a specific instance:

```
aws ec2 describe-instances --instance-ids {{instance_id}}
```

- Display information about all instances:

```
aws ec2 describe-instances
```

- Display information about all EC2 volumes:

```
aws ec2 describe-volumes
```

- Delete an EC2 volume:

```
aws ec2 delete-volume --volume-id {{volume_id}}
```

- Create a snapshot from an EC2 volume:

```
aws ec2 create-snapshot --volume-id {{volume_id}}
```

- List available AMIs (Amazon Machine Images):

```
aws ec2 describe-images
```

aws glue

CLI for AWS Glue.

Defines the public endpoint for the AWS Glue service.

More information: <https://docs.aws.amazon.com/cli/latest/reference/glue/index.html>.

- List jobs:

```
aws glue list-jobs
```

- Start a job:

```
aws glue start-job-run --job-name {{job_name}}
```

- Start running a workflow:

```
aws glue start-workflow-run --name {{workflow_name}}
```

- List triggers:

```
aws glue list-triggers
```

- Start a trigger:

```
aws glue start-trigger --name {{trigger_name}}
```

- Create a dev endpoint:

```
aws glue create-dev-endpoint --endpoint-name {{name}} --role-arn {{role_arn_used_by_endpoint}}
```

aws-google-auth

Command line tool to acquire AWS temporary (STS) credentials using Google Apps as a federated (Single Sign-On) provider.

More information: <https://github.com/cevoaustralia/aws-google-auth>.

- Login with Google SSO using the IDP and SP identifiers and set the credentials duration to one hour:

```
aws-google-auth -u {{example@example.com}} -I  
{{$GOOGLE_IDP_ID}} -S {{$GOOGLE_SP_ID}} -d {{3600}}
```

- Login [a]sking which role to use (in case of several available SAML roles):

```
aws-google-auth -u {{example@example.com}} -I  
{{$GOOGLE_IDP_ID}} -S {{$GOOGLE_SP_ID}} -d {{3600}} -a
```

- Resolve aliases for AWS accounts:

```
aws-google-auth -u {{example@example.com}} -I  
{{$GOOGLE_IDP_ID}} -S {{$GOOGLE_SP_ID}} -d {{3600}} -a --  
resolve-aliases
```

- Show help information:

```
aws-google-auth -h
```

aws iam

CLI for AWS IAM.

More information: <https://awscli.amazonaws.com/v2/documentation/api/latest/reference/iam/index.html>.

- Show `aws iam` help page (including all available iam commands):

```
aws iam help
```

- List users:

```
aws iam list-users
```

- List policies:

```
aws iam list-policies
```

- List groups:

```
aws iam list-groups
```

- Get users in a group:

```
aws iam get-group --group-name {{group_name}}
```

- Describe an IAM policy:

```
aws iam get-policy --policy-arn arn:aws:iam::aws:policy/{{policy_name}}
```

- List access keys:

```
aws iam list-access-keys
```

- List access keys for a specific user:

```
aws iam list-access-keys --user-name {{user_name}}
```

aws kinesis

Official AWS CLI for Amazon Kinesis streaming data services.

More information: <https://docs.aws.amazon.com/cli/latest/reference/kinesis/index.html#cli-aws-kinesis>.

- Show all streams in the account:

```
aws kinesis list-streams
```

- Write one record to a Kinesis stream:

```
aws kinesis put-record --stream-name {{name}} --partition-key {{key}} --data {{base64_encoded_message}}
```

- Write a record to a Kinesis stream with inline base64 encoding:

```
aws kinesis put-record --stream-name {{name}} --partition-key {{key}} --data "$( echo "{{my raw message}}" | base64 )"
```

- List the shards available on a stream:

```
aws kinesis list-shards --stream-name {{name}}
```

- Get a shard iterator for reading from the oldest message in a stream's shard:

```
aws kinesis get-shard-iterator --shard-iterator-type TRIM_HORIZON --stream-name {{name}} --shard-id {{id}}
```

- Read records from a shard, using a shard iterator:

```
aws kinesis get-records --shard-iterator {{iterator}}
```

aws lambda

CLI for AWS lambda.

More information: <https://docs.aws.amazon.com/cli/latest/reference/lambda/index.html>.

- Run a function:

```
aws lambda invoke --function-name {{name}} {{path/to/response}}.json
```

- Run a function with an input payload in JSON format:

```
aws lambda invoke --function-name {{name}} --payload {{json}} {{path/to/response}}.json
```

- List functions:

```
aws lambda list-functions
```

- Display the configuration of a function:

```
aws lambda get-function-configuration --function-name {{name}}
```

- List function aliases:

```
aws lambda list-aliases --function-name {{name}}
```

- Display the reserved concurrency configuration for a function:

```
aws lambda get-function-concurrency --function-name {{name}}
```

- List which AWS services can invoke the function:

```
aws lambda get-policy --function-name {{name}}
```

aws quicksight

CLI for AWS QuickSight.

Access QuickSight entities.

More information: <https://docs.aws.amazon.com/cli/latest/reference/quicksight/index.html>.

- List datasets:

```
aws quicksight list-data-sets --aws-account-id  
{{aws_account_id}}
```

- List users:

```
aws quicksight list-users --aws-account-id {{aws_account_id}}  
--namespace default
```

- List groups:

```
aws quicksight list-groups --aws-account-id  
{{aws_account_id}} --namespace default
```

- List dashboards:

```
aws quicksight list-dashboards --aws-account-id  
{{aws_account_id}}
```

- Display detailed information about a dataset:

```
aws quicksight describe-data-set --aws-account-id  
{{aws_account_id}} --data-set-id {{data_set_id}}
```

- Display who has access to the dataset and what kind of actions they can perform on the dataset:

```
aws quicksight describe-data-set-permissions --aws-account-id  
{{aws_account_id}} --data-set-id {{data_set_id}}
```

aws s3

CLI for AWS S3 - provides storage through web services interfaces.

More information: <https://aws.amazon.com/cli>.

- Show files in a bucket:

```
aws s3 ls {{bucket_name}}
```

- Sync files and directories from local to bucket:

```
aws s3 sync {{path/to/files}} s3://{{bucket_name}}
```

- Sync files and directories from bucket to local:

```
aws s3 sync s3://{{bucket_name}} {{path/to/target}}
```

- Sync files and directories with exclusions:

```
aws s3 sync {{path/to/files}} s3://{{bucket_name}} --exclude  
{{path/to/file}} --exclude {{path/to/directory}}/*
```

- Remove file from bucket:

```
aws s3 rm s3://{{bucket}}/{{path/to/file}}
```

- Preview changes only:

```
aws s3 {{any_command}} --dryrun
```

aws-vault

A vault for securely storing and accessing AWS credentials in development environments.

More information: <https://github.com/99designs/aws-vault>.

- Add credentials to the secure keystore:

```
aws-vault add {{profile}}
```

- Execute a command with AWS credentials in the environment:

```
aws-vault exec {{profile}} -- {{aws s3 ls}}
```

- Open a browser window and login to the AWS Console:

```
aws-vault login {{profile}}
```

- List profiles, along with their credentials and sessions:

```
aws-vault list
```

- Rotate AWS credentials:

```
aws-vault rotate {{profile}}
```

- Remove credentials from the secure keystore:

```
aws-vault remove {{profile}}
```

aws

The official CLI tool for Amazon Web Services.

Wizard, SSO, Resource Autocompletion, and YAML options are v2 only.

More information: <https://aws.amazon.com/cli>.

- Configure the AWS Command Line:

```
aws configure wizard
```

- Configure the AWS Command Line using SSO:

```
aws configure sso
```

- See help text for the AWS command:

```
aws {{command}} help
```

- Get the caller identity (used to troubleshoot permissions):

```
aws sts get-caller-identity
```

- List AWS resources in a region and output in yaml:

```
aws dynamodb list-tables --region {{us-east-1}} --output yaml
```

- Use auto prompt to help with a command:

```
aws iam create-user --cli-auto-prompt
```

- Get an interactive wizard for an AWS resource:

```
aws dynamodb wizard {{new_table}}
```

- Generate a JSON CLI Skeleton (useful for infrastructure as code):

```
aws dynamodb update-table --generate-cli-skeleton
```

awslogs

Queries groups, streams and events from Amazon Cloudwatch logs.

More information: <https://github.com/jorgebastida/awslogs>.

- List log groups:

```
awslogs groups
```

- List existing streams for the specified group:

```
awslogs streams {{/var/log/syslog}}
```

- Get logs for any streams in the specified group between 1 and 2 hours ago:

```
awslogs get {{/var/log/syslog}} --start='{{2h ago}}' --end='{{1h ago}}'
```

- Get logs that match a specific Cloudwatch Logs Filter pattern:

```
awslogs get {{/aws/lambda/my_lambda_group}} --filter-pattern='{{ERROR}}'
```

- Watch logs for any streams in the specified group:

```
awslogs get {{/var/log/syslog}} ALL --watch
```

axel

Download accelerator.

Supports HTTP, HTTPS, and FTP.

More information: <https://github.com/axel-download-accelerator/axel>.

- Download a URL to a file:

```
axel {{url}}
```

- Download and specify filename:

```
axel {{url}} -o {{filename}}
```

- Download with multiple connections:

```
axel -n {{connections_num}} {{url}}
```

- Search for mirrors:

```
axel -S {{mirrors_num}} {{url}}
```

- Limit download speed (bytes per second):

```
axel -s {{speed}} {{url}}
```

az

The official CLI tool for Microsoft Azure.

More information: <https://docs.microsoft.com/cli/azure>.

- Log in to Azure:

```
az login
```

- Manage azure subscription information:

```
az account
```

- List all Azure Managed Disks:

```
az disk list
```

- List all Azure virtual machines:

```
az vm list
```

- Manage Azure Kubernetes Services:

```
az aks
```

- Manage Azure Network resources:

```
az network
```

b2sum

Calculate BLAKE2 cryptographic checksums.

More information: <https://blake2.net/#su>.

- Calculate the BLAKE2 checksum for a file:

```
b2sum {{filename1}}
```

- Calculate BLAKE2 checksums for multiple files:

```
b2sum {{filename1}} {{filename2}}
```

- Read a file of BLAKE2 sums and filenames and verify all files have matching checksums:

```
b2sum -c {{filename.b2}}
```

- Calculate the BLAKE2 checksum from `stdin`:

```
{{somecommand}} | b2sum
```

babel

A transpiler which converts code from JavaScript ES6/ES7 syntax to ES5 syntax.

More information: <https://babeljs.io/>.

- Transpile a specified input file and output to `stdout`:

```
babel {{path/to/file}}
```

- Transpile a specified input file and output to a specific file:

```
babel {{path/to/input_file}} --out-file {{path/to/output_file}}
```

- Transpile the input file every time it is changed:

```
babel {{path/to/input_file}} --watch
```

- Transpile a whole directory of files:

```
babel {{path/to/input_directory}}
```

- Ignore specified comma-separated files in a directory:

```
babel {{path/to/input_directory}} --ignore {{ignored_files}}
```

- Transpile and output as minified JavaScript:

```
babel {{path/to/input_file}} --minified
```

- Choose a set of presets for output formatting:

```
babel {{path/to/input_file}} --presets {{presets}}
```

- Output all available options:

```
babel --help
```

badblocks

Search a device for bad blocks.

Some usages of badblocks can cause destructive actions, such as erasing all the data on a disk, including the partition table.

- Search a disk for bad blocks by using a non-destructive read-only test:

```
sudo badblocks {{/dev/sdX}}
```

- Search an unmounted disk for bad blocks with a non-destructive read-write test:

```
sudo badblocks -n {{/dev/sdX}}
```

- Search an unmounted disk for bad blocks with a destructive write test:

```
sudo badblocks -w {{/dev/sdX}}
```

- Search an unmounted disk for bad blocks with a destructive write test and show verbose status:

```
sudo badblocks -svw {{/dev/sdX}}
```

- Search an unmounted disk in destructive mode and output found blocks to a file:

```
sudo badblocks -o {{path/to/file}} -w {{/dev/sdX}}
```

- Search an unmounted disk in destructive mode with improved speed using 4K block size and 64K block count:

```
sudo badblocks -w -b {{4096}} -c {{65536}} {{/dev/sdX}}
```

balena

Interact with the balenaCloud, openBalena and the balena API from the command line.

More information: <https://www.balena.io/docs/reference/cli/>.

- Login to the balenaCloud account:

```
balena login
```

- Create a balenaCloud or openBalena application:

```
balena app create {{app_name}}
```

- List all balenaCloud or openBalena applications within the account:

```
balena apps
```

- List all devices associated with the balenaCloud or openBalena account:

```
balena devices
```

- Flash a balenaOS image to a local drive:

```
balena local flash {{path/to/balenaos.img}} --drive  
{{drive_location}}
```

banner

Print the given argument as a large ASCII art.

- Print the text message as a large banner (quotes are optional):

```
banner "{{Hello World}}"
```

- Print the text message as a banner with a width of 50 characters:

```
banner -w {{50}} "{{Hello World}}"
```

- Read text from `stdin`:

```
banner
```

base32

Encode or decode file or standard input to/from Base32, to standard output.

- Encode a file:

```
base32 {{filename}}
```

- Decode a file:

```
base32 -d {{filename}}
```

- Encode from `stdin`:

```
{{somecommand}} | base32
```

- Decode from `stdin`:

```
{{somecommand}} | base32 -d
```

base64

Encode or decode file or standard input to/from Base64, to standard output.

- Encode a file:

```
base64 {{filename}}
```

- Decode a file:

```
base64 -d {{filename}}
```

- Encode from **stdin**:

```
{{somecommand}} | base64
```

- Decode from **stdin**:

```
{{somecommand}} | base64 -d
```

basename

Remove leading directory portions from a path.

- Show only the file name from a path:

```
basename {{path/to/file}}
```

- Show only the rightmost directory name from a path:

```
basename {{path/to/directory/}}
```

- Show only the file name from a path, with a suffix removed:

```
basename {{path/to/file}} {{suffix}}
```

bash

Bourne-Again SHell.

sh-compatible command line interpreter.

More information: <https://gnu.org/software/bash>.

- Start interactive shell:

`bash`

- Execute a command:

`bash -c "{{command}}"`

- Run commands from a file:

`bash {{file.sh}}`

- Run commands from a file, logging all commands executed to the terminal:

`bash -x {{file.sh}}`

- Run commands from a file, stopping at the first error:

`bash -e {{file.sh}}`

- Run commands from `stdin`:

`bash -s`

- Print the version information of bash (use `echo $BASH_VERSION` to show just the version without license information):

`bash --version`

bashmarks

Save and jump to commonly used directories using 1 character commands.

More information: <https://github.com/huyng/bashmarks>.

- List available bookmarks:

`l`

- Save the current directory as "bookmark_name":

`s {{bookmark_name}}`

- Go to a bookmarked directory:

`g {{bookmark_name}}`

- Print a bookmarked directory's contents:

`p {{bookmark_name}}`

- Delete a bookmark:

`d {{bookmark_name}}`

bastet

Clone of the game Tetris in the terminal.

More information: <https://fph.altervista.org/prog/bastet.html>.

- Start a tetris game:

bastet

- Navigate the piece horizontally:

{{Left|Right}} arrow key

- Rotate the piece clockwise or counterclockwise:

{{Spacebar|Up arrow key}}

- Soft drop the piece:

Down arrow key

- Hard drop the piece:

Enter

- Pause the game:

p

- Quit the game:

Ctrl + C

bat

Print and concatenate files.

A **cat** clone with syntax highlighting and Git integration.

More information: <https://github.com/sharkdp/bat>.

- Print the contents of a file to the standard output:

```
bat {{file}}
```

- Concatenate several files into the target file:

```
bat {{file1}} {{file2}} > {{target_file}}
```

- Append several files into the target file:

```
bat {{file1}} {{file2}} >> {{target_file}}
```

- Number all output lines:

```
bat -n {{file}}
```

- Syntax highlight a json file:

```
bat --language json {{file.json}}
```

- Display all supported languages:

```
bat --list-languages
```

batch

Execute commands at a later time when the system load levels permit.

Service atd (or atrun) should be running for the actual executions.

- Execute commands from standard input (press **Ctrl + D** when done):

```
batch
```

- Execute a command from standard input:

```
echo "{{ ./make_db_backup.sh }}" | batch
```

- Execute commands from a given file:

```
batch -f {{path/to/file}}
```

bc

Calculator.

- Run calculator in interactive mode using the standard math library:

```
bc -l
```

- Calculate the result of an expression:

```
bc <<< "(1 + 2) * 2 ^ 2"
```

- Calculate expression and force number of decimal places to 10:

```
bc <<< "scale=10; 5 / 3"
```

- Calculate expression with sine and cosine using mathlib:

```
bc -l <<< "s(1) + c(1)"
```

beanstalkd

A simple and generic work-queue server.

More information: <https://beanstalkd.github.io/>.

- Start beanstalkd, listening on port 11300:

`beanstalkd`

- Start beanstalkd listening on a custom port and address:

`beanstalkd -l {{ip_address}} -p {{port_number}}`

- Persist work queues by saving them to disk:

`beanstalkd -b {{path/to/persistence_directory}}`

- Sync to the persistence directory every 500 milliseconds:

`beanstalkd -b {{path/to/persistence_directory}} -f {{500}}`

bedtools

A swiss-army knife of tools for genomic-analysis tasks.

Used to intersect, group, convert and count data in BAM, BED, GFF/GTF, VCF format.

More information: <https://bedtools.readthedocs.io/en/latest/>.

- Intersect two files with respect to the sequences' strand and save the result to {{path/to/output_file}}:

```
bedtools intersect -a {{path/to/file_1}} -b {{path/to/file_2}} -s > {{path/to/output_file}}
```

- Intersect two files with a left outer join, i.e. report each feature from {{file_1}} and NULL if no overlap with {{file_2}}:

```
bedtools intersect -a {{path/to/file_1}} -b {{path/to/file_2}} -lof > {{path/to/output_file}}
```

- Using more efficient algorithm to intersect two pre-sorted files:

```
bedtools intersect -a {{path/to/file_1}} -b {{path/to/file_2}} -sorted > {{path/to/output_file}}
```

- Group file {{path/to/file}} based on the first three and the fifth column and summarize the sixth column by summing it up:

```
bedtools groupby -i {{path/to/file}} -c 1-3,5 -g 6 -o sum
```

- Convert bam-formatted file to a bed-formatted one:

```
bedtools bamtobed -i {{path/to/file}}.bam > {{path/to/file}}.bed
```

- Find for all features in {{file_1}}.bed the closest one in {{file_2}}.bed and write their distance in an extra column (input files must be sorted):

```
bedtools closest -a {{path/to/file_1}}.bed -b {{path/to/file_2}}.bed -d
```

behat

A PHP framework for Behaviour-Driven Development.

More information: <https://behat.org>.

- Initialise a new Behat project:

```
behat --init
```

- Run all tests:

```
behat
```

- Run all tests from the specified suite:

```
behat --suite={{suite_name}}
```

- Run tests with a specific output formatter:

```
behat --format {{pretty|progress}}
```

- Run tests and output results to a file:

```
behat --out {{path/to/file}}
```

- Display a list of definitions in your test suites:

```
behat --definitions
```

berks

Chef cookbook dependency manager.

More information: <https://docs.chef.io/berkshelf.html>.

- Install cookbook dependencies into a local repo:

```
berks install
```

- Update a specific cookbook and its dependencies:

```
berks update {{cookbook}}
```

- Upload a cookbook to the Chef server:

```
berks upload {{cookbook}}
```

- View the dependencies of a cookbook:

```
berks contingent {{cookbook}}
```

bg

Resumes jobs that have been suspended (e.g. using **Ctrl + Z**), and keeps them running in the background.

- Resume most recently suspended job and run it in the background:

```
bg
```

- Resume a specific job (use **jobs -l** to get its ID) and run it in the background:

```
bg {{job_id}}
```

bison

GNU parser generator.

More information: <https://www.gnu.org/software/bison/>.

- Compile a bison definition file:

```
bison {{path/to/file.y}}
```

- Compile in debug mode, which causes the resulting parser to write additional information to the standard output:

```
bison --debug {{path/to/file.y}}
```

- Specify the output filename:

```
bison --output {{path/to/output.c}} {{path/to/file.y}}
```

- Be verbose when compiling:

```
bison --verbose
```

bitcoin-cli

Command-line client to interact with the Bitcoin daemon via RPC calls.

Uses the configuration defined in **bitcoin.conf**.

More information: https://en.bitcoin.it/wiki/Running_Bitcoin#Command-line_arguments

- Send a transaction to a given address:

```
bitcoin-cli sendtoaddress "{{address}}" {{amount}}
```

- Generate one or more blocks:

```
bitcoin-cli generate {{num_blocks}}
```

- Print high-level information about the wallet:

```
bitcoin-cli getwalletinfo
```

- List all outputs from previous transactions available to fund outgoing transactions:

```
bitcoin-cli listunspent
```

- Export the wallet information to a text file:

```
bitcoin-cli dumpwallet "{{path/to/file}}"
```

black

A Python auto code formatter.

More information: <https://github.com/psf/black>.

- Auto-format a file or entire directory:

```
black {{path/to/file_or_directory}}
```

- Format the code passed in as a string:

```
black -c {{path/to/file_or_directory}}
```

- Output a diff for each file on stdout:

```
black --diff {{path/to/file_or_directory}}
```

- Return the status without writing the files back:

```
black --check {{path/to/file_or_directory}}
```

- Auto-format a file or directory emitting exclusively error messages to stderr:

```
black --quiet {{path/to/file_or_directory}}
```

blackfire

A command line profiling tool for PHP.

More information: <https://blackfire.io>.

- Initialise and configure the Blackfire client:

```
blackfire config
```

- Launch the Blackfire agent:

```
blackfire agent
```

- Launch the Blackfire agent on a specific socket:

```
blackfire agent --socket="{{tcp://127.0.0.1:8307}}"
```

- Run the profiler on a specific program:

```
blackfire run {{php path/to/file.php}}
```

- Run the profiler and collect 10 samples:

```
blackfire --samples={{10}} run {{php path/to/file.php}}
```

- Run the profiler and output results as JSON:

```
blackfire --json run {{php path/to/file.php}}
```

- Upload a profiler file to the Blackfire web service:

```
blackfire upload {{path/to/file}}
```

- View the status of profiles on the Blackfire web service:

```
blackfire status
```

blender

Command-line interface to the Blender 3D computer graphics application.

Arguments are executed in the order they are given.

More information: https://docs.blender.org/manual/en/latest/render/workflows/command_line.html.

- Render all frames of an animation in the background, without loading the UI (output is saved to `/tmp`):

```
blender -b {{filename}}.blend -a
```

- Render an animation using a specific image naming pattern, in a path relative `(//)` to the .blend file:

```
blender -b {{filename}}.blend -o //{{render/frame_###.png}} -a
```

- Render the 10th frame of an animation as a single image, saved to an existing directory (absolute path):

```
blender -b {{filename}}.blend -o {{/path/to/output_directory}} -f {{10}}
```

- Render the second last frame in an animation as a JPEG image, saved to an existing directory (relative path):

```
blender -b {{filename}}.blend -o //{{output_directory}} -F {{JPEG}} -f {{-2}}
```

- Render the animation of a specific scene, starting at frame 10 and ending at frame 500:

```
blender -b {{filename}}.blend -S {{scene_name}} -s {{10}} -e {{500}} -a
```

- Render an animation at a specific resolution, by passing a Python expression:

```
blender -b {{filename}}.blend --python-expr '{{import bpy; bpy.data.scenes[0].render.resolution_percentage = 25}}' -a
```

- Start an interactive Blender session in the terminal with a python console (do `import bpy` after starting):

```
blender -b --python-console
```

blockout2

Tetris like game in 3D.

More information: <http://www.blockout.net/blockout2/>.

- Start a new game:

blockout2

- Navigate the current piece on a 2D plane:

{{Up|Down|Left|Right}} arrow key

- Rotate the piece on its axis:

{{Q|W|E|A|S|D}}

- Hard drop the current piece:

Spacebar

- Pause/unpause the game:

p

bmaptool

Create or copy block maps intelligently (designed to be faster than **cp** or **dd**).

More information: <https://source.tizen.org/documentation/reference/bmaptool>.

- Create a blockmap from image file:

```
bmaptool create -o {{blockmap.bmap}} {{source.img}}
```

- Copy an image file into sdb:

```
bmaptool copy --bmap {{blockmap.bmap}} {{source.img}} {{/dev/sdb}}
```

- Copy a compressed image file into sdb:

```
bmaptool copy --bmap {{blockmap.bmap}} {{source.img.gz}} {{/dev/sdb}}
```

- Copy an image file into sdb without using a blockmap:

```
bmaptool copy --nobmap {{source.img}} {{/dev/sdb}}
```

boot

Build tooling for the Clojure programming language.

More information: <https://github.com/boot-clj/boot>.

- Start a REPL session either with the project or standalone:

`boot repl`

- Build a single "uberjar":

`boot jar`

- Learn about a command:

`boot cljs --help`

- Generate scaffolding for a new project based on a template:

`boot --dependencies boot/new new --template {{template_name}} --name {{project_name}}`

- Build for development (if using the boot/new template):

`boot dev`

- Build for production (if using the boot/new template):

`boot prod`

borg

Deduplicating backup tool.

Creates local or remote backups that are mountable as filesystems.

More information: <https://borgbackup.readthedocs.io/en/stable/usage/general.html>.

- Initialise a (local) repository:

```
borg init {{path/to/repo_directory}}
```

- Backup a directory into the repository, creating an archive called "Monday":

```
borg create --progress {{path/to/repo_directory}}::{{Monday}}
{{path/to/source_directory}}
```

- List all archives in a repository:

```
borg list {{path/to/repo_directory}}
```

- Extract a specific directory from the "Monday" archive in a remote repository, excluding all *.ext files:

```
borg extract {{user}}@{{host}}:{{path/to/repo_directory}}::{{Monday}} {{path/to/target_directory}} --exclude '{{*.ext}}'
```

- Prune a repository by deleting all archives older than 7 days, listing changes:

```
borg prune --keep-within {{7d}} --list {{path/to/
repo_directory}}
```

- Mount a repository as a FUSE filesystem:

```
borg mount {{path/to/repo_directory}}::{{Monday}} {{path/to/
mountpoint}}
```

- Display help on creating archives:

```
borg create --help
```

bosh

Command line tool to deploy and manage the bosh director.

More information: <https://bosh.io/docs/cli-v2/>.

- Create local alias for director:

```
bosh alias-env {{environment_name}} -e {{ip_address|url}} --  
ca-cert {{ca_certificate}}
```

- List environments:

```
bosh environments
```

- Login to the director:

```
bosh login -e {{environment}}
```

- List deployments:

```
bosh -e {{environment}} deployments
```

- List environment virtual machines:

```
bosh -e {{environment}} vms -d {{deployment}}
```

- Ssh into virtual machine:

```
bosh -e {{environment}} ssh {{virtual_machine}} -d  
{{deployment}}
```

- Upload stemcell:

```
bosh -e {{environment}} upload-stemcell {{stemcell_file|url}}
```

- Show current cloud config:

```
bosh -e {{environment}} cloud-config
```

bower

A package manager optimized for front-end web development.

A package can be a GitHub user/repo shorthand, a Git endpoint, a URL or a registered package.

More information: <https://bower.io/>.

- Install a project's dependencies, listed in its bower.json:

```
bower install
```

- Install one or more packages to the bower_components directory:

```
bower install {{package}} {{package}}
```

- Uninstall packages locally from the bower_components directory:

```
bower uninstall {{package}} {{package}}
```

- List local packages and possible updates:

```
bower list
```

- Display help information about a bower command:

```
bower help {{command}}
```

- Create a bower.json file for your package:

```
bower init
```

- Install a specific dependency version, and add it to bower.json:

```
bower install {{local_name}}={{package}}#{{version}} --save
```

box

A PHP application for building and managing Phars.

More information: <https://github.com/box-project/box>.

- Compile a new Phar file:

```
box compile
```

- Compile a new Phar file using a specific config file:

```
box compile -c {{path/to/config}}
```

- Display information about the PHAR PHP extension:

```
box info
```

- Display information about a specific Phar file:

```
box info {{path/to/phar_file}}
```

- Validate the first found config file in the working directory:

```
box validate
```

- Verify the signature of a specific Phar file:

```
box verify {{path/to/phar_file}}
```

- Display all available commands and options:

```
box help
```

browser-sync

Starts local web server that updates browser on file changes.

More information: <https://browsersync.io/docs/command-line>.

- Start a server from a specific directory:

```
browser-sync start --server {{path/to/directory}} --files  
{{path/to/directory}}
```

- Start a server from local directory, watching all css files in some directory:

```
browser-sync start --server --files '{{path/to/directory/}  
*.css}}
```

- Create configuration file:

```
browser-sync init
```

- Start browser-sync from config file:

```
browser-sync start --config {{config_file}}
```

btm

An alternative to **top**.

Aims to be lightweight, cross-platform and more graphical than **top**.

More information: <https://github.com/ClementTsang/bottom>.

- Show the default layout (cpu, memory, temperatures, disk, network, and processes):

btm

- Enable basic mode, removing charts and condensing data (similar to **top**):

btm --basic

- Use big dots instead of small ones in charts:

btm --dot_marker

- Show also battery charge and health status:

btm --battery

- Refresh every 250 milliseconds and show the last 30 seconds in the charts:

btm --rate 250 --default_time_value 30000

buku

Command-line browser-independent bookmark manager.

More information: <https://github.com/jarun/Buku>.

- Display all bookmarks matching "keyword" and with "privacy" tag:

```
buku {{keyword}} --stag {{privacy}}
```

- Add bookmark with tags "search engine" and "privacy":

```
buku --add {{https://example.com}} {{search engine}},  
{{privacy}}
```

- Delete a bookmark:

```
buku --delete {{bookmark_id}}
```

- Open editor to edit a bookmark:

```
buku --write {{bookmark_id}}
```

- Remove "search engine" tag from a bookmark:

```
buku --update {{bookmark_id}} --tag {{-}} {{search engine}}
```

bundle

Dependency manager for the Ruby programming language.

More information: <https://bundler.io/man/bundle.1.html>.

- Install all gems defined in the `Gemfile` expected in the working directory:

```
bundle install
```

- Execute a command in the context of the current bundle:

```
bundle exec {{command}} {{arguments}}
```

- Update all gems by the rules defined in the `Gemfile` and regenerate `Gemfile.lock`:

```
bundle update
```

- Update one or more specific gem(s) defined in the `Gemfile`:

```
bundle update {{gemname}} {{gemname}}
```

- Update one or more specific gems(s) defined in the `Gemfile` but only to the next patch version:

```
bundle update --patch {{gemname}} {{gemname}}
```

- Update update all gems within the given group in the `Gemfile`:

```
bundle update --group {{development}}
```

- List installed gems in the `Gemfile` with newer versions available:

```
bundle outdated
```

- Create a new gem skeleton:

```
bundle gem {{gemname}}
```

bup

Backup system based on the git packfile format, providing incremental saves and global deduplication.

More information: <https://github.com/bup/bup>.

- Initialize a backup repository in the specified local directory:

```
bup -d {{path/to/repository}} init
```

- Prepare a given directory before taking a backup:

```
bup -d {{path/to/repository}} index {{path/to/directory}}
```

- Backup a directory to the repository:

```
bup -d {{path/to/repository}} save -n {{backup_name}} {{path/to/directory}}
```

- Show the backup snapshots currently stored in the repository:

```
bup -d {{path/to/repository}} ls
```

- Restore a specific backup snapshot to a target directory:

```
bup -d {{path/to/repository}} restore -C {{path/to/target_directory}} {{backup_name}}
```

buzzphrase

Node.js command line tool to output a random buzzphrase.

More information: <https://github.com/atomantic/buzzphrase>.

- Generate a string of three random phrases containing an adjective, a past tense verb and a plural noun:

buzzphrase

- Output a phrase formatted as [i]mperative verb + past tense [v]erb + [a]djective + plural [N]oun:

buzzphrase {{'{i} {v} {a} {N}'}}

- Output 4 phrases formatted as present participle [V]erb + [a]djective + singular [n]oun + [f]inal:

buzzphrase {{4 '{V} {a} {n} {f}'}}

bw

A CLI to access and manage a Bitwarden vault.

More information: <https://help.bitwarden.com/article/cli/>.

- Log in to a Bitwarden user account:

```
bw login
```

- Log out of a Bitwarden user account:

```
bw logout
```

- Search and display items from Bitwarden vault:

```
bw list items --search {{github}}
```

- Display a particular item from Bitwarden vault:

```
bw get item {{github}}
```

- Create a folder in Bitwarden vault:

```
{{echo -n '{"name": "My Folder1"}' | base64}} | bw create folder
```

bzip2

A block-sorting file compressor.

More information: <http://bzip.org>.

- Compress a file:

```
bzip2 {{path/to/file_to_compress}}
```

- Decompress a file:

```
bzip2 -d {{path/to/compressed_file.bz2}}
```

- Decompress a file to standard output:

```
bzip2 -dc {{path/to/compressed_file.bz2}}
```

c99

Compiles C programs according to the ISO C standard.

- Compile source file(s) and create an executable:

```
c99 {{file.c}}
```

- Compile source file(s) and create an executable with a custom name:

```
c99 -o {{executable_name}} {{file.c}}
```

- Compile source file(s) and create object file(s):

```
c99 -c {{file.c}}
```

- Compile source file(s), link with object file(s), and create an executable:

```
c99 {{file.c}} {{file.o}}
```

cabal

Command line interface to the Haskell package infrastructure (Cabal).

Manage Haskell projects and Cabal packages from the Hackage package repository.

More information: <https://cabal.readthedocs.io/en/latest/intro.html>.

- Search and list packages from Hackage:

```
cabal list {{search_string}}
```

- Show information about a package:

```
cabal info {{package_name}}
```

- Download and install a package:

```
cabal install {{package_name}}
```

- Create a new Haskell project in the current directory:

```
cabal init
```

- Build the project in the current directory:

```
cabal build
```

- Run tests of the project in the current directory:

```
cabal test
```

cake

The command line processor for the CakePHP framework.

More information: <https://cakephp.org>.

- Display basic information about the current app and available commands:

`cake`

- Display a list of available routes:

`cake routes`

- Clear configuration caches:

`cake cache clear_all`

- Build the metadata cache:

`cake schema_cache build --connection {{connection}}`

- Clear the metadata cache:

`cake schema_cache clear`

- Clear a single cache table:

`cake schema_cache clear {{table_name}}`

- Start a development web server (defaults to port 8765):

`cake server`

- Start a REPL interactive shell instance:

`cake console`

calendar

Display upcoming events from a calendar file.

- Show events for today and tomorrow (or the weekend on Friday) from the default calendar:

`calendar`

- Look [A]head, showing events for the next 30 days:

`calendar -A {{30}}`

- Look [B]ack, showing events for the previous 7 days:

`calendar -B {{7}}`

- Show events from a custom calendar [f]ile:

`calendar -f {{path/to/file}}`

calibre-server

A server application that can be used to distribute ebooks over a network.

Ebooks must be imported into the library using the GUI or calibredb before.

Part of the Calibre ebook library.

More information: <https://manual.calibre-ebook.com/generated/en/calibre-server.html>.

- Start a server to distribute ebooks. Access at http://localhost:8080:

`calibre-server`

- Start server on different port. Access at http://localhost:port:

`calibre-server --port {{port}}`

- Password protect the server:

`calibre-server --username {{username}} --password {{password}}`

calibredb

Tool to manipulate the your ebook database.

Part of the Calibre ebook library.

More information: <https://manual.calibre-ebook.com/generated/en/calibredb.html>.

- List ebooks in the library with additional information:

```
calibredb list
```

- Search for ebooks displaying additional information:

```
calibredb list --search {{search_term}}
```

- Search for just ids of ebooks:

```
calibredb search {{search_term}}
```

- Add one or more ebooks to the library:

```
calibredb add {{file1 file2 ...}}
```

- Recursively add all ebooks under a directory to the library:

```
calibredb add -r {{path/to/directory}}
```

- Remove one or more ebooks from the library. You need ebook-ids (see above):

```
calibredb remove {{id1 id2 ...}}
```

carbon-now

Create beautiful images of code.

More at <https://github.com/mixn/carbon-now-cli>.

- Create an image from a file using default settings:

```
carbon-now {{file}}
```

- Create an image from a text in clipboard using default settings:

```
carbon-now --from-clipboard
```

- Create an image from standard input using default settings:

```
{{input}} | carbon-now
```

- Create images interactively for custom settings and optionally save a preset:

```
carbon-now -i {{file}}
```

- Create images from previously saved preset:

```
carbon-now -p {{preset}} {{file}}
```

- Start at a specified line of text:

```
carbon-now -s {{line}} {{file}}
```

- End at a specific line of text:

```
carbon-now -e {{line}} {{file}}
```

- Open image in a browser instead of saving:

```
carbon-now --open {{file}}
```

cargo build

Compile a local package and all of its dependencies.

More information: <https://doc.rust-lang.org/cargo/commands/cargo-build.html>.

- Build the package or packages defined by the `Cargo.toml` manifest file in the local path:

```
cargo build
```

- Build artifacts in release mode, with optimizations:

```
cargo build --release
```

- Require that `Cargo.lock` is up to date:

```
cargo build --locked
```

- Build all packages in the workspace:

```
cargo build --workspace
```

- Build a specific package:

```
cargo build --package {{package}}
```

- Build only the specified binary:

```
cargo build --bin {{name}}
```

- Build only the specified test target:

```
cargo build --test {{testname}}
```

cargo clippy

A collection of lints to catch common mistakes and improve your Rust code.

More information: <https://github.com/rust-lang/rust-clippy>.

- Run checks over the code in the current directory:

```
cargo clippy
```

- Require that `Cargo.lock` is up to date:

```
cargo clippy --locked
```

- Run checks on all packages in the workspace:

```
cargo clippy --workspace
```

- Run checks for a package:

```
cargo clippy --package {{package}}
```

- Treat warnings as errors:

```
RUSTFLAGS="-Dwarnings" cargo clippy -- -D warnings
```

- Run checks and ignore warnings:

```
cargo clippy -- -A warnings
```

- Apply Clippy suggestion automatically (experimental and only supported on the nightly channel):

```
cargo clippy --fix -Z unstable-options
```

cargo doc

Build and view Rust package documentation offline.

More information: <https://doc.rust-lang.org/cargo/commands/cargo-doc.html>.

- Build and view the default package documentation in the browser:

```
cargo doc --open
```

- Build documentation without accessing the network:

```
cargo doc --offline
```

- View a particular package's documentation:

```
cargo doc --open --package {{package}}
```

- View a particular package's documentation offline:

```
cargo doc --open --offline --package {{package}}
```

cargo rustc

Compile a Rust package, and pass extra options to the compiler.

More information: <https://doc.rust-lang.org/cargo/commands/cargo-rustc.html>.

- Build the package or packages defined by the `Cargo.toml` manifest file in the current working directory:

```
cargo rustc
```

- Build artifacts in release mode, with optimizations:

```
cargo rustc --release
```

- Compile with architecture-specific optimizations for the current CPU:

```
cargo rustc --release -- -C target-cpu=native
```

- Compile with speed optimization:

```
cargo rustc -- -C opt-level {{1|2|3}}
```

- Compile with [s]ize optimization (`z` also turns off loop vectorization):

```
cargo rustc -- -C opt-level {{s|z}}
```

- Check if your package uses unsafe code:

```
cargo rustc --lib -- -D unsafe-code
```

- Build a specific package:

```
cargo rustc --package {{package}}
```

- Build only the specified binary:

```
cargo --bin {{name}}
```

cargo test

Execute the unit and integration tests of a Rust package.

More information: <https://doc.rust-lang.org/cargo/commands/cargo-test.html>.

- Only run tests containing a specific string in their names:

```
cargo test {{testname}}
```

- Set the number of simultaneous running test cases:

```
cargo test -- --test-threads={{count}}
```

- Require that `Cargo.lock` is up to date:

```
cargo test --locked
```

- Test artifacts in release mode, with optimizations:

```
cargo test --release
```

- Test all packages in the workspace:

```
cargo test --workspace
```

- Run tests for a package:

```
cargo test --package {{package}}
```

cargo

Rust package manager.

Manage Rust projects and their module dependencies (crates).

More information: <https://crates.io/>.

- Search for crates:

```
cargo search {{search_string}}
```

- Install a crate:

```
cargo install {{crate_name}}
```

- List installed crates:

```
cargo install --list
```

- Create a new binary or library Rust project in the current directory:

```
cargo init --{{bin|lib}}
```

- Create a new binary or library Rust project in the specified directory:

```
cargo new {{path/to/directory}} --{{bin|lib}}
```

- Build the Rust project in the current directory:

```
cargo build
```

- Build using a specific number of threads (default is the number of CPU cores):

```
cargo build -j {{jobs}}
```

case

Branch based on the value of an expression.

- Match a variable against string literals to decide which command to run:

```
case {$tocount} in {{words}}) {{wc -w README}}; ;;
{{lines}}) {{wc -l README}}; ;; esac
```

- Combine patterns with |, use * as a fallback pattern:

```
case {$tocount} in {[wW]|words}) {{wc -w README}}; ;;
{[lL]|lines}) {{wc -l README}}; ;; *) {{echo "what?"}}; ;;
esac
```

cat

Print and concatenate files.

- Print the contents of a file to the standard output:

```
cat {{file}}
```

- Concatenate several files into the target file:

```
cat {{file1}} {{file2}} > {{target_file}}
```

- Append several files into the target file:

```
cat {{file1}} {{file2}} >> {{target_file}}
```

- Number all output lines:

```
cat -n {{file}}
```

- Display non-printable and whitespace characters (with M- prefix if non-ASCII):

```
cat -v -t -e {{file}}
```

cd

Change the current working directory.

- Go to the given directory:

`cd {{path/to/directory}}`

- Go to home directory of current user:

`cd`

- Go up to the parent of the current directory:

`cd ..`

- Go to the previously chosen directory:

`cd -`

cdk

A CLI for AWS Cloud Development Kit (CDK).

More information: <https://docs.aws.amazon.com/cdk/latest/guide/cli.html>.

- List the stacks in the app:

```
cdk ls
```

- Synthesize and print the CloudFormation template for the specified stack(s):

```
cdk synth {{stack_name}}
```

- Deploy a space-separated list of stacks:

```
cdk deploy {{stack_name}}
```

- Destroy a space-separated list of stacks:

```
cdk destroy {{stack_name}}
```

- Compare the specified stack with the deployed stack or a local CloudFormation template:

```
cdk diff {{stack_name}}
```

- Create a new CDK project in the current directory for a specified language:

```
cdk init -l {{language_name}}
```

- Open the CDK API reference in your browser:

```
cdk doc
```

cf

Command line tool to manage apps and services on Cloud Foundry.

More information: <https://docs.cloudfoundry.org>.

- Push an app using the default settings:

```
cf push {{app_name}}
```

- View the services available from your organization:

```
cf marketplace
```

- Create a service instance:

```
cf create-service {{service}} {{plan}} {{service_name}}
```

- Connect an application to a service:

```
cf bind-service {{app_name}} {{service_name}}
```

- Run a script whose code is included in the app, but runs independently:

```
cf run-task {{app_name}} "{{script_command}}" --name  
{{task_name}}
```

- Start an interactive SSH session with a VM hosting an app:

```
cf ssh {{app_name}}
```

- View a dump of recent app logs:

```
cf logs {{app_name}} --recent
```

chars

Display names and codes for various ASCII and Unicode characters and code points.

More information: <https://github.com/antifuchs/chars>.

- Look up a character by its value:

```
chars '{{\}}'
```

- Look up a character by its Unicode code point:

```
chars {{U+1F63C}}
```

- Look up possible characters given an ambiguous code point:

```
chars {{10}}
```

- Look up a control character:

```
chars "{{^C}}"
```

chcon

Change SELinux security context of a file or files/directories.

- View security context of a file:

```
ls -lZ {{path/to/file}}
```

- Change the security context of a target file, using a reference file:

```
chcon --reference={{reference_file}} {{target_file}}
```

- Change the full SELinux security context of a file:

```
chcon {{user}}:{{role}}:{{type}}:{{range/level}} {{filename}}
```

- Change only the user part of SELinux security context:

```
chcon -u {{user}} {{filename}}
```

- Change only the role part of SELinux security context:

```
chcon -r {{role}} {{filename}}
```

- Change only the type part of SELinux security context:

```
chcon -t {{type}} {{filename}}
```

- Change only the range/level part of SELinux security context:

```
chcon -l {{range/level}} {{filename}}
```

cheat

Create and view interactive cheat sheets on the command-line.

More information: <https://github.com/cheat/cheat>.

- Show example usage of a command:

```
cheat {{command}}
```

- Edit the cheat sheet for a command:

```
cheat -e {{command}}
```

- List the available cheat sheets:

```
cheat -l
```

- Search available the cheat sheets for a specified command name:

```
cheat -s {{command}}
```

- Get the current cheat version:

```
cheat -v
```

Chezmoi

A multi-machine dotfile manager, written in Go.

More information: <https://chezmoi.io>.

- Initialize chezmoi on your machine:

```
chezmoi init
```

- Tell chezmoi to manage a dotfile:

```
chezmoi add {{path/to/file}}
```

- Edit the source state of a tracked dotfile:

```
chezmoi edit {{path/to/file}}
```

- See changes chezmoi would make:

```
chezmoi diff
```

- Apply the changes:

```
chezmoi -v apply
```

- Set chezmoi up on another machine by downloading existing dotfiles from a git repo:

```
chezmoi init {{https://example.com/path/to/repository.git}}
```

- Fetch the latest changes from a remote repository:

```
chezmoi update
```

chgrp

Change group ownership of files and directories.

- Change the owner group of a file/directory:

```
chgrp {{group}} {{path/to/file_or_directory}}
```

- Recursively change the owner group of a directory and its contents:

```
chgrp -R {{group}} {{path/to/directory}}
```

- Change the owner group of a symbolic link:

```
chgrp -h {{group}} {{path/to/symlink}}
```

- Change the owner group of a file/directory to match a reference file:

```
chgrp --reference={{path/to/reference_file}} {{path/to/file_or_directory}}
```

chisel

Create TCP tunnels. Includes both client and server.

More information: <https://github.com/jpillora/chisel>.

- Run a Chisel server:

```
chisel server
```

- Run a Chisel server listening to a specific port:

```
chisel server -p {{server_port}}
```

- Run a chisel server that accepts authenticated connections using username and password:

```
chisel server --auth {{username}}:{{password}}
```

- Connect to a Chisel server and tunnel a specific port to a remote server and port:

```
chisel client {{server_ip}}:{{server_port}} {{local_port}}:  
{{remote_server}}:{{remote_port}}
```

- Connect to a Chisel server and tunnel a specific host and port to a remote server and port:

```
chisel client {{server_ip}}:{{server_port}} {{local_host}}:  
{{local_port}}:{{remote_server}}:{{remote_port}}
```

- Connect to a Chisel server using username and password authentication:

```
chisel client --auth {{username}}:{{password}} {{server_ip}}:  
{{server_port}} {{local_port}}:{{remote_server}}:  
{{remote_port}}
```

chmod

Change the access permissions of a file or directory.

- Give the [u]ser who owns a file the right to e[x]ecute it:

```
chmod u+x {{file}}
```

- Give the [u]ser rights to [r]ead and [w]rite to a file/directory:

```
chmod u+rw {{file_or_directory}}
```

- Remove e[x]ecutable rights from the [g]roup:

```
chmod g-x {{file}}
```

- Give [a]ll users rights to [r]ead and e[x]ecute:

```
chmod a+rwx {{file}}
```

- Give [o]thers (not in the file owner's group) the same rights as the [g]roup:

```
chmod o=g {{file}}
```

- Remove all rights from [o]thers:

```
chmod o= {{file}}
```

- Change permissions recursively giving [g]roup and [o]thers the ability to [w]rite:

```
chmod -R g+w,o+w {{directory}}
```

chown

Change user and group ownership of files and directories.

- Change the owner user of a file/directory:

```
chown {{user}} {{path/to/file_or_directory}}
```

- Change the owner user and group of a file/directory:

```
chown {{user}}:{{group}} {{path/to/file_or_directory}}
```

- Recursively change the owner of a directory and its contents:

```
chown -R {{user}} {{path/to/directory}}
```

- Change the owner of a symbolic link:

```
chown -h {{user}} {{path/to/symlink}}
```

- Change the owner of a file/directory to match a reference file:

```
chown --reference={{path/to/reference_file}} {{path/to/file_or_directory}}
```

chroma

Chroma is a general-purpose syntax highlighting library and corresponding command, for Go.

More information: <https://github.com/alecthomas/chroma>.

- Highlight a source file with python lexer and output to terminal:

```
chroma --lexer="{{python}}" {{source_file}}
```

- Highlight a source file with Go lexer and output to a HTML file:

```
chroma --lexer="{{go}}" --formatter="{{html}}"
{{source_file}} > {{html_file}}
```

- Highlight a source file with C++ lexer and output to an SVG image, using the Monokai style:

```
chroma --lexer="{{c++}}" --formatter="{{svg}}"
--style="{{monokai}}" {{source_file}} > {{svg_file}}
```

chromium

Open-source web browser from Google.

More information: <https://chromium.org>.

- Open a file:

```
chromium {{path/to/file.html}}
```

- Open an URL:

```
chromium {{example.com}}
```

- Open in incognito mode:

```
chromium --incognito {{example.com}}
```

- Open in a new window:

```
chromium --new-window {{example.com}}
```

- Open in app mode (without toolbars, URL bar, buttons, etc.):

```
chromium --app='{{https://example.com}}'
```

- Use a proxy server:

```
chromium --proxy-server="{{socks5://hostname:66}}"  
{{example.com}}
```

chroot

Run command or interactive shell with special root directory.

- Run command as new root directory:

```
chroot {{path/to/new/root}} {{command}}
```

- Specify user and group (ID or name) to use:

```
chroot --userspec={{user:group}}
```

chsh

Change user's login shell.

- Change shell:

```
chsh -s {{path/to/shell_binary}} {{username}}
```

cksum

Calculates CRC checksums and byte counts of a file.

Note, on old UNIX systems the CRC implementation may differ.

- Display a 32 bit checksum, size in bytes and filename:

```
cksum {{filename}}
```

clamscan

A command line virus scanner.

More information: <https://www.clamav.net>.

- Scan a file for vulnerabilities:

```
clamscan {{path/to/file}}
```

- Scan all files recursively in a specific directory:

```
clamscan -r {{path/to/directory}}
```

- Scan data from `stdin`:

```
{{command}} | clamscan -
```

- Specify a virus database file or directory of files:

```
clamscan --database {{path/to/database_file_or_directory}}
```

- Scan the current directory and output only infected files:

```
clamscan --infected
```

- Output the scan report to a log file:

```
clamscan --log {{path/to/log_file}}
```

- Move infected files to a specific directory:

```
clamscan --move {{path/to/quarantine_directory}}
```

- Remove infected files:

```
clamscan --remove yes
```

clang-format

Tool to auto-format C/C++/Java/JavaScript/Objective-C/Protobuf/C# code.

More information: <https://clang.llvm.org/docs/ClangFormat.html>.

- Format a file and print the result to `stdout`:

```
clang-format {{path/to/file}}
```

- Format a file in-place:

```
clang-format -i {{path/to/file}}
```

- Format a file using a predefined coding style:

```
clang-format --style={{LLVM|Google|Chromium|Mozilla|WebKit}}  
{{path/to/file}}
```

- Format a file using the `.clang-format` file in one of the parent directories of the source file:

```
clang-format --style=file {{path/to/file}}
```

- Generate a custom `.clang-format` file:

```
clang-format --style={{LLVM|Google|Chromium|Mozilla|WebKit}}  
--dump-config > {{.clang-format}}
```

clang

Compiler for C, C++, and Objective-C source files. Can be used as a drop-in replacement for GCC.

More information: <https://clang.llvm.org/docs/ClangCommandLineReference.html>.

- Compile a source code file into an executable binary:

```
clang {{input_source.c}} -o {{output_executable}}
```

- Activate output of all errors and warnings:

```
clang {{input_source.c}} -Wall -o {{output_executable}}
```

- Include libraries located at a different path than the source file:

```
clang {{input_source.c}} -o {{output_executable}} -  
I{{header_path}} -L{{library_path}} -l{{library_name}}
```

- Compile source code into LLVM Intermediate Representation (IR):

```
clang -S -emit-llvm {{file.c}} -o {{file.ll}}
```

clear

Clears the screen of the terminal.

- Clear the screen (equivalent to pressing Control-L in Bash shell):

```
clear
```

- Clear the screen but keep the terminal's scrollback buffer:

```
clear -x
```

- Indicate the type of terminal to clean (defaults to the value of the environment variable **TERM**):

```
clear -T {{type_of_terminal}}
```

- Show the version of **ncurses** used by **clear**:

```
clear -V
```

clementine

A modern music player and library organizer.

More information: <https://www.clementine-player.org>.

- Open Clementine:

`clementine`

- Start playing a music file:

`clementine {{url/or/path/to/file.ext}}`

- Toggle between pausing and playing:

`clementine --play-pause`

- Stop playback:

`clementine --stop`

- Skip to the next track:

`clementine --next`

- Skip to the previous track:

`clementine --previous`

- Load a playlist file:

`clementine --load {{path/to/playlist.ext}}`

- Play the 5th track in the currently loaded playlist:

`clementine --play-track {{5}}`

cloc

Count, and compute differences of, lines of source code and comments.

More information: <https://github.com/AlDanial/cloc>.

- Count all the lines of code in a directory:

```
cloc {{path/to/directory}}
```

- Count all the lines of code in a directory, displaying a progress bar during the counting process:

```
cloc --progress=1 {{path/to/directory}}
```

- Compare 2 directory structures and count the differences between them:

```
cloc --diff {{path/to/directory/one}} {{path/to/directory/two}}
```

- Ignore files that are ignored by VCS, such as files specified in .gitignore:

```
cloc --vcs git {{path/to/directory}}
```

- Count all the lines of code in a directory, displaying the results for each file instead of each language:

```
cloc --by-file {{path/to/directory}}
```

clockwork-cli

A command line interface for the Clockwork PHP debugging framework.

More information: <https://github.com/ptrofimov/clockwork-cli>.

- Monitor Clockwork logs for the current project:

`clockwork-cli`

- Monitor Clockwork logs for a specific project:

`clockwork-cli {{path/to/directory}}`

- Monitor Clockwork logs for multiple projects:

`clockwork-cli {{path/to/directory1 path/to/directory2 ...}}`

cloudflared

Command line tool to create a persistent connection to the Cloudflare network.

More information: <https://developers.cloudflare.com/argo-tunnel/>.

- Authenticate and associate the connection to a domain in the Cloudflare account:

```
cloudflared tunnel login
```

- Establish a tunnel to a host in Cloudflare from the local server:

```
cloudflared tunnel --hostname {{hostname}} localhost:  
{{port_number}}
```

- Establish a tunnel to a host in Cloudflare from the local server, without verifying the local server's certificate:

```
cloudflared tunnel --hostname {{hostname}} localhost:  
{{port_number}} --no-tls-verify
```

- Save logs to a file:

```
cloudflared tunnel --hostname {{hostname}} http://localhost:  
{{port_number}} --loglevel {{panic|fatal|error|warn|info|  
debug}} --logfile {{path/to/file}}
```

- Install cloudflared as a system service:

```
cloudflared service install
```

cmake

Cross-platform build system generator.

It generates Makefiles, Visual Studio projects or others, depending on the target system.

More information: <https://cmake.org/cmake/help/latest/manual/cmake.1.html>.

- Generate a Makefile and use it to compile a project in the same directory as the source:

```
cmake && make
```

- Generate a Makefile and use it to compile a project in a separate "build" directory (out-of-source build):

```
cmake -H. -B {{build}} && make -C {{build}}
```

cmark

Converts CommonMark Markdown formatted text to other formats.

More information: <https://github.com/commonmark/cmark>.

- Render a Commonmark Markdown file to HTML:

```
cmark --to html {{filename.md}}
```

- Convert data from standard input to latex:

```
cmark --to latex
```

- Convert straight quotes to smart quotes:

```
cmark --smart --to html {{filename.md}}
```

- Validate utf8 characters:

```
cmark --validate-utf8 {{filename.md}}
```

cmatrix

Shows a scrolling Matrix like screen in the terminal.

More information: <https://github.com/abishekvashok/cmatrix>.

- Enable asynchronous scrolling:

```
cmatrix -a
```

- Display red text:

```
cmatrix -C {{red}}
```

- Enable rainbow mode:

```
cmatrix -r
```

- Set screen update delay to 2 centiseconds:

```
cmatrix -u {{2}}
```

cmp

Compare two files.

- Find the byte number and line number of the first difference between the files:

```
cmp {{file1}} {{file2}}
```

- Find the byte number and differing bytes of every difference:

```
cmp -l {{file1}} {{file2}}
```

code

Visual Studio Code.

More information: <https://github.com/microsoft/vscode>.

- Open VS Code:

```
code
```

- Open the current directory in VS Code:

```
code .
```

- Open a file or directory in VS Code:

```
code {{path/to/file_or_directory}}
```

- Open a file or directory in the currently open VS Code window:

```
code --reuse-window {{path/to/file_or_directory}}
```

- Compare two files in VS Code:

```
code -d {{file1}} {{file2}}
```

- Open VS Code with super user (sudo) permissions:

```
sudo code {{path/to/file_or_directory}} --user-data-dir
```

coffee

Executes CoffeeScript scripts or compiles them into JavaScript.

More information: <https://coffeescript.org#cli>.

- Run a script:

```
coffee {{path/to/file.coffee}}
```

- Compile to JavaScript and save to a file with the same name:

```
coffee --compile {{path/to/file.coffee}}
```

- Compile to JavaScript and save to a given output file:

```
coffee --compile {{path/to/file.coffee}} --output {{path/to/file.js}}
```

- Run interactive REPL:

```
coffee --interactive
```

- Watch script for changes and re-run script:

```
coffee --watch {{path/to/file.coffee}}
```

colordiff

A tool to colorize diff output.

The Perl script colordiff is a wrapper for **diff** and produces the same output but with pretty syntax highlighting. Colour schemes can be customized.

More information: <https://github.com/kimmel,colordiff>.

- Compare files:

```
colordiff {{file1}} {{file2}}
```

- Output in two columns:

```
colordiff -y {{file1}} {{file2}}
```

- Ignore case differences in file contents:

```
colordiff -i {{file1}} {{file2}}
```

- Report when two files are the same:

```
colordiff -s {{file1}} {{file2}}
```

- Ignore white spaces:

```
colordiff -w {{file1}} {{file2}}
```

column

Format standard input or file into multiple columns.

Rows are filled before columns; default separator is whitespace.

- Format output for a 30 characters wide display:

```
printf "header1 header2\nbar foo\n" | column -c {{30}}
```

- Split columns automatically and auto-align in a tabular format:

```
printf "header1 header2\nbar foo\n" | column -t
```

- Specify column delimiter character for the -t option (e.g. "," for csv); default is whitespace:

```
printf "header1,header2\nbar,foo\n" | column -t -s{{,}}
```

- Fill columns before filling rows:

```
printf "header1\nbar\nfoobar\n" | column -c {{30}} -x
```

comm

Select or reject lines common to two files. Both files must be sorted.

- Produce three tab-separated columns: lines only in first file, lines only in second file and common lines:

```
comm {{file1}} {{file2}}
```

- Print only lines common to both files:

```
comm -12 {{file1}} {{file2}}
```

- Print only lines common to both files, reading one file from `stdin`:

```
cat {{file1}} | comm -12 - {{file2}}
```

- Get lines only found in first file, saving the result to a third file:

```
comm -23 {{file1}} {{file2}} > {{file1_only}}
```

- Print lines only found in second file, when the files aren't sorted:

```
comm -13 <(sort {{file1}}) <(sort {{file2}})
```

command

Command forces the shell to execute the program and ignore any functions, builtins and aliases with the same name.

- Execute the ls program literally, even if an ls alias exists:

```
command {{ls}}
```

- Display the path to the executable or the alias definition of a specific command:

```
command -v {{command_name}}
```

compare

View the difference between 2 images.

More information: <https://imagemagick.org/script/compare.php>.

- Compare 2 images:

```
compare {{image1.png}} {{image2.png}} {{diff.png}}
```

- Compare 2 images using a custom metric:

```
compare -verbose -metric {{PSNR}} {{image1.png}}
{{image2.png}} {{diff.png}}
```

complete

Provides argument completion to shell commands.

- Apply a function that performs completion to a command:

```
complete -F {{function}} {{command}}
```

- Apply a command that performs completion to another command:

```
complete -C {{autocomplete_command}} {{command}}
```

- Apply completion without appending a space to the completed word:

```
complete -o nospace -F {{function}} {{command}}
```

composer

A package-based dependency manager for PHP projects.

More information: <https://getcomposer.org/>.

- Interactively create a `composer.json` file:

```
composer init
```

- Add a package as a dependency for this project, adding it to `composer.json`:

```
composer require {{user/package_name}}
```

- Install all the dependencies in this project's `composer.json` and create `composer.lock`:

```
composer install
```

- Uninstall a package from this project, removing it as a dependency from `composer.json`:

```
composer remove {{user/package_name}}
```

- Update all the dependencies in this project's `composer.json` and note versions in `composer.lock` file:

```
composer update
```

- Update composer lock only after updating `composer.json` manually:

```
composer update --lock
```

- Learn more about why a dependency can't be installed:

```
composer why-not {{user/package_name}}
```

- Update composer to its latest version:

```
composer self-update
```

conda

Package, dependency and environment management for any programming language.

More information: <https://github.com/conda/conda>.

- Create a new environment, installing named packages into it:

```
conda create --name {{environment_name}} {{python=2.7  
matplotlib}}
```

- List all environments:

```
conda info --envs
```

- Load or unload an environment:

```
conda {{activate|deactivate}} {{environment_name}}
```

- Delete an environment (remove all packages):

```
conda remove --name {{environment_name}} --all
```

- Search conda channels for a package by name:

```
conda search {{package_name}}
```

- Install packages into the current environment:

```
conda install {{python=3.4 numpy}}
```

- List currently installed packages in current environment:

```
conda list
```

- Delete unused packages and caches:

```
conda clean --all
```

consul-kv

Distributed key-value store with health checking and service discovery.

More information: <https://learn.hashicorp.com/consul/getting-started/kv>.

- Read a value from the key-value store:

```
consul kv get {{key}}
```

- Store a new key-value pair:

```
consul kv put {{key}} {{value}}
```

- Delete a key-value pair:

```
consul kv delete {{key}}
```

consul

Distributed key-value store with health checking and service discovery.

More information: <https://www.consul.io/docs/commands/index.html>.

- Check the Consul version:

```
consul --version
```

- Show general help:

```
consul --help
```

- Show help for a sub-command:

```
consul {{sub-command}} --help
```

convert

Imagemagick image conversion tool.

More information: <https://imagemagick.org/script/convert.php>.

- Convert an image from JPG to PNG:

```
convert {{image.jpg}} {{image.png}}
```

- Scale an image 50% its original size:

```
convert {{image.png}} -resize 50% {{image2.png}}
```

- Scale an image keeping the original aspect ratio to a maximum dimension of 640x480:

```
convert {{image.png}} -resize 640x480 {{image2.png}}
```

- Horizontally append images:

```
convert {{image1.png}} {{image2.png}} {{image3.png}} +append  
{{image123.png}}
```

- Vertically append images:

```
convert {{image1.png}} {{image2.png}} {{image3.png}} -append  
{{image123.png}}
```

- Create a gif from a series of images with 100ms delay between them:

```
convert {{image1.png}} {{image2.png}} {{image3.png}} -delay  
{10} {{animation.gif}}
```

- Create an image with nothing but a solid background:

```
convert -size {{800x600}} "xc:{{#ff0000}}" {{image.png}}
```

convmv

Convert filenames (NOT file content) from one encoding to another.

More information: <https://www.j3e.de/linux/convmv/man/>.

- Test filename encoding conversion (don't actually change the filename):

```
convmv -f {{from_encoding}} -t {{to_encoding}} {{input_file}}
```

- Convert filename encoding and rename the file to the new encoding:

```
convmv -f {{from_encoding}} -t {{ to_encoding}} --notest  
{{input_file}}
```

copyq

Clipboard manager with advanced features.

More information: <https://hluk.github.io/CopyQ/>.

- Launch CopyQ to store clipboard history:

```
copyq
```

- Show current clipboard content:

```
copyq clipboard
```

- Insert raw text into the clipboard history:

```
copyq add -- {{text1}} {{text2}} {{text3}}
```

- Insert text containing escape sequences ('\n', '\t') into the clipboard history:

```
copyq add {{firstline\nsecondline}}
```

- Print the content of the first 3 items in the clipboard history:

```
copyq read 0 1 2
```

- Copy a file's contents into the clipboard:

```
copyq copy < {{file.txt}}
```

- Copy a JPEG image into the clipboard:

```
copyq copy image/jpeg < {{image.jpg}}
```

cordova

Mobile apps with HTML, CSS & JS.

More information: <https://cordova.apache.org/docs/en/latest/guide/cli/>.

- Create a cordova project:

```
cordova create {{path}} {{package_name}} {{project_name}}
```

- Display the current workspace status:

```
cordova info
```

- Add a cordova platform:

```
cordova platform add {{platform}}
```

- Remove a cordova platform:

```
cordova platform remove {{platform}}
```

- Add a cordova plugin:

```
cordova plugin add {{pluginid}}
```

- Remove a cordova plugin:

```
cordova plugin remove {{pluginid}}
```

cotton

Markdown test specification runner.

More information: <https://github.com/chonla/cotton>.

- Use a specific base url:

```
cotton -u {{base_url}} {{file}}.md
```

- Disable certificate verification (insecure mode):

```
cotton -u {{base_url}} -i {{file}}.md
```

- Stop running when a test fails:

```
cotton -u {{base_url}} -s {{file}}.md
```

couchdb

Command line interface for Apache CouchDB database server.

More information: <https://couchdb.apache.org>.

- Start couchdb:

`couchdb`

- Start couchdb interactive shell:

`couchdb -i`

- Start couchdb as a background process:

`couchdb -b`

- Kill the background process (Note: It will respawn if needed):

`couchdb -k`

- Shutdown the background process:

`couchdb -d`

Cowsay

Generate an ASCII character (by default a cow) saying or thinking something.

More information: <https://github.com/tnalpgge/rank-amateur-cowsay>.

- Print an ASCII cow saying "Hello world!":

```
cowsay "Hello world!"
```

- Use text from standard input for the balloon:

```
echo "Hello!" | cowsay
```

- List all available characters:

```
cowsay -l
```

- Print an ASCII dragon saying "Hello!":

```
cowsay -f dragon "Hello!"
```

- Print a stoned thinking ASCII cow:

```
cowthink -s "I'm just a cow, not a great thinker ..."
```

cp

Copy files and directories.

- Copy a file to another location:

```
cp {{path/to/source_file.ext}} {{path/to/target_file.ext}}
```

- Copy a file into another directory, keeping the filename:

```
cp {{path/to/source_file.ext}} {{path/to/ target_parent_directory}}
```

- Recursively copy a directory's contents to another location (if the destination exists, the directory is copied inside it):

```
cp -R {{path/to/source_directory}} {{path/to/ target_directory}}
```

- Copy a directory recursively, in verbose mode (shows files as they are copied):

```
cp -vR {{path/to/source_directory}} {{path/to/ target_directory}}
```

- Copy text files to another location, in interactive mode (prompts user before overwriting):

```
cp -i {{*.txt}} {{path/to/target_directory}}
```

- Dereference symbolic links before copying:

```
cp -L {{link}} {{path/to/target_directory}}
```

cpdf

CLI to manipulate existing PDF files in a variety of ways.

More information: <https://www coherentpdf.com/cpdfmanual/cpdfmanual.html>.

- Select pages 1, 2, 3 and 6 from a source document and write those to a destination document:

```
cpdf {{path/to/source_document.pdf}} {{1-3,6}} -o {{path/to/destination_document.pdf}}
```

- Merge two documents into a new one:

```
cpdf -merge {{path/to/source_document_one.pdf}} {{path/to/source_document_two.pdf}} -o {{path/to/destination_document.pdf}}
```

- Show the bookmarks of a document:

```
cpdf -list-bookmarks {{path/to/document.pdf}}
```

- Split a document into ten-page chunks, writing them to chunk001.pdf, chunk002.pdf, etc:

```
cpdf -split {{path/to/document.pdf}} -o {{path/to/chunk%%.pdf}} -chunk {{10}}
```

- Encrypt a document using 128bit encryption, providing **fred** as owner password and **joe** as user password:

```
cpdf -encrypt {{128bit}} {{fred}} {{joe}} {{path/to/source_document.pdf}} -o {{path/to/encrypted_document.pdf}}
```

- Decrypt a document using the owner password **fred**:

```
cpdf -decrypt {{path/to/encrypted_document.pdf}} owner={{fred}} -o {{path/to/decrypted_document.pdf}}
```

- Show the annotations of a document:

```
cpdf -list-annotations {{path/to/document.pdf}}
```

- Create a new document from an existing one with additional metadata:

```
cpdf -set-metadata {{path/to/metadata.xml}} {{path/to/source_document.pdf}} -o {{path/to/destination_document.pdf}}
```

cpio

Copies files in and out of archives.

Supports the following archive formats: cpio's custom binary, old ASCII, new ASCII, crc, HPUX binary, HPUX old ASCII, old tar, and POSIX.1 tar.

More information: <https://www.gnu.org/software/cpio>.

- Take a list of file names from standard input and add them [o]nto an archive in cpio's binary format:

```
echo "{{file1}} {{file2}} {{file3}}" | cpio -o > {{archive.cpio}}
```

- Copy all files and directories in a directory and add them [o]nto an archive, in [v]erbose mode:

```
find {{path/to/directory}} | cpio -ov > {{archive.cpio}}
```

- P[i]ck all files from an archive, generating [d]irectories where needed, in [v]erbose mode:

```
cpio -idv < {{archive.cpio}}
```

cppcheck

A static analysis tool for C/C++ code.

Instead of syntax errors, it focuses on the types of bugs that compilers normally do not detect.

More information: <http://cppcheck.sourceforge.net>.

- Recursively check the current directory, showing progress on the screen and logging error messages to a file:

```
cppcheck . 2> cppcheck.log
```

- Recursively check a given directory, and don't print progress messages:

```
cppcheck --quiet {{path/to/directory}}
```

- Check a given file, specifying which tests to perform (by default only errors are shown):

```
cppcheck --enable={{error|warning|style|performance|portability|information|all}} {{path/to/file.cpp}}
```

- List available tests:

```
cppcheck --errorlist
```

- Check a given file, ignoring specific tests:

```
cppcheck --suppress={{test_id1}} --suppress={{test_id2}} {{path/to/file.cpp}}
```

- Check the current directory, providing paths for include files located outside it (e.g. external libraries):

```
cppcheck -I {{include/directory_1}} -I {{include/directory_2}} .
```

- Check a Microsoft Visual Studio project (*.vcxproj) or solution (*.sln):

```
cppcheck --project={{path/to/project.sln}}
```

cppclean

Find unused code in C++ projects.

More information: <https://github.com/myint/cppclean>.

- Run in a project's directory:

```
cppclean {{path/to/project}}
```

- Run on a project where the headers are in the "inc1/" and "inc2/" directories:

```
cppclean {{path/to/project}} --include-path={{inc1}} --  
include-path={{inc2}}
```

- Run on a specific file "main.cpp":

```
cppclean {{main.cpp}}
```

- Run on the current directory, excluding the "build" directory:

```
cppclean {{.}} --exclude={{build}}
```

cradle deploy

Manage Cradle deployments.

More information: <https://cradlephp.github.io/docs/3.B.-Reference-Command-Line-Tools.html#deploy>.

- Deploy Cradle to a server:

```
cradle deploy production
```

- Deploy static assets to Amazon S3:

```
cradle deploy s3
```

- Deploy static assets including the Yarn "components" directory:

```
cradle deploy s3 --include-yarn
```

- Deploy static assets including the "upload" directory:

```
cradle deploy s3 --include-upload
```

cradle elastic

Manage the ElasticSearch instances for a Cradle instance.

More information: <https://cradlephp.github.io/docs/3.B.-Reference-Command-Line-Tools.html#elastic>.

- Truncate the ElasticSearch index:

```
cradle elastic flush
```

- Truncate the ElasticSearch index for a specific package:

```
cradle elastic flush {{package_name}}
```

- Submit the ElasticSearch schema:

```
cradle elastic map
```

- Submit the ElasticSearch schema for a specific package:

```
cradle elastic map {{package_name}}
```

- Populate the ElasticSearch indices for all packages:

```
cradle elastic populate
```

- Populate the ElasticSearch indices for a specific package:

```
cradle elastic populate {{package_name}}
```

cradle install

Installs the Cradle PHP framework components.

More information: <https://cradlephp.github.io/docs/3.B.-Reference-Command-Line-Tools.html#install>.

- Install Cradle's components (User will be prompted for further details):

```
cradle install
```

- Forcefully overwrite files:

```
cradle install --force
```

- Skip running SQL migrations:

```
cradle install --skip-sql
```

- Skip running package updates:

```
cradle install --skip-versioning
```

- Use specific database details:

```
cradle install -h {{hostname}} -u {{username}} -p  
{{password}}
```

cradle package

Manage packages for a Cradle instance.

More information: <https://cradlephp.github.io/docs/3.B.-Reference-Command-Line-Tools.html#package>.

- Display a list of available packages:

```
cradle package list
```

- Search for a package:

```
cradle package search {{package}}
```

- Install a package from Packagist:

```
cradle package install {{package}}
```

- Install a specific version of a package:

```
cradle package install {{package}} {{version}}
```

- Update a package:

```
cradle package update {{package}}
```

- Update a package to a specific version:

```
cradle package update {{package}} {{version}}
```

- Remove a specific package:

```
cradle package remove {{package}}
```

cradle sql

Manage Cradle SQL databases.

More information: <https://cradlephp.github.io/docs/3.B.-Reference-Command-Line-Tools.html#sql>.

- Rebuild the database schema:

```
cradle sql build
```

- Rebuild the database schema for a specific package:

```
cradle sql build {{package_name}}
```

- Empty the entire database:

```
cradle sql flush
```

- Empty the database tables for a specific package:

```
cradle sql flush {{package_name}}
```

- Populate the tables for all packages:

```
cradle sql populate
```

- Populate the tables for a specific package:

```
cradle sql populate {{package_name}}
```

cradle

The Cradle PHP framework.

See **cradle-install**, **cradle-deploy** and other pages for additional information.

More information: <https://cradlephp.github.io>.

- Connect to a server:

```
cradle connect {{server_name}}
```

- Display general help:

```
cradle help
```

- Display help for a specific command:

```
cradle {{command}} help
```

- Execute a Cradle command:

```
cradle {{command}}
```

croc

Send and receive files easily and securely over any network.

More information: <https://github.com/schollz/croc>.

- Send a file or folder:

```
croc send {{path/to/file}}
```

- Send a file or folder with a specific passphrase:

```
croc send --code {{passphrase}} {{path/to/file}}
```

- Receive a file or folder on receiving machine:

```
croc {{passphrase}}
```

- Send and connect over a custom relay:

```
croc --relay {{ip_to_relay}} send {{path/to/file}}
```

- Receive and connect over a custom relay:

```
croc --relay {{ip_to_relay}} {{passphrase}}
```

- Host a croc relay on the default ports:

```
croc relay
```

- Display parameters and options for a croc command:

```
croc {{send|relay}} --help
```

cronic

Bash script for wrapping cron jobs to prevent excess email sending.

More information: <https://habilis.net/cronic/>.

- Call a command and display its output if it returns a non-zero exit code:

```
cronic {{command}}
```

crontab

Schedule cron jobs to run on a time interval for the current user.

Job definition format: "(min) (hour) (day_of_month) (month) (day_of_week) command_to_execute".

- Edit the crontab file for the current user:

```
crontab -e
```

- Edit the crontab file for a specific user:

```
sudo crontab -e -u {{user}}
```

- Replace the current crontab with the contents of the given file:

```
crontab {{path/to/file}}
```

- View a list of existing cron jobs for current user:

```
crontab -l
```

- Remove all cron jobs for the current user:

```
crontab -r
```

- Sample job which runs at 10:00 every day (* means any value):

```
0 10 * * * {{command_to_execute}}
```

- Sample job which runs every minute on the 3rd of April:

```
* * 3 Apr * {{command_to_execute}}
```

- Sample job which runs a certain script at 02:30 every Friday:

```
30 2 * * Fri {{/absolute/path/to/script.sh}}
```

crunch

Wordlist generator.

More information: <https://sourceforge.net/projects/crunch-wordlist/>.

- Output a list of words of length 1 to 3 with only lowercase characters:

```
crunch {{1}} {{3}}
```

- Output a list of hexadecimal words of length 8:

```
crunch {{8}} {{8}} {{0123456789abcdef}}
```

- Output a list of all permutations of abc (lengths are not processed):

```
crunch {{1}} {{1}} -p {{abc}}
```

- Output a list of all permutations of the given strings (lengths are not processed):

```
crunch {{1}} {{1}} -p {{abc}} {{def}} {{ghi}}
```

- Output a list of words generated according to the given pattern and a maximum number of duplicate letters:

```
crunch {{5}} {{5}} {{abcde123}} -t {{@@@12}} -d 2@
```

- Write a list of words in chunk files of a given size, starting with the given string:

```
crunch {{3}} {{5}} -o {{START}} -b {{10kb}} -s {{abc}}
```

- Write a list of words stopping with the given string and inverting the wordlist:

```
crunch {{1}} {{5}} -o {{START}} -e {{abcde}} -i
```

- Write a list of words in compressed chunk files with a specified number of words:

```
crunch {{1}} {{5}} -o {{START}} -c {{1000}} -z {{gzip|bzip2|lzma|7z}}
```

cryfs

A cryptographic filesystem for the cloud.

More information: <https://www.cryfs.org/>.

- Mount an encrypted filesystem. The initialization wizard will be started on the first execution:

```
cryfs {{path/to/cipher_dir}} {{path/to/mount_point}}
```

- Unmount an encrypted filesystem:

```
cryfs-unmount {{path/to/mount_point}}
```

- Automatically unmount after ten minutes of inactivity:

```
cryfs --unmount-idle {{10}} {{path/to/cipher_dir}} {{path/to/mount_point}}
```

- Show a list of supported ciphers:

```
cryfs --show-ciphers
```

crystal

Tool for managing Crystal source code.

More information: https://crystal-lang.org/reference/using_the_compiler.

- Run a Crystal file:

```
crystal {{path/to/file.cr}}
```

- Compile a file and all dependencies to a single executable:

```
crystal build {{path/to/file.cr}}
```

- Start a local interactive server for testing the language:

```
crystal play
```

- Create a project directory for a Crystal application:

```
crystal init app {{application_name}}
```

- Display all help options:

```
crystal help
```

CSC

The Microsoft C# Compiler.

More information: <https://docs.microsoft.com/dotnet/csharp/language-reference/compiler-options/command-line-building-with-csc-exe>.

- Compile one or more C# files to a CIL executable:

```
csc {{path/to/input_file_a.cs}} {{path/to/input_file_b.cs}}
```

- Specify the output filename:

```
csc /out:{{path/to/filename}} {{path/to/input_file.cs}}
```

- Compile into a '.dll' library instead of an executable:

```
csc /target:library {{path/to/input_file.cs}}
```

- Reference another assembly:

```
csc /reference:{{path/to/library.dll}} {{path/to/input_file.cs}}
```

- Embed a resource:

```
csc /resource:{{path/to/resource_file}} {{path/to/input_file.cs}}
```

- Automatically generate XML documentation:

```
csc /doc:{{path/to/output.xml}} {{path/to/input_file.cs}}
```

- Specify an icon:

```
csc /win32icon:{{path/to/icon.ico}} {{path/to/input_file.cs}}
```

- Strongly-name the resulting assembly with a keyfile:

```
csc /keyfile:{{path/to/keyfile}} {{path/to/input_file.cs}}
```

csslint

A linter for CSS code.

More information: <https://github.com/CSSLint/csslint/wiki/Command-line-interface>.

- Lint a single CSS file:

```
csslint {{file.css}}
```

- Lint multiple CSS files:

```
csslint {{file1.css}} {{file2.css}} {{file3.css}}
```

- List all possible style rules:

```
csslint --list-rules
```

- Specify certain rules as errors (which result in a non-zero exit code):

```
csslint --errors={{errors,universal-selector,imports}}  
{{file.css}}
```

- Specify certain rules as warnings:

```
csslint --warnings={{box-sizing,selector-max,floats}}  
{{file.css}}
```

- Specify certain rules to completely ignore:

```
csslint --ignore={{ids,rules-count,shorthand}} {{file.css}}
```

csvclean

Finds and cleans common syntax errors in CSV files.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvclean.html>.

- Clean a CSV file:

```
csvclean {{bad.csv}}
```

- List locations of syntax errors in a CSV file:

```
csvclean -n {{bad.csv}}
```

CSVCUT

Filter and truncate CSV files. Like Unix's **cut** command, but for tabular data.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvcut.html>.

- Print indices and names of all columns:

```
csvcut -n {{data.csv}}
```

- Extract the first and third columns:

```
csvcut -c {{1,3}} {{data.csv}}
```

- Extract all columns **except** the fourth one:

```
csvcut -C {{4}} {{data.csv}}
```

- Extract the columns named "id" and "first name" (in that order):

```
csvcut -c {{id,"first name"}} {{data.csv}}
```

csvformat

Convert a CSV file to a custom output format.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvformat.html>.

- Convert to a tab-delimited file (TSV):

```
csvformat -T {{data.csv}}
```

- Convert delimiters to a custom character:

```
csvformat -D "{{custom_character}}" {{data.csv}}
```

- Convert line endings to carriage return (^M) + line feed:

```
csvformat -M "{{\r\n}}" {{data.csv}}
```

- Minimize use of quote characters:

```
csvformat -U 0 {{data.csv}}
```

- Maximize use of quote characters:

```
csvformat -U 1 {{data.csv}}
```

csvgrep

Filter CSV rows with string and pattern matching.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvgrep.html>.

- Find rows that have a certain string in column 1:

```
csvgrep -c {{1}} -m {{string_to_match}} {{data.csv}}
```

- Find rows in which columns 3 or 4 match a certain regex pattern:

```
csvgrep -c {{3,4}} -r {{regex_pattern}} {{data.csv}}
```

- Find rows in which the "name" column does NOT include the string "John Doe":

```
csvgrep -i -c {{name}} -m "{{John Doe}}" {{data.csv}}
```

csvkit

Manipulation toolkit for CSV files.

See the individual commands: **csvclean**, **csvcut**, **csvformat**, **csvgrep**, **csvlook**, **csvpy**, **csvsort**, **csvstat**.

More information: <https://csvkit.readthedocs.io/en/0.9.1/cli.html>.

- Run a command on a CSV file with a custom delimiter:

```
 {{cmd}} -d {{delimiter}} {{filename.csv}}
```

- Run a command on a CSV file with a tab as a delimiter (overrides -d):

```
 {{cmd}} -t {{filename.csv}}
```

- Run a command on a CSV file with a custom quote character:

```
 {{cmd}} -q {{quote_char}} {{filename.csv}}
```

- Run a command on a CSV file with no header row:

```
 {{cmd}} -H {{filename.csv}}
```

csvlook

Render a CSV file in the console as a fixed-width table.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvlook.html>.

- View a CSV file:

```
csvlook {{data.csv}}
```

csvpy

Loads a CSV file into a Python shell.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvpy.html>.

- Load a CSV file into a `CSVKitReader` object:

```
csvpy {{data.csv}}
```

- Load a CSV file into a `CSVKitDictReader` object:

```
csvpy --dict {{data.csv}}
```

CSVSORT

Sorts CSV files.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvsort.html>.

- Sort a CSV file by column 9:

```
csvsort -c {{9}} {{data.csv}}
```

- Sort a CSV file by the "name" column in descending order:

```
csvsort -r -c {{name}} {{data.csv}}
```

- Sort a CSV file by column 2, then by column 4:

```
csvsort -c {{2,4}} {{data.csv}}
```

- Sort a CSV file without inferring data types:

```
csvsort --no-inference -c {{columns}} {{data.csv}}
```

csvsql

Generate SQL statements for a CSV file or execute those statements directly on a database.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvsql.html>.

- Generate a `CREATE TABLE` SQL statement for a CSV file:

```
csvsql {{path/to/data.csv}}
```

- Import a CSV file into an SQL database:

```
csvsql --insert --db "{{mysql://user:password@host/ database}}" {{data.csv}}
```

- Run an SQL query on a CSV file:

```
csvsql --query "{{select * from 'data'}}" {{data.csv}}
```

csvstat

Print descriptive statistics for all columns in a CSV file.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/csvstat.html>.

- Show all stats for all columns:

```
csvstat {{data.csv}}
```

- Show all stats for columns 2 and 4:

```
csvstat -c {{2,4}} {{data.csv}}
```

- Show sums for all columns:

```
csvstat --sum {{data.csv}}
```

- Show the max value length for column 3:

```
csvstat -c {{3}} --len {{data.csv}}
```

- Show the number of unique values in the "name" column:

```
csvstat -c {{name}} --unique {{data.csv}}
```

csvtool

Utility to filter and extract data from CSV formatted sources.

More information: <https://github.com/maroofi/csvtool>.

- Extract the second column from a CSV file:

```
csvtool --column {{2}} {{path/to/file.csv}}
```

- Extract the second and fourth columns from a CSV file:

```
csvtool --column {{2,4}} {{path/to/file.csv}}
```

- Extract lines from a CSV file where the second column exactly matches 'Foo':

```
csvtool --column {{2}} --search '{{^Foo$}}' {{path/to/file.csv}}
```

- Extract lines from a CSV file where the second column starts with 'Bar':

```
csvtool --column {{2}} --search '{{^Bar}}' {{path/to/file.csv}}
```

- Find lines in a CSV file where the second column ends with 'Baz' and then extract the third and sixth columns:

```
csvtool --column {{2}} --search '{{Baz$}}' {{path/to/file.csv}} | csvtool --no-header --column {{3,6}}
```

ctags

Generates an index (or tag) file of language objects found in source files for many popular programming languages.

More information: <https://ctags.io/>.

- Generate tags for a single file, and output them to a file named "tags" in the current directory, overwriting the file if it exists:

```
ctags {{path/to/file}}
```

- Generate tags for all files in the current directory, and output them to a specific file, overwriting the file if it exists:

```
ctags -f {{filename}} *
```

- Generate tags for all files in the current directory and all subdirectories:

```
ctags -- recurse
```

ctest

CMake test driver program.

More information: <https://gitlab.kitware.com/cmake/community/wikis/doc/ctest/Testing-With-CTest>.

- Run all tests defined in the CMake project, executing 4 jobs at a time in parallel:

```
ctest -j{{4}} --output-on-failure
```

- Show a list of available tests:

```
ctest -N
```

- Run a single test based on its name, or filter on a regular expression:

```
ctest --output-on-failure -R '^{{test_name}}$'
```

curl

Transfers data from or to a server.

Supports most protocols, including HTTP, FTP, and POP3.

More information: <https://curl.haxx.se>.

- Download the contents of an URL to a file:

```
curl {{http://example.com}} -o {{filename}}
```

- Download a file, saving the output under the filename indicated by the URL:

```
curl -O {{http://example.com/filename}}
```

- Download a file, following [L]ocation redirects, and automatically [C]ontinuing (resuming) a previous file transfer:

```
curl -O -L -C - {{http://example.com/filename}}
```

- Send form-encoded data (POST request of type `application/x-www-form-urlencoded`). Use `-d @file_name` or `-d @'-'` to read from STDIN:

```
curl -d {{'name=bob'}} {{http://example.com/form}}
```

- Send a request with an extra header, using a custom HTTP method:

```
curl -H {{'X-My-Header: 123'}} -X {{PUT}} {{http://example.com}}
```

- Send data in JSON format, specifying the appropriate content-type header:

```
curl -d {{'{"name": "bob"}'}} -H {{'Content-Type: application/json'}} {{http://example.com/users/1234}}
```

- Pass a user name and password for server authentication:

```
curl -u myusername:mypassword {{http://example.com}}
```

- Pass client certificate and key for a resource, skipping certificate validation:

```
curl --cert {{client.pem}} --key {{key.pem}} --insecure {{https://example.com}}
```

cut

Cut out fields from **stdin** or files.

- Cut out the first sixteen characters of each line of **stdin**:

```
cut -c {{1-16}}
```

- Cut out the first sixteen characters of each line of the given files:

```
cut -c {{1-16}} {{file}}
```

- Cut out everything from the 3rd character to the end of each line:

```
cut -c {{3-}}
```

- Cut out the fifth field of each line, using a colon as a field delimiter (default delimiter is tab):

```
cut -d'{{:}}' -f{{5}}
```

- Cut out the 2nd and 10th fields of each line, using a semicolon as a delimiter:

```
cut -d'{{;}}' -f{{2,10}}
```

- Cut out the fields 3 through to the end of each line, using a space as a delimiter:

```
cut -d'{{ }}' -f{{3-}}
```

darkhttpd

Darkhttpd web server.

More information: <https://unix4lyfe.org/darkhttpd>.

- Start server serving the specified document root:

```
darkhttpd {{path/to/docroot}}
```

- Start server on specified port (port 8080 by default if running as non-root user):

```
darkhttpd {{path/to/docroot}} --port {{port}}
```

- Listen only on specified IP address (by default, the server listens on all interfaces):

```
darkhttpd {{path/to/docroot}} --addr {{ip_address}}
```

date

Set or display the system date.

- Display the current date using the default locale's format:

```
date +"%c"
```

- Display the current date in UTC and ISO 8601 format:

```
date -u +"%Y-%m-%dT%H:%M:%S%Z"
```

- Display the current date as a Unix timestamp (seconds since the Unix epoch):

```
date +%s
```

- Display a specific date (represented as a Unix timestamp) using the default format:

```
date -d @1473305798
```

- Convert a specific date to the Unix timestamp format:

```
date -d "{{2018-09-01 00:00}}" +%s --utc
```

- Display the current date using the RFC-3339 format (YYYY-MM-DD hh:mm:ss TZ):

```
date --rfc-3339=s
```

dc

An arbitrary precision calculator. Uses reverse polish notation (RPN).

- Run calculator in interactive mode:

```
dc
```

- Execute dc script in file:

```
dc -f {{file}}
```

- Calculate 4 times 5 [4 5 *], subtract 17 [17 -], and [p]rint the output (using echo):

```
echo "4 5 * 17 - p" | dc
```

- Set number of decimal places to 7 [7 k], calculate 5 divided by -3 [5 _3 /] and [p]rint (using dc -e):

```
dc -e "7 k 5 _3 / p"
```

- Calculate the golden ratio, phi: Set number of decimal places to 100 [100 k], square root of 5 [5 v] plus 1 [1 +], divided by 2 [2 /], and [p]rint result:

```
dc -e "100 k 5 v 1 + 2 / p"
```

dcfldd

Enhanced version of dd for forensics and security.

More information: <http://dcfldd.sourceforge.net/>.

- Copy a disk to a raw image file and hash the image using SHA256:

```
dcfldd if=/dev/{{disk_device}} of={{file.img}} hash=sha256  
hashlog={{file.hash}}
```

- Copy a disk to a raw image file, hashing each 1GB chunk:

```
dcfldd if=/dev/{{disk_device}} of={{file.img}} hash={{sha512|  
sha384|sha256|sha1|md5}} hashlog={{file.hash}}  
hashwindow={{1G}}
```

dcg

Drupal code generator.

More information: <https://github.com/Chi-teck/drupal-code-generator>.

- Start a wizard to choose what kind of code (e.g. module, service, form, etc.) to generate:

dcg

- Directly specify the kind of code to generate:

dcg {{service|plugin|theme|module|form}}

- Generate the code in a specific directory:

dcg --directory {{path/to/directory}}

dd

Convert and copy a file.

- Make a bootable usb drive from an isohybrid file (such like archlinux-xxx.iso) and show the progress:

```
dd if={{file.iso}} of=/dev/{{usb_drive}} status=progress
```

- Clone a drive to another drive with 4MB block, ignore error and show progress:

```
dd if=/dev/{{source_drive}} of=/dev/{{dest_drive}} bs=4M  
conv=noerror status=progress
```

- Generate a file of 100 random bytes by using kernel random driver:

```
dd if=/dev/urandom of={{random_file}} bs=100 count=1
```

- Benchmark the write performance of a disk:

```
dd if=/dev/zero of={{file_1GB}} bs=1024 count=1000000
```

- Check progress of an ongoing dd operation (Run this command from another shell):

```
kill -USR1 $(pgrep ^dd)
```

decaffeinate

Move your CoffeeScript source to modern JavaScript.

More information: <https://decaffeinate-project.org>.

- Convert a CoffeeScript file to JavaScript:

```
decaffeinate {{path/to/file.coffee}}
```

- Convert a CoffeeScript v2 file to JavaScript:

```
decaffeinate --use-cs2 {{path/to/file.coffee}}
```

- Convert require and module.exports to import and export:

```
decaffeinate --use-js-modules {{path/to/file.coffee}}
```

- Convert a CoffeeScript, allowing named exports:

```
decaffeinate --loose-js-modules {{path/to/file.coffee}}
```

deemix

A barebone deezer downloader library built from the ashes of Deezloader Remix.

It can be used as a standalone CLI app or implemented in an UI using the API.

More Information: <https://deemix.app>.

- Download a track or playlist:

```
deemix {{https://www.deezer.com/us/track/00000000}}
```

- Download track / playlist at a specific bitrate:

```
deemix --bitrate {{FLAC|MP3}} {{url}}
```

- Download to a specific path:

```
deemix --bitrate {{bitrate}} --path {{path}} {{url}}
```

- Create a portable deemix config in the current directory:

```
deemix --portable --bitrate {{bitrate}} --path {{path}} {{url}}
```

delta

A viewer for git and diff output.

More information: <https://github.com/dandavison/delta>.

- Compare files or directories:

```
delta {{path/to/old_file_or_directory}} {{path/to/
new_file_or_directory}}
```

- Compare files or directories, showing the line numbers:

```
delta --line-numbers {{path/to/old_file_or_directory}}
{{path/to/new_file_or_directory}}
```

- Compare files or directories, showing the differences side by side:

```
delta --side-by-side {{path/to/old_file_or_directory}}
{{path/to/new_file_or_directory}}
```

- Compare files or directories, ignoring any git configuration settings:

```
delta --no-gitconfig {{path/to/old_file_or_directory}}
{{path/to/new_file_or_directory}}
```

- Compare, rendering commit hashes, file names, and line numbers as hyperlinks, according to the hyperlink spec for terminal emulators:

```
delta --hyperlinks {{path/to/old_file_or_directory}} {{path/
to/new_file_or_directory}}
```

- Display the current settings:

```
delta --show-config
```

- Display supported languages and associated file extensions:

```
delta --list-languages
```

deluge-console

An interactive interface for the Deluge BitTorrent client.

More information: <https://deluge-torrent.org>.

- Start the interactive console interface:

```
deluge-console
```

- Connect to a Deluge daemon instance:

```
connect {{hostname}}:{{port}}
```

- Add a torrent to the daemon:

```
add {{url|magnet|path/to/file}}
```

- Display information about all torrents:

```
info
```

- Display information about a specific torrent:

```
info {{torrent_id}}
```

- Pause a torrent:

```
pause {{torrent_id}}
```

- Resume a torrent:

```
resume {{torrent_id}}
```

- Remove a torrent from the daemon:

```
rm {{torrent_id}}
```

deluge

A command line BitTorrent client.

More information: <https://deluge-torrent.org>.

- Download a torrent:

```
deluge {{url|magnet|path/to/file}}
```

- Download a torrent using a specific configuration file:

```
deluge -c {{path/to/configuration_file}} {{url|magnet|path/to/file}}
```

- Download a torrent and launch the specified user interface:

```
deluge -u {{gtk|web|console}} {{url|magnet|path/to/file}}
```

- Download a torrent and output the log to a file:

```
deluge -l {{path/to/log_file}} {{url|magnet|path/to/file}}
```

deluged

A daemon process for the Deluge BitTorrent client.

More information: <https://deluge-torrent.org>.

- Start the Deluge daemon:

`deluged`

- Start the Deluge daemon on a specific port:

`deluged -p {{port}}`

- Start the Deluge daemon using a specific configuration file:

`deluged -c {{path/to/configuration_file}}`

- Start the Deluge daemon and output the log to a file:

`deluged -l {{path/to/log_file}}`

deluser

Remove a user account or remove a user from a group.

- Remove a user:

```
deluser {{name}}
```

- Remove a user along with their home directory and mail spool:

```
deluser -r {{name}}
```

- Remove a user from a group:

```
deluser {{name}} {{group}}
```

deno

A secure runtime for JavaScript and TypeScript.

More information: <https://deno.land/>.

- Run a JavaScript or TypeScript file:

```
deno {{path/to/file.ts}}
```

- Start a REPL (interactive shell):

```
deno
```

- Run a file with network access enabled:

```
deno --allow-net {{path/to/file.ts}}
```

- Run a file from a URL:

```
deno {{https://deno.land/std/examples/welcome.ts}}
```

- Install an executable script from a URL:

```
deno install --allow-net --allow-read {{file_server}}  
{{https://deno.land/std/http/file_server.ts}}
```

dep

A CLI tool for deployment of PHP applications.

Note: The Go command **dep** with the same name is deprecated and archived.

More information: <https://deployer.org>.

- Interactively initialize deployer in the local path (use a framework template with `--template={{template}}`):

```
dep init
```

- Deploy an application to a remote host:

```
dep deploy {{hostname}}
```

- Rollback to the previous working release:

```
dep rollback
```

- Connect to a remote host via ssh:

```
dep ssh {{hostname}}
```

- List commands:

```
dep list
```

- Run any arbitrary command on the remote hosts:

```
dep run "{{command}}"
```

- Display help for a command:

```
dep help {{command}}
```

detox

Renames files to make them easier to work with.

It removes spaces and other such annoyances like duplicate underline characters.

More information: <https://github.com/dharple/detox>.

- Remove spaces and other undesirable characters from a file's name:

```
detox {{file}}
```

- Show how detox would rename all of the files in a directory tree:

```
detox --dry-run -r {{directory}}
```

- Remove spaces and other undesirable characters from all files in a directory tree:

```
detox -r {{directory}}
```

dexdump

Display information about Android DEX files.

- Extract classes and methods from an APK file:

```
dexdump {{path/to/file.apk}}
```

- Display header information of DEX files contained in an APK file:

```
dexdump -f {{path/to/file.apk}}
```

- Display the dis-assembled output of executable sections:

```
dexdump -d {{path/to/file.apk}}
```

- Output results to a file:

```
dexdump -o {{path/to/file}} {{path/to/file.apk}}
```

dexter

Tool for authenticating the kubectl users with OpenId Connect.

More information: <https://github.com/gini/dexter>.

- Create and authenticate a user with Google OIDC:

```
dexter auth -i {{client_id}} -s {{client_secret}}
```

- Override the default kube config location:

```
dexter auth -i {{client_id}} -s {{client_secret}} --kube-  
config {{sample/config}}
```

df

Gives an overview of the filesystem disk space usage.

- Display all filesystems and their disk usage:

`df`

- Display all filesystems and their disk usage in human readable form:

`df -h`

- Display the filesystem and its disk usage containing the given file or directory:

`df {{path/to/file_or_directory}}`

- Display statistics on the number of free inodes:

`df -i`

- Display filesystems but exclude the specified type:

`df -x {{squashfs}} -x {{tmpfs}}`

dfc

Gives an overview of the filesystem disk space usage with colours and graphs.

More information: <https://projects.gw-computing.net/projects/dfc/wiki>.

- Display filesystems and their disk usage in human readable form with colours and graphs:

`dfc`

- Display all filesystems including pseudo, duplicate and inaccessible filesystems:

`dfc -a`

- Display filesystems without colour:

`dfc -c never`

- Display filesystems containing "ext" in the filesystem type:

`dfc -t ext`

dhclient

DHCP client.

- Get an IP address for the `eth0` interface:

```
sudo dhclient {{eth0}}
```

- Release an IP address for the `eth0` interface:

```
sudo dhclient -r {{eth0}}
```

dhcpwn

Test DHCP IP exhaustion attacks and sniff local DHCP traffic.

More information: <https://github.com/mschwager/dhcpwn>.

- Flood the network with IP requests:

```
dhcpwn --interface {{network_interface}} flood --count  
{{number_of_requests}}
```

- Sniff local DHCP traffic:

```
dhcpwn --interface {{network_interface}} sniff
```

diff

Compare files and directories.

- Compare files (lists changes to turn `old_file` into `new_file`):

```
diff {{old_file}} {{new_file}}
```

- Compare files, ignoring white spaces:

```
diff -w {{old_file}} {{new_file}}
```

- Compare files, showing the differences side by side:

```
diff -y {{old_file}} {{new_file}}
```

- Compare files, showing the differences in unified format (as used by `git diff`):

```
diff -u {{old_file}} {{new_file}}
```

- Compare directories recursively (shows names for differing files/directories as well as changes made to files):

```
diff -r {{old_directory}} {{new_directory}}
```

- Compare directories, only showing the names of files that differ:

```
diff -rq {{old_directory}} {{new_directory}}
```

diffoscope

Compare files, archives, and directories.

More information: <https://diffoscope.org>.

- Compare two files:

```
diffoscope {{path/to/file1}} {{path/to/file2}}
```

- Compare two files without displaying a progress bar:

```
diffoscope --no-progress {{path/to/file1}} {{path/to/file2}}
```

- Compare two files and write a HTML-report to a file (use - for `stdout`):

```
diffoscope --html {{path/to/outfile|-}} {{path/to/file1}}  
{{path/to/file2}}
```

- Compare two directories excluding files with a name matching a specified pattern:

```
diffoscope --exclude {{pattern}} {{path/to/directory1}}  
{{path/to/directory2}}
```

- Compare two directories and control whether directory metadata is considered:

```
diffoscope --exclude-directory-metadata {{auto|yes|no|  
recursive}} {{path/to/directory1}} {{path/to/directory2}}
```

diffstat

Create a histogram from the output of the **diff** command.

- Display changes in a histogram:

```
diff {{file1}} {{file2}} | diffstat
```

- Display inserted, deleted and modified changes as a table:

```
diff {{file1}} {{file2}} | diffstat -t
```

dig

DNS Lookup utility.

- Lookup the IP(s) associated with a hostname (A records):

```
dig +short {{example.com}}
```

- Lookup the mail server(s) associated with a given domain name (MX record):

```
dig +short {{example.com}} MX
```

- Get all types of records for a given domain name:

```
dig {{example.com}} ANY
```

- Specify an alternate DNS server to query:

```
dig @{{8.8.8.8}} {{example.com}}
```

- Perform a reverse DNS lookup on an IP address (PTR record):

```
dig -x {{8.8.8.8}}
```

- Find authoritative name servers for the zone and display SOA records:

```
dig +nssearch {{example.com}}
```

- Perform iterative queries and display the entire trace path to resolve a domain name:

```
dig +trace {{example.com}}
```

dircolors

Output commands to set the LS_COLOR environment variable and style **ls**, **dir**, etc.

- Output commands to set LS_COLOR using default colors:

dircolors

- Output commands to set LS_COLOR using colors from a file:

dircolors {{file}}

- Output commands for Bourne shell:

dircolors --bourne-shell

- Output commands for C shell:

dircolors --c-shell

- View the default colors for file types and extensions:

dircolors --print-data

direnv

Shell extension to load and unload environment variables depending on the current directory.

More information: <https://github.com/direnv/direnv>.

- Grant direnv permission to load the specified .envrc:

```
direnv allow
```

- Revoke the authorization of a given .envrc:

```
direnv deny
```

- Edit the `.envrc` file in the default text editor and reload the environment on exit:

```
direnv allow
```

- Trigger a reload of the environment:

```
direnv reload
```

- Print some debug status information:

```
direnv status
```

dirname

Calculates the parent directory of a given file or directory path.

- Calculate the parent directory of a given path:

```
dirname {{path/to/file_or_directory}}
```

- Calculate the parent directory of multiple paths:

```
dirname {{path/to/file_a}} {{path/to/directory_b}}
```

- Delimit output with a NUL character instead of a newline (useful when combining with `xargs`):

```
dirname --zero {{path/to/directory_a}} {{path/to/file_b}}
```

dirs

Displays or manipulates the directory stack.

The directory stack is a list of recently visited directories that can be manipulated with the **pushd** and **popd** commands.

- Display the directory stack with a space between each entry:

```
dirs
```

- Display the directory stack with one entry per line:

```
dirs -p
```

- Display only the nth entry in the directory stack, starting at 0:

```
dirs +{{N}}
```

- Clear the directory stack:

```
dirs -c
```

dirsearch

Web path scanner.

More information: <https://github.com/maurosoria/dirsearch>.

- Scan a web server for common paths with common extensions:

```
dirsearch --url {{url}} --extensions-list
```

- Scan a list of web servers for common paths with the .php extension:

```
dirsearch --url-list {{path/to/url-list.txt}} --extensions {{php}}
```

- Scan a web server for user-defined paths with common extensions:

```
dirsearch --url {{url}} --extensions-list --wordlist {{path/to/url-paths.txt}}
```

- Scan a web server using a cookie:

```
dirsearch --url {{url}} --extensions {{php}} --cookie {{cookie}}
```

- Scan a web server using the HEAD HTTP method:

```
dirsearch --url {{url}} --extensions {{php}} --http-method {{HEAD}}
```

- Scan a web server, saving the results to a .json file:

```
dirsearch --url {{url}} --extensions {{php}} --json-report {{path/to/report.json}}
```

dive

A tool for exploring a Docker image, layer contents, and discovering ways to shrink it.

More information: <https://github.com/wagoodman/dive>.

- Analyze a Docker image:

```
dive {{your_image_tag}}
```

- Build an image and start analyzing it:

```
dive build -t {{some_tag}}
```

django-admin

Django's utility for administrative tasks.

More information: <https://docs.djangoproject.com/en/3.0/ref/django-admin/>.

- Create a new django project:

```
django-admin startproject {{project_name}}
```

- Create a new app for the current project:

```
django-admin startapp {{app_name}}
```

- Check the current version of Django:

```
django-admin --version
```

- Display more information for the given command:

```
django-admin help {{command}}
```

doas

Executes a command as another user.

More information: <https://man.openbsd.org/doas>.

- Run a command as root:

```
doas {{command}}
```

- Run a command as another user:

```
doas -u {{user}} {{command}}
```

- Launch the default shell as root:

```
doas -s
```

- Parse a config file and check if the execution of a command as another user is allowed:

```
doas -C {{config_file}} {{command}}
```

- Make **doas** request a password even after it was supplied earlier:

```
doas -L
```

docker build

Build an image from a Dockerfile.

More information: <https://docs.docker.com/engine/reference/commandline/build/>.

- Build a docker image using the Dockerfile in the current directory:

```
docker build .
```

- Build a docker image from a Dockerfile at a specified URL:

```
docker build {{github.com/creack/docker-firefox}}
```

- Build a docker image and tag it:

```
docker build --tag {{name:tag}} .
```

- Do not use the cache when building the image:

```
docker build --no-cache --tag {{name:tag}} .
```

- Build a docker image using a specific Dockerfile:

```
docker build --file {{Dockerfile}} .
```

- Build with custom build-time variables:

```
docker build --build-arg {{HTTP_PROXY=http://10.20.30.2:1234}} --build-arg {{FTP_PROXY=http://40.50.60.5:4567}} .
```

docker-compose

Run and manage multi container docker applications.

More information: <https://docs.docker.com/compose/reference/overview/>.

- List all running containers:

```
docker-compose ps
```

- Create and start all containers in the background using a `docker-compose.yml` file from the current directory:

```
docker-compose up -d
```

- Start all containers, rebuild if necessary:

```
docker-compose up --build
```

- Start all containers using an alternate compose file:

```
docker-compose --file {{path/to/file}} up
```

- Stop all running containers:

```
docker-compose stop
```

- Stop and remove all containers, networks, images, and volumes:

```
docker-compose down --rmi all --volumes
```

- Follow logs for all containers:

```
docker-compose logs --follow
```

- Follow logs for a specific container:

```
docker-compose logs --follow {{container_name}}
```

docker container

Manage Docker containers.

More information: <https://docs.docker.com/engine/reference/commandline/container/>.

- List currently running Docker containers:

```
docker container ls
```

- Start one or more stopped containers:

```
docker container start {{container1_name}}  
{{container2_name}}
```

- Kill one or more running containers:

```
docker container kill {{container_name}}
```

- Stop one or more running containers:

```
docker container stop {{container_name}}
```

- Pause all processes within one or more containers:

```
docker container pause {{container_name}}
```

- Display detailed information on one or more containers:

```
docker container inspect {{container_name}}
```

- Export a container's filesystem as a tar archive:

```
docker container export {{container_name}}
```

- Create a new image from a container's changes:

```
docker container commit {{container_name}}
```

docker exec

Execute a command on an already running Docker container.

More information: <https://docs.docker.com/engine/reference/commandline/exec/>.

- Enter an interactive shell session on an already-running container:

```
docker exec --interactive --tty {{container_name}} {{/bin/bash}}
```

- Run a command in the background (detached) on a running container:

```
docker exec --detach {{container_name}} {{command}}
```

- Select the working directory for a given command to execute into:

```
docker exec --interactive -tty --workdir {{path/to/directory}} {{container_name}} {{command}}
```

- Run a command in background on existing container but keep `stdin` open:

```
docker exec --interactive --detach {{container_name}} {{command}}
```

- Set an environment variable in a running bash session:

```
docker exec --interactive --tty --env {{variable_name}}={{value}} {{container_name}} {{/bin/bash}}
```

- Run a command as a specific user:

```
docker exec --user {{user}} {{container_name}} {{command}}
```

docker images

Manage Docker images.

More information: <https://docs.docker.com/engine/reference/commandline/images/>.

- List all Docker images:

```
docker images
```

- List all Docker images including intermediates:

```
docker images --all
```

- List the output in quiet mode (only numeric IDs):

```
docker images --quiet
```

- List all Docker images not used by any container:

```
docker images --filter dangling=true
```

- List images that contain a substring in their name:

```
docker images "{{*name*}}"
```

docker inspect

Return low-level information on Docker objects.

More information: <https://docs.docker.com/engine/reference/commandline/inspect/>.

- Show help:

```
docker inspect
```

- Display information about a container, image, or volume using a name or ID:

```
docker inspect {{container|image|ID}}
```

- Display a container's IP address:

```
docker inspect --format='{{range .NetworkSettings.Networks}}{{.IPAddress}}{{end}}' {{container}}
```

- Display the path to the container's log file:

```
docker inspect --format='{{.LogPath}}' {{container}}
```

- Display the image name of the container:

```
docker inspect --format='{{.Config.Image}}' {{container}}
```

- Display the configuration information as JSON:

```
docker inspect --format='{{json .Config}}' {{container}}
```

- Display all port bindings:

```
docker inspect --format='{{range $p, $conf := .NetworkSettings.Ports}} {{$p}} -> {{(index $conf 0).HostPort}} {{end}}' {{container}}
```

docker logs

Print container logs.

More information: <https://docs.docker.com/engine/reference/commandline/logs>.

- Print logs from a container:

```
docker logs {{container_name}}
```

- Print logs and follow them:

```
docker logs -f {{container_name}}
```

- Print last 5 lines:

```
docker logs {{container_name}} --tail {{5}}
```

- Print logs and append them with timestamps:

```
docker logs -t {{container_name}}
```

- Print logs from a certain point in time of container execution (i.e. 23m, 10s, 2013-01-02T13:23:37):

```
docker logs {{container_name}} --until {{time}}
```

docker-machine

Create and manage machines running Docker.

More information: <https://docs.docker.com/machine/reference/>.

- List currently running docker machines:

```
docker-machine ls
```

- Create a new docker machine with specific name:

```
docker-machine create {{name}}
```

- Get the status of a machine:

```
docker-machine status {{name}}
```

- Start a machine:

```
docker-machine start {{name}}
```

- Stop a machine:

```
docker-machine stop {{name}}
```

- Inspect information about a machine:

```
docker-machine inspect {{name}}
```

docker network

Create and manage docker networks.

More information: <https://docs.docker.com/engine/reference/commandline/network/>.

- List all available and configured networks on docker daemon:

```
docker network ls
```

- Create a user defined network:

```
docker network create --driver {{driver_name}}  
{{network_name}}
```

- Display detailed information of a space-separated list of networks:

```
docker network inspect {{network_name}}
```

- Connect a container to a network using a name or ID:

```
docker network connect {{network_name}} {{container_name|ID}}
```

- Disconnect a container from a network:

```
docker network disconnect {{network_name}} {{container_name|  
ID}}
```

- Remove all unused (not referenced by any container) networks:

```
docker network prune
```

- Remove a space-separated list of unused networks:

```
docker network rm {{network_name}}
```

docker ps

List Docker containers.

More information: <https://docs.docker.com/engine/reference/commandline/ps/>.

- List currently running docker containers:

```
docker ps
```

- List all docker containers (running and stopped):

```
docker ps --all
```

- Show the latest created container (includes all states):

```
docker ps --latest
```

- Filter containers that contain a substring in their name:

```
docker ps --filter="name={{name}}"
```

- Filter containers that share a given image as an ancestor:

```
docker ps --filter "ancestor={{image}}:{{tag}}"
```

- Filter containers by exit status code:

```
docker ps --all --filter="exited={{code}}"
```

- Filter containers by status (created, running, removing, paused, exited and dead):

```
docker ps --filter="status={{status}}"
```

- Filter containers that mount a specific volume or have a volume mounted in a specific path:

```
docker ps --filter="volume={{path/to/directory}}" --format  
"table {{.ID}}\t{{.Image}}\t{{.Names}}\t{{.Mounts}}"
```

docker rmi

Remove one or more Docker images.

More information: <https://docs.docker.com/engine/reference/commandline/rmi/>.

- Show help:

```
docker rmi
```

- Remove one or more images given their names:

```
docker rmi {{image1 image2 ...}}
```

- Force remove an image:

```
docker rmi --force {{image}}
```

- Remove an image without deleting untagged parents:

```
docker rmi --no-prune {{image}}
```

docker run

Run a command in a new Docker container.

More information: <https://docs.docker.com/engine/reference/commandline/run/>.

- Run command in a new container from a tagged image:

```
docker run {{image:tag}} {{command}}
```

- Run command in a new container in background and display its ID:

```
docker run -d {{image}} {{command}}
```

- Run command in a one-off container in interactive mode and pseudo-TTY:

```
docker run --rm -it {{image}} {{command}}
```

- Run command in a new container with passed environment variables:

```
docker run -e '{{variable}}={{value}}' -e {{variable}} {{image}} {{command}}
```

- Run command in a new container with bind mounted volumes:

```
docker run -v {{path/to/host_path}}:{{path/to/container_path}} {{image}} {{command}}
```

- Run command in a new container with published ports:

```
docker run -p {{host_port}}:{{container_port}} {{image}} {{command}}
```

docker save

Export one or more docker images to archive.

More information: <https://docs.docker.com/engine/reference/commandline/save/>.

- Save an image by redirecting `stdout` to a tar archive:

```
docker save {{image}}:{{tag}} > {{path/to/file.tar}}
```

- Save an image to a tar archive:

```
docker save --output {{path/to/file.tar}} {{image}}:{{tag}}
```

- Save all tags of the image:

```
docker save --output {{path/to/file.tar}} {{image_name}}
```

- Cherry-pick particular tags of an image to save:

```
docker save --output {{path/to/file.tar}} {{image_name:tag1  
image_name:tag2 ...}}
```

docker secret

Manage Docker swarm secrets.

More information: <https://docs.docker.com/engine/reference/commandline/secret/>.

- Create a new secret from stdin:

```
 {{command}} | docker secret create {{secret_name}} -
```

- Create a new secret from a file:

```
 docker secret create {{secret_name}} {{path/to/file}}
```

- List all secrets:

```
 docker secret ls
```

- Display detailed information on one or multiple secrets in a human friendly format:

```
 docker secret inspect --pretty {{secret_name1 secret_name2 ...}}
```

- Remove one or more secrets:

```
 docker secret rm {{secret_name1 secret_name2 ...}}
```

docker service

Manage the services on a docker daemon.

More information: <https://docs.docker.com/engine/reference/commandline/service/>.

- List the services on a docker daemon:

```
docker service ls
```

- Create a new service:

```
docker service create --name {{service_name}} {{image}}:  
{{tag}}
```

- Display detailed information of a space-separated list of services:

```
docker service inspect {{service_name|ID}}
```

- List the tasks of a space-separated list of services:

```
docker service ps {{service_name|ID}}
```

- Scale to a specific number of replicas for a space-separated list of services:

```
docker service scale {{service_name}}={{count_of_replicas}}
```

- Remove a space-separated list of services:

```
docker service rm {{service_name|ID}}
```

docker start

Start one or more stopped containers.

More information: <https://docs.docker.com/engine/reference/commandline/start/>.

- Show help:

```
docker start
```

- Start a docker container:

```
docker start {{container}}
```

- Start a container, attaching `stdout` and `stderr` and forwarding signals:

```
docker start --attach {{container}}
```

- Start one or more space-separated containers:

```
docker start {{container(s)}}
```

docker stats

Display a live stream of resource usage statistics for containers.

More information: <https://docs.docker.com/engine/reference/commandline/stats/>.

- Display a live stream for the statistics of all running containers:

```
docker stats
```

- Display a live stream of statistics for a space-separated list of containers:

```
docker stats {{container_name}}
```

- Change the columns format to display container's cpu usage percentage:

```
docker stats --format "{{.Name}}:\t{{.CPUPerc}}"
```

- Display statistics for all containers (both running and stopped):

```
docker stats --all
```

- Disable streaming stats and only pull the current stats:

```
docker stats --no-stream
```

docker swarm

A container orchestration tool.

More information: <https://docs.docker.com/engine/swarm/>.

- Initialize a swarm cluster:

```
docker swarm init
```

- Display the token to join a manager or a worker:

```
docker swarm join-token {{worker|manager}}
```

- Join a new node to the cluster:

```
docker swarm join --token {{token}} {{manager_node_url:2377}}
```

- Remove a worker from the swarm (run inside the worker node):

```
docker swarm leave
```

- Display the current CA certificate in PEM format:

```
docker swarm ca
```

- Rotate the current CA certificate and display the new certificate:

```
docker swarm ca --rotate
```

- Change the valid period for node certificates:

```
docker swarm update --cert-expiry {{hours}}h{{minutes}}m{{seconds}}s
```

docker system

Manage Docker data and display system-wide information.

More information: <https://docs.docker.com/engine/reference/commandline/system/>.

- Show help:

```
docker system
```

- Show docker disk usage:

```
docker system df
```

- Show detailed information on disk usage:

```
docker system df --verbose
```

- Remove unused data:

```
docker system prune
```

- Remove unused data created more than a specified amount of time in the past:

```
docker system prune --filter="until={{hours}}h{{minutes}}m"
```

- Display real-time events from the Docker daemon:

```
docker system events
```

- Display real-time events from containers streamed as valid JSON Lines:

```
docker system events --filter 'type=container' --format '{{json .}}'
```

- Display system-wide information:

```
docker system info
```

docker

Manage Docker containers and images.

More information: <https://docs.docker.com/engine/reference/commandline/cli/>.

- List currently running docker containers:

```
docker ps
```

- List all docker containers (running and stopped):

```
docker ps -a
```

- Start a container from an image, with a custom name:

```
docker run --name {{container_name}} {{image}}
```

- Start or stop an existing container:

```
docker {{start|stop}} {{container_name}}
```

- Pull an image from a docker registry:

```
docker pull {{image}}
```

- Open a shell inside of an already running container:

```
docker exec -it {{container_name}} {{sh}}
```

- Remove a stopped container:

```
docker rm {{container_name}}
```

- Fetch and follow the logs of a container:

```
docker logs -f {{container_name}}
```

dokku

Docker powered mini-Heroku (PaaS).

Easily deploy multiple apps to your server in different languages using a single **git-push** command.

More information: <https://github.com/dokku/dokku>.

- List running apps:

```
dokku apps
```

- Create an app:

```
dokku apps:create {{app_name}}
```

- Remove an app:

```
dokku apps:destroy {{app_name}}
```

- Install plugin:

```
dokku plugin:install {{full_repo_url}}
```

- Link database to an app:

```
dokku {{db}}:link {{db_name}} {{app_name}}
```

dot

A command-line tool to produce layered drawings of directed graphs.

- Render an image file and determine output filename based on input filename and selected format:

```
dot -Tpng -O {{path/to/file.dot}}
```

- Create an SVG from DOT file:

```
dot -Tsvg -o {{path/to/out_file.svg}} {{path/to/file.dot}}
```

dotnet build

Builds a .NET application and its dependencies.

More information: <https://docs.microsoft.com/dotnet/core/tools/dotnet-build>.

- Compile the project or solution in the current directory:

```
dotnet build
```

- Compile a .NET project or solution in debug mode:

```
dotnet build {{path/to/project_or_solution}}
```

- Compile in release mode:

```
dotnet build --configuration {{Release}}
```

- Compile without restoring dependencies:

```
dotnet build --no-restore
```

- Compile with a specific verbosity level:

```
dotnet build --verbosity {{quiet|minimal|normal|detailed|diagnostic}}
```

- Compile for a specific runtime:

```
dotnet build --runtime {{runtime_identifier}}
```

- Specify the output directory:

```
dotnet build --output {{path/to/directory}}
```

dotnet publish

Publish a .NET application and its dependencies to a folder for deployment to a hosting system.

More information: <https://docs.microsoft.com/dotnet/core/tools/dotnet-publish>.

- Compile a .NET project in release mode:

```
dotnet publish --configuration Release {{path/to/project_file}}
```

- Publish the .NET Core runtime with your application for the specified runtime:

```
dotnet publish --self-contained true --runtime {{runtime_identifier}} {{path/to/project_file}}
```

- Package the application into a platform-specific single-file executable:

```
dotnet publish --runtime {{runtime_identifier}} -p:PublishSingleFile=true {{path/to/project_file}}
```

- Trim unused libraries to reduce the deployment size of an application:

```
dotnet publish --self-contained true --runtime {{runtime_identifier}} -p:PublishTrimmed=true {{path/to/project_file}}
```

- Compile a .NET project without restoring dependencies:

```
dotnet publish --no-restore {{path/to/project_file}}
```

- Specify the output directory:

```
dotnet publish --output {{path/to/directory}} {{path/to/project_file}}
```

dotnet restore

Restores the dependencies and tools of a .NET project.

More information: <https://docs.microsoft.com/dotnet/core/tools/dotnet-restore>.

- Restore dependencies for a .NET project or solution in the current directory:

```
dotnet restore
```

- Restore dependencies for a .NET project or solution in a specific location:

```
dotnet restore {{path/to/project_or_solution}}
```

- Restore dependencies without caching the HTTP requests:

```
dotnet restore --no-cache
```

- Force all dependencies to be resolved even if the last restore was successful:

```
dotnet restore --force
```

- Restore dependencies using package source failures as warnings:

```
dotnet restore --ignore-failed-sources
```

- Restore dependencies with a specific verbosity level:

```
dotnet restore --verbosity {{quiet|minimal|normal|detailed|diagnostic}}
```

dotnet

Cross platform .NET command line tools for .NET Core.

More information: <https://docs.microsoft.com/dotnet/core/tools>.

- Initialize a new .NET project:

```
dotnet new {{template_short_name}}
```

- Restore nuget packages:

```
dotnet restore
```

- Build and execute the .NET project in the current directory:

```
dotnet run
```

- Run a packaged dotnet application (only needs the runtime, the rest of the commands require the .NET Core SDK installed):

```
dotnet {{path/to/application.dll}}
```

doxygen

A documentation system for various programming languages.

More information: <http://www.doxygen.nl>.

- Generate a default template configuration file "Doxyfile":

```
doxygen -g
```

- Generate a template configuration file:

```
doxygen -g {{path/to/config_file}}
```

- Generate documentation using an existing configuration file:

```
doxygen {{path/to/config_file}}
```

drill

Perform various DNS queries.

- Lookup the IP(s) associated with a hostname (A records):

```
drill {{example.com}}
```

- Lookup the mail server(s) associated with a given domain name (MX record):

```
drill mx {{example.com}}
```

- Get all types of records for a given domain name:

```
drill any {{example.com}}
```

- Specify an alternate DNS server to query:

```
drill {{example.com}} @{{8.8.8.8}}
```

- Perform a reverse DNS lookup on an IP address (PTR record):

```
drill -x {{8.8.8.8}}
```

- Perform DNSSEC trace from root servers down to a domain name:

```
drill -TD {{example.com}}
```

- Show DNSKEY record(s) for a domain name:

```
drill -s dnskey {{example.com}}
```

drupal-check

Check Drupal PHP code for deprecations.

More information: <https://github.com/mglaman/drupal-check>.

- Check the code in a specific directory for deprecations:

```
drupal-check {{path/to/directory}}
```

- Check the code excluding a comma-separated list of directories:

```
drupal-check --exclude-dir {{path/to/excluded_directory}},  
{{path/to/excluded_files/*.php}} {{path/to/directory}}
```

- Don't show a progress bar:

```
drupal-check --no-progress {{path/to/directory}}
```

- Perform static analysis to detect bad coding practices:

```
drupal-check --analysis {{path/to/directory}}
```

drupal

CLI for Drupal.

Generates boilerplate code, interacts with and debugs Drupal projects.

More information: <https://drupalconsole.com/>.

- Install a module:

```
drupal module:install {{module_name}}
```

- Uninstall a module:

```
drupal module:uninstall {{module_name}}
```

- Clear all caches:

```
drupal cache:rebuild
```

- View current Drupal installation status:

```
drupal site:status
```

drush

A command-line shell and scripting interface for Drupal.

More information: <https://www.drush.org>.

- Enable module "foo":

```
drush en {{foo}}
```

- Uninstall module "foo":

```
drush pmu {{foo}}
```

- Clear all caches:

```
drush cr
```

- Clear CSS and JavaScript caches:

```
drush cc css-js
```

du

Disk usage: estimate and summarize file and directory space usage.

- List the sizes of a directory and any subdirectories, in the given unit (B/KB/MB):

```
du -{{b|k|m}} {{path/to/directory}}
```

- List the sizes of a directory and any subdirectories, in human-readable form (i.e. auto-selecting the appropriate unit for each size):

```
du -h {{path/to/directory}}
```

- Show the size of a single directory, in human readable units:

```
du -sh {{path/to/directory}}
```

- List the human-readable sizes of a directory and of all the files and directories within it:

```
du -ah {{path/to/directory}}
```

- List the human-readable sizes of a directory and any subdirectories, up to N levels deep:

```
du -h --max-depth=N {{path/to/directory}}
```

- List the human-readable size of all .jpg files in subdirectories of the current directory, and show a cumulative total at the end:

```
du -ch */*.jpg
```

dua

Dua (Disk Usage Analyzer) is a tool to conveniently learn about the usage of disk space of a given directory.

More information: <https://github.com/Byron/dua-cli>.

- Analyze specific directory:

```
dua {{path/to/directory}}
```

- Display apparent size instead of disk usage:

```
dua --apparent-size
```

- Count hard-linked files each time they are seen:

```
dua --count-hard-links
```

- Aggregate the consumed space of one or more directories or files:

```
dua aggregate
```

- Launch the terminal user interface:

```
dua interactive
```

- Format printing byte counts:

```
dua --format {{metric|binary|bytes|GB|GiB|MB|MiB}}
```

- Set the number of threads to be used:

```
dua --threads {{count}}
```

duplicity

Creates incremental, compressed, encrypted and versioned backups.

Can also upload the backups to a variety of backend services.

More information: <http://duplicity.nongnu.org>.

- Backup a directory via FTPS to a remote machine, encrypting it with a password:

```
FTP_PASSWORD={{ftp_login_password}}
PASSPHRASE={{encryption_password}} duplicity {{path/to/
source/directory}} {{ftps://user@hostname/target/directory/
path/}}
```

- Backup a directory to Amazon S3, doing a full backup every month:

```
duplicity --full-if-older-than {{1M}} --use-new-style s3://
{{bucket_name[/prefix]}}
```

- Delete versions older than 1 year from a backup stored on a WebDAV share:

```
FTP_PASSWORD={{webdav_login_password}} duplicity remove-
older-than {{1Y}} --force {{webdav[s]]://user@hostname[:port]/
some_dir}}
```

- List the available backups:

```
duplicity collection-status "file://{{absolute/path/to/
backup/directory}}"
```

- List the files in a backup stored on a remote machine, via ssh:

```
duplicity list-current-files --time {{YYYY-MM-DD}} scp://
{{user@hostname}}/path/to/backup/dir
```

- Restore a subdirectory from a GnuPG-encrypted local backup to a given location:

```
PASSPHRASE={{gpg_key_password}} duplicity restore --encrypt-
key {{gpg_key_id}} --file-to-restore {{relative/path/
restoredirectory}} file://{{absolute/path/to/backup/
directory}} {{path/to/directory/to/restore/to}}
```

dvc add

Add changed files to the index.

More information: <https://dvc.org/doc/command-reference/add>.

- Add a single target file to the index:

```
dvc add {{path/to/file}}
```

- Add a target directory to the index:

```
dvc add {{path/to/directory}}
```

- Recursively add all the files in a given target directory:

```
dvc add --recursive {{path/to/directory}}
```

- Add a target file with a custom `.dvc` filename:

```
dvc add --file {{custom_name.dvc}} {{path/to/file}}
```

dvc checkout

Checkout data files and directories from cache.

More information: <https://dvc.org/doc/command-reference/checkout>.

- Checkout the latest version of all target files and directories:

```
dvc checkout
```

- Checkout to latest version of a specified target:

```
dvc checkout {{target}}
```

- Checkout a specific version of a target from a different Git commit/tag/branch:

```
git checkout {{commit_hash|tag|branch}} {{target}} && dvc  
checkout {{target}}
```

dvc commit

Record changes to DVC-tracked files in the project.

More information: <https://dvc.org/doc/command-reference/commit>.

- Commit changes to all DVC-tracked files and directories:

```
dvc commit
```

- Commit changes to a specified DVC-tracked target:

```
dvc commit {{target}}
```

- Recursively commit all DVC-tracked files in a directory:

```
dvc commit --recursive {{path/to/directory}}
```

dvc config

Low level command to manage custom configuration options for dvc repositories.

These configurations can be on project, local, global, or system level.

More information: <https://dvc.org/doc/command-reference/config>.

- Get the name of the default remote:

```
dvc config core.remote
```

- Set the project's default remote:

```
dvc config core.remote {{remote_name}}
```

- Unset the project's default remote:

```
dvc config --unset core.remote
```

- Get the config value for a specified key for the current project:

```
dvc config {{key}}
```

- Set the config value for a key on a project level:

```
dvc config {{key}} {{value}}
```

- Unset a project level config value for a given key:

```
dvc config --unset {{key}}
```

- Set a local, global, or system level config value:

```
dvc config --local/global/system {{key}} {{value}}
```

dvc dag

Visualize the pipeline(s) defined in **dvc.yaml**.

More information: <https://dvc.org/doc/command-reference/dag>.

- Visualize the entire pipeline:

```
dvc dag
```

- Visualize the pipeline stages up to a specified target stage:

```
dvc dag {{target}}
```

- Export the pipeline in the dot format:

```
dvc dag --dot > {{path/to/pipeline.dot}}
```

dvc destroy

Remove all DVC files and directories from a DVC project.

More information: <https://dvc.org/doc/command-reference/destroy>.

- Destroy the current project:

```
dvc destroy
```

- Force destroy the current project:

```
dvc destroy --force
```

dvc diff

Show changes in DVC tracked file and directories.

More information: <https://dvc.org/doc/command-reference/diff>.

- Compare DVC tracked files from different Git commits, tags, and branches w.r.t the current workspace:

```
dvc diff {{commit_hash/tag/branch}}
```

- Compare the changes in DVC tracked files from 1 git commit to another:

```
dvc diff {{revision_b}} {{revision_a}}
```

- Compare DVC tracked files, along with their latest hash:

```
dvc diff --show-hash {{commit}}
```

- Compare DVC tracked files, displaying the output as JSON:

```
dvc diff --show-json --show-hash {{commit}}
```

- Compare DVC tracked files, displaying the output as Markdown:

```
dvc diff --show-md --show-hash {{commit}}
```

dvc fetch

Download DVC tracked files and directories from a remote repository.

More information: <https://dvc.org/doc/command-reference/fetch>.

- Fetch the latest changes from the default remote upstream repository (if set):

```
dvc fetch
```

- Fetch changes from a specific remote upstream repository:

```
dvc fetch --remote {{remote_name}}
```

- Fetch the latest changes for a specific target/s:

```
dvc fetch {{target/s}}
```

- Fetch changes for all branch and tags:

```
dvc fetch --all-branches --all-tags
```

- Fetch changes for all commits:

```
dvc fetch --all-commits
```

dvc freeze

Freeze stages in the DVC pipeline.

This prevents DVC from tracking changes in stage dependencies and re-execution until unfreeze.

See also [dvs unfreeze](#).

More information: <https://dvc.org/doc/command-reference/freeze>.

- Freeze 1 or more specified stages:

```
dvc freeze {{stage_name_a}} [{{stage_name_b}} ...]
```

dvc gc

Remove unused files and directories from the cache or remote storage.

More information: <https://dvc.org/doc/command-reference/gc>.

- Garbage collect from the cache, keeping only versions referenced by the current workspace:

```
dvc gc --workspace
```

- Garbage collect from the cache, keeping only versions referenced by branch, tags, and commits:

```
dvc gc --all-branches --all-tags --all-commits
```

- Garbage collect from the cache, including the default cloud remote storage (if set):

```
dvc gc --all-commits --cloud
```

- Garbage collect from the cache, including a specific cloud remote storage:

```
dvc gc --all-commits --cloud --remote {{remote_name}}
```

dvc init

Initialize a new local DVC repository.

More information: <https://dvc.org/doc/command-reference/init>.

- Initialize a new local repository:

```
dvc init
```

- Initialize DVC without Git:

```
dvc init --no-scm
```

- Initialize DVC in a subdirectory:

```
cd {{path/to/subdir}} && dvc init --sudir
```

dvc unfreeze

Unfreeze stages in the DVC pipeline.

This allows DVC to start tracking changes in stage dependencies again after they were frozen.

See also [dvc freeze](#).

More information: <https://dvc.org/doc/command-reference/unfreeze>.

- Unfreeze 1 or more specified stages:

```
dvc unfreeze {{stage_name_a}} [{{stage_name_b}} ...]
```

dvc

Data Version Control: like **git** for data.

More information: <https://dvc.org/>.

- Check the DVC version:

```
dvc --version
```

- Display general help:

```
dvc --help
```

- Display help about a specific subcommand:

```
dvc {{subcommand}} --help
```

- Execute a DVC subcommand:

```
dvc {{subcommand}}
```

ebook-convert

Can be used to convert ebooks between common formats, e.g., pdf, epub and mobi.

Part of the Calibre ebook library tool.

More information: <https://manual.calibre-ebook.com/generated/en/ebook-convert.html>.

- Convert an ebook into another format:

```
ebook-convert {{source}} {{destination}}
```

- Convert Markdown or HTML to ebook with TOC, title and author:

```
ebook-convert {{source}} {{destination}} --level1-toc="//h:h1" --level2-toc="//h:h2" --level3-toc="//h:h3" --title={{title}} --authors={{author}}
```

echo

Print given arguments.

- Print a text message. Note: quotes are optional:

```
echo "{{Hello World}}"
```

- Print a message with environment variables:

```
echo "{{My path is $PATH}}"
```

- Print a message without the trailing newline:

```
echo -n "{{Hello World}}"
```

- Append a message to the file:

```
echo "{{Hello World}}" >> {{file.txt}}
```

- Enable interpretation of backslash escapes (special characters):

```
echo -e "{{Column 1\tColumn 2}}"
```

ect

Efficient Compression Tool (or ECT) is a C++ file optimizer. It supports PNG, JPEG, GZIP and ZIP files.

More information: <https://github.com/fhanau/Efficient-Compression-Tool>.

- Compress a file:

```
ect {{filename.png}}
```

- Compress a file with the highest compression level and multithreading:

```
ect -9 --mt-deflate {{filename.png}}
```

- Compress all the files in a directory recursively, keeping the original modification time:

```
ect -keep -recurse {{directory}}
```

ed

The original Unix text editor.

- Start ed, editing an empty document (which can be saved as a new file in the current directory):

`ed`

- Start ed, editing an empty document, with `:` as a command prompt indicator:

`ed -p :`

- Start ed editing an existing file (this shows the byte count of the loaded file):

`ed -p : {{path/to/file}}`

- Toggle the printing of error explanations. (By default, explanations are not printed and only a `?` appears):

`H`

- Add text to the current document. Mark completion by entering a period by itself in a new line:

`a<Enter>{{text_to_insert}}<Enter>.`

- Print the entire document (`,` is a shortcut to the range `1,$` which covers the start to the end of the document):

`,p`

- Write the current document to a new file (the filename can be omitted if `ed` was called with an existing file):

`w {{filename}}`

- Quit ed:

`q`

electron-packager

A tool used to build Electron app executables for Windows, Linux and MacOS.

Requires a valid package.json in the application directory.

More information: <https://github.com/electron/electron-packager>.

- Package an application for the current architecture and platform:

```
electron-packager "{{path/to/app}}" "{{app_name}}"
```

- Package an application for all architectures and platforms:

```
electron-packager "{{path/to/app}}" "{{app_name}}" --all
```

- Package an application for 64-bit Linux:

```
electron-packager "{{path/to/app}}" "{{app_name}}" --  
platform="{{linux}}" --arch="{{x64}}"
```

- Package an application for ARM MacOS:

```
electron-packager "{{path/to/app}}" "{{app_name}}" --  
platform="{{darwin}}" --arch="{{arm64}}"
```

electrum

Ergonomic Bitcoin wallet and private key management.

More information: <https://electrum.org>.

- Create a new wallet:

```
electrum -w {{new_wallet.dat}} create
```

- Restore an existing wallet from seed offline:

```
electrum -w {{recovery_wallet.dat}} restore -o
```

- Create a signed transaction offline:

```
electrum mktx {{recipient}} {{amount}} -f 0.0000001 -F {{from}} -o
```

- Display all wallet receiving addresses:

```
electrum listaddresses -a
```

- Sign a message:

```
electrum signmessage {{address}} {{message}}
```

- Verify a message:

```
electrum verifymessage {{address}} {{signature}} {{message}}
```

- Connect only to a specific electrum-server instance:

```
electrum -p socks5:{{127.0.0.1}}:9050 -s {{56ckl5obj37gypcu.onion}}:50001:t -1
```

elinks

A text based browser similar to lynx.

More information: <http://elinks.or.cz>.

- Start elinks:

`elinks`

- Quit elinks:

`Ctrl + C`

- Dump output of webpage to console, colorizing the text with ANSI control codes:

`elinks -dump -dump-color-mode {{1}} {{url}}`

elixir

Elixir programming language interpreter.

More information: <https://elixir-lang.org>.

- Run an Elixir file:

```
elixir {{path/to/file}}
```

- Evaluate Elixir code by passing it as an argument:

```
elixir -e "{{code}}"
```

elm

Compile and run Elm source files.

More information: <https://elm-lang.org>.

- Initialize an Elm project, generates an elm.json file:

```
elm init
```

- Start interactive Elm shell:

```
elm repl
```

- Compile an Elm file, output the result to an index.html file:

```
elm make {{source}}
```

- Compile an Elm file, output the result to a Javascript file:

```
elm make {{source}} --output={{destination}}.js
```

- Start local web server that compiles Elm files on page load:

```
elm reactor
```

- Install Elm package from https://package.elm-lang.org:

```
elm install {{author}}/{{package}}
```

emacs

The extensible, customizable, self-documenting, real-time display editor.

More information: <https://www.gnu.org/software/emacs>.

- Start in console mode (without X window):

`emacs -nw`

- Open a file:

`emacs {{path/to/file}}`

- Save a file:

`Ctrl + X, Ctrl + S`

- Quit:

`Ctrl + X, Ctrl + C`

- Open a file at a specified line number:

`emacs +{{line_number}} {{path/to/file}}`

emacsclient

Open files in an existing emacs server.

More information: <https://www.emacswiki.org/emacs/EmacsClient>.

- Open files in an existing Emacs server (using GUI if available):

```
emacsclient {{filename}}
```

- Open file in console mode (without X window):

```
emacsclient -nw {{filename}}
```

- Open a file in an existing emacs frame and return immediately:

```
emacsclient -n {{filename}}
```

- Open file in a new emacs frame:

```
emacsclient -c {{filename}}
```

- Eval command in a new emacs frame:

```
emacsclient -c -e '({{command}})'
```

ember

The Ember.js command line utility.

Used for creating and maintaining Ember.js applications.

More information: <https://cli.emberjs.com>.

- Create a new Ember application:

```
ember new {{my_new_app}}
```

- Create a new Ember addon:

```
ember addon {{my_new_addon}}
```

- Build the project:

```
ember build
```

- Build the project in production mode:

```
ember build -prod
```

- Run the development server:

```
ember serve
```

- Run the test suite:

```
ember test
```

- Run a blueprint to generate something like a route or component:

```
ember generate {{type}} {{name}}
```

- Install an ember-cli addon:

```
ember install {{name_of_addon}}
```

emulator

Manager Android emulators from the command line.

More information: <https://developer.android.com/studio/run/emulator-commandline>.

- Display the help:

```
emulator -help
```

- Start an Android emulator device:

```
emulator -avd {{name}}
```

- Display the webcams on your development computer that are available for emulation:

```
emulator -avd {{name}} -webcam-list
```

- Start an emulator overriding the facing back camera setting (use `-camera-front` for front camera):

```
emulator -avd {{name}} -camera-back {{none|emulated|webcamN}}
```

- Start an emulator, with a maximum network speed:

```
emulator -avd {{name}} -netspeed {{gsm|hscsd|gprs|edge|hsdpa|lte|evdo|full}}
```

- Start an emulator with network latency:

```
emulator -avd {{name}} -netdelay {{gsm|hscsd|gprs|edge|hsdpa|lte|evdo|none}}
```

- Start an emulator, making all TCP connections through a specified HTTP/HTTPS proxy (port number is required):

```
emulator -avd {{name}} -http-proxy {{http://example.com:80}}
```

- Start an emulator with a given SD card partition image file:

```
emulator -avd {{name}} -sdcard {{path/to/sdcard.img}}
```

enca

Detect and convert the encoding of text files.

More information: <https://github.com/nijel/enca>.

- Detect file(s) encoding according to the system's locale:

```
enca {{file1 file2 ...}}
```

- Detect file(s) encoding specifying a language in the POSIX/C locale format (e.g. zh_CN, en_US):

```
enca -L {{language}} {{file1 file2 ...}}
```

- Convert file(s) to a specific encoding:

```
enca -L {{language}} -x {{to_encoding}} {{file1 file2 ...}}
```

- Create a copy of an existing file using a different encoding:

```
enca -L {{language}} -x {{to_encoding}} < {{original_file}} > {{new_file}}
```

enscript

Convert text files to PostScript, HTML, RTF, ANSI, and overstrikes.

More information: <https://www.gnu.org/software/enscript>.

- Generate a PostScript file from a text file:

```
enscript {{path/to/input_file}} --output={{path/to/
output_file}}
```

- Generate a file in a different language than PostScript:

```
enscript {{path/to/input_file}} --language={{html|rtf|...}}
--output={{path/to/output_file}}
```

- Generate a PostScript file with a landscape layout, splitting the page into columns (maximum 9):

```
enscript {{path/to/input_file}} --columns={{num}} --landscape
--output={{path/to/output_file}}
```

- Display available syntax highlighting languages and file formats:

```
enscript --help-highlight
```

- Generate a PostScript file with syntax highlighting and color for a specified language:

```
enscript {{path/to/input_file}} --color=1 --
highlight={{language}} --output={{path/to/output_file}}
```

entr

Run arbitrary commands when files change.

- Rebuild with `make` if any file in any subdirectory changes:

```
{ag -l} | entr {{make}}
```

- Rebuild and test with `make` if any `.c` source files in the current directory change:

```
{ls *.c} | entr {{'make && make test'}}
```

- Send a `SIGTERM` to any previously spawned ruby subprocesses before executing `ruby main.rb`:

```
{ls *.rb} | entr -r {{ruby main.rb}}
```

- Run a command with the changed file (`/_`) as an argument:

```
{ls *.sql} | entr {{psql -f}} /_
```

env

Show the environment or run a program in a modified environment.

- Show the environment:

```
env
```

- Run a program. Often used in scripts after the shebang (#!) for looking up the path to the program:

```
env {{program}}
```

- Clear the environment and run a program:

```
env -i {{program}}
```

- Remove variable from the environment and run a program:

```
env -u {{variable}} {{program}}
```

- Set a variable and run a program:

```
env {{variable}}={{value}} {{program}}
```

- Set multiple variables and run a program:

```
env {{variable1}}={{value}} {{variable2}}={{value}}  
{{variable3}}={{value}} {{program}}
```

envoy

A PHP-based task manager for Laravel remote servers.

More information: <https://laravel.com/docs/envoy>.

- Initialise a configuration file:

```
envoy init {{host_name}}
```

- Run a task:

```
envoy run {{task_name}}
```

- Run a task from a specific project:

```
envoy run --path {{path/to/directory}} {{task_name}}
```

- Run a task and continue on failure:

```
envoy run --continue {{task_name}}
```

- Dump a task as a bash script for inspection:

```
envoy run --pretend {{task_name}}
```

- Connect to the specified server via SSH:

```
envoy ssh {{server_name}}
```

envsubst

Substitutes environment variables with their value in shell format strings.

Variables to be replaced should be in either `${var}` or `$var` format.

- Replace environment variables in `stdin` and output to `stdout`:

```
echo '{{$HOME}}' | envsubst
```

- Replace environment variables in an input file and output to `stdout`:

```
envsubst < {{path/to/input_file}}
```

- Replace environment variables in an input file and output to a file:

```
envsubst < {{path/to/input_file}} > {{path/to/output_file}}
```

- Replace environment variables in an input file from a space-separated list:

```
envsubst '{{$USER $SHELL $HOME}}' < {{path/to/input_file}}
```

erl

Run and manage programs in the Erlang programming language.

More information: <https://www.erlang.org>.

- Compile and run sequential Erlang program as a common script and then exit:

```
erlc {{files}} && erl -noshell  
'{{mymodule:myfunction(arguments)}}, init:stop().'
```

- Connect to a running Erlang node:

```
erl -remsh {{nodename}}@{{hostname}} -sname  
{{custom_shortname}} -hidden -setcookie  
{{cookie_of_remote_node}}
```

- Tell the Erlang shell to load modules from a directory:

```
erl -pa {{directory_with_beam_files}}
```

eslint

A pluggable linting utility for JavaScript and JSX.

More information: <https://eslint.org>.

- Create eslint config:

```
eslint --init
```

- Lint on a given set of files:

```
eslint {{filename}}.js {{filename1}}.js
```

- Fix lint issues:

```
eslint --fix
```

- Lint with config:

```
eslint -c {{path/to/config_file}} {{app/src}}
```

espeak

Uses text-to-speech to speak through the default sound device.

More information: <http://espeak.sourceforge.net>.

- Speak a phrase aloud:

```
espeak "I like to ride my bike."
```

- Speak a file aloud:

```
espeak -f {{filename}}
```

- Save output to a WAV audio file, rather than speaking it directly:

```
espeak -w {{filename.wav}} "It's GNU plus Linux"
```

- Use a different voice:

```
espeak -v {{voice}}
```

eva

Simple calculator REPL, similar to **bc**, with syntax highlighting and persistent history.

More information <https://github.com/NerdyPepper/eva>.

- Run the calculator in interactive mode:

```
eva
```

- Calculate the result of an expression:

```
eva "{{(1 + 2) * 2 ^ 2}}"
```

- Calculate an expression forcing the number of decimal places to 5:

```
eva --fix {{5}} "{{5 / 3}}"
```

- Calculate an expression with sine and cosine:

```
eva "{{sin(1) + cos(1)}}"
```

evil-winrm

Windows Remote Management (WinRM) shell for pentesting.

Once connected, we get a PowerShell prompt on the target host.

More information: <https://github.com/Hackplayers/evil-winrm>.

- Connect to a host:

```
evil-winrm --ip {{ip}} --user {{user}} --password  
{{password}}
```

- Connect to a host, passing the password hash:

```
evil-winrm --ip {{ip}} --user {{user}} --hash {{nt_hash}}
```

- Connect to a host, specifying folders for scripts and executables:

```
evil-winrm --ip {{ip}} --user {{user}} --password  
{{password}} --scripts {{path/to/scripts}} --executables  
{{path/to/executables}}
```

- Connect to a host, using SSL:

```
evil-winrm --ip {{ip}} --user {{user}} --password  
{{password}} --ssl --pub-key {{path/to/pubkey}} --priv-key  
{{path/to/privkey}}
```

- Upload a file to the host:

```
PS > upload {{path/to/local/file}} {{path/to/remote/file}}
```

- Get a list of loaded PowerShell functions:

```
PS > menu
```

- Load a PowerShell script from the **--scripts** folder:

```
PS > {{script.ps1}}
```

- Invoke a binary on the host from the **--executables** folder:

```
PS > Invoke-Binary {{binary.exe}}
```

exa

A modern replacement for **ls** (List directory contents).

More information: <https://the.exa.website>.

- List files one per line:

```
exa --oneline
```

- List all files, including hidden files:

```
exa --all
```

- Long format list (permissions, ownership, size and modification date) of all files:

```
exa --long --all
```

- List files with the largest at the top:

```
exa --reverse --sort={{size}}
```

- Display a tree of files, three levels deep:

```
exa --long --tree --level={{3}}
```

- List files sorted by modification date (oldest first):

```
exa --long --sort={{modified}}
```

exec

Replace the current process with another process.

- Replace with the specified command using the current environment variables:

```
exec {{command -with -flags}}
```

- Replace with the specified command, clearing environment variables:

```
exec -c {{command -with -flags}}
```

- Replace with the specified command and login using the default shell:

```
exec -l {{command -with -flags}}
```

- Replace with the specified command and change the process name:

```
exec -a {{process_name}} {{command -with -flags}}
```

exenv

A tool to easily install Elixir versions and manage application environments.

More information: <https://github.com/exenv/exenv>.

- Display a list of installed versions:

```
exenv versions
```

- Use a specific version of Elixir across the whole system:

```
exenv global {{version}}
```

- Use a specific version of Elixir for the current application/project directory:

```
exenv local {{version}}
```

- Show the currently selected Elixir version:

```
exenv {{version}}
```

- Install a version of Elixir (requires `elixir-build` plugin <https://github.com/mururu/elixir-build>):

```
exenv install {{version}}
```

exiftool

Read and write meta information in files.

More information: <https://exiftool.org>.

- Remove all EXIF metadata from the given files:

```
exiftool -All= {{file1 file2 ...}}
```

- Move the date at which all photos in a directory were taken 1 hour forward:

```
exiftool "-AllDates+=0:0:0 1:0:0" {{path/to/directory}}
```

- Move the date at which all JPEG photos in the current directory were taken 1 day and 2 hours backward:

```
exiftool "-AllDates-=0:0:1 2:0:0" -ext jpg
```

- Only change the **DateTimeOriginal** field subtracting 1.5 hours, without keeping backups:

```
exiftool -DateTimeOriginal-=1.5 -overwrite_original
```

- Recursively rename all JPEG photos in a directory based on the **DateTimeOriginal** field:

```
exiftool '-filename<DateTimeOriginal' -d %Y-%m-%d_%H-%M-%S%  
%lc.%e {{path/to/directory}} -r -ext jpg
```

exit

Exit the shell.

- Exit the shell with the exit code of the last command executed:

```
exit
```

- Exit the shell with the specified exit code:

```
exit {{exit_code}}
```

exiv2

Image metadata manipulation tool.

More information: <https://www.exiv2.org/manpage.html>.

- Print a summary of the image Exif metadata:

```
exiv2 {{path/to/file}}
```

- Print all metadata (Exif, IPTC, XMP) with interpreted values:

```
exiv2 -P kt {{path/to/file}}
```

- Print all metadata with raw values:

```
exiv2 -P kv {{path/to/file}}
```

- Delete all metadata from an image:

```
exiv2 -d a {{path/to/file}}
```

- Delete all metadata, preserving the file timestamp:

```
exiv2 -d a -k {{path/to/file}}
```

- Rename the file, prepending the date and time from metadata (not from the file timestamp):

```
exiv2 -r {{'%Y%m%d_%H%M%S_':basename:'}} {{path/to/file}}
```

expand

Convert tabs to spaces.

- Convert tabs in each file to spaces, writing to standard output:

```
expand {{file}}
```

- Convert tabs to spaces, reading from standard input:

```
expand
```

- Do not convert tabs after non blanks:

```
expand -i {{file}}
```

- Have tabs a certain number of characters apart, not 8:

```
expand -t={{number}} {{file}}
```

- Use a comma separated list of explicit tab positions:

```
expand -t={{1,4,6}}
```

expose

An open source tunnel application for sharing websites.

More information: <https://beyondco.de/docs/expose>.

- Register your authentication token:

```
expose token {{token}}
```

- Share the current working directory:

```
expose
```

- Share the current working directory with a specific subdomain:

```
expose --subdomain={{subdomain}}
```

- Share a local url:

```
expose share {{url}}
```

- Run the Expose server:

```
expose serve
```

- Run the Expose server with a specific hostname:

```
expose serve {{hostname}}
```

expr

Evaluate expressions and manipulate strings.

- Get string length:

```
expr length {{string}}
```

- Evaluate logical or math expression with an operator ('+', '-', '*', '&', '|', etc.). Special symbols should be escaped:

```
expr {{first_argument}} {{operator}} {{second_argument}}
```

- Get position of the first character in 'string' that matches 'substring':

```
echo $(expr index {{string}} {{substring}})
```

- Extract part of the string:

```
echo $(expr substr {{string}} {{position_to_start}}  
{{number_of_characters}})
```

- Extract part of the string which matches a regular expression:

```
echo $(expr {{string}} : '\({{regular_expression}}\}')
```

f3fix

Edit the partition table of a fake flash drive.

See also **f3probe**, **f3write**, **f3read**.

More information: <http://oss.digirati.com.br/f3/>.

- Fill a fake flash drive with a single partition that matches its real capacity:

```
sudo f3fix {{/dev/device_name}}
```

- Mark the partition as bootable:

```
sudo f3fix --boot {{/dev/device_name}}
```

- Specify the filesystem:

```
sudo f3fix --fs-type={{filesystem_type}} {{/dev/device_name}}
```

f3probe

Probe a block device (e.g. a flash drive or a microSD card) for counterfeit flash memory.

See also **f3read**, **f3write**, **f3fix**.

More information: <https://github.com/AltraMayor/f3>.

- Probe a block device:

```
sudo f3probe {{path/to/block_device}}
```

- Use the minimum about of RAM possible:

```
sudo f3probe --min-memory {{path/to/block_device}}
```

- Time disk operations:

```
sudo f3probe --time-ops {{path/to/block_device}}
```

f3read

Validate .h2w files to test the real capacity of the drive.

See also **f3write**, **f3probe**, **f3fix**.

More information: <http://oss.digirati.com.br/f3/>.

- Validate a device by checking the files in a given directory:

```
f3read {{path/to/mount_point}}
```

f3write

Fill a drive out with .h2w files to test its real capacity.

See also **f3read**, **f3probe**, **f3fix**.

More information: <http://oss.digirati.com.br/f3/>.

- Write test files to a given directory, filling the drive:

```
f3write {{path/to/mount_point}}
```

- Limit the write speed:

```
f3write --max-write-rate={{kb_per_second}} {{path/to/mount_point}}
```

factor

Prints the prime factorization of a number.

- Display the prime-factorization of a number:

```
factor {{number}}
```

- Take the input from `stdin` if no argument is specified:

```
echo {{number}} | factor
```

false

Returns an exit code of 1.

- Return an exit code of 1:

`false`

fastboot

Communicate with connected Android devices when in bootloader mode (the one place **adb** doesn't work).

More information: <https://android.googlesource.com/platform/system/core/+/master/fastboot/#fastboot>.

- Unlock the bootloader:

```
fastboot oem unlock
```

- Relock the bootloader:

```
fastboot oem lock
```

- Reboot the device from fastboot mode into fastboot mode again:

```
fastboot reboot bootloader
```

- Flash a given image:

```
fastboot flash {{file.zip}}
```

- Flash a custom recovery image:

```
fastboot flash recovery {{file.img}}
```

- Display connected devices:

```
fastboot devices
```

- Display all information of a device:

```
fastboot getvar all
```

fd

An alternative to **find**.

Aims to be faster and easier to use than **find**.

More information: <https://github.com/sharkdp/fd>.

- Recursively find files matching the given pattern in the current directory:

```
fd {{pattern}}
```

- Find files that begin with "foo":

```
fd {{'^foo'}}
```

- Find files with a specific extension:

```
fd --extension {{txt}}
```

- Find files in a specific directory:

```
fd {{pattern}} {{path/to/directory}}
```

- Include ignored and hidden files in the search:

```
fd --hidden --no-ignore {{pattern}}
```

fdroid

F-Droid build tool.

F-Droid is an installable catalogue of FOSS (Free and Open Source Software) applications for the Android platform.

More information: <https://f-droid.org/>.

- Build a specific app:

```
fdroid build {{app_id}}
```

- Build a specific app in a build server VM:

```
fdroid build {{app_id}} --server
```

- Publish the app to the local repository:

```
fdroid publish {{app_id}}
```

- Install the app on every connected device:

```
fdroid install {{app_id}}
```

- Check if the metadata is formatted correctly:

```
fdroid lint --format {{app_id}}
```

- Fix the formatting automatically (if possible):

```
fdroid rewritemeta {{app_id}}
```

fdroidcl

F-Droid CLI client.

More information: <https://github.com/mvdan/fdroidcl>.

- Fetch the F-Droid index:

```
fdroidcl update
```

- Display info about an app:

```
fdroidcl show {{app_id}}
```

- Download an APK file:

```
fdroidcl download {{app_id}}
```

- Search for an app in the index:

```
fdroidcl search {{search_pattern}}
```

- Install an app on a connected device:

```
fdroidcl install {{app_id}}
```

fdupes

Finds duplicate files in a given set of directories.

More information: <https://github.com/adrianlopezroche/fdupes>.

- Search a single directory:

```
fdupes {{directory}}
```

- Search multiple directories:

```
fdupes {{directory1}} {{directory2}}
```

- Search all directories recursively:

```
fdupes -r {{directory}}
```

- Search multiple directories, one recursively:

```
fdupes {{directory1}} -R {{directory2}}
```

ffmpeg

Video conversion tool.

More information: <https://ffmpeg.org>.

- Extract the sound from a video and save it as MP3:

```
ffmpeg -i {{video.mp4}} -vn {{sound}}.mp3
```

- Convert frames from a video or GIF into individual numbered images:

```
ffmpeg -i {{video.mpg|video.gif}} {{frame_%d.png}}
```

- Combine numbered images (frame_1.jpg, frame_2.jpg, etc) into a video or GIF:

```
ffmpeg -i {{frame_%d.jpg}} -f image2 {{video.mpg|video.gif}}
```

- Quickly extract a single frame from a video at time mm:ss and save it as a 128x128 resolution image:

```
ffmpeg -ss {{mm:ss}} -i {{video.mp4}} -frames 1 -s {{128x128}} -f image2 {{image.png}}
```

- Trim a video from a given start time mm:ss to an end time mm2:ss2 (omit the -to flag to trim till the end):

```
ffmpeg -ss {{mm:ss}} -to {{mm2:ss2}} -i {{video.mp4}} -codec copy {{output.mp4}}
```

- Convert AVI video to MP4. AAC Audio @ 128kbit, h264 Video @ CRF 23:

```
ffmpeg -i {{input_video}}.avi -codec:audio aac -b:audio 128k -codec:video libx264 -crf 23 {{output_video}}.mp4
```

- Remux MKV video to MP4 without re-encoding audio or video streams:

```
ffmpeg -i {{input_video}}.mkv -codec copy {{output_video}}.mp4
```

- Convert MP4 video to VP9 codec. For the best quality, use a CRF value (recommended range 15-35) and -b:video MUST be 0:

```
ffmpeg -i {{input_video}}.mp4 -codec:video libvpx-vp9 -crf {{30}} -b:video 0 -codec:audio libopus -vbr on -threads {{number_of_threads}} {{output_video}}.webm
```

ffprobe

Multimedia stream analyzer.

More information: <https://ffmpeg.org/ffprobe.html>.

- Display all available stream info for a media file:

```
ffprobe -v error -show_entries {{input.mp4}}
```

- Display media duration:

```
ffprobe -v error -show_entries format=duration -of default=noprint_wrappers=1:nokey=1 {{input.mp4}}
```

- Display the frame rate of a video:

```
ffprobe -v error -select_streams v:0 -show_entries stream=avg_frame_rate -of default=noprint_wrappers=1:nokey=1 {{input.mp4}}
```

- Display the width or height of a video:

```
ffprobe -v error -select_streams v:0 -show_entries stream={{width|height}} -of default=noprint_wrappers=1:nokey=1 {{input.mp4}}
```

- Display the average bit rate of a video:

```
ffprobe -v error -select_streams v:0 -show_entries stream=bit_rate -of default=noprint_wrappers=1:nokey=1 {{input.mp4}}
```

ffsend

Easily and securely share files from command line.

More information: <https://gitlab.com/timvisee/ffsend>.

- Upload a file:

```
ffsend upload {{file}}
```

- Download a file:

```
ffsend download {{url}}
```

- Upload a file with password:

```
ffsend upload {{file}} -p {{password}}
```

- Download a file protected by password:

```
ffsend download {{file}} -p {{password}}
```

- Upload a file and allow 4 downloads:

```
ffsend upload {{file}} -d {{4}}
```

fg

Run jobs in foreground.

- Bring most recently suspended background job to foreground:

`fg`

- Bring a specific job to foreground:

`fg {{job_id}}`

fgrep

Matches patterns in files.

Supports simple patterns and regular expressions.

- Search for an exact string in a file:

```
fgrep {{search_string}} {{path/to/file}}
```

- Search only lines that match entirely in files:

```
fgrep -x {{path/to/file1}} {{path/to/file2}}
```

- Count the number of lines that match the given string in a file:

```
fgrep -c {{search_string}} {{path/to/file}}
```

- Show the line number in the file along with the line matched:

```
fgrep -n {{search_string}} {{path/to/file}}
```

- Display all lines except those that contain the given regular expression:

```
fgrep -v {{^regex$}} {{path/to/file}}
```

- Display filenames whose content matchs the regular expression at least once:

```
fgrep -l {{^regex$}} {{path/to/file1}} {{path/to/file2}}
```

figlet

Generate ASCII banners from user input.

- Generate by directly inputting text:

```
figlet {{input_text}}
```

- Use a custom font file:

```
figlet {{input_text}} -f {{font_filename}}
```

- Pipe command output through figlet:

```
{{command}} | figlet
```

- Show available figlet fonts:

```
showfigfonts {{optional_string_to_display}}
```

fin

Docksal command line utility.

More information: <https://docs.docksal.io/fin/fin/>.

- Start the project in the current directory:

```
fin project start
```

- Stop the project in the current directory:

```
fin project stop
```

- Open a shell into a specific container:

```
fin bash {{container_name}}
```

- Display logs of a specific container:

```
fin logs {{container_name}}
```

- Display logs of a specific container and follow the log:

```
fin logs -f {{container_name}}
```

find

Find files or directories under the given directory tree, recursively.

- Find files by extension:

```
find {{root_path}} -name '{{*.ext}}'
```

- Find files by matching multiple patterns:

```
find {{root_path}} -name '{{*pattern_1*}}' -or -name  
'{{*pattern_2*}}'
```

- Find directories matching a given name, in case-insensitive mode:

```
find {{root_path}} -type d -iname '{{*lib*}}'
```

- Find files matching a path pattern:

```
find {{root_path}} -path '{{*/lib/**/*.*}}'
```

- Find files matching a given pattern, excluding specific paths:

```
find {{root_path}} -name '{{*.py}}' -not -path '{{*/site-  
packages/*}}'
```

- Find files matching a given size range:

```
find {{root_path}} -size {{+500k}} -size {{-10M}}
```

- Run a command for each file (use `{}` within the command to access the filename):

```
find {{root_path}} -name '{{*.ext}}' -exec {{wc -l {} }}\;
```

- Find files modified in the last 7 days, and delete them:

```
find {{root_path}} -mtime {{-7}} -delete
```

finger

User information lookup program.

- Display information about currently logged in users:

finger

- Display information about a specific user:

finger {{username}}

- Display the user's login name, real name, terminal name, and other information:

finger -s

- Produce multi-line output format displaying same information as **-s** as well as user's home directory, home phone number, login shell, mail status, etc.:

finger -l

- Prevent matching against user's names and only use login names:

finger -m

firebase

Firebase Command Line Interface (CLI) Tools.

Used to test, manage, and deploy your Firebase project from the command line.

More information: <https://github.com/firebase/firebase-tools>.

- Login:

```
firebase login
```

- Display the help:

```
firebase help
```

- List existing firebase projects:

```
firebase project:list
```

- Setup a firebase in the current directory:

```
firebase init {{options}} {{feature}}
```

- Deploy code and assets to the project in the current directory:

```
firebase deploy
```

firefox

A free and open source web browser.

More information: https://developer.mozilla.org/en-US/docs/Mozilla/Command_Line_Options.

- Launch Firefox and open a web page:

```
firefox {{https://www.duckduckgo.com}}
```

- Open a new window:

```
firefox --new-window {{https://www.duckduckgo.com}}
```

- Open a private (incognito) window:

```
firefox --private-window
```

- Search for "wikipedia" using the default search engine:

```
firefox --search "{{wikipedia}}"
```

- Launch Firefox in safe mode, with all extensions disabled:

```
firefox --safe-mode
```

- Take a screenshot of a web page in headless mode:

```
firefox --headless --screenshot {{path/to/output_file.png}} {{https://example.com/}}
```

- Use a specific profile to allow multiple separate instances of Firefox to run at once:

```
firefox --profile {{path/to/directory}} {{https://example.com/}}
```

- Set Firefox as the default browser:

```
firefox --setDefaultBrowser
```

fish

The Friendly Interactive SHell.

A command-line interpreter designed to be user friendly.

More information: <https://fishshell.com>.

- Start interactive shell:

```
fish
```

- Execute a command:

```
fish -c "{{command}}"
```

- Run commands from a file:

```
fish {{file.fish}}
```

- Check a file for syntax errors:

```
fish --no-execute {{file.fish}}
```

- Display version information and exit:

```
fish --version
```

- Set and export environmental variables that persist across restarts:

```
set -Ux {{variable_name}} {{variable_value}}
```

fisher

Fisher, a fish-shell plugin manager.

Install plugins by name or from a managed 'fishfile' for bundled installs.

More information: <https://github.com/jorgebucaran/fisher>.

- Install one or more plugins:

```
fisher {{plugin1}} {{plugin2}}
```

- Install a plugin from a GitHub gist:

```
fisher {{gist_url}}
```

- Edit 'fishfile' by hand with your favorite editor and install multiple plugins:

```
{{editor}} ~/.config/fish/fishfile; fisher
```

- List installed plugins:

```
fisher ls
```

- Update plugins:

```
fisher update
```

- Remove one or more plugins:

```
fisher remove {{plugin1}} {{plugin2}}
```

fkill

Fabulously kill processes. Cross-platform.

More information: <https://github.com/sindresorhus/fkill>.

- Run without arguments to use the interactive interface:

`fkill`

- Kill the process by pid, name or port:

`fkill {{pid|name|:port}}`

flac

Encodes, decodes and tests flac files.

More information: <https://xiph.org/flac>.

- Encode a wav file to flac (this will create a flac file in the same location as the wav file):

```
flac {{path/to/file.wav}}
```

- Encode a wav file to flac, specifying the output file:

```
flac -o {{path/to/output.flac}} {{path/to/file.wav}}
```

- Decode a flac file to wav, specifying the output file:

```
flac -d -o {{path/to/output.wav}} {{path/to/file.flac}}
```

- Test a flac file for the correct encoding:

```
flac -t {{path/to/file.flac}}
```

flask

A general utility script for Flask applications. Loads the application defined in the **FLASK_APP** environment variable.

More information: <https://flask.palletsprojects.com/en/1.1.x/cli/>.

- Run a development server:

```
flask run
```

- Show the routes for the app:

```
flask routes
```

- Run a Python interactive shell in the app's context:

```
flask shell
```

flex

Lexical analyser generator. Based on **lex**.

Given the specification for a lexical analyser, generates C code implementing it.

- Generate an analyser from a flex file:

```
flex {{analyser.l}}
```

- Specify the output file:

```
flex --outfile {{analyser.c}} {{analyser.l}}
```

- Compile a C file generated by flex:

```
cc {{path/to/lex.yy.c}} --output {{executable}}
```

flow

A static type checker for JavaScript.

More information: <https://flow.org>.

- Run a flow check:

```
flow
```

- Check which files are being checked by flow:

```
flow ls
```

- Run a type coverage check on all files in a directory:

```
flow batch-coverage --show-all --strip-root {{path/to/directory}}
```

- Display line-by-line type coverage stats:

```
flow coverage --color {{path/to/file.jsx}}
```

fls

List files and directories in an image file or device.

More information: <https://wiki.sleuthkit.org/index.php?title=Fls>.

- Build a recursive fls list over a device, output paths will start with C:

```
fls -r -m {{C:}} {{/dev/loop1p1}}
```

- Analyse a single partition, providing the sector offset at which the filesystem starts in the image:

```
fls -r -m {{C:}} -o {{sector}} {{path/to/image_file}}
```

- Analyse a single partition, providing the timezone of the original system:

```
fls -r -m {{C:}} -z {{timezone}} {{/dev/loop1p1}}
```

flutter

Google's free, open source, and cross-platform mobile app SDK.

More information: <https://github.com/flutter/flutter/wiki/The-flutter-tool>.

- Display help about a specific command:

```
flutter help {{command}}
```

- Check if all external tools are correctly installed:

```
flutter doctor
```

- List or change Flutter channel:

```
flutter channel {{stable|beta|dev|master}}
```

- Run Flutter on all started emulators and connected devices:

```
flutter run -d all
```

- Download all packages specified in `pubspec.yaml`:

```
flutter pub get
```

- Run tests in a terminal from the root of the project:

```
flutter test {{test/example_test.dart}}
```

- Build a release APK targeting most modern smartphones:

```
flutter build apk --target-platform {{android-arm}}  
{{android-arm64}}
```

fly

Command line tool for concourse-ci.

More information: <https://concourse-ci.org/fly.html>.

- Authenticate with and save concourse target:

```
fly --target {{target_name}} login --team-name {{team_name}}
-c {{https://ci.example.com}}
```

- List targets:

```
fly targets
```

- List pipelines:

```
fly -t {{target_name}} pipelines
```

- Upload or update a pipeline:

```
fly -t {{target_name}} set-pipeline --config {{pipeline.yml}}
--pipeline {{pipeline_name}}
```

- Unpause pipeline:

```
fly -t {{target_name}} unpause-pipeline --pipeline
{{pipeline_name}}
```

- Show pipeline configuration:

```
fly -t {{target_name}} get-pipeline --pipeline
{{pipeline_name}}
```

- Update local copy of fly:

```
fly -t {{target_name}} sync
```

- Destroy pipeline:

```
fly -t {{target_name}} destroy-pipeline --pipeline
{{pipeline_name}}
```

fmt

Reformat a text file by joining its paragraphs and limiting the line width to given number of characters (75 by default).

- Reformat a file:

```
fmt {{path/to/file}}
```

- Reformat a file producing output lines of (at most) **n** characters:

```
fmt -w {{n}} {{path/to/file}}
```

- Reformat a file without joining lines shorter than the given width together:

```
fmt -s {{path/to/file}}
```

- Reformat a file with uniform spacing (1 space between words and 2 spaces between paragraphs):

```
fmt -u {{path/to/file}}
```

fnm

Fast Node.js version manager.

Install, uninstall or switch between Node.js versions.

More info: <https://github.com/Schniz/fnm>.

- Install a specific version of Node.js:

```
fnm install {{node_version}}
```

- List all available Node.js versions and highlight the default one:

```
fnm ls
```

- Use a specific version of Node.js in the current shell:

```
fnm use {{node_version}}
```

- Set the default Node.js version:

```
fnm default {{node_version}}
```

- Uninstall a given Node.js version:

```
fnm uninstall {{node_version}}
```

fold

Wraps each line in an input file to fit a specified width and prints it to the standard output.

- Wrap each line to default width (80 characters):

```
fold {{file}}
```

- Wrap each line to width "30":

```
fold -w30 {{file}}
```

- Wrap each line to width "5" and break the line at spaces (puts each space separated word in a new line, words with length > 5 are wrapped):

```
fold -w5 -s {{file}}
```

for

Shell loop over parameters.

- Perform a command with different arguments:

```
for argument in 1 2 3; do {{command $argument}}; done
```

- Perform a command in every directory:

```
for d in *; do (cd $d; {{command}}); done
```

forever

Server-side JavaScript application that makes sure Node.js applications run indefinitely (restarts after exit).

More information: <https://github.com/foreversd/forever>.

- Start running a file forever (as a daemon):

```
forever {{script}}
```

- List running "forever" processes (along with IDs and other details of "forever" processes):

```
forever list
```

- Stop a running "forever" process:

```
forever stop {{ID|pid|script}}
```

fortune

Print a random quotation (fortune-cookie style).

- Print a quotation:

`fortune`

- Print an offensive quotation:

`fortune -o`

- Print a long quotation:

`fortune -l`

- Print a short quotation:

`fortune -s`

- List the available quotation database files:

`fortune -f`

- Print a quotation from one of the database files listed by `fortune -f`:

`fortune {{filename}}`

fossa

CLI for the Fossa service - Generate realtime license audits, vulnerability scans and reports about dependencies licenses.

More information: <https://github.com/fossas/fossa-cli>.

- Initialize a `.fossa.yml` configuration file:

`fossa init`

- Run a default project build:

`fossa build`

- Analyze built dependencies:

`fossa analyze`

- Generate reports:

`fossa report`

- Test current revision against the FOSSA scan status and exit with errors if issues are found:

`fossa test`

fping

A more powerful ping which can ping multiple hosts.

More information: <https://fping.org>.

- List alive hosts within a subnet generated from a netmask:

```
fping -a -g 192.168.1.0/24
```

- List alive hosts within a subnet generated from an IP range:

```
fping -a -g 192.168.1.1 192.168.1.254
```

- List unreachable hosts within a subnet generated from a netmask:

```
fping -u -g 192.168.1.0/24
```

fselect

Find files with SQL-like queries.

More information: <https://github.com/jhpetersson/fselect>.

- Select full path and size from temporary or config files in a given directory:

```
fselect size, path from {{path/to/directory}} where name = {{'*cfg'}} or name = {{'*tmp'}}
```

- Find square images:

```
fselect path from {{path/to/directory}} where width = height
```

- Find old-school rap 320kbps MP3 files:

```
fselect path from {{path/to/directory}} where genre = {{Rap}} and bitrate = {{320}} and mp3_year lt {{2000}}
```

- Select only the first 5 results and output as JSON:

```
fselect size, path from {{path/to/directory}} limit {{5}} into json
```

- Use SQL aggregate functions to calculate minimum, maximum and average size of files in a directory:

```
fselect "{{MIN(size), MAX(size), AVG(size), SUM(size), COUNT(*)}} from {{path/to/directory}}"
```

fswatch

A cross-platform file change monitor.

More information: <https://emcrisostomo.github.io/fswatch>.

- Run a bash command on file creation, update or deletion:

```
fswatch {{path/to/file}} | xargs -n 1 {{bash_command}}
```

- Watch one or more files and/or directories:

```
fswatch {{path/to/file}} {{path/to/directory}} {{path/to/another_directory/**/*.*}} | xargs -n 1 {{bash_command}}
```

- Print the absolute paths of the changed files:

```
fswatch {{path/to/directory}} | xargs -n 1 -I {} echo {}
```

- Filter by event type, eg. Updated, Deleted or Created:

```
fswatch --event {{Updated}} {{path/to/directory}} | xargs -n 1 {{bash_command}}
```

fswebcam

Small and simple webcam for *nix.

More information: <https://www.sanslogic.co.uk/fswebcam>.

- Take a picture:

```
fswebcam {{filename}}
```

- Take a picture with custom resolution:

```
fswebcam -r {{width}}x{{height}} {{filename}}
```

- Take a picture from selected device(Default is /dev/video0):

```
fswebcam -d {{device}} {{filename}}
```

- Take a picture with timestamp(timestamp string is formatted by strftime):

```
fswebcam --timestamp {{timestamp}} {{filename}}
```

ftp

Tools to interact with a server via File Transfer Protocol.

- Connect to an FTP server:

```
ftp {{ftp.example.com}}
```

- Switch to binary transfer mode (graphics, compressed files, etc):

```
binary
```

- Transfer multiple files without prompting for confirmation on every file:

```
prompt off
```

- Download multiple files (glob expression):

```
mget {{*.png}}
```

- Upload multiple files (glob expression):

```
mput {{*.zip}}
```

- Delete multiple files on the remote server:

```
mdelete {{*.txt}}
```

- Rename a file on the remote server:

```
rename {{original_filename}} {{new_filename}}
```

fuck

Corrects your previous console command.

More information: <https://github.com/nvbn/thefuck>.

- Set the `fuck` alias to `thefuck` tool:

```
eval "$(thefuck --alias)"
```

- Try to match a rule for the previous command:

```
fuck
```

func

Azure Functions Core Tools: Develop and test Azure Functions locally.

Local functions can connect to live Azure services, and can deploy a function app to an Azure subscription.

More information: <https://docs.microsoft.com/azure/azure-functions/functions-run-local>.

- Create a new functions project:

```
func init {{project}}
```

- Create a new function:

```
func new
```

- Run functions locally:

```
func start
```

- Publish your code to a function app in Azure:

```
func azure functionapp publish {{function}}
```

- Download all settings from an existing function app:

```
func azure functionapp fetch-app-settings {{function}}
```

- Get the connection string for a specific storage account:

```
func azure storage fetch-connection-string  
{{storage_account}}
```

fzf

Command line fuzzy finder.

More information: <https://github.com/junegunn/fzf>.

- Start finder on all files from arbitrary locations:

```
find {{path/to/search}} -type f | fzf
```

- Start finder on running processes:

```
ps aux | fzf
```

- Select multiple files with **Shift + Tab** and write to a file:

```
find {{path/to/search_files}} -type f | fzf -m > {{filename}}
```

- Start finder with a given query:

```
fzf -q "{{query}}"
```

- Start finder on entries that start with core and end with either go, rb, or py:

```
fzf -q "^core go$ | rb$ | py$"
```

- Start finder on entries that not match pyc and match exactly travis:

```
fzf -q "!pyc 'travis'"
```

gplusplus

Compiles C++ source files.

Part of GCC (GNU Compiler Collection).

More information: <https://gcc.gnu.org>.

- Compile a source code file into an executable binary:

```
g++ {{source.cpp}} -o {{output_executable}}
```

- Display (almost) all errors and warnings:

```
g++ {{source.cpp}} -Wall -o {{output_executable}}
```

- Choose a language standard to compile for(C++98/C++11/C++14/C++17):

```
g++ {{source.cpp}} -std={{language_standard}} -o  
{{output_executable}}
```

- Include libraries located at a different path than the source file:

```
g++ {{source.cpp}} -o {{output_executable}} -I{{header_path}}  
-L{{library_path}} -l{{library_name}}
```

gatsby

Static site generator for React.

More information: <https://gatsbyjs.org>.

- Create a new site:

```
gatsby new {{site_name}}
```

- Create a new site with a Gatsby 'starter':

```
gatsby new {{site_name}} {{url_of_starter_github_repo}}
```

- Start a live-reloading local development server:

```
gatsby develop
```

- Perform a production build and generate static HTML:

```
gatsby build
```

- Start a local server which serves the production build:

```
gatsby serve
```

gcal

Displays calendar.

More information: <https://www.gnu.org/software/gcal>.

- Display calendar for the current month:

`gcal`

- Display calendar for the month of February of the year 2010:

`gcal {{2}} {{2010}}`

- Provide calendar sheet with week numbers:

`gcal --with-week-number`

- Change starting day of week to 1st day of the week (Monday):

`gcal --starting-day={{1}}`

- Display the previous, current and next month surrounding today:

`gcal .`

gcalcli

Command line tool to interact with Google Calendar.

Requests Google API authorization upon first launch.

More information: <https://github.com/insanum/gcalcli>.

- List your events for all your calendars over the next 7 days:

`gcalcli agenda`

- Show events starting from or between specific dates (also takes relative dates e.g. "tomorrow"):

`gcalcli agenda {{mm/dd}} [{{mm/dd}}]`

- List events from a specific calendar:

`gcalcli --calendar {{calendar_name}} agenda`

- Display an ASCII calendar of events by week:

`gcalcli calw`

- Display an ASCII calendar of events for a month:

`gcalcli calm`

- Quick-add an event to your calendar:

`gcalcli --calendar {{calendar_name}} quick "{{mm/dd}} {{HH:MM}} {{event_name}}"`

- Add an event to calendar. Triggers interactive prompt:

`gcalcli --calendar "{{calendar_name}}" add`

gcc

Preprocess and compile C and C++ source files, then assemble and link them together.

More information: <https://gcc.gnu.org>.

- Compile multiple source files into executable:

```
gcc {{source1.c}} {{source2.c}} -o {{executable}}
```

- Allow warnings, debug symbols in output:

```
gcc {{source.c}} -Wall -Og -o {{executable}}
```

- Include libraries from a different path:

```
gcc {{source.c}} -o {{executable}} -I{{header_path}} -L{{library_path}} -l{{library_name}}
```

- Compile source code into Assembler instructions:

```
gcc -S {{source.c}}
```

- Compile source code without linking:

```
gcc -c {{source.c}}
```

gcloud

The official CLI tool for Google Cloud Platform.

More information: <https://cloud.google.com/sdk/gcloud>.

- List all properties in one's active configuration:

```
gcloud config list
```

- Login to Google account:

```
gcloud auth login
```

- Set the active project:

```
gcloud config set project {{project_name}}
```

- SSH into a virtual machine instance:

```
gcloud compute ssh {{user}}@{{instance}}
```

- Display all Google Compute Engine instances in a project. Instances from all zones are listed by default:

```
gcloud compute instances list
```

- Update a kubeconfig file with the appropriate credentials to point kubectl to a specific cluster in Google Kubernetes Engine:

```
gcloud container clusters get-credentials {{cluster_name}}
```

- Update all gcloud CLI components:

```
gcloud components update
```

- Show help for a given command:

```
gcloud help {{command}}
```

gdalbuildvrt

Build Virtual Datasets from a list of existing datasets.

More information: <https://gdal.org/programs/gdalbuildvrt.html>.

- Make a virtual mosaic from all TIFF files contained in a directory:

```
gdalbuildvrt {{path/to/output.vrt}} {{path/to/ input_directory/*.tif}}
```

- Make a virtual mosaic from files whose name is specified in a text file:

```
gdalbuildvrt -input_file_list {{path/to/list.txt}} {{path/to/ output.vrt}}
```

- Make a RGB virtual mosaic from 3 single-band input files:

```
gdalbuildvrt -separate {{path/to/rgb.vrt}} {{path/to/ red.tif}} {{path/to/green.tif}} {{path/to/blue.tif}}
```

- Make a virtual mosaic with blue background colour (RGB: 0 0 255):

```
gdalbuildvrt -hidenodata -vrtnodata "{{0 0 255}}" {{path/to/ output.vrt}} {{path/to/input_directory/*.tif}}
```

gdb

The GNU Debugger.

More information: <https://www.gnu.org/software/gdb>.

- Debug an executable:

```
gdb {{executable}}
```

- Attach a process to gdb:

```
gdb -p {{procID}}
```

- Debug with a core file:

```
gdb -c {{core}} {{executable}}
```

- Execute given GDB commands upon start:

```
gdb -ex "{{commands}}" {{executable}}
```

- Start gdb and pass arguments to the executable:

```
gdb --args {{executable}} {{argument1}} {{argument2}}
```

gdrive

Command line tool to interact with Google Drive.

Folder/file id can be obtained from the Google Drive folder or id url.

More information: <https://github.com/gdrive-org/gdrive>.

- Upload a local path to the parent folder with the specified id:

```
gdrive upload -p {{id}} {{path/to/file_or_folder}}
```

- Download file or directory by id to current directory:

```
gdrive download {{id}}
```

- Download to a given local path by its id:

```
gdrive download --path {{path/to/folder}} {{id}}
```

- Create a new revision of an id using a given file or folder:

```
gdrive update {{id}} {{path/to/file_or_folder}}
```

gem

Interact with the package manager for the Ruby programming language.

More information: <https://rubygems.org>.

- Search for remote gem(s) and show all available versions:

```
gem search {{regexp}} --all
```

- Install latest version of a gem:

```
gem install {{gemname}}
```

- Install specific version of a gem:

```
gem install {{gemname}} --version {{1.0.0}}
```

- Install the latest matching (SemVer) version of a gem:

```
gem install {{gemname}} --version '~> {{1.0}}'
```

- Update a gem:

```
gem update {{gemname}}
```

- List all local gems:

```
gem list
```

- Uninstall a gem:

```
gem uninstall {{gemname}}
```

- Uninstall specific version of a gem:

```
gem uninstall {{gemname}} --version {{1.0.0}}
```

geth

The go-ethereum command line interface.

More information: <https://geth.ethereum.org>.

- Connect to the main Ethereum network and automatically download the full node:

`geth`

- Connect to the Ropsten test network:

`geth --testnet`

- Create a new account:

`geth account new`

- Enable mining:

`geth --mine`

gh auth

Authenticate with a GitHub host from the command line.

More information: https://cli.github.com/manual/gh_auth.

- Login with interactive prompt:

```
gh auth login
```

- Login with a token from standard input (created in <https://github.com/settings/tokens>):

```
echo {{your_token}} | gh auth login --with-token
```

- Check if you are logged in:

```
gh auth status
```

- Log out:

```
gh auth logout
```

- Login with a specific GitHub Enterprise Server:

```
gh auth login --hostname {{github.example.com}}
```

gh config

Change configuration for GitHub cli.

More information: https://cli.github.com/manual/gh_config.

- Display what Git protocol is being used:

```
gh config get git_protocol
```

- Set protocol to SSH:

```
gh config set git_protocol {{ssh}}
```

- Set text editor to Vim:

```
gh config set editor {{vim}}
```

- Reset to default text editor:

```
gh config set editor {{""}}
```

- Disable interactive prompts:

```
gh config set prompt {{disabled}}
```

- Set a specific configuration value:

```
gh config set {{key}} {{value}}
```

gh gist

Work with GitHub Gists on the command line.

More information: https://cli.github.com/manual/gh_gist.

- Create a new Gist from a space-separated list of files:

```
gh gist create {{path/to/files}}
```

- Create a new Gist with a description:

```
gh gist create {{filename}} --desc "{{description}}"
```

- Edit a Gist:

```
gh gist edit {{id_or_url}}
```

- List Gists owned by the currently logged in user:

```
gh gist list --limit {{int}}
```

- View a Gist in the default browser without rendering markdown:

```
gh gist view {{id_or_url}} --web --raw
```

gh issue

Manage GitHub issues from the command line.

More information: https://cli.github.com/manual/gh_issue.

- Print out the issue:

```
gh issue view {{issue_number}}
```

- Create a new issue in the web browser:

```
gh issue create --web
```

- List the last 10 issues with the **bug** label:

```
gh issue list --limit {{10}} --label "{{bug}}"
```

- List closed issues made by a specific user:

```
gh issue list --state closed --author {{username}}
```

- Display the status of issues relevant to the user, in a specific repository:

```
gh issue status --repo {{owner}}/{{repository}}
```

- Reopen an issue:

```
gh issue reopen {{issue_number}}
```

gh-pr

Manage GitHub pull requests from the command line.

More information: https://cli.github.com/manual/gh_pr.

- Create a pull request:

```
gh pr create
```

- Check out a pull request locally:

```
gh pr checkout {{pr_number}}
```

- View the changes made in the PR:

```
gh pr diff
```

- Approve the pull request of the current branch:

```
gh pr review --approve
```

- Merge the pull request associated with the current branch, removing the branch on both the local and the remote:

```
gh pr merge
```

gh release

Manage GitHub releases from the command line.

More information: https://cli.github.com/manual/gh_release.

- List releases in a GitHub repository, limited to 30 items:

```
gh release list
```

- Display information about a specific release:

```
gh release view {{tag}}
```

- Create a new release:

```
gh release create {{tag}}
```

- Delete a specific release:

```
gh release delete {{tag}}
```

- Download assets from a specific release:

```
gh release download {{tag}}
```

- Upload assets to a specific release:

```
gh release upload {{tag}} {{path/to/file1}} {{path/to/file2}}
```

gh repo

Work with GitHub repositories on the command line.

More information: https://cli.github.com/manual/gh_repo.

- Create a new repository (if the repository name is not set, the default name will be the name of the current directory):

```
gh repo create {{name}}
```

- Clone a repository:

```
gh repo clone {{owner}}/{{repository}}
```

- Fork and clone a repository:

```
gh repo fork {{owner}}/{{repository}} --clone
```

- View a repository in the web browser:

```
gh repo view {{repository}} --web
```

gh

Work seamlessly with GitHub from the command line.

More information: <https://cli.github.com/>.

- Clone a repository locally:

```
gh repo clone {{owner}}/{{repository}}
```

- Create a new issue:

```
gh issue create
```

- View and filter a repository's open issues:

```
gh issue list
```

- View an issue in the browser:

```
gh issue view --web {{issue_number}}
```

- Create a pull request:

```
gh pr create
```

- View a pull request in the browser:

```
gh pr view --web {{pr_number}}
```

- Check out pull requests locally:

```
gh pr checkout {{pr_number}}
```

- Check the status of a repository's pull requests:

```
gh pr status
```

ghc

The Glasgow Haskell Compiler.

Compiles and links Haskell source files.

More information: <https://www.haskell.org/ghc>.

- Find and compile all modules in the current directory:

`ghc Main`

- Compile a single file:

`ghc {{file.hs}}`

- Compile using extra optimization:

`ghc -O {{file.hs}}`

- Stop compilation after generating object files (.o):

`ghc -c {{file.hs}}`

- Run Haskell interactive interpreter (REPL):

`ghci`

- Evaluate a single expression:

`ghc -e {{expression}}`

ghci

The Glasgow Haskell Compiler's interactive environment.

More information: https://downloads.haskell.org/ghc/latest/docs/html/users_guide/ghci.html.

- Start a REPL (interactive shell):

```
ghci
```

- Start a REPL and load the specified Haskell source file:

```
ghci {{source_file.hs}}
```

- Start a REPL and enable a language option:

```
ghci -X{{language_option}}
```

- Start a REPL and enable some level of compiler warnings (e.g. **all** or **compact**):

```
ghci -W{{warning_level}}
```

- Start a REPL with a colon-separated list of directories for finding source files:

```
ghci -i{{path/to/directory1}}:{{path/to/directory2}}
```

ghdl

Open-source simulator for the VHDL language.

More information: <http://ghdl.free.fr>.

- Analyze a VHDL source file and produce an object file:

```
ghdl -a {{filename.vhdl}}
```

- Elaborate a design (where `{{design}}` is the name of a configuration unit, entity unit or architecture unit):

```
ghdl -e {{design}}
```

- Run an elaborated design:

```
ghdl -r {{design}}
```

- Run an elaborated design and dump output to a waveform file:

```
ghdl -r {{design}} --wave={{output.ghw}}
```

- Check the syntax of a VHDL source file:

```
ghdl -s {{filename.vhdl}}
```

- Display the help page:

```
ghdl --help
```

ghost

A blogging platform and headless CMS.

More information: <https://ghost.org>.

- Install Ghost in the current directory:

`ghost install`

- Start an instance of Ghost:

`ghost start`

- Restart the Ghost instance:

`ghost restart`

- Check the system for any potential hiccups when on install or update of Ghost:

`ghost doctor`

- View the logs of a Ghost instance:

`ghost log {{name}}`

- Run a Ghost instance directly (used by process managers and for debugging):

`ghost run`

- View running Ghost processes:

`ghost ls`

- View or edit Ghost configuration:

`ghost config {{key}} {{value}}`

gibo

Fetch gitignore boilerplates.

More information: <https://github.com/simonwhitaker/gibo>.

- List available boilerplates:

```
gibo list
```

- Write a boilerplate to `stdout`:

```
gibo dump {{boilerplate}}
```

- Write a boilerplate to `.gitignore`:

```
gibo dump {{boilerplate}} >>{{.gitignore}}
```

- Search for boilerplates containing a given string:

```
gibo search {{string}}
```

- Update available local boilerplates:

```
gibo update
```

gifsicle

Create GIFs.

More information: <https://www.lcdf.org/gifsicle>.

- Optimise a GIF:

```
gifsicle --batch --optimize=3 {{amin.gif}}
```

- Make a GIF animation with gifsicle:

```
gifsicle --delay={{10}} --loop *.gif > {{anim.gif}}
```

- Extract frames from an animation:

```
gifsicle {{anim.gif}} '#0' > {{firstframe.gif}}
```

- You can also edit animations by replacing, deleting, or inserting frames:

```
gifsicle -b {{anim.gif}} --replace '#0' {{new.gif}}
```

gist

Upload code to <https://gist.github.com>.

More information: <https://github.com/defunkt/gist>.

- Login in gist on this computer:

```
gist --login
```

- Create a gist from any number of text files:

```
gist {{file.txt}} {{file2.txt}}
```

- Create a private gist with a description:

```
gist -p -d "{{A meaningful description}}" {{file.txt}}
```

- Read contents from `stdin` and create a gist from it:

```
{{echo "hello world"}} | gist
```

- List your public and private gists:

```
gist -l
```

- List all gists for the currently logged in user:

```
gist -l {{username}}
```

- Use the id from the gist URL to modify or include a file:

```
gist -u {{GIST_ID}} {{file.txt}}
```

git add

Adds changed files to the index.

More information: <https://git-scm.com/docs/git-add>.

- Add a file to the index:

```
git add {{path/to/file}}
```

- Add all files (tracked and untracked):

```
git add -A
```

- Only add already tracked files:

```
git add -u
```

- Also add ignored files:

```
git add -f
```

- Interactively stage parts of files:

```
git add -p
```

- Interactively stage parts of a given file:

```
git add -p {{path/to/file}}
```

- Interactively stage a file:

```
git add -i
```

git am

Apply patch files. Useful when receiving commits via email.

See also **git format-patch**, which can generate patch files.

More information: <https://git-scm.com/docs/git-am>.

- Apply a patch file:

```
git am {{path/to/file.patch}}
```

- Abort the process of applying a patch file:

```
git am --abort
```

- Apply as much of a patch file as possible, saving failed hunks to reject files:

```
git am --reject {{path/to/file.patch}}
```

git annex

Manage files with git, without checking their contents in.

When a file is annexed, its content is moved into a key-value store, and a symlink is made that points to the content.

More information: <https://git-annex.branchable.com>.

- Help:

```
git annex help
```

- Initialize a repo with git annex:

```
git annex init
```

- Add a file:

```
git annex add {{path/to/file_or_directory}}
```

- Show the current status of a file or directory:

```
git annex status {{path/to/file_or_directory}}
```

- Synchronize a local repository with a remote:

```
git annex {{remote}}
```

- Get a file or directory:

```
git annex get {{path/to/file_or_directory}}
```

git apply

Apply a patch to files and/or to the index.

More information: <https://git-scm.com/docs/git-apply>.

- Print messages about the patched files:

```
git apply --verbose {{path/to/file}}
```

- Apply and add the patched files to the index:

```
git apply --index {{path/to/file}}
```

- Apply a remote patch file:

```
curl {{https://example.com/file.patch}} | git apply
```

- Output diffstat for the input and apply the patch:

```
git apply --stat --apply {{path/to/file}}
```

- Apply the patch in reverse:

```
git apply --reverse {{path/to/file}}
```

- Store the patch result in the index without modifying the working tree:

```
git apply --cache {{path/to/file}}
```

git archive

Create an archive of files from a named tree.

More information: <https://git-scm.com/docs/git-archive>.

- Create a tar archive from the contents of the current HEAD and print it to standard output:

```
git archive --verbose HEAD
```

- Create a zip archive from the current HEAD and print it to standard output:

```
git archive --verbose --format=zip HEAD
```

- Same as above, but write the zip archive to file:

```
git archive --verbose --output={{path/to/file.zip}} HEAD
```

- Create a tar archive from the contents of the latest commit on a specific branch:

```
git archive --output={{path/to/file.tar}} {{branch_name}}
```

- Create a tar archive from the contents of a specific directory:

```
git archive --output={{path/to/file.tar}} HEAD:{{path/to/directory}}
```

- Prepend a path to each file to archive it inside a specific directory:

```
git archive --output={{path/to/file.tar}} --prefix={{path/to/prepend}}/ HEAD
```

git bisect

Use binary search to find the commit that introduced a bug.

Git automatically jumps back and forth in the commit graph to progressively narrow down the faulty commit.

More information: <https://git-scm.com/docs/git-bisect>.

- Start a bisect session on a commit range bounded by a known buggy commit, and a known clean (typically older) one:

```
git bisect start {{bad_commit}} {{good_commit}}
```

- For each commit that `git bisect` selects, mark it as "bad" or "good" after testing it for the issue:

```
git bisect {{good|bad}}
```

- After `git bisect` pinpoints the faulty commit, end the bisect session and return to the previous branch:

```
git bisect reset
```

- Skip a commit during a bisect (e.g. one that fails the tests due to a different issue):

```
git bisect skip
```

git blame

Show commit hash and last author on each line of a file.

More information: <https://git-scm.com/docs/git-blame>.

- Print file with author name and commit hash on each line:

```
git blame {{file}}
```

- Print file with author email and commit hash on each line:

```
git blame -e {{file}}
```

git branch

Main git command for working with branches.

More information: <https://git-scm.com/docs/git-branch>.

- List local branches. The current branch is highlighted by *:

```
git branch
```

- List all branches (local and remote):

```
git branch -a
```

- Show the name of the current branch:

```
git branch --show-current
```

- Create new branch based on the current commit:

```
git branch {{branch_name}}
```

- Create new branch based on a specific commit:

```
git branch {{branch_name}} {{commit_hash}}
```

- Rename a branch (must not have it checked out to do this):

```
git branch -m {{old_branch_name}} {{new_branch_name}}
```

- Delete a local branch (must not have it checked out to do this):

```
git branch -d {{branch_name}}
```

- Delete a remote branch:

```
git push {{remote_name}} --delete {{remote_branch_name}}
```

git bundle

Package objects and references into an archive.

More information: <https://git-scm.com/docs/git-bundle>.

- Create a bundle file that contains all objects and references of a specific branch:

```
git bundle create {{path/to/file.bundle}} {{branch_name}}
```

- Create a bundle file of all branches:

```
git bundle create {{path/to/file.bundle}} --all
```

- Create a bundle file of the last 5 commits of the current branch:

```
git bundle create {{path/to/file.bundle}} -{{5}} {{HEAD}}
```

- Create a bundle file of the latest 7 days:

```
git bundle create {{path/to/file.bundle}} --since={{7.days}} {{HEAD}}
```

- Verify that a bundle file is valid and can be applied to the current repository:

```
git bundle verify {{path/to/file.bundle}}
```

- Print to the standard output the list of references contained in a bundle:

```
git bundle unbundle {{path/to/file.bundle}}
```

- Unbundle a specific branch from a bundle file into the current repository:

```
git pull {{path/to/file.bundle}} {{branch_name}}
```

git cat-file

Provide content or type and size information for git repository objects.

More information: <https://git-scm.com/docs/git-cat-file>.

- Get the [s]ize of the HEAD commit in bytes:

```
git cat-file -s HEAD
```

- Get the [t]ype (blob, tree, commit, tag) of a given git object:

```
git cat-file -t {{8c442dc3}}
```

- Pretty-[p]rint the contents of a given git object based on its type:

```
git cat-file -p {{HEAD~2}}
```

git check-ignore

Analyse and debug Git ignore / exclude (".`gitignore`") files.

More information: <https://git-scm.com/docs/git-check-ignore>.

- Check whether a file or directory is ignored:

```
git check-ignore {{path/to/file_or_directory}}
```

- Check whether multiple files or directories are ignored:

```
git check-ignore {{path/to/file}} {{path/to/directory}}
```

- Use pathnames, one per line, from `stdin`:

```
git check-ignore --stdin < {{path/to/file_list}}
```

- Do not check the index (used to debug why paths were tracked and not ignored):

```
git check-ignore --no-index {{path/to/files_or_directories}}
```

- Include details about the matching pattern for each path:

```
git check-ignore --verbose {{path/to/files_or_directories}}
```

git checkout

Checkout a branch or paths to the working tree.

More information: <https://git-scm.com/docs/git-checkout>.

- Create and switch to a new branch:

```
git checkout -b {{branch_name}}
```

- Create and switch to a new branch based on a specific reference (branch, remote/branch, tag are examples of valid references):

```
git checkout -b {{branch_name}} {{reference}}
```

- Switch to an existing local branch:

```
git checkout {{branch_name}}
```

- Switch to the previously checked out branch:

```
git checkout -
```

- Switch to an existing remote branch:

```
git checkout --track {{remote_name}}/{{branch_name}}
```

- Discard all unstaged changes in the current directory (see `git reset` for more undo-like commands):

```
git checkout .
```

- Discard unstaged changes to a given file:

```
git checkout {{filename}}
```

- Replace a file in the current directory with the version of it committed in a given branch:

```
git checkout {{branch_name}} -- {{filename}}
```

git cherry-pick

Apply the changes introduced by existing commits to the current branch.

To apply changes to another branch, first use `git checkout` to switch to the desired branch.

More information: <https://git-scm.com/docs/git-cherry-pick>.

- Apply a commit to the current branch:

```
git cherry-pick {{commit}}
```

- Apply a range of commits to the current branch (see also `git rebase --onto`):

```
git cherry-pick {{start_commit}}~..{{end_commit}}
```

- Apply multiple (non-sequential) commits to the current branch:

```
git cherry-pick {{commit_1}} {{commit_2}}
```

- Add the changes of a commit to the working directory, without creating a commit:

```
git cherry-pick -n {{commit}}
```

git cherry

Find commits that have yet to be applied upstream.

More information: <https://git-scm.com/docs/git-cherry>.

- Show commits (and their messages) with equivalent commits upstream:

```
git cherry -v
```

- Specify a different upstream and topic branch:

```
git cherry {{origin}} {{topic}}
```

- Limit commits to those within a given limit:

```
git cherry {{origin}} {{topic}} {{base}}
```

git clean

Remove untracked files from the working tree.

More information: <https://git-scm.com/docs/git-clean>.

- Delete files that are not tracked by git:

`git clean`

- Interactively delete files that are not tracked by git:

`git clean -i`

- Show what files would be deleted without actually deleting them:

`git clean --dry-run`

- Forcefully delete files that are not tracked by git:

`git clean -f`

- Forcefully delete directories that are not tracked by git:

`git clean -fd`

- Delete untracked files, including ignored files in `.gitignore` and `.git/info/exclude`:

`git clean -x`

git clone

Clone an existing repository.

More information: <https://git-scm.com/docs/git-clone>.

- Clone an existing repository:

```
git clone {{remote_repository_location}}
```

- Clone an existing repository into a specific directory:

```
git clone {{remote_repository_location}} {{path/to/directory}}
```

- Clone an existing repository and its submodules:

```
git clone --recursive {{remote_repository_location}}
```

- Clone a local repository:

```
git clone -l {{path/to/local/repository}}
```

- Clone quietly:

```
git clone -q {{remote_repository_location}}
```

- Clone an existing repository only fetching the 10 most recent commits on the default branch (useful to save time):

```
git clone --depth {{10}} {{remote_repository_location}}
```

- Clone an existing repository only fetching a specific branch:

```
git clone --branch {{name}} --single-branch {{remote_repository_location}}
```

git commit

Commit files to the repository.

More information: <https://git-scm.com/docs/git-commit>.

- Commit staged files to the repository with a message:

```
git commit -m {{message}}
```

- Auto stage all modified files and commit with a message:

```
git commit -a -m {{message}}
```

- Update the last commit by adding the currently staged changes, changing the commit's hash:

```
git commit --amend
```

- Commit only specific (already staged) files:

```
git commit {{path/to/my/file1}} {{path/to/my/file2}}
```

git config

Manage custom configuration options for git repositories.

These configurations can be local (for the current repository) or global (for the current user).

More information: <https://git-scm.com/docs/git-config>.

- List only local configuration entries (stored in `.git/config` in the current repository):

```
git config --list --local
```

- List only global configuration entries (stored in `~/.gitconfig`):

```
git config --list --global
```

- List all configuration entries that have been defined either locally or globally:

```
git config --list
```

- Get the value of a given configuration entry:

```
git config alias.unstage
```

- Set the global value of a given configuration entry:

```
git config --global alias.unstage "reset HEAD --"
```

- Revert a global configuration entry to its default value:

```
git config --global --unset alias.unstage
```

- Edit the git configuration for the current repository in the default editor:

```
git config --edit
```

- Edit the global git configuration in the default editor:

```
git config --global --edit
```

git describe

Give an object a human readable name based on an available ref.

More information: <https://git-scm.com/docs/git-describe>.

- Create a unique name for the current commit (the name contains the most recent annotated tag, the number of additional commits, and the abbreviated commit hash):

```
git describe
```

- Create a name with 4 digits for the abbreviated commit hash:

```
git describe --abbrev={{4}}
```

- Generate a name with the tag reference path:

```
git describe --all
```

- Describe a git tag:

```
git describe {{v1.0.0}}
```

- Create a name for the last commit of a given branch:

```
git describe {{branch_name}}
```

git diff

Show changes to tracked files.

More information: <https://git-scm.com/docs/git-diff>.

- Show unstaged, uncommitted changes:

```
git diff
```

- Show all uncommitted changes (including staged ones):

```
git diff HEAD
```

- Show only staged (added, but not yet committed) changes:

```
git diff --staged
```

- Show changes from all commits since a given date/time (a date expression, e.g. "1 week 2 days" or an ISO date):

```
git diff 'HEAD@{3 months|weeks|days|hours|seconds ago}'
```

- Show only names of changed files since a given commit:

```
git diff --name-only {{commit}}
```

- Output a summary of file creations, renames and mode changes since a given commit:

```
git diff --summary {{commit}}
```

- Compare a single file between two branches or commits:

```
git diff {{branch_1}}..{{branch_2}} [--] {{path/to/file}}
```

- Compare different files from the current branch to other branch:

```
git diff {{branch}}:{{path/to/file2}} {{path/to/file}}
```

git difftool

Show file changes using external diff tools. Accepts the same options and arguments as git diff.

More information: <https://git-scm.com/docs/git-difftool>.

- List available diff tools:

```
git difftool --tool-help
```

- Set the default diff tool to meld:

```
git config --global diff.tool "{{meld}}"
```

- Use the default diff tool to show staged changes:

```
git difftool --staged
```

- Use a specific tool (opendiff) to show changes since a given commit:

```
git difftool --tool={{opendiff}} {{commit}}
```

git fetch

Download objects and refs from a remote repository.

More information: <https://git-scm.com/docs/git-fetch>.

- Fetch the latest changes from the default remote upstream repository (if set):

`git fetch`

- Fetch new branches from a specific remote upstream repository:

`git fetch {{remote_name}}`

- Fetch the latest changes from all remote upstream repositories:

`git fetch --all`

- Also fetch tags from the remote upstream repository:

`git fetch --tags`

- Delete local references to remote branches that have been deleted upstream:

`git fetch --prune`

git flow

A collection of Git extensions to provide high-level repository operations.

More information: <https://github.com/nvie/gitflow>.

- Initialize it inside an existing git repository:

```
git flow init
```

- Start developing on a feature branch based on `develop`:

```
git flow feature start {{feature}}
```

- Finish development on a feature branch, merging it into the `develop` branch and deleting it:

```
git flow feature finish {{feature}}
```

- Publish a feature to the remote server:

```
git flow feature publish {{feature}}
```

- Get a feature published by another user:

```
git flow feature pull origin {{feature}}
```

git format-patch

Prepare .patch files. Useful when emailing commits elsewhere.

See also **git am**, which can apply generated .patch files.

More information: <https://git-scm.com/docs/git-format-patch>.

- Create an auto-named .patch file for all the unpushed commits:

```
git format-patch {{origin}}
```

- Write a .patch file for all the commits between 2 revisions to **stdout**:

```
git format-patch {{revision_1}}..{{revision_2}}
```

- Write a .patch file for the 3 latest commits:

```
git format-patch -{{3}}
```

git fsck

Verify the validity and connectivity of nodes in a Git repository index.

Does not make any modifications. See `git gc` for cleaning up dangling blobs.

More information: <https://git-scm.com/docs/git-fsck>.

- Check the current repository:

```
git fsck
```

- List all tags found:

```
git fsck --tags
```

- List all root nodes found:

```
git fsck --root
```

git gc

Optimise the local repository by cleaning unnecessary files.

More information: <https://git-scm.com/docs/git-gc>.

- Optimise the repository:

`git gc`

- Aggressively optimise, takes more time:

`git gc --aggressive`

- Do not prune loose objects (prunes by default):

`git gc --no-prune`

- Suppress all output:

`git gc --quiet`

- View full usage:

`git gc --help`

git-grep

Find strings inside files anywhere in a repository's history.

Accepts a lot of the same flags as regular **grep**.

More information: <https://git-scm.com/docs/git-grep>.

- Search for a string in tracked files:

```
git grep {{search_string}}
```

- Search for a string in files matching a pattern in tracked files:

```
git grep {{search_string}} -- {{file_glob_pattern}}
```

- Search for a string in tracked files, including submodules:

```
git grep --recurse-submodules {{search_string}}
```

- Search for a string at a specific point in history:

```
git grep {{search_string}} {{HEAD~2}}
```

- Search for a string across all branches:

```
git grep {{search_string}} $(git rev-list --all)
```

git help

Display help information about git.

More information: <https://git-scm.com/docs/git-help>.

- Display help about a specific git subcommand:

```
git help {{subcommand}}
```

- Display help about a specific git subcommand in a web browser:

```
git help --web {{subcommand}}
```

- Display a list of all available git subcommands:

```
git help --all
```

- List the available guides:

```
git help --guide
```

- List all possible configuration variables:

```
git help --config
```

git ignore

Generate .gitignore files from predefined templates.

More information: <https://docs.gitignore.io/install/command-line>.

- List available templates:

```
git ignore list
```

- Generate a .gitignore template:

```
git ignore {{item_a,item_b,item_n}}
```

git-imerge

Perform a merge or rebase between two git branches incrementally.

Conflicts between branches are tracked down to pairs of individual commits, to simplify conflict resolution.

More information: <https://github.com/mhagger/git-imerge>.

- Start imerge-based rebase (checkout the branch to be rebased, first):

```
git imerge rebase {{branch_to_rebase_onto}}
```

- Start imerge-based merge (checkout the branch to merge into, first):

```
git imerge merge {{branch_to_be_merged}}
```

- Show ASCII diagram of in-progress merge or rebase:

```
git imerge diagram
```

- Continue imerge operation after resolving conflicts (`git add` the conflicted files, first):

```
git imerge continue --no-edit
```

- Wrap up imerge operation, after all conflicts are resolved:

```
git imerge finish
```

- Abort imerge operation, and return to the previous branch:

```
git-imerge remove && git checkout {{previous_branch}}
```

git init

Initializes a new local Git repository.

More information: <https://git-scm.com/docs/git-init>.

- Initialize a new local repository:

```
git init
```

- Initialize a repository using SHA256 for object hashes (requires git version 2.29+):

```
git init --object-format={{sha256}}
```

- Initialize a barebones repository, suitable for use as a remote over ssh:

```
git init --bare
```

git instaweb

Helper to launch a gitweb server.

More information: <https://git-scm.com/docs/git-instaweb>.

- Launch a gitweb server for the current git repository:

```
git instaweb --start
```

- Listen only on localhost:

```
git instaweb --start --local
```

- Listen on a specific port:

```
git instaweb --start --port {{1234}}
```

- Use a specified http daemon:

```
git instaweb --start --httpd {{lighttpd|apache2|mongoose|
plackup|webrick}}
```

- Also auto-launch a web browser:

```
git instaweb --start --browser
```

- Stop the currently running gitweb server:

```
git instaweb --stop
```

- Restart the currently running gitweb server:

```
git instaweb --restart
```

git lfs

Work with large files in Git repositories.

More information: <https://git-lfs.github.com>.

- Initialise Git LFS:

```
git lfs install
```

- Track files that match a glob:

```
git lfs track '{*.bin}'
```

- Change the Git LFS endpoint URL (useful if the LFS server is separate from the Git server):

```
git config -f .lfsconfig lfs.url {{lfs_endpoint_url}}
```

- List tracked patterns:

```
git lfs track
```

- List tracked files that have been committed:

```
git lfs ls-files
```

- Push all Git LFS objects to the remote server (useful if errors are encountered):

```
git lfs push --all {{remote_name}} {{branch_name}}
```

- Fetch all Git LFS objects:

```
git lfs fetch
```

- Checkout all Git LFS objects:

```
git lfs checkout
```

git log

Show a history of commits.

More information: <https://git-scm.com/docs/git-log>.

- Show the sequence of commits starting from the current one, in reverse chronological order of the git repository in the current working directory:

```
git log
```

- Show the history of a particular file or directory, including differences:

```
git log -p {{path/to/file_or_directory}}
```

- Show an overview of which file(s) changed in each commit:

```
git log --stat
```

- Show a graph of commits in the current branch using only the first line of each commit message:

```
git log --oneline --graph
```

- Show a graph of all commits, tags and branches in the entire repo:

```
git log --oneline --decorate --all --graph
```

- Show only commits whose messages include a given string (case-insensitively):

```
git log -i --grep {{search_string}}
```

- Show the last N commits from a certain author:

```
git log -n {{number}} --author={{author}}
```

- Show commits between two dates:

```
git log --before={{date}} --after={{date}}
```

git ls-files

Show information about files in the index and the working tree.

More information: <https://git-scm.com/docs/git-ls-files>.

- Show deleted files:

```
git ls-files --deleted
```

- Show modified and deleted files:

```
git ls-files --modified
```

- Show ignored and untracked files:

```
git ls-files --others
```

git ls-remote

Git command for listing references in a remote repository based on name or URL.

If no name or URL are given, then the configured upstream branch will be used, or remote origin if the former is not configured.

More information: <https://git-scm.com/docs/git-ls-remote.html>.

- Show all references in the default remote repository:

```
git ls-remote
```

- Show only heads references in the default remote repository:

```
git ls-remote --heads
```

- Show only tags references in the default remote repository:

```
git ls-remote --tags
```

- Show all references from a remote repository based on name or url:

```
git ls-remote {{repository_url}}
```

- Show references from a remote repository filtered by a pattern:

```
git ls-remote {{repository_name}} "{{pattern}}"
```

git ls-tree

List the contents of a tree object.

More information: <https://git-scm.com/docs/git-ls-tree>.

- List the contents of the tree on a branch:

```
git ls-tree {{branch_name}}
```

- List the contents of the tree on a commit, recursing into subtrees:

```
git ls-tree -r {{commit_hash}}
```

- List only the filenames of the tree on a commit:

```
git ls-tree --name-only {{commit_hash}}
```

git merge

Merge branches.

More information: <https://git-scm.com/docs/git-merge>.

- Merge a branch into your current branch:

```
git merge {{branch_name}}
```

- Edit the merge message:

```
git merge -e {{branch_name}}
```

- Merge a branch and create a merge commit:

```
git merge --no-ff {{branch_name}}
```

- Abort a merge in case of conflicts:

```
git merge --abort
```

git mergetool

Run merge conflict resolution tools to resolve merge conflicts.

More information: <https://git-scm.com/docs/git-mergetool>.

- Launch the default merge tool to resolve conflicts:

```
git mergetool
```

- List valid merge tools:

```
git mergetool --tool-help
```

- Launch the merge tool identified by a name:

```
git mergetool --tool {{tool_name}}
```

- Don't prompt before each invocation of the merge tool:

```
git mergetool --no-prompt
```

- Explicitly use the GUI merge tool (see the `merge.guitool` config variable):

```
git mergetool --gui
```

- Explicitly use the regular merge tool (see the `merge.tool` config variable):

```
git mergetool --no-gui
```

git mv

Move or rename files and update the git index.

More information: <https://git-scm.com/docs/git-mv>.

- Move file inside the repo and add the movement to the next commit:

```
git mv {{path/to/file}} {{new/path/to/file}}
```

- Rename file and add renaming to the next commit:

```
git mv {{filename}} {{new_filename}}
```

- Overwrite the file in the target path if it exists:

```
git mv --force {{file}} {{target}}
```

git notes

Add or inspect object notes.

More information: <https://git-scm.com/docs/git-notes>.

- List all notes and the objects they are attached to:

```
git notes list
```

- List all notes attached to a given object (defaults to HEAD):

```
git notes list {{object}}
```

- Show the notes attached to a given object (defaults to HEAD):

```
git notes show {{object}}
```

- Append a note to a specified object (opens the default text editor):

```
git notes append {{object}}
```

- Append a note to a specified object, specifying the message:

```
git notes append --message="{{message_text}}"
```

- Edit an existing note (defaults to HEAD):

```
git notes edit {{object}}
```

- Copy a note from one object to another:

```
git notes copy {{source_object}} {{target_object}}
```

- Remove all the notes added to a specified object:

```
git notes remove {{object}}
```

git pr

Check out GitHub pull requests locally.

More information: <https://github.com/tj/git-extras/blob/master/Commands.md#git-pr>.

- Check out a specific pull request:

```
git pr {{pr_number}}
```

- Check out a pull request for a specific remote:

```
git pr {{pr_number}} {{remote}}
```

- Check out a pull request from its URL:

```
git pr {{url}}
```

- Clean up old pull request branches:

```
git pr clean
```

git prune

Git command for pruning all unreachable objects from the object database.

This command is often not used directly but as an internal command that is used by git gc.

More information: <https://git-scm.com/docs/git-prune>.

- Report what would be removed by git prune without removing it:

```
git prune --dry-run
```

- Prune unreachable objects and display what has been pruned to `stdout`:

```
git prune --verbose
```

- Prune unreachable objects while showing progress:

```
git prune --progress
```

git pull

Fetch branch from a remote repository and merge it to local repository.

More information: <https://git-scm.com/docs/git-pull>.

- Download changes from default remote repository and merge it:

```
git pull
```

- Download changes from default remote repository and use fast forward:

```
git pull --rebase
```

- Download changes from given remote repository and branch, then merge them into HEAD:

```
git pull {{remote_name}} {{branch}}
```

git push

Push commits to a remote repository.

More information: <https://git-scm.com/docs/git-push>.

- Send local changes in the current branch to its remote counterpart:

```
git push
```

- Send local changes in a given branch to its remote counterpart:

```
git push {{remote_name}} {{local_branch}}
```

- Publish the current branch to a remote repository, setting the remote branch name:

```
git push {{remote_name}} -u {{remote_branch}}
```

- Send changes on all local branches to their counterparts in a given remote repository:

```
git push --all {{remote_name}}
```

- Delete a branch in a remote repository:

```
git push {{remote_name}} --delete {{remote_branch}}
```

- Remove remote branches that don't have a local counterpart:

```
git push --prune {{remote_name}}
```

- Publish tags that aren't yet in the remote repository:

```
git push --tags
```

git rebase

Reapply commits from one branch on top of another branch.

Commonly used to "move" an entire branch to another base, creating copies of the commits in the new location.

More information: <https://git-scm.com/docs/git-rebase>.

- Rebase the current branch on top of another specified branch:

```
git rebase {{new_base_branch}}
```

- Start an interactive rebase, which allows the commits to be reordered, omitted, combined or modified:

```
git rebase -i {{target_base_branch_or_commit_hash}}
```

- Continue a rebase that was interrupted by a merge failure, after editing conflicting files:

```
git rebase --continue
```

- Continue a rebase that was paused due to merge conflicts, by skipping the conflicted commit:

```
git rebase --skip
```

- Abort a rebase in progress (e.g. if it is interrupted by a merge conflict):

```
git rebase --abort
```

- Move part of the current branch onto a new base, providing the old base to start from:

```
git rebase --onto {{new_base}} {{old_base}}
```

- Reapply the last 5 commits in-place, stopping to allow them to be reordered, omitted, combined or modified:

```
git rebase -i {{HEAD~5}}
```

- Auto-resolve any conflicts by favoring the working branch version (`theirs` keyword has reversed meaning in this case):

```
git rebase -X theirs {{branch_name}}
```

git reflog

Show a log of changes to local references like HEAD, branches or tags.

More information: <https://git-scm.com/docs/git-reflog>.

- Show the reflog for HEAD:

```
git reflog
```

- Show the reflog for a given branch:

```
git reflog {{branch_name}}
```

- Show only the 5 latest entries in the reflog:

```
git reflog -n {{5}}
```

git remote

Manage set of tracked repositories ("remotes").

More information: <https://git-scm.com/docs/git-remote>.

- Show a list of existing remotes, their names and URL:

```
git remote -v
```

- Show information about a remote:

```
git remote show {{remote_name}}
```

- Add a remote:

```
git remote add {{remote_name}} {{remote_url}}
```

- Change the URL of a remote (use `--add` to keep the existing URL):

```
git remote set-url {{remote_name}} {{new_url}}
```

- Remove a remote:

```
git remote remove {{remote_name}}
```

- Rename a remote:

```
git remote rename {{old_name}} {{new_name}}
```

git repack

Pack unpacked objects in a git repository.

More information: <https://git-scm.com/docs/git-repack>.

- Pack unpacked objects in the current directory:

`git repack`

- Also remove redundant objects after packing:

`git repack -d`

git replace

Create, list, and delete refs to replace objects.

More information: <https://git-scm.com/docs/git-replace>.

- Replace any commit with a different one, leaving other commits unchanged:

```
git replace {{object}} {{replacement}}
```

- Delete existing replace refs for the given objects:

```
git replace --delete {{object}}
```

- Edit an object's content interactively:

```
git replace --edit {{object}}
```

git request-pull

Generate a request asking the upstream project to pull changes into its tree.

More information: <https://git-scm.com/docs/git-request-pull>.

- Produce a request summarizing the changes between the v1.1 release and a specified branch:

```
git request-pull {{v1.1}} {{https://example.com/project}}
{{branch_name}}
```

- Produce a request summarizing the changes between the v0.1 release on the **foo** branch and the local **bar** branch:

```
git request-pull {{v0.1}} {{https://example.com/project}}
{{foo:bar}}
```

git reset

Undo commits or unstage changes, by resetting the current git HEAD to the specified state.

If a path is passed, it works as "unstage"; if a commit hash or branch is passed, it works as "uncommit".

More information: <https://git-scm.com/docs/git-reset>.

- Unstage everything:

```
git reset
```

- Unstage specific file(s):

```
git reset {{path/to/file(s)}}
```

- Unstage portions of a file:

```
git reset -p {{path/to/file}}
```

- Undo the last commit, keeping its changes (and any further uncommitted changes) in the filesystem:

```
git reset HEAD~
```

- Undo the last two commits, adding their changes to the index, i.e. staged for commit:

```
git reset --soft HEAD~2
```

- Discard any uncommitted changes, staged or not (for only unstaged changes, use `git checkout`):

```
git reset --hard
```

- Reset the repository to a given commit, discarding committed, staged and uncommitted changes since then:

```
git reset --hard {{commit}}
```

git restore

Restore working tree files. Requires git version 2.23+.

See also [git checkout](#).

More information: <https://git-scm.com/docs/git-restore/>.

- Restore a deleted file from the contents of the current commit (HEAD):

```
git restore {{path/to/file}}
```

- Restore a file to a version from a different commit:

```
git restore --source {{commit}} {{path/to/file}}
```

- Undo any uncommitted changes to tracked files, reverting to the current HEAD:

```
git restore .
```

git rev-list

List revisions (commits) in reverse chronological order.

More information: <https://git-scm.com/docs/git-rev-list>.

- List all commits on the current branch:

```
git rev-list {{HEAD}}
```

- List commits more recent than a specific date, on a specific branch:

```
git rev-list --since={{'2019-12-01 00:00:00'}}  
{{branch_name}}
```

- List all merge commits on a specific commit:

```
git rev-list --merges {{commit}}
```

git rev-parse

Display metadata related to specific revisions.

More information: <https://git-scm.com/docs/git-rev-parse>.

- Get the commit hash of a branch:

```
git rev-parse {{branch_name}}
```

- Get the current branch name:

```
git rev-parse --abbrev-ref {{HEAD}}
```

- Get the absolute path to the root directory:

```
git rev-parse --show-toplevel
```

git revert

Create new commits which reverse the effect of earlier ones.

More information: <https://git-scm.com/docs/git-revert>.

- Revert the most recent commit:

```
git revert {{@}}
```

- Revert the 5th last commit:

```
git revert HEAD~{{4}}
```

- Revert multiple commits:

```
git revert {{branch_name~5..branch_name~2}}
```

- Don't create new commits, just change the working tree:

```
git revert -n {{0c01a9..9a1743}}
```

git rm

Remove files from repository index and local filesystem.

More information: <https://git-scm.com/docs/git-rm>.

- Remove file from repository index and filesystem:

```
git rm {{file}}
```

- Remove directory:

```
git rm -r {{directory}}
```

- Remove file from repository index but keep it untouched locally:

```
git rm --cached {{file}}
```

git send-email

Send a collection of patches as emails.

Patches can be specified as files, directions, or a revision list.

More information: <https://git-scm.com/docs/git-send-email>.

- Send the last commit in the current branch:

```
git send-email -1
```

- Send a given commit:

```
git send-email -1 {{commit}}
```

- Send multiple (e.g. 10) commits in the current branch:

```
git send-email {{-10}}
```

- Send an introductory email message for the patch series:

```
git send-email -{{number_of_commits}} --compose
```

- Review and edit the email message for each patch you're about to send:

```
git send-email -{{number_of_commits}} --annotate
```

git shortlog

Summarizes the `git log` output.

More information: <https://git-scm.com/docs/git-shortlog>.

- View a summary of all the commits made, grouped alphabetically by author name:

```
git shortlog
```

- View a summary of all the commits made, sorted by the number of commits made:

```
git shortlog -n
```

- View a summary of all the commits made, grouped by the committer identities (name and email):

```
git shortlog -c
```

- View a summary of the last 5 commits (i.e. specify a revision range):

```
git shortlog HEAD~{{5}}..HEAD
```

- View all users, emails and the number of commits in the current branch:

```
git shortlog -sne
```

- View all users, emails and the number of commits in all branches:

```
git shortlog -sne --all
```

git show-branch

Show branches and their commits.

More information: <https://git-scm.com/docs/git-show-branch>.

- Show a summary of the latest commit on a branch:

```
git show-branch {{branch_name|ref|commit}}
```

- Compare commits in the history of multiple commits or branches:

```
git show-branch {{branch_name|ref|commit}}
```

- Compare all remote tracking branches:

```
git show-branch --remotes
```

- Compare both local and remote tracking branches:

```
git show-branch --all
```

- List the latest commits in all branches:

```
git show-branch --all --list
```

- Compare a given branch with the current branch:

```
git show-branch --current {{commit|branch_name|ref}}
```

- Display the commit name instead of the relative name:

```
git show-branch --sha1-name --current {{current|branch_name|ref}}
```

- Keep going a given number of commits past the common ancestor:

```
git show-branch --more {{5}} {{commit|branch_name|ref}}
{{commit|branch_name|ref}} {{...}}
```

git show-ref

Git command for listing references.

More information: <https://git-scm.com/docs/git-show-ref>.

- Show all refs in the repository:

```
git show-ref
```

- Show only heads references:

```
git show-ref --heads
```

- Show only tags references:

```
git show-ref --tags
```

- Verify that a given reference exists:

```
git show-ref --verify {{path/to/ref}}
```

git show

Show various types of git objects (commits, tags, etc.).

More information: <https://git-scm.com/docs/git-show>.

- Show information about the latest commit (hash, message, changes, and other metadata):

```
git show
```

- Show information about a given commit:

```
git show {{commit}}
```

- Show information about the commit associated with a given tag:

```
git show {{tag}}
```

- Show information about the 3rd commit from the HEAD of a branch:

```
git show {{branch}}~{{3}}
```

- Show a commit's message in a single line, suppressing the diff output:

```
git show --oneline -s {{commit}}
```

- Show only statistics (added/removed characters) about the changed files:

```
git show --stat {{commit}}
```

- Show only the list of added, renamed or deleted files:

```
git show --summary {{commit}}
```

- Show the contents of a file as it was at a given revision (e.g. branch, tag or commit):

```
git show {{revision}}:{{path/to/file}}
```

git sizer

Computes various Git repository size metrics and alerts you to any that might cause problems or inconvenience.

More information: <https://github.com/github/git-sizer>.

- Report only statistics that have a level of concern greater than 0:

`git sizer`

- Report all statistics:

`git sizer -v`

- See additional options:

`git sizer -h`

git stage

Add file contents to the staging area.

Synonym of **git add**.

More information: <https://git-scm.com/docs/git-stage>.

- Add a file to the index:

```
git stage {{path/to/file}}
```

- Add all files (tracked and untracked):

```
git stage -A
```

- Only add already tracked files:

```
git stage -u
```

- Also add ignored files:

```
git stage -f
```

- Interactively stage parts of files:

```
git stage -p
```

- Interactively stage parts of a given file:

```
git stage -p {{path/to/file}}
```

- Interactively stage a file:

```
git stage -i
```

git stash

Stash local Git changes in a temporary area.

More information: <https://git-scm.com/docs/git-stash>.

- Stash current changes, except new (untracked) files:

```
git stash [push -m {{optional_stash_message}}]
```

- Stash current changes, including new (untracked) files:

```
git stash -u
```

- Interactively select parts of changed files for stashing:

```
git stash -p
```

- List all stashes (shows stash name, related branch and message):

```
git stash list
```

- Apply a stash (default is the latest, named stash@{0}):

```
git stash apply {{optional_stash_name_or_commit}}
```

- Apply a stash (default is stash@{0}), and remove it from the stash list if applying doesn't cause conflicts:

```
git stash pop {{optional_stash_name}}
```

- Drop a stash (default is stash@{0}):

```
git stash drop {{optional_stash_name}}
```

- Drop all stashes:

```
git stash clear
```

git status

Show the changes to files in a git repository.

Lists changed, added and deleted files compared to the currently checked-out commit.

More information: <https://git-scm.com/docs/git-status>.

- Show changed files which are not yet added for commit:

```
git status
```

- Give output in [s]hort format:

```
git status -s
```

- Don't show untracked files in the output:

```
git status --untracked-files=no
```

- Show output in [s]hort format along with [b]ranch info:

```
git status -sb
```

git submodule

Inspects, updates and manages submodules.

More information: <https://git-scm.com/docs/git-submodule>.

- Install a repository's specified submodules:

```
git submodule update --init --recursive
```

- Add a git repository as a submodule:

```
git submodule add {{repository_url}}
```

- Add a git repository as a submodule at the specified directory:

```
git submodule add {{repository_url}} {{path/to/directory}}
```

- Update every submodule to its latest commit:

```
git submodule foreach git pull
```

git subtree

Tool to manage project dependencies as subprojects.

More information: <https://manpages.debian.org/testing/git-man/git-subtree.1.en.html>.

- Add a git repository as a subtree:

```
git subtree add --prefix={{path/to/directory/}} --squash  
{{repository_url}} {{branch_name}}
```

- Update subtree repository to its latest commit:

```
git subtree pull --prefix={{path/to/directory/}}  
{{repository_url}} {{branch_name}}
```

- Merge recent changes up to the latest subtree commit into the subtree:

```
git subtree merge --prefix={{path/to/directory/}} --squash  
{{repository_url}} {{branch_name}}
```

- Push commits to a subtree repository:

```
git subtree push --prefix={{path/to/directory/}}  
{{repository_url}} {{branch_name}}
```

- Extract a new project history from the history of a subtree:

```
git subtree split --prefix={{path/to/directory/}}  
{{repository_url}} -b {{branch_name}}
```

git svn

Bidirectional operation between a Subversion repository and Git.

More information: <https://git-scm.com/docs/git-svn>.

- Clone an SVN repository:

```
git svn clone {{https://example.com/subversion_repo}}  
{{local_dir}}
```

- Clone a SVN repository starting at a given revision number:

```
git svn clone -r{{1234}}:HEAD {{https://svn.example.net/}}  
{{subversion/repo}} {{local_dir}}
```

- Update local clone from the remote SVN repository:

```
git svn rebase
```

- Fetch updates from the remote SVN repository without changing the git HEAD:

```
git svn fetch
```

- Commit back to the SVN repository:

```
git svn dcommit
```

git switch

Switch between git branches. Requires git version 2.23+.

See also [git checkout](#).

More information: <https://git-scm.com/docs/git-switch/>.

- Switch to an existing branch:

```
git switch {{branch_name}}
```

- Create a new branch and switch to it:

```
git switch --create {{branch_name}}
```

- Create a new branch based on an existing commit and switch to it:

```
git switch --create {{branch_name}} {{commit}}
```

- Switch to the previous branch:

```
git switch -
```

- Switch to a branch and update all submodules to match:

```
git switch --recurse-submodules {{branch_name}}
```

- Switch to a branch and automatically merge the current branch and any uncommitted changes into it:

```
git switch --merge {{branch_name}}
```

git tag

Create, list, delete or verify tags.

A tag is a static reference to a specific commit.

More information: <https://git-scm.com/docs/git-tag>.

- List all tags:

```
git tag
```

- Create a tag with the given name pointing to the current commit:

```
git tag {{tag_name}}
```

- Create a tag with the given name pointing to a given commit:

```
git tag {{tag_name}} {{commit}}
```

- Create an annotated tag with the given message:

```
git tag {{tag_name}} -m {{tag_message}}
```

- Delete the tag with the given name:

```
git tag -d {{tag_name}}
```

- Get updated tags from upstream:

```
git fetch --tags
```

- List all tags whose ancestors include a given commit:

```
git tag --contains {{commit}}
```

git update-index

Git command for manipulating the index.

More information: <https://git-scm.com/docs/git-update-index>.

- Pretend that a modified file is unchanged (`git status` will not show this as changed):

```
git update-index --skip-worktree {{path/to/modified_file}}
```

git update-ref

Git command for creating, updating, and deleting git refs.

More information: <https://git-scm.com/docs/git-update-ref>.

- Delete a ref, useful for soft resetting the first commit:

```
git update-ref -d {{HEAD}}
```

- Update ref with a message:

```
git update-ref -m {{message}} {{HEAD}} {{4e95e05}}
```

git worktree

Manage multiple working trees attached to the same repository.

More information: <https://git-scm.com/docs/git-worktree>.

- Create a new directory with the specified branch checked out into it:

```
git worktree add {{path/to/directory}} {{branch}}
```

- Create a new directory with a new branch checked out into it:

```
git worktree add {{path/to/directory}} -b {{new_branch}}
```

- List all the working directories attached to this repository:

```
git worktree list
```

- Remove a worktree (after deleting worktree directory):

```
git worktree prune
```

git

Distributed version control system.

More information: <https://git-scm.com/>.

- Check the Git version:

```
git --version
```

- Show general help:

```
git --help
```

- Show help on a Git subcommand (like `commit`, `log`, etc.):

```
git help {{subcommand}}
```

- Execute a Git subcommand:

```
git {{subcommand}}
```

- Execute a Git subcommand on a custom repository root path:

```
git -C {{path/to/repo}} {{subcommand}}
```

- Execute a Git subcommand with a given configuration set:

```
git -c '{{config.key}}={{value}}' {{subcommand}}
```

github-label-sync

A command line interface for synchronising GitHub labels.

More information: <https://npmjs.com/package/github-label-sync>.

- Synchronise labels using a local `labels.json` file:

```
github-label-sync --access-token {{token}}  
{{repository_name}}
```

- Synchronise labels using a specific labels JSON file:

```
github-label-sync --access-token {{token}} --labels {{url|  
path/to/json_file}} {{repository_name}}
```

- Perform a dry run instead of actually synchronising labels:

```
github-label-sync --access-token {{token}} --dry-run  
{{repository_name}}
```

- Keep labels that aren't in `labels.json`:

```
github-label-sync --access-token {{token}} --allow-added-  
labels {{repository_name}}
```

- Synchronise using the `GITHUB_ACCESS_TOKEN` environment variable:

```
github-label-sync {{repository_name}}
```

gitk

A graphical git repository browser.

More information: <https://git-scm.com/docs/gitk>.

- Show the repository browser for the current git repository:

```
gitk
```

- Show repository browser for a specific file or directory:

```
gitk {{path/to/file_or_directory}}
```

- Show commits made since 1 week ago:

```
gitk --since="{{1 week ago}}"
```

- Show commits older than 1/1/2016:

```
gitk --until="{{1/1/2015}}"
```

- Show at most 100 changes in all branches:

```
gitk --max-count={{100}} --all
```

gitlab-ctl

CLI tool for managing the GitLab omnibus.

More information: <https://docs.gitlab.com/omnibus/maintenance/>.

- Display the status of every service:

```
sudo gitlab-ctl status
```

- Display the status of a specific service:

```
sudo gitlab-ctl status {{nginx}}
```

- Restart every service:

```
sudo gitlab-ctl restart
```

- Restart a specific service:

```
sudo gitlab-ctl restart {{nginx}}
```

- Display the logs of every service and keep reading until **Ctrl + C** is pressed:

```
sudo gitlab-ctl tail
```

- Display the logs of a specific service:

```
sudo gitlab-ctl tail {{nginx}}
```

gitlab-runner

CLI tool for managing GitLab runners.

More information: <https://docs.gitlab.com/runner/>.

- Register a runner:

```
sudo gitlab-runner register --url {{https://gitlab.example.com}} --registration-token {{token}} --name {{name}}
```

- Register a runner with a Docker executor:

```
sudo gitlab-runner register --url {{https://gitlab.example.com}} --registration-token {{token}} --name {{name}} --executor {{docker}}
```

- Unregister a runner:

```
sudo gitlab-runner unregister --name {{name}}
```

- Display the status of the runner service:

```
sudo gitlab-runner status
```

- Restart the runner service:

```
sudo gitlab-runner restart
```

- Check if the registered runners can connect to GitLab:

```
sudo gitlab-runner verify
```

gitlab

Ruby wrapper and CLI for the GitLab API.

More information: <https://narkoz.github.io/gitlab/>.

- Create a new project:

```
gitlab create_project {{project_name}}
```

- Get info about a specific commit:

```
gitlab commit {{project_name}} {{commit_hash}}
```

- Get info about jobs in a CI pipeline:

```
gitlab pipeline_jobs {{project_name}} {{pipeline_id}}
```

- Start a specific CI job:

```
gitlab job_play {{project_name}} {{job_id}}
```

gitsome

A terminal-based interface for GitHub, accessed via the `gh` command.

It also provides menu-style autocomplete suggestions for `git` commands.

More information: <https://github.com/donnemartin/gitsome>.

- Enter the gitsome shell (optional), to enable autocomplete and interactive help for git (and gh) commands:

`gitsome`

- Setup GitHub integration with the current account:

`gh configure`

- List notifications for the current account (as would be seen in <https://github.com/notifications>):

`gh notifications`

- List the current account's starred repos, filtered by a given search string:

`gh starred "{{python 3}}"`

- View the recent activity feed of a given GitHub repository:

`gh feed {{tldr-pages/tldr}}`

- View the recent activity feed for a given GitHub user, using the default pager (e.g. `less`):

`gh feed {{torvalds}} -p`

gixy

Analyze nginx configuration files.

More information: <https://github.com/yandex/gixy>.

- Analyze nginx configuration (default path: /etc/nginx/nginx.conf):

`gixy`

- Analyze nginx configuration but skip specific tests:

`gixy --skips {{http_splitting}}`

- Analyze nginx configuration with the specific severity level:

`gixy {{-l|-ll|-lll}}`

- Analyze nginx configuration files on the specific path:

`gixy {{path/to/configuration_file_1}} {{path/to/configuration_file_2}}`

glab

GitLab CLI tool to help working with GitLab from the command line.

More information: <https://clementsam.tech/glab/>.

- Create a merge request:

```
glab mr create
```

- List merge requests:

```
glab mr list
```

- Create a new issue:

```
glab issue create
```

- View and filter the current repository's open issues:

```
glab issue list
```

- List pipelines:

```
glab pipeline list
```

- Clone a repository into a specific directory:

```
glab repo clone {{user}}/{{repository}} {{directory}}
```

glances

A cross-platform system monitoring tool.

More information: <https://nicolargo.github.io/glances/>.

- Run in terminal:

```
glances
```

- Run in web server mode to show results in browser:

```
glances -w
```

- Run in server mode to allow connections from other Glances clients:

```
glances -s
```

- Connect to a Glances server:

```
glances -c {{hostname}}
```

- Require a password in (web) server mode:

```
glances -s --password
```

glib-compile-resources

Compiles resource files (e.g. images) into a binary resource bundle.

These may be linked into GTK applications using the GResource API.

- Compile resources referenced in "file.gresource.xml" to a .gresource binary:

```
glib-compile-resources {{file.gresource.xml}}
```

- Compile resources referenced in "file.gresource.xml" to a C source file:

```
glib-compile-resources --generate-source  
{{file.gresource.xml}}
```

- Compile resources in "file.gresource.xml" to a chosen target file, with .c, .h or .gresource extension:

```
glib-compile-resources --generate --target={{file.ext}}  
{{file.gresource.xml}}
```

- Print a list of resource files referenced in "file.gresource.xml":

```
glib-compile-resources --generate-dependencies  
{{file.gresource.xml}}
```

glow

Render Markdown in the terminal.

More information: <https://github.com/charmbracelet/glow>.

- Run glow and select a file to view:

```
glow
```

- Render a markdown file to the terminal:

```
glow {{path/to/file}}
```

- View a markdown file using a paginator:

```
glow -p {{path/to/file}}
```

- View a file from a URL:

```
glow {{https://example.com/file.md}}
```

- View a GitHub/GitLab README:

```
glow {{github.com/owner/repository}}
```

gnomon

Utility to annotate console logging statements with timestamps and find slow processes.

More information: <https://github.com/paypal/gnomon>.

- Use UNIX (or DOS) pipes to pipe the **stdout** of any command through gnomon:

```
{npm test} | gnomon
```

- Show number of seconds since the start of the process:

```
{npm test} | gnomon --type=elapsed-total
```

- Show an absolute timestamp in UTC:

```
{npm test} | gnomon --type=absolute
```

- Set a high threshold of 0.5 seconds for the elapsed time; exceeding which the timestamp will be colored bright red:

```
{npm test} | gnomon --high {0.5}
```

- Set a medium threshold of 0.2 seconds (Timestamp will be colored bright yellow):

```
{npm test} | gnomon --medium {0.2}
```

gnuplot

A graph plotter that outputs in several formats.

More information: <http://www.gnuplot.info/>.

- Start the interactive graph plotting shell:

```
gnuplot
```

- Plot the graph for the specified graph definition file:

```
gnuplot {{path/to/definition.plt}}
```

- Set the output format by executing a command before loading the definition file:

```
gnuplot -e "{{set output "path/to/filename.png" size  
1024,768}}" {{path/to/definition.plt}}
```

- Persist the graph plot preview window after gnuplot exits:

```
gnuplot --persist {{path/to/definition.plt}}
```

go bug

Report a bug.

More information: https://golang.org/cmd/go/#hdr-Start_a_bug_report.

- Open a web page to start a bug report:

go bug

go build

Compile Go sources.

More information: https://golang.org/cmd/go/#hdr-Compile_packages_and_dependencies.

- Compile a file:

```
go build {{path/to/main.go}}
```

- Compile, specifying the output filename:

```
go build -o {{path/to/binary}} {{path/to/source.go}}
```

- Compile a package:

```
go build -o {{path/to/binary}} {{path/to/package}}
```

- Compile a main package into an executable, with data race detection:

```
go build -race -o {{path/to/executable}} {{path/to/main/package}}
```

go clean

Remove object files and cached files.

More information: https://golang.org/cmd/go/#hdr-Remove_object_files_and_cached_files.

- Print the remove commands instead of actually removing anything:

```
go clean -n
```

- Delete the build cache:

```
go clean -cache
```

- Delete all cached test results:

```
go clean -testcache
```

- Delete the module cache:

```
go clean -modcache
```

go doc

Show documentation for a package or symbol.

More information: [https://golang.org/cmd/go/#hdr-Show_documentation_for_package_or_symbol](https://golang.org/cmd/go/#hdr>Show_documentation_for_package_or_symbol).

- Show documentation for the current package:

```
go doc
```

- Show package documentation and exported symbols:

```
go doc {{encoding/json}}
```

- Show also documentation of symbols:

```
go doc -all {{encoding/json}}
```

- Show also sources:

```
go doc -all -src {{encoding/json}}
```

- Show a specific symbol:

```
go doc -all -src {{encoding/json.Number}}
```

go env

Manage environment variables used by the Go toolchain.

More information: https://golang.org/cmd/go/#hdr-Print_Go_environment_information.

- Show all environment variables:

```
go env
```

- Show a specific environment variable:

```
go env {{GOPATH}}
```

- Set an environment variable to a value:

```
go env -w {{GOBIN}}={{path/to/directory}}
```

- Reset an environment variable's value:

```
go env -u {{GOBIN}}
```

go fix

Update packages to use new APIs.

More information: https://golang.org/cmd/go/#hdr-Update_packages_to_use_new_APIs.

- Update packages to use new APIs:

```
go fix {{packages}}
```

go generate

Generate Go files by running commands within source files.

More information: https://golang.org/cmd/go/#hdr-Generate_Go_files_by_processing_source.

- Generate Go files by running commands within source files:

```
go generate
```

go list

List packages or modules.

More information: https://golang.org/cmd/go/#hdr-List_packages_or_modules.

- List packages:

```
go list ./...
```

- List standard packages:

```
go list std
```

- List packages in json format:

```
go list -json time net/http
```

- List module dependencies and available updates:

```
go list -m -u all
```

go mod

Module maintenance.

More information: https://golang.org/cmd/go/#hdr-Module_maintenance.

- Initialize new module in current directory:

```
go mod init {{moduleName}}
```

- Download modules to local cache:

```
go mod download
```

- Add missing and remove unused modules:

```
go mod tidy
```

- Verify dependencies have expected content:

```
go mod verify
```

- Copy sources of all dependencies into the vendor directory:

```
go mod vendor
```

go version

Print Go version.

More information: https://golang.org/cmd/go/#hdr-Print_Go_version.

- Print Go version:

```
go version
```

- Print the Go version used to build the named executable file:

```
go version {{path/to/executable}}
```

go

Tool for managing go source code.

More information: <https://golang.org>.

- Download and install a package, specified by its import path:

```
go get {{package_path}}
```

- Compile and run a source file (it has to contain a `main` package):

```
go run {{file}}.go
```

- Compile a source file into a named executable:

```
go build -o {{executable}} {{file}}.go
```

- Compile the package present in the current directory:

```
go build
```

- Execute all test cases of the current package (files have to end with `_test.go`):

```
go test
```

- Compile and install the current package:

```
go install
```

- Initialize a new module in the current directory:

```
go mod init {{module_name}}
```

gocryptfs

Encrypted overlay filesystem written in Go.

More information: <https://github.com/rfjakob/gocryptfs>.

- Initialize an encrypted filesystem:

```
gocryptfs -init {{path/to/cipher_dir}}
```

- Mount an encrypted filesystem:

```
gocryptfs {{path/to/cipher_dir}} {{path/to/mount_point}}
```

- Mount with the explicit master key instead of password:

```
gocryptfs --masterkey {{path/to/cipher_dir}} {{path/to/mount_point}}
```

- Change the password:

```
gocryptfs --passwd {{path/to/cipher_dir}}
```

- Make an encrypted snapshot of a plain directory:

```
gocryptfs --reverse {{path/to/plain_dir}} {{path/to/cipher_dir}}
```

godoc

Show documentation for go packages.

More information: <https://godoc.org/>.

- Display help for package "fmt":

```
godoc {{fmt}}
```

- Display help for the function "Printf" of "fmt" package:

```
godoc {{fmt}} {{Printf}}
```

- Serve documentation as a web server on port "6060":

```
godoc -http=:{{6060}}
```

- Create an index file:

```
godoc -write_index -index_files={{path/to/file}}
```

- Use the given index file to search the docs:

```
godoc -http=:{{6060}} -index -index_files={{path/to/file}}
```

godot

An open source 2D and 3D game engine.

More information: <https://godotengine.org/>.

- Run a project if the current directory contains a `project.godot` file, otherwise open the project manager:

`godot`

- Edit a project (the current directory must contain a `project.godot` file):

`godot -e`

- Open the project manager even if the current directory contains a `project.godot` file:

`godot -p`

- Export a project for a given export preset (the preset must be defined in the project):

`godot --export {{preset}} {{output_path}}`

- Execute a standalone GDScript file (the script must inherit from `SceneTree` or `MainLoop`):

`godot -s {{script.gd}}`

gofmt

Tool for formatting Go source code.

More information: <https://golang.org/cmd/gofmt/>.

- Format a file and display the result to the console:

```
gofmt {{source.go}}
```

- Format a file, overwriting the original file in-place:

```
gofmt -w {{source.go}}
```

- Format a file, and then simplify the code, overwriting the original file:

```
gofmt -s -w {{source.go}}
```

- Print all (including spurious) errors:

```
gofmt -e {{source.go}}
```

goimports

Updates Go import lines, adding missing ones and removing unreferenced ones.

More information: <https://godoc.org/golang.org/x/tools/cmd/goimports>.

- Display the completed import source file:

```
goimports {{file}}.go
```

- Write the result back to the source file instead of the standard output:

```
goimports -w {{file}}.go
```

- Display diffs and write the result back to the source file:

```
goimports -w -d {{file}}.go
```

- Set the import prefix string after 3rd-party packages (comma-separated list):

```
goimports -local {{path/to/package}} {{file}}.go
```

googler

Search Google from command line.

More information: <https://github.com/jarun/googler>.

- Search Google for a keyword:

```
googler {{keyword}}
```

- Search Google and open the first result in web browser:

```
googler -j {{keyword}}
```

- Show N search results (default 10):

```
googler -n {{N}} {{keyword}}
```

- Disable automatic spelling correction:

```
googler -x {{keyword}}
```

- Search one site for a keyword:

```
googler -w {{site}} {{keyword}}
```

- Show Google search result in JSON format:

```
googler --json {{keyword}}
```

- Perform in-place self-upgrade:

```
googler -u
```

- For more help in interactive mode:

```
?
```

gopass

Standard Unix Password Manager for Teams. Written in Go.

More information: <https://www.gopass.pw>.

- Initialise the configuration settings:

```
gopass init
```

- Create a new entry:

```
gopass new
```

- Show all stores:

```
gopass mounts
```

- Mount a shared git store:

```
gopass mounts add {{store_name}} {{git_repo_url}}
```

- Search interactively using a keyword:

```
gopass show {{keyword}}
```

- Search using a keyword:

```
gopass find {{keyword}}
```

- Sync all mounted stores:

```
gopass sync
```

- Show a particular password entry:

```
gopass {{store_name|path/to/directory|email@email.com}}
```

gops

CLI tool which lists and diagnoses Go processes currently running on your system.

More information: <https://github.com/google/gops>.

- Print all go processes running locally:

`gops`

- Print more information about a process:

`gops {{pid}}`

- Display a process tree:

`gops tree`

- Print the current stack trace from a target program:

`gops stack {{pid|addr}}`

- Print the current runtime memory statistics:

`gops memstats {{pid|addr}}`

goreload

Live reload utility for Go programs.

More information: <https://github.com/acoshift/goreload>.

- Set the name of the binary file to watch (defaults to ".goreload"):

```
goreload -b {{path/to/binary}} {{file}}.go
```

- Set a custom log prefix (defaults to "goreload"):

```
goreload --logPrefix {{prefix}} {{file}}.go
```

- Reload whenever any file changes:

```
goreload --all
```

gotty

Share your terminal as a web application.

More information: <https://github.com/yudai/gotty>.

- Share result of command:

```
gotty {{command}}
```

- Share with write permission:

```
gotty -w {{shell}}
```

- Share with credential (Basic Auth):

```
gotty -w -c {{username}}:{{password}} {{shell}}
```

gource

Renders an animated tree diagram of Git, SVN, Mercurial and Bazaar repositories.

It shows files and directories being created, modified or removed over time.

More information: <https://gource.io>.

- Run gource in a directory (if it isn't the repository's root directory, the root is sought up from there):

```
gource {{path/to/repository}}
```

- Run gource in the current directory, with a custom output resolution:

```
gource -{{width}}x{{height}}
```

- Set a custom time scale for the animation:

```
gource -c {{time_scale_multiplier}}
```

- Set how long each day should be in the animation (this combines with -c, if provided):

```
gource -s {{seconds}}
```

- Set fullscreen mode and a custom background color:

```
gource -f -b {{hex_color_code}}
```

- Set a title for the animation:

```
gource --title {{title}}
```

gox

A tool for cross-compiling Go programs.

More information: <https://github.com/mitchellh/gox>.

- Compile Go program in the current directory for all operating systems and architecture combinations:

`gox`

- Download and compile a Go program from a remote URL:

`gox {{url_1}} {{url_2}}`

- Compile current directory for a particular operating system:

`gox -os="{{os}}"`

- Compile current directory for a single operating system and architecture combination:

`gox -osarch="{{os}}/{{arch}}"`

gpg-zip

Encrypt files and directories in an archive using GPG.

- Encrypt a directory into archive.gpg using a passphrase:

```
gpg-zip --symmetric --output {{archive.gpg}} {{path/to/directory}}
```

- Decrypt archive.gpg into a directory of the same name:

```
gpg-zip --decrypt {{path/to/archive.gpg}}
```

- List the contents of the encrypted archive.gpg:

```
gpg-zip --list-archive {{path/to/archive.gpg}}
```

gpg

GNU Privacy Guard.

More information: <https://gnupg.org>.

- Sign doc.txt without encryption (writes output to doc.txt.asc):

```
gpg --clearsign {{doc.txt}}
```

- Encrypt doc.txt for alice@example.com (output to doc.txt.gpg):

```
gpg --encrypt --recipient {{alice@example.com}} {{doc.txt}}
```

- Encrypt doc.txt with only a passphrase (output to doc.txt.gpg):

```
gpg --symmetric {{doc.txt}}
```

- Decrypt doc.txt.gpg (output to `stdout`):

```
gpg --decrypt {{doc.txt.gpg}}
```

- Import a public key:

```
gpg --import {{public.gpg}}
```

- Export public key for alice@example.com (output to `stdout`):

```
gpg --export --armor {{alice@example.com}}
```

- Export private key for alice@example.com (output to `stdout`):

```
gpg --export-secret-keys --armor {{alice@example.com}}
```

gpg

GNU Privacy Guard 2.

More information: <https://docs.releeng.linuxfoundation.org/en/latest/gpg.html>.

- List imported keys:

```
gpg2 --list-keys
```

- Encrypt a specified file for a specified recipient, writing the output to a new file with .gpg appended:

```
gpg2 --encrypt --recipient {{alice@example.com}} {{path/to/doc.txt}}
```

- Encrypt a specified file with only a passphrase, writing the output to a new file with .gpg appended:

```
gpg2 --symmetric {{path/to/doc.txt}}
```

- Decrypt a specified file, writing the result to the standard output:

```
gpg2 --decrypt {{path/to/doc.txt.gpg}}
```

- Import a public key:

```
gpg2 --import {{path/to/public_key.gpg}}
```

- Export the public key of a specified email address to the standard output:

```
gpg2 --export --armor {{alice@example.com}}
```

- Export the private key with a specified email address to the standard output:

```
gpg2 --export-secret-keys --armor {{alice@example.com}}
```

gpgv

Verify OpenPGP signatures.

More information: <https://www.gnupg.org/documentation/manuals/gnupg/gpgv.html>.

- Verify a signed file:

```
gpgv {{path/to/file}}
```

- Verify a signed file using a detached signature:

```
gpgv {{path/to/signature}} {{path/to/file}}
```

- Add a file to the list of keyrings (a single exported key also counts as a keyring):

```
gpgv --keyring {{./alice.keyring}} {{path/to/signature}}  
{{path/to/file}}
```

gradle

Gradle is an open source build automation system.

More information: <https://gradle.org>.

- Compile a package:

```
gradle build
```

- Exclude test task:

```
gradle build -x {{test}}
```

- Run in offline mode to prevent gradle from accessing the network during builds:

```
gradle build --offline
```

- Clear the build directory:

```
gradle clean
```

- Compile and Release package:

```
gradle assembleRelease
```

grep

Matches patterns in input text.

Supports simple patterns and regular expressions.

- Search for a pattern within a file:

```
grep {{search_pattern}} {{path/to/file}}
```

- Search for an exact string:

```
grep -F {{exact_string}} {{path/to/file}}
```

- Search for a pattern [R]ecursively in the current directory, showing matching line [n]umbers, [I]gnoring non-text files:

```
grep -RIn {{search_pattern}} .
```

- Use extended regular expressions (supporting ?, +, {}, (), and |), in case-insensitive mode:

```
grep -Ei {{search_pattern}} {{path/to/file}}
```

- Print 3 lines of [C]ontext around, [B]efore, or [A]fter each match:

```
grep -{{C|B|A}} 3 {{search_pattern}} {{path/to/file}}
```

- Print file name with the corresponding line number for each match:

```
grep -Hn {{search_pattern}} {{path/to/file}}
```

- Use the standard input instead of a file:

```
cat {{path/to/file}} | grep {{search_pattern}}
```

- Invert match for excluding specific strings:

```
grep -v {{search_pattern}}
```

grex

Simple command line tool to generate regular expressions.

More information: <https://github.com/pemistahl/grex>.

- Generate a simple regular expression:

```
grex {{space_separated_strings}}
```

- Generate a case-insensitive regex:

```
grex -i {{space_separated_strings}}
```

- Replace digits with '\d':

```
grex -d {{space_separated_strings}}
```

- Replace unicode word character with '\w':

```
grex -w {{space_separated_strings}}
```

- Replace spaces with '\s':

```
grex -s {{space_separated_strings}}
```

- Add {min, max} quantifier representation for repeating sub-strings:

```
grex -r {{space_separated_strings}}
```

groff

Typesetting program that reads plain text mixed with formatting commands and produces formatted output.

It is the GNU replacement for the **troff** and **nroff** Unix commands for text formatting.

More information: <https://www.gnu.org/software/groff>.

- Render a man page as plain text, and display the result:

```
groff -man -T utf8 {{manpage.1}}
```

- Render a man page using the ASCII output device, and display it using a pager:

```
groff -man -T ascii {{manpage.1}} | less
```

- Render a man page into an HTML file:

```
groff -man -T html {{manpage.1}} > {{page.html}}
```

- Process a roff file using the **tbl** and **pic** preprocessors, and the **me** macro set:

```
groff -t -p -me -T utf8 {{foo.me}}
```

- Run a **groff** command with preprocessor and macro options guessed by the **grog** utility:

```
eval "$(grog -T utf8 {{foo.me}})"
```

groups

Print group memberships for a user.

- Print group memberships for the current user:

`groups`

- Print group memberships for a specific user:

`groups {{username}}`

- Print group memberships for a list of users:

`groups {{username1}} {{username2}} {{username3}}`

grpcurl

Like cURL, but for gRPC: CLI tool for interacting with gRPC servers.

More information: <https://github.com/fullstorydev/grpcurl>.

- Send an empty request:

```
grpcurl {{grpc.server.com:443}} {{my.custom.server.Service/Method}}
```

- Send a request with a header and a body:

```
grpcurl -H "{{Authorization: Bearer $token}}" -d '{"foo": "bar"}' {{grpc.server.com:443}} {{my.custom.server.Service/Method}}
```

- List all services exposed by a server:

```
grpcurl {{grpc.server.com:443}} list
```

- List all methods in a particular service:

```
grpcurl {{grpc.server.com:443}} list {{my.custom.server.Service}}
```

grumphp

A PHP Composer plugin that enables source code quality checks.

More information: <https://github.com/phpro/grumphp>.

- Register the Git hooks:

```
grumphp git:init
```

- Trigger the pre-commit hook manually:

```
grumphp git:pre-commit
```

- Check every versioned file:

```
grumphp run
```

grunt

A JavaScript task runner for automating processes.

More information: <https://github.com/gruntjs/grunt-cli>.

- Run the default task process:

```
grunt
```

- Run one or more specific space-separated task(s):

```
grunt {{task_name}}
```

- Specify an alternative configuration file:

```
grunt --gruntfile {{path/to/file}}
```

- Specify an alternative base path for relative files:

```
grunt --base {{path/to/directory}}
```

- Specify an additional directory to scan for tasks in:

```
grunt --tasks {{path/to/directory}}
```

- Perform a dry-run without writing any files:

```
grunt --no-write
```

- List all available options:

```
grunt --help
```

gtop

System monitoring dashboard for the terminal.

More information: <https://github.com/aksakalli/gtop>.

- Show the system stats dashboard:

`gtop`

- Sort by CPU usage:

`c`

- Sort by memory usage:

`m`

guacd

Apache Guacamole proxy daemon.

Support loader for client plugins to interface between the Guacamole protocol and any arbitrary remote desktop protocol (e.g. RDP, VNC, Other).

More information: <https://guacamole.apache.org/>.

- Bind to a specific port on localhost:

```
guacd -b {{127.0.0.1}} -l {{4823}}
```

- Start in debug mode, keeping the process in the foreground:

```
guacd -f -L {{debug}}
```

- Start with TLS support:

```
guacd -C {{my-cert.crt}} -K {{my-key.pem}}
```

- Write the PID to a file:

```
guacd -p {{path/to/file.pid}}
```

guetzli

JPEG image compression utility.

More information: <https://github.com/google/guetzli>.

- Compress a JPEG image:

```
guetzli {{input.jpg}} {{output.jpg}}
```

- Create compressed JPEG image from PNG image:

```
guetzli {{input.png}} {{output.jpg}}
```

- Compress a JPEG image with desired visual quality (84-100):

```
guetzli --quality {{quality_value}} {{input.jpg}}  
{{output.jpg}}
```

guile

Guile Scheme interpreter.

More information: <https://www.gnu.org/software/guile>.

- Start the Guile Scheme REPL:

```
guile
```

- Execute the script in a given Scheme file:

```
guile {{script.scm}}
```

- Execute a Scheme expression:

```
guile -c "{{expression}}"
```

- Listen on a port or a Unix domain socket (the default is port 37146) for remote REPL connections:

```
guile --listen={{port_or_socket}}
```

gulp

JavaScript task runner and streaming build system.

Tasks are defined within `gulpfile.js` at the project root.

More information: <https://github.com/gulpjs/gulp-cli>.

- Run the default task:

`gulp`

- Run individual tasks:

`gulp {{task}} {{othertask}}`

gunicorn

Python WSGI HTTP Server.

More information: <https://gunicorn.org/>.

- Run Python web app:

```
gunicorn {{import.path:app_object}}
```

- Listen on port 8080 on localhost:

```
gunicorn --bind {{localhost}}:{{8080}}
{{import.path:app_object}}
```

- Turn on live reload:

```
gunicorn --reload {{import.path:app_object}}
```

- Use 4 worker processes for handling requests:

```
gunicorn --workers {{4}} {{import.path:app_object}}
```

- Use 4 worker threads for handling requests:

```
gunicorn --threads {{4}} {{import.path:app_object}}
```

- Run app over HTTPS:

```
gunicorn --certfile {{cert.pem}} --keyfile {{key.pem}}
{{import.path:app_object}}
```

gunzip

Extract file(s) from a gzip (.gz) archive.

- Extract a file from an archive, replacing the original file if it exists:

```
gunzip {{archive.tar.gz}}
```

- Extract a file to a target destination:

```
gunzip -c {{archive.tar.gz}} > {{archive.tar}}
```

- List the contents of a compressed file:

```
gunzip -l {{file.txt.gz}}
```

gzip

Compress/uncompress files with gzip compression (LZ77).

- Compress a file, replacing it with a gzipped compressed version:

```
gzip {{file.ext}}
```

- Decompress a file, replacing it with the original uncompressed version:

```
gzip -d {{file.ext}}.gz
```

- Compress a file specifying the output filename:

```
gzip -c {{file.ext}} > {{compressed_file.ext.gz}}
```

- Decompress a gzipped file specifying the output filename:

```
gzip -c -d {{file.ext}}.gz > {{uncompressed_file.ext}}
```

- Specify the compression level. 1=Fastest (Worst), 9=Slowest (Best), Default level is 6:

```
gzip -9 -c {{file.ext}} > {{compressed_file.ext.gz}}
```

hadolint

Dockerfile linter.

More information: <https://github.com/hadolint/hadolint>.

- Lint a Dockerfile:

```
hadolint {{path/to/Dockerfile}}
```

- Lint a Dockerfile, displaying the output in JSON format:

```
hadolint --format {{json}} {{path/to/Dockerfile}}
```

- Lint a Dockerfile, displaying the output in a specific format:

```
hadolint --format {{tty|json|checkstyle|codeclimate|codacy}}  
{{path/to/Dockerfile}}
```

- Lint a Dockerfile ignoring specific rules:

```
hadolint --ignore {{DL3006}} --ignore {{DL3008}} {{path/to/}  
Dockerfile}}
```

- Lint multiple Dockerfiles using specific trusted registries:

```
hadolint --trusted-registry {{docker.io}} --trusted-registry  
{{example.com}}:{{5000}} {{path/to/Dockerfile}} {{path/to/}  
another/Dockerfile}}
```

handbrakecli

Command-line interface to the HandBrake video conversion tool.

More information: <https://handbrake.fr/>.

- Convert a video file to MKV (AAC 160kbit audio and x264 CRF20 video):

```
handbrakecli -i {{input.avi}} -o {{output.mkv}} -e x264 -q 20  
-B 160
```

- Resize a video file to 320x240:

```
handbrakecli -i {{input.mp4}} -o {{output.mp4}} -w 320 -l 240
```

- List available presets:

```
handbrakecli --preset-list
```

- Convert an AVI video to MP4 using the Android preset:

```
handbrakecli --preset="Android" -i {{input.ext}} -o  
&{{output.mp4}}
```

hangups

Third party command line client for Google Hangouts.

More information: <https://github.com/tdryer/hangups>.

- Start hangups:

`hangups`

- View troubleshooting information and help:

`hangups -h`

- Set a refresh token for hangups:

`hangups --token-path {{path/to/token}}`

haxelib

Haxe Library Manager.

More information: <https://lib.haxe.org/>.

- Search for a Haxe library:

```
haxelib search {{keyword}}
```

- Install a Haxe library:

```
haxelib install {{libname}}
```

- Upgrade all installed Haxe libraries:

```
haxelib upgrade
```

- Install the development version of a library from a Git repository:

```
haxelib git {{libname}} {{git_url}}
```

head

Output the first part of files.

- Output the first few lines of a file:

```
head -n {{count_of_lines}} {{filename}}
```

- Output the first few bytes of a file:

```
head -c {{size_in_bytes}} {{filename}}
```

- Output everything but the last few lines of a file:

```
head -n -{{count_of_lines}} {{filename}}
```

- Output everything but the last few bytes of a file:

```
head -c -{{size_in_bytes}} {{filename}}
```

helm

Helm is a package manager for Kubernetes.

More information: <https://helm.sh/>.

- Create a helm chart:

```
helm create {{chart_name}}
```

- Add a new helm repository:

```
helm repo add {{repo_name}}
```

- List helm repositories:

```
helm repo list
```

- Update helm repositories:

```
helm repo update
```

- Delete a helm repository:

```
helm repo remove {{repo_name}}
```

- Install a helm chart:

```
helm install {{repo_name}}/{{chart_name}}
```

- Download helm chart as a tar archive:

```
helm get {{chart_release_name}}
```

- Update helm dependencies:

```
helm dependency update
```

help2man

Produce simple man pages from an executable's **--help** and **--version** output.

More information: <https://www.gnu.org/software/help2man>.

- Generate a man page for an executable:

```
help2man {{executable}}
```

- Specify the "name" paragraph in the man page:

```
help2man {{executable}} --name {{name}}
```

- Specify the section for the man page (defaults to 1):

```
help2man {{executable}} --section {{section}}
```

- Output to a file instead of **stdout**:

```
help2man {{executable}} --output {{path/to/file}}
```

- Display detailed help:

```
help2man --help
```

heroku

Create and manage Heroku apps from the command line.

More information: <https://www.heroku.com/>.

- Login to your heroku account:

```
heroku login
```

- Create a heroku app:

```
heroku create
```

- Show logs for an app:

```
heroku logs --app {{app_name}}
```

- Run a one-off process inside a dyno (Heroku virtual machine):

```
heroku run {{process_name}} --app {{app_name}}
```

- List dynos (Heroku virtual machines) for an app:

```
heroku ps --app {{app_name}}
```

- Permanently destroy an app:

```
heroku destroy --app {{app_name}}
```

hexo

A fast, simple & powerful blog framework.

More information: <https://hexo.io/>.

- Initialize a website:

```
hexo init {{path/to/directory}}
```

- Create a new article:

```
hexo new {{layout}} {{title}}
```

- Generate static files:

```
hexo generate
```

- Start a local server:

```
hexo server
```

- Deploy the website:

```
hexo deploy
```

- Clean the cache file (`db.json`) and generated files (`public/`):

```
hexo clean
```

hexyl

A simple hex viewer for the terminal. Uses colored output to distinguish different categories of bytes.

More information: <https://github.com/sharkdp/hexyl>.

- Print the hexadecimal representation of a file:

```
hexyl {{path/to/file}}
```

- Print the hexadecimal representation of the first n bytes of a file:

```
hexyl -n {{n}} {{path/to/file}}
```

- Print bytes 512 through 1024 of a file:

```
hexyl -r {{512}}:{{1024}} {{path/to/file}}
```

- Print 512 bytes starting at the 1024th byte:

```
hexyl -r {{1024}}:+{{512}} {{path/to/file}}
```

hg add

Adds specified files to the staging area for the next commit in Mercurial.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#add>.

- Add files or directories to the staging area:

```
hg add {{path/to/file}}
```

- Add all unstaged files matching a specified pattern:

```
hg add --include {{pattern}}
```

- Add all unstaged files, excluding those that match a specified pattern:

```
hg add --exclude {{pattern}}
```

- Recursively add sub-repositories:

```
hg add --subrepos
```

- Perform a test-run without performing any actions:

```
hg add --dry-run
```

hg branch

Create or show a branch name.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#branch>.

- Show the name of the currently active branch:

```
hg branch
```

- Create a new branch for the next commit:

```
hg branch {{branch_name}}
```

hg clone

Create a copy of an existing repository in a new directory.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#clone>.

- Clone a repository to a specified directory:

```
hg clone {{remote_repository_source}} {{destination_path}}
```

- Clone a repository to the head of a specific branch, ignoring later commits:

```
hg clone --branch {{branch}} {{remote_repository_source}}
```

- Clone a repository with only the ".hg" directory, without checking out files:

```
hg clone --noupdate {{remote_repository_source}}
```

- Clone a repository to a specific revision, tag or branch, keeping the entire history:

```
hg clone --updaterev {{revision}}  
{{remote_repository_source}}
```

- Clone a repository up to a specific revision without any newer history:

```
hg clone --rev {{revision}} {{remote_repository_source}}
```

hg commit

Commit all staged or specified files to the repository.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#commit>.

- Commit staged files to the repository:

```
hg commit
```

- Commit a specific file or directory:

```
hg commit {{path/to/file_or_directory}}
```

- Commit with a specific message:

```
hg commit --message {{message}}
```

- Commit all files matching a specified pattern:

```
hg commit --include {{pattern}}
```

- Commit all files, excluding those that match a specified pattern:

```
hg commit --exclude {{pattern}}
```

- Commit using the interactive mode:

```
hg commit --interactive
```

hg init

Create a new repository in the specified directory.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#init>.

- Initialise a new repository in the current directory:

`hg init`

- Initialise a new repository in the specified directory:

`hg init {{path/to/directory}}`

hg log

Display the revision history of the repository.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#log>.

- Display the entire revision history of the repository:

```
hg log
```

- Display the revision history with an ASCII graph:

```
hg log --graph
```

- Display the revision history with file names matching a specified pattern:

```
hg log --include {{pattern}}
```

- Display the revision history, excluding file names that match a specified pattern:

```
hg log --exclude {{pattern}}
```

- Display the log information for a specific revision:

```
hg log --rev {{revision}}
```

- Display the revision history for a specific branch:

```
hg log --branch {{branch}}
```

- Display the revision history for a specific date:

```
hg log --date {{date}}
```

- Display revisions committed by a specific user:

```
hg log --user {{user}}
```

hg pull

Pull changes from a specified repository to the local repository.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#pull>.

- Pull from the "default" source path:

```
hg pull
```

- Pull from a specified source repository:

```
hg pull {{path/to/source_repository}}
```

- Update the local repository to the head of the remote:

```
hg pull --update
```

- Pull changes even when the remote repository is unrelated:

```
hg pull --force
```

- Specify a specific revision changeset to pull up to:

```
hg pull --rev {{revision}}
```

- Specify a specific branch to pull:

```
hg pull --branch {{branch}}
```

- Specify a specific bookmark to pull:

```
hg pull --bookmark {{bookmark}}
```

hg push

Push changes from the local repository to a specified destination.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#push>.

- Push changes to the "default" remote path:

```
hg push
```

- Push changes to a specified remote repository:

```
hg push {{path/to/destination_repository}}
```

- Push a new branch if it does not exist (disabled by default):

```
hg push --new-branch
```

- Specify a specific revision changeset to push:

```
hg push --rev {{revision}}
```

- Specify a specific branch to push:

```
hg push --branch {{branch}}
```

- Specify a specific bookmark to push:

```
hg push --bookmark {{bookmark}}
```

hg remove

Remove specified files from the staging area.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#remove>.

- Remove files or directories from the staging area:

```
hg remove {{path/to/file}}
```

- Remove all staged files matching a specified pattern:

```
hg remove --include {{pattern}}
```

- Remove all staged files, excluding those that match a specified pattern:

```
hg remove --exclude {{pattern}}
```

- Recursively remove sub-repositories:

```
hg remove --subrepos
```

- Remove files from the repository that have been physically removed:

```
hg remove --after
```

hg root

Display the root location of a Hg repository.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#root>.

- Display the root location of the current repository:

```
hg root
```

- Display the root location of the specified repository:

```
hg root --cwd {{path/to/directory}}
```

hg serve

Start a standalone Mercurial web server for browsing repositories.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#serve>.

- Start a web server instance:

```
hg serve
```

- Start a web server instance on the specified port:

```
hg serve --port {{port}}
```

- Start a web server instance on the specified listening address:

```
hg serve --address {{address}}
```

- Start a web server instance with a specific identifier:

```
hg serve --name {{name}}
```

- Start a web server instance using the specified theme (see the templates directory):

```
hg serve --style {{style}}
```

- Start a web server instance using the specified SSL certificate bundle:

```
hg serve --certificate {{path/to/certificate}}
```

hg status

Show files that have changed in the working directory.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#status>.

- Display the status of changed files:

```
hg status
```

- Display only modified files:

```
hg status --modified
```

- Display only added files:

```
hg status --added
```

- Display only removed files:

```
hg status --removed
```

- Display only deleted (but tracked) files:

```
hg status --deleted
```

- Display changes in the working directory compared to a specified changeset:

```
hg status --rev {{revision}}
```

- Display only files matching a specified glob pattern:

```
hg status --include {{pattern}}
```

- Display files, excluding those that match a specified glob pattern:

```
hg status --exclude {{pattern}}
```

hg update

Update the working directory to a specified changeset.

More information: <https://www.mercurial-scm.org/doc/hg.1.html#update>.

- Update to the tip of the current branch:

```
hg update
```

- Update to the specified revision:

```
hg update --rev {{revision}}
```

- Update and discard uncommitted changes:

```
hg update --clean
```

- Update to the last commit matching a specified date:

```
hg update --date {{dd-mm-yyyy}}
```

hg

A command line interface for Mercurial, a distributed source control management system.

See **hg-add**, **hg-commit** and other pages for additional information.

More information: <https://www.mercurial-scm.org>.

- Execute Mercurial command:

```
hg {{command}}
```

- Call general help:

```
hg help
```

- Call help on a command:

```
hg help {{command}}
```

- Check the Mercurial version:

```
hg --version
```

history

Command Line history.

- Display the commands history list with line numbers:

```
history
```

- Display the last 20 commands:

```
history {{20}}
```

- Clear the commands history list (only for current **bash** shell):

```
history -c
```

- Overwrite history file with history of current **bash** shell (often combined with `history -c` to purge history):

```
history -w
```

- Delete the history entry at the specified offset:

```
history -d {{offset}}
```

hive

CLI tool for Apache Hive.

More information: <https://cwiki.apache.org/confluence/display/Hive/LanguageManual+Cli>.

- Start a Hive interactive shell:

```
hive
```

- Run HiveQL:

```
hive -e "{{hiveql_query}}"
```

- Run a HiveQL file with a variable substitution:

```
hive --define {{key}}={{value}} -f {{path/to/file.sql}}
```

- Run a HiveQL with HiveConfig (e.g. `mapred.reduce.tasks=32`):

```
hive --hiveconf {{conf_name}}={{conf_value}}
```

hn

Command-line interface for Hacker News.

More information: <https://github.com/rafaelrinaldi/hn-cli>.

- View stories on Hacker News:

`hn`

- View *number* of stories on Hacker News:

`hn --limit {{number}}`

- View stories on Hacker News, and keep the list open after selecting a link:

`hn --keep-open`

- View stories on Hacker News sorted by submission date:

`hn --latest`

home-manager

Manage a user environment using Nix.

More information: <https://github.com/rycee/home-manager>.

- Activate the configuration defined in `~/.config/nixpkgs/home.nix`:

```
home-manager build
```

- Activate the configuration and switch to it:

```
home-manager switch
```

host

Lookup Domain Name Server.

- Lookup A, AAAA, and MX records of a domain:

```
host {{domain}}
```

- Lookup a field (CNAME, TXT,...) of a domain:

```
host -t {{field}} {{domain}}
```

- Reverse lookup an IP:

```
host {{ip_address}}
```

- Specify an alternate DNS server to query:

```
host {{domain}} {{8.8.8.8}}
```

hostapd

Start an access point using a wireless interface.

More information: <https://w1.fi/hostapd/>.

- Start an access point:

```
sudo hostapd {{path/to/hostapd.conf}}
```

- Start an access point, forking into the background:

```
sudo hostapd -B {{path/to/hostapd.conf}}
```

hostess

An idempotent command-line utility for managing your /etc/hosts file.

More information: <https://github.com/cbednarski/hostess>.

- List domains, target ips and on/off status:

```
hostess list
```

- Add a domain pointing to your machine to your hosts file:

```
hostess add {{local.example.com}} {{127.0.0.1}}
```

- Remove a domain from your hosts file:

```
hostess del {{local.example.com}}
```

- Disable a domain (but don't remove it completely):

```
hostess off {{local.example.com}}
```

hostid

Prints the numeric identifier for the current host (not necessarily the IP address).

- Display the numeric identifier for the current host in hexadecimal:

`hostid`

hping

Command-line oriented TCP/IP packet assembler and analyzer.

Inspired by the **ping** command.

More information: <http://www.hping.org>.

- Ping localhost over TCP:

```
hping3 {{localhost}}
```

- Ping an IP address over TCP on a specific port:

```
hping3 -p {{80}} -S {{192.168.1.1}}
```

- Ping an IP address over UDP on port 80:

```
hping3 --udp -p {{80}} -S {{192.168.1.1}}
```

- Scan a set of TCP ports on a specific IP address:

```
hping3 --scan {{80,3000,9000}} -S {{192.168.1.1}}
```

- Perform a charge test on port 80:

```
hping3 --flood -p {{80}} -S {{192.168.1.1}}
```

hr

Print a horizontal rule in the terminal.

- Print a horizontal rule:

```
hr
```

- Print a horizontal rule with a custom string:

```
hr {{string}}
```

- Print a multiline horizontal rule:

```
hr {{string_a}} {{string_b}} {{string_c}}
```

hsd-cli

The command line REST tool for the Handshake blockchain.

More information: <https://handshake.org>.

- Retrieve information about the current server:

```
hsd-cli info
```

- Broadcast a local transaction:

```
hsd-cli broadcast {{transaction_hex}}
```

- Retrieve a mempool snapshot:

```
hsd-cli mempool
```

- View a transaction by address or hash:

```
hsd-cli tx {{address_or_hash}}
```

- View a coin by its hash index or address:

```
hsd-cli coin {{hash_index_or_address}}
```

- View a block by height or hash:

```
hsd-cli block {{height_or_hash}}
```

- Reset the chain to the specified block:

```
hsd-cli reset {{height_or_hash}}
```

- Execute an RPC command:

```
hsd-cli rpc {{command}} {{args}}
```

hsw-cli

The command line REST tool for the Handshake wallet.

More information: <https://npmjs.com/package/hs-client>.

- Unlock the current wallet (timeout in seconds):

```
hsw-cli unlock {{passphrase}} {{timeout}}
```

- Lock the current wallet:

```
hsw-cli lock
```

- View the current wallet's details:

```
hsw-cli get
```

- View the current wallet's balance:

```
hsw-cli balance
```

- View the current wallet's transaction history:

```
hsw-cli history
```

- Send a transaction with the specified coin amount to an address:

```
hsw-cli send {{address}} {{1.05}}
```

- View the current wallet's pending transactions:

```
hsw-cli pending
```

- View details about a transaction:

```
hsw-cli tx {{transaction_hash}}
```

html5validator

A command line tool for testing HTML5 validity.

More information: <https://github.com/svenkreiss/html5validator>.

- Validate a specific file:

```
html5validator {{path/to/file}}
```

- Validate all HTML files in a specific directory:

```
html5validator --root {{path/to/directory}}
```

- Show warnings as well as errors:

```
html5validator --show-warnings {{path/to/file}}
```

- Match multiple files using a glob pattern:

```
html5validator --root {{path/to/directory}} --match "{{*.html  
*.php}}"
```

- Ignore specific directory names:

```
html5validator --root {{path/to/directory}} --blacklist  
"{{node_modules vendor}}"
```

- Output the results in a specific format:

```
html5validator --format {{gnu|xml|json|text}} {{path/to/  
file}}
```

- Output the log at a specific verbosity level:

```
html5validator --root {{path/to/directory}} --log {{debug|  
info|warning}}
```

htop

Display dynamic real-time information about running processes. An enhanced version of `top`.

- Start htop:

```
htop
```

- Start htop displaying only processes owned by given user:

```
htop -u {{username}}
```

- Sort processes by a column (use `--sort-key help` for a column list):

```
htop -s {{column_name}}
```

- Get help about interactive commands:

```
?
```

htpasswd

Create and manage htpasswd files to protect web server directories using basic authentication.

More information: <https://httpd.apache.org/docs/current/programs/htpasswd.html>.

- Create/overwrite htpasswd file:

```
htpasswd -c {{path/to/file}} {{username}}
```

- Add user to htpasswd file or update existing user:

```
htpasswd {{path/to/file}} {{username}}
```

- Add user to htpasswd file in batch mode without an interactive password prompt (for script usage):

```
htpasswd -b {{path/to/file}} {{username}} {{password}}
```

- Delete user from htpasswd file:

```
htpasswd -D {{path/to/file}} {{username}}
```

- Verify user password:

```
htpasswd -v {{path/to/file}} {{username}}
```

- Display a string with username (plain text) and password (md5):

```
htpasswd -nbm {{username}} {{password}}
```

http

HTTPie: HTTP client, aims to be easier to use than cURL.

More information: <https://httpie.org>.

- Download a URL to a file:

```
http -d {{example.org}}
```

- Send form-encoded data:

```
http -f {{example.org}} {{name='bob'}}  
{{profile_picture@'bob.png'}}
```

- Send JSON object:

```
http {{example.org}} {{name='bob'}}
```

- Specify an HTTP method:

```
http {{HEAD}} {{example.org}}
```

- Include an extra header:

```
http {{example.org}} {{X-MyHeader:123}}
```

- Pass a user name and password for server authentication:

```
http -a {{username:password}} {{example.org}}
```

- Specify raw request body via `stdin`:

```
cat {{data.txt}} | http PUT {{example.org}}
```

httpflow

A command line utility to capture and dump HTTP streams.

More information: <https://github.com/six-ddc/httpflow>.

- Capture traffic on all interfaces:

```
httpflow -i {{any}}
```

- Use a bpf-style capture to filter the results:

```
httpflow {{host httpbin.org or host baidu.com}}
```

- Use a regexp to filter requests by urls:

```
httpflow -u '{{regex}}'
```

- Read packets from pcap format binary file:

```
httpflow -r {{out.cap}}
```

- Write the output to a directory:

```
httpflow -w {{path/to/directory}}
```

httping

Measure the latency and throughput of a web server.

More information: <https://www.vanheusden.com/httping>.

- Ping the specified url:

```
httping -g {{url}}
```

- Ping the web server on **host** and **port**:

```
httping -h {{host}} -p {{port}}
```

- Ping the web server on **host** using a TLS connection:

```
httping -l -g https://{{host}}
```

- Ping the web server on **host** using HTTP basic authentication:

```
httping -g http://{{host}} -U {{username}} -P {{password}}
```

httpprobe

Take a list of domains and probe for working HTTP and HTTPS servers.

More information: <https://github.com/tomnomnom/httpprobe>.

- Probe a list of domains from a text file:

```
cat {{input_file}} | httpprobe
```

- Only check for HTTP if HTTPS is not working:

```
cat {{input_file}} | httpprobe --prefer-https
```

- Probe additional ports with a given protocol:

```
cat {{input_file}} | httpprobe -p {{https:2222}}
```

- Output all available options:

```
httpprobe --help
```

httpry

A lightweight packet sniffer for displaying and logging HTTP traffic.

It can be run in real-time displaying the traffic as it is parsed, or as a daemon process that logs to an output file.

More information: <http://dumpsterventures.com/jason/httpry/>.

- Save output to a file:

```
httpry -o {{path/to/file.log}}
```

- Listen on a specific interface and save output to a binary pcap format file:

```
httpry {{eth0}} -b {{path/to/file.pcap}}
```

- Filter output by a comma-separated list of HTTP verbs:

```
httpry -m {{get|post|put|head|options|delete|trace|connect|patch}}
```

- Read from an input capture file and filter by IP:

```
httpry -r {{path/to/file.log}} '{{host 192.168.5.25}}'
```

- Run as daemon process:

```
httpry -d -o {{path/to/file.log}}
```

hub

A wrapper for git that adds commands for working with GitHub-based projects.

If set up as instructed by `hub alias`, one can use `git` to run `hub` commands.

More information: <https://hub.github.com>.

- Clone a repository you own, using just the repository name rather than the full URL:

```
hub clone {{repo_name}}
```

- Clone another user's repository, using their github username and the repository name:

```
hub clone {{username}}/{{repo_name}}
```

- Create a fork of the current repository (cloned from another user) under your github profile:

```
hub fork
```

- Push the current local branch to github and create a PR for it in the original repository:

```
hub push {{remote_name}} && hub pull-request
```

- Create a PR of the current (already pushed) branch, reusing the message from the first commit:

```
hub pull-request --no-edit
```

- Create a new branch with the contents of a pull request and switch to it:

```
hub pr checkout {{pr_number}}
```

- Upload the current (local-only) repository to your github account:

```
hub create
```

hugo

Template-based static site generator. Uses modules, components, and themes.

More information: <https://gohugo.io>.

- Create a new Hugo site:

```
hugo new site {{path/to/site}}
```

- Create a new Hugo theme (themes may also be downloaded from https://themes.gohugo.io/):

```
hugo new theme {{theme_name}}
```

- Create a new page:

```
hugo new {{section_name}}/{{filename}}
```

- Build a site to the `./public/` directory:

```
hugo
```

- Build a site including pages that are marked as a "draft":

```
hugo --buildDrafts
```

- Build a site to a given directory:

```
hugo --destination {{path/to/destination}}
```

- Build a site, start up a webserver to serve it, and automatically reload when pages are edited:

```
hugo server
```

hunspell

Check spelling.

More information: <https://hunspell.github.io/>.

- Check the spelling of a file:

```
hunspell {{path/to/file}}
```

- Check the spelling of a file with the en_US dictionary:

```
hunspell -d {{en_US}} {{path/to/file}}
```

- List misspelled words in a file:

```
hunspell -l {{path/to/file}}
```

hydra

Online password guessing tool.

Protocols supported include FTP, HTTP(S), SMTP, SNMP, XMPP, SSH, and more.

More information: <https://github.com/vanhauser-thc/thc-hydra>.

- Start Hydra's wizard:

```
hydra-wizard
```

- Guess SSH credentials using a given username and a list of passwords:

```
hydra -l {{username}} -P {{path/to/wordlist.txt}} {{host_ip}}  
{{ssh}}
```

- Guess Telnet credentials using a list of usernames and a single password, specifying a non-standard port and IPv6:

```
hydra -L {{path/to/usernames.txt}} -p {{password}} -s  
{{port}} -6 {{host_ip}} {{telnet}}
```

- Guess FTP credentials using usernames and passwords lists, specifying the number of threads:

```
hydra -L {{path/to/usernames.txt}} -P {{path/to/}  
wordlist.txt}} -t {{n_tasks}} {{host_ip}} {{ftp}}
```

- Guess MySQL credentials using a username and a passwords list, exiting when a username/password pair is found:

```
hydra -l {{username}} -P {{path/to/wordlist.txt}} -f  
{{host_ip}} {{mysql}}
```

- Guess RDP credentials using a username and a passwords list, showing each attempt:

```
hydra -l {{username}} -P {{path/to/wordlist.txt}} -V {{rdp://}}  
{{host_ip}}
```

- Guess IMAP credentials on a range of hosts using a list of colon-separated username/password pairs:

```
hydra -C {{path/to/username_password_pairs.txt}} {{imap://[host_range_cidr]}}
```

- Guess POP3 credentials on a list of hosts using usernames and passwords lists, exiting when a username/password pair is found:

```
hydra -L {{path/to/usernames.txt}} -P {{path/to/wordlist.txt}} -M {{path/to/hosts.txt}} -F {{pop3}}
```

hyperfine

A command-line benchmarking tool.

More information: <https://github.com/sharkdp/hyperfine/>.

- Run a basic benchmark, performing at least 10 runs:

```
hyperfine '{{make}}'
```

- Run a comparative benchmark:

```
hyperfine '{{make target1}}' '{{make target2}}'
```

- Change minimum number of benchmarking runs:

```
hyperfine --min-runs {{7}} '{{make}}'
```

- Perform benchmark with warmup:

```
hyperfine --warmup {{5}} '{{make}}'
```

- Run a command before each benchmark run (to clear caches, etc.):

```
hyperfine --prepare '{{make clean}}' '{{make}}'
```

- Run a benchmark where a single parameter changes for each run:

```
hyperfine --prepare '{{make clean}}' --parameter-scan
{{num_threads}} {{1}} {{10}} '{{make -j {num_threads}}}'
```

iconv

Converts text from one encoding to another.

- Convert file to a specific encoding, and print to **stdout**:

```
iconv -f {{from_encoding}} -t {{to_encoding}} {{input_file}}
```

- Convert file to the current locale's encoding, and output to a file:

```
iconv -f {{from_encoding}} {{input_file}} > {{output_file}}
```

- List supported encodings:

```
iconv -l
```

id

Display current user and group identity.

- Display current user's id (UID), group id (GID) and groups to which they belong:

id

- Display the current user identity as a number:

id -u

- Display the current group identity as a number:

id -g

- Display an arbitrary user's id (UID), group id (GID) and groups to which they belong:

id {{username}}

id3tag

Tool for reading, writing, and manipulating ID3v1 and ID3v2 tags of MP3 files.

- Set artist and title tag of an MP3 file:

```
id3tag --artist={{artist}} --title={{title}} {{path/to/  
file.mp3}}
```

- Set album title of all MP3 files in the current directory:

```
id3tag --album={{album}} {{*.mp3}}
```

- Get more help:

```
id3tag --help
```

identify

Command line utility of Image Magick project to describe the format and characteristics of one or more image files.

More information: <https://imagemagick.org/script/identify.php>.

- Collect dimensions of all jpeg files under current directory:

```
identify -format "%f,%w,%h\n" *.{jpg} > {{filelist.csv}}
```

iex

IEx is the interactive shell for Elixir.

More information: <https://hexdocs.pm/iex>.

- Start an interactive session:

```
iex
```

- Start a session that remembers history:

```
iex --erl "-kernel shell_history enabled"
```

- Start and load Mix project files:

```
iex -S mix
```

if

Simple shell conditional.

- Echo a different thing depending on a command's success:

```
{command} && echo "success" || echo "failure"
```

- Full if syntax:

```
if {{condition}}; then echo "true"; else echo "false"; fi
```

- List available if conditions:

```
help test
```

- Test if a given variable is empty:

```
if [[ -z $GIT_BRANCH ]]; then echo "true"; else echo "false"; fi
```

- Test if a file exists:

```
if [[ -e {{filename}} ]]; then echo "true"; else echo "false"; fi
```

- If directory not exists:

```
if [[ ! -d {{path/to/directory}} ]]; then echo "true"; else echo "false"; fi
```

ifconfig

Network Interface Configurator.

- View network settings of an ethernet adapter:

```
ifconfig eth0
```

- Display details of all interfaces, including disabled interfaces:

```
ifconfig -a
```

- Disable eth0 interface:

```
ifconfig eth0 down
```

- Enable eth0 interface:

```
ifconfig eth0 up
```

- Assign IP address to eth0 interface:

```
ifconfig eth0 {{ip_address}}
```

ignite

A CLI for React Native boilerplates, plugins, generators, and more.

More information: <https://infinite.red/ignite>.

- Create a new React Native project:

```
ignite new {{project_name}}
```

- Generate file from a plugin:

```
ignite generate {{plugin_name}} {{filename}}
```

- Add an Ignite plugin to the project:

```
ignite add {{plugin_name}}
```

- Remove an Ignite plugin from the project:

```
ignite remove {{plugin_name}}
```

imapsync

Email IMAP tool for syncing, copying and migrating email mailboxes between two imap servers, one way, and without duplicates.

More information: <https://imapsync.lamiral.info>.

- Synchronize imap account between host1 and host2:

```
imapsync --host1 {{host1}} --user1 {{user1}} --password1  
{{secret1}} --host2 {{host2}} --user2 {{user2}} --password2  
{{secret2}}
```

import

Capture some or all of an X server screen, and save the image to a file.

Part of the ImageMagick library.

- Capture the entire X server screen in the PostScript image format:

```
import -window root {{output.postscript}}
```

- Capture contents of a remote X server screen in the PNG image format:

```
import -window root -display {{remote_host}}:{screen}.  
{display} {{output.png}}
```

- Capture a specific window, given its ID as displayed by [xwininfo](#), into the JPEG format:

```
import -window {{window_id}} {{output.jpg}}
```

in2csv

Converts various tabular data formats into CSV.

Included in csvkit.

More information: <https://csvkit.readthedocs.io/en/latest/scripts/in2csv.html>.

- Convert an XLS file to CSV:

```
in2csv {{data.xls}}
```

- Convert a DBF file to a CSV file:

```
in2csv {{data.dbf}} > {{data.csv}}
```

- Convert a specific sheet from an XLSX file to CSV:

```
in2csv --sheet={{sheet_name}} {{data.xlsx}}
```

- Pipe a JSON file to in2csv:

```
cat {{data.json}} | in2csv -f json > {{data.csv}}
```

indent

Change the appearance of a C/C++ program by inserting or deleting whitespace.

More information: <https://www.gnu.org/software/indent/>.

- Format C/C++ source according to the Linux style guide, automatically back up the original files, and replace with the indented versions:

```
indent --linux-style {{path/to/source.c}} {{path/to/another_source.c}}
```

- Format C/C++ source according to the GNU style, saving the indented version to a different file:

```
indent --gnu-style {{path/to/source.c}} -o {{path/to/indented_source.c}}
```

- Format C/C++ source according to the style of Kernigan & Ritchie (K&R), no tabs, 3 spaces per indent, and wrap lines at 120 characters:

```
indent --k-and-r-style --indent-level3 --no-tabs --line-length120 {{path/to/source.c}} -o {{path/to/indented_source.c}}
```

infection

A mutation testing framework for PHP.

More information: <https://infection.github.io>.

- Analyse code using the configuration file (or create one if it does not exist):

`infection`

- Use a specific number of threads:

`infection --threads {{number_of_threads}}`

- Specify a minimum Mutation Score Indicator (MSI):

`infection --min-msi {{percentage}}`

- Specify a minimum covered code MSI:

`infection --min-covered-msi {{percentage}}`

- Use a specific test framework (defaults to phpunit):

`infection --test-framework {{phpunit|phpspec}}`

- Only mutate lines of code that are covered by tests:

`infection --only-covered`

- Display the mutation code that has been applied:

`infection --show-mutations`

- Specify the log verbosity:

`infection --log-verbosity {{default|all|none}}`

influx

InfluxDB command-line client.

More information: <https://docs.influxdata.com/influxdb/v1.7/tools/shell/>.

- Connect to an InfluxDB running on localhost with no credentials:

```
influx
```

- Connect with a specific username (will prompt for a password):

```
influx -username {{username}} -password ""
```

- Connect to a specific host:

```
influx -host {{hostname}}
```

- Use a specific database:

```
influx -database {{database_name}}
```

- Execute a given command:

```
influx -execute "{{influxql_command}}"
```

- Return output in a specific format:

```
influx -execute "{{influxql_command}}" -format {{json|csv|column}}
```

info

Reads documentation stored in the info format.

More information: [https://en.wikipedia.org/wiki/Info_\(Unix\)](https://en.wikipedia.org/wiki/Info_(Unix)).

- Start reading top-level directory menu:

`info`

- Start reading at given menu item node from top-level directory:

`info {{menu_item}}`

- Start reading at second menu item within first menu item manual:

`info {{first_menu_item}} {{second_menu_item}}`

initdb

Create a PostgreSQL database on disk.

More information: <https://www.postgresql.org/docs/9.5/app-initdb.html>.

- Create a database at /usr/local/var/postgres:

```
initdb -D /usr/local/var/postgres
```

inkscape

An SVG (Scalable Vector Graphics) editing program.

For Inkscape versions up to 0.92.x, use -e instead of -o.

More information: <https://inkscape.org>.

- Open an SVG file in the Inkscape GUI:

```
inkscape {{filename.svg}}
```

- Export an SVG file into a bitmap with the default format (PNG) and the default resolution (96 DPI):

```
inkscape {{filename.svg}} -o {{filename.png}}
```

- Export an SVG file into a bitmap of 600x400 pixels (aspect ratio distortion may occur):

```
inkscape {{filename.svg}} -o {{filename.png}} -w {{600}} -h {{400}}
```

- Export the drawing (bounding box of all objects) of an SVG file into a bitmap:

```
inkscape {{filename.svg}} -o {{filename.png}} -D
```

- Export a single object, given its ID, into a bitmap:

```
inkscape {{filename.svg}} -i {{id}} -o {{object.png}}
```

- Export an SVG document to PDF, converting all texts to paths:

```
inkscape {{filename.svg}} -o {{filename.pdf}} --export-text-to-path
```

- Duplicate the object with id="path123", rotate the duplicate 90 degrees, save the file, and quit Inkscape:

```
inkscape {{filename.svg}} --select=path123 --verb="{{EditDuplicate;ObjectRotate90;FileSave;FileQuit}}"
```

inkview

Inkscape graphical SVG previewer.

Also functions as a slideshow viewer.

More information: <http://wiki.inkscape.org/wiki/index.php/Inkview>.

- Preview an SVG:

```
inkview {{path/to/file.svg}}
```

- Preview multiple SVGs (use arrow keys to navigate):

```
inkview {{path/to/file_a.svg}} {{path/to/file_b.svg}} {{path/to/file_c.svg}}
```

install

Copy files and set attributes.

Copy files (often executable) to a system location like `/usr/local/bin`, give them the appropriate permissions/ownership.

- Copy files to destination:

```
install {{path/to/source}} {{path/to/destination}}
```

- Copy files to destination, setting their ownership:

```
install -o {{user}} {{path/to/source}} {{path/to/destination}}
```

- Copy files to destination, setting their group ownership:

```
install -g {{user}} {{path/to/source}} {{path/to/destination}}
```

- Copy files to destination, setting their mode:

```
install -m {{+x}} {{path/to/source}} {{path/to/destination}}
```

- Copy files and apply access/modification times of source to destination:

```
install -p {{path/to/source}} {{path/to/destination}}
```

interdiff

Show differences between two diff files.

More information: <http://freshmeat.sourceforge.net/projects/patchutils>.

- Compare diff files:

```
interdiff {{old_file}} {{new_file}}
```

- Compare diff files, ignoring whitespace:

```
interdiff -w {{old_file}} {{new_file}}
```

ionic

A framework to build hybrid mobile apps.

More information: <https://ionicframework.com/docs/cli>.

- Create a new project:

```
ionic start
```

- Start a local dev server for app dev/testing:

```
ionic serve
```

- Generate new app component, directive, page, pipe, provider or tabs:

```
ionic g {{page}}
```

- Show versions of ionic, cordova, environment, etc.:

```
ionic info
```

- Run app on an android/ios device:

```
ionic cordova run {{android|ios}} --device
```

- Check the health of a ionic app:

```
ionic doctor {{check}}
```

ionice

Get or set program I/O scheduling class and priority.

Scheduling classes: 1 (realtime), 2 (best-effort), 3 (idle).

Priority levels: 0 (the highest) - 7 (the lowest).

- Set I/O scheduling class of a running process:

```
ionice -c {{scheduling_class}} -p {{pid}}
```

- Run a command with custom I/O scheduling class and priority:

```
ionice -c {{scheduling_class}} -n {{priority}} {{command}}
```

- Print the I/O scheduling class and priority of a running process:

```
ionice -p {{pid}}
```

ioping

Monitor I/O latency in real time.

More information: <https://github.com/koct9i/ioping>.

- Show disk I/O latency using the default values and the current directory:

```
ioping .
```

- Measure latency on /tmp using 10 requests of 1 megabyte each:

```
ioping -c 10 -s 1M /tmp
```

- Measure disk seek rate on `/dev/sdX`:

```
ioping -R {{/dev/sdX}}
```

- Measure disk sequential speed on `/dev/sdX`:

```
ioping -RL {{/dev/sdX}}
```

iotop

Display a table of current I/O usage by processes or threads.

More information: <https://linux.die.net/man/1/iotop>.

- Start top-like I/O monitor:

`iotop`

- Show only processes or threads actually doing I/O:

`iotop -o`

- Show I/O usage in non-interactive mode:

`iotop -b`

- Show only I/O usage of processes(Default is to show all threads):

`iotop -P`

- Show I/O usage of given PID(s):

`iotop -p {{PID}}`

- Show I/O usage of a given user:

`iotop -u {{user}}`

- Show accumulated I/O instead of bandwidth:

`iotop -a`

ipcs

Display information about resources used in IPC (Inter-process Communication).

- Specific information about the Message Queue which has the id 32768:

```
ipcs -qi 32768
```

- General information about all the IPC:

```
ipcs -a
```

iperf

Measure network bandwidth between computers.

More information: <https://iperf.fr>.

- Run on server:

```
iperf -s
```

- Run on server using UDP mode and set server port to listen on 5001:

```
iperf -u -s -p {{5001}}
```

- Run on client:

```
iperf -c {{server_address}}
```

- Run on client every 2 seconds:

```
iperf -c {{server_address}} -i {{2}}
```

- Run on client with 5 parallel threads:

```
iperf -c {{server_address}} -P {{5}}
```

- Run on client using UDP mode:

```
iperf -u -c {{server_address}} -p {{5001}}
```

iperf3

Traffic generator for testing network bandwidth.

More information: <https://iperf.fr>.

- Run iperf3 as a server:

```
iperf3 -s
```

- Run an iperf3 server on a specific port:

```
iperf3 -s -p {{port}}
```

- Start bandwidth test:

```
iperf3 -c {{server}}
```

- Run iperf3 in multiple parallel streams:

```
iperf3 -c {{server}} -P {{streams}}
```

- Reverse direction of the test. Server sends data to the client:

```
iperf3 -c {{server}} -R
```

ipfs

Inter Planetary File System.

A peer-to-peer hypermedia protocol. Aims to make the web more open.

More information: <https://ipfs.io>.

- Add a file from local to the filesystem, pin it and print the relative hash:

```
ipfs add {{filename}}
```

- Add a directory and its files recursively from local to the filesystem and print the relative hash:

```
ipfs add -r {{directory}}
```

- Save a remote file and give it a name but not pin it:

```
ipfs get {{hash}} -o {{filename}}
```

- Pin a remote file locally:

```
ipfs pin add {{hash}}
```

- Display pinned files:

```
ipfs pin ls
```

- Unpin a file from the local storage:

```
ipfs pin rm {{hash}}
```

- Remove unpinned files from local storage:

```
ipfs repo gc
```

IPython

A Python shell with automatic history, dynamic object introspection, easier configuration, command completion, access to the system shell and more.

More information: <https://ipython.org/documentation.html>.

- Start an interactive IPython session:

```
ipython
```

- Enter an interactive IPython session after running a Python script:

```
ipython -i {{script.py}}
```

- Create default IPython profile:

```
ipython profile create
```

- Print the path to the directory for the default IPython profile:

```
ipython locate profile
```

- Clear the IPython history database, deleting all entries:

```
ipython history clear
```

irssi

Text based IRC client.

More information: <https://irssi.org>.

- Open irssi and connect to a server with a nickname:

```
irssi -n {{nickname}} -c {{irc.example.com}}
```

- Open irssi and connect with a specific server on a given port:

```
irssi -c {{irc.example.com}} -p {{port}}
```

- View the help:

```
irssi --help
```

- Join a channel:

```
/join {{#channelname}}
```

- Change active window (starts at 1):

```
/win {{window_number}}
```

- Exit the application cleanly and quitting any server(s):

```
/quit
```

is-up

Check whether a website is up or down.

More information: <https://github.com/sindresorhus/is-up-cli>.

- Check the status of the specified website:

```
is-up {{example.com}}
```

iverilog

Preprocesses and compiles Verilog HDL (IEEE-1364) code, into executable programs for simulation.

More information: <http://iverilog.icarus.com/>.

- Compile a source file into an executable:

```
iverilog {{source.v}} -o {{executable}}
```

- Also display all warnings:

```
iverilog {{source.v}} -Wall -o {{executable}}
```

- Compile and run explicitly using the VVP runtime:

```
iverilog -o {{execuable}} -tvvp {{source.v}}
```

- Compile using Verilog library files from a different path:

```
iverilog {{source.v}} -o {{executable}} -I{{path/to/library_directory}}
```

- Preprocess Verilog code without compiling:

```
iverilog -E {{source.v}}
```

jar

Java Applications/Libraries Packager.

More information: <https://docs.oracle.com/javase/tutorial/deployment/jar/basicsindex.html>.

- Recursively archive all files in the current directory into a .jar file:

```
jar cf {{file.jar}} *
```

- Unzip .jar/.war file to the current directory:

```
jar -xvf {{file.jar}}
```

- List a .jar/.war file content:

```
jar tf {{path/to/file.jar}}
```

- List a .jar/.war file content with verbose output:

```
jar tvf {{path/to/file.jar}}
```

jarsigner

Sign and verify Java Archive (JAR) files.

More information: <https://docs.oracle.com/javase/9/tools/jarsigner.htm>.

- Sign a JAR file:

```
jarsigner {{path/to/file.jar}} {{keystore_alias}}
```

- Sign a JAR file with a specific algorithm:

```
jarsigner -sigalg {{algorithm}} {{path/to/file.jar}}  
{{keystore_alias}}
```

- Verify the signature of a JAR file:

```
jarsigner -verify {{path/to/file.jar}}
```

java

Java Application Launcher.

More information: <https://java.com>.

- Execute a java .class file that contains a main method by using just the class name:

```
java {{classname}}
```

- Execute a .jar program:

```
java -jar {{filename.jar}}
```

- Execute a .jar program with debug waiting to connect on port 5005:

```
java -  
agentlib:jdwp=transport=dt_socket,server=y,suspend=y,address=*:  
5005 -jar {{filename.jar}}
```

- Display JDK, JRE and HotSpot versions:

```
java -version
```

- Display usage information for the java command:

```
java -help
```

javac

Java Application Compiler.

- Compile a .java file:

```
javac {{file.java}}
```

- Compile several .java files:

```
javac {{file1.java}} {{file2.java}} {{file3.java}}
```

- Compile all .java files in current directory:

```
javac {{*.java}}
```

- Compile a .java file and place the resulting class file in a specific directory:

```
javac -d {{path/to/some/directory}} {{file.java}}
```

javadoc

Generate Java API documentation in HTML format from source code.

More information: <https://docs.oracle.com/javase/9/javadoc/javadoc-command.htm>.

- Generate documentation for Java source code and save the result in a directory:

```
javadoc -d {{path/to/directory/}} {{path/to/java_source_code}}
```

- Generate documentation with a specific encoding:

```
javadoc -docencoding {{UTF-8}} {{path/to/java_source_code}}
```

- Generate documentation excluding some packages:

```
javadoc -exclude {{package_list}} {{path/to/java_source_code}}
```

jc

A utility to convert the output of multiple commands to JSON.

More information: <https://github.com/kellyjonbrazil/jc>.

- Convert command output to JSON via pipe:

```
{ifconfig} | jc {{--ifconfig}}
```

- Convert command output to JSON via magic syntax:

```
jc {ifconfig}
```

- Output pretty JSON via pipe:

```
{ifconfig} | jc {{--ifconfig}} -p
```

- Output pretty JSON via magic syntax:

```
jc -p {ifconfig}
```

jcal

Display calendar information in the Jalali format, with the current day highlighted.

More information: <http://www.nongnu.org/jcal/>.

- Display a calendar for the current month:

`jcal`

- Display the previous, current, and next months:

`jcal -3`

- Display a calendar for a specific year (4 digits):

`jcal {{year}}`

- Display a calendar for a specific month and year:

`jcal {{year}} {{month}}`

jdupes

A powerful duplicate file finder and an enhanced fork of fdupes.

More information: <https://github.com/jbruchon/jdupes>.

- Search a single directory:

```
jdupes {{directory}}
```

- Search multiple directories:

```
jdupes {{directory1}} {{directory2}}
```

- Search all directories recursively:

```
jdupes --recurse {{directory}}
```

- Search directory recursively and let user choose files to preserve:

```
jdupes --delete --recurse {{directory}}
```

- Search multiple directories and follow subdirectories under directory2, not directory1:

```
jdupes {{directory1}} --recurse: {{directory2}}
```

- Search multiple directories and keep the directory order in result:

```
jdupes -0 {{directory1}} {{directory2}} {{directory3}}
```

jekyll

A simple, blog-aware, static site generator.

More information: <https://jekyllrb.com>.

- Generate a development server that will run at http://localhost:4000/:

```
jekyll serve
```

- Enable incremental regeneration:

```
jekyll serve --incremental
```

- Enable verbose output:

```
jekyll serve --verbose
```

- Generate the current directory into `./_site`:

```
jekyll build
```

- Clean the site (removes site output and `cache` folder) without building:

```
jekyll clean
```

jenv

Command line tool to manage the "JAVA_HOME" environment variable.

More information: <https://www.jenv.be/>.

- Add a java version to jEnv:

```
jenv add {{path/to/jdk_home}}
```

- Display the current JDK version used:

```
jenv version
```

- Display all managed JDKs:

```
jenv versions
```

- Set the global JDK version:

```
jenv global {{java_version}}
```

- Set the JDK version for the current shell session:

```
jenv shell {{java_version}}
```

- Enable a jEnv plugin:

```
jenv enable-plugin {{plugin_name}}
```

jest

A zero-configuration JavaScript testing platform.

More information: <https://jestjs.io>.

- Run all available tests:

`jest`

- Run the test suites from files whose paths match the given regex patterns:

`jest {{test_file1}} {{path/to/test_file2.js}}`

- Run the tests whose names match the given regex pattern:

`jest --testNamePattern {{spec_name}}`

- Run test suites related to a given source file:

`jest --findRelatedTests {{path/to/source_file.js}}`

- Run test suites related to all uncommitted files:

`jest --onlyChanged`

- Watch files for changes and automatically re-run related tests:

`jest --watch`

- Show help:

`jest --help`

jhat

Java Heap Analysis Tool.

- Analyze a heap dump (from jmap), view via http on port 7000:

```
jhat {{dump_file.bin}}
```

- Analyze a heap dump, specifying an alternate port for the http server:

```
jhat -p {{port}} {{dump_file.bin}}
```

- Analyze a dump letting jhat use up to 8GB RAM (2-4x dump size recommended):

```
jhat -J-mx8G {{dump_file.bin}}
```

jhipster

Web application generator using either monolithic or microservices architecture.

More information: <https://www.jhipster.tech/>.

- Generate a simple full-stack project (monolithic or microservices):

`jhipster`

- Generate a simple frontend project:

`jhipster --skip-server`

- Generate a simple backend project:

`jhipster --skip-client`

- Apply lastest JHipster updates to the project:

`jhipster upgrade`

- Add a new entity to a generated project:

`jhipster entity {{entity_name}}`

- Import a JDL file to configure your application (see: <https://start.jhipster.tech/jdl-studio/>):

`jhipster import-jdl {{first_file.jh second_file.jh ... n_file.jh}}`

- Generate a CI/CD pipeline for your application:

`jhipster ci-cd`

- Generate a Kubernetes configuration for your application:

`jhipster kubernetes`

jigsaw

A Laravel-based static site builder for PHP.

More information: <https://jigsaw.tighten.co>.

- Initialise a project:

```
jigsaw init
```

- Initialise a project using a starter template:

```
jigsaw init {{template_name}}
```

- Build the site for development:

```
jigsaw build
```

- Preview the site from the "build_local" directory:

```
jigsaw serve
```

- Build the site for production:

```
jigsaw build production
```

- Preview the site from the "build_production" directory:

```
jigsaw serve {{build_production}}
```

jmap

Java Memory Map Tool.

- Print shared object mappings for a java process (output like pmap):

```
jmap {{java_pid}}
```

- Print heap summary information:

```
jmap -heap {{filename.jar}} {{java_pid}}
```

- Print histogram of heap usage by type:

```
jmap -histo {{java_pid}}
```

- Dump contents of the heap into a binary file for analysis with jhat:

```
jmap -dump:format=b,file={{filename}} {{java_pid}}
```

jobs

Display status of jobs in the current session.

- Show status of all jobs:

`jobs`

- Show status of a particular job:

`jobs {{job_id}}`

- Show status and process IDs of all jobs:

`jobs -l`

- Show process IDs of all jobs:

`jobs -p`

john

Password cracker.

More information: <https://www.openwall.com/john/>.

- Crack password hashes:

```
john {{path/to/hashes.txt}}
```

- Show passwords cracked:

```
john --show {{path/to/hashes.txt}}
```

- Display users' cracked passwords by user identifier from multiple files:

```
john --show --users={{user_ids}} {{path/to/hashes*}} {{path/to/other/hashes*}}
```

- Crack password hashes, using a custom wordlist:

```
john --wordlist={{path/to/wordlist.txt}} {{path/to/hashes.txt}}
```

- List available hash formats:

```
john --list=formats
```

- Crack password hashes, using a specific hash format:

```
john --format={{md5crypt}} {{path/to/hashes.txt}}
```

- Crack password hashes, enabling word mangling rules:

```
john --rules {{path/to/hashes.txt}}
```

- Restore an interrupted cracking session from a state file, e.g. `mycrack.rec`:

```
john --restore={{path/to/mycrack.rec}}
```

join

Join lines of two sorted files on a common field.

- Join two files on the first (default) field:

```
join {{file1}} {{file2}}
```

- Join two files using a comma (instead of a space) as the field separator:

```
join -t {{','}} {{file1}} {{file2}}
```

- Join field3 of file1 with field1 of file2:

```
join -1 {{3}} -2 {{1}} {{file1}} {{file2}}
```

- Produce a line for each unpairable line for file1:

```
join -a {{1}} {{file1}} {{file2}}
```

jp2a

Convert JPEG images to ASCII.

More information: <https://csl.name/jp2a/>.

- Read JPEG image from a file and print in ASCII:

```
jp2a {{path/to/image.jpeg}}
```

- Read JPEG image from a URL and print in ASCII:

```
jp2a {{www.example.com/image.jpeg}}
```

- Colorize the ASCII output:

```
jp2a --colors {{path/to/image.jpeg}}
```

- Specify characters to be used for the ASCII output:

```
jp2a --chars='{{.-oxx@@}}' {{path/to/image.jpeg}}
```

- Write the ASCII output into a file:

```
jp2a --output={{path/to/output_file.txt}} {{path/to/ image.jpeg}}
```

- Write the ASCII output in HTML file format, suitable for viewing in web browsers:

```
jp2a --html --output={{path/to/output_file.html}} {{path/to/ image.jpeg}}
```

jpegoptim

Optimise JPEG images.

More information: <https://github.com/tjko/jpegoptim>.

- Optimise a set of JPEG images, retaining all associated data:

```
jpegoptim {{image1.jpeg}} {{image2.jpeg}} {{imageN.jpeg}}
```

- Optimise JPEG images, stripping all non-essential data:

```
jpegoptim --strip-all {{image1.jpeg}} {{image2.jpeg}}  
{{imageN.jpeg}}
```

- Force the output images to be progressive:

```
jpegoptim --all-progressive {{image1.jpeg}} {{image2.jpeg}}  
{{imageN.jpeg}}
```

- Force the output images to have a fixed maximum filesize:

```
jpegoptim --size={{250k}} {{image1.jpeg}} {{image2.jpeg}}  
{{imageN.jpeg}}
```

jps

Show JVM Process Status of current user.

- List all JVM processes:

`jps`

- List all JVM processes with only PID:

`jps -q`

- Display the arguments passed to the processes:

`jps -m`

- Display the full package name of all processes:

`jps -l`

- Display the arguments passed to the JVM:

`jps -v`

jq

A command-line JSON processor that uses a domain-specific language.

More information: <https://stedolan.github.io/jq>.

- Output a JSON file, in pretty-print format:

```
jq . {{file.json}}
```

- Output all elements from arrays (or all the values from objects) in a JSON file:

```
jq '.[]' {{file.json}}
```

- Read JSON objects from a file into an array, and output it (inverse of `jq .[]`):

```
jq --slurp . {{file.json}}
```

- Output the first element in a JSON file:

```
jq '.[0]' {{file.json}}
```

- Output the value of a given key of the first element in a JSON text from `stdin`:

```
cat {{file.json}} | jq '.[0].{{key_name}}'
```

- Output the value of a given key of each element in a JSON text from `stdin`:

```
cat {{file.json}} | jq 'map(.{{key_name}})'
```

- Output the value of multiple keys as a new JSON object (assuming the input JSON has the keys `key_name` and `other_key_name`):

```
cat {{file.json}} | jq '{{my_new_key}: .{{key_name}}, {{my_other_key}}: .{{other_key_name}}}'
```

- Combine multiple filters:

```
cat {{file.json}} | jq 'unique | sort | reverse'
```

- Output the value of a given key to a string (and disable JSON output):

```
cat {{file.json}} | jq --raw-output '"some text: \(.{{key_name}})"'
```

jrnл

A simple journal application for your command line.

More information: <http://jrnл.sh>.

- Insert a new entry with your editor:

```
jrnл
```

- Quickly insert a new entry:

```
jrnл {{today at 3am}}: {{title}}. {{content}}
```

- View the last ten entries:

```
jrnл -n {{10}}
```

- View everything that happened from the start of last year to the start of last march:

```
jrnл -from "{{last year}}" -until {{march}}
```

- Edit all entries tagged with "texas" and "history":

```
jrnл {{@texas}} -and {{@history}} --edit
```

json5

A command-line tool for converting JSON5 files to JSON.

More information: <https://json5.org>.

- Convert JSON5 stdin to JSON **stdout**:

```
echo {{input}} | json5
```

- Convert a JSON5 file to JSON and output to **stdout**:

```
json5 {{path/to/input_file.json5}}
```

- Convert a JSON5 file to the specified JSON file:

```
json5 {{path/to/input_file.json5}} --out-file {{path/to/output_file.json}}
```

- Validate a JSON5 file:

```
json5 {{path/to/input_file.json5}} --validate
```

- Specify the number of spaces to indent by (or "t" for tabs):

```
json5 --space {{indent_amount}}
```

- View available options:

```
json5 --help
```

jstack

Java Stack Trace Tool.

- Print java stack traces for all threads in a java process:

```
jstack {{java_pid}}
```

- Print mixed mode (java/c++) stack traces for all threads in a java process:

```
jstack -m {{java_pid}}
```

- Print stack traces from java core dump:

```
jstack {{/usr/bin/java}} {{file.core}}
```

julia

A high-level, high-performance dynamic programming language for technical computing.

More information: <https://docs.julialang.org/en/v1/manual/getting-started/>.

- Start a Julia REPL session:

```
julia
```

- Execute a Julia program and exit:

```
julia {{program.jl}}
```

- Execute a Julia program that takes arguments:

```
julia {{program.jl}} {{arguments}}
```

- Evaluate a string containing Julia code:

```
julia -e '{{julia_code}}'
```

- Evaluate a string of Julia code, passing arguments to it:

```
julia -e '{{for x in ARGS; println(x); end}}' {{arguments}}
```

- Evaluate an expression and print the result:

```
julia -E '{{(1 - cos(pi/4))/2}}'
```

- Start Julia in parallel mode, using N worker processes:

```
julia -p {{N}}
```

jupyter

Web application to create and share documents that contain code, visualizations and notes.

Primarily used for data analysis, scientific computing and machine learning.

More information: <https://jupyter.org>.

- Start a Jupyter notebook server in the current directory:

```
jupyter notebook
```

- Open a specific Jupyter notebook:

```
jupyter notebook {{example.ipynb}}
```

- Export a specific Jupyter notebook into another format:

```
jupyter nbconvert --to {{html|markdown|pdf|script}}  
{{example.ipynb}}
```

- Start a server on a specific port:

```
jupyter notebook --port={{port}}
```

- List currently running notebook servers:

```
jupyter notebook list
```

- Stop the currently running server:

```
jupyter notebook stop
```

- Start JupyterLab, if installed, in the current directory:

```
jupyter lab
```

jupytext

Tool to convert Jupyter notebooks to plain text documents, and back again.

More information: <https://jupytext.readthedocs.io/en/latest/>.

- Turn a notebook into a paired `.ipynb/.py` notebook:

```
jupytext --set-formats ipynb,py {{notebook.ipynb}}
```

- Convert a notebook to a `.py` file:

```
jupytext --to py {{notebook.ipynb}}
```

- Convert a `.py` file to a notebook with no outputs:

```
jupytext --to notebook {{notebook.py}}
```

- Convert a `.md` file to a notebook and run it:

```
jupytext --to notebook --execute {{notebook.md}}
```

- Update the input cells in a notebook and preserve outputs and metadata:

```
jupytext --update --to notebook {{notebook.py}}
```

- Update all paired representations of a notebook:

```
jupytext --sync {{notebook.ipynb}}
```

jwt

A command line tool to work with JSON Web Tokens (JWTs).

Encryption algorithms available are HS256,HS384, HS512, RS256, RS384, RS512, ES256, ES384.

For more information: <https://github.com/mike-engel/jwt-cli>.

- Decode a JWT:

```
jwt decode {{jwt_string}}
```

- Decode a JWT as a JSON string:

```
jwt decode -j {{jwt_string}}
```

- Encode a JSON string to a JWT:

```
jwt encode --alg {{HS256}} --secret {{1234567890}}  
'{{json_string}}'
```

- Encode key pair payload to JWT:

```
jwt encode --alg {{HS256}} --secret {{1234567890}} -P  
key=value
```

k6

Open source load testing tool and SaaS for engineering teams.

More information: <https://k6.io>.

- Run load test locally:

```
k6 run {{script.js}}
```

- Run load test locally with a given number of virtual users and duration:

```
k6 run --vus {{10}} --duration {{30s}} {{script.js}}
```

- Run load test locally with a given environment variable:

```
k6 run -e {{HOSTNAME=example.com}} {{script.js}}
```

- Run load test locally using InfluxDB to store results:

```
k6 run --out influxdb={{http://localhost:8086/k6db}}  
{{script.js}}
```

- Run load test locally and discard response bodies (significantly faster):

```
k6 run --discard-response-bodies {{script.js}}
```

- Run load test locally using the base javascript compatibility mode (significantly faster):

```
k6 run --compatibility-mode=base {{script.js}}
```

- Login to cloud service using secret token:

```
k6 login cloud --token {{secret}}
```

- Run load test on cloud infrastructure:

```
k6 cloud {{script.js}}
```

k8s-unused-secret-detector

Command line interface tool for detecting unused Kubernetes secrets.

More information: <https://github.com/dtan4/k8s-unused-secret-detector>.

- Detect unused secrets:

```
k8s-unused-secret-detector
```

- Detect unused secrets in a specific namespace:

```
k8s-unused-secret-detector -n {{namespace}}
```

- Delete unused secrets in a specific namespace:

```
k8s-unused-secret-detector -n {{namespace}} | kubectl delete secret -n {{namespace}}
```

k8sec

Command line interface tool to manage Kubernetes secrets.

More information: <https://github.com/dtan4/k8sec>.

- List all secrets:

```
k8sec list
```

- List a specific secret as a base64-encoded string:

```
k8sec list {{secret_name}} --base64
```

- Set a secret's value:

```
k8sec set {{secret_name}} {{key=value}}
```

- Set a base64-encoded value:

```
k8sec set --base64 {{secret_name}} {{key=encoded_value}}
```

- Unset a secret:

```
k8sec unset {{secret_name}}
```

- Load secrets from a file:

```
k8sec load -f {{path/to/file}} {{secret_name}}
```

- Dump secrets to a file:

```
k8sec dump -f {{path/to/file}} {{secret_name}}
```

kafkacat

Apache Kafka producer and consumer tool.

More information: <https://github.com/edenhill/kafkacat>.

- Consume messages starting with the newest offset:

```
kafkacat -C -t {{topic}} -b {{brokers}}
```

- Consume messages starting with the oldest offset and exit after the last message is received:

```
kafkacat -C -t {{topic}} -b {{brokers}} -o beginning -e
```

- Consume messages as a Kafka consumer group:

```
kafkacat -G {{group_id}} {{topic}} -b {{brokers}}
```

- Publish message by reading from `stdin`:

```
echo {{message}} | kafkacat -P -t {{topic}} -b {{brokers}}
```

- Publish messages by reading from a file:

```
kafkacat -P -t {{topic}} -b {{brokers}} {{path/to/file}}
```

- List metadata for all topics and brokers:

```
kafkacat -L -b {{brokers}}
```

- List metadata for a specific topic:

```
kafkacat -L -t {{topic}} -b {{brokers}}
```

- Get offset for a topic/partition for a specific point in time:

```
kafkacat -Q -t {{topic}}:{{partition}}:{{unix_timestamp}} -b {{brokers}}
```

kaggle

Official CLI for Kaggle implemented in Python 3.

More information: <https://github.com/Kaggle/kaggle-api>.

- View current configuration values:

```
kaggle config view
```

- Download a specific file from a competition dataset:

```
kaggle competitions download {{competition}} -f {{filename}}
```

kahlan

A unit and Behaviour Driven Development test framework for PHP.

More information: <https://kahlan.github.io>.

- Run all specifications in the "spec" directory:

`kahlan`

- Run specifications using a specific configuration file:

`kahlan --config={{path/to/configuration_file}}`

- Run specifications and output using a reporter:

`kahlan --reporter={{dot|bar|json|tap|verbose}}`

- Run specifications with code coverage (detail can be between 0 and 4):

`kahlan --coverage={{detail_level}}`

kak

Kakoune is a mode-based code editor implementing the "multiple selections" paradigm.

Data can be selected and simultaneously edited in different locations, using multiple selections; users can also connect to the same session for collaborative editing.

More information: <https://kakoune.org>.

- Open a file and enter normal mode, to execute commands:

```
kak {{path/to/file}}
```

- Enter insert mode from normal mode, to write text into the file:

```
i
```

- Escape insert mode, to go back to normal mode:

```
<Escape>
```

- Replace all instances of "foo" in the current file with "bar":

```
%s{{foo}}<Enter>c{{bar}}<Escape>
```

- Un-select all secondary selections, and keep only the main one:

```
<Space>
```

- Search for numbers and select the first two:

```
/\d+<Enter>N
```

- Insert the contents of a file:

```
!cat {{path/to/file}}<Enter>
```

- Save the current file:

```
:w<Enter>
```

keepass2

A light-weight password manager.

More information: <https://keepass.info>.

- Start KeePass 2, opening the most recently-opened password database:

`keepass2`

- Start KeePass 2, opening a specific password database:

`keepass2 {{path/to/database.kbdfx}}`

- Use a specific key file to open a password database:

`keepass2 {{path/to/database.kbdfx}} -keyfile:{{path/to/key/file.key}}`

keybase

Key directory that maps social media identities to encryption keys in a publicly auditable manner.

More information: https://keybase.io/docs/command_line.

- Follow another user:

```
keybase follow {{username}}
```

- Add a new proof:

```
keybase prove {{service}} {{service_username}}
```

- Sign a file:

```
keybase sign --infile {{input_file}} --outfile  
{{output_file}}
```

- Verify a signed file:

```
keybase verify --infile {{input_file}} --outfile  
{{output_file}}
```

- Encrypt a file:

```
keybase encrypt --infile {{input_file}} --outfile  
{{output_file}} {{receiver}}
```

- Decrypt a file:

```
keybase decrypt --infile {{input_file}} --outfile  
{{output_file}}
```

- Revoke current device, log out, and delete local data:

```
keybase deprovision
```

khal

A text-based calendar and scheduling application for the command line.

More information: <https://lostpackets.de/khal>.

- Start khal on interactive mode:

```
ikhal
```

- Print all events scheduled in personal calendar for the next seven days:

```
khal list -a {{personal}} {{today}} {{7d}}
```

- Print all events scheduled not in personal calendar for tomorrow at 10:00:

```
khal at -d {{personal}} {{tomorrow}} {{10:00}}
```

- Print a calendar with a list of events for the next three months:

```
khal calendar
```

- Add new event to personal calendar:

```
khal new -a {{personal}} {{2020-09-08}} {{18:00}} {{18:30}}  
"{{Dentist appointment}}"
```

kill

Sends a signal to a process, usually related to stopping the process.

All signals except for SIGKILL and SIGSTOP can be intercepted by the process to perform a clean exit.

- Terminate a program using the default SIGTERM (terminate) signal:

```
kill {{process_id}}
```

- List available signal names (to be used without the **SIG** prefix):

```
kill -l
```

- Terminate a background job:

```
kill %{{job_id}}
```

- Terminate a program using the SIGHUP (hang up) signal. Many daemons will reload instead of terminating:

```
kill -{{1|HUP}} {{process_id}}
```

- Terminate a program using the SIGINT (interrupt) signal. This is typically initiated by the user pressing **Ctrl + C**:

```
kill -{{2|INT}} {{process_id}}
```

- Signal the operating system to immediately terminate a program (which gets no chance to capture the signal):

```
kill -{{9|KILL}} {{process_id}}
```

- Signal the operating system to pause a program until a SIGCONT ("continue") signal is received:

```
kill -{{17|STOP}} {{process_id}}
```

- Send a **SIGUSR1** signal to all processes with the given GID (group id):

```
kill -{{SIGUSR1}} -{{group_id}}
```

killall

Send kill signal to all instances of a process by name (must be exact name).

All signals except SIGKILL and SIGSTOP can be intercepted by the process, allowing a clean exit.

- Terminate a process using the default SIGTERM (terminate) signal:

```
killall {{process_name}}
```

- List available signal names (to be used without the 'SIG' prefix):

```
killall --list
```

- Interactively ask for confirmation before termination:

```
killall -i {{process_name}}
```

- Terminate a process using the SIGINT (interrupt) signal, which is the same signal sent by pressing **Ctrl + C**:

```
killall -INT {{process_name}}
```

- Force kill a process:

```
killall -KILL {{process_name}}
```

kind

Tool for running local Kubernetes clusters using Docker container "nodes".

Designed for testing Kubernetes itself, but may be used for local development or continuous integration.

More information: <https://github.com/kubernetes-sigs/kind>.

- Create a local Kubernetes cluster:

```
kind create cluster --name {{cluster_name}}
```

- Delete one or more clusters:

```
kind delete clusters {{cluster_name}}
```

- Get details about clusters, nodes, or the kubeconfig:

```
kind get {{clusters|nodes|kubeconfig}}
```

- Export the kubeconfig or the logs:

```
kind export {{kubeconfig|logs}}
```

knife

CLI for interacting with a Chef server from a local Chef repo.

More information: <https://docs.chef.io/knife.html>.

- Bootstrap a new node:

```
knife bootstrap {{fqdn_or_ip}}
```

- List all registered nodes:

```
knife node list
```

- Show a node:

```
knife node show {{node_name}}
```

- Edit a node:

```
knife node edit {{node_name}}
```

- Edit a role:

```
knife role edit {{role_name}}
```

- View a data bag:

```
knife data bag show {{data_bag_name}} {{data_bag_item}}
```

- Upload a local cookbook to the Chef server:

```
knife cookbook upload {{cookbook_name}}
```

kompose

A tool to convert docker-compose applications to Kubernetes.

More information: <https://github.com/kubernetes/kompose>.

- Deploy a dockerized application to Kubernetes:

```
kompose up -f {{docker-compose.yml}}
```

- Delete instantiated services/deployments from Kubernetes:

```
kompose down -f {{docker-compose.yml}}
```

- Convert a docker-compose file into Kubernetes resources file:

```
kompose convert -f {{docker-compose.yml}}
```

kops

Create, destroy, upgrade and maintain Kubernetes clusters from the command line.

More informations: <https://github.com/kubernetes/kops/>.

- Create a cluster from the configuration specification:

```
kops create cluster -f {{cluster_name.yaml}}
```

- Create a new ssh public key:

```
kops create secret sshpublickey {{key_name}} -i {{~/.ssh/id_rsa.pub}}
```

- Export the cluster configurations into the ~/.kube/config file:

```
kops export kubecfg {{cluster_name}}
```

- Get the cluster configuration as yaml:

```
kops get cluster {{cluster_name}} -o yaml
```

- Delete a cluster:

```
kops delete cluster {{cluster_name}} --yes
```

kosmorro

Compute the ephemerides and the events for a given date, at a given position on Earth.

More information: <http://kosmorro.space>.

- Get ephemerides for Paris, France:

```
kosmorro --latitude={{48.7996}} --longitude={{2.3511}}
```

- Get ephemerides for Paris, France, in the UTC+2 timezone:

```
kosmorro --latitude={{48.7996}} --longitude={{2.3511}} --  
timezone={{2}}
```

- Get ephemerides for Paris, France, on June 9th, 2020:

```
kosmorro --latitude={{48.7996}} --longitude={{2.3511}} --  
date={{2020-06-09}}
```

- Generate a PDF (note: TeXLive must be installed):

```
kosmorro --format={{pdf}} --output={{path/to/file.pdf}}
```

kotlin

Kotlin Application Launcher.

More information <https://kotlinlang.org>.

- Run a jar file:

```
kotlin {{filename.jar}}
```

- Display Kotlin and JVM version:

```
kotlin -version
```

ksh

Korn Shell.

bash and **sh**-compatible command line interpreter.

More information: <http://kornshell.com>.

- Start interactive command line interpreter:

`ksh`

- Execute a command:

`ksh -c {{command}}`

- Run commands from a file:

`ksh {{file}}`

- Run commands from a file and print them as they are executed:

`ksh -x {{file}}`

kube-capacity

A simple CLI that provides an overview of the resource requests, limits, and utilization in a Kubernetes cluster.

Combine the best parts of `kubectl top` and `kubectl describe` into a CLI focused on cluster resources.

More information: <https://github.com/robscott/kube-capacity>.

- Output a list of nodes with the total CPU and Memory resource requests and limits:

```
kube-capacity
```

- Include pods:

```
kube-capacity -p
```

- Include utilization:

```
kube-capacity -u
```

kube-fzf

Shell commands for command line fuzzy searching of Kubernetes Pods.

See also **kubectl** for related commands.

More information: <https://github.com/thecasualcoder/kube-fzf>.

- Get pod details (from current namespace):

`findpod`

- Get pod details (from all namespaces):

`findpod -a`

- Describe a pod:

`describepod`

- Tail pod logs:

`tailpod`

- Exec into a pod's container:

`execpod {{shell_command}}`

- Port-forward a pod:

`pfpod {{port_number}}`

kubeadm

Command line interface for creating and managing Kubernetes clusters.

More information: <https://kubernetes.io/docs/reference/setup-tools/kubeadm>.

- Create a Kubernetes master node:

```
kubeadm init
```

- Bootstrap a Kubernetes worker node and join it to a cluster:

```
kubeadm join --token {{token}}
```

- Create a new bootstrap token with a TTL of 12 hours:

```
kubeadm token create --ttl {{12h0m0s}}
```

- Check if the Kubernetes cluster is upgradeable and which versions are available:

```
kubeadm upgrade plan
```

- Upgrade Kubernetes cluster to a specified version:

```
kubeadm upgrade apply {{version}}
```

- View the kubeadm ConfigMap containing the cluster's configuration:

```
kubeadm config view
```

- Revert changes made to the host by 'kubeadm init' or 'kubeadm join':

```
kubeadm reset
```

kubectl describe

Show details of Kubernetes objects and resources.

More information: <https://kubernetes.io/docs/reference/generated/kubectl/kubectl-commands#describe>.

- Show details of pods in a namespace:

```
kubectl describe pods -n {{namespace}}
```

- Show details of nodes in a namespace:

```
kubectl describe nodes -n {{namespace}}
```

- Show the details of a specific pod in a namespace:

```
kubectl describe pods {{pod_name}} -n {{namespace}}
```

- Show the details of a specific node in a namespace:

```
kubectl describe nodes {{node_name}} -n {{namespace}}
```

- Show details of Kubernetes objects defined in a YAML manifest:

```
kubectl describe -f {{path/to/manifest}}.yaml
```

kubectl get

Get Kubernetes objects and resources.

More information: <https://kubernetes.io/docs/reference/generated/kubectl/kubectl-commands#get>.

- Get all namespaces in the current cluster:

```
kubectl get namespaces
```

- Get nodes in a specified namespace:

```
kubectl get nodes -n {{namespace}}
```

- Get pods in a specified namespace:

```
kubectl get pods -n {{namespace}}
```

- Get deployments in a specified namespace:

```
kubectl get deployments -n {{namespace}}
```

- Get services in a specified namespace:

```
kubectl get services -n {{namespace}}
```

- Get Kubernetes objects defined in a YAML manifest:

```
kubectl get -f {{path/to/manifest}}.yaml
```

kubectl

Command line interface for running commands against Kubernetes clusters.

More information: <https://kubernetes.io/docs/reference/kubectl/>.

- List all information about a resource with more details:

```
kubectl get {{pod|service|deployment|ingress|...}} -o wide
```

- Update specified pod with the label 'unhealthy' and the value 'true':

```
kubectl label pods {{name}} unhealthy=true
```

- List all resources with different types:

```
kubectl get all
```

- Display resource (CPU/Memory/Storage) usage of nodes or pods:

```
kubectl top {{pod|node}}
```

- Print the address of the master and cluster services:

```
kubectl cluster-info
```

- Display an explanation of a specific field:

```
kubectl explain {{pods.spec.containers}}
```

- Print the logs for a container in a pod or specified resource:

```
kubectl logs {{pod_name}}
```

- Run command in an existing pod:

```
kubectl exec {{pod_name}} -- {{ls /}}
```

kubectx

Utility to manage and switch between **kubectl** contexts.

More information: <https://github.com/ahmetb/kubectx>.

- List the contexts:

`kubectx`

- Switch to a named context:

`kubectx {{name}}`

- Switch to the previous context:

`kubectx -`

- Delete a named context:

`kubectx -d {{name}}`

kubens

Utility to switch between Kubernetes namespaces.

More information: <https://github.com/ahmetb/kubectx>.

- List the namespaces:

`kubens`

- Change the active namespace:

`kubens {{name}}`

- Switch to the previous namespace:

`kubens -`

kubetail

Utility to tail multiple Kubernetes pod logs at the same time.

More information: <https://github.com/johanhaleby/kubetail>.

- Tail the logs of multiple pods (whose name starts with "my_app") in one go:

```
kubetail {{my_app}}
```

- Tail only a specific container from multiple pods:

```
kubetail {{my_app}} -c {{my_container}}
```

- To tail multiple containers from multiple pods:

```
kubetail {{my_app}} -c {{my_container_1}} -c {{my_container_2}}
```

- To tail multiple applications at the same time separate them by comma:

```
kubetail {{my_app_1}},{{my_app_2}}
```

kustomize

Kustomize is a tool to easily deploy resources for Kubernetes.

More information: <https://github.com/kubernetes-sigs/kustomize>.

- Create kustomization file with resources and namespace:

```
kustomize create --resources {{deployment.yaml,service.yaml}}  
--namespace {{staging}}
```

- Build kustomization file and deploy it with `kubectl`:

```
kustomize build . | kubectl apply -f -
```

- Set an image in the kustomization file:

```
kustomize edit set image {{busybox=alpine:3.6}}
```

- Search for kubernetes resources in the current directory to be added to the kustomization file:

```
kustomize create --autodetect
```

laravel-zero

A command line installer for the Laravel Zero framework.

More information: <https://laravel-zero.com>.

- Create a new Laravel Zero application:

```
laravel-zero new {{name}}
```

- Update the installer to the latest version:

```
laravel-zero self-update
```

- List the available installer commands:

```
laravel-zero list
```

laravel

A command line installer for the Laravel framework.

More information: <https://laravel.com>.

- Create a new Laravel application:

```
laravel new {{name}}
```

- Use the latest development release:

```
laravel new {{name}} --dev
```

- Overwrite if the directory already exists:

```
laravel new {{name}} --force
```

- Install the Laravel Jetstream scaffolding:

```
laravel new {{name}} --jet
```

- Install the Laravel Jetstream scaffolding with a specific stack:

```
laravel new {{name}} --jet --stack {{livewire|inertia}}
```

- Install the Laravel Jetstream scaffolding with support for teams:

```
laravel new {{name}} --jet --teams
```

- List the available installer commands:

```
laravel list
```

last

View the last logged in users.

- View last logins, their duration and other information as read from /var/log/wtmp:

`last`

- Specify how many of the last logins to show:

`last -n {{login_count}}`

- Print the full date and time for entries and then display the hostname column last to prevent truncation:

`last -F -a`

- View all logins by a specific user and show the ip address instead of the hostname:

`last {{username}} -i`

- View all recorded reboots (i.e., the last logins of the pseudo user "reboot"):

`last reboot`

- View all recorded shutdowns (i.e., the last logins of the pseudo user "shutdown"):

`last shutdown`

latexmk

Compile LaTeX source files into finished documents.

Automatically does multiple runs when needed.

More information: <https://mg.readthedocs.io/latexmk.html>.

- Compile a dvi (DeVice Independent file) document from every source:

`latexmk`

- Compile a dvi document from a specific source file:

`latexmk {{source.tex}}`

- Compile a pdf document:

`latexmk -pdf {{source.tex}}`

- Force the generation of a document even if there are errors:

`latexmk -f {{source.tex}}`

- Clean up temporary tex files created for a specific tex file:

`latexmk -c {{source.tex}}`

- Clean up all temporary tex files in the current directory:

`latexmk -c`

ldapsearch

CLI utility for querying an LDAP directory.

- Query an LDAP server for all items that are a member of the given group and return the object's displayName value:

```
ldapsearch -D '{{admin_DN}}' -w '{{password}}' -h
{{ldap_host}} -b {{base_ou}} '{{memberOf=group1}}'
displayName
```

- Query an LDAP server with a no-newline password file for all items that are a member of the given group and return the object's displayName value:

```
ldapsearch -D '{{admin_DN}}' -y '{{password_file}}' -h
{{ldap_host}} -b {{base_ou}} '{{memberOf=group1}}'
displayName
```

- Return 5 items that match the given filter:

```
ldapsearch -D '{{admin_DN}}' -w '{{password}}' -h
{{ldap_host}} -b {{base_ou}} '{{memberOf=group1}}' -z 5
displayName
```

- Wait up to 7 seconds for a response:

```
ldapsearch -D '{{admin_DN}}' -w '{{password}}' -h
{{ldap_host}} -b {{base_ou}} '{{memberOf=group1}}' -l 7
displayName
```

- Invert the filter:

```
ldapsearch -D '{{admin_DN}}' -w '{{password}}' -h
{{ldap_host}} -b {{base_ou}} '(!(memberOf={{group1}}))'
displayName
```

- Return all items that are part of multiple groups, returning the display name for each item:

```
ldapsearch -D '{{admin_DN}}' -w '{{password}}' -h
{{ldap_host}} '(&({{memberOf=group1}})({{memberOf=group2}})
({{memberOf=group3}}))' "displayName"
```

- Return all items that are members of at least 1 of the specified groups:

```
ldapsearch -D '{{admin_DN}}' -w '{{password}}' -h  
{{ldap_host}} '(|({{memberOf=group1}})({{memberOf=group1}})  
({{memberOf=group3}}))' displayName
```

- Combine multiple boolean logic filters:

```
ldapsearch -D '{{admin_DN}}' -w '{{password}}' -h  
{{ldap_host}} '(&({{memberOf=group1}})({{memberOf=group2}})(!  
({{memberOf=group3}}))' displayName
```

leave

Remind when it's time to leave.

To remove reminders use **kill \$(pidof leave)**.

- Set a reminder at a given time:

```
leave {{time_to_leave}}
```

- Remind to leave at noon:

```
leave {{1200}}
```

- Set a reminder in a specific amount of time:

```
leave +{{amount_of_time}}
```

- Remind to leave in 4 hours and 4 minutes:

```
leave +{{0404}}
```

lebab

A JavaScript modernizer for transpiling code to ES6/ES7.

Transformations must be provided for all examples.

More information: <https://github.com/lebab/lebab>.

- Display a list of the available transformations:

```
lebab --help
```

- Transpile using one or more comma-separated transformations:

```
lebab --transform {{transformation}}
```

- Transpile a file to `stdout`:

```
lebab {{path/to/input_file}}
```

- Transpile a file to the specified output file:

```
lebab {{path/to/input_file}} --out-file {{path/to/ output_file}}
```

- Replace all `.js` files in-place in the specified directory, glob or file:

```
lebab --replace {{directory|glob|file}}
```

lein

Manage clojure projects with declarative configuration.

More information: <https://leiningen.org>.

- Generate scaffolding for a new project based on a template:

```
lein new {{template_name}} {{project_name}}
```

- Start a REPL session either with the project or standalone:

```
lein repl
```

- Run the project's "-main" function with optional args:

```
lein run {{args}}
```

- Run the project's tests:

```
lein test
```

- Package up the project files and all its dependencies into a jar file:

```
lein uberjar
```

less

Open a file for interactive reading, allowing scrolling and search.

- Open a file:

`less {{source_file}}`

- Page down / up:

`<Space> (down), b (up)`

- Go to end / start of file:

`G (end), g (start)`

- Forward search for a string (press `n/N` to go to next/previous match):

`/{{something}}`

- Backward search for a string (press `n/N` to go to next/previous match):

`?{{something}}`

- Follow the output of the currently opened file:

`F`

- Open the current file in an editor:

`v`

- Exit:

`q`

lex

Lexical analyser generator.

Given the specification for a lexical analyser, generates C code implementing it.

- Generate an analyser from a Lex file:

```
lex {{analyser.l}}
```

- Specify the output file:

```
lex {{analyser.l}} --outfile {{analyser.c}}
```

- Compile a C file generated by Lex:

```
cc {{path/to/lex.yy.c}} --output {{executable}}
```

license

Create license files for open-source projects.

More information: <https://nishanths.github.io/license>.

- Print a license to `stdout`, using the defaults (auto-detected author name, and current year):

```
license {{license_name}}
```

- Generate a license and save it to a file:

```
license -o {{filename}} {{license_name}}
```

- List all available licenses:

```
license ls
```

- Generate a license with custom author name and year:

```
license --name {{author}} --year {{release_year}}  
{{license_name}}
```

light-arionum-cli

The PHP light wallet for the Arionum cryptocurrency.

More information: <https://github.com/arionum/lightWalletCLI>.

- Generate a new public/private key pair:

`light-arionum-cli`

- Display the balance of the current address:

`light-arionum-cli balance`

- Display the balance of the specified address:

`light-arionum-cli balance {{address}}`

- Send a transaction with an optional message:

`light-arionum-cli send {{address}} {{value}}
{{optional_message}}`

- Export the current wallet information:

`light-arionum-cli export`

- Display information about the current block:

`light-arionum-cli block`

- Display information about the current address' transactions:

`light-arionum-cli transactions`

- Display information about a specific transaction:

`light-arionum-cli transaction {{transaction_id}}`

lilypond

Typeset music and/or produce MIDI from file.

More information: <https://lilypond.org/index.html>.

- Compile a lilypond file into a PDF:

```
lilypond {{path/to/file}}
```

- Compile into the specified format:

```
lilypond --formats={{format_dump}} {{path/to/file}}
```

- Compile the specified file, suppressing progress updates:

```
lilypond -s {{path/to/file}}
```

- Compile the specified file, and also specify the output filename:

```
lilypond --output={{path/to/output_file}} {{path/to/ input_file}}
```

- Show the current version of lilypond:

```
lilypond --version
```

link

Create a hard link to an existing file.

For more options, see the **ln** command.

- Create a hard link from a new file to an existing file:

```
link {{path/to/existing_file}} {{path/to/new_file}}
```

linkchecker

Command line client to check HTML documents and websites for broken links.

More information: <https://linkchecker.github.io/linkchecker/>.

- Find broken links on https://example.com/:

```
linkchecker {{https://example.com/}}
```

- Also check URLs that point to external domains:

```
linkchecker --check-extern {{https://example.com/}}
```

- Ignore URLs that match a specific regex:

```
linkchecker --ignore-url {{regex}} {{https://example.com/}}
```

- Output results to a CSV file:

```
linkchecker --file-output {{csv}}/{{path/to/file}} {{https://example.com/}}
```

live-server

A simple development http server with live reload capability.

More information: <https://www.npmjs.com/package/live-server>.

- Serve an index.html file and reload on changes:

```
live-server
```

- Specify a port (default is 8080) from which to serve a file:

```
live-server --port={{8081}}
```

- Specify a given file to serve:

```
live-server --open={{about.html}}
```

- Proxy all requests for ROUTE to URL:

```
live-server --proxy={{/}}:{{http:localhost:3000}}
```

ln

Creates links to files and directories.

- Create a symbolic link to a file or directory:

```
ln -s {{path/to/file_or_directory}} {{path/to/symlink}}
```

- Overwrite an existing symbolic link to point to a different file:

```
ln -sf {{path/to/new_file}} {{path/to/symlink}}
```

- Create a hard link to a file:

```
ln {{path/to/file}} {{path/to/hardlink}}
```

loc

Tool written in Rust that counts lines of code.

More information: <https://github.com/cgag/loc>.

- Print lines of code in the current directory:

```
loc
```

- Print lines of code in the target directory:

```
loc {{path/to/directory}}
```

- Print lines of code with stats for individual files:

```
loc --files
```

- Print lines of code without .gitignore (etc.) files (e.g. two -u flags will additionally count hidden files and dirs):

```
loc -u
```

locust

Load-testing tool to determine number of concurrent users a system can handle.

More information: <https://locust.io>.

- Load-test "example.com" with web interface using locustfile.py:

```
locust --host={{http://example.com}}
```

- Use a different test file:

```
locust --locustfile={{test_file.py}} --host={{http://example.com}}
```

- Run test without web interface, spawning 1 user a second until there are 100 users:

```
locust --no-web --clients={{100}} --hatch-rate={{1}} --host={{http://example.com}}
```

- Start locust in master mode:

```
locust --master --host={{http://example.com}}
```

- Connect locust slave to master:

```
locust --slave --host={{http://example.com}}
```

- Connect locust slave to master on a different machine:

```
locust --slave --master-host={{master_hostname}} --host={{http://example.com}}
```

logname

Shows the user's login name.

- Display the currently logged in user's name:

```
logname
```

logstash

An ETL (extract, transform and load) tool.

Commonly used to load data from various sources, like databases and log files, into elasticsearch.

More information: <https://www.elastic.co/products/logstash>.

- Check validity of a logstash configuration:

```
logstash --configtest --config {{logstash_config.conf}}
```

- Run logstash using configuration:

```
sudo logstash --config {{logstash_config.conf}}
```

- Run logstash with the most basic inline configuration string:

```
sudo logstash -e 'input {} filter {} output {}'
```

lolcat

Put a rainbow in everything you **cat** to the console.

More information: <https://github.com/busyloop/lolcat>.

- Print a file to the console in rainbow colors:

```
lolcat {{path/to/file}}
```

- Print the result of a text-producing command in rainbow colors:

```
{{fortune}} | lolcat
```

- Print a file to the console with animated rainbow colors:

```
lolcat -a {{path/to/file}}
```

- Print a file to the console with 24-bit (truecolor) rainbow colors:

```
lolcat -t {{path/to/file}}
```

lorem

Create more or less random lorem ipsum text.

- Print the specified number of words:

```
lorem -n {{20}}
```

- Print 10 lines of Goethe's Faust:

```
lorem -l {{10}} --faust
```

- Print 5 sentences of Poe's Raven:

```
lorem -s {{5}} --raven
```

- Print 40 random characters from Boccacio's Decameron:

```
lorem --randomize -c {{40}} --decamerone
```

lp

Print files.

- Print the output of a command to the default printer (see **lpstat** command):

```
echo "test" | lp
```

- Print a file to the default printer:

```
lp {{path/to/filename}}
```

- Print a file to a named printer (see **lpstat** command):

```
lp -d {{printer_name}} {{path/to/filename}}
```

- Print N copies of file to default printer (replace N with desired number of copies):

```
lp -n {{N}} {{path/to/filename}}
```

- Print only certain pages to the default printer (print pages 1, 3-5, and 16):

```
lp -P 1,3-5,16 {{path/to/filename}}
```

- Resume printing a job:

```
lp -i {{job_id}} -H resume
```

lpass

Command line interface for the LastPass password manager.

More information: <https://github.com/lastpass/lastpass-cli>.

- Login to your LastPass account, by entering your master password when prompted:

```
lpass login {{username}}
```

- Show login status:

```
lpass status
```

- List all sites grouped by category:

```
lpass ls
```

- Generate a new password for "gmail.com" with identifier "myinbox" and add to LastPass:

```
lpass generate --username {{username}} --url {{gmail.com}}  
{{myinbox}} {{password_length}}
```

- Show password for a specified entry:

```
lpass show {{myinbox}} --password
```

lpr

CUPS tool for printing files.

See also **lpstat** and **lpadmin** for listing and configuring printers.

More information: <http://www.CUPS.org>.

- Print a file to the default printer:

```
lpr {{path/to/file}}
```

- Print 2 copies:

```
lpr -# {{2}} {{path/to/file}}
```

- Print to a named printer:

```
lpr -P {{printer}} {{path/to/file}}
```

- Print either a single page (e.g. 2) or a range of pages (e.g. 2–16):

```
lpr -o page-ranges={{2|2-16}} {{path/to/file}}
```

- Print double sided either in portrait (long) or in landscape (short):

```
lpr -o sides={{two_sided_long_edge|two_sided_short_edge}} {{path/to/file}}
```

- Set page size (more options may be available depending on setup):

```
lpr -o media={{a4|letter|legal}} {{path/to/file}}
```

- Print multiple pages per sheet:

```
lpr -o number-up={{2|4|6|9|16}} {{path/to/file}}
```

lpstat

Show status information about printers.

- List printers present on the machine and whether they are enabled for printing:

```
lpstat -p
```

- Show the default printer:

```
lpstat -d
```

- Display all available status information:

```
lpstat -t
```

- Show a list of print jobs queued by the specified user:

```
lpstat -u {{user}}
```

ls

List directory contents.

- List files one per line:

```
ls -1
```

- List all files, including hidden files:

```
ls -a
```

- List all files, with trailing / added to directory names:

```
ls -F
```

- Long format list (permissions, ownership, size and modification date) of all files:

```
ls -la
```

- Long format list with size displayed using human readable units (KB, MB, GB):

```
ls -lh
```

- Long format list sorted by size (descending):

```
ls -ls
```

- Long format list of all files, sorted by modification date (oldest first):

```
ls -ltr
```

lsof

Lists open files and the corresponding processes.

Note: Root privileges (or sudo) is required to list files opened by others.

- Find the processes that have a given file open:

```
lsof {{path/to/file}}
```

- Find the process that opened a local internet port:

```
lsof -i :{{port}}
```

- Only output the process ID (PID):

```
lsof -t {{path/to/file}}
```

- List files opened by the given user:

```
lsof -u {{username}}
```

- List files opened by the given command or process:

```
lsof -c {{process_or_command_name}}
```

- List files opened by a specific process, given its PID:

```
lsof -p {{PID}}
```

- List open files in a directory:

```
lsof +D {{path/to/directory}}
```

- Find the process that is listening on a local TCP port:

```
lsof -iTCP:{{port}} -sTCP:LISTEN
```

lt

Localtunnel exposes your localhost to the world for easy testing and sharing.

More information: <https://github.com/localtunnel/localtunnel>.

- Start tunnel from a specific port:

```
lt --port {{8000}}
```

- Specify the upstream server doing the forwarding:

```
lt --port {{8000}} --host {{host}}
```

- Request a specific subdomain:

```
lt --port {{8000}} --subdomain {{subdomain}}
```

- Print basic request info:

```
lt --port {{8000}} --print-requests
```

- Open the tunnel URL in the default web browser:

```
lt --port {{8000}} --open
```

lua

A powerful, light-weight embeddable programming language.

More information: <https://www.lua.org>.

- Start an interactive Lua shell:

```
lua
```

- Execute a Lua script:

```
lua {{script_name.lua}} {{--optional-argument}}
```

- Execute a Lua expression:

```
lua -e '{{print( "Hello World" )}}
```

luac

Lua bytecode compiler.

More information: <https://www.lua.org>.

- Compile a Lua source file to Lua bytecode:

```
luac -o {{byte_code.luac}} {{source.lua}}
```

- Do not include debug symbols in the output:

```
luac -s -o {{byte_code.luac}} {{source.lua}}
```

lumen

A command line installer for the Lumen micro-framework.

More information: <https://lumen.laravel.com>.

- Create a new Lumen application:

```
lumen new {{application_name}}
```

- List the available installer commands:

```
lumen list
```

lwp-request

Simple command-line HTTP client.

Built with libwww-perl.

More information: <https://metacpan.org/pod/lwp-request>.

- Make a simple GET request:

```
lwp-request -m GET {{http://example.com/some/path}}
```

- Upload a file with a POST request:

```
lwp-request -m POST {{http://example.com/some/path}} <{{path/to/file}}
```

- Make a request with a custom user agent:

```
lwp-request -H 'User-Agent: {{user_agent}}' -m {{METHOD}} {{http://example.com/some/path}}
```

- Make a request with HTTP authentication:

```
lwp-request -C {{username}}:{{password}} -m {{METHOD}} {{http://example.com/some/path}}
```

- Make a request and print request headers:

```
lwp-request -U -m {{METHOD}} {{http://example.com/some/path}}
```

- Make a request and print response headers and status chain:

```
lwp-request -E -m {{METHOD}} {{http://example.com/some/path}}
```

lynx

Command-line web browser.

More information: <https://lynx.browser.org>.

- Visit a website:

```
lynx {{example.com}}
```

- Apply restrictions for anonymous account:

```
lynx -anonymous {{example.com}}
```

- Turn on mouse support, if available:

```
lynx -use_mouse {{example.com}}
```

- Force color mode on, if available:

```
lynx -color {{example.com}}
```

- Open a link, using a specific file to read and write cookies:

```
lynx -cookie_file={{path/to/file}} {{example.com}}
```

- Navigate forwards and backwards through the links on a page:

Up arrow key, Down arrow key

- Go back to the previously displayed page:

Left arrow key or u

- Exit:

```
q then y
```

lz4

Compress or decompress .lz4 files.

More information: <https://github.com/lz4/lz4>.

- Compress a file:

```
lz4 {{file}}
```

- Decompress a file:

```
lz4 -d {{file.lz4}}
```

- Decompress a file and write to **stdout**:

```
lz4 -dc {{file.lz4}}
```

- Package and compress a directory and its contents:

```
tar cvf - {{path/to/directory}} | lz4 - {{dir.tar.lz4}}
```

- Decompress and unpack a directory and its contents:

```
lz4 -d {{dir.tar.lz4}} | tar -xv
```

- Compress a file using the best compression:

```
lz4 -9 {{file}}
```

lzop

Compress or decompress files with LZO compression.

More information: <https://www.lzop.org/>.

- Compress a file into a new file with the .lzo suffix:

```
lzop {{file}}
```

- Decompress a file:

```
lzop -d {{file}}.lzo
```

- Compress a file, while specifying the compression level. 0 = Worst, 9 = Best (Default level is 3):

```
lzop -{{level}} {{file}}
```

m4

Macro processor.

More information: <https://www.gnu.org/software/m4>.

- Process macros in a file:

```
m4 {{path/to/file}}
```

- Define a macro before processing files:

```
m4 -D{{macro_name}}={{macro_value}} {{path/to/file}}
```

Magento

A CLI for managing the Magento PHP framework.

More information: <https://magento.com>.

- Enable one or more space-separated modules:

```
magento module:enable {{module(s)}}
```

- Disable one or more space-separated modules:

```
magento module:disable {{module(s)}}
```

- Update the database after enabling modules:

```
magento setup:upgrade
```

- Update code and dependency injection configuration:

```
magento setup:di:compile
```

- Deploy static assets:

```
magento setup:static-content:deploy
```

- Enable maintenance mode:

```
magento maintenance:enable
```

- Disable maintenance mode:

```
magento maintenance:disable
```

- List all available commands:

```
magento list
```

magick

Create, edit, compose, or convert bitmap images.

ImageMagick version 7+. See **convert** for versions 6 and below.

More information: <https://imagemagick.org/>.

- Convert file type:

```
magick {{image.png}} {{image.jpg}}
```

- Resize an image, making a new copy:

```
magick convert -resize {100x100} {{image.jpg}}  
{{image.jpg}}
```

- Create a GIF using images:

```
magick {{*.jpg}} {{images.gif}}
```

- Create checkerboard pattern:

```
magick -size {{640x480}} pattern:checkerboard  
{{checkerboard.png}}
```

- Convert images to individual PDF pages:

```
magick {{*.jpg}} +adjoin {{page-%d.pdf}}
```

mail

The command operates on the user's mailbox if no argument is given.

To send an email the message body is built from standard input.

- Send a typed email message. The command line below continues after pressing Enter key. Input CC email-id (optional) press Enter key. Input message text (can be multi-line). Press "Ctrl-D" key to complete the message text:

```
mail --subject="{{subject_line}}" {{to_user@example.com}}
```

- Send an email that contains file content:

```
mail --subject="{{$HOSTNAME filename.txt}}"
{{to_user@example.com}} < {{path/to/filename.txt}}
```

- Send a tar.gz file as an attachment:

```
tar cvzf - {{path/to/directory1 path/to/directory2}} |
uuencode {{data.tar.gz}} | mail --subject="{{subject_line}}"
{{to_user@example.com}}
```

mailx

Send and receive mail.

- Send mail (the content should be typed after the command, and ended with **Ctrl+D**):

```
mailx -s "{{subject}}" {{to_addr}}
```

- Send mail with content passed from another command:

```
echo "{{content}}" | mailx -s "{{subject}}" {{to_addr}}
```

- Send mail with content read from a file:

```
mailx -s "{{subject}}" {{to_addr}} < {{content.txt}}
```

- Send mail to a recipient and CC to another address:

```
mailx -s "{{subject}}" -c {{cc_addr}} {{to_addr}}
```

- Send mail specifying the sender address:

```
mailx -s "{{subject}}" -r {{from_addr}} {{to_addr}}
```

- Send mail with an attachment:

```
mailx -a {{file}} -s "{{subject}}" {{to_addr}}
```

make

Task runner for targets described in Makefile.

Mostly used to control the compilation of an executable from source code.

More information: <https://www.gnu.org/software/make/manual/make.html>.

- Call the first target specified in the Makefile (usually named "all"):

```
make
```

- Call a specific target:

```
make {{target}}
```

- Call a specific target, executing 4 jobs at a time in parallel:

```
make -j{{4}} {{target}}
```

- Use a specific Makefile:

```
make --file {{file}}
```

- Execute make from another directory:

```
make --directory {{directory}}
```

- Force making of a target, even if source files are unchanged:

```
make --always-make {{target}}
```

- Override variables defined in the Makefile by the environment:

```
make --environment-overrides {{target}}
```

makebuildserver

Create an F-Droid build server virtual machine.

More information: https://f-droid.org/en/docs/Build_Server_Setup/.

- Create a new virtual machine or update an existing one (if available):

`makebuildserver`

- Force creating a fresh virtual machine:

`makebuildserver --clean`

makensis

Cross-platform compiler for NSIS installers.

It compiles a NSIS script into a Windows installer executable.

More information: <https://nsis.sourceforge.io/Docs/Chapter3.html>.

- Compile a NSIS script:

```
makensis {{path/to/file.nsi}}
```

- Compile a NSIS script in strict mode (treat warnings as errors):

```
makensis -WX {{path/to/file.nsi}}
```

- Print help for a specific command:

```
makensis -CMDHELP {{command}}
```

makepasswd

Generate and encrypt passwords.

More information: <https://manpages.debian.org/stretch/makepasswd/makepasswd.1.en.html>.

- Generate a random password (8 to 10 characters long, containing letters and numbers):

`makepasswd`

- Generate a 10 characters long password:

`makepasswd --chars {{10}}`

- Generate a 5 to 10 characters long password:

`makepasswd --minchars {{5}} --maxchars {{10}}`

- Generate a password containing only the characters "b", "a" or "r":

`makepasswd --string {{bar}}`

man

Format and display manual pages.

- Display the man page for a command:

```
man {{command}}
```

- Display the man page for a command from section 7:

```
man {{command}}.{{7}}
```

- Display the path searched for manpages:

```
man --path
```

- Display the location of a manpage rather than the manpage itself:

```
man -w {{command}}
```

- Search for manpages containing a search string:

```
man -k "{{search_string}}"
```

mat2

Anonymise various file formats by removing metadata.

More information: <https://0xacab.org/jvoisin/mat2>.

- List supported file formats:

```
mat2 --list
```

- Remove metadata from a file:

```
mat2 {{path/to/file}}
```

- Remove metadata from a file and print detailed output to the console:

```
mat2 --verbose {{path/to/file}}
```

- Show metadata in a file without removing it:

```
mat2 --show {{path/to/file}}
```

- Partially remove metadata from a file:

```
mat2 --lightweight {{path/to/file}}
```

matlab

Numerical computation environment by MathWorks.

More information: <https://uk.mathworks.com/help/matlab/>.

- Run without splash screen during startup:

```
matlab -nosplash
```

- Execute a MATLAB statement:

```
matlab -r "{{matlab_statement}}"
```

- Run a MATLAB script:

```
matlab -r "run('{{path/to/script.m}}")"
```

mc

Midnight Commander, a terminal based file manager.

Navigate the directory structure using the arrow keys, the mouse or by typing the commands into the terminal.

More information: <https://midnight-commander.org>.

- Start `mc`:

`mc`

- Start `mc` in black and white:

`mc -b`

md5sum

Calculate MD5 cryptographic checksums.

- Calculate the MD5 checksum for a file:

```
md5sum {{filename1}}
```

- Calculate MD5 checksums for multiple files:

```
md5sum {{filename1}} {{filename2}}
```

- Read a file of MD5SUMs and verify all files have matching checksums:

```
md5sum -c {{filename.md5}}
```

- Calculate a MD5 checksum from the standard input:

```
echo "{{text}}" | md5sum
```

mdp

A command-line based tool to make presentations from markdown files.

More information: <https://github.com/visit1985/mdp>.

- Launch a presentation in the terminal from a markdown file:

```
mdp {{presentation.md}}
```

- Disable fading transitions:

```
mdp --nofade {{presentation.md}}
```

- Invert font colors to use in terminals with light background:

```
mdp --invert {{presentation.md}}
```

- Disable transparency in transparent terminals:

```
mdp --notrans {{presentation.md}}
```

mediainfo

Display metadata from video and audio files.

More information: <https://mediaarea.net/MediaInfo>.

- Display metadata for a given file in the console:

```
mediainfo {{file}}
```

- Store the output to a given file along with displaying in the console:

```
mediainfo --Logfile={{out.txt}} {{file}}
```

- Display the list of metadata attributes that can be extracted:

```
mediainfo --Info-Parameters
```

meld

Graphical diffing and merging tool.

More information: <https://meldmerge.org/>.

- Start meld:

```
meld
```

- Compare 2 files:

```
meld {{path/to/file_1}} {{path/to/file_2}}
```

- Compare 2 directories:

```
meld {{path/to/directory_1}} {{path/to/directory_2}}
```

- Compare 3 files:

```
meld {{path/to/file_1}} {{path/to/file_2}} {{path/to/file_3}}
```

- Open a comparison as a new tab in a pre-existing meld instance:

```
meld --newtab {{path/to/file_1}} {{path/to/file_2}}
```

- Compare multiple sets of files:

```
meld --diff {{path/to/file_1}} {{path/to/file_2}} --diff  
{{path/to/file_3}} {{path/to/file_4}}
```

mesg

Check or set a terminal's ability to receive messages from other users, usually from the write command.

See also [write](#).

- Check terminal's openness to write messages:

`mesg`

- Disable receiving messages from the write command:

`mesg n`

- Enable receiving messages from the write command:

`mesg y`

meshlabserver

Command line interface for the MeshLab 3D mesh processing software.

- Convert an STL file to an OBJ file:

```
meshlabserver -i {{input.stl}} -o {{output.obj}}
```

- Convert a WRL file to a OFF file, including the vertex and face normals in the output mesh:

```
meshlabserver -i {{input.wrl}} -o {{output.off}} -om vn fn
```

- Dump a list of all the available processing filters into a file:

```
meshlabserver -d {{filename}}
```

- Process a 3D file using a filter script created in the MeshLab GUI (Filters > Show current filter script > Save Script):

```
meshlabserver -i {{input.ply}} -o {{output.ply}} -s  
{{filter_script mlx}}
```

- Process a 3D file using a filter script, writing the output of the filters into a log file:

```
meshlabserver -i {{input.x3d}} -o {{output.x3d}} -s  
{{filter_script mlx}} -l {{logfile}}
```

meson

SCons-like build system that uses python as a front-end language and Ninja as a building backend.

More information: <https://mesonbuild.com>.

- Generate a c project with a given name and version:

```
meson init --language={{c}} --name={{myproject}} --version={{0.1}}
```

- Configure builddir with default values:

```
meson setup {{build_dir}}
```

- Build the project:

```
meson compile -C {{path/to/build_dir}}
```

- Show the help:

```
meson --help
```

- Show version info:

```
meson --version
```

meteor

Full-stack javascript platform for building web applications.

More information: <https://meteor.com>.

- Run a meteor project from its root directory in development mode:

`meteor`

- Create a project under the given directory:

`meteor create {{path/to/directory}}`

- Display the list of packages the project is currently using:

`meteor list`

- Add a package to the project:

`meteor add {{package_name}}`

- Remove a package from the project:

`meteor remove {{package_name}}`

- Create a production build of the project as a tarball under the given directory:

`meteor build {{path/to/directory}}`

micro

Micro is a modern and intuitive terminal-based text editor.

You can use your keyboard, but also your mouse to navigate and/or select text.

More information: <https://micro-editor.github.io>.

- Open a file:

`micro {{file}}`

- Cut the entire line:

`Ctrl + K`

- Search for a pattern in the file (press `Ctrl + N/Ctrl + P` to go to next/previous match):

`Ctrl + F "{{pattern}}" <Enter>`

- Execute a command:

`Ctrl + E {{command}} <Enter>`

- Perform a substitution in the whole file:

`Ctrl + E replaceall "{{pattern}}" "{{replacement}}" <Enter>`

- Quit:

`Ctrl + Q`

middleman

Static site generator written in Ruby.

More information: <https://middlemanapp.com/>.

- Create a new Middleman project:

```
middleman init "{{project_name}}"
```

- Start local server for current project on port 4567:

```
middleman server
```

- Start local server for current project on a specified port:

```
middleman server -p "{{port}}"
```

- Build the project in the current directory to prepare for deployment:

```
bundle exec middleman build
```

- Deploy the Middleman project in the current directory:

```
middleman deploy
```

minetest

Multiplayer infinite-world block sandbox.

See also **minetestserver**, the server-only binary.

More information: <https://wiki.minetest.net/Minetest>.

- Start minetest in client mode:

```
minetest
```

- Start minetest in server mode:

```
minetest --server
```

- Write logs to a specific file:

```
minetest --logfile {{path/to/file}}
```

- Only write errors to the console:

```
minetest --quiet
```

minetestserver

Multiplayer infinite-world block sandbox server.

See also [minetest](#), the graphical client.

More information: https://wiki.minetest.net/Setting_up_a_server.

- Start the server:

```
minetestserver
```

- List available worlds:

```
minetestserver --world list
```

- Specify the world name to load:

```
minetestserver --world {{world_name}}
```

- List the available game IDs:

```
minetestserver --gameid list
```

- Specify a game to use:

```
minetestserver --gameid {{game_id}}
```

- Listen on a specific port:

```
minetestserver --port {{34567}}
```

- Migrate to a different data backend:

```
minetestserver --migrate {{sqlite3|leveldb|redis}}
```

- Start an interactive terminal after starting the server:

```
minetestserver --terminal
```

minikube

Tool to run Kubernetes locally.

More information: <https://github.com/kubernetes/minikube>.

- Start the cluster:

```
minikube start
```

- Get the IP address of the cluster:

```
minikube ip
```

- Access a service named my_service exposed via a node port and get the url:

```
minikube service {{my_service}} --url
```

- Open kubernetes dashboard in a browser:

```
minikube dashboard
```

- Stop the running cluster:

```
minikube stop
```

- Delete the cluster:

```
minikube delete
```

mitmdump

View, record, and programmatically transform HTTP traffic.

The command-line counterpart to mitmproxy.

More information: <https://docs.mitmproxy.org/stable/overview-tools/#mitmdump>.

- Start a proxy and save all output to a file:

```
mitmdump -w {{filename}}
```

- Filter a saved traffic file to just POST requests:

```
mitmdump -nr {{input_filename}} -w {{output_filename}} "{{~m post}}"
```

- Replay a saved traffic file:

```
mitmdump -nc {{filename}}
```

mitmproxy

An interactive man-in-the-middle HTTP proxy.

More information: <https://mitmproxy.org>.

- Start mitmproxy with default settings:

`mitmproxy`

- Start mitmproxy bound to custom address and port:

`mitmproxy -b {{ip_address}} -p {{port}}`

mix

Mix is a build tool that provides tasks for creating, compiling, and testing Elixir projects, managing its dependencies, and more.

More information: <https://hexdocs.pm/mix>.

- Execute a particular file:

```
mix run {{my_script.exs}}
```

- Create a new project:

```
mix new {{project_name}}
```

- Compile project:

```
mix compile
```

- Run project tests:

```
mix test
```

- List all mix commands:

```
mix help
```

mkcrt

Tool for making locally-trusted development certificates.

More information: <https://github.com/FiloSottile/mkcrt>.

- Install the local CA in the system trust store:

```
mkcert -install
```

- Generate certificate and private key for a given domain:

```
mkcert {{example.org}}
```

- Generate certificate and private key for multiple domains:

```
mkcert {{example.org}} {{myapp.dev}} {{127.0.0.1}}
```

- Generate wildcard certificate and private key for a given domain and its subdomains:

```
mkcert "{{*.example.it}}"
```

- Uninstall the local CA:

```
mkcert -uninstall
```

mkdir

Creates a directory.

- Create a directory in current directory or given path:

```
mkdir {{directory}}
```

- Create directories recursively (useful for creating nested dirs):

```
mkdir -p {{path/to/directory}}
```

mkfifo

Makes FIFOs (named pipes).

- Create a named pipe at a given path:

```
mkfifo {{path/to/pipe}}
```

mktemp

Create a temporary file or directory.

More information: <https://www.gnu.org/software/autogen/mktemp.html>.

- Create an empty temporary file and return the absolute path to it:

`mktemp`

- Create a temporary directory and return the absolute path to it:

`mktemp -d`

- Create a temporary file with a specified suffix:

`mktemp --suffix "{{.txt}}"`

mktorrent

A CLI utility to create BitTorrent metainfo files.

More information: <https://github.com/Rudde/mktorrent>.

- Create a torrent with 2^{21} KB as the piece size:

```
mktorrent -a {{tracker_announce_url}} -l {{21}} -o {{path/to/}}  
example.torrent {{path/to/file_or_directory}}
```

- Create a private torrent with a 2^{21} KB piece size:

```
mktorrent -p -a {{tracker_announce_url}} -l {{21}} -o {{path/}}  
to/example.torrent {{path/to/file_or_directory}}
```

- Create a torrent with a comment:

```
mktorrent -c "{{comment}}" -a {{tracker_announce_url}} -l  
{{21}} -o {{path/to/example.torrent}} {{path/to/}}  
file_or_directory
```

- Create a torrent with multiple trackers:

```
mktorrent -a {{tracker_announce_url,tracker_announce_url_2}}  
-l {{21}} -o {{path/to/example.torrent}} {{path/to/}}  
file_or_directory
```

- Create a torrent with web seed URLs:

```
mktorrent -a {{tracker_announce_url}} -w {{web_seed_url}} -l  
{{21}} -o {{path/to/example.torrent}} {{path/to/}}  
file_or_directory
```

mlr

Miller is like **awk**, **sed**, **cut**, **join**, and **sort** for name-indexed data such as CSV, TSV, and tabular JSON.

More information: <https://johnkerl.org/miller/doc>.

- Pretty-print a CSV file in a tabular format:

```
mlr --icsv --opprint cat {{example.csv}}
```

- Receive JSON data and pretty print the output:

```
echo '{"hello":"world"}' | mlr --ijson --opprint cat
```

- Sort alphabetically on a field:

```
mlr --icsv --opprint sort -f {{field}} {{example.csv}}
```

- Sort in descending numerical order on a field:

```
mlr --icsv --opprint sort -nr {{field}} {{example.csv}}
```

- Convert CSV to JSON, performing calculations and display those calculations:

```
mlr --icsv --ojson put '${{newField1}} = ${{oldFieldA}}/${{oldFieldB}}' {{example.csv}}
```

- Receive JSON and format the output as vertical JSON:

```
echo '{"hello":"world", "foo":"bar"}' | mlr --ijson --ojson --jvstack cat
```

- Filter lines of a compressed CSV file treating numbers as strings:

```
mlr --prepipe 'gunzip' --csv filter -S '${{fieldName}} =~ ${{regexp}}' {{example.csv.gz}}
```

mmdc

CLI for mermaid, a diagram generation tool with a domain-specific language.

A mermaid definition file is taken as input and a SVG, PNG, or PDF file is generated as output.

More information: <https://mermaid-js.github.io/mermaid/>.

- Convert a file to the specified format (automatically determined from the file extension):

```
mmdc --input {{input.mmd}} --output {{output.svg}}
```

- Specify the theme of the chart:

```
mmdc --input {{input.mmd}} --output {{output.svg}} --theme  
{{forest|dark|neutral|default}}
```

- Specify the background color of the chart (e.g. lime, "#D8064F", or transparent):

```
mmdc --input {{input.mmd}} --output {{output.svg}} --  
backgroundColor {{color}}
```

mmls

Display the partition layout of a volume system.

More information: <https://wiki.sleuthkit.org/index.php?title=Mmcls>.

- Display the partition table stored in an image file:

```
mmls {{path/to/image_file}}
```

- Display the partition table with an additional column for the partition size:

```
mmls -B -i {{path/to/image_file}}
```

- Display the partition table in a split EWF image:

```
mmls -i ewf {{image.e01}} {{image.e02}}
```

- Display nested partition tables:

```
mmls -t {{nested_table_type}} -o {{offset}} {{path/to/ image_file}}
```

mmv

Move and rename files in bulk.

- Rename all files with a certain extension to a different extension:

```
mmv "*{{.old_extension}}" "#1{{.new_extension}}"
```

- Copy report6part4.txt to ./french/rapport6partie4.txt along with all similarly named files:

```
mmv -c "{{report*part*.txt}}" "{{./french/rapport#1partie#2.txt}}"
```

- Append all .txt files into one file:

```
mmv -a "{{*.txt}}" "{{all.txt}}"
```

- Convert dates in filenames from "M-D-Y" format to "D-M-Y" format:

```
mmv "[[0-1][0-9]-[0-3][0-9]-[0-9][0-9][0-9].txt]" "#3#4-#1#2-#5#6#7#8.txt"
```

mocha

Execute Mocha JavaScript test runner.

More information: <https://mochajs.org>.

- Run tests with default configuration or as configured in `mocha.opts`:

`mocha`

- Run tests contained at a specific location:

`mocha {{directory/with/tests}}`

- Run tests that match a specific grep pattern:

`mocha --grep {{^regex$}}`

- Run tests on changes to JavaScript files in the current directory and once initially:

`mocha --watch`

- Run tests with a specific reporter:

`mocha --reporter {{reporter}}`

mogrify

Perform operations on multiple images, such as resizing, cropping, flipping, and adding effects.

Changes are applied directly to the original file.

More information: <https://imagemagick.org/script/mogrify.php>.

- Resize all JPEG images in the directory to 50% of their initial size:

```
mogrify -resize {{50%}} {{*.jpg}}
```

- Resize all images starting with "DSC" to 800x600:

```
mogrify -resize {{800x600}} {{DSC*}}
```

- Convert all PNG images in the directory to JPEG:

```
mogrify -format {{jpg}} {{*.png}}
```

- Halve the saturation of all image files in the current directory:

```
mogrify -modulate {{100,50}} {{*}}
```

- Double the brightness of all image files in the current directory:

```
mogrify -modulate {{200}} {{*}}
```

molecule

Molecule helps testing ansible roles.

More information: <https://molecule.readthedocs.io>.

- Create a new ansible role:

```
molecule init role --role-name {{role_name}}
```

- Run tests:

```
molecule test
```

- Start the instance:

```
molecule create
```

- Configure the instance:

```
molecule converge
```

- Login into the instance:

```
molecule login
```

mongo

MongoDB interactive shell client.

More information: <https://docs.mongodb.com/manual/reference/program/mongo>.

- Connect to a database:

```
mongo {{database}}
```

- Connect to a database running on a given host on a given port:

```
mongo --host {{host}} --port {{port}} {{database}}
```

- Connect to a database with a given username; user will be prompted for password:

```
mongo --username {{username}} {{database}} --password
```

- Evaluate a javascript expression on the database:

```
mongo --eval '{{JSON.stringify(db.foo.findOne())}}'  
{{database}}
```

mongod

The MongoDB database server.

More information: <https://docs.mongodb.com/manual/reference/program/mongod>.

- Specify a config file:

```
mongod --config {{filename}}
```

- Specify the port to listen on:

```
mongod --port {{port}}
```

- Specify database profiling level. 0 is off, 1 is only slow operations, 2 is all:

```
mongod --profile {{0|1|2}}
```

mongodump

Utility to export the contents of a MongoDB instance.

More information: <https://docs.mongodb.com/manual/reference/program/mongodump>.

- Create a dump of all databases (this will place the files inside a directory called "dump"):

```
mongodump
```

- Specify an output location for the dump:

```
mongodump --out {{path/to/directory}}
```

- Create a dump of a given database:

```
mongodump --db {{database_name}}
```

- Create a dump of a given collection within a given database:

```
mongodump --collection {{collection_name}} --db  
{{database_name}}
```

- Connect to a given host running on a given port, and create a dump:

```
mongodump --host {{host}} --port {{port}}
```

- Create a dump of a given database with a given username; user will be prompted for password:

```
mongodump --username {{username}} {{database}} --password
```

mongorestore

Utility to import a collection or database from a binary dump into a MongoDB instance.

More information: <https://docs.mongodb.com/manual/reference/program/mongorestore>.

- Import a bson data dump from a directory to a MongoDB database:

```
mongorestore --db {{database_name}} {{path/to/directory}}
```

- Import a bson data dump from a directory to a given database in a MongoDB server host, running at a given port, with user authentication (user will be prompted for password):

```
mongorestore --host {{database_host:port}} --db
{{database_name}} --username {{username}} {{path/to/
directory}} --password
```

- Import a collection from a bson file to a MongoDB database:

```
mongorestore --db {{database_name}} {{path/to/file}}
```

- Import a collection from a bson file to a given database in a MongoDB server host, running at a given port, with user authentication (user will be prompted for password):

```
mongorestore --host {{database_host:port}} --db
{{database_name}} --username {{username}} {{path/to/file}} --
password
```

monodevelop

Cross platform IDE for C#, F# and more.

More information: <https://www.monodevelop.com/>.

- Start Monodevelop:

```
monodevelop
```

- Open a specific file:

```
monodevelop {{path/to/file}}
```

- Open a specific file with the caret at a specific position:

```
monodevelop {{path/to/file}};{{line_number}};  
{{column_number}}
```

- Force opening a new window instead of switching to an existing one:

```
monodevelop --new-window
```

- Disable redirection of `stdout` and `stderr` to a log file:

```
monodevelop --no-redirect
```

- Enable performance monitoring:

```
monodevelop --perf-log
```

monodis

The Mono Common Intermediate Language (CIL) disassembler.

More information: <https://www.mono-project.com/docs/tools+libraries/tools/monodis/>.

- Disassemble an assembly to textual CIL:

```
monodis {{path/to/assembly.exe}}
```

- Save the output to a file:

```
monodis --output={{path/to/output.il}} {{path/to/assembly.exe}}
```

- Show information about an assembly:

```
monodis --assembly {{path/to/assembly.dll}}
```

- List the references of an assembly:

```
monodis --assemblyref {{path/to/assembly.exe}}
```

- List all the methods in an assembly:

```
monodis --method {{path/to/assembly.exe}}
```

- Show a list of resources embedded within an assembly:

```
monodis --manifest {{path/to/assembly.dll}}
```

- Extract all the embedded resources to the current directory:

```
monodis --mresources {{path/to/assembly.dll}}
```

monop

Finds and displays signatures of Types and methods inside .NET assemblies.

- Show the structure of a Type built-in of the .NET Framework:

```
monop {{System.String}}
```

- List the types in an assembly:

```
monop -r:{{path/to/assembly.exe}}
```

- Show the structure of a Type in a specific assembly:

```
monop -r:{{path/to/assembly.dll}} {{Namespace.Path.To.Type}}
```

- Only show members defined in the specified Type:

```
monop -r:{{path/to/assembly.dll}} --only-declared  
{{Namespace.Path.To.Type}}
```

- Show private members:

```
monop -r:{{path/to/assembly.dll}} --private  
{{Namespace.Path.To.Type}}
```

- Hide obsolete members:

```
monop -r:{{path/to/assembly.dll}} --filter-obsolete  
{{Namespace.Path.To.Type}}
```

- List the other assemblies that a specified assembly references:

```
monop -r:{{path/to/assembly.dll}} --refs
```

montage

Imagemagick image montage tool.

Tiles images into a customisable grid.

More information: <https://imagemagick.org/script/montage.php>.

- Tile images into a grid, automatically resizing images larger than the grid cell size:

```
montage {{image1.png}} {{image2.jpg}} {{imageN.png}}
montage.jpg
```

- Tile images into a grid, automatically calculating the grid cell size from the largest image:

```
montage {{image1.png}} {{image2.jpg}} {{imageN.png}} -
geometry +0+0 montage.jpg
```

- Set the grid cell size and resize images to fit it before tiling:

```
montage {{image1.png}} {{image2.jpg}} {{imageN.png}} -
geometry 640x480+0+0 montage.jpg
```

- Limit the number of rows and columns in the grid, causing input images to overflow into multiple output montages:

```
montage {{image1.png}} {{image2.jpg}} {{imageN.png}} -
geometry +0+0 -tile 2x3 montage_%d.jpg
```

- Resize and crop images to completely fill their grid cells before tiling:

```
montage {{image1.png}} {{image2.jpg}} {{imageN.png}} -
geometry +0+0 -resize 640x480^ -gravity center -crop
640x480+0+0 montage.jpg
```

more

Open a file for interactive reading, allowing scrolling and search (in forward direction only).

- Open a file:

`more {{source_file}}`

- Page down:

`<Space>`

- Search for a string (press `n` to go to the next match):

`/{{something}}`

- Exit:

`q`

moro

Track work time.

More information: <https://moro.js.org>.

- Invoke `moro` without parameters, to set the current time as the start of the working day:

`moro`

- Specify a custom time for the start of the working day:

`moro hi {{09:30}}`

- Invoke `moro` without parameters a second time, to set the current time at the end of the working day:

`moro`

- Specify a custom time for the end of the working day:

`moro bye {{17:30}}`

- Add a note on the current working day:

`moro note {{3 hours on project Foo}}`

- Show a report of time logs and notes for the current working day:

`moro report`

- Show a report of time logs and notes for all working days on record:

`moro report --all`

mosh

Mobile Shell (**mosh**) is a robust and responsive replacement for SSH.

mosh persists connections to remote servers while roaming between networks.

More information: <https://mosh.org>.

- Connect to a remote server:

```
mosh {{username}}@{{remote_host}}
```

- Connect to a remote server with a specific identity (private key):

```
mosh --ssh="ssh -i {{path/to/key_file}}" {{username}}@{{remote_host}}
```

- Connect to a remote server using a specific port:

```
mosh --ssh="ssh -p {{2222}}" {{username}}@{{remote_host}}
```

- Run a command on a remote server:

```
mosh {{remote_host}} -- {{command -with -flags}}
```

- Select Mosh UDP port (useful when {{remote_host}} is behind a NAT):

```
mosh -p {{124}} {{username}}@{{remote_host}}
```

- Usage when **mosh-server** binary is outside standard path:

```
mosh --server={{path/to/bin/}}mosh-server {{remote_host}}
```

mosquitto

An MQTT broker.

More information: <https://mosquitto.org/>.

- Start mosquitto:

```
mosquitto
```

- Specify a configuration file to use:

```
mosquitto --config-file {{path/to/file.conf}}
```

- Listen on a specific port:

```
mosquitto - -port {{8883}}
```

- Daemonize by forking into the background:

```
mosquitto - -daemon
```

mosquitto_passwd

Manage password files for mosquitto.

See also [mosquitto](#), the MQTT server that this manages.

More information: https://mosquitto.org/man/mosquitto_passwd-1.html.

- Add a new user to a password file (will prompt to enter the password):

```
mosquitto_passwd {{path/to/password_file}} {{username}}
```

- Create the password file if it doesn't already exist:

```
mosquitto_passwd -c {{path/to/password_file}} {{username}}
```

- Delete the specified username instead:

```
mosquitto_passwd -D {{path/to/password_file}} {{username}}
```

- Upgrade an old plain-text password file to a hashed password file:

```
mosquitto_passwd -U {{path/to/password_file}}
```

mosquitto_pub

A simple MQTT version 3.1.1 client that will publish a single message on a topic and exit.

More information: https://mosquitto.org/man/mosquitto_pub-1.html.

- Publish a temperature value of 32 on the topic `sensors/temperature` to 192.168.1.1 (defaults to `localhost`) with Quality of Service (`QoS`) set to 1:

```
mosquitto_pub -h {{192.168.1.1}} -t {{sensors/temperature}} -m {{32}} -q {{1}}
```

- Publish timestamp and temperature data on the topic `sensors/temperature` to a remote host on a non-standard port:

```
mosquitto_pub -h {{192.168.1.1}} -p {{1885}} -t {{sensors/temperature}} -m "{{1266193804 32}}"
```

- Publish light switch status and retain the message on the topic `switches/kitchen_lights/status` to a remote host because there may be a long period of time between light switch events:

```
mosquitto_pub -r -h "{{iot.eclipse.org}}" -t {{switches/kitchen_lights/status}} -m "{{on}}"
```

- Send the contents of a file (`data.txt`) as a message and publish it to `sensors/temperature` topic:

```
mosquitto_pub -t {{sensors/temperature}} -f {{data.txt}}
```

- Send the contents of a file (`data.txt`), by reading from `stdin` and send the entire input as a message and publish it to `sensors/temperature` topic:

```
mosquitto_pub -t {{sensors/temperature}} -s < {{data.txt}}
```

- Read newline delimited data from `stdin` as a message and publish it to `sensors/temperature` topic:

```
{{echo data.txt}} | mosquitto_pub -t {{sensors/temperature}} -l
```

mosquitto_sub

A simple MQTT version 3.1.1 client that will subscribe to topics and print the messages that it receives.

More information: https://mosquitto.org/man/mosquitto_sub-1.html.

- Subscribe to the topic `sensors/temperature` information with Quality of Service (QoS) set to 1. (The default hostname is `localhost` and port `1883`):

```
mosquitto_sub -t {{sensors/temperature}} -q {{1}}
```

- Subscribe to all broker status messages publishing on `iot.eclipse.org` port `1885` and print published messages verbosely:

```
mosquitto_sub -v -h "iot.eclipse.org" -p 1885 -t {{\$SYS/#}}
```

- Subscribe to multiple topics matching a given pattern. (+ takes any metric name):

```
mosquitto_sub -t {{sensors/machines/+/temperature/+}}
```

most

Open one or several files for interactive reading, allowing scrolling and search.

- Open a file:

```
most {{path/to/file}}
```

- Open several files:

```
most {{path/to/file1}} {{path/to/file2}}
```

- Open a file at the first occurrence of "string":

```
most {{file}} +/{{string}}
```

- Move through opened files:

```
:0 n
```

- Jump to the 100th line:

```
{{100}}j
```

- Edit current file:

```
e
```

- Split the current window in half:

```
<CTRL-X> o
```

- Exit:

```
Q
```

mount

Provides access to an entire filesystem in one directory.

- Show all mounted filesystems:

```
mount
```

- Mount a device to a directory:

```
mount -t {{filesystem_type}} {{path/to/device_file}} {{path/to/target_directory}}
```

- Mount a CD-ROM device (with the filetype ISO9660) to /cdrom (readonly):

```
mount -t {{iso9660}} -o ro {{/dev/cdrom}} {{/cdrom}}
```

- Mount all the filesystem defined in /etc/fstab:

```
mount -a
```

- Mount a specific filesystem described in /etc/fstab (e.g. "/dev/sda1 /my_drive ext2 defaults 0 2"):

```
mount {{/my_drive}}
```

- Mount a directory to another directory:

```
mount --bind {{path/to/old_dir}} {{path/to/new_dir}}
```

mp4box

MPEG-4 Systems Toolbox - Muxes streams into MP4 container.

More information: <https://gpac.wp.imt.fr/mp4box>.

- Display information about an existing MP4 file:

```
mp4box -info {{filename}}
```

- Add an SRT subtitle file into an MP4 file:

```
mp4box -add {{input_subs.srt}}:lang=eng -add {{input.mp4}}  
{{output.mp4}}
```

- Combine audio from one file and video from another:

```
mp4box -add {{input1.mp4}}#audio -add {{input2.mp4}}#video  
{{output.mp4}}
```

mpc

Music Player Client.

Program for controlling the Music Player Daemon (MPD).

More information: <https://www.musicpd.org/clients/mpc>.

- Toggle play/pause:

`mpc toggle`

- Stop playing:

`mpc stop`

- Show information about the currently playing song:

`mpc status`

- Play next song:

`mpc next`

- Play previous song:

`mpc prev`

- Forward or rewind the currently playing song:

`mpc [+ -]{{seconds}}`

mpg321

High Performance MPEG 1.0/2.0/2.5 Audio Player for Layer 1, 2, and 3.

Mpg321 was written (sometime in 1999) to be a drop-in replacement for the (previously) non-free mpg123 player.

More information: <http://mpg321.sourceforge.net/>.

- Play an audio source exactly N times (N=0 means forever):

```
mpg321 -l {{N}} {{path/to/file_a|URL}} {{path/to/file_b|URL}}  
{{...}}
```

- Play a directory recursively:

```
mpg321 -B {{path/to/directory}}
```

- Enable Basic Keys (* or / - Increase or decrease volume, n - Skip song, m - Mute/unmute.) while playing:

```
mpg321 -K {{path/to/file_a|URL}} {{path/to/file_b|URL}}  
{{...}}
```

- Play files randomly until interrupted:

```
mpg321 -Z {{path/to/file_a|URL}} {{path/to/file_b|URL}}  
{{...}}
```

- Shuffle the files before playing them once:

```
mpg321 -z {{path/to/file_a|URL}} {{path/to/file_b|URL}}  
{{...}}
```

- Play all files in the current folder and subfolders, randomly (until interrupted), with Basic Keys enabled:

```
mpg321 -B -Z -K .
```

mpv

A audio/video player based on MPlayer.

More information: <https://mpv.io>.

- Play a video or audio file:

```
mpv {{file}}
```

- Play a video or audio file from an URL:

```
mpv '{{https://www.youtube.com/watch?v=dQw4w9WgXcQ}}'
```

- Jump backward/forward 5 seconds:

```
LEFT <or> RIGHT
```

- Jump backward/forward 1 minute:

```
DOWN <or> UP
```

- Decrease or increase playback speed by 10 %:

```
[ <or> ]
```

- Play a file at a specified speed (0.01 to 100, default 1):

```
mpv --speed {{speed}} {{file}}
```

- Play a file using a profile defined in the `mpv.conf` file:

```
mpv --profile {{profile_name}} {{file}}
```

- Display the output of webcam or other video input device:

```
mpv /dev/{{video0}}
```

mr

Myrepos manages all your version control repositories at once.

More information: <https://myrepos.branchable.com>.

- Register a repository:

```
mr register
```

- Update repositories in 5 concurrent jobs:

```
mr -j{{5}} update
```

- Print the status of all repositories:

```
mr status
```

- Checkout all repositories to the latest version:

```
mr checkout
```

msbuild

The Microsoft build tool for Visual Studio project solutions.

More information: <https://docs.microsoft.com/visualstudio/msbuild>.

- Build the first project file in the current directory:

```
msbuild
```

- Build a specific project file:

```
msbuild {{path/to/project_file}}
```

- Set one or more semicolon-separated targets to build:

```
msbuild {{path/to/project_file}} /target:{{targets}}
```

- Set one or more semicolon-separated properties:

```
msbuild {{path/to/project_file}} /property:{{name=value}}
```

- Set the build tools version to use:

```
msbuild {{path/to/project_file}} /toolsversion:{{version}}
```

- Display detailed information at the end of the log about how the project was configured:

```
msbuild {{path/to/project_file}} /detailedsummary
```

- Display detailed help information:

```
msbuild /help
```

msfvenom

Manually generate payloads for metasploit.

More information: <https://github.com/rapid7/metasploit-framework/wiki/How-to-use-msfvenom>.

- List payloads:

```
msfvenom -l payloads
```

- List formats:

```
msfvenom -l formats
```

- Show payload options:

```
msfvenom -p {{payload}} --list-options
```

- Create an ELF binary with a reverse TCP handler:

```
msfvenom -p linux/x64/meterpreter/reverse_tcp  
LHOST={{local_ip}} LPORT={{local_port}} -f elf > {{path/to/}  
binary}}
```

- Create an EXE binary with a reverse TCP handler:

```
msfvenom -p windows/x64/meterpreter/reverse_tcp  
LHOST={{local_ip}} LPORT={{local_port}} -f exe > {{path/to/}  
binary.exe}}
```

msmtp

An SMTP client.

It reads text from standard input and sends it to an SMTP server.

More information: <https://marlam.de/msmtp>.

- Send an email using the default account configured in `~/.msmtprc`:

```
echo "{{Hello world}}" | msmtp {{to@example.org}}
```

- Send an email using a specific account configured in `~/.msmtprc`:

```
echo "{{Hello world}}" | msmtp --account={{account_name}}  
{{to@example.org}}
```

- Send an email without a configured account. The password should be specified in the `~/.msmtprc` file:

```
echo "{{Hello world}}" | msmtp --host={{localhost}} --  
port={{999}} --from={{from@example.org}} {{to@example.org}}
```

mtr

Matt's Traceroute: combined traceroute and ping tool.

More information: <https://bitwizard.nl/mtr>.

- Traceroute to a host and continuously ping all intermediary hops:

```
mtr {{host}}
```

- Disable IP address and host name mapping:

```
mtr -n {{host}}
```

- Generate output after pinging each hop 10 times:

```
mtr -w {{host}}
```

- Force IP IPv4 or IPV6:

```
mtr -4 {{host}}
```

- Wait for a given time (in seconds) before sending another packet to the same hop:

```
mtr -i {{seconds}} {{host}}
```

multipass

CLI to manage Ubuntu virtual machines using native hypervisors.

More information: <https://multipass.run/>.

- List the aliases that can be used to launch an instance:

```
multipass find
```

- Launch a new instance, set its name and use a cloud-init configuration file:

```
multipass launch -n {{instance_name}} --cloud-init
{{configuration_file}}
```

- List all the created instances and some of their properties:

```
multipass list
```

- Start a specific instance by name:

```
multipass start {{instance_name}}
```

- Show the properties of an instance:

```
multipass info {{instance_name}}
```

- Open a shell prompt on a specific instance by name:

```
multipass shell {{instance_name}}
```

- Delete an instance by name:

```
multipass delete {{instance_name}}
```

- Mount a directory into a specific instance:

```
multipass mount {{path/to/local/directory}}
{{instance_name}}:{{path/to/target/directory}}
```

multitail

Extension of tail.

More information: <https://www.vanheusden.com/multitail/examples.php>.

- Tail all files matching a pattern in a single stream:

```
multitail -Q 1 '{{pattern}}'
```

- Tail all files in a directory in a single stream:

```
multitail -Q 1 '{{directory}}/*'
```

- Automatically add new files to a window:

```
multitail -Q {{pattern}}
```

- Show 5 logfiles while merging 2 and put them in 2 columns with only one in the left column:

```
multitail -s 2 -sn 1,3 {{mergefile}} -I {{file1}} {{file2}}  
{{file3}} {{file4}}
```

mutool

Convert PDF files, query information and extract data.

More information: <https://mupdf.com/docs>.

- Convert pages 1-10 into 10 PNG images:

```
mutool convert -o {{image%d.png}} {{file.pdf}} {{1-10}}
```

- Convert pages 2, 3 and 5 of a PDF into text in the standard output:

```
mutool draw -F {{txt}} {{file.pdf}} {{2,3,5}}
```

- Concatenate two PDFs:

```
mutool merge -o {{output.pdf}} {{input1.pdf}} {{input2.pdf}}
```

- Query information about all content embedded in a PDF:

```
mutool info {{input.pdf}}
```

- Extract all images, fonts and resources embedded in a PDF out into the current directory:

```
mutool extract {{input.pdf}}
```

mutt

Command-line email client.

More information: <http://mutt.org>.

- Open the specified mailbox:

```
mutt -f {{mailbox}}
```

- Send an email and specify a subject and a cc recipient:

```
mutt -s {{subject}} -c {{cc@example.com}}
{{recipient@example.com}}
```

- Send an email with files attached:

```
mutt -a {{file1}} {{file2}} -- {{recipient@example.com}}
```

- Specify a file to include as the message body:

```
mutt -i {{file}} {{recipient@example.com}}
```

- Specify a draft file containing the header and the body of the message, in RFC 5322 format:

```
mutt -H {{file}} {{recipient@example.com}}
```

mv

Move or rename files and directories.

- Move files in arbitrary locations:

```
mv {{source}} {{target}}
```

- Do not prompt for confirmation before overwriting existing files:

```
mv -f {{source}} {{target}}
```

- Prompt for confirmation before overwriting existing files, regardless of file permissions:

```
mv -i {{source}} {{target}}
```

- Do not overwrite existing files at the target:

```
mv -n {{source}} {{target}}
```

- Move files in verbose mode, showing files after they are moved:

```
mv -v {{source}} {{target}}
```

mvn

Apache Maven.

Tool for building and managing Java-based projects.

More information: <https://maven.apache.org>.

- Compile a project:

```
mvn compile
```

- Compile and package the compiled code in its distributable format, such as a **jar**:

```
mvn package
```

- Compile and package, skipping unit tests:

```
mvn package -Dmaven.test.skip=true
```

- Install the built package in local maven repository. (This will invoke the compile and package commands too):

```
mvn install
```

- Delete build artifacts from the target directory:

```
mvn clean
```

- Do a clean and then invoke the package phase:

```
mvn clean package
```

- Clean and then package the code with a given build profile:

```
mvn clean -P{{profile}} package
```

- Run a class with a main method:

```
mvn exec:java -Dexec.mainClass="{{com.example.Main}}" -  
Dexec.args="{{arg1 arg2}}"
```

mycli

A command line client for MySQL that can do auto-completion and syntax highlighting.

More information: <https://mycli.net>.

- Connect to a local database on port 3306, using the current user's username:

```
mycli {{database_name}}
```

- Connect to a database (user will be prompted for a password):

```
mycli -u {{username}} {{database_name}}
```

- Connect to a database on another host:

```
mycli -h {{database_host}} -P {{port}} -u {{username}}  
{{database_name}}
```

mysql

The MySQL command-line tool.

More information: <https://www.mysql.com/>.

- Connect to a database:

```
mysql {{database_name}}
```

- Connect to a database, user will be prompted for a password:

```
mysql -u {{user}} --password {{database_name}}
```

- Connect to a database on another host:

```
mysql -h {{database_host}} {{database_name}}
```

- Connect to a database through a Unix socket:

```
mysql --socket {{path/to/socket.sock}}
```

- Execute SQL statements in a script file (batch file):

```
mysql -e "source {{filename.sql}}" {{database_name}}
```

- Restore a database from a backup created with `mysqldump` (user will be prompted for a password):

```
mysql --user {{user}} --password {{database_name}} < {{path/to/backup.sql}}
```

- Restore all databases from a backup (user will be prompted for a password):

```
mysql --user {{user}} --password < {{path/to/backup.sql}}
```

mysqldump

Backups MySQL databases.

See also [mysql](#) for restoring databases.

More information: <https://dev.mysql.com/doc/refman/en/mysqldump.html>.

- Create a backup (user will be prompted for a password):

```
mysqldump --user {{user}} --password {{database_name}} -r  
{{path/to/file.sql}}
```

- Backup all databases redirecting the output to a file (user will be prompted for a password):

```
mysqldump --user {{user}} --password --all-databases >  
{{path/to/file.sql}}
```

mytop

Display MySQL server performance info like **top**.

More information: <http://www.mysqlfanboy.com/mytop-3>.

- Start mytop:

```
mytop
```

- Connect with a specified username and password:

```
mytop -u {{user}} -p {{password}}
```

- Connect with a specified username (the user will be prompted for a password):

```
mytop -u {{user}} --prompt
```

- Do not show any idle (sleeping) threads:

```
mytop -u {{user}} -p {{password}} --noidle
```

nano

Simple, easy to use command-line text editor. An enhanced, free Pico clone.

More information: <https://nano-editor.org>.

- Open a specific file:

```
nano {{path/to/file}}
```

- Open a file positioning the cursor at the specified line and column:

```
nano +{{line}},{{column}} {{path/to/file}}
```

- Enable smooth scrolling:

```
nano -S {{filename}}
```

- Indent new lines to the previous lines' indentation:

```
nano -i {{filename}}
```

- Before modification, backup separately as {{current_file_name}}~:

```
nano -B {{filename}}
```

nasm

The Netwide Assembler, a portable 80x86 assembler.

More information: <https://nasm.us>.

- Assemble `source.asm` into a binary file `source`, in the (default) raw binary format:

```
nasm {{source.asm}}
```

- Assemble `source.asm` into a binary file `output_file`, in the specified format:

```
nasm -f {{format}} {{source.asm}} -o {{output_file}}
```

- List valid output formats (along with basic nasm help):

```
nasm -hf
```

- Assemble and generate an assembly listing file:

```
nasm -l {{list_file}} {{source.asm}}
```

- Add a directory (must be written with trailing slash) to the include file search path before assembling:

```
nasm -i {{path/to/include_dir/}} {{source.asm}}
```

nativefier

Command-line tool to create a desktop app for any web site with minimal configuration.

More information <https://github.com/jiahaog/nativefier>.

- Make a desktop app for a website:

```
nativefier {{url}}
```

- Create a desktop app with a custom name:

```
nativefier --name {{name}} {{url}}
```

- Use a custom icon, should be a PNG:

```
nativefier --icon {{path/to/icon.png}} {{url}}
```

nc

Netcat is a versatile utility for working with TCP or UDP data.

More information: <https://nmap.org/ncat>.

- Listen on a specified port and print any data received:

```
nc -l {{port}}
```

- Connect to a certain port (you can then write to this port):

```
nc {{ip_address}} {{port}}
```

- Set a timeout:

```
nc -w {{timeout_in_seconds}} {{ipaddress}} {{port}}
```

- Serve a file:

```
nc -l {{port}} < {{file}}
```

- Receive a file:

```
nc {{ip_address}} {{port}} > {{file}}
```

- Server stay up after client detach:

```
nc -k -l {{port}}
```

- Client stay up after EOF:

```
nc -q {{timeout}} {{ip_address}}
```

- Scan the open ports of a specified host:

```
nc -v -z {{ip_address}} {{port}}
```

- Act as proxy and forward data from a local TCP port to the given remote host:

```
nc -l {{local_port}} | nc {{hostname}} {{remote_port}}
```

ncmpcpp

A command line music player client for the Music Player Daemon.

More information: <https://rybczak.net/ncmpcpp>.

- Connect to a music player daemon on a given host and port:

```
ncmpcpp --host {{ip}} --port {{port}}
```

- Display metadata of the current song to console:

```
ncmpcpp --current-song
```

- Use a specified configuration file:

```
ncmpcpp --config {{file}}
```

- Use a different set of key bindings from a file:

```
ncmpcpp --bindings {{file}}
```

ned

Is like **grep** but with powerful replace capabilities.

Unlike **sed**, as it isn't restricted to line oriented editing.

More information: <https://github.com/nevdelap/ned>.

- Recursively search starting in the current directory, ignoring case:

```
ned --ignore-case --recursive '{{^dl}og}}' {{.}}
```

- Search always showing colored output:

```
ned --colors '{{^dl}og}}' {{.}}
```

- Search never showing colored output:

```
ned --colors=never '{{^dl}og}}' {{.}}
```

- Search ignoring certain files:

```
ned --recursive --exclude '{{*.htm}}' '{{^dl}og}}' {{.}}
```

- Simple replace:

```
ned '{{dog}}' --replace '{{cat}}' {{.}}
```

- Replace using numbered group references:

```
ned '{{the ([a-z]+) dog and the ([a-z]+) dog}}' --replace  
'{{the $2 dog and the $1 dog}}' {{.}}
```

- Replace changing case:

```
ned '{{([a-z]+) dog}}' --case-replacements --replace  
'{{\U$1\E! dog}}' --stdout {{.}}
```

- Preview results of a find and replace without updating the target files:

```
ned '{{^sb]ad}}' --replace '{{happy}}' --stdout {{.}}
```

neofetch

CLI tool to display information about your operating system, software and hardware.

More information: <https://github.com/dylanaraps/neofetch>.

- Return the default config, and create it if it's the first time the program runs:

```
neofetch
```

- Trigger an info line from appearing in the output, where 'infoname' is the function name in the config file, e.g. memory:

```
neofetch --{{enable|disable}} {{infoname}}
```

- Hide/Show OS architecture:

```
neofetch --os_arch {{on|off}}
```

- Enable/Disable CPU brand in output:

```
neofetch --cpu_brand {{on|off}}
```

netlify

Deploy sites and configure continuous deployment to the Netlify platform.

More information: <https://www.netlify.com/docs/cli/>.

- Login to the Netlify account:

```
netlify login
```

- Deploy the contents of a directory to Netlify:

```
netlify deploy
```

- Configure continuous deployment for a new or an existing site:

```
netlify init
```

- Start a local dev server:

```
netlify dev
```

newman

Collection runner for Postman.

More information: <https://github.com/postmanlabs/newman>.

- Run a collection (from a file):

```
newman run {{path/to/collection.json}}
```

- Run a collection (from a URL):

```
newman run {{https://www.getpostman.com/collections/631643-f695cab7-6878-eb55-7943-ad88e1ccfd65-JsLv}}
```

newsboat

An RSS/Atom feed reader for text terminals.

More information: <https://newsboat.org/>.

- First import feed URLs from an OPML file:

```
newsboat -i {{my-feeds.xml}}
```

- Alternatively, add feeds manually:

```
echo {{http://example.com/path/to/feed}} >> "${HOME}/.newsboat/urls"
```

- Start newsboat and refresh all feeds on startup:

```
newsboat -r
```

- See keyboard shortcuts (the most relevant are visible in the status line):

```
?
```

nextflow

Tool for running computational pipelines. Mostly used for bioinformatics workflows.

More information: <https://www.nextflow.io>.

- Run a pipeline, use cached results from previous runs:

```
nextflow run {{main.nf}} -resume
```

- Run a specific release of a remote workflow from GitHub:

```
nextflow run {{user/repo}} -revision {{release_tag}}
```

- Run with a given work directory for intermediate files, save execution report:

```
nextflow run {{workflow}} -work-dir {{path/to/directory}} -with-report {{report.html}}
```

- Show details of previous runs in current directory:

```
nextflow log
```

- Remove cache and intermediate files for a specific run:

```
nextflow clean -force {{run_name}}
```

- List all downloaded projects:

```
nextflow list
```

- Pull the latest version of a remote workflow from Bitbucket:

```
nextflow pull {{user/repo}} -hub bitbucket
```

- Update Nextflow:

```
nextflow self-update
```

nf-core

The nf-core framework tools, to create, check and develop best-practice guidelines for Nextflow.

More information: <https://nf-co.re/tools>.

- List existing pipelines on nf-core:

```
nf-core list
```

- Create a new pipeline skeleton:

```
nf-core create
```

- Lint the pipeline code:

```
nf-core lint {{path/to/directory}}
```

- Bump software versions in pipeline recipe:

```
nf-core bump-version {{path/to/directory}} {{new_version}}
```

- Launch an nf-core pipeline:

```
nf-core launch {{pipeline_name}}
```

- Download an nf-core pipeline for offline use:

```
nf-core download {{pipeline_name}}
```

ng

Command Line Interface (CLI) for creating and managing Angular applications.

More information: <https://angular.io/cli>.

- Create a new Angular application inside a directory:

```
ng new {{project_name}}
```

- Add a new component to one's application:

```
ng generate component {{component_name}}
```

- Add a new class to one's application:

```
ng generate class {{class_name}}
```

- Add a new directive to one's application:

```
ng generate directive {{directive_name}}
```

- Run the application with the following command in its root directory:

```
ng serve
```

- Build the application:

```
ng build
```

- Run unit tests:

```
ng test
```

- Check the version of your current Angular installation:

```
ng version
```

nginx

Nginx web server.

More information: <https://nginx.org/en/>.

- Start server with the default config file:

```
nginx
```

- Start server with a custom config file:

```
nginx -c {{config_file}}
```

- Start server with a prefix for all relative paths in the config file:

```
nginx -c {{config_file}} -p {{prefix/for/relative/paths}}
```

- Test the configuration without affecting the running server:

```
nginx -t
```

- Reload the configuration by sending a signal with no downtime:

```
nginx -s reload
```

ngrep

Filter network traffic packets using regular expressions.

More information: <https://github.com/jpr5/ngrep>.

- Capture traffic of all interfaces:

```
ngrep -d any
```

- Capture traffic of a specific interface:

```
ngrep -d {{eth0}}
```

- Capture traffic crossing port 22 of interface eth0:

```
ngrep -d {{eth0}} port {{22}}
```

- Capture traffic from or to a host:

```
ngrep host {{www.example.com}}
```

- Filter keyword 'User-Agent:' of interface eth0:

```
ngrep -d {{eth0}} '{{User-Agent:}}
```

ngrok

Reverse proxy that creates a secure tunnel from a public endpoint to a locally running web service.

More information: <https://ngrok.com>.

- Expose a local HTTP service on a given port:

```
ngrok http {{80}}
```

- Expose a local HTTP service on a specific host:

```
ngrok http {{foo.dev}}:{{80}}
```

- Expose a local HTTPS server:

```
ngrok http https://localhost
```

- Expose TCP traffic on a given port:

```
ngrok tcp {{22}}
```

- Expose TLS traffic for a specific host and port:

```
ngrok tls -hostname={{foo.com}} {{443}}
```

nice

Execute a program with a custom scheduling priority (niceness).

Niceness values range from -20 (the highest priority) to 19 (the lowest).

- Launch a program with altered priority:

```
sudo nice -n {{niceness_value}} {{command}}
```

nikto

Web server scanner which performs tests against web servers for multiple items.

More information: <https://cirt.net/Nikto2>.

- Perform a basic Nikto scan against a target host:

```
perl nikto.pl -h {{192.168.0.1}}
```

- Specify the port number when performing a basic scan:

```
perl nikto.pl -h {{192.168.0.1}} -p {{443}}
```

- Scan ports and protocols with full URL syntax:

```
perl nikto.pl -h {{https://192.168.0.1:443/}}
```

- Scan multiple ports in the same scanning session:

```
perl nikto.pl -h {{192.168.0.1}} -p {{80,88,443}}
```

- Update to the latest plugins and databases:

```
perl nikto.pl -update
```

nim

The Nim compiler.

Processes, compiles and links Nim language source files.

More information: <https://nim-lang.org>.

- Compile a source file:

```
nim compile {{file.nim}}
```

- Compile and run a source file:

```
nim compile -r {{file.nim}}
```

- Compile a source file with release optimizations enabled:

```
nim compile -d:release {{file.nim}}
```

- Build a release binary optimized for low file size:

```
nim compile -d:release --opt:size {{file.nim}}
```

- Generate HTML documentation for a module (output will be placed in the current directory):

```
nim doc {{file.nim}}
```

nimble

Package manager for the Nim programming language.

Manage Nim projects and their dependencies.

More information: <https://github.com/nim-lang/nimble>.

- Search for packages:

```
nimble search {{search_string}}
```

- Install a package:

```
nimble install {{package_name}}
```

- List installed packages:

```
nimble list -i
```

- Create a new Nimble package in the current directory:

```
nimble init
```

- Build a Nimble package:

```
nimble build
```

- Install a Nimble package:

```
nimble install
```

ninja

A Build system designed to be fast.

More information: <https://ninja-build.org/manual.html>.

- Build in the current directory:

```
ninja
```

- Build a program in a given directory:

```
ninja -C {{path/to/directory}}
```

- Show targets (e.g. `install` and `uninstall`):

```
ninja -t targets
```

- Show help:

```
ninja -h
```

nix-build

Build a Nix expression.

More information: <https://nixos.org/releases/nix/latest/manual#sec-nix-build>.

- Build a Nix expression:

```
nix-build --attr {{expression_name}}
```

- Build a sandboxed Nix expression (on non-nixOS):

```
nix-build --attr {{expression_name}} --option sandbox true
```

nix-collect-garbage

Delete unused and unreachable nix store paths.

Generations can be listed using `nix-env --list-generations`.

More information: <https://nixos.org/releases/nix/latest/manual/#sec-nix-collect-garbage>.

- Delete all store paths unused by current generations of each profile:

```
sudo nix-collect-garbage --delete-old
```

- Simulate the deletion of old store paths:

```
sudo nix-collect-garbage --delete-old --dry-run
```

- Delete all store paths older than 30 days:

```
sudo nix-collect-garbage --delete-older-than {{30d}}
```

nix-env

Manipulate or query Nix user environments.

More information: <https://nixos.org/releases/nix/latest/manual#sec-nix-env>.

- List all installed packages:

```
nix-env -q
```

- Query installed packages:

```
nix-env -q {{search_term}}
```

- Query available packages:

```
nix-env -qa {{search_term}}
```

- Install package:

```
nix-env -iA nixpkgs.{{pkg_name}}
```

- Install a package from a URL:

```
nix-env -i {{pkg_name}} --file {{example.com}}
```

- Uninstall package:

```
nix-env -e {{pkg_name}}
```

- Upgrade one package:

```
nix-env -u {{pkg_name}}
```

- Upgrade all packages:

```
nix-env -u
```

nix

Utilities for the Nix language and store.

More information: <https://nixos.org>.

- Search for a package via its name or description:

```
nix search {{search_term}}
```

- Start a Nix shell with the specified packages available:

```
nix run {{nixpkgs.pkg1 nixpkgs.pkg2 nixpkgs.pkg3...}}
```

- Optimise Nix store disk usage by combining duplicate files:

```
nix optimise-store
```

- Start an interactive environment for evaluating Nix expressions:

```
nix repl
```

- Upgrade Nix to the latest stable version:

```
nix upgrade-nix
```

nkf

Network kanji filter.

Converts kanji code from one encoding to another.

- Convert to UTF-8 encoding:

```
nkf -w {{path/to/file.txt}}
```

- Convert to SHIFT_JIS encoding:

```
nkf -s {{path/to/file.txt}}
```

- Convert to UTF-8 encoding and overwrite the file:

```
nkf -w --overwrite {{path/to/file.txt}}
```

- Set new line code to LF and overwrite (unix type):

```
nkf -d --overwrite {{path/to/file.txt}}
```

- Set new line code to CRLF and overwrite (windows type):

```
nkf -c --overwrite {{path/to/file.txt}}
```

- Decrypt mime file and overwrite:

```
nkf -m --overwrite {{path/to/file.txt}}
```

nl

A utility for numbering lines, either from a file, or from standard input.

- Number non-blank lines in a file:

```
nl {{file}}
```

- Read from standard output:

```
cat {{file}} | nl {{options}} -
```

- Number only the lines with printable text:

```
nl -t {{file}}
```

- Number all lines including blank lines:

```
nl -b a {{file}}
```

- Number only the body lines that match a basic regular expression (BRE) pattern:

```
nl -b p'FooBar[0-9]' {{file}}
```

nmap

Network exploration tool and security / port scanner.

Some features only activate when Nmap is run with privileges.

More information: <https://nmap.org>.

- Check if an IP address is up, and guess the remote host's operating system:

```
nmap -O {{ip_or_hostname}}
```

- Try to determine whether the specified hosts are up and what are their names:

```
nmap -sn {{ip_or_hostname}} {{optional_another_address}}
```

- Like above, but also run a default 1000-port TCP scan if host seems up:

```
nmap {{ip_or_hostname}} {{optional_another_address}}
```

- Also enable scripts, service detection, OS fingerprinting and traceroute:

```
nmap -A {{address_or_addresses}}
```

- Assume good network connection and speed up execution:

```
nmap -T4 {{address_or_addresses}}
```

- Scan a specific list of ports (use -p- for all ports 1-65535):

```
nmap -p {{port1,port2,...,portN}} {{address_or_addresses}}
```

- Perform TCP and UDP scanning (use -sU for UDP only, -sZ for SCTP, -sO for IP):

```
nmap -sSU {{address_or_addresses}}
```

- Perform TLS cipher scan against a host to determine supported ciphers and SSL/TLS protocols:

```
nmap --script ssl-enum-ciphers {{address_or_addresses}} -p 443
```

- Perform full port, service, version detection scan with all default NSE scripts active against a host to determine weaknesses and info:

```
nmap -sC -sV {{address_or_addresses}}
```

node

Server-side JavaScript platform (Node.js).

More information: <https://nodejs.org>.

- Run a JavaScript file:

```
node {{path/to/file}}
```

- Start a REPL (interactive shell):

```
node
```

- Evaluate JavaScript code by passing it as an argument:

```
node -e "{{code}}"
```

- Evaluate and print result, useful to see node's dependencies versions:

```
node -p "{{process.versions}}"
```

- Activate inspector, pausing execution until a debugger is connected once source code is fully parsed:

```
node --no-lazy --inspect-brk {{path/to/file}}
```

nodemon

Watch files and automatically restart a node application when changes are detected.

More information: <https://nodemon.io>.

- Execute the specified file and watch a specific file for changes:

```
nodemon --inspect {{path/to/file.js}}
```

- Manually restart nodemon (note nodemon must already be active for this to work):

```
rs
```

- Ignore specific files:

```
nodemon --ignore {{path/to/file_or_directory}}
```

- Pass arguments to the node application:

```
nodemon {{path/to/file.js}} {{arguments}}
```

- Run non-node scripts:

```
nodemon --exec "{{python --verbose}}" {{path/to/file.py}}
```

nodenv

A tool to manage NodeJS versions.

More information: <https://github.com/nodenv/nodenv>.

- Install a specific version of Node.js:

```
nodenv install {{version}}
```

- Display a list of available versions:

```
nodenv install --list
```

- Use a specific version of Node.js across the whole system:

```
nodenv global {{version}}
```

- Use a specific version of Node.js with a directory:

```
nodenv local {{version}}
```

- Display the Node.js version for the current directory:

```
nodenv version
```

- Display the location of a Node.js installed command (e.g. `npm`):

```
nodenv which {{command}}
```

nohup

Allows for a process to live when the terminal gets killed.

- Run process that can live beyond the terminal:

```
nohup {{command}} {{command_options}}
```

nokogiri

An HTML, XML, SAX and Reader parser.

More information: <https://nokogiri.org>.

- Parse the contents of a url or file:

```
nokogiri {{url|path/to/file}}
```

- Parse as a specific type:

```
nokogiri {{url|path/to/file}} --type {{xml|html}}
```

- Load a specific initialisation file before parsing:

```
nokogiri {{url|path/to/file}} -C {{path/to/config_file}}
```

- Parse using a specific encoding:

```
nokogiri {{url|path/to/file}} --encoding {{encoding}}
```

- Validate using a RELAX NG file:

```
nokogiri {{url|path/to/file}} --rng {{url|path/to/file}}
```

nomad

Distributed, highly available, datacenter-aware scheduler.

More information: <https://www.nomadproject.io/docs/commands/>.

- Show the status of nodes in the cluster:

```
nomad node status
```

- Validate a job file:

```
nomad job validate {{path/to/file.nomad}}
```

- Plan a job for execution on the cluster:

```
nomad job plan {{path/to/file.nomad}}
```

- Run a job on the cluster:

```
nomad job run {{path/to/file.nomad}}
```

- Show the status of jobs currently running on the cluster:

```
nomad job status
```

- Show the detailed status information about a specific job:

```
nomad job status {{job_name}}
```

- Follow the logs of a specific allocation:

```
nomad alloc logs {{alloc_id}}
```

- Show the status of storage volumes:

```
nomad volume status
```

noti

Monitor a process and trigger a banner notification.

More information: <https://github.com/variadico/noti>.

- Display a notification when tar finishes compressing files:

```
noti {{tar -cjf example.tar.bz2 example/}}
```

- Display a notification even when you put it after the command to watch:

```
{{command_to_watch}}; noti
```

- Monitor a process by PID and trigger a notification when the PID disappears:

```
noti -w {{process_id}}
```

notmuch

Command-line based program for indexing, searching, reading, and tagging large collections of email messages.

More Information: <https://notmuchmail.org/manpages/>.

- Configure for first use:

```
notmuch setup
```

- Add a tag for all messages matching a search term:

```
notmuch tag +{{custom_tag}} "{{search_term}}"
```

- Remove a tag for all messages matching a search term:

```
notmuch tag -{{custom_tag}} "{{search_term}}"
```

- Count messages matching the given search term:

```
notmuch count --output={{messages|threads}} "{{search_term}}"
```

- Search for messages matching the given search term:

```
notmuch search --format={{json|text}} --output={{summary|threads|messages|files|tags}} "{{search_term}}"
```

- Limit the number of search results to X:

```
notmuch search --format={{json|text}} --output={{summary|threads|messages|files|tags}} --limit={{X}} "{{search_term}}"
```

- Create a reply template for a set of messages:

```
notmuch reply --format={{default|headers-only}} --reply-to={{sender|all}} "{{search_term}}"
```

now

Cloud platform for serverless deployment.

More information: <https://zeit.co/now>.

- Deploy the current directory:

```
now
```

- Display a list of deployments:

```
now list
```

- Display information related to a deployment:

```
now inspect {{deployment_url}}
```

- Remove a deployment:

```
now remove {{deployment_id}}
```

- Log in into an account or create a new one:

```
now login
```

- Initialize an example project (a new directory will be created):

```
now init
```

npm-check

Check for outdated, incorrect, and unused npm package dependencies.

More information: <https://www.npmjs.com/package/npm-check/>.

- Display a report of outdated, incorrect, and unused dependencies:

`npm-check`

- Interactively update out-of-date packages:

`npm-check --update`

- Update everything without prompting:

`npm-check --update-all`

- Don't check for unused packages:

`npm-check --skip-unused`

npm-why

Identifies why an npm package is installed.

More information: <https://www.npmjs.com/package/npm-why>.

- Show why an npm package is installed:

```
npm-why {{package_name}}
```

npm

JavaScript and Node.js package manager.

Manage Node.js projects and their module dependencies.

More information: <https://www.npmjs.com/>.

- Interactively create a package.json file:

```
npm init
```

- Download all the packages listed as dependencies in package.json:

```
npm install
```

- Download a specific version of a package and add it to the list of dependencies in package.json:

```
npm install {{module_name}}@{{version}}
```

- Download a package and add it to the list of dev dependencies in package.json:

```
npm install {{module_name}} --save-dev
```

- Download a package and install it globally:

```
npm install -g {{module_name}}
```

- Uninstall a package and remove it from the list of dependencies in package.json:

```
npm uninstall {{module_name}}
```

- Print a tree of locally-installed dependencies:

```
npm list
```

- List top-level globally installed modules:

```
npm list -g --depth={{0}}
```

nproc

Print the number of processing units (normally CPUs) available.

- Display the number of available processing units:

```
nproc
```

- Display the number of installed processing units, including any inactive ones:

```
nproc --all
```

- If possible, subtract a given number of units from the returned value:

```
nproc --ignore {{count}}
```

npx

Execute binaries from **npm** packages.

More information: <https://www.npmjs.com/package/npx>.

- Execute the binary from a given npm module:

```
npx {{module_name}}
```

- In case a package has multiple binaries, specify the package name along with the binary:

```
npx -p {{package_name}} {{module_name}}
```

- View help contents:

```
npx --help
```

nrm

NPM registry manager.

Helps to easily switch between different npm registries.

More information: <https://github.com/Pana/nrm>.

- List all registries:

```
nrm ls
```

- Change to a particular registry:

```
nrm use {{registry}}
```

- Show the response time for all registries:

```
nrm test
```

- Add a custom registry:

```
nrm add {{registry}} {{url}}
```

- Delete a registry:

```
nrm del {{registry}}
```

nslookup

Query name server(s) for various domain records.

- Query your system's default name server for an IP address (A record) of the domain:

```
nslookup {{example.com}}
```

- Query a given name server for a NS record of the domain:

```
nslookup -type=NS {{example.com}} {{8.8.8.8}}
```

- Query for a reverse lookup (PTR record) of an IP address:

```
nslookup -type=PTR {{54.240.162.118}}
```

- Query for ANY available records using TCP protocol:

```
nslookup -vc -type=ANY {{example.com}}
```

- Query a given name server for the whole zone file (zone transfer) of the domain using TCP protocol:

```
nslookup -vc -type=AXFR {{example.com}} {{name_server}}
```

- Query for a mail server (MX record) of the domain, showing details of the transaction:

```
nslookup -type=MX -debug {{example.com}}
```

- Query a given name server on a specific port number for a TXT record of the domain:

```
nslookup -port={{port_number}} -type=TXT {{example.com}} {{name_server}}
```

nudoku

Sudoku game in terminal.

More information: <https://jubalh.github.io/nudoku/>.

- Start a sudoku game:

nudoku

- Choose the difficulty of the game:

nudoku -d {{easy|normal|hard}}

- Navigate the board:

{{h|j|k|l}} OR {{Left|Down|Up|Right}} arrow key

- Delete a number:

{{Backspace|x}}

- Get a hint:

H

- See the complete solution:

S

- Create a new puzzle:

N

- Quit the game:

Q

numfmt

Convert numbers to and from human-readable strings.

More information: https://www.gnu.org/software/coreutils/manual/html_node/numfmt-invocation.html.

- Convert 1.5K (SI Units) to 1500:

```
numfmt --from={{si}} {{1.5K}}
```

- Convert 5th field (1-indexed) to IEC Units without converting header:

```
ls -l | numfmt --header={{1}} --field={{5}} --to={{iec}}
```

- Convert to IEC units, pad with 5 characters, left aligned:

```
du -s * | numfmt --to={{iec}} --format="{{%-5f}}"
```

nvidia-smi

Aid the management and monitoring of NVIDIA GPU devices.

More information: <https://developer.nvidia.com/nvidia-system-management-interface>.

- Display information on all available GPUs and processes using them:

`nvidia-smi`

- Display more detailed GPU information:

`nvidia-smi --query`

- Monitor overall GPU usage with 1-second update interval:

`nvidia-smi dmon`

nvim

Neovim, a programmer's text editor based on Vim, provides several modes for different kinds of text manipulation.

Pressing **i** enters edit mode. **<Esc>** goes back to normal mode, which doesn't allow regular text insertion.

More information: <https://neovim.io>.

- Open a file:

```
nvim {{file}}
```

- Enter text editing mode (insert mode):

```
<Esc>i
```

- Copy ("yank") or cut ("delete") the current line (paste it with **P**):

```
<Esc>{{yy|dd}}
```

- Undo the last operation:

```
<Esc>u
```

- Search for a pattern in the file (press **n/N** to go to next/previous match):

```
<Esc>/{{search_pattern}}<Enter>
```

- Perform a regex substitution in the whole file:

```
<Esc>:%s/{{pattern}}/{{replacement}}/g<Enter>
```

- Save (write) the file, and quit:

```
<Esc>:wq<Enter>
```

- Quit without saving:

```
<Esc>:q!<Enter>
```

nvm

Install, uninstall or switch between Node.js versions.

Supports version numbers like "0.12" or "v4.2", and labels like "stable", "system", etc.

More information: <https://github.com/creationix/nvm>.

- Install a specific version of Node.js:

```
nvm install {{node_version}}
```

- Use a specific version of Node.js in the current shell:

```
nvm use {{node_version}}
```

- Set the default Node.js version:

```
nvm alias default {{node_version}}
```

- List all available Node.js versions and highlight the default one:

```
nvm list
```

- Uninstall a given Node.js version:

```
nvm uninstall {{node_version}}
```

- Launch the REPL of a specific version of Node.js:

```
nvm run {{node_version}} --version
```

- Execute a script in a specific version of Node.js:

```
nvm exec {{node_version}} node {{app.js}}
```

objdump

View information about object files.

- Display the file header information:

```
objdump -f {{binary}}
```

- Display the dis-assembled output of executable sections:

```
objdump -d {{binary}}
```

- Display a complete binary hex dump of all sections:

```
objdump -s {{binary}}
```

obs

Open Broadcaster Software.

Video recording and livestreaming program.

- Launch OBS:

`obs`

- Launch OBS in portable mode:

`obs --portable`

- Automatically start recording a video on launch:

`obs --startrecording`

- Automatically start the replay buffer on launch:

`obs --startreplaybuffer`

- Automatically start streaming on launch:

`obs --startstreaming`

- Minimise to the system tray on launch:

`obs --minimize-to-tray`

- Make the log more verbose (for debugging):

`obs --verbose`

OC

The OpenShift Container Platform CLI.

Allows for application and container management.

More information: https://docs.openshift.com/container-platform/3.11/cli_reference/get_started_cli.html.

- Log in to the OpenShift Container Platform server:

```
oc login
```

- Create a new project:

```
oc new-project {{project_name}}
```

- Switch to an existing project:

```
oc project {{project_name}}
```

- Add a new application to a project:

```
oc new-app {{repo_url}} --name {{application}}
```

- Open a remote shell session to a container:

```
oc rsh {{pod_name}}
```

- List pods in a project:

```
oc get pods
```

- Logout from the current session:

```
oc logout
```

ocaml

The OCaml repl (read-evaluate-print-loop).

Interprets Ocaml commands.

More information: <https://ocaml.org>.

- Read OCaml commands from the user and execute them:

`ocaml`

- Read OCaml commands from a file and execute them:

`ocaml {{path/to/file.ml}}`

ocamlc

The OCaml bytecode compiler.

Produces executables runnable by the OCaml interpreter.

More information: <https://ocaml.org>.

- Create a binary from a source file:

```
ocamlc {{path/to/source_file.ml}}
```

- Create a named binary from a source file:

```
ocamlc -o {{path/to/binary}} {{path/to/source_file.ml}}
```

- Automatically generate a module signature (interface) file:

```
ocamlc -i {{path/to/source_file.ml}}
```

ocamlfind

The **findlib** package manager for OCaml.

Simplifies linking executables with external libraries.

More information: <http://projects.camlcity.org/projects/findlib.html>.

- Compile a source file to a native binary and link with packages:

```
ocamlfind ocamlopt -package {{package1}},{{package2}} -linkpkg -o {{executable}} {{source_file.ml}}
```

- Compile a source file to a bytecode binary and link with packages:

```
ocamlfind ocamlc -package {{package1}},{{package2}} -linkpkg -o {{executable}} {{source_file.ml}}
```

- Cross-compile for a different platform:

```
ocamlfind -toolchain {{cross-toolchain}} ocamlopt -o {{executable}} {{source_file.ml}}
```

ocamlopt

The OCaml native code compiler.

Produces native executables, e.g. ELF on Linux.

More information: <https://ocaml.org>.

- Compile a source file:

```
ocamlopt -o {{path/to/binary}} {{path/to/source_file.ml}}
```

- Compile with debugging enabled:

```
ocamlopt -g -o {{path/to/binary}} {{path/to/source_file.ml}}
```

od

Display file contents in octal, decimal or hexadecimal format.

Optionally display the byte offsets and/or printable representation for each line.

- Display file using default settings: octal format, 8 bytes per line, byte offsets in octal, and duplicate lines replaced with *:

```
od {{path/to/file}}
```

- Display file in verbose mode, i.e. without replacing duplicate lines with *:

```
od -v {{path/to/file}}
```

- Display file in hexadecimal format (2-byte units), with byte offsets in decimal format:

```
od --format={{x}} --address-radix={{d}} -v {{path/to/file}}
```

- Display file in hexadecimal format (1-byte units), and 4 bytes per line:

```
od --format={{x1}} --width={{4}} -v {{path/to/file}}
```

- Display file in hexadecimal format along with its character representation, and do not print byte offsets:

```
od --format={{xz}} --address-radix={{n}} -v {{path/to/file}}
```

- Read only 100 bytes of a file starting from the 500th byte:

```
od --read-bytes {{100}} --skip-bytes={{500}} -v {{path/to/file}}
```

odps auth

User authorities in ODPS (Open Data Processing Service).

- Add a user to the current project:

```
add user {{username}};
```

- Grant a set of authorities to a user:

```
grant {{action_list}} on {{object_type}} {{object_name}} to  
user {{username}};
```

- Show authorities of a user:

```
show grants for {{username}};
```

- Create a user role:

```
create role {{role_name}};
```

- Grant a set of authorities to a role:

```
grant {{action_list}} on {{object_type}} {{object_name}} to  
role {{role_name}};
```

- Describe authorities of a role:

```
desc role {{role_name}};
```

- Grant a role to a user:

```
grant {{role_name}} to {{username}};
```

odps func

Manage functions in ODPS (Open Data Processing Service).

- Show functions in the current project:

```
list functions;
```

- Create a Java function using a .jar resource:

```
create function {{func_name}} as {{path.to.package.Func}}
using '{{package.jar}}';
```

- Create a Python function using a .py resource:

```
create function {{func_name}} as {{script.Func}} using
'{{script.py}}';
```

- Delete a function:

```
drop function {{func_name}};
```

odps inst

Manage instances in ODPS (Open Data Processing Service).

- Show instances created by current user:

```
show instances;
```

- Describe the details of an instance:

```
desc instance {{instance_id}};
```

- Check the status of an instance:

```
status {{instance_id}};
```

- Wait on the termination of an instance, printing log and progress information until then:

```
wait {{instance_id}};
```

- Kill an instance:

```
kill {{instance_id}};
```

odps resource

Manage resources in ODPS (Open Data Processing Service).

- Show resources in the current project:

```
list resources;
```

- Add file resource:

```
add file {{filename}} as {{alias}};
```

- Add archive resource:

```
add archive {{archive.tar.gz}} as {{alias}};
```

- Add .jar resource:

```
add jar {{package.jar}};
```

- Add .py resource:

```
add py {{script.py}};
```

- Delete resource:

```
drop resource {{resource_name}};
```

odps table

Create and modify tables in ODPS (Open Data Processing Service).

- Create a table with partition and lifecycle:

```
create table {{table_name}} ({{col}} {{type}}) partitioned by  
({{col}} {{type}}) lifecycle {{days}};
```

- Create a table based on the definition of another table:

```
create table {{table_name}} like {{another_table}};
```

- Add partition to a table:

```
alter table {{table_name}} add partition  
({{partition_spec}});
```

- Delete partition from a table:

```
alter table {{table_name}} drop partition  
({{partition_spec}});
```

- Delete table:

```
drop table {{table_name}};
```

odps tunnel

Data tunnel in ODPS (Open Data Processing Service).

- Download table to local file:

```
tunnel download {{table_name}} {{file}};
```

- Upload local file to a table partition:

```
tunnel upload {{file}} {{table_name}}/{{partition_spec}};
```

- Upload table specifying field and record delimiters:

```
tunnel upload {{file}} {{table_name}} -fd {{field_delim}} -rd {{record_delim}};
```

- Upload table using multiple threads:

```
tunnel upload {{file}} {{table_name}} -threads {{num}};
```

odps

Aliyun ODPS (Open Data Processing Service) command line tool.

- Start the command line with a custom configuration file:

```
odpscmd --config={{odps_config.ini}}
```

- Switch current project:

```
use {{project_name}};
```

- Show tables in the current project:

```
show tables;
```

- Describe a table:

```
desc {{table_name}};
```

- Show table partitions:

```
show partitions {{table_name}};
```

- Describe a partition:

```
desc {{table_name}} partition ({{partition_spec}});
```

ogr2ogr

Convert Simple Features data between file formats.

More information: <https://gdal.org/programs/ogr2ogr.html#ogr2ogr>.

- Convert a Shapefile into a GeoPackage:

```
ogr2ogr -f GPKG {{output}}.gpkg {{input}}.shp
```

- Change coordinate reference system of a GeoPackage from **EPSG:4326** to **EPSG:3857**:

```
ogr2ogr -s_srs {{EPSG:4326}} -t_srs {{EPSG:3857}} -f GPKG  
{{output}}.gpkg {{input}}.gpkg
```

- Convert a CSV file into a GeoPackage, specifying the names of the coordinate columns and assigning a coordinate reference system:

```
ogr2ogr -f GPKG {{output}}.gpkg {{input}}.csv -oo  
X_POSSIBLE_NAMES={{longitude}} -oo  
Y_POSSIBLE_NAMES={{latitude}} -a_srs {{EPSG:4326}}
```

- Load a GeoPackage into a PostGIS database:

```
ogr2ogr -f "PostgreSQL" PG:dbname="{{database_name}}"  
{{input}}.gpkg
```

- Clip layers of a GeoPackage file to the given bounding box:

```
ogr2ogr -spat {{min_x}} {{min_y}} {{max_x}} {{max_y}} -f GPKG  
{{output}}.gpkg {{input}}.gpkg
```

ogrinfo

List information about an OGR-supported data source.

More information: <https://gdal.org/programs/ogrinfo.html>.

- List layers of a GeoPackage:

```
ogrinfo {{input}}.gpkg
```

- Get detailed information about a specific layer of a GeoPackage:

```
ogrinfo {{input}}.gpkg {{layer_name}}
```

- Only show summary information about a specific layer of a GeoPackage:

```
ogrinfo -so {{input}}.gpkg {{layer_name}}
```

ohdear-cli

An unofficial Oh Dear CLI written with Laravel Zero.

More information: <https://github.com/nunomaduro/ohdear-cli>.

- Display details about the currently authenticated user:

```
ohdear-cli me
```

- Add a new site to Oh Dear:

```
ohdear-cli sites:add {{url}}
```

- Display a list of sites and their current status:

```
ohdear-cli sites:list
```

- Display details about a specific site:

```
ohdear-cli sites:show {{site_id}}
```

omf

Oh My Fish, the Fishshell Framework.

Install packages to extend and modify the fish shell.

More information: <https://github.com/oh-my-fish/oh-my-fish>.

- Install one or more packages:

```
omf install {{name}}
```

- List installed packages:

```
omf list
```

- List available themes:

```
omf theme
```

- Apply a theme:

```
omf theme {{name}}
```

- Remove a theme or package:

```
omf remove {{name}}
```

- Uninstall Oh My Fish:

```
omf destroy
```

opam

OCaml Package Manager.

Manage OCaml compilers, tools and libraries.

More information: <https://opam.ocaml.org/>.

- Initialize opam for first use:

`opam init`

- Search for packages:

`opam search {{package_name}}`

- Install a package and all of its dependencies:

`opam install {{package_name}}`

- Display detailed information about a package:

`opam show {{package_name}}`

- List all installed packages:

`opam list`

- Update the local package database:

`opam update`

- Upgrade all installed packages:

`opam upgrade`

- Display all commands:

`opam help`

openconnect

A VPN client, for Cisco AnyConnect VPNs and others.

More information: <https://www.infradead.org/openconnect/manual.html>.

- Connect to a server:

```
openconnect {{vpn.example.org}}
```

- Connect to a server, forking into the background:

```
openconnect --background {{vpn.example.org}}
```

- Terminate the connection that is running in the background:

```
killall -SIGINT openconnect
```

- Connect to a server, reading options from a config file:

```
openconnect --config={{path/to/file}} {{vpn.example.org}}
```

- Connect to a server and authenticate with a specific SSL client certificate:

```
openconnect --certificate={{path/to/file}}
{{vpn.example.org}}
```

openssl dgst

OpenSSL command to generate digest values and perform signature operations.

More information: <https://www.openssl.org/docs/manmaster/man1/openssl-dgst.html>.

- Calculate the SHA256 digest for a file, saving the result to a specific file:

```
openssl dgst -sha256 -binary -out {{output_file}}  
{{input_file}}
```

- Sign a file using an RSA key, saving the result to a specific file:

```
openssl dgst -sign {{private_key_file}} -sha256 -sigopt  
rsa_padding_mode:pss -out {{output_file}} {{input_file}}
```

- Verify an RSA signature:

```
openssl dgst -verify {{public_key_file}} -signature  
{{signature_file}} -sigopt rsa_padding_mode:pss  
{{signature_message_file}}
```

- Sign a file using and ECDSA key:

```
openssl dgst -sign {{private_key_file}} -sha256 -out  
{{output_file}} {{input_file}}
```

- Verify an ECDSA signature:

```
openssl dgst -verify {{public_key_file}} -signature  
{{signature_file}} {{signature_message_file}}
```

openssl genpkey

OpenSSL command to generate asymmetric key pairs.

More information: <https://www.openssl.org/docs/manmaster/man1/openssl-genpkey.html>.

- Generate an RSA private key of 2048 bits, saving it to a specific file:

```
openssl genpkey -algorithm rsa -pkeyopt rsa_keygen_bits:  
{{2048}} -out {{filename.key}}
```

- Generate an elliptic curve private key using the curve `prime256v1`, saving it to a specific file:

```
openssl genpkey -algorithm EC -pkeyopt ec_paramgen_curve:  
{{prime256v1}} -out {{filename.key}}
```

- Generate an `ED25519` elliptic curve private key, saving it to a specific file:

```
openssl genpkey -algorithm {{ED25519}} -out {{filename.key}}
```

openssl genrsa

OpenSSL command to generate RSA private keys.

More information: <https://www.openssl.org/docs/manmaster/man1/openssl-genrsa.html>.

- Generate an RSA private key of 2048 bits to stdout:

```
openssl genrsa
```

- Save an RSA private key of an arbitrary number of bits to the output file:

```
openssl genrsa -out {{output_file.key}} {{1234}}
```

- Generate an RSA private key and encrypt it with AES256 (you will be prompted for a passphrase):

```
openssl genrsa {{-aes256}}
```

openssl prime

OpenSSL command to compute prime numbers.

More information: <https://www.openssl.org/docs/manmaster/man1/openssl-prime.html>.

- Generate a 2048bit prime number and display it in hexadecimal:

```
openssl prime -generate -bits 2048 -hex
```

- Check if a given number is prime:

```
openssl prime {{number}}
```

openssl req

OpenSSL command to manage PKCS#10 Certificate Signing Requests.

More information: <https://www.openssl.org/docs/manmaster/man1/openssl-req.html>.

- Generate a certificate signing request to be sent to a certificate authority:

```
openssl req -new -sha256 -key {{filename.key}} -out  
{{filename.csr}}
```

- Generate a selfsigned certificate and a corresponding keypair, storing both in a file:

```
openssl req -new -x509 -newkey {{rsa}}:{{4096}} -keyout  
{{filename.key}} -out {{filename.cert}} -subj "{{/C=XX/  
CN=foobar}}" -days {{365}}
```

openssl s_client

OpenSSL command to create TLS client connections.

More information: https://www.openssl.org/docs/manmaster/man1/openssl-s_client.html.

- Display the start and expiry dates for a domain's certificate:

```
openssl s_client -connect {{host}}:{{port}} 2>/dev/null |  
openssl x509 -noout -dates
```

- Display the certificate presented by an SSL/TLS server:

```
openssl s_client -connect {{host}}:{{port}} </dev/null
```

- Display the complete certificate chain of an HTTPS server:

```
openssl s_client -connect {{host}}:443 -showcerts </dev/null
```

openssl x509

OpenSSL command to manage X.509 certificates.

More information: <https://www.openssl.org/docs/manmaster/man1/openssl-x509.html>.

- Display certificate information:

```
openssl x509 -in {{filename.crt}} -noout -text
```

- Display a certificate's expiration date:

```
openssl x509 -enddate -noout -in {{filename.pem}}
```

- Convert a certificate between binary DER encoding and textual PEM encoding:

```
openssl x509 -inform {{der}} -outform {{pem}} -in  
{{original_certificate_file}} -out  
{{converted_certificate_file}}
```

- Store a certificate's public key in a file:

```
openssl x509 -in {{certificate_file}} -noout -pubkey -out  
{{output_file}}
```

openssl

OpenSSL cryptographic toolkit.

More information: <https://www.openssl.org>.

- Print a list of available subcommands:

```
openssl help
```

- Print options for a specific subcommand:

```
openssl help {{x509}}
```

- Print the version of OpenSSL:

```
openssl version
```

openvpn

OpenVPN client and daemon binary.

More information: <https://openvpn.net/>.

- Connect to server using a config file:

```
sudo openvpn {{path/to/client.conf}}
```

- Try to set up an insecure peer-to-peer tunnel on bob.example.com host:

```
sudo openvpn --remote {{alice.example.com}} --dev {{tun1}} --  
ifconfig {{10.4.0.1}} {{10.4.0.2}}
```

- Connect to the awaiting bob.example.com host without encryption:

```
sudo openvpn --remote {{bob.example.com}} --dev {{tun1}} --  
ifconfig {{10.4.0.2}} {{10.4.0.1}}
```

- Create a cryptographic key and save it to file:

```
openvpn --genkey --secret {{path/to/key}}
```

- Try to set up a peer-to-peer tunnel on bob.example.com host with a static key:

```
sudo openvpn --remote {{alice.example.com}} --dev {{tun1}} --  
ifconfig {{10.4.0.1}} {{10.4.0.2}} --secret {{path/to/key}}
```

- Connect to the awaiting bob.example.com host with the same static key as on bob.example.com:

```
sudo openvpn --remote {{bob.example.com}} --dev {{tun1}} --  
ifconfig {{10.4.0.2}} {{10.4.0.1}} --secret {{path/to/key}}
```

opt

A tool that takes LLVM source files and runs specified optimizations and/or analyses on them.

More information: <https://llvm.org/docs/CommandGuide/opt.html>.

- Run an optimization or analysis on a bitcode file:

```
opt -{{passname}} {{path/to/file.bc}} -S -o {{file_opt.bc}}
```

- Output the Control Flow Graph of a function to a "dot" file:

```
opt {{-dot-cfg}} -S {{path/to/file.bc}} -disable-output
```

- Optimize the program at level 2 and output the result to another file:

```
opt -O2 {{path/to/file.bc}} -S -o {{path/to/output_file.bc}}
```

optipng

PNG image file optimization utility.

More information: <http://optipng.sourceforge.net>.

- Compress a PNG with default settings:

```
optipng {{path/to/file.png}}
```

- Compress a PNG with best compression:

```
optipng -o{{7}} {{path/to/file.png}}
```

- Compress a PNG with fastest compression:

```
optipng -o{{0}} {{path/to/file.png}}
```

- Compress a PNG and add interlacing:

```
optipng -i {{1}} {{path/to/file.png}}
```

- Compress a PNG and preserve all metadata (including file timestamps):

```
optipng -preserve {{path/to/file.png}}
```

- Compress a PNG and remove all metadata:

```
optipng -strip all {{path/to/file.png}}
```

opusenc

Convert WAV or FLAC audio to Opus.

More information: <https://opus-codec.org/docs/opus-tools/opusenc.html>.

- Convert WAV to Opus using default options:

```
opusenc {{path/to/input.wav}} {{path/to/output}}.opus
```

- Convert stereo audio at the highest quality level:

```
opusenc --bitrate {{512}} {{path/to/input.wav}} {{path/to/output}}.opus
```

- Convert 5.1 surround sound audio at the highest quality level:

```
opusenc --bitrate {{1536}} {{path/to/input.flac}} {{path/to/output}}.opus
```

- Convert speech audio at the lowest quality level:

```
opusenc {{path/to/input.wav}} --downmix-mono --bitrate {{6}} {{path/to/out}}.opus
```

p4

Perforce Version Control System.

More information: <https://www.perforce.com/manuals/cmdref>.

- Log in to the Perforce service:

```
p4 login -a
```

- Create a client:

```
p4 client
```

- Copy files from depot into the client workspace:

```
p4 sync
```

- Create or edit changelist description:

```
p4 change
```

- Open a file to edit:

```
p4 edit -c {{changelist_number}} {{filename}}
```

- Open a new file to add it to the depot:

```
p4 add
```

- Display list of files modified by changelist:

```
p4 describe -c {{changelist_number}}
```

- Submit a changelist to the depot:

```
p4 submit -c {{changelist_number}}
```

p5

P5js template builder and sketch manager.

More information: <https://www.npmjs.com/package/p5-manager>.

- Create a new p5 collection:

```
p5 new {{collection_name}}
```

- Generate a new p5 project (should be run from collection directory):

```
p5 generate {{project_name}}
```

- Run the p5 manager server:

```
p5 server
```

- Update libraries to their latest versions:

```
p5 update
```

p7zip

Wrapper of 7-Zip file archiver with high compression ratio.

Internally executes either 7za or 7zr command.

More information: <http://p7zip.sourceforge.net>.

- Archive a file, replacing it with a 7zipped compressed version:

`p7zip {{path/to/file}}`

- Archive a file keeping the input file:

`p7zip -k {{path/to/file}}`

- Decompress a file, replacing it with the original uncompressed version:

`p7zip -d {{compressed.ext}}.7z`

- Decompress a file keeping the input file:

`p7zip -d -k {{compressed.ext}}.7z`

- Skip some checks and force compression or decompression:

`p7zip -f {{path/to/file}}`

paci

A package manager for bash scripts.

- Update the list of available packages and versions (it's recommended to run this before other `paci` commands):

```
paci refresh
```

- Configure its behaviour:

```
paci configure
```

- Search for a given package:

```
paci search {{package}}
```

- Install a package:

```
paci install {{package}}
```

- Update a package:

```
paci update {{package}}
```

packer

Build automated machine images.

More information: <https://www.packer.io/>.

- Build an image:

```
packer build {{path/to/config.json}}
```

- Check the syntax of a Packer image config:

```
packer validate {{path/to/config.json}}
```

pactl

Control a running PulseAudio sound server.

- List all sinks (or other types - sinks are outputs and sink-inputs are active audio streams):

```
pactl list {{sinks}} short
```

- Change the default sink (output) to 1 (the number can be retrieved via the `list` subcommand):

```
pactl set-default-sink {{1}}
```

- Move sink-input 627 to sink 1:

```
pactl move-sink-input {{627}} {{1}}
```

- Set the volume of sink 1 to 75%:

```
pactl set-sink-volume {{1}} {{0.75}}
```

- Toggle mute on the default sink (using the special name `@DEFAULT_SINK@`):

```
pactl set-sink-mute {{@DEFAULT_SINK@}} toggle
```

pageres

Capture screenshots of websites in various resolutions.

More information: <https://github.com/sindresorhus/pageres-cli>.

- Take multiple screenshots of multiple URLs at different resolutions:

```
pageres {{https://example.com/}} {{https://example2.com/}}
{{1366x768}} {{1600x900}}
```

- Provide specific options for a URL, overriding global options:

```
pageres [{{https://example.com/}} {{1366x768}} --no-crop]
[{{https://example2.com/}} {{1024x768}}] --crop
```

- Provide a custom filename template:

```
pageres {{https://example.com/}} {{1024x768}} --
filename={{'<%= date %> - <%= url %>'}}
```

- Capture a specific element on a page:

```
pageres {{https://example.com/}} {{1366x768}} --
selector='{{.page-header}}'
```

- Hide a specific element:

```
pageres {{https://example.com/}} {{1366x768}} --
hide='{{.page-header}}'
```

- Capture a screenshot of a local file:

```
pageres {{local_file_path.html}} {{1366x768}}
```

pamixer

A simple command-line mixer for PulseAudio.

More information: <https://github.com/cdemoulins/pamixer>.

- List all sinks and sources with their corresponding IDs:

```
pamixer --list-sinks --list-sources
```

- Set the volume to 75% on the default sink:

```
pamixer --set-volume {{75}}
```

- Toggle mute on a sink other than the default:

```
pamixer --toggle-mute --sink {{ID}}
```

- Increase the volume on default sink by 5%:

```
pamixer --increase {{5}}
```

- Decrease the volume on a source by 5%:

```
pamixer --decrease {{5}} --source {{ID}}
```

- Use the allow boost option to increase, decrease, or set the volume above 100%:

```
pamixer --set-volume {{105}} --allow-boost
```

- Mute the default sink (use `--unmute` instead to unmute):

```
pamixer --mute
```

pandoc

Convert documents between various formats.

More information: <https://pandoc.org>.

- Convert file to pdf (the output format is determined by file extension):

```
pandoc {{input.md}} -o {{output.pdf}}
```

- Force conversion to use a specific format:

```
pandoc {{input.docx}} --to {{gfm}} -o {{output.md}}
```

- Convert to a standalone file with the appropriate headers/footers (for LaTeX, HTML, etc.):

```
pandoc {{input.md}} -s -o {{output.tex}}
```

- List all supported input formats:

```
pandoc --list-input-formats
```

- List all supported output formats:

```
pandoc --list-output-formats
```

parallel-lint

A tool to check the syntax of PHP files in parallel.

More information: <https://github.com/JakubOnderka/PHP-Parallel-Lint>.

- Lint a specific directory:

```
parallel-lint {{path/to/directory}}
```

- Lint a directory using the specified number of parallel processes:

```
parallel-lint -j {{processes}} {{path/to/directory}}
```

- Lint a directory, excluding the specified directory:

```
parallel-lint --exclude {{path/to/excluded_directory}}  
{{path/to/directory}}
```

- Lint a directory of files using a comma-separated list of extension(s):

```
parallel-lint -e {{php,html,phpt}} {{path/to/directory}}
```

- Lint a directory and output the results as JSON:

```
parallel-lint --json {{path/to/directory}}
```

- Lint a directory and show Git Blame results for rows containing errors:

```
parallel-lint --blame {{path/to/directory}}
```

parallel

Run commands on multiple CPU cores.

More information: <https://www.gnu.org/software/parallel>.

- Gzip several files at once, using all cores:

```
parallel gzip ::: {{file1}} {{file2}} {{file3}}
```

- Read arguments from `stdin`, run 4 jobs at once:

```
ls *.txt | parallel -j4 gzip
```

- Convert JPG images to PNG using replacement strings:

```
parallel convert {} {.}.png ::: *.jpg
```

- Parallel xargs, cram as many args as possible onto one command:

```
{{args}} | parallel -X {{command}}
```

- Break `stdin` into ~1M blocks, feed each block to `stdin` of new command:

```
cat {{big_file.txt}} | parallel --pipe --block 1M {{command}}
```

- Run on multiple machines via SSH:

```
parallel -S {{machine1}},{{machine2}} {{command}} :::
{{arg1}} {{arg2}}
```

parquet-tools

A tool to show, inspect and manipulate Parquet file.

More information: <https://github.com/apache/parquet-mr/tree/master/parquet-tools>.

- Display the content of a Parquet file:

```
parquet-tools cat {{path/to/parquet}}
```

- Display the first few lines of a Parquet file:

```
parquet-tools head {{path/to/parquet}}
```

- Print the schema of a Parquet file:

```
parquet-tools schema {{path/to/parquet}}
```

- Print the metadata of a Parquet file:

```
parquet-tools meta {{path/to/parquet}}
```

- Print the content and metadata of a Parquet file:

```
parquet-tools dump {{path/to/parquet}}
```

- Concatenate several Parquet files into the target one:

```
parquet-tools merge {{path/to/parquet1}} {{path/to/parquet2}}  
{{path/to/target_parquet}}
```

- Print the count of rows in a Parquet file:

```
parquet-tools rowcount {{path/to/parquet}}
```

- Print the column and offset indexes of a Parquet file:

```
parquet-tools column-index {{path/to/parquet}}
```

particle

A command-line tool for interacting with Particle devices.

More information: <https://docs.particle.io/tutorials/developer-tools/cli>.

- Log in or create an account for the Particle CLI:

```
particle setup
```

- Display a list of devices:

```
particle list
```

- Create a new Particle project interactively:

```
particle project create
```

- Compile a Particle project:

```
particle compile {{device_type}} {{path/to/source_code.ino}}
```

- Update a device to use a specific app remotely:

```
particle flash {{device_name}} {{path/to/program.bin}}
```

- Update a device to use the latest firmware via serial:

```
particle flash --serial {{path/to/firmware.bin}}
```

- Execute a function on a device:

```
particle call {{device_name}} {{function_name}}  
{{function_arguments}}
```

pass otp

A pass extension for managing one-time-password (OTP) tokens.

More information: <https://github.com/tadfisher/pass-otp#readme>.

- Prompt for an otpauth URI token and create a new pass file:

```
pass otp insert {{path/to/pass}}
```

- Prompt for an otpauth URI token and append to an existing pass file:

```
pass otp append {{path/to/pass}}
```

- Print a 2FA code using the OTP token in a pass file:

```
pass otp {{path/to/pass}}
```

- Copy and don't print a 2FA code using the OTP token in a pass file:

```
pass otp --clip {{path/to/pass}}
```

- Display a QR code using the OTP token stored in a pass file:

```
pass otp uri --qrcode {{path/to/pass}}
```

- Prompt for an OTP secret value specifying issuer and account (at least one must be specified) and append to existing pass file:

```
pass otp append --secret --issuer {{issuer_name}} --account {{account_name}} {{path/to/pass}}
```

pass

Tool for storing and reading passwords or other sensitive data.

All data is GPG-encrypted, and managed with a git repository.

More information: <https://www.passwordstore.org>.

- Initialize (or re-encrypt) the storage using one or more GPG IDs:

```
pass init {{gpg_id_1}} {{gpg_id_2}}
```

- Save a new password and additional information (press Ctrl + D on a new line to complete):

```
pass insert --multiline {{path/to/data}}
```

- Edit an entry:

```
pass edit {{path/to/data}}
```

- Copy a password (first line of the data file) to the clipboard:

```
pass -c {{path/to/data}}
```

- List the whole store tree:

```
pass
```

- Generate a new random password with a given length, and copy it to the clipboard:

```
pass generate -c {{path/to/data}} {{num}}
```

- Initialize a new Git repository (any changes done by pass will be committed automatically):

```
pass git init
```

passwd

Passwd is a tool used to change a user's password.

- Change the password of the current user interactively:

`passwd`

- Change the password of the current user:

`passwd {{new_password}}`

- Change the password of the specified user:

`passwd {{username}} {{new_password}}`

- Get the current status of the user:

`passwd -S`

- Make the password of the account blank (it will set the named account passwordless):

`passwd -d`

paste

Merge lines of files.

- Join all the lines into a single line, using TAB as delimiter:

```
paste -s {{file}}
```

- Join all the lines into a single line, using the specified delimiter:

```
paste -s -d {{delimiter}} {{file}}
```

- Merge two files side by side, each in its column, using TAB as delimiter:

```
paste {{file1}} {{file2}}
```

- Merge two files side by side, each in its column, using the specified delimiter:

```
paste -d {{delimiter}} {{file1}} {{file2}}
```

- Merge two files, with lines added alternatively:

```
paste -d '\n' {{file1}} {{file2}}
```

pastel

Generate, analyze, convert and manipulate colors.

More information: <https://github.com/sharkdp/pastel>.

- Convert colors from one format to another. Here from RGB to HSL:

```
pastel format {{hsl}} {{ff8000}}
```

- Show and analyze colors on the terminal:

```
pastel color "{{rgb(255,50,127)}}
```

- Pick a color from somewhere on the screen:

```
pastel pick
```

- Generate a set of N visually distinct colors:

```
pastel distinct {{8}}
```

- Get a list of all X11 / CSS color names:

```
pastel list
```

patch

Patch a file (or files) with a diff file.

Note that diff files should be generated by the **diff** command.

- Apply a patch using a diff file (filenames must be included in the diff file):

```
patch < {{patch.diff}}
```

- Apply a patch to a specific file:

```
patch {{path/to/file}} < {{patch.diff}}
```

- Patch a file writing the result to a different file:

```
patch {{path/to/input_file}} -o {{path/to/output_file}} <  
{{patch.diff}}
```

- Apply a patch to the current directory:

```
patch -p1 < {{patch.diff}}
```

- Apply the reverse of a patch:

```
patch -R < {{patch.diff}}
```

pathchk

Check the validity and portability of one or more pathnames.

- Check pathames for validity in the current system:

```
pathchk {{path1 path2 ...}}
```

- Check pathnames for validity on a wider range of POSIX compliant systems:

```
pathchk -p {{path1 path2 ...}}
```

- Check pathnames for validity on all POSIX compliant systems:

```
pathchk --portability {{path1 path2 ...}}
```

- Only check for empty pathnames or leading dashes (-):

```
pathchk -P {{path1 path2 ...}}
```

pax

Archiving and copying utility.

- List the contents of an archive:

```
pax -f {{archive.tar}}
```

- List the contents of a gzipped archive:

```
pax -zf {{archive.tar.gz}}
```

- Create an archive from files:

```
pax -wf {{target.tar}} {{path/to/file1}} {{path/to/file2}}  
{{path/to/file3}}
```

- Create an archive from files, using output redirection:

```
pax -w {{path/to/file1}} {{path/to/file2}} {{path/to/file3}}  
> {{target.tar}}
```

- Extract an archive into the current directory:

```
pax -rf {{source.tar}}
```

- Copy to a directory, while keeping the original metadata; **target/** must exist:

```
pax -rw {{path/to/file1}} {{path/to/directory1}} {{path/to/}  
directory2}} {{target/}}
```

pdffonts

Portable Document Format (PDF) file fonts information viewer.

More information: <https://www.xpdfreader.com/pdffonts-man.html>.

- Print PDF file fonts information:

```
pdffonts {{path/to/file.pdf}}
```

- Specify user password for PDF file to bypass security restrictions:

```
pdffonts -upw {{password}} {{path/to/file.pdf}}
```

- Specify owner password for PDF file to bypass security restrictions:

```
pdffonts -opw {{password}} {{path/to/file.pdf}}
```

- Print additional information on location of the font that will be used when the PDF file is rasterized:

```
pdffonts -loc {{path/to/file.pdf}}
```

- Print additional information on location of the font that will be used when the PDF file is converted to PostScript:

```
pdffonts -locPS {{path/to/file.pdf}}
```

pdfimages

Utility for extracting images from PDFs.

- Extract all images from a PDF file and save them as PNGs:

```
pdfimages -png {{path/to/file.pdf}} {{filename_prefix}}
```

- Extract images from pages 3 to 5:

```
pdfimages -f {{3}} -l {{5}} {{path/to/file.pdf}}
{{filename_prefix}}
```

- Extract images from a PDF file and include the page number in the output filenames:

```
pdfimages -p {{path/to/file.pdf}} {{filename_prefix}}
```

- List information about all the images in a PDF file:

```
pdfimages -list {{path/to/file.pdf}}
```

pdfinfo

Portable Document Format (PDF) file information viewer.

More information: <https://www.xpdfreader.com/pdfinfo-man.html>.

- Print PDF file information:

```
pdfinfo {{path/to/file.pdf}}
```

- Specify user password for PDF file to bypass security restrictions:

```
pdfinfo -upw {{password}} {{path/to/file.pdf}}
```

- Specify owner password for PDF file to bypass security restrictions:

```
pdfinfo -opw {{password}} {{path/to/file.pdf}}
```

pdfjoin

PDF merging utility.

- Merge two PDFs:

```
pdfjoin {{file1}} {{file2}} --outfile {{output_file}}
```

- Save pages 3 to 5 followed by page 1 to a new PDF:

```
pdfjoin {{file 3-5,1}} --outfile {{output_file}}
```

- Merge subranges from two PDFs:

```
pdfjoin {{file1 3-5,1}} {{file2 4-6}} --outfile  
{{output_file}}
```

pdflatex

Compile a pdf document from LaTeX source files.

- Compile a pdf document:

```
pdflatex {{source.tex}}
```

- Compile a pdf document specifying an output directory:

```
pdflatex -output-directory={{path/to/directory}}  
{{source.tex}}
```

- Compile a pdf document, halting on each error:

```
pdflatex -halt-on-error {{source.tex}}
```

pdfposter

Convert a large-sheeted pdf into multiple A4 pages for printing.

More information: <https://pdfposter.readthedocs.io>.

- Convert an A2 poster into 4 A4 pages:

```
pdfposter --poster-size a2 {{input_file.pdf}}  
{{output_file.pdf}}
```

- Scale an A4 poster to A3 and then generate 2 A4 pages:

```
pdfposter --scale 2 {{input_file.pdf}} {{output_file.pdf}}
```

pdfseparate

Portable Document Format (PDF) file page extractor.

More information: <https://manpages.debian.org/unstable/poppler-utils/pdfseparate.1.en.html>.

- Extract pages from PDF file and make a separate PDF file for each page:

```
pdfseparate {{path/to/source_filename.pdf}} {{path/to/destination_filename-%d.pdf}}
```

- Specify the first/start page for extraction:

```
pdfseparate -f {{3}} {{path/to/source_filename.pdf}} {{path/to/destination_filename-%d.pdf}}
```

- Specify the last page for extraction:

```
pdfseparate -l {{10}} {{path/to/source_filename.pdf}} {{path/to/destination_filename-%d.pdf}}
```

pdftk

PDF toolkit.

More information: <https://www.pdflabs.com/tools/pdftk-the-pdf-toolkit>.

- Extract pages 1-3, 5 and 6-10 from a PDF file and save them as another one:

```
pdftk {{input.pdf}} cat {{1-3 5 6-10}} output {{output.pdf}}
```

- Merge (concatenate) a list of PDF files and save the result as another one:

```
pdftk {{file1.pdf file2.pdf ...}} cat output {{output.pdf}}
```

- Split each page of a PDF file into a separate file, with a given filename output pattern:

```
pdftk {{input.pdf}} burst output {{out_%d.pdf}}
```

- Rotate all pages by 180 degrees clockwise:

```
pdftk {{input.pdf}} cat {{1-endsouth}} output {{output.pdf}}
```

- Rotate third page by 90 degrees clockwise and leave others unchanged:

```
pdftk {{input.pdf}} cat {{1-2 3east 4-end}} output {{output.pdf}}
```

pdftocairo

Converts PDF files to PNG/JPEG/TIFF/PDF/PS/EPS/SVG using cairo.

More information: <https://poppler.freedesktop.org>.

- Convert a PDF file to JPEG:

```
pdftocairo {{path/to/file.pdf}} -jpeg
```

- Convert to PDF expanding the output to fill the paper:

```
pdftocairo {{path/to/file.pdf}} {{output.pdf}} -pdf -expand
```

- Convert to SVG specifying the first/last page to convert:

```
pdftocairo {{path/to/file.pdf}} {{output.svg}} -svg -f  
{{first_page}} -l {{last_page}}
```

- Convert to PNG with 200ppi resolution:

```
pdftocairo {{path/to/file.pdf}} {{output.png}} -png -r 200
```

- Convert to grayscale TIFF setting paper size to A3:

```
pdftocairo {{path/to/file.pdf}} -tiff -gray -paper A3
```

- Convert to PNG cropping x and y pixels from the top left corner:

```
pdftocairo {{path/to/file.pdf}} -png -x {{x_pixels}} -y  
{{y_pixels}}
```

pdftotext

Convert PDF files to plain text format.

- Convert filename.pdf to plain text and print it to standard output:

```
pdftotext {{filename.pdf}} -
```

- Convert filename.pdf to plain text and save it as filename.txt:

```
pdftotext {{filename.pdf}}
```

- Convert filename.pdf to plain text and preserve the layout:

```
pdftotext -layout {{filename.pdf}}
```

- Convert input.pdf to plain text and save it as output.txt:

```
pdftotext {{input.pdf}} {{output.txt}}
```

- Convert pages 2, 3 and 4 of input.pdf to plain text and save them as output.txt:

```
pdftotext -f {{2}} -l {{4}} {{input.pdf}} {{output.txt}}
```

pdfunite

PDF merging utility.

More information: <https://github.com/mtgrosser/pdfunite>.

- Merge 2 PDFs into a single PDF:

```
pdfunite {{path/to/fileA.pdf}} {{path/to/fileB.pdf}} {{path/to/merged_output.pdf}}
```

- Merge a directory of PDFs into a single PDF:

```
pdfunite {{path/to/directory/*.pdf}} {{path/to/merged_output.pdf}}
```

peerflix

Stream video- or audio-based torrents to a media player.

More information: <https://github.com/mafintosh/peerflix>.

- Stream the largest media file in a torrent:

```
peerflix "{{torrent_url|magnet_link}}"
```

- List all streamable files contained in a torrent (given as a magnet link):

```
peerflix "{{magnet:?xt=urn:btih:  
0123456789abcdef0123456789abcdef01234567}}" --list
```

- Stream the largest file in a torrent, given as a torrent URL, to VLC:

```
peerflix "{{http://example.net/music.torrent}}" --vlc
```

- Stream the largest file in a torrent to MPlayer, with subtitles:

```
peerflix "{{torrent_url|magnet_link}}" --mplayer --subtitles  
{subtitle-file.srt}
```

- Stream all files from a torrent to Airplay:

```
peerflix "{{torrent_url|magnet_link}}" --all --airplay
```

perl

The Perl 5 language interpreter.

More information: <https://www.perl.org>.

- Parse and execute a Perl script:

```
perl {{script.pl}}
```

- Check syntax errors on a Perl script:

```
perl -c {{script.pl}}
```

- Parse and execute a Perl statement:

```
perl -e {{perl_statement}}
```

- Run a Perl script in debug mode, using `perldebug`:

```
perl -d {{script.pl}}
```

- Loop over all lines of a file, editing them in-place using a find/replace expression:

```
perl -p -i -e 's/{{find}}/{{replace}}/g' {{filename}}
```

- Run a find/replace expression on a file, saving the original file with a given extension:

```
perl -p -i'.old' -e 's/{{find}}/{{replace}}/g' {{filename}}
```

- Run a multi-line find/replace expression on a file, and save the result in another file:

```
perl -p0e 's/{{foo\nbar}}/{{foobar}}/g' {{input_file}} > {{output_file}}
```

- Run a regular expression on `stdin`, printing out the first capture group for each line:

```
cat {{path/to/input_file}} | perl -nle 'if (/.*({{foo}}).*/){print "$1"; last;}'
```

pest

A PHP testing framework with a focus on simplicity.

More information: <https://pestphp.com>.

- Initialise a standard Pest configuration in the current directory:

```
pest --init
```

- Run tests in the current directory:

```
pest
```

- Run tests annotated with the given group:

```
pest --group {{name}}
```

- Run tests and print the coverage report to `stdout`:

```
pest --coverage
```

- Run tests with coverage and fail if the coverage is less than the minimum percentage:

```
pest --coverage --min={{80}}
```

pg_ctl

Utility for controlling a PostgreSQL server and database cluster.

More information: <https://www.postgresql.org/docs/current/app-pg-ctl.html>.

- Initialize a new PostgreSQL database cluster:

```
pg_ctl -D {{data_directory}} init
```

- Start a PostgreSQL server:

```
pg_ctl -D {{data_directory}} start
```

- Stop a PostgreSQL server:

```
pg_ctl -D {{data_directory}} stop
```

- Restart a PostgreSQL server:

```
pg_ctl -D {{data_directory}} restart
```

- Reload the PostgreSQL server configuration:

```
pg_ctl -D {{data_directory}} reload
```

pg_dump

Extract a PostgreSQL database into a script file or other archive file.

More information: <https://www.postgresql.org/docs/current/app-pgdump.html>.

- Dump database into a SQL-script file:

```
pg_dump {{db_name}} > {{output_file.sql}}
```

- Same as above, customize username:

```
pg_dump -U {{username}} {{db_name}} > {{output_file.sql}}
```

- Same as above, customize host and port:

```
pg_dump -h {{host}} -p {{port}} {{db_name}} >  
{{output_file.sql}}
```

- Dump a database into a custom-format archive file:

```
pg_dump -Fc {{db_name}} > {{output_file.dump}}
```

- Dump only database data into an SQL-script file:

```
pg_dump -a {{db_name}} > {{path/to/output_file.sql}}
```

- Dump only schema (data definitions) into an SQL-script file:

```
pg_dump -s {{db_name}} > {{path/to/output_file.sql}}
```

pg_restore

Restore a PostgreSQL database from an archive file created by pg_dump.

More information: <https://www.postgresql.org/docs/current/app-pgrestore.html>.

- Restore an archive into an existing database:

```
pg_restore -d {{db_name}} {{archive_file.dump}}
```

- Same as above, customize username:

```
pg_restore -U {{username}} -d {{db_name}}  
{{archive_file.dump}}
```

- Same as above, customize host and port:

```
pg_restore -h {{host}} -p {{port}} -d {{db_name}}  
{{archive_file.dump}}
```

- List database objects included in the archive:

```
pg_restore --list {{archive_file.dump}}
```

- Clean database objects before creating them:

```
pg_restore --clean -d {{db_name}} {{archive_file.dump}}
```

- Use multiple jobs to do the restoring:

```
pg_restore -j {{2}} -d {{db_name}} {{archive_file.dump}}
```

pgrep

Find or signal process by name.

- Return PIDs of any running processes with a matching command string:

```
pgrep {{process_name}}
```

- Search full command line with parameters instead of just the process name:

```
pgrep -f "{{process_name}} {{parameter}}"
```

- Search for process run by a specific user:

```
pgrep -u root {{process_name}}
```

phan

A static analysis tool for PHP.

More information: <https://github.com/phan/phan>.

- Generate a `.phan/config.php` in the current directory:

```
phan --init
```

- Generate a Phan configuration file using a specific level (1 being strictest to 5 being the least strict):

```
phan --init --init-level {{level}}
```

- Analyse the current directory:

```
phan
```

- Analyse one or more directories:

```
phan --directory {{path/to/directory}} --directory {{path/to/another_directory}}
```

- Specify a config file (defaults to `.phan/config.php`):

```
phan --config-file {{path/to/config.php}}
```

- Specify the output mode:

```
phan --output-mode {{text|verbose|json|csv|codeclimate|checkstyle|pylint|html}}
```

- Specify the number of parallel processes:

```
phan --processes {{number_of_processes}}
```

phing

A PHP build tool based on Apache Ant.

More information: <https://www.phing.info>.

- Perform the default task in the "build.xml" file:

```
phing
```

- Initialise a new build file:

```
phing -i {{path/to/build.xml}}
```

- Perform a specific task:

```
phing {{task_name}}
```

- Specify a custom build file path:

```
phing -f {{path/to/build.xml}} {{task_name}}
```

- Specify a log file to output to:

```
phing -b {{path/to/log_file}} {{task_name}}
```

- Specify custom properties to use in the build:

```
phing -D{{property}}={{value}} {{task_name}}
```

- Specify a custom listener class:

```
phing -listener {{class_name}} {{task_name}}
```

- Build using verbose output:

```
phing -verbose {{task_name}}
```

phive

The Phar Installation and Verification Environment for secure PHP application deployment.

More information: <https://phar.io>.

- Display a list of available aliased Phars:

```
phive list
```

- Install a specified Phar to the local directory:

```
phive install {{alias|url}}
```

- Install a specified Phar globally:

```
phive install {{alias|url}} --global
```

- Install a specified Phar to a target directory:

```
phive install {{alias|url}} --target {{path/to/directory}}
```

- Update all Phar files to the latest version:

```
phive update
```

- Remove a specified Phar file:

```
phive remove {{alias|url}}
```

- Remove unused Phar files:

```
phive purge
```

- List all available commands:

```
phive help
```

php artisan

Laravel's Artisan command line interface.

More information: <https://laravel.com/docs/artisan>.

- Start PHP's built-in web server for the current Laravel application:

```
php artisan serve
```

- Start an interactive PHP command line interface:

```
php artisan tinker
```

- Generate a new Eloquent model class with a migration, factory and resource controller:

```
php artisan make:model {{ModelName}} --all
```

- Display a list of all available commands:

```
php artisan help
```

php yii

Yii Framework's command line interface.

More information: <https://yiiframework.com>.

- Display a list of all available commands:

```
php yii {{help}}
```

- Start PHP's built-in web server for the current Yii application:

```
php yii {{serve}}
```

- Generate a controller, views and related files for the CRUD actions on the specified model class:

```
php yii {{gii/crud}} --modelClass={{ModelName}} --controllerClass={{ControllerName}}
```

php

PHP command line interface.

More information: <https://php.net>.

- Parse and execute a php script:

```
php {{file}}
```

- Check syntax on (i.e. lint) a PHP script:

```
php -l {{file}}
```

- Run PHP interactively:

```
php -a
```

- Run PHP code (Notes: Don't use <? ?> tags; escape double quotes with backslash):

```
php -r "{{code}}"
```

- Start a PHP built-in web server in the current directory:

```
php -S {{host:port}}
```

- Get a list of installed PHP extensions:

```
php -m
```

- Display information about the current PHP configuration:

```
php -i
```

phpbu

A backup utility framework for PHP.

More information: <https://phpbu.de>.

- Run backups using the default "phpbu.xml" configuration file:

`phpbu`

- Run backups using a specific configuration file:

`phpbu --configuration={{path/to/configuration_file.xml}}`

- Only run the specified backups:

`phpbu --limit={{backup_task_name}}`

- Simulate the actions that would have been performed:

`phpbu --simulate`

phpcbf

Fix violations detected by phpcs.

More information: https://github.com/squizlabs/PHP_CodeSniffer.

- Fix issues in the specified directory (defaults to the PEAR standard):

```
phpcbf {{path/to/directory}}
```

- Display a list of installed coding standards:

```
phpcbf -i
```

- Specify a coding standard to validate against:

```
phpcbf {{path/to/directory}} --standard {{standard}}
```

- Specify comma-separated file extensions to include when sniffing:

```
phpcbf {{path/to/directory}} --extensions  
{{file_extension(s)}}}
```

- A comma-separated list of files to load before processing:

```
phpcbf {{path/to/directory}} --bootstrap {{file(s)}}
```

- Don't recurse into subdirectories:

```
phpcbf {{path/to/directory}} -l
```

phpcpd

A copy and paste detector for PHP code.

More information: <https://github.com/sebastianbergmann/phpcpd>.

- Analyse duplicated code for a specific file or directory:

```
phpcpd {{path/to/file_or_directory}}
```

- Analyse using fuzzy matching for variable names:

```
phpcpd --fuzzy {{path/to/file_or_directory}}
```

- Specify a minimum number of identical lines (defaults to 5):

```
phpcpd --min-lines {{number_of_lines}} {{path/to/file_or_directory}}
```

- Specify a minimum number of identical tokens (defaults to 70):

```
phpcpd --min-tokens {{number_of_tokens}} {{path/to/file_or_directory}}
```

- Exclude a directory from analysis (must be relative to the source):

```
phpcpd --exclude {{path/to/excluded_directory}} {{path/to/file_or_directory}}
```

- Output the results to a PHP-CPD XML file:

```
phpcpd --log-pmd {{path/to/log_file}} {{path/to/file_or_directory}}
```

phpcs

Tokenize PHP, JavaScript and CSS files to detect violations of a defined set of coding standards.

More information: https://github.com/squizlabs/PHP_CodeSniffer.

- Sniff the specified directory for issues (defaults to the PEAR standard):

```
phpcs {{path/to/directory}}
```

- Display a list of installed coding standards:

```
phpcs -i
```

- Specify a coding standard to validate against:

```
phpcs {{path/to/directory}} --standard {{standard}}
```

- Specify comma-separated file extensions to include when sniffing:

```
phpcs {{path/to/directory}} --extensions  
{{file_extension(s)}}}
```

- Specify the format of the output report (e.g. **full**, **xml**, **json**, **summary**):

```
phpcs {{path/to/directory}} --report {{format}}
```

- Set config variables to be used during the process:

```
phpcs {{path/to/directory}} --config-set {{key}} {{value}}
```

- A comma-separated list of files to load before processing:

```
phpcs {{path/to/directory}} --bootstrap {{file(s)}}
```

- Don't recurse into subdirectories:

```
phpcs {{path/to/directory}} -l
```

phpenv

A PHP version manager for development purposes.

More information: <https://github.com/phpenv/phpenv>.

- Install a PHP version globally:

```
phpenv install {{version}}
```

- Refresh shim files for all PHP binaries known to `phpenv`:

```
phpenv rehash
```

- List all installed PHP versions:

```
phpenv versions
```

- Display the currently active PHP version:

```
phpenv version
```

- Set the global PHP version:

```
phpenv global {{version}}
```

- Set the local PHP version, which overrides the global version:

```
phpenv local {{version}}
```

- Unset the local PHP version:

```
phpenv local --unset
```

phpize

Prepare a PHP extension for compiling.

More information: <https://www.php.net/manual/install.pecl.phpize>.

- Prepare the PHP extension in the current directory for compiling:

`phpize`

- Delete files previously created by `phpize`:

`phpize --clean`

phploc

A tool for quickly measuring the size and analyzing the structure of a PHP project.

More information: <https://github.com/sebastianbergmann/phploc>.

- Analyse a directory and print the result:

```
phploc {{path/to/directory}}
```

- Include only specific files from a comma-separated list (globs are allowed):

```
phploc {{path/to/directory}} --names {{files}}
```

- Exclude specific files from a comma-separated list (globs are allowed):

```
phploc {{path/to/directory}} --names-exclude {{files}}
```

- Exclude a specific directory from analysis:

```
phploc {{path/to/directory}} --exclude {{path/to/exclude_directory}}
```

- Log the results to a specific CSV file:

```
phploc {{path/to/directory}} --log-csv {{path/to/file}}
```

- Log the results to a specific XML file:

```
phploc {{path/to/directory}} --log-xml {{path/to/file}}
```

- Count PHPUnit test case classes and test methods:

```
phploc {{path/to/directory}} --count-tests
```

phpmd

A PHP mess detector that checks for common potential problems.

More information: <https://github.com/phpmd/phpmd>.

- Display a list of available rulesets and formats:

```
phpmd
```

- Scan a file or directory for problems using comma-separated rulesets:

```
phpmd {{path/to/file_or_directory}} {{xml|text|html}}
{{rulesets}}
```

- Specify the minimum priority threshold for rules:

```
phpmd {{path/to/file_or_directory}} {{xml|text|html}}
{{rulesets}} --minimumpriority {{priority}}
```

- Include only the specified extensions in analysis:

```
phpmd {{path/to/file_or_directory}} {{xml|text|html}}
{{rulesets}} --suffixes {{extensions}}
```

- Exclude the specified comma-separated directories:

```
phpmd {{path/to/file_or_directory}} {{xml|text|html}}
{{rulesets}} --exclude {{directory_patterns}}
```

- Output the results to a file instead of `stdout`:

```
phpmd {{path/to/file_or_directory}} {{xml|text|html}}
{{rulesets}} --reportfile {{path/to/report_file}}
```

- Ignore the use of warning-suppressive PHPDoc comments:

```
phpmd {{path/to/file_or_directory}} {{xml|text|html}}
{{rulesets}} --strict
```

phpspec

A Behaviour Driven Development tool for PHP.

More information: <https://phpspec.net>.

- Create a specification for a class:

```
phpspec describe {{class_name}}
```

- Run all specifications in the "spec" directory:

```
phpspec run
```

- Run a single specification:

```
phpspec run {{path/to/class_specification_file}}
```

- Run specifications using a specific configuration file:

```
phpspec run -c {{path/to/configuration_file}}
```

- Run specifications using a specific bootstrap file:

```
phpspec run -b {{path/to/bootstrap_file}}
```

- Disable code generation prompts:

```
phpspec run --no-code-generation
```

- Enable fake return values:

```
phpspec run --fake
```

phpstan

A PHP static analysis tool to discover bugs in code.

More information: <https://github.com/phpstan/phpstan>.

- Display available options for analysis:

```
phpstan analyse --help
```

- Analyse the specified space-separated directories:

```
phpstan analyse {{path/to/directory}}
```

- Analyse a directory using a configuration file:

```
phpstan analyse {{path/to/directory}} --configuration {{path/to/config}}
```

- Analyse using a specific rule level (0-7, higher is stricter):

```
phpstan analyse {{path/to/directory}} --level {{level}}
```

- Specify an autoload file to load before analysing:

```
phpstan analyse {{path/to/directory}} --autoload-file {{path/to/autoload_file}}
```

- Specify a memory limit during analysis:

```
phpstan analyse {{path/to/directory}} --memory-limit {{memory_limit}}
```

phpstorm

A cross-platform IDE for PHP based on the JetBrains IntelliJ platform.

More information: <https://jetbrains.com/phpstorm>.

- Open a specific directory:

```
phpstorm {{path/to/directory}}
```

- Open a file:

```
phpstorm {{path/to/file}}
```

- Open a file at a specific line:

```
phpstorm --line {{line_number}} {{path/to/file}}
```

- View the differences between two files:

```
phpstorm diff {{path/to/left_file}} {{path/to/right_file}}
```

phpunit

PHPUnit command-line test runner.

More information: <https://phpunit.de>.

- Run tests in the current directory. Note: Expects you to have a 'phpunit.xml':

```
phpunit
```

- Run tests in a specific file:

```
phpunit {{path/to/TestFile.php}}
```

- Run tests annotated with the given group:

```
phpunit --group {{name}}
```

- Run tests and generate a coverage report in HTML:

```
phpunit --coverage-html {{directory}}
```

piactl

The command line tool for Private Internet Access, a commercial VPN provider.

More information: <https://privateinternetaccess.com/helpdesk/kb/articles/pia-desktop-command-line-interface>.

- Log in to Private Internet Access:

```
piactl login {{path/to/login_file}}
```

- Connect to Private Internet Access:

```
piactl connect
```

- Disconnect from Private Internet Access:

```
piactl disconnect
```

- Enable or disable the Private Internet Access daemon in the background:

```
piactl background {{enable|disable}}
```

- List all available VPN regions:

```
piactl get regions
```

- Display the current VPN region:

```
piactl get region
```

- Set your VPN region:

```
piactl set region {{region}}
```

- Log out of Private Internet Access:

```
piactl logout
```

picard

Next generation MusicBrainz tagging application.

More information: <https://picard.musicbrainz.org/>.

- Start Picard:

```
picard
```

- Open a set of files:

```
picard {{path/to/file1.mp3}} {{path/to/file2.mp3}}
```

- Display the version of Picard installed:

```
picard --long-version
```

pickle

A PHP extension installer based on Composer.

More information: <https://github.com/FriendsOfPHP/pickle>.

- Install a specific PHP extension:

```
pickle install {{extension_name}}
```

- Convert an existing PECL extension configuration to a Pickle configuration file:

```
pickle convert {{path/to/directory}}
```

- Validate a PECL extension:

```
pickle validate {{path/to/directory}}
```

- Package a PECL extension for release:

```
pickle release {{path/to/directory}}
```

pigz

Multithreaded zlib compression utility.

More information: <https://github.com/madler/pigz>.

- Compress a file with default options:

```
pigz {{filename}}
```

- Compress a file using the best compression method:

```
pigz -9 {{filename}}
```

- Compress a file using no compression and 4 processors:

```
pigz -0 -p{{4}} {{filename}}
```

- Compress a directory using tar:

```
tar cf - {{path/to/directory}} | pigz > {{filename}}.tar.gz
```

- Decompress a file:

```
pigz -d {{archive.gz}}
```

- List the contents of an archive:

```
pigz -l {{archive.tar.gz}}
```

ping

Send ICMP ECHO_REQUEST packets to network hosts.

- Ping host:

```
ping {{host}}
```

- Ping a host only a specific number of times:

```
ping -c {{count}} {{host}}
```

- Ping host, specifying the interval in seconds between requests (default is 1 second):

```
ping -i {{seconds}} {{host}}
```

- Ping host without trying to lookup symbolic names for addresses:

```
ping -n {{host}}
```

- Ping host and ring the bell when a packet is received (if your terminal supports it):

```
ping -a {{host}}
```

- Also display a message if no response was received:

```
ping -0 {{host}}
```

ping6

Send ICMP ECHO_REQUEST packets to network hosts via IPv6 address.

- Ping a host:

```
ping6 {{host}}
```

- Ping a host only a specific number of times:

```
ping6 -c {{count}} {{host}}
```

- Ping a host, specifying the interval in seconds between requests (default is 1 second):

```
ping6 -i {{seconds}} {{host}}
```

- Ping a host without trying to lookup symbolic names for addresses:

```
ping6 -n {{host}}
```

- Ping a host and ring the bell when a packet is received (if your terminal supports it):

```
ping6 -a {{host}}
```

pinky

Print user information using the **finger** protocol.

- Display details about the current user:

```
pinky
```

- Display details for a specific user:

```
pinky {{user}}
```

- Display details in the long format:

```
pinky {{user}} -l
```

- Omit the user's home directory and shell in long format:

```
pinky {{user}} -lb
```

- Omit the user's project file in long format:

```
pinky {{user}} -lh
```

- Omit the column headings in short format:

```
pinky {{user}} -f
```

pip

Python package manager.

More information: <https://pip.pypa.io>.

- Install a package:

```
pip install {{package_name}}
```

- Install a specific version of a package:

```
pip install {{package_name}}=={{package_version}}
```

- Upgrade a package:

```
pip install -U {{package_name}}
```

- Uninstall a package:

```
pip uninstall {{package_name}}
```

- Save installed packages to file:

```
pip freeze > {{requirements.txt}}
```

- Install packages from file:

```
pip install -r {{requirements.txt}}
```

- Show installed package info:

```
pip show {{package_name}}
```

pip3

Python package manager.

More information: <https://pip.pypa.io>.

- Find available packages:

```
pip3 search {{package_name}}
```

- Install a package:

```
pip3 install {{package_name}}
```

- Install a specific version of a package:

```
pip3 install {{package_name}}=={{package_version}}
```

- Upgrade a package:

```
pip3 install --upgrade {{package_name}}
```

- Uninstall a package:

```
pip3 uninstall {{package_name}}
```

- Save the list of installed packages to a file:

```
pip3 freeze > {{requirements.txt}}
```

- Install packages from a file:

```
pip3 install --requirements {{requirements.txt}}
```

- Show installed package info:

```
pip3 show {{package_name}}
```

pipenv

Simple and unified Python development workflow.

Manages packages and the virtual environment for a project.

More information: <https://pypi.org/project/pipenv>.

- Create a new project:

```
pipenv
```

- Create a new project using Python 3:

```
pipenv --three
```

- Install a package:

```
pipenv install {{package_name}}
```

- Install all the dependencies for a project:

```
pipenv install
```

- Install all the dependencies for a project (including dev packages):

```
pipenv install --dev
```

- Uninstall a package:

```
pipenv uninstall {{package_name}}
```

- Start a shell within the created virtual environment:

```
pipenv shell
```

- Generate a `requirements.txt` (list of dependencies) for a project:

```
pipenv lock --requirements
```

pipx

Install and run python applications in isolated environments.

More information: <https://github.com/pipxproject/pipx>.

- Run an app in a temporary virtual environment:

```
pipx run {{pycowsay}} {{moo}}
```

- Install a package in a virtual environment and add entry points to path:

```
pipx install {{package}}
```

- List installed packages:

```
pipx list
```

- Run an app in a temporary virtual environment with a package name different from the executable:

```
pipx run --spec {{httpx-cli}} {{httpx}} {{http://www.github.com}}
```

pkill

Signal process by name.

Mostly used for stopping processes.

- Kill all processes which match:

```
pkill -9 {{process_name}}
```

- Kill all processes which match their full command instead of just the process name:

```
pkill -9 -f "{{command_name}}"
```

- Send SIGUSR1 signal to processes which match:

```
pkill -USR1 {{process_name}}
```

plantuml

Create UML diagrams from a plain text language and render them in different formats.

More information: <https://plantuml.com/en/command-line>.

- Render diagrams to default format (PNG):

```
plantuml {{diagram1.puml}} {{diagram2.puml}}
```

- Render a diagram in given format (e.g. **png**, **pdf**, **svg**, **txt**):

```
plantuml -t {{format}} {{diagram.puml}}
```

- Render all diagrams of a directory:

```
plantuml {{path/to/diagrams}}
```

- Render a diagram to the output directory:

```
plantuml -o {{path/to/output}} {{diagram.puml}}
```

- Render a diagram with the configuration file:

```
plantuml -config {{config.cfg}} {{diagram.puml}}
```

- Display help:

```
plantuml -help
```

play

Audio player of SoX - Sound eXchange.

Plays any audio from the command line, with audio formats identified by the extension.

More information: <http://sox.sourceforge.net>.

- Play the given audio file:

```
play {{audiofile}}
```

- Play the given audio files:

```
play {{audiofile1}} {{audiofile2}}
```

- Play the given audio at twice the speed:

```
play {{audiofile}} speed 2.0
```

- Play the given audio in reverse:

```
play {{audiofile}} reverse
```

pm2

Process manager for Node.js.

Used for log management, monitoring and configuring processes.

More information: <https://pm2.keymetrics.io>.

- Start a process with a name that can be used for later operations:

```
pm2 start {{app.js}} --name {{myapp}}
```

- List processes:

```
pm2 list
```

- Monitor all processes:

```
pm2 monit
```

- Stop a process:

```
pm2 stop {{myapp}}
```

- Restart a process:

```
pm2 restart {{myapp}}
```

- Dump all processes for resurrecting them later:

```
pm2 save
```

- Resurrect previously dumped processes:

```
pm2 resurrect
```

- Launch monitoring:

```
pm2 monit
```

pngcrush

PNG image compression utility.

More information: <https://pmt.sourceforge.io/pngcrush>.

- Compress a PNG file:

```
pngcrush {{in.png}} {{out.png}}
```

- Compress all PNGs and output to directory:

```
pngcrush -d {{path/to/output}} *.png
```

- Compress PNG file with all 114 available algorithms and pick the best result:

```
pngcrush -rem allb -brute -reduce {{in.png}} {{out.png}}
```

podman

Simple management tool for pods, containers and images.

Podman provides a Docker-CLI comparable command line. Simply put: **alias docker=podman**.

More information: <https://github.com/containers/libpod/blob/master/commands.md>.

- Print out information about containers:

```
podman ps
```

- List all containers (both running and stopped):

```
podman ps --all
```

- Start one or more containers:

```
podman start {{container_name}} {{container_id}}
```

- Stop one or more running containers:

```
podman stop {{container_name}} {{container_id}}
```

- Pull an image from a registry (defaults to the Docker Hub):

```
podman pull {{image_name}}:{{image_tag}}
```

- Open a shell inside of an already running container:

```
podman exec --interactive --tty {{container_name}} {{sh}}
```

- Remove one or more stopped containers:

```
podman rm {{container_name}} {{container_id}}
```

- Display the logs of one or more containers and follow log output:

```
podman logs --follow {{container_name}} {{container_id}}
```

poetry

Manage Python packages and dependencies.

More information: <https://python-poetry.org/docs>.

- Create a new Poetry project in the directory with a specific name:

```
poetry new {{project_name}}
```

- Install a dependency and its subdependencies:

```
poetry add {{dependency}}
```

- Interactively initialize the current directory as a new Poetry project:

```
poetry init
```

- Get the latest version of all dependencies and update poetry.lock:

```
poetry update
```

- Execute a command inside the project's virtual environment:

```
poetry run {{command}}
```

popeye

Utility that reports potential issues with Kubernetes deployment manifests.

More information: <https://github.com/derailed/popeye>.

- Scan the current Kubernetes cluster:

`popeye`

- Scan a specific namespace:

`popeye -n {{namespace}}`

- Scan specific Kubernetes context:

`popeye --context={{context}}`

- Use a spinach configuration file for scanning:

`popeye -f {{spinach.yaml}}`

postcss

PostCSS is a tool for transforming styles with JS plugins.

More information: <https://postcss.org>.

- Parse and transform a CSS file:

```
postcss {{path/to/file}}
```

- Parse and transform a CSS file and output to a specific file:

```
postcss {{path/to/file}} --output {{path/to/file}}
```

- Parse and transform a CSS file and output to a specific directory:

```
postcss {{path/to/file}} --dir {{path/to/directory}}
```

- Parse and transform a CSS file in-place:

```
postcss {{path/to/file}} --replace
```

- Specify a custom PostCSS parser:

```
postcss {{path/to/file}} --parser {{parser}}
```

- Specify a custom PostCSS syntax:

```
postcss {{path/to/file}} --syntax {{syntax}}
```

- Watch for changes to a CSS file:

```
postcss {{path/to/file}} --watch
```

- Display available options and examples:

```
postcss --help
```

powerstat

Measures the power consumption of a computer that has a battery power source or supports the RAPL interface.

More information: <http://manpages.ubuntu.com/manpages/bionic/man8/powerstat.8.html>.

- Measure power with the default of 10 samples with an interval of 10 seconds:

```
powerstat
```

- Measure power with custom number of samples and interval duration:

```
powerstat {{interval}} {{number_of_samples}}
```

- Measure power using Intel's RAPL interface:

```
powerstat -R {{interval}} {{number_of_samples}}
```

- Show an histogram of the power measurements:

```
powerstat -H {{interval}} {{number_of_samples}}
```

- Enable all statistics gathering options:

```
powerstat -a {{interval}} {{number_of_samples}}
```

pprof

Command-line tool for visualization and analysis of profile data.

More information: <https://github.com/google/pprof>.

- Generate a text report from a specific profiling file, on fibbo binary:

```
pprof -top {{./fibbo}} {{./fibbo-profile.pb.gz}}
```

- Generate a graph and open it on a web browser:

```
pprof -svg {{./fibbo}} {{./fibbo-profile.pb.gz}}
```

- Run pprof in interactive mode to be able to manually launch `pprof` on a file:

```
pprof {{./fibbo}} {{./fibbo-profile.pb.gz}}
```

- Run a web server that serves a web interface on top of `pprof`:

```
pprof -http={{localhost:8080}} {{./fibbo}} {{./fibbo-profile.pb.gz}}
```

- Fetch a profile from an HTTP server and generate a report:

```
pprof {{http://localhost:8080/debug/pprof}}
```

pr

Paginate or columnate files for printing.

More information: https://www.gnu.org/software/coreutils/manual/html_node/pr-invocation.html.

- Print multiple files with a default header and footer:

```
pr {{file1}} {{file2}} {{file3}}
```

- Print with a custom centered header:

```
pr -h "{{header}}" {{file1}} {{file2}} {{file3}}
```

- Print with numbered lines and a custom date format:

```
pr -n -D "{{format}}" {{file1}} {{file2}} {{file3}}
```

- Print all files together, one in each column, without a header or footer:

```
pr -m -T {{file1}} {{file2}} {{file3}}
```

- Print, beginning at page 2 up to page 5, with a given page length (including header and footer):

```
pr +{{2}}:{{5}} -l {{page_length}} {{file1}} {{file2}}  
{{file3}}
```

- Print with an offset for each line and a truncating custom page width:

```
pr -o {{offset}} -W {{width}} {{file1}} {{file2}} {{file3}}
```

printenv

Print values of all or specific environment variables.

- Display key-value pairs of all environment variables:

```
printenv
```

- Display the value of a specific variable:

```
printenv {{HOME}}
```

- Display the value of a variable and end with NUL instead of newline:

```
printenv --null {{HOME}}
```

printf

Format and print text.

- Print a text message:

```
printf "{{%s\n}} \"{{Hello world}}\"
```

- Print an integer in bold blue:

```
printf "{{\e[1;34m%.3d\0m\n}} {{42}}"
```

- Print a float number with the unicode Euro sign:

```
printf "{{\u20AC %.2f\n}} {{123.4}}"
```

- Print a text message composed with environment variables:

```
printf "{{var1: %s\tvar2: %s\n}} \"{{$VAR1}}\" \"{{$VAR2}}\""
```

- Store a formatted message in a variable (does not work on zsh):

```
printf -v {myvar} {"This is %s = %d\n" "a year" 2016}
```

progpilot

A PHP static analysis tool for detecting security vulnerabilities.

More information: <https://github.com/designsecurity/progpilot>.

- Analyse the current directory:

`progpilot`

- Analyse a specific file or directory:

`progpilot {{path/to/file_or_directory}}`

- Specify a custom configuration file:

`progpilot --configuration {{path/to/configuration.yml}}`

prosodyctl

The control tool for the Prosody XMPP server.

More information: <https://prosody.im/doc/prosodyctl>.

- Show the status of the Prosody server:

```
sudo prosodyctl status
```

- Reload the server's configuration files:

```
sudo prosodyctl reload
```

- Add a user to the Prosody XMPP server:

```
sudo prosodyctl adduser {{user@example.com}}
```

- Set a user's password:

```
sudo prosodyctl passwd {{user@example.com}}
```

- Permanently delete a user:

```
sudo prosodyctl deluser {{user@example.com}}
```

protoc

Parse Google Protobuf `.proto` files and generate output in the specified language.

More information: <https://developers.google.com/protocol-buffers>.

- Generate Python code from a `.proto` file:

```
protoc --python_out={{path/to/output_directory}}  
{{input_file.proto}}
```

- Generate Java code from a `.proto` file that imports other `.proto` files:

```
protoc --java_out={{path/to/output_directory}} --  
proto_path={{path/to/import_search_path}}  
{{input_file.proto}}
```

- Generate code for multiple languages:

```
protoc --csharp_out={{path/to/c#_output_directory}} --  
js_out={{path/to/js_output_directory}} {{input_file.proto}}
```

ps

Information about running processes.

- List all running processes:

```
ps aux
```

- List all running processes including the full command string:

```
ps auxww
```

- Search for a process that matches a string:

```
ps aux | grep {{string}}
```

- List all processes of the current user in extra full format:

```
ps --user $(id -u) -F
```

- List all processes of the current user as a tree:

```
ps --user $(id -u) f
```

- Get the parent pid of a process:

```
ps -o ppid= -p {{pid}}
```

- Sort processes by memory consumption:

```
ps --sort size
```

psgrep

Search running processes with **grep**.

More information: <https://jvz.github.io/psgrep>.

- Find process lines containing a specific string:

```
psgrep {{process_name}}
```

- Find process lines containing a specific string, excluding headers:

```
psgrep -n {{process_name}}
```

- Search using a simplified format (PID, user, command):

```
psgrep -s {{process_name}}
```

psql

PostgreSQL command-line client.

More information: <https://www.postgresql.org/docs/current/app-psql.html>.

- Connect to database. It connects to localhost using default port 5432 with default user as currently logged in user:

```
psql {{database}}
```

- Connect to database on given server host running on given port with given username, without a password prompt:

```
psql -h {{host}} -p {{port}} -U {{username}} {{database}}
```

- Connect to database; user will be prompted for password:

```
psql -h {{host}} -p {{port}} -U {{username}} -W {{database}}
```

- Execute a single SQL query or PostgreSQL command on the given database (useful in shell scripts):

```
psql -c '{{query}}' {{database}}
```

- Execute commands from a file on the given database:

```
psql {{database}} -f {{file.sql}}
```

pssh

Parallel SSH program.

- Run a command on two hosts, and print its output on each server inline:

```
pssh -i -H "{{host1}} {{host2}}" {{hostname -i}}
```

- Run a command and save the output to separate files:

```
pssh -H {{host1}} -H {{host2}} -o {{path/to/output_dir}}  
{{hostname -i}}
```

- Run a command on multiple hosts, specified in a new-line separated file:

```
pssh -i -h {{path/to/hosts_file}} {{hostname -i}}
```

- Run a command as root (this asks for the root password):

```
pssh -i -h {{path/to/hosts_file}} -A -l {{root_username}}  
{{hostname -i}}
```

- Run a command with extra SSH arguments:

```
pssh -i -h {{path/to/hosts_file}} -x "{{-O  
VisualHostKey=yes}}" {{hostname -i}}
```

- Run a command limiting the number of parallel connections to 10:

```
pssh -i -h {{path/to/hosts_file}} -p {{10}} '{{cd dir; ./  
script.sh; exit}'
```

psysh

A runtime developer console, interactive debugger and REPL for PHP.

More information: <https://psysh.org>.

- Open a shell in the current directory:

```
psysh
```

- Open a shell in a specific directory:

```
psysh --cwd {{path/to/directory}}
```

- Use a specific configuration file:

```
psysh --config {{path/to/file}}
```

pt

Platinum Searcher.

A code search tool similar to [ag](#).

More information: https://github.com/monochromegane/the_platinum_searcher.

- Find files containing "foo" and print the files with highlighted matches:

```
pt {{foo}}
```

- Find files containing "foo" and display count of matches in each file:

```
pt -c {{foo}}
```

- Find files containing "foo" as a whole word and ignore its case:

```
pt -wi {{foo}}
```

- Find "foo" in files with a given extension using a regular expression:

```
pt -G='{{\.\bar$}}' {{foo}}
```

- Find files whose contents match the regular expression, up to 2 directories deep:

```
pt --depth={{2}} -e '{{^ba[rz]*$}}'
```

pup

Command line HTML parsing tool.

More information: <https://github.com/ericchiang/pup>.

- Transform a raw HTML file into a cleaned, indented, and colored format:

```
cat {{index.html}} | pup --color
```

- Filter HTML by element tag name:

```
cat {{index.html}} | pup '{{tag}}'
```

- Filter HTML by id:

```
cat {{index.html}} | pup '{{div#id}}'
```

- Filter HTML by attribute value:

```
cat {{index.html}} | pup '{{input[type="text"]}}'
```

- Print all text from the filtered HTML elements and their children:

```
cat {{index.html}} | pup '{{div}} text{}'
```

- Print HTML as JSON:

```
cat {{index.html}} | pup '{{div}} json{}'
```

pv

Monitor the progress of data through a pipe.

- Print the contents of the file and display a progress bar:

```
pv {{file}}
```

- Measure the speed and amount of data flow between pipes (**-s** is optional):

```
command1 | pv -s {{expected_amount_of_data_for_eta}} | command2
```

- Filter a file, see both progress and amount of output data:

```
pv -cN in {{big_text_file}} | grep {{pattern}} | pv -cN out > {{filtered_file}}
```

- Attach to an already running process and see its file reading progress:

```
pv -d {{PID}}
```

- Read an erroneous file, skip errors as `dd conv=sync,noerror` would:

```
pv -EE {{path/to/faulty_media}} > image.img
```

- Stop reading after reading specified amount of data, rate limit to 1K/s:

```
pv -L 1K -S {{maximum_file_size_to_be_read}}
```

pwd

Print name of current/working directory.

- Print the current directory:

`pwd`

- Print the current directory, and resolve all symlinks (i.e. show the "physical" path):

`pwd -P`

pycodestyle

A tool to check Python code against PEP 8 style conventions.

More information: <https://pycodestyle.readthedocs.io>.

- Check the style of a single file:

```
pycodestyle {{file.py}}
```

- Check the style of multiple files:

```
pycodestyle {{file1.py}} {{file2.py}} {{file3.py}}
```

- Show only the first occurrence of an error:

```
pycodestyle --first {{file.py}}
```

- Show the source code for each error:

```
pycodestyle --show-source {{file.py}}
```

- Show the specific PEP 8 text for each error:

```
pycodestyle --show-pep8 {{file.py}}
```

pyenv virtualenv

Create virtual environments based on one's installed Python distributions.

More information: <https://github.com/pyenv/pyenv-virtualenv>.

- Create a new Python 3.6.6 virtual environment:

```
pyenv virtualenv {{3.6.6}} {{virtualenv_name}}
```

- List all existing virtual environments:

```
pyenv virtualenvs
```

- Activate a virtual environment:

```
pyenv activate {{virtualenv_name}}
```

- Deactivate the virtual environment:

```
pyenv deactivate
```

pyenv

Switch between multiple versions of Python easily.

More information: <https://github.com/pyenv/pyenv>.

- List all available commands:

```
pyenv commands
```

- List all Python versions under the \${PYENV_ROOT}/versions directory:

```
pyenv versions
```

- Install a Python version under the \${PYENV_ROOT}/versions directory:

```
pyenv install {{2.7.10}}
```

- Uninstall a Python version under the \${PYENV_ROOT}/versions directory:

```
pyenv uninstall {{2.7.10}}
```

- Set Python version to be used globally in the current machine:

```
pyenv global {{2.7.10}}
```

- Set Python version to be used in the current directory and all directories below it:

```
pyenv local {{2.7.10}}
```

pyflakes

Checks Python source code files for errors.

More information: <https://pypi.org/project/pyflakes>.

- Check a single Python file:

```
pyflakes check {{path/to/file}}.py
```

- Check Python files in a specific directory:

```
pyflakes checkPath {{path/to/directory}}
```

- Check Python files in a directory recursively:

```
pyflakes checkRecursive {{path/to/directory}}
```

- Check all Python files found in multiple directories:

```
pyflakes iterSourceCode {{path/to/directory_1}} {{path/to/directory_2}}
```

pygmentize

Python-based syntax highlighter.

- Highlight file syntax and print to standard output (language is inferred from the file extension):

```
pygmentize {{file.py}}
```

- Explicitly set the language for syntax highlighting:

```
pygmentize -l {{javascript}} {{input_file}}
```

- List available lexers (processors for input languages):

```
pygmentize -L lexers
```

- Save output to a file in HTML format:

```
pygmentize -f html -o {{output_file.html}} {{input_file.py}}
```

- List available output formats:

```
pygmentize -L formatters
```

- Output an HTML file, with additional formatter options (full page, with line numbers):

```
pygmentize -f html -O "full,linenos=True" -o  
{{output_file.html}} {{input_file}}
```

python

Python language interpreter.

More information: <https://www.python.org>.

- Call a Python interactive shell (REPL):

```
python
```

- Execute script in a given Python file:

```
python {{script.py}}
```

- Execute script as part of an interactive shell:

```
python -i {{script.py}}
```

- Execute a Python expression:

```
python -c "{{expression}}"
```

- Run library module as a script (terminates option list):

```
python -m {{module}} {{arguments}}
```

- Install a package using pip:

```
python -m pip install {{package_name}}
```

- Interactively debug a Python script:

```
python -m pdb {{script.py}}
```

q

Execute SQL-like queries on .csv and .tsv files.

More information: <https://harelba.github.io/q>.

- Query .csv file by specifying the delimiter as ',':

```
q -d',' "SELECT * from {{path/to/file}}"
```

- Query .tsv file:

```
q -t "SELECT * from {{path/to/file}}"
```

- Query file with header row:

```
q -d{{delimiter}} -H "SELECT * from {{path/to/file}}"
```

- Read data from stdin; '-' in the query represents the data from `stdin`:

```
{{output}} | q "select * from -"
```

- Join two files (aliased as `f1` and `f2` in the example) on column `c1`, a common column:

```
q "SELECT * FROM {{path/to/file}} f1 JOIN {{path/to/other_file}} f2 ON (f1.c1 = f2.c1)"
```

- Format output using an output delimiter with an output header line (note: command will output column names based on the input file header or the column aliases overridden in the query):

```
q -D{{delimiter}} -O "SELECT {{column}} as {{alias}} from {{path/to/file}}"
```

qcp

Copy files using the default text editor to define the filenames.

More information: <https://www.nongnu.org/renameutils/>.

- Copy a single file (open an editor with the source filename on the left and the target filename on the right):

```
qcp {{source_file}}
```

- Copy multiple JPG files:

```
qcp {{*.jpg}}
```

- Copy files, but swap the positions of the source and the target filenames in the editor:

```
qcp --option swap {{*.jpg}}
```

qemu-img

Tool for Quick Emulator Virtual HDD image creation and manipulation.

- Create disk image with a specific size (in gigabytes):

```
qemu-img create {{image_name.img}} {{gigabytes}}G
```

- Show information about a disk image:

```
qemu-img info {{image_name.img}}
```

- Increase or decrease image size:

```
qemu-img resize {{image_name.img}} {{gigabytes}}G
```

- Dump the allocation state of every sector of the specified disk image:

```
qemu-img map {{image_name.img}}
```

- Convert a VMWare .vmdk disk image to a KVM .qcow2 disk image:

```
qemu-img convert -O qcow2 {{path/to/file/foo.vmdk}} {{path/to/file/foo.qcow2}}
```

qemu

Generic machine emulator and virtualizer.

Supports a large variety of CPU architectures.

More information: <https://www.qemu.org>.

- Boot from image emulating i386 architecture:

```
qemu-system-i386 -hda {{image_name.img}}
```

- Boot from image emulating x64 architecture:

```
qemu-system-x86_64 -hda {{image_name.img}}
```

- Boot QEMU instance with a live ISO image:

```
qemu-system-i386 -hda {{image_name.img}} -cdrom  
{{os_image.iso}} -boot d
```

- Specify amount of RAM for instance:

```
qemu-system-i386 -m 256 -hda image_name.img -cdrom os-  
image.iso -boot d
```

- Boot from physical device (e.g. from USB to test bootable medium):

```
qemu-system-i386 -hda /dev/{{storage_device}}
```

qmv

Move files and directories using the default text editor to define the filenames.

More information: <https://www.nongnu.org/renameutils/>.

- Move a single file (open an editor with the source filename on the left and the target filename on the right):

```
qmv {{source_file}}
```

- Move multiple JPG files:

```
qmv {{*.jpg}}
```

- Move multiple directories:

```
qmv -d {{path/to/directory1}} {{path/to/directory2}} {{path/to/directory3}}
```

- Move all files and directories inside a directory:

```
qmv --recursive {{path/to/directory}}
```

- Move files, but swap the positions of the source and the target filenames in the editor:

```
qmv --option swap {{*.jpg}}
```

qpdf

Versatile PDF transformation software.

More information: <https://github.com/qpdf/qpdf>.

- Extract pages 1-3, 5 and 6-10 from a PDF file and save them as another one:

```
qpdf --empty --pages {{input.pdf}} {{1-3,5,6-10}} -- {{output.pdf}}
```

- Merge (concatenate) all the pages of a list of PDF files and save the result as a new PDF:

```
qpdf --empty --pages {{file1.pdf}} {{file2.pdf}}  
{{file3.pdf}} -- {{output.pdf}}
```

- Merge (concatenate) given pages from a list of PDF files and save the result as a new PDF:

```
qpdf --empty --pages {{file1.pdf}} {{1,6-8}} {{file2.pdf}}  
{{3,4,5}} -- {{output.pdf}}
```

- Write each group of n pages to a separate output file with a given filename pattern:

```
qpdf --split-pages=n {{input.pdf}} {{out_%d.pdf}}
```

- Rotate certain pages of a pdf with a given angle:

```
qpdf --rotate={{90:2,4,6}} --rotate={{180:7-8}} {{input.pdf}}  
{{output.pdf}}
```

- Remove the password from a password protected file:

```
qpdf --password={{password}} --decrypt {{input.pdf}}  
{{output.pdf}}
```

qr

Generate QR codes in the terminal with ANSI VT-100 escape codes.

More information: <https://github.com/lincolnloop/python-qrcode/>.

- Generate a QR code:

```
echo "{{data}}" | qr
```

- Specify the error correction level (defaults to M):

```
echo "{{data}}" | qr --error-correction={{L|M|Q|H}}
```

qrencode

QR Code generator. Supports PNG and EPS.

More information: <https://fukuchi.org/works/qrencode>.

- Convert a string to a QR code and save to an output file:

```
qrencode -o {{path/to/output_file.png}} {{string}}
```

- Convert an input file to a QR code and save to an output file:

```
qrencode -o {{path/to/output_file.png}} -r {{path/to/ input_file}}
```

- Convert a string to a QR code and print it in terminal:

```
qrencode -t ansiutf8 {{string}}
```

- Convert input from pipe to a QR code and print it in terminal:

```
echo {{string}} | qrencode -t ansiutf8
```

quilt

Tool to manage a series of patches.

More information: <https://savannah.nongnu.org/projects/quilt>.

- Import an existing patch from a file:

```
quilt import {{path/to/filename.patch}}
```

- Create a new patch:

```
quilt new {{filename.patch}}
```

- Add a file to the current patch:

```
quilt add {{path/to/file}}
```

- After editing the file, refresh the current patch with the changes:

```
quilt refresh
```

- Apply all the patches in the series file:

```
quilt push -a
```

- Remove all applied patches:

```
quilt pop -a
```

quota

Display users' disk space usage and allocated limits.

- Show disk quotas in human readable units for the current user:

```
quota -s
```

- Verbose output (also display quotas on filesystems where no storage is allocated):

```
quota -v
```

- Quiet output (only display quotas on filesystems where usage is over quota):

```
quota -q
```

- Print quotas for the groups of which the current user is a member:

```
quota -g
```

- Show disk quotas for another user:

```
sudo quota -u {{username}}
```

r2e

Forwards RSS feeds to an email address.

Requires a configured **sendmail** or smtp setup.

More information: <https://github.com/rss2email/rss2email>.

- Create a new feed database that sends email to an email address:

```
r2e new {{email_address}}
```

- Subscribe to a feed:

```
r2e add {{feed_name}} {{feed_URI}}
```

- Send new stories to an email address:

```
r2e run
```

- List all feeds:

```
r2e list
```

- Delete a feed at a specified index:

```
r2e delete {{index}}
```

rabin2

Get information about binary files (ELF, PE, Java CLASS, Mach-O) - symbols, sections, linked libraries, etc.

Comes bundled with **radare2**.

- Display general information about a binary (architecture, type, endianness):

```
rabin2 -I {{path/to/binary}}
```

- Display linked libraries:

```
rabin2 -l {{path/to/binary}}
```

- Display symbols imported from libraries:

```
rabin2 -i {{path/to/binary}}
```

- Display strings contained in the binary:

```
rabin2 -z {{path/to/binary}}
```

- Display the output in JSON:

```
rabin2 -j -I {{path/to/binary}}
```

radare2

A set of reverse engineering tools.

More information: <https://radare.gitbooks.io/radare2book/>.

- Open a file in write mode without parsing the file format headers:

```
radare2 -nw {{path/to/binary}}
```

- Debug a program:

```
radare2 -d {{path/to/binary}}
```

- Run a script before entering the interactive CLI:

```
radare2 -i {{path/to/script.r2}} {{path/to/binary}}
```

- Show help text for any command in the interactive CLI:

```
> {{radare2_command}}?
```

- Run a shell command from the interactive CLI:

```
> !{{shell_command}}
```

- Dump raw bytes of current block to a file:

```
> pr > {{path/to/file.bin}}
```

rails db

Various database-related subcommands for Ruby on Rails.

- Create databases, load the schema, and initialize with seed data:

```
rails db:setup
```

- Access the database console:

```
rails db
```

- Create the databases defined in the current environment:

```
rails db:create
```

- Destroy the databases defined in the current environment:

```
rails db:drop
```

- Run pending migrations:

```
rails db:migrate
```

- View the status of each migration file:

```
rails db:migrate:status
```

- Rollback the last migration:

```
rails db:rollback
```

- Fill the current database with data defined in db/seeds.rb:

```
rails db:seed
```

rails generate

Generate new Rails templates in an existing project.

More information: https://guides.rubyonrails.org/command_line.html#rails-generate.

- List all available generators:

```
rails generate
```

- Generate a new model named Post with attributes title and body:

```
rails generate model {{Post}} {{title:string}} {{body:text}}
```

- Generate a new controller named Posts with actions index, show, new and create:

```
rails generate controller {{Posts}} {{index}} {{show}}  
{{new}} {{create}}
```

- Generate a new migration that adds a category attribute to an existing model called Post:

```
rails generate migration {{AddCategoryToPost}}  
{{category:string}}
```

- Generate a scaffold for a model named Post, predefining the attributes title and body:

```
rails generate scaffold {{Post}} {{title:string}}  
{{body:text}}
```

rails routes

List routes in a Rails application.

More information: <https://guides.rubyonrails.org/routing.html>.

- List all routes:

```
rails routes
```

- List all routes in an expanded format:

```
rails routes --expanded
```

- List routes partially matching URL helper method name, HTTP verb, or URL path:

```
rails routes -g {{posts_path|GET|/posts}}
```

- List routes that map to a specified controller:

```
rails routes -c {{posts|Posts|Blogs::PostsController}}
```

rails

A server-side MVC framework written in Ruby.

More information: https://guides.rubyonrails.org/command_line.html.

- Create a new rails project:

```
rails new "{{project_name}}"
```

- Start local server for current project on port 3000:

```
rails server
```

- Start local server for current project on a specified port:

```
rails server -p "{{port}}"
```

- Open console to interact with application from command line:

```
rails console
```

- Check current version of rails:

```
rails --version
```

rainbowstream

Terminal-based Twitter client supporting realtime tweetstream, trends, sending, search, favorites and user management.

Online help with **h**, up and down arrows for history, tab to auto-complete and 2-tab for suggestion.

More information: <https://github.com/orakaro/rainbowstream>.

- Open rainbowstream:

`rainbowstream`

- Show your timeline (optional number of tweets to display, default is 5):

`home [{num_of_last_tweets}]`

- Show profile of a given user:

`whois @{user}`

- Tweet the message as-is:

`t {{message}}`

- Retweet the tweet with given id (id is beside the time):

`rt {{tweet_id}}`

- Favorite the tweet with given id:

`fav {{tweet_id}}`

- Perform a search for a given word (with or without hashtag):

`s {{word}}`

ranger

Console file manager with VI key bindings.

More information: <https://github.com/ranger/ranger>.

- Launch ranger:

```
ranger
```

- Show only directories:

```
ranger --show-only-dirs
```

- Change the configuration directory:

```
ranger --confdir={{path/to/directory}}
```

- Change the data directory:

```
ranger --datadir={{path/to/directory}}
```

- Print CPU usage statistics on exit:

```
ranger --profile
```

rapper

The Raptor RDF parsing utility.

Part of the Raptor RDF Syntax Library.

More information: <http://librdf.org/raptor/rapper.html>.

- Convert an RDF/XML document to Turtle:

```
rapper -i rdfxml -o turtle {{file}}
```

- Count the number of triples in a Turtle file:

```
rapper -i turtle -c {{file}}
```

rar

The RAR archiver. Supports multi-volume archives that can be optionally self-extracting.

- Archive 1 or more files:

```
rar a {{path/to/archive_name.rar}} {{path/to/file1}} {{path/to/file2}} {{path/to/file3}}
```

- Archive a directory:

```
rar a {{path/to/archive_name.rar}} {{path/to/directory}}
```

- Split the archive into parts of equal size (50M):

```
rar a -v{{50M}} -R {{path/to/archive_name.rar}} {{path/to/file_or_directory}}
```

- Password protect the resulting archive:

```
rar a -p{{password}} {{path/to/archive_name.rar}} {{path/to/file_or_directory}}
```

- Encrypt file data and headers with password:

```
rar a -hp{{password}} {{path/to/archive_name.rar}} {{path/to/file_or_directory}}
```

- Use a specific compression level (0-5):

```
rar a -m{{compression_level}} {{path/to/archive_name.rar}} {{path/to/file_or_directory}}
```

rbac-lookup

Find roles and cluster roles attached to any user, service account or group name in your Kubernetes cluster.

More information: <https://github.com/reactiveops/rbac-lookup>.

- View all RBAC bindings:

```
rbac-lookup
```

- View RBAC bindings that match a given expression:

```
rbac-lookup {{search_term}}
```

- View all RBAC bindings along with the source role binding:

```
rbac-lookup -o wide
```

- View all RBAC bindings filtered by subject:

```
rbac-lookup -k {{user|group|serviceaccount}}
```

- View all RBAC bindings along with IAM roles (if you are using GKE):

```
rbac-lookup --gke
```

rbash

Restricted Bash shell.

Similar to the **bash** shell with some restrictions like changing directories with **cd**, setting/unsetting of PATH, ENV variables and others.

- Start rbash:

```
rbash
```

- Execute a command:

```
rbash -c "{{command}}"
```

- Run commands from a file:

```
rbash {{file.sh}}
```

- Print the version information of rbash:

```
rbash --version
```

rbenv

A tool to easily install Ruby versions and manage application environments.

More information: <https://github.com/rbenv/rbenv>.

- Install one or more space-separated versions of Ruby:

```
rbenv install {{version(s)}}
```

- Display a list of installed versions:

```
rbenv versions
```

- Use a specific version of Ruby across the whole system:

```
rbenv global {{version}}
```

- Use a specific version of Ruby for an application/project directory:

```
rbenv local {{version}}
```

- Show the currently selected Ruby version:

```
rbenv version
```

- Uninstall a version of Ruby:

```
rbenv uninstall {{version}}
```

- Display all ruby versions that contain the specified executable:

```
rbenv whence {{executable}}
```

rbt

RBTools is a set of command line tools for working with Review Board and RBCommons.

More information: <https://www.reviewboard.org/docs/rbtools/dev/>.

- Post changes to Review Board:

```
rbt post {{change_number}}
```

- Display the diff that will be sent to Review Board:

```
rbt diff
```

- Land a change in a local branch or on a review request:

```
rbt land {{branch_name}}
```

- Patch your tree with a change on a review request:

```
rbt patch {{review_request_id}}
```

- Set up RBTool to talk to a repository:

```
rbt setup-repo
```

rclone

CLI program to copy/sync/move files and directories to and from many cloud services.

More information: <https://rclone.org>.

- List contents of a directory on an rclone remote:

```
rclone lsf {{remote_name}}:{{path/to/directory}}
```

- Copy file or directory from local source to remote destination:

```
rclone copy {{path/to/source_file_or_directory}}  
{{remote_name}}:{{path/to/destination_directory}}
```

- Copy file or directory from remote source to local destination:

```
rclone copy {{remote_name}}:{{path/to/  
source_file_or_directory}} {{path/to/destination_directory}}
```

- Sync local source to remote destination, changing the destination only:

```
rclone sync {{path/to/file_or_directory}} {{remote_name}}:  
{{path/to/directory}}
```

- Move file or directory from local source to remote destination:

```
rclone move {{path/to/file_or_directory}} {{remote_name}}:  
{{path/to/directory}}
```

- Delete remote file or directory (use `--dry-run` to test, remove it to actually delete):

```
rclone --dry-run delete {{remote_name}}:{{path/to/  
file_or_directory}}
```

- Mount rclone remote (experimental):

```
rclone mount {{remote_name}}:{{path/to/directory}} {{path/to/  
mount_point}}
```

- Unmount rclone remote if CTRL-C fails (experimental):

```
fusermount -u {{path/to/mount_point}}
```

rdfind

Find files with duplicate content and get rid of them.

More information: <https://rdfind.pauldreik.se>.

- Identify all duplicates in a given directory and output a summary:

```
rdfind -dryrun true {{path/to/directory}}
```

- Replace all duplicates with hardlinks:

```
rdfind -makehardlinks true {{path/to/directory}}
```

- Replace all duplicates with symlinks/soft links:

```
rdfind -makesymlinks true {{path/to/directory}}
```

- Delete all duplicates and do not ignore empty files:

```
rdfind -deleteduplicates true -ignoreempty false {{path/to/directory}}
```

read

BASH builtin for retrieving data from standard input.

- Store data that you type from the keyboard:

```
read {{variable}}
```

- Store each of the next lines you enter as values of an array:

```
read -a {{array}}
```

- Enable backspace and GNU readline hotkeys when entering input with read:

```
read -e {{variable}}
```

- Specify the number of maximum characters to be read:

```
read -n {{character_count}} {{variable}}
```

- Use a specific character as a delimiter instead of a new line:

```
read -d {{new_delimiter}} {{variable}}
```

- Do not let backslash () act as an escape character:

```
read -r {{variable}}
```

- Display a prompt before the input:

```
read -p "{{Enter your input here: }}" {{variable}}
```

- Do not echo typed characters (silent mode):

```
read -s {{variable}}
```

readlink

Follow symlinks and get symlink information.

- Get the actual file to which the symlink points:

```
readlink {{filename}}
```

- Get the absolute path to a file:

```
readlink -f {{filename}}
```

realpath

Display the resolved absolute path for a file or directory.

- Display the absolute path for a file or directory:

```
realpath {{path/to/file_or_directory}}
```

- Require all path components to exist:

```
realpath --canonicalize-existing {{path/to/
file_or_directory}}
```

- Resolve ".." components before symlinks:

```
realpath --logical {{path/to/file_or_directory}}
```

- Disable symlink expansion:

```
realpath --no-symlinks {{path/to/file_or_directory}}
```

- Suppress error messages:

```
realpath --quiet {{path/to/file_or_directory}}
```

recsel

Print records from a recfile: a human-editable, plain text database.

More information: <https://www.gnu.org/software/recutils/manual/recutils.html>.

- Extract name and version field:

```
recsel -p name,version {{data.rec}}
```

- Use "~" to match a string with a given regular expression:

```
recsel -e "{{field_name}} ~ '{{pattern_regex}}' {{data.rec}}"
```

- Use a predicate to match a name and a version:

```
recsel -e "name ~ '{{pattern_regex}}' && version ~  
'{{pattern_regex}}'" {{data.rec}}
```

rector

An automated tool for updating and refactoring PHP 5.3+ code.

More information: <https://github.com/rectorphp/rector>.

- Process a specific directory:

```
rector process {{path/to/directory}}
```

- Process a directory without applying changes (dry run):

```
rector process {{path/to/directory}} --dry-run
```

- Process a directory and apply coding standards:

```
rector process {{path/to/directory}} --with-style
```

- Display a list of available levels:

```
rector levels
```

- Process a directory with a specific level:

```
rector process {{path/to/directory}} --level {{level_name}}
```

redis-cli

Opens a connection to a Redis server.

More information: <https://redis.io/topics/rediscli>.

- Connect to the local server:

```
redis-cli
```

- Connect to a remote server on the default port (6379):

```
redis-cli -h {{host}}
```

- Connect to a remote server specifying a port number:

```
redis-cli -h {{host}} -p {{port}}
```

- Connect to a remote server specifying an URI:

```
redis-cli -u {{uri}}
```

- Specify a password:

```
redis-cli -a {{password}}
```

- Execute Redis command:

```
redis-cli {{redis_command}}
```

redis-server

Persistent key-value database.

More information: <https://redis.io>.

- Start Redis server, using the default port (6379), and write logs to `stdout`:

```
redis-server
```

- Start Redis server, using the default port, as a background process:

```
redis-server --daemonize yes
```

- Start Redis server, using the specified port, as a background process:

```
redis-server --port {{port}} --daemonize yes
```

- Start Redis server with a custom configuration file:

```
redis-server {{path/to/redis.conf}}
```

- Start Redis server with verbose logging:

```
redis-server --loglevel {{warning|notice|verbose|debug}}
```

redshift

Adjust the color temperature of your screen according to your surroundings.

More information: <https://jonls.dk/redshift>.

- Turn on Redshift with 5700K temperature during day and 3600K at night:

```
redshift -t {{5700}}:{{3600}}
```

- Turn on Redshift with a manually-specified custom location:

```
redshift -l {{latitude}}:{{longitude}}
```

- Turn on Redshift with 70% screen brightness during day and 40% brightness at night:

```
redshift -b {{0.7}}:{{0.4}}
```

- Turn on Redshift with custom gamma levels (between 0 and 1):

```
redshift -g {{red}}:{{green}}:{{blue}}
```

- Turn on Redshift with a constant unchanging color temperature:

```
redshift -0 {{temperature}}
```

reflac

Recompress FLAC files in-place while preserving metadata.

More information: <https://github.com/chungy/reflac>.

- Recompress a directory of FLAC files:

```
reflac {{path/to/directory}}
```

- Enable maximum compression (very slow):

```
reflac --best {{path/to/directory}}
```

- Display filenames as they are processed:

```
reflac --verbose {{path/to/directory}}
```

- Recurse into subdirectories:

```
reflac --recursive {{path/to/directory}}
```

- Preserve file modification times:

```
reflac --preserve {{path/to/directory}}
```

reflex

Tool to watch a directory and rerun a command when certain files change.

More information: <https://github.com/cespare/reflex>.

- Rebuild with `make` if any file changes:

```
reflex make
```

- Compile and run Go application if any .go file changes:

```
reflex --regex='{{\.\go\$}}' {{go run .}}
```

- Ignore a directory when watching for changes:

```
reflex --inverse-regex='{{^dir/}}' {{command}}
```

- Run command when reflex starts and restarts on file changes:

```
reflex --start-service=true {{command}}
```

- Substitute the filename that changed in:

```
reflex -- echo {}
```

renice

Alters the scheduling priority/nicenesses of one or more running processes.

Niceness values range from -20 (most favorable to the process) to 19 (least favorable to the process).

- Change priority of a running process:

```
renice -n {{niceness_value}} -p {{pid}}
```

- Change priority of all processes owned by a user:

```
renice -n {{niceness_value}} -u {{user}}
```

- Change priority of all processes that belong to a process group:

```
renice -n {{niceness_value}} --pgrp {{process_group}}
```

repren

Multi-pattern string replacement and file renaming tool.

More information: <https://github.com/jlevy/repren>.

- Do a dry-run renaming a directory of pngs with a literal string replacement:

```
repren --dry-run --rename --literal --from '{{find_string}}'  
--to '{{replacement_string}}' {{*.png}}
```

- Do a dry-run renaming a directory of jpegs with a regular expression:

```
repren --rename --dry-run --from '{{regular_expression}}'  
--to '{{replacement_string}}' {{*.jpg}} {{*.jpeg}}
```

- Do a find-and-replace on the contents of a directory of csv files:

```
repren --from '{{([0-9]+) example_string}}' --to  
'{{replacement_string \1}}' {{*.csv}}
```

- Do both a find-and-replace and a rename operation at the same time, using a pattern file:

```
repren --patterns {{path/to/patfile.ext}} --full {{*.txt}}
```

- Do a case-insensitive rename:

```
repren --rename --insensitive --patterns {{path/to/  
patfile.ext}} *
```

restic

A backup program that aims to be fast, secure and efficient.

More information: <https://restic.net>.

- Initialize a backup repository in the specified local directory:

```
restic init -r {{path/to/repository}}
```

- Backup a directory to the repository:

```
restic -r {{path/to/repository}} backup {{path/to/directory}}
```

- Show backup snapshots currently stored in the repository:

```
restic -r {{path/to/repository}} snapshots
```

- Restore a specific backup snapshot to a target directory:

```
restic -r {{path/to/repository}} restore {{snapshot_id}}  
{{path/to/target}}
```

- Restore a specific path from a specific backup to a target directory:

```
restic -r {{path/to/repository}} --include {{path/to/  
restore}} --target {{path/to/target}} restore {{snapshot_id}}
```

- Clean up the repository and keep only the most recent snapshot of each unique backup:

```
restic forget --keep-last 1 --prune
```

rev

Reverse a line of text.

- Reverse the text string "hello":

```
echo "hello" | rev
```

- Reverse an entire file and print to **stdout**:

```
rev {{file}}
```

ripgrep

A recursive line-oriented CLI search tool.

Aims to be a faster alternative to **grep**.

More information: <https://github.com/BurntSushi/ripgrep>.

- Recursively search the current directory for a regex pattern:

```
rg {{pattern}}
```

- Search for pattern including all .gitignored and hidden files:

```
rg -uu {{pattern}}
```

- Search for a pattern only in a certain filetype (e.g., html, css, etc.):

```
rg -t {{filetype}} {{pattern}}
```

- Search for a pattern only in a subset of directories:

```
rg {{pattern}} {{set_of_subdirs}}
```

- Search for a pattern in files matching a glob (e.g., README.*):

```
rg {{pattern}} -g {{glob}}
```

- Only list matched files (useful when piping to other commands):

```
rg --files-with-matches {{pattern}}
```

- Show lines that do not match the given pattern:

```
rg --invert-match {{pattern}}
```

- Search a literal string pattern:

```
rg -F {{string}}
```

rm

Remove files or directories.

- Remove files from arbitrary locations:

```
rm {{path/to/file}} {{path/to/another/file}}
```

- Recursively remove a directory and all its subdirectories:

```
rm -r {{path/to/directory}}
```

- Forcibly remove a directory, without prompting for confirmation or showing error messages:

```
rm -rf {{path/to/directory}}
```

- Interactively remove multiple files, with a prompt before every removal:

```
rm -i {{file(s)}}
```

- Remove files in verbose mode, printing a message for each removed file:

```
rm -v {{path/to/directory/*}}
```

rmdir

Removes a directory.

- Remove directory, provided it is empty. Use `rm -r` to remove non-empty directories:

```
rmdir {{path/to/directory}}
```

- Remove the target and its parent directories (useful for nested dirs):

```
rmdir -p {{path/to/directory}}
```

roave-backward-compatibility-check

A tool that can be used to verify backward compatibility breaks between two versions of a PHP library.

More information: <https://github.com/Roave/BackwardCompatibilityCheck>.

- Check for breaking changes since the last tag:

```
roave-backward-compatibility-check
```

- Check for breaking changes since a specific tag:

```
roave-backward-compatibility-check --from={{git_reference}}
```

- Check for breaking changes between the last tag and a specific reference:

```
roave-backward-compatibility-check --to={{git_reference}}
```

- Check for breaking changes and output to markdown:

```
roave-backward-compatibility-check --format=markdown > {{results.md}}
```

robo

PHP task runner.

More information: <https://robo.li/>.

- List available commands:

```
robo list
```

- Run a specific command:

```
robo {{foo}}
```

- Simulate running a specific command:

```
robo --simulate {{foo}}
```

roll

Rolls a user-defined dice sequence.

- Roll 3 6-sided dice and sums the results:

```
roll {{3d}}
```

- Roll 1 8-sided die, add 3 and sum the results:

```
roll {{d8 + 3}}
```

- Roll 4 6-sided dice, keep the 3 highest results and sum the results:

```
roll {{4d6h3}}
```

- Roll 2 12-sided dice 2 times and show every roll:

```
roll --verbose {{2{2d12}}}
```

- Roll 2 20-sided dice until the result is bigger than 10:

```
roll "{{2d20>10}}"
```

- Roll 2 5-sided dice 3 times and show the total sum:

```
roll --sum-series {{3{2d5}}}
```

route

Use route cmd to set the route table.

- Display the information of route table:

```
route -n
```

- Add route rule:

```
sudo route add -net {{ip_address}} netmask  
{{netmask_address}} gw {{gw_address}}
```

- Delete route rule:

```
sudo route del -net {{ip_address}} netmask  
{{netmask_address}} dev {{gw_address}}
```

rr

Debugging tool designed to record and replay program execution.

More information: <https://rr-project.org/>.

- Record an application:

```
rr record {{path/to/binary --arg1 --arg2}}
```

- Replay latest recorded execution:

```
rr replay
```

rspec

Behavior-driven development testing framework written in Ruby to test Ruby code.

More information: <https://rspec.info>.

- Initialise an .rspec config and a spec helper file:

```
rspec --init
```

- Run all tests:

```
rspec
```

- Run a specific directory of tests:

```
rspec {{path/to/directory}}
```

- Run a specific test file:

```
rspec {{path/to/file}}
```

- Run multiple test files:

```
rspec {{path/to/file1}} {{path/to/file2}}
```

- Run a specific test in a file (e.g. the test starts on line 83):

```
rspec {{path/to/file}}:{{83}}
```

- Run specs with a specific seed:

```
rspec --seed {{seed_number}}
```

rsstail

tail for RSS feeds.

More information: <https://github.com/gvalkov/rsstail.py>.

- Show the feed of a given url and wait for new entries appearing at the bottom:

```
rsstail -u {{url}}
```

- Show the feed in reverse chronological order (newer at the bottom):

```
rsstail -r -u {{url}}
```

- Include publication date and link:

```
rsstail -pl -u {{url}}
```

- Set update interval:

```
rsstail -u {{url}} -i {{interval_in_seconds}}
```

- Show feed and exit:

```
rsstail -l -u {{url}}
```

rsync

Transfer files either to or from a remote host (not between two remote hosts).

Can transfer single files, or multiple files matching a pattern.

- Transfer file from local to remote host:

```
rsync {{path/to/local_file}} {{remote_host}}:{{path/to/remote_directory}}
```

- Transfer file from remote host to local:

```
rsync {{remote_host}}:{{path/to/remote_file}} {{path/to/local_directory}}
```

- Transfer file in [a]rchive (to preserve attributes) and compressed ([z]ipped) mode with [v]erbose and [h]uman-readable [P]rogress:

```
rsync -azvhP {{path/to/local_file}} {{remote_host}}:{{path/to/remote_directory}}
```

- Transfer a directory and all its children from a remote to local:

```
rsync -r {{remote_host}}:{{path/to/remote_directory}} {{path/to/local_directory}}
```

- Transfer directory contents (but not the directory itself) from a remote to local:

```
rsync -r {{remote_host}}:{{path/to/remote_directory}}/{{path/to/local_directory}}
```

- Transfer a directory [r]ecursively, in [a]rchive to preserve attributes, resolving contained soft[li]nks , and ignoring already transferred files [u]nless newer:

```
rsync -rauL {{remote_host}}:{{path/to/remote_file}} {{path/to/local_directory}}
```

- Transfer file over SSH and delete local files that do not exist on remote host:

```
rsync -e ssh --delete {{remote_host}}:{{path/to/remote_file}} {{path/to/local_file}}
```

- Transfer file over SSH using a different port than the default and show global progress:

```
rsync -e 'ssh -p {{port}}' --info=progress2 {{remote_host}}:{{path/to/remote_file}} {{path/to/local_file}}
```

rtmpdump

A tool to dump media content streamed over the RTMP protocol.

More information: <http://rtmpdump.mplayerhq.hu/>.

- Download a file:

```
rtmpdump --rtmp {{rtmp://example.com/path/to/video}} -o  
{{file.ext}}
```

- Download a file from a Flash player:

```
rtmpdump --rtmp {{rtmp://example.com/path/to/video}} --swfVfy  
{{http://example.com/player}} --flashVer "{{LNX 10,0,32,18}}"  
-o {{file.ext}}
```

- Specify connection parameters if they are not detected correctly:

```
rtmpdump --rtmp {{rtmp://example.com/path/to/video}} --app  
{{app_name}} --playpath {{path/to/video}} -o {{file.ext}}
```

- Download a file from a server that requires a referrer:

```
rtmpdump --rtmp {{rtmp://example.com/path/to/video}} --  
pageUrl {{http://example.com/webpage}} -o {{file.ext}}
```

rtv

Reddit Terminal Viewer.

Use arrow keys to navigate. Right and Left to view and return from a submission, respectively.

More information: <https://github.com/michael-lazar/rtv>.

- Open the front page:

`/front`

- Open a subreddit:

`/r/{{subreddit_name}}`

- Expand/collapse comments:

`[space]`

- Open link:

`0`

- Login:

`u`

- Open the help screen:

`?`

ruby

Ruby programming language interpreter.

More information: <https://www.ruby-lang.org>.

- Open an Interactive Ruby Shell (REPL):

`irb`

- Execute a Ruby script:

`ruby {{script.rb}}`

- Execute a single Ruby command in the command line:

`ruby -e {{command}}`

- Check for syntax errors on a given Ruby script:

`ruby -c {{script.rb}}`

- Show the version of Ruby you are using:

`ruby -v`

rustc

The Rust compiler.

Processes, compiles and links Rust language source files.

More information: <https://doc.rust-lang.org/rustc>.

- Compile a single file:

```
rustc {{file.rs}}
```

- Compile with high optimization:

```
rustc -O {{file.rs}}
```

- Compile with debugging information:

```
rustc -g {{file.rs}}
```

- Compile with architecture-specific optimizations for the current CPU:

```
rustc -C target-cpu=native {{path/to/file.rs}}
```

- Display architecture-specific optimizations for the current CPU:

```
rustc -C target-cpu=native --print cfg
```

- Display target list:

```
rustc --print target-list
```

- Compile for a specific target:

```
rustc --target {{target_triple}} {{path/to/file.rs}}
```

rustfmt

Tool for formatting Rust source code.

More information: <https://github.com/rust-lang/rustfmt>.

- Format a file, overwriting the original file in-place:

```
rustfmt {{source.rs}}
```

- Check a file for formatting and display any changes on the console:

```
rustfmt --check {{source.rs}}
```

- Backup any modified files before formatting (the original file is renamed with a .bk extension):

```
rustfmt --backup {{source.rs}}
```

rustup

Rust toolchain installer.

Install, manage, and update Rust toolchains.

More information: <https://github.com/rust-lang/rustup.rs>.

- Install the nightly toolchain for your system:

```
rustup install nightly
```

- Switch the default toolchain to nightly so that the `cargo` and `rustc` commands will use it:

```
rustup default nightly
```

- Use the nightly toolchain when inside the current project, but leave global settings unchanged:

```
rustup override set nightly
```

- Update all toolchains:

```
rustup update
```

- List installed toolchains:

```
rustup show
```

- Run cargo build with a certain toolchain:

```
rustup run {{toolchain_name}} cargo build
```

rvm

A tool for easily installing, managing, and working with multiple ruby environments.

More information: <https://rvm.io>.

- Install one or more space-separated versions of Ruby:

```
rvm install {{version(s)}}
```

- Display a list of installed versions:

```
rvm list
```

- Use a specific version of Ruby:

```
rvm use {{version}}
```

- Set the default Ruby version:

```
rvm --default use {{version}}
```

- Upgrade a version of Ruby to a new version:

```
rvm upgrade {{current_version}} {{new_version}}
```

- Uninstall a version of Ruby and keep its sources:

```
rvm uninstall {{version}}
```

- Remove a version of Ruby and its sources:

```
rvm remove {{version}}
```

- Show specific dependencies for your OS:

```
rvm requirements
```

S

Web search from the terminal.

- Search for a query on Google(default provider):

```
s {{query}}
```

- List all providers:

```
s --list-providers
```

- Search for a query with a given provider:

```
s --provider {{provider}} {{query}}
```

- Use a specified binary to perform the search query:

```
s --binary "{{binary}} {{arguments}}" {{query}}
```

safe

A CLI to interact with HashiCorp Vault.

More information: <https://github.com/starkandwayne/safe>.

- Add a safe target:

```
safe target {{vault_addr}} {{target_name}}
```

- Authenticate the CLI client against the Vault server, using an authentication token:

```
safe auth {{authentication_token}}
```

- Print the environment variables describing the current target:

```
safe env
```

- Display a tree hierarchy of all reachable keys for a given path:

```
safe tree {{path}}
```

- Move a secret from one path to another:

```
safe move {{old/path/to/secret}} {{new/path/to/secret}}
```

- Generate a new 2048-bit SSH keypair and store it:

```
safe ssh {{2048}} {{path/to/secret}}
```

- Set non-sensitive keys for a secret:

```
safe set {{path/to/secret}} {{key}}={{value}}
```

- Set auto-generated password in a secret:

```
safe gen {{path/to/secret}} {{key}}
```

sails

Sails.js is a realtime enterprise level MVC framework built on top of Node.js.

More information: <https://sailsjs.com>.

- Start Sails:

```
sails lift
```

- Create new Sails project:

```
sails new {{projectName}}
```

- Generate Sails API:

```
sails generate {{name}}
```

- Generate Sails Controller:

```
sails generate controller {{name}}
```

- Generate Sails Model:

```
sails generate model {{name}}
```

salt-call

Invoke salt locally on a salt minion.

More information: <https://docs.saltstack.com/ref/cli/salt-call.html>.

- Perform a highstate on this minion:

```
salt-call state.highstate
```

- Perform a highstate dry-run, compute all changes but don't actually perform them:

```
salt-call state.highstate test=true
```

- Perform a highstate with verbose debugging output:

```
salt-call -l debug state.highstate
```

- List this minion's grains:

```
salt-call grains.items
```

salt-key

Manages salt minion keys on the salt master.

Needs to be run on the salt master, likely as root or with sudo.

More information: <https://docs.saltstack.com/ref/cli/salt-key.html>.

- List all accepted, unaccepted and rejected minion keys:

`salt-key -L`

- Accept a minion key by name:

`salt-key -a {{MINION_ID}}`

- Reject a minion key by name:

`salt-key -r {{MINION_ID}}`

- Print fingerprints of all public keys:

`salt-key -F`

salt-run

Frontend for executing salt-runners on minions.

More information: <https://docs.saltstack.com/ref/cli/salt-run.html>.

- Show status of all minions:

```
salt-run manage.status
```

- Show all minions which are disconnected:

```
salt-run manage.up
```

salt

Execute commands and assert state on remote salt minions.

More information: <https://docs.saltstack.com/ref/cli/salt.html>.

- List connected minions:

```
salt '*' test.ping
```

- Execute a highstate on all connected minions:

```
salt '*' state.highstate
```

- Upgrade packages using the OS package manager (apt, yum, brew) on a subset of minions:

```
salt '*.example.com' pkg.upgrade
```

- Execute an arbitrary command on a particular minion:

```
salt '{{minion_id}}' cmd.run "ls "
```

samtools

Tools for handling high-throughput sequencing (genomics) data.

Used for reading/writing/editing/indexing/viewing of data in SAM/BAM/CRAM format.

- Convert a SAM input file to BAM stream and save to file:

```
samtools view -S -b {{input.sam}} > {{output.bam}}
```

- Take input from stdin (-) and print the SAM header and any reads overlapping a specific region to **stdout**:

```
{{other_command}} | samtools view -h - chromosome:start-end
```

- Sort file and save to BAM (the output format is automatically determined from the output file's extension):

```
samtools sort {{input}} -o {{output.bam}}
```

- Index a sorted BAM file (creates {{sorted_input.bam.bai}}):

```
samtools index {{sorted_input.bam}}
```

- Print alignment statistics about a file:

```
samtools flagstat {{sorted_input}}
```

- Count alignments to each index (chromosome / contig):

```
samtools idxstats {{sorted_indexed_input}}
```

- Merge multiple files:

```
samtools merge {{output}} {{input1 input2 ...}}
```

- Split input file according to read groups:

```
samtools split {{merged_input}}
```

SASS

Converts SCSS or Sass files to CSS.

More information: <https://sass-lang.com/documentation/cli/dart-sass>.

- Convert a SCSS or Sass file to CSS and print out the result:

```
sass {{inputfile.scss|inputfile.sass}}
```

- Convert a SCSS or Sass file to CSS and save the result to a file:

```
sass {{inputfile.scss|inputfile.sass}} {{outputfile.css}}
```

- Watch a SCSS or Sass file for changes and output or update the CSS file with same filename:

```
sass --watch {{inputfile.scss|inputfile.sass}}
```

- Watch a SCSS or Sass file for changes and output or update the CSS file with the given filename:

```
sass --watch {{inputfile.scss|inputfile.sass}}:  
{{outputfile.css}}
```

satis

The command-line utility for the Satis static Composer repository.

More information: <https://github.com/composer/satis>.

- Initialise a Satis configuration:

```
satis init {{satis.json}}
```

- Add a VCS repository to the Satis configuration:

```
satis add {{repository_url}}
```

- Build the static output from the configuration:

```
satis build {{satis.json}} {{path/to/output_directory}}
```

- Build the static output by updating only the specified repository:

```
satis build --repository-url {{repository_url}}  
{{satis.json}} {{path/to/output_directory}}
```

- Remove useless archive files:

```
satis purge {{satis.json}} {{path/to/output_directory}}
```

sbt

Build tool for Scala and Java projects.

More information: <https://www.scala-sbt.org/1.0/docs/index.html>.

- Start the SBT interactive shell (REPL):

```
sbt
```

- Create a new Scala project from an existing Giter8 template hosted on GitHub:

```
sbt new {{scala/hello-world.g8}}
```

- Use the specified version of sbt:

```
sbt -sbt-version {{version}}
```

- Use a specific jar file as the sbt launcher:

```
sbt -sbt-jar {{path}}
```

- List all sbt options:

```
sbt -h
```

SC-IM

A curses based, vim-like spreadsheet calculator.

Use `hjkl` or arrow keys to navigate.

More information: <https://github.com/andmarti1424/sc-im>.

- Start SC-IM:

`scim {{filename}}.csv`

- Enter a string into the current cell:

`< or >`

- Enter a numeric constant into the current cell:

`=`

- Edit string in the current cell:

`E`

- Edit number in the current cell:

`e`

- Center align the current cell:

`|`

scala

Scala application launcher and interactive interpreter.

More information: <https://scala-lang.org>.

- Start a Scala interactive shell (REPL):

`scala`

- Execute a Scala script:

`scala {{script.scala}}`

- Execute a .jar program:

`scala {{filename.jar}}`

- Execute a single Scala command in the command line:

`scala -e {{command}}`

SCC

Tool written in Go that counts lines of code.

More information: <https://github.com/boyter/scc>.

- Print lines of code in the current directory:

```
scc
```

- Print lines of code in the target directory:

```
scc {{path/to/directory}}
```

- Display output for every file:

```
scc --by-file
```

- Display output using a specific output format (defaults to `tabular`):

```
scc --format {{tabular|wide|json|csv|cloc-yaml|html|html-table}}
```

- Only count files with specific file extensions:

```
scc --include-ext {{go, java, js}}
```

- Exclude directories from being counted:

```
scc --exclude-dir {{.git,.hg}}
```

- Display output and sort by column (defaults to by files):

```
scc --sort {{files|name|lines|blanks|code|comments|complexity}}
```

- Print help for scc:

```
scc -h
```

scheme

MIT Scheme language interpreter and REPL (interactive shell).

More information: <https://www.gnu.org/software/mit-scheme>.

- Open an interactive shell (REPL):

```
scheme
```

- Run a scheme program (with no REPL output):

```
scheme --quiet < {{script.scm}}
```

- Load a scheme program into the REPL:

```
scheme --load {{script.scm}}
```

- Load scheme expressions into the REPL:

```
scheme --eval "{{(define foo 'x)}}
```

- Open the REPL in quiet mode:

```
scheme --quiet
```

scp

Secure copy.

Copy files between hosts using Secure Copy Protocol over SSH.

- Copy a local file to a remote host:

```
scp {{path/to/local_file}} {{remote_host}}:{{path/to/remote_file}}
```

- Copy a file from a remote host to a local directory:

```
scp {{remote_host}}:{{path/to/remote_file}} {{path/to/local_directory}}
```

- Recursively copy the contents of a directory from a remote host to a local directory:

```
scp -r {{remote_host}}:{{path/to/remote_directory}} {{path/to/local_directory}}
```

- Copy a file between two remote hosts transferring through the local host:

```
scp -3 {{host1}}:{{path/to/remote_file}} {{host2}}:{{path/to/remote_directory}}
```

- Use a specific username when connecting to the remote host:

```
scp {{path/to/local_file}} {{remote_username}}@{{remote_host}}:{{path/to/remote_directory}}
```

- Use a specific ssh private key for authentication with the remote host:

```
scp -i {{~/.ssh/private_key}} {{local_file}} {{remote_host}}:{{path/remote_file}}
```

scrapy

Web-crawling framework.

More information: <https://scrapy.org>.

- Create a project:

```
scrapy startproject {{project_name}}
```

- Create a spider (in project directory):

```
scrapy genspider {{spider_name}} {{website_domain}}
```

- Edit spider (in project directory):

```
scrapy edit {{spider_name}}
```

- Run spider (in project directory):

```
scrapy crawl {{spider_name}}
```

- Fetch a webpage as scrapy sees it and print source in `stdout`:

```
scrapy fetch {{url}}
```

- Open a webpage in the default browser as scrapy sees it (disable javascript for extra fidelity):

```
scrapy view {{url}}
```

- Open scrapy shell for url, which allows interaction with the page source in python shell (or ipython if available):

```
scrapy shell {{url}}
```

scrcpy

Display and control your Android device on a desktop.

More information: <https://github.com/Genymobile/scrcpy>.

- Display a mirror of a connected device:

```
scrcpy
```

- Display a mirror of a specific device based on its ID or IP address (find it under the `adb devices` command):

```
scrcpy --serial {{0123456789abcdef|192.168.0.1:5555}}
```

- Start display in fullscreen mode:

```
scrcpy --fullscreen
```

- Rotate the display screen. Each incremental value adds a 90 degree counterclockwise rotation:

```
scrcpy --rotation {{0|1|2|3}}
```

- Show touches on physical device:

```
scrcpy --show-touches
```

- Record display screen:

```
scrcpy --record {{path/to/file.mp4}}
```

- Set target directory for pushing files to device by drag and drop (non-APK):

```
scrcpy --push-target {{path/to/directory}}
```

screen

Hold a session open on a remote server. Manage multiple windows with a single SSH connection.

- Start a new screen session:

```
screen
```

- Start a new named screen session:

```
screen -S {{session_name}}
```

- Start a new daemon and log the output to screenlog.x:

```
screen -dmLS {{session_name}} {{command}}
```

- Show open screen sessions:

```
screen -ls
```

- Reattach to an open screen:

```
screen -r {{session_name}}
```

- Detach from inside a screen:

```
Ctrl + A, D
```

- Kill the current screen session:

```
Ctrl + A, K
```

- Kill a detached screen:

```
screen -X -S {{session_name}} quit
```

screenfetch

Display system information.

More information: <https://github.com/KittyKatt/screenFetch>.

- Start screenfetch:

```
screenfetch
```

- Take a screenshot (requires 'scrot'):

```
screenfetch -s
```

- Specify distribution logo:

```
screenfetch -A '{{distribution_name}}'
```

- Specify distribution logo and text:

```
screenfetch -D '{{distribution_name}}'
```

- Strip all color:

```
screenfetch -N
```

script

Make a typescript file of a terminal session.

- Start recording in file named "typescript":

```
script
```

- Stop recording:

```
exit
```

- Start recording in a given file:

```
script {{logfile.log}}
```

- Append to an existing file:

```
script -a {{logfile.log}}
```

- Execute quietly without start and done messages:

```
script -q {{logfile.log}}
```

sd

Intuitive find & replace CLI.

- Trim some whitespace using regex:

```
{echo 'lorem ipsum 23 '} | sd '\s+$' ''
```

- Replace words using capture groups:

```
{echo 'cargo +nightly watch'} | sd '(\w+)\s+\+(\w+)\s+(\w+)' 'cmd: $1, channel: $2, subcmd: $3'
```

- Find and replace in a file printing the result to stdout:

```
sd -p {'window.fetch'} {'fetch'} {http.js}
```

- Find and replace across a project changing each file in place:

```
sd {'from "react"} {'from "preact"} $(find . -type f)
```

sdiff

Compare the differences between and optionally merge 2 files.

- Compare 2 files:

```
sdiff {{path/to/file1}} {{path/to/file2}}
```

- Compare 2 files, ignoring all tabs and whitespace:

```
sdiff -W {{path/to/file1}} {{path/to/file2}}
```

- Compare 2 files, ignoring whitespace at the end of lines:

```
sdiff -Z {{path/to/file1}} {{path/to/file2}}
```

- Compare 2 files in a case-insensitive manner:

```
sdiff -i {{path/to/file1}} {{path/to/file2}}
```

- Compare and then merge, writing the output to a new file:

```
sdiff -o {{path/to/merged_file}} {{path/to/file1}} {{path/to/file2}}
```

sdk

Tool for managing parallel versions of multiple Software Development Kits.

Supports Java, Groovy, Scala, Kotlin, Gradle, Maven, Vert.x and many others.

More information: <https://sdkman.io/usage>.

- Install a specific version of Gradle:

```
 sdk install {{gradle}} {{gradle_version}}
```

- Switch to a specific version of Gradle:

```
 sdk use {{gradle}} {{gradle_version}}
```

- Check current Gradle version:

```
 sdk current {{gradle}}
```

- List all Software Development Kits available to install:

```
 sdk list
```

- Update Gradle to the latest version:

```
 sdk upgrade {{gradle}}
```

- Uninstall a particular version of Gradle:

```
 sdk rm {{gradle}} {{gradle_version}}
```

SDK Manager

Tool to install packages for the Android SDK.

More information: <https://developer.android.com/studio/command-line/sdkmanager>.

- List available packages:

```
 sdkmanager --list
```

- Install a package:

```
 sdkmanager {{package}}
```

- Update every installed package:

```
 sdkmanager --update
```

- Uninstall a package:

```
 sdkmanager --uninstall {{package}}
```

secrethub

A tool to keep secrets out of config files.

More information: <https://secrethub.io>.

- Print a secret to stdout:

```
secrethub read {{path/to/secret}}
```

- Generate a random value and store it as a new or updated secret:

```
secrethub generate {{path/to/secret}}
```

- Store a value from the clipboard as a new or updated secret:

```
secrethub write --clip {{path/to/secret}}
```

- Store a value supplied on stdin as a new or updated secret:

```
echo "{{secret_value}}" | secrethub write {{path/to/secret}}
```

- Audit a repository or secret:

```
secrethub audit {{path/to/repo_or_secret}}
```

security-checker

Check if a PHP application uses dependencies with known security vulnerabilities.

More information: <https://github.com/sensiolabs/security-checker>.

- Look for security issues in the project dependencies (based on the composer.lock file in the current folder):

```
security-checker security:check
```

- Use a specific composer.lock file:

```
security-checker security:check {{path/to/composer.lock}}
```

- Return results as a JSON object:

```
security-checker security:check --format=json
```

sed

Edit text in a scriptable manner.

- Replace the first occurrence of a regular expression in each line of a file, and print the result:

```
sed 's/{{regex}}/{{replace}}/' {{filename}}
```

- Replace all occurrences of an extended regular expression in a file, and print the result:

```
sed -r 's/{{regex}}/{{replace}}/g' {{filename}}
```

- Replace all occurrences of a string in a file, overwriting the file (i.e. in-place):

```
sed -i 's/{{find}}/{{replace}}/g' {{filename}}
```

- Replace only on lines matching the line pattern:

```
sed '/{{line_pattern}}/s/{{find}}/{{replace}}/' {{filename}}
```

- Delete lines matching the line pattern:

```
sed '/{{line_pattern}}/d' {{filename}}
```

- Print the first 11 lines of a file:

```
sed 11q {{filename}}
```

- Apply multiple find-replace expressions to a file:

```
sed -e 's/{{find}}/{{replace}}/' -e 's/{{find}}/{{replace}}/' {{filename}}
```

- Replace separator / by any other character not used in the find or replace patterns, e.g., #:

```
sed 's#{{find}}##{{replace}}#' {{filename}}
```

sendmail

Send email from the command line.

- Send a message with the content of message.txt to the mail directory of local user `username`:

```
sendmail {{username}} < {{message.txt}}
```

- Send an email from `you@yourdomain.com` (assuming the mail server is configured for this) to `test@gmail.com` containing the message in `message.txt`:

```
sendmail -f {{you@yourdomain.com}} {{test@gmail.com}} <  
{{message.txt}}
```

- Send an email from `you@yourdomain.com` (assuming the mail server is configured for this) to `test@gmail.com` containing the file `file.zip`:

```
sendmail -f {{you@yourdomain.com}} {{test@gmail.com}} <  
{{file.zip}}
```

seq

Output a sequence of numbers to **stdout**.

- Sequence from 1 to 10:

```
seq 10
```

- Every 3rd number from 5 to 20:

```
seq 5 3 20
```

- Separate the output with a space instead of a newline:

```
seq -s " " 5 3 20
```

- Format output width to a minimum of 4 digits padding with zeros as necessary:

```
seq -f "%04g" 5 3 20
```

sequelize

Promise-based Node.js ORM for Postgres, MySQL, MariaDB, SQLite and Microsoft SQL Server.

More information: <https://sequelize.org/>.

- Create a model with 3 fields and a migration file:

```
sequelize model:generate --name {{table_name}} --attributes  
{{field1:integer,field2:string,field3:boolean}}
```

- Run the migration file:

```
sequelize db:migrate
```

- Revert all migrations:

```
sequelize db:migrate:undo:all
```

- Create a seed file with the specified name to populate the database:

```
sequelize seed:generate --name {{seed_filename}}
```

- Populate database using all seed files:

```
sequelize db:seed:all
```

serverless

Toolkit for deploying and operating serverless architectures on AWS, Google Cloud, Azure and IBM OpenWhisk.

Commands can be run either using the **serverless** command or it's alias, **sls**.

More information: <https://serverless.com/>.

- Create a serverless project:

```
serverless create
```

- Create a serverless project from a template:

```
serverless create --template {{template_name}}
```

- Deploy to a cloud provider:

```
serverless deploy
```

- Display information about a serverless project:

```
serverless info
```

- Invoke a deployed function:

```
serverless invoke -f {{function_name}}
```

- Follow the logs for a project:

```
serverless logs -t
```

set

Display, set or unset values of shell attributes and positional parameters.

- Display the names and values of shell variables:

```
set
```

- Mark variables that are modified or created for export:

```
set -a
```

- Notify of job termination immediately:

```
set -b
```

- Set various options, e.g. enable **vi** style line editing:

```
set -o {{vi}}
```

sftp

Secure File Transfer Program.

Interactive program to copy files between hosts over SSH.

For non-interactive file transfers, see **scp** or **rsync**.

- Connect to a remote server and enter an interactive command mode:

```
sftp {{remote_user}}@{{remote_host}}
```

- Connect using an alternate port:

```
sftp -P {{remote_port}} {{remote_user}}@{{remote_host}}
```

- Transfer remote file to the local system:

```
get {{/path/remote_file}}
```

- Transfer local file to the remote system:

```
put {{/path/local_file}}
```

- Transfer remote directory to the local system recursively (works with **put** too):

```
get -R {{/path/remote_directory}}
```

- Get list of files on local machine:

```
lls
```

- Get list of files on remote machine:

```
ls
```

sh

Bourne shell.

The standard command language interpreter.

- Start interactive shell:

`sh`

- Execute a command:

`sh -c {{command}}`

- Run commands from a file:

`sh {{file.sh}}`

- Run commands from `stdin`:

`sh -s`

sha1sum

Calculate SHA1 cryptographic checksums.

- Calculate the SHA1 checksum for a file:

```
sha1sum {{filename1}}
```

- Calculate SHA1 checksums for multiple files:

```
sha1sum {{filename1}} {{filename2}}
```

- Read a file of SHA1 sums and verify all files have matching checksums:

```
sha1sum -c {{filename.sha1}}
```

sha224sum

Calculate SHA224 cryptographic checksums.

- Calculate the SHA224 checksum for a file:

```
sha224sum {{filename1}}
```

- Calculate SHA224 checksums for multiple files:

```
sha224sum {{filename1}} {{filename2}}
```

- Read a file of SHA224 sums and verify all files have matching checksums:

```
sha224sum -c {{filename.sha224}}
```

sha256sum

Calculate SHA256 cryptographic checksums.

- Calculate the SHA256 checksum for a file:

```
sha256sum {{filename1}}
```

- Calculate SHA256 checksums for multiple files:

```
sha256sum {{filename1}} {{filename2}}
```

- Read a file of SHA256 sums and verify all files have matching checksums:

```
sha256sum -c {{filename.sha256}}
```

sha384sum

Calculate SHA384 cryptographic checksums.

- Calculate the SHA384 checksum for a file:

```
sha384sum {{filename1}}
```

- Calculate SHA384 checksums for multiple files:

```
sha384sum {{filename1}} {{filename2}}
```

- Read a file of SHA384 sums and verify all files have matching checksums:

```
sha384sum -c {{filename.sha384}}
```

sha512sum

Calculate SHA512 cryptographic checksums.

- Calculate the SHA512 checksum for a file:

```
sha512sum {{filename1}}
```

- Calculate SHA512 checksums for multiple files:

```
sha512sum {{filename1}} {{filename2}}
```

- Read a file of SHA512 sums and verify all files have matching checksums:

```
sha512sum -c {{filename.sha512}}
```

shards

Dependency management tool for the Crystal language.

More information: https://crystal-lang.org/reference/the_shards_command.

- Create a skeleton shard.yml file:

```
shards init
```

- Install dependencies from a shard.yml file:

```
shards install
```

- Update all dependencies:

```
shards update
```

- List all installed dependencies:

```
shards list
```

- List version of dependency:

```
shards version {{path/to/dependency_directory}}
```

shasum

Calculate or check cryptographic SHA checksums.

- Calculate the SHA1 checksum for a file:

```
shasum {{filename}}
```

- Calculate the SHA256 checksum for a file:

```
shasum --algorithm 256 {{filename}}
```

- Calculate the SHA512 checksum for multiple files:

```
shasum --algorithm 512 {{filename1}} {{filename2}}
```

- Check a file with a list of sums against the directory's files:

```
shasum --check {{list_file}}
```

- Calculate the SHA1 checksum from `stdin`:

```
{{somecommand}} | shasum
```

shc

Generic shell script compiler.

- Compile a shell script:

```
shc -f {{script}}
```

- Compile a shell script and specify an output binary file:

```
shc -f {{script}} -o {{binary}}
```

- Compile a shell script and set an expiration date for the executable:

```
shc -f {{script}} -e {{dd/mm/yyyy}}
```

- Compile a shell script and set a message to display upon expiration:

```
shc -f {{script}} -e {{dd/mm/yyyy}} -m "{{Please contact your provider}}"
```

shellcheck

Shell script static analysis tool.

More information: <https://www.shellcheck.net/>.

- Check a shell script:

```
shellcheck {{file.sh}}
```

- Override script's shebang:

```
shellcheck --shell {{sh|bash|ksh}} {{file.sh}}
```

- Ignore certain errors:

```
shellcheck --exclude {{SC1009}} {{file.sh}}
```

- Ignore multiple errors:

```
shellcheck --exclude {{SC1009,SC1073}} {{file.sh}}
```

shiori

Simple bookmark manager built with Go.

More information: <https://github.com/go-shiori/shiori>.

- Import bookmarks from HTML Netscape bookmark format file:

```
shiori import {{path/to/bookmarks.html}}
```

- Save the specified URL as bookmark:

```
shiori add {{url}}
```

- List the saved bookmarks:

```
shiori print
```

- Open the saved bookmark in a browser:

```
shiori open {{bookmark_id}}
```

- Start the web interface for managing bookmarks at port 8181:

```
shiori serve --port {{8181}}
```

shopt

Manage Bash shell options: variables (stored in **\$BASHOPTS**) that control behavior specific to the Bash shell.

Generic POSIX shell variables (stored in **\$SHELLOPTS**) are managed with the **set** command instead.

- List of all settable options and whether they are set:

```
shopt
```

- Set an option:

```
shopt -s {{option_name}}
```

- Unset an option:

```
shopt -u {{option_name}}
```

- Print a list of all options and their status formatted as runnable **shopt** commands:

```
shopt -p
```

- Show help for the command:

```
help shopt
```

shred

Overwrite files to securely delete data.

- Overwrite a file:

```
shred {{file}}
```

- Overwrite a file, leaving zeroes instead of random data:

```
shred --zero {{file}}
```

- Overwrite a file 25 times:

```
shred -n25 {{file}}
```

- Overwrite a file and remove it:

```
shred --remove {{file}}
```

shuf

Generate random permutations.

- Randomize the order of lines in a file and output the result:

```
shuf {{filename}}
```

- Only output the first 5 entries of the result:

```
shuf -n {{5}} {{filename}}
```

- Write the output to another file:

```
shuf {{filename}} -o {{output_filename}}
```

- Generate random numbers in range:

```
shuf -i {{1-10}}
```

singularity

Manage Singularity containers and images.

- Download a remote image from Sylabs Cloud:

```
singularity pull --name {{image.sif}} {{library://godlovedc/funny/lolcow:latest}}
```

- Rebuild a remote image using latest Singularity image format:

```
singularity build {{image.sif}} {{docker://godlovedc/lolcow}}
```

- Start a container from an image and get a shell inside of it:

```
singularity shell {{image.sif}}
```

- Start a container from an image and run a command:

```
singularity exec {{image.sif}} {{command}}
```

- Start a container from an image and execute the internal runscript:

```
singularity run {{image.sif}}
```

- Build a singularity image from a recipe file:

```
sudo singularity build {{image.sif}} {{recipe}}
```

skaffold

A tool that facilitates continuous development for Kubernetes applications.

More information: <https://skaffold.dev>.

- Build the artifacts:

```
skaffold build -f {{skaffold.yaml}}
```

- Build and deploy your app every time your code changes:

```
skaffold dev -f {{skaffold.yaml}}
```

- Run a pipeline file:

```
skaffold run -f {{skaffold.yaml}}
```

- Run a diagnostic on Skaffold:

```
skaffold diagnose -f {{skaffold.yaml}}
```

- Deploy the artifacts:

```
skaffold deploy -f {{skaffold.yaml}}
```

skicka

Manage your Google Drive.

More information: <https://github.com/google/skicka>.

- Upload a file/folder to Google Drive:

```
skicka upload {{path/to/local}} {{path/to/remote}}
```

- Download a file/folder from Google Drive:

```
skicka download {{path/to/remote}} {{path/to/local}}
```

- List files:

```
skicka ls {{path/to/folder}}
```

- Show amount of space used by children folders:

```
skicka du {{path/to/parent/folder}}
```

- Create a folder:

```
skicka mkdir {{path/to/folder}}
```

- Delete a file:

```
skicka rm {{path/to/file}}
```

sl

Steam locomotive running through your terminal.

More information: <https://github.com/mtoyoda/sl>.

- Let a steam locomotive run through your terminal:

`sl`

- The train burns, people scream:

`sl -a`

- Let the train fly:

`sl -F`

- Make the train little:

`sl -l`

- Let the user exit (CTRL + C):

`sl -e`

slackcat

Utility for passing files and command output to Slack.

More information: <https://github.com/bcicen/slackcat>.

- Post a file to Slack:

```
slackcat --channel {{channel_name}} {{path/to/file}}
```

- Post a file to Slack with a custom filename:

```
slackcat --channel {{channel_name}} --filename={{filename}}  
{{path/to/file}}
```

- Pipe command output to Slack as a text snippet:

```
{{command}} | slackcat --channel {{channel_name}} --  
filename={{snippet_name}}
```

- Stream command output to Slack continuously:

```
{{command}} | slackcat --channel {{channel_name}} --stream
```

sleep

Delay for a specified amount of time.

- Delay in seconds:

```
sleep {{seconds}}
```

- Delay in minutes:

```
sleep {{minutes}}m
```

- Delay in hours:

```
sleep {{hours}}h
```

slimrb

Convert Slim files to HTML.

- Convert a Slim file to HTML:

```
slimrb {{input.slim}} {{output.html}}
```

- Convert a Slim file and output to prettified HTML:

```
slimrb --pretty {{input.slim}} {{output.html}}
```

- Convert a Slim file to ERB:

```
slimrb --erb {{input.slim}} {{output.erb}}
```

smartctl

View a disk's SMART data and other information.

More information: <https://en.wikipedia.org/wiki/S.M.A.R.T.>

- View SMART health summary:

```
sudo smartctl --health {{/dev/sdX}}
```

- View device information:

```
sudo smartctl --info {{/dev/sdX}}
```

- Begin a short self-test:

```
sudo smartctl --test short {{/dev/sdX}}
```

- View current/last self-test status and other SMART capabilities:

```
sudo smartctl --capabilities {{/dev/sdX}}
```

- View SMART self-test log (if supported):

```
sudo smartctl --log selftest {{/dev/sdX}}
```

sn

Mono StrongName utility for signing and verifying IL assemblies.

- Generate a new StrongNaming key:

```
sn -k {{path/to/key.snk}}
```

- Re-sign an assembly with the specified private key:

```
sn -R {{path/to/assembly.dll}} {{path/to/keypair.snk}}
```

- Show the public key of the private key that was used to sign an assembly:

```
sn -T {{path/to/assembly.exe}}
```

- Extract the public key to a file:

```
sn -e {{path/to/assembly.dll}} {{path/to/output.pub}}
```

snyk

Find vulnerabilities in your code and remediate risks.

More information: <https://snyk.io>.

- Login to your Snyk account:

`snyk auth`

- Test your code for any known vulnerabilities:

`snyk test`

- Test a local Docker image for any known vulnerabilities:

`snyk test --docker {{docker_image}}`

- Record the state of dependencies and any vulnerabilities on snyk.io:

`snyk monitor`

- Auto patch and ignore vulnerabilities:

`snyk wizard`

socat

Multipurpose relay (SOcket CAT).

- Listen to a port, wait for an incoming connection and transfer data to STDIO:

```
socat - TCP-LISTEN:8080,fork
```

- Create a connection to a host and port, transfer data in STDIO to connected host:

```
socat - TCP4:www.example.com:80
```

- Forward incoming data of a local port to another host and port:

```
socat TCP-LISTEN:80,fork TCP4:www.example.com:80
```

solo

Interact with Solo hardware security keys.

More information: <https://github.com/solokeys/solo-python>.

- List connected Solos:

```
solo ls
```

- Update the currently connected Solo's firmware to the latest version:

```
solo key update
```

- Blink the led of a specific Solo:

```
solo key wink --serial {{serial_number}}
```

- Generate random bytes using the currently connected Solo's secure random number generator:

```
solo key rng raw
```

- Monitor the serial output of a Solo:

```
solo monitor {{path/to/serial_port}}
```

sonar-scanner

SonarScanner is a generic scanner for SonarQube for projects do not use any specific build tool like maven, gradle , etc.

More information: <https://docs.sonarqube.org/latest/analysis/scan/sonarscanner/>.

- Scan a project with configuration file in your project's root directory named `sonar-project.properties`:

`sonar-scanner`

- Scan a project using configuration file other than `sonar-project.properties`:

`sonar-scanner -D{{project.settings=myproject.properties}}`

- Print help information:

`sonar-scanner -h`

- Print debudgging information:

`sonar-scanner -X`

Sops

SOPS: Secrets OPerationS.

Tool for managing secrets.

More information: <https://github.com/mozilla/sops>.

- Encrypt a file:

```
sops -e {{path/to/myfile.json}} > {{path/to/myfile.enc.json}}
```

- Decrypt a file to the standard output:

```
sops -d {{path/to/myfile.enc.json}}
```

- Rotate data keys for a sops file:

```
sops -r {{path/to/myfile.enc.yaml}}
```

- Change the extension of the file once encrypted:

```
sops -d --input-type json {{path/to/myfile.enc.json}}
```

- Extract keys by naming them, and array elements by numbering them:

```
sops -d --extract '["an_array"][1]' {{path/to/myfile.enc.json}}
```

- Show the difference between two sops files:

```
diff <(sops -d {{path/to/secret1.enc.yaml}}) <(sops -d {{path/to/secret2.enc.yaml}})
```

sort

Sort lines of text files.

More information: https://www.gnu.org/software/coreutils/manual/html_node/sort-invocation.html.

- Sort a file in ascending order:

```
sort {{path/to/file}}
```

- Sort a file in descending order:

```
sort -r {{path/to/file}}
```

- Sort a file in case-insensitive way:

```
sort --ignore-case {{path/to/file}}
```

- Sort a file using numeric rather than alphabetic order:

```
sort -n {{path/to/file}}
```

- Sort the passwd file by the 3rd field, numerically:

```
sort -t: -k 3n /etc/passwd
```

- Sort a file preserving only unique lines:

```
sort -u {{path/to/file}}
```

- Sort human-readable numbers (in this case the 5th field of `ls -lh`):

```
ls -lh | sort -h -k 5
```

- Sort numbers with exponents:

```
sort --general-numeric-sort {{path/to/file}}
```

source

Execute commands from a file in the current shell.

- Evaluate contents of a given file:

```
source {{path/to/file}}
```

SOX

Sound eXchange: play, record and convert audio files.

Audio formats are identified by the extension.

More information: <http://sox.sourceforge.net>.

- Merge two audio files into one:

```
sox -m {{input_audiotfile1}} {{input_audiotfile2}}  
{{output_audiotfile}}
```

- Trim an audio file to the specified times:

```
sox {{input_audiotfile}} {{output_audiotfile}} trim {{start}}  
{{end}}
```

- Normalize an audio file (adjust volume to the maximum peak level, without clipping):

```
sox --norm {{input_audiotfile}} {{output_audiotfile}}
```

- Reverse and save an audio file:

```
sox {{input_audiotfile}} {{output_audiotfile}} reverse
```

- Print statistical data of an audio file:

```
sox {{input_audiotfile}} -n stat
```

- Increase the volume of an audio file by 2x:

```
sox -v 2.0 {{input_audiotfile}} {{output_audiotfile}}
```

spark

The Laravel Spark command line tool.

More information: <https://spark.laravel.com>.

- Register your API token:

```
spark register {{token}}
```

- Display the currently registered API token:

```
spark token
```

- Create a new Spark project:

```
spark new {{project_name}}
```

- Create a new Spark project with Braintree stubs:

```
spark new {{project_name}} --braintree
```

- Create a new Spark project with team based billing stubs:

```
spark new {{project_name}} --team-billing
```

spatial

A set of commands for managing and developing SpatialOS projects.

- Run this when you use a project for the first time:

```
spatial worker build
```

- Build workers for local deployment on Unity on macOS:

```
spatial worker build --target=development --target=0sx
```

- Build workers for local deployment on Unreal on Windows:

```
spatial worker build --target=local --target=Windows
```

- Deploy locally:

```
spatial local launch {{launch_config}} --  
snapshot={{snapshot_file}}
```

- Launch a local worker to connect to your local deployment:

```
spatial local worker launch {{worker_type}} {{launch_config}}
```

- Upload an assembly to use for cloud deployments:

```
spatial cloud upload {{assembly_name}}
```

- Launch a cloud deployment:

```
spatial cloud launch {{assembly_name}} {{launch_config}}  
{{deployment_name}}
```

- Clean worker directories:

```
spatial worker clean
```

speedtest-cli

Command line interface for testing internet bandwidth using speedtest.net.

More information: <https://github.com/sivel/speedtest-cli>.

- Run a speed test:

```
speedtest-cli
```

- Run without performing download tests:

```
speedtest-cli --no-download
```

- Run a speed test and generate a shareable result picture:

```
speedtest-cli --share
```

- Print a list of all speedtest.net servers, sorted by distance, to file:

```
speedtest-cli --list > speedtest_servers.txt
```

- Run a speed test to the given speedtest.net server id:

```
speedtest-cli --server {{server_id}}
```

- Display results in CSV format, suppressing the progress information:

```
speedtest-cli --csv --csv-delimiter {{delimiter_char}}
```

- Display results in JSON format, suppressing the progress information:

```
speedtest-cli --json
```

spfquery

Query Sender Policy Framework records to validate e-mail senders.

More information: <https://www.libspf2.org/>.

- Check if an IP address is allowed to send an e-mail from the specified e-mail address:

```
spfquery -ip {{8.8.8.8}} -sender {{sender@example.com}}
```

- Turn on debugging output:

```
spfquery -ip {{8.8.8.8}} -sender {{sender@example.com}} --debug
```

sphinx-build

Sphinx documentation generator.

More information: <http://www.sphinx-doc.org/en/master/man/sphinx-build.html>.

- Build documentation:

```
sphinx-build -b {{html|epub|text|latex|man|...}} {{path/to/source_dir}} {{path/to/build_dir}}
```

- Build documentations intended for readthedocs.io (requires the sphinx-rtd-theme pip package):

```
sphinx-build -b {{html}} {{path/to/docs_dir}} {{path/to/build_dir}}
```

spike

A fully featured static website generator written in JavaScript.

More information: <https://spike.js.org>.

- Create a new project using the default template:

```
spike new {{project_name}}
```

- Compile your project, watch for changes, and auto-reload the browser:

```
spike watch
```

- Compile your project once to the "public" directory:

```
spike compile
```

- Remove the output directory:

```
spike clean
```

split

Split a file into pieces.

- Split a file, each split having 10 lines (except the last split):

```
split -l {{10}} {{filename}}
```

- Split a file into 5 files. File is split such that each split has same size (except the last split):

```
split -n {{5}} {{filename}}
```

- Split a file with 512 bytes in each split (except the last split; use 512k for kilobytes and 512m for megabytes):

```
split -b {{512}} {{filename}}
```

- Split a file with at most 512 bytes in each split without breaking lines:

```
split -C {{512}} {{filename}}
```

sponge

Soak up the input before writing the output file.

More information: <https://linux.die.net/man/1/sponge>.

- Append file content to the source file:

```
cat {{path/to/file}} | sponge -a {{path/to/file}}
```

- Remove all lines starting with # in a file:

```
grep -v '^{{#}}' {{path/to/file}} | sponge {{path/to/file}}
```

sqlite3

The command-line interface to SQLite 3, which is a self-contained file-based embedded SQL engine.

More information: <https://sqlite.org>.

- Start an interactive shell with a new database:

```
sqlite3
```

- Open an interactive shell against an existing database:

```
sqlite3 {{path/to/database.sqlite3}}
```

- Execute an SQL statement against a database and then exit:

```
sqlite3 {{path/to/database.sqlite3}} '{{SELECT * FROM  
some_table;}}'
```

sqlmap

Detect and exploit SQL injection flaws.

More information: <https://sqlmap.org>.

- Run sqlmap against a single target URL:

```
python sqlmap.py -u "{{http://www.target.com/vuln.php?id=1}}"
```

- Send data in a POST request (--data implies POST request):

```
python sqlmap.py -u "{{http://www.target.com/vuln.php}}" --data="{{id=1}}"
```

- Change the parameter delimiter (& is the default):

```
python sqlmap.py -u "{{http://www.target.com/vuln.php}}" --data="{{query=foobar;id=1}}" --param-del="{{;}}"
```

- Select a random User-Agent from ./txt/user-agents.txt and use it:

```
python sqlmap.py -u "{{http://www.target.com/vuln.php}}" --random-agent
```

- Provide user credentials for HTTP protocol authentication:

```
python sqlmap.py -u "{{http://www.target.com/vuln.php}}" --auth-type {Basic} --auth-cred "{{testuser:testpass}}"
```

SQSC

A command line AWS Simple Queue Service client.

More information: <https://github.com/yongfei25/sqsc>.

- List all queues:

```
sqsc lq {{queue_prefix}}
```

- List all messages in a queue:

```
sqsc ls {{queue_name}}
```

- Copy all messages from one queue to another:

```
sqsc cp {{source_queue}} {{destination_queue}}
```

- Move all messages from one queue to another:

```
sqsc mv {{source_queue}} {{destination_queue}}
```

- Describe a queue:

```
sqsc describe {{queue_name}}
```

- Query a queue with SQL syntax:

```
sqsc query "SELECT body FROM {{queue_name}} WHERE body LIKE '%user%'"
```

- Pull all messages from a queue into a local sqlite database in your present working directory:

```
sqsc pull {{queue_name}}
```

srm

Securely remove files or directories.

Overwrites the existing data one or multiple times. Drop in replacement for rm.

More information: <http://srm.sourceforge.net/srm.html>.

- Remove a file after a single-pass overwriting with random data:

```
srm -s {{path/to/file}}
```

- Remove a file after seven passes of overwriting with random data:

```
srm -m {{path/to/file}}
```

- Recursively remove a directory and its contents overwriting each file with a single-pass of random data:

```
srm -r -s {{path/to/directory}}
```

- Prompt before every removal:

```
srm -i {{\*}}
```

ss-local

Run a Shadowsocks client as a SOCKS5 proxy.

More information: <https://github.com/shadowsocks/shadowsocks-libev/blob/master/doc/ss-local.asciidoc>.

- Run a Shadowsocks proxy by specifying the host, server port, local port, password, and encryption method:

```
ss-local -s {{host}} -p {{server_port}} -l {{local_port}} -k  
{{password}} -m {{encrypt_method}}
```

- Run a Shadowsocks proxy by specifying the config file:

```
ss-local -c {{path/to/config/file.json}}
```

- Use a plugin to run the proxy client:

```
ss-local --plugin {{plugin_name}} --plugin-opts  
{{plugin_options}}
```

- Enable TCP fast open:

```
ss-local --fast-open
```

ssh-agent

Spawn an SSH Agent process.

An SSH Agent holds SSH keys decrypted in memory until removed or the process is killed.

See also [ssh-add](#), which can add and manage keys held by an SSH Agent.

- Start an SSH Agent for the current shell:

```
eval $(ssh-agent)
```

- Kill the currently running agent:

```
ssh-agent -k
```

ssh-copy-id

Install your public key in a remote machine's authorized_keys.

- Copy your keys to the remote machine:

```
ssh-copy-id {{username@remote_host}}
```

- Copy the given public key to the remote:

```
ssh-copy-id -i {{path/to/certificate}} {{username}}  
@{{remote_host}}
```

- Copy the given public key to the remote with specific port:

```
ssh-copy-id -i {{path/to/certificate}} -p {{port}}  
{{username}}@{{remote_host}}
```

ssh-keygen

Generate ssh keys used for authentication, password-less logins, and other things.

- Generate a key interactively:

```
ssh-keygen
```

- Specify file in which to save the key:

```
ssh-keygen -f ~/.ssh/{{filename}}
```

- Generate an ed25519 key with 100 key derivation function rounds:

```
ssh-keygen -t ed25519 -a 100
```

- Generate an RSA 4096 bit key with email as a comment:

```
ssh-keygen -t rsa -b 4096 -C "{{email}}"
```

- Retrieve the key fingerprint from a host (useful for confirming the authenticity of the host when first connecting to it via SSH):

```
ssh-keygen -l -F {{remote_host}}
```

- Remove the keys of a host from the known_hosts file (useful when a known host has a new key):

```
ssh-keygen -R {{remote_host}}
```

- Retrieve the fingerprint of a key in MD5 Hex:

```
ssh-keygen -l -E md5 -f ~/.ssh/{{filename}}
```

- Change the password of a key:

```
ssh-keygen -p -f ~/.ssh/{{filename}}
```

ssh-keyscan

Get the public ssh keys of remote hosts.

- Retrieve all public ssh keys of a remote host:

```
ssh-keyscan {{host}}
```

- Retrieve all public ssh keys of a remote host listening on a specific port:

```
ssh-keyscan -p {{port}} {{host}}
```

- Retrieve certain types of public ssh keys of a remote host:

```
ssh-keyscan -t {{rsa,dsa,ecdsa,ed25519}} {{host}}
```

- Manually update the ssh known_hosts file with the fingerprint of a given host:

```
ssh-keyscan -H {{host}} >> ~/.ssh/known_hosts
```

ssh

Secure Shell is a protocol used to securely log onto remote systems.

It can be used for logging or executing commands on a remote server.

- Connect to a remote server:

```
ssh {{username}}@{{remote_host}}
```

- Connect to a remote server with a specific identity (private key):

```
ssh -i {{path/to/key_file}} {{username}}@{{remote_host}}
```

- Connect to a remote server using a specific port:

```
ssh {{username}}@{{remote_host}} -p {{2222}}
```

- Run a command on a remote server:

```
ssh {{remote_host}} {{command -with -flags}}
```

- SSH tunneling: Dynamic port forwarding (SOCKS proxy on localhost:9999):

```
ssh -D {{9999}} -C {{username}}@{{remote_host}}
```

- SSH tunneling: Forward a specific port (localhost:9999 to example.org:80) along with disabling pseudo-[t]ty allocation and executio[n] of remote commands:

```
ssh -L {{9999}}:{{example.org}}:{{80}} -N -T {{username}}@{{remote_host}}
```

- SSH jumping: Connect through a jumphost to a remote server (Multiple jump hops may be specified separated by comma characters):

```
ssh -J {{username}}@{{jump_host}} {{username}}@{{remote_host}}
```

- Agent forwarding: Forward the authentication information to the remote machine (see `man ssh_config` for available options):

```
ssh -A {{username}}@{{remote_host}}
```

sshfs

Filesystem client based on ssh.

More information: <https://github.com/libfuse/sshfs>.

- Mount remote directory:

```
sshfs {{username}}@{{remote_host}}:{{remote_directory}}  
{{mountpoint}}
```

- Unmount remote directory:

```
umount {{mountpoint}}
```

- Mount remote directory from server with specific port:

```
sshfs {{username}}@{{remote_host}}:{{remote_directory}} -p  
{{2222}}
```

- Use compression:

```
sshfs {{username}}@{{remote_host}}:{{remote_directory}} -C
```

- Follow symbolic links:

```
sshfs -o follow_symlinks {{username}}@{{remote_host}}:  
{{remote_directory}} {{mountpoint}}
```

sshpass

An ssh password provider.

It works by creating a TTY, feeding the password into it, and then redirecting `stdin` to the ssh session.

- Connect to a remote server using a password supplied on a file descriptor (in this case, `stdin`):

```
sshpass -d {{0}} ssh {{user}}@{{hostname}}
```

- Connect to a remote server with the password supplied as an option, and automatically accept unknown ssh keys:

```
sshpass -p {{password}} ssh -o StrictHostKeyChecking=no  
{{user}}@{{hostname}}
```

- Connect to a remote server using the first line of a file as the password, automatically accept unknown ssh keys, and launch a command:

```
sshpass -f {{file}} ssh -o StrictHostKeyChecking=no {{user}}  
@{{hostname}} "{{command}}"
```

st-flash

Flash binary files to STM32 ARM Cortex microcontrollers.

More information: <https://github.com/texane/stlink>.

- Read 4096 bytes from the device starting from 0x8000000:

```
st-flash read {{firmware}}.bin {{0x8000000}} {{4096}}
```

- Write firmware to device starting from 0x8000000:

```
st-flash write {{firmware}}.bin {{0x8000000}}
```

- Erase firmware from device:

```
st-flash erase
```

st-info

Provides information about connected STLink and STM32 devices.

More information: <https://github.com/texane/stlink>.

- Display amount of program memory available:

```
st-info --flash
```

- Display amount of sram memory available:

```
st-info --sram
```

- Display summarized information of the device:

```
st-info --probe
```

st-util

Run GDB (GNU Debugger) server to interact with STM32 ARM Cortex microcontroller.

More information: <https://github.com/texane/stlink>.

- Run GDB server on port 4500:

```
st-util -p {{4500}}
```

- Connect to GDB server:

```
(gdb) target extended-remote {{localhost}}:{{4500}}
```

- Write firmware to device:

```
(gdb) load {{firmware.elf}}
```

stack

Tool for managing Haskell projects.

More information: <https://github.com/commercialhaskell/stack>.

- Create a new package:

```
stack new {{package_name}} {{template_name}}
```

- Compile a package:

```
stack build
```

- Run tests inside a package:

```
stack test
```

- Compile a project and re-compile every time a file changes:

```
stack build --file-watch
```

- Compile a project and execute a command after compilation:

```
stack build --exec "{{command}}"
```

- Run a program and pass an argument to it:

```
stack exec {{program_name}} -- {{argument}}
```

standard

The JavaScript Standard Style tool for linting and fixing JavaScript code.

More information: <https://standardjs.com>.

- Lint all JavaScript source files in the current directory:

`standard`

- Lint specific JavaScript file(s):

`standard {{path/to/file(s)}}`

- Apply automatic fixes during linting:

`standard --fix`

- Declare any available global variables:

`standard --global {{variable}}`

- Use a custom ESLint plugin when linting:

`standard --plugin {{plugin}}`

- Use a custom JS parser when linting:

`standard --parser {{parser}}`

- Use a custom ESLint environment when linting:

`standard --env {{environment}}`

stat

Display file and filesystem information.

- Show file properties such as size, permissions, creation and access dates among others:

```
stat {{file}}
```

- Same as above but in a more concise way:

```
stat -t {{file}}
```

- Show filesystem information:

```
stat -f {{file}}
```

- Show only octal file permissions:

```
stat -c "%a %n" {{file}}
```

- Show owner and group of the file:

```
stat -c "%U %G" {{file}}
```

- Show the size of the file in bytes:

```
stat -c "%s %n" {{file}}
```

stdbuf

Run a command with modified buffering operations for its standard streams.

- Change the standard input buffer size to 512 KiB:

```
stdbuf --input={{512K}} {{command}}
```

- Change the standard output buffer to line-buffered:

```
stdbuf --output={{L}} {{command}}
```

- Change the standard error buffer to unbuffered:

```
stdbuf --error={{0}} {{command}}
```

stern

Tail multiple pods and containers from Kubernetes.

More information: <https://github.com/wercker/stern/>.

- Tail all pods within a current namespace:

```
stern .
```

- Tail all pods with a specific status:

```
stern . --container-state {{running|waiting|terminated}}
```

- Tail all pods that matches a given regular expression:

```
stern {{pod_query}}
```

- Tail matched pods from all namespaces:

```
stern {{pod_query}} --all-namespaces
```

- Tail matched pods from 15 minutes ago:

```
stern {{pod_query}} --since {{15m}}
```

- Tail matched pods with a specific label:

```
stern {{pod_query}} --selector {{release=canary}}
```

Stolon

A cloud native PostgreSQL manager for PostgreSQL high availability.

More information: <https://github.com/sorintlab/stolon>.

- Get cluster status:

```
stolonctl --cluster-name {{cluster_name}} --store-backend  
{{store_backend}} --store-endpoints {{store_endpoints}}  
status
```

- Get cluster data:

```
stolonctl --cluster-name {{cluster_name}} --store-backend  
{{store_backend}} --store-endpoints {{store_endpoints}}  
clusterdata
```

- Get cluster specification:

```
stolonctl --cluster-name {{cluster_name}} --store-backend  
{{store_backend}} --store-endpoints {{store_endpoints}} spec
```

- Update cluster specification with a patch in json format:

```
stolonctl --cluster-name {{cluster_name}} --store-backend  
{{store_backend}} --store-endpoints {{store_endpoints}}  
update --patch '{{cluster_spec}}'
```

stow

Symlink manager.

Often used to manage dotfiles.

More information: <https://www.gnu.org/software/stow>.

- Symlink all files recursively to a given directory:

```
stow --target={{path/to/target_directory}} {{file1  
directory1 file2 directory2}}
```

- Delete symlinks recursively from a given directory:

```
stow --delete --target={{path/to/target_directory}} {{file1  
directory1 file2 directory2}}
```

- Simulate to see what the result would be like:

```
stow --simulate --target={{path/to/target_directory}} {{file1  
directory1 file2 directory2}}
```

- Delete and resymlink:

```
stow --restow --target={{path/to/target_directory}} {{file1  
directory1 file2 directory2}}
```

- Exclude files matching a regular expression:

```
stow --ignore={{regex}} --target={{path/to/target_directory}}  
{{file1 directory1 file2 directory2}}
```

streamlink

Extracts streams from various services and pipes them into a video player of choice.

More information: <https://streamlink.github.io>.

- Attempt to extract streams from the URL specified, and if it's successful, print out a list of available streams to choose from:

```
streamlink {{example.com/stream}}
```

- Open a stream with the specified quality:

```
streamlink {{example.com/stream}} {{720p60}}
```

- Select the highest or lowest available quality:

```
streamlink {{example.com/stream}} {{best|worst}}
```

- Specify which player to use to feed stream data to (VLC is used by default if found):

```
streamlink --player={{mpv}} {{example.com/stream}} {{best}}
```

- Specify the amount of time to skip from the beginning of the stream. For live streams, this is a negative offset from the end of the stream (rewind):

```
streamlink --hls-start-offset {{[HH:]MM:SS}} {{example.com/stream}} {{best}}
```

- Skip to the beginning of a live stream, or as far back as possible:

```
streamlink --hls-live-restart {{example.com/stream}} {{best}}
```

- Write stream data to a file instead of playing it:

```
streamlink --output {{path/to/file.ts}} {{example.com/stream}} {{best}}
```

- Open the stream in the player, while at the same time writing it to a file:

```
streamlink --record {{path/to/file.ts}} {{example.com/stream}} {{best}}
```

strings

Find printable strings in an object file or binary.

- Print all strings in a binary:

```
strings {{file}}
```

- Limit results to strings at least *length* characters long:

```
strings -n {{length}} {{file}}
```

- Prefix each result with its offset within the file:

```
strings -t d {{file}}
```

- Prefix each result with its offset within the file in hexadecimal:

```
strings -t x {{file}}
```

strip-nondeterminism

A tool to remove non-deterministic information (e.g. timestamps) from files.

More information: <https://salsa.debian.org/reproducible-builds/strip-nondeterminism>.

- Strip nondeterministic information from a file:

```
strip-nondeterminism {{path/to/file}}
```

- Strip nondeterministic information from a file manually specifying the filetype:

```
strip-nondeterminism --type {{filetype}} {{path/to/file}}
```

- Strip nondeterministic information from a file; instead of removing timestamps set them to the specified UNIX timestamp:

```
strip-nondeterminism --timestamp {{unix_timestamp}} {{path/to/file}}
```

stripe

Interact with a Stripe account.

More information: <https://github.com/stripe/stripe-cli>.

- Follow the logs of activity on the account:

```
stripe logs tail
```

- Listen for events, filtering on events with the name `charge.succeeded` and forwarding them to localhost:3000/events:

```
stripe listen --events="{{charge.succeeded}}" --forward-to="{{localhost:3000/events}}"
```

- Send a test webhook event:

```
stripe trigger {{charge.succeeded}}
```

- Create a customer:

```
stripe customers create --email="{{test@example.com}}" --name="{{Jenny Rosen}}"
```

- Print to JSON:

```
stripe listen --print-json
```

stty

Set options for a terminal device interface.

- Display all settings for the current terminal:

```
stty -a
```

- Set the number of rows:

```
stty rows {{rows}}
```

- Set the number of columns:

```
stty cols {{cols}}
```

- Get the actual transfer speed of a device:

```
stty -f {{path/to/device_file}} speed
```

- Reset all modes to reasonable values for the current terminal:

```
stty sane
```

SU

Switch shell to another user.

- Switch to superuser (requires the root password):

su

- Switch to a given user (requires the user's password):

su {{username}}

- Switch to a given user and simulate a full login shell:

su - {{username}}

- Execute a command as another user:

su - {{username}} -c "{{command}}"

subfinder

A subdomain discovery tool that discovers valid subdomains for websites.

Designed as a passive framework to be useful for bug bounties and safe for penetration testing.

More information: <https://github.com/subfinder/subfinder>.

- Find subdomains for a specific domain:

```
subfinder -d {{example.com}}
```

- Show only the subdomains found:

```
subfinder --silent -d {{example.com}}
```

- Use bruteforcing to find subdomains:

```
subfinder -d {{example.com}} -b
```

- Remove wildcard subdomains:

```
subfinder -nW -d {{example.com}}
```

- Use a given comma-separated list of resolvers:

```
subfinder -r {{8.8.8.8}},{{1.1.1.1}} -d {{example.com}}
```

subl

Sublime Text editor.

More information: <https://www.sublimetext.com>.

- Open the current directory in Sublime Text:

```
subl {{.}}
```

- Open a file or directory in Sublime Text:

```
subl {{path/to/file_or_directory}}
```

- Open a file and jump to a specific line number:

```
subl {{path/to/file}}:{{line_number}}
```

- Open a file or directory in the currently open window:

```
subl -a {{path/to/file}}
```

- Open a file or directory in a new window:

```
subl -n {{path/to/file}}
```

subliminal

Python-based subtitle downloader.

More information: <https://github.com/Diaoul/subliminal>.

- Download English subtitles for a video:

```
subliminal download -l {{en}} {{video.ext}}
```

sublist3r

Fast subdomains enumeration tool for penetration testers.

More information: <https://github.com/aboul3la/Sublist3r>.

- Find subdomains for a domain:

```
sublist3r --domain {{domain_name}}
```

- Find subdomains for a domain, also enabling brute force search:

```
sublist3r --domain {{domain_name}} --bruteforce
```

- Save the found subdomains to a text file:

```
sublist3r --domain {{domain_name}} --output {{path/to/output_file}}
```

- Output all available options:

```
sublist3r --help
```

sudo

Executes a single command as the superuser or another user.

- Run a command as the superuser:

```
sudo {{less /var/log/syslog}}
```

- Edit a file as the superuser with your default editor:

```
sudo -e {{/etc/fstab}}
```

- Run a command as another user and/or group:

```
sudo -u {{user}} -g {{group}} {{id -a}}
```

- Repeat the last command prefixed with "sudo" (only in bash, zsh, etc.):

```
sudo !!
```

- Launch the default shell with superuser privileges:

```
sudo -i
```

sum

Compute checksums and the number of blocks for a file.

A predecessor to the more modern **cksum**.

- Compute a checksum with BSD-compatible algorithm and 1024-byte blocks:

```
sum {{file}}
```

- Compute a checksum with System V-compatible algorithm and 512-byte blocks:

```
sum --sysv {{file}}
```

supervisorctl

Supervisor is a client/server system that allows its users to control a number of processes on UNIX-like operating systems.

Supervisorctl is the command-line client piece of the supervisor which provides a shell-like interface.

More information: <http://supervisord.org>.

- Start/stop/restart a process:

```
supervisorctl {{start|stop|restart}} {{process_name}}
```

- Start/stop/restart all processes in a group:

```
supervisorctl {{start|stop|restart}} {{group_name}}:*
```

- Show last 100 **bytes** of process **stderr**:

```
supervisorctl tail -100 {{process_name}} stderr
```

- Keep displaying **stdout** of a process:

```
supervisorctl tail -f {{process_name}} stdout
```

- Reload process config file to add/remove processes as necessary:

```
supervisorctl update
```

supervisord

Supervisor is a client/server system for controlling some processes on UNIX-like operating systems.

Supervisord is the server part of supervisor; it is primarily managed via a configuration file.

More information: <http://supervisord.org>.

- Start supervisord with specified configuration file:

```
supervisord -c {{path/to/file}}
```

- Run supervisord in the foreground:

```
supervisord -n
```

surfraw

CLI to query a variety of web search engines.

Consists of a collection of elvi, each of which knows how to search a specific website.

More information: <http://surfraw.org>.

- Display the list of supported website search scripts (elvi):

```
surfraw -elvi
```

- Open the elvi's results page for a specific search in the browser:

```
surfraw {{elvi}} "{{search_terms}}"
```

- Display an elvi description and its specific options:

```
surfraw {{elvi}} -local-help
```

- Search using an elvi with specific options and open the results page in the browser:

```
surfraw {{elvi}} {{elvi_options}} "{{search_terms}}"
```

- Display the URL to the elvi's results page for a specific search:

```
surfraw -print {{elvi}} "{{search_terms}}"
```

- Search using the alias:

```
sr {{elvi}} "{{search_terms}}"
```

surge

Simple command line web publishing.

More information: <https://surge.sh>.

- Upload a new site to surge.sh:

```
surge {{path/to/my_project}}
```

- Deploy site to custom domain (note that the DNS records must point to the surge.sh subdomain):

```
surge {{path/to/my_project}} {{my_custom_domain.com}}
```

- List your surge projects:

```
surge list
```

- Remove a project:

```
surge teardown {{my_custom_domain.com}}
```

svgcleaner

SVG image optimizing utility.

More information: <https://github.com/RazrFalcon/svgcleaner>.

- Optimize an SVG image:

```
svgcleaner {{input.svg}} {{output.svg}}
```

- Optimize an SVG image multiple times:

```
svgcleaner --multipass {{input.svg}} {{output.svg}}
```

SVGO

SVG Optimizer: a Node.js-based tool for optimizing Scalable Vector Graphics files.

It applies a series of transformation rules (plugins), which can be toggled individually.

More information: <https://github.com/svg/svgo>.

- Optimize a file using the default plugins (overwrites the original file):

```
svgo {{test.svg}}
```

- Optimize a file and save the result to another file:

```
svgo {{test.svg}} -o {{test.min.svg}}
```

- Optimize all SVG files within a directory (overwrites the original files):

```
svgo -f {{path/to/directory/with/svg/files}}
```

- Optimize all SVG files within a directory and save the resulting files to another directory:

```
svgo -f {{path/to/input/directory}} -o {{path/to/output/directory}}
```

- Optimize SVG content passed from another command, and save the result to a file:

```
{{cat test.svg}} | svgo -i - -o {{test.min.svg}}
```

- Optimize a file and print out the result:

```
svgo {{test.svg}} -o -
```

- Optimize a file making sure a given plugin is enabled:

```
svgo --enable={{plugin_name}}
```

- Show available plugins:

```
svgo --show-plugins
```

SVN

Subversion command line client tool.

More information: <https://subversion.apache.org>.

- Check out a working copy from a repository:

```
svn co {{url/to/repository}}
```

- Bring changes from the repository into the working copy:

```
svn up
```

- Put files and directories under version control, scheduling them for addition to repository. They will be added in next commit:

```
svn add {{PATH}}
```

- Send changes from your working copy to the repository:

```
svn ci -m {{commit_log_message}} [{{PATH}}]
```

- Display changes from the last 10 revisions, showing modified files for each revision:

```
svn log -vl {{10}}
```

- Show detailed help:

```
svn help
```

swagger-codegen

Generate code and documentation for your REST api from a OpenAPI/swagger definition.

More information: <https://github.com/swagger-api/swagger-codegen>.

- Generate documentation and code from an OpenAPI/swagger file:

```
swagger-codegen generate -i {{swagger_file}} -l {{language}}
```

- Generate java code using the library retrofit2 and the option useRxJava2:

```
swagger-codegen generate -i {{http://petstore.swagger.io/v2/swagger.json}} -l {{java}} --library {{retrofit2}} -D{{useRxJava2}}={{true}}
```

- List available languages:

```
swagger-codegen langs
```

- Display help options for the generate command:

```
swagger-codegen help {{generate}}
```

Swift

Create, run and build Swift projects.

More information: <https://swift.org>.

- Invoke the interactive interpreter (REPL):

```
swift
```

- Execute a program:

```
swift {{file.swift}}
```

- Start a new project with the package manager:

```
swift package init
```

- Generate an Xcode project file:

```
swift package generate-xcodeproj
```

- Update dependencies:

```
swift package update
```

- Compile project for release:

```
swift build -c release
```

Swig

Generate bindings between C / C++ code and various high level languages such as Javascript, Python, C#, and more.

It uses special .i or .swg files to generate the bindings (C/C++ with SWIG directives, then outputs a C/C++ file that contains all of the wrapper code needed to build an extension module.

- Generate a binding between C++ and Python:

```
swig -c++ -python -o {{path/to/output_wrapper.cpp}} {{path/to/swig_file.i}}
```

- Generate a binding between C++ and Go:

```
swig -go -cgo -intgosize 64 -c++ {{path/to/swig_file.i}}
```

- Generate a binding between C and Java:

```
swig -java {{path/to/swig_file.i}}
```

- Generate a binding between C and Ruby and prefix the Ruby module with {{foo::bar::}}:

```
swig -ruby -prefix "{{foo::bar::}}" {{path/to/swig_file.i}}
```

symfony

The console component for the Symfony framework.

More information: <https://symfony.com>.

- Create a new Symfony project:

```
symfony new {{name}}
```

- Run a local web server:

```
symfony serve
```

- Stop the local web server:

```
symfony server:stop
```

- Check for security issues in the project's dependencies:

```
symfony security:check
```

sync

Flushes all pending write operations to the appropriate disks.

- Flush all pending write operations on all disks:

`sync`

- Flush all pending write operations on a single file to disk:

`sync {{path/to/file}}`

syncthing

Continuous bidirectional decentralised folder synchronisation tool.

More information: <https://docs.syncthing.net/>.

- Start syncthing:

```
syncthing
```

- Start syncthing without opening a web browser:

```
syncthing -no-browser
```

- Print the device ID:

```
syncthing -device-id
```

- Change the home directory:

```
syncthing -home={{path/to/directory}}
```

- Force a full index exchange:

```
syncthing -reset-deltas
```

- Change the address upon which the web interface listens:

```
syncthing -gui-address={{ip_address:port|path/to/socket.sock}}
```

- Show filepaths to the files used by syncthing:

```
syncthing -paths
```

- Disable the syncthing monitor process:

```
syncthing -no-restart
```

tabula

Extract tables from PDF files.

More information: <https://tabula.technology>.

- Extract all tables from a PDF to a CSV file:

```
tabula -o {{file.csv}} {{file.pdf}}
```

- Extract all tables from a PDF to a JSON file:

```
tabula --format JSON -o {{file.json}} {{file.pdf}}
```

- Extract tables from pages 1, 2, 3, and 6 of a PDF:

```
tabula --pages {{1-3,6}} {{file.pdf}}
```

- Extract tables from page 1 of a PDF, guessing which portion of the page to examine:

```
tabula --guess --pages {{1}} {{file.pdf}}
```

- Extract all tables from a PDF, using ruling lines to determine cell boundaries:

```
tabula --spreadsheet {{file.pdf}}
```

- Extract all tables from a PDF, using blank space to determine cell boundaries:

```
tabula --no-spreadsheet {{file.pdf}}
```

tac

Print and concatenate files in reverse (last line first).

- Print the contents of *file1* reversed to the standard output:

```
tac {{file1}}
```

- Print the contents of the standard input reversed to the standard output:

```
{{command}} | tac
```

- Concatenate several files reversed into the target file:

```
tac {{file1}} {{file2}} > {{target_file}}
```

tail

Display the last part of a file.

- Show last 'num' lines in file:

```
tail -n {{num}} {{file}}
```

- Show all file since line 'num':

```
tail -n +{{num}} {{file}}
```

- Show last 'num' bytes in file:

```
tail -c {{num}} {{file}}
```

- Keep reading file until **Ctrl + C**:

```
tail -f {{file}}
```

- Keep reading file until **Ctrl + C**, even if the file is rotated:

```
tail -F {{file}}
```

- Show last 'num' lines in 'file' and refresh every 'n' seconds:

```
tail -n {{num}} -s {{n}} -f {{file}}
```

tar

Archiving utility.

Often combined with a compression method, such as gzip or bzip.

More information: <https://www.gnu.org/software/tar>.

- Create an archive from files:

```
tar cf {{target.tar}} {{file1}} {{file2}} {{file3}}
```

- Create a gzipped archive:

```
tar czf {{target.tar.gz}} {{file1}} {{file2}} {{file3}}
```

- Create a gzipped archive from a directory using relative paths:

```
tar czf {{target.tar.gz}} -C {{path/to/directory}} .
```

- Extract a (compressed) archive into the current directory:

```
tar xf {{source.tar[.gz|.bz2|.xz]}}
```

- Extract a (compressed) archive into the target directory:

```
tar xf {{source.tar[.gz|.bz2|.xz]}} -C {{directory}}
```

- Create a compressed archive, using archive suffix to determine the compression program:

```
tar caf {{target.tar.xz}} {{file1}} {{file2}} {{file3}}
```

- List the contents of a tar file:

```
tar tvf {{source.tar}}
```

- Extract files matching a pattern:

```
tar xf {{source.tar}} --wildcards "{{*.html}}"
```

- Extract a specific file without preserving the folder structure:

```
tar xf {{source.tar}} {{source.tar/path/to/extract}} --strip-components={{depth_to_strip}}
```

task

TODO list manager.

- Add new task:

```
task add {{thing_to_do}}
```

- List tasks:

```
task list
```

- Mark task as completed:

```
task {{task_id}} done
```

- Modify task:

```
task {{task_id}} modify {{new_thing_to_do}}
```

- Delete task:

```
task {{task_id}} delete
```

tb

CLI for managing tasks and notes across multiple boards.

More information: <https://github.com/klaussinani/taskbook>.

- Add a new task to a board:

```
tb --task {{task_description}} @{{board_name}}
```

- Add a new note to a board:

```
tb --note {{note_description}} @{{board_name}}
```

- Edit item's priority:

```
tb --priority @{{item_id}} {{priority}}
```

- Check/uncheck item:

```
tb --check {{item_id}}
```

- Archive all checked items:

```
tb --clear
```

- Move item to a board:

```
tb --move @{{item_id}} {{board_name}}
```

tcpdump

Dump traffic on a network.

More information: <https://www.tcpdump.org>.

- List available network interfaces:

```
tcpdump -D
```

- Capture the traffic of a specific interface:

```
tcpdump -i {{eth0}}
```

- Capture all TCP traffic showing contents (ASCII) in console:

```
tcpdump -A tcp
```

- Capture the traffic from or to a host:

```
tcpdump host {{www.example.com}}
```

- Capture the traffic from a specific interface, source, destination and destination port:

```
tcpdump -i {{eth0}} src {{192.168.1.1}} and dst {{192.168.1.2}} and dst port {{80}}
```

- Capture the traffic of a network:

```
tcpdump net {{192.168.1.0/24}}
```

- Capture all traffic except traffic over port 22 and save to a dump file:

```
tcpdump -w {{dumpfile.pcap}} port not {{22}}
```

- Read from a given dump file:

```
tcpdump -r {{dumpfile.pcap}}
```

tea

A command line tool to interact with Gitea servers.

More information: <https://gitea.com/gitea/tea>.

- Log into a Gitea server:

```
tea login add --name "{{name}}" --url "{{url}}" --token  
"{{token}}"
```

- Display all repositories:

```
tea repos ls
```

- Display a list of issues:

```
tea issues ls
```

- Display a list of issues for a specific repository:

```
tea issues ls --repo "{{repository}}"
```

- Create a new issue:

```
tea issues create --title "{{title}}" --body "{{body}}"
```

- Display a list of open pull requests:

```
tea pulls ls
```

- Open the current repository in a browser:

```
tea open
```

tee

Read from standard input and write to standard output and files (or commands).

- Copy standard input to each FILE, and also to standard output:

```
echo "example" | tee {{FILE}}
```

- Append to the given FILEs, do not overwrite:

```
echo "example" | tee -a {{FILE}}
```

- Print standard input to the terminal, and also pipe it into another program for further processing:

```
echo "example" | tee {{/dev/tty}} | {{xargs printf "[%s]"))}}
```

- Create a directory called "example", count the number of characters in "example" and write "example" to the terminal:

```
echo "example" | tee >(xargs mkdir) >(wc -c)
```

telnet

Connect to a specified port of a host using the telnet protocol.

- Telnet to the default port of a host:

```
telnet {{host}}
```

- Telnet to a specific port of a host:

```
telnet {{ip_address}} {{port}}
```

- Exit a telnet session:

```
quit
```

- Emit the default escape character combination for terminating the session:

```
Ctrl + ]
```

- Start telnet with "x" as the session termination character:

```
telnet -e {{x}} {{ip_address}} {{port}}
```

terminalizer

Utility program which records the terminal and generate animated gifs or share a video.

More information: <https://terminalizer.com>.

- Create the global config directory:

```
terminalizer init
```

- Record the terminal and create a recording file:

```
terminalizer record {{filename}}
```

- Play a recorded file on the terminal:

```
terminalizer play {{filename}}
```

- Render a recording file as an animated gif image:

```
terminalizer render {{filename}}
```

- Upload a video to terminalizer.com:

```
terminalizer share {{filename}}
```

terraform fmt

Format configuration according to Terraform language style conventions.

More information: <https://www.terraform.io/docs/commands/fmt.html>.

- Format the configuration in the current directory:

```
terraform fmt
```

- Format the configuration in the current directory and subdirectories:

```
terraform fmt -recursive
```

- Display diffs of formatting changes:

```
terraform fmt -diff
```

- Do not list files that were formatted to stdout:

```
terraform fmt -list=false
```

terraform

Create and deploy infrastructure as code to cloud providers.

More information: <https://www.terraform.io/>.

- Initialize a new or existing Terraform configuration:

`terraform init`

- Verify that the configuration files are syntactically valid:

`terraform validate`

- Format configuration according to Terraform language style conventions:

`terraform fmt`

- Generate and show an execution plan:

`terraform plan`

- Build or change infrastructure:

`terraform apply`

- Destroy Terraform-managed infrastructure:

`terraform destroy`

tesseract

OCR (Optical Character Recognition) engine.

More information: <https://github.com/tesseract-ocr/tesseract>.

- Recognize text in an image and save it to `output.txt` (the '.txt' extension is added automatically):

```
tesseract {{image.png}} {{output}}
```

- Specify a custom language (default is English) with an ISO 639-2 code (e.g. deu = Deutsch = German):

```
tesseract -l deu {{image.png}} {{output}}
```

- List the ISO 639-2 codes of available languages:

```
tesseract --list-langs
```

- Specify a custom page segmentation mode (default is 3):

```
tesseract -psm {{0_to_10}} {{image.png}} {{output}}
```

- List page segmentation modes and their descriptions:

```
tesseract --help-psm
```

test

Evaluate condition.

If it is true, returns 0 exit status, otherwise returns 1.

- Test if given variable is equal to given string:

```
test $MY_VAR == '/bin/zsh'
```

- Test if given variable is empty:

```
test -z $GIT_BRANCH
```

- Test if file exists:

```
test -e {{filename}}
```

- Test if directory not exists:

```
test ! -d {{path/to/directory}}
```

- If-else statement:

```
test {{condition}} && echo "true" || echo "false"
```

testssl

Check SSL/TLS protocols and ciphers supported by a server.

More information: <https://testssl.sh/>.

- Test a server (run every check) on port 443:

```
testssl {{example.com}}
```

- Test a different port:

```
testssl {{example.com:465}}
```

- Only check available protocols:

```
testssl --protocols {{example.com}}
```

- Only check vulnerabilities:

```
testssl --vulnerable {{example.com}}
```

- Only check HTTP security headers:

```
testssl --headers {{example.com}}
```

theHarvester

A tool designed to be used in the early stages of a penetration test.

More information: <https://github.com/laramies/theHarvester>.

- Gather information on a domain using Google:

```
theHarvester --domain {{domain_name}} --source google
```

- Gather information on a domain using multiple sources:

```
theHarvester --domain {{domain_name}} --source  
{{google,bing,crtsh}}
```

- Change the limit of results to work with:

```
theHarvester --domain {{domain_name}} --source {{google}} --  
limit {{200}}
```

- Save the output to two files in xml and html format:

```
theHarvester --domain {{domain_name}} --source {{google}} --  
file {{output_file_name}}
```

- Output all available options:

```
theHarvester --help
```

thunderbird

Email client and RSS reader.

- Open thunderbird:

```
thunderbird
```

- Use a specific user profile:

```
thunderbird -P {{profile_name}}
```

- Use a specific user profile directory:

```
thunderbird --profile {{path/to/profile/directory}}
```

tig

A text-mode interface for Git.

More information: <https://github.com/jonas/tig>.

- Show the sequence of commits starting from the current one in reverse chronological order:

`tig`

- Show the history of a specific branch:

`tig {{branch}}`

- Show the history of specific files or directories:

`tig {{path1 path2 ...}}`

- Show the difference between two references (such as branches or tags):

`tig {{base_ref}}...{{compared_ref}}`

- Display commits from all branches and stashes:

`tig --all`

- Start in stash view, displaying all saved stashes:

`tig stash`

time

See how long a command takes.

- Time "ls":

```
time ls
```

timeout

Run a command with a time limit.

- Run `sleep 10` and terminate it, if it runs for more than 3 seconds:

```
timeout {{3s}} {{sleep 10}}
```

- Specify the signal to be sent to the command after the time limit expires. (By default, TERM is sent):

```
timeout --signal {{INT}} {{5s}} {{sleep 10}}
```

timew

A time tracking tool used to measure the duration of activities.

More information: <https://taskwarrior.org/docs/timewarrior>.

- Start a new stopwatch, giving a tag name to the activity being tracked:

```
timew start {{activity_tag}}
```

- View running stopwatches:

```
timew
```

- Stop the stopwatch with a given tag name:

```
timew stop {{activity_tag}}
```

- Stop all running stopwatches:

```
timew stop
```

- View tracked items:

```
timew summary
```

tldr

Displays simple help pages for command-line tools, from the tldr-pages project.

More information: <https://tldr.sh>.

- Get typical usages of a command (hint: this is how you got here!):

```
tldr {{command}}
```

- Show the tar tldr page for Linux:

```
tldr -p {{linux}} {{tar}}
```

- Get help for a git subcommand:

```
tldr {{git-checkout}}
```

- Update local pages (if the client supports caching):

```
tldr -u
```

tldr

Lint and format **tldr** pages.

More information: <https://github.com/tldr-pages/tldr-lint>.

- Lint all pages:

```
tldr {{pages_directory}}
```

- Format a specific page to **stdout**:

```
tldr -f {{page.md}}
```

- Format all pages in place:

```
tldr -fi {{pages_directory}}
```

tmux

Terminal multiplexer. It allows multiple sessions with windows, panes, and more.

More information: <https://github.com/tmux/tmux>.

- Start a new session:

`tmux`

- Start a new named session:

`tmux new -s {{name}}`

- List existing sessions:

`tmux ls`

- Attach to the most recently used session:

`tmux attach`

- Detach from the current session (inside a tmux session):

`Ctrl-B d`

- Create a new window (inside a tmux session):

`Ctrl-B c`

- Switch between sessions and windows (inside a tmux session):

`Ctrl-B w`

- Kill a session by name:

`tmux kill-session -t {{name}}`

tmuxinator

Create and manage tmux sessions easily.

More information: <https://github.com/tmuxinator/tmuxinator>.

- Create a new project:

```
tmuxinator new {{project}}
```

- Edit a project:

```
tmuxinator edit {{project}}
```

- List projects:

```
tmuxinator list
```

- Start a tmux session based on project:

```
tmuxinator start {{project}}
```

- Stop a project's tmux session:

```
tmuxinator stop {{project}}
```

tokei

A program that prints out statistics about code.

More information: <https://github.com/XAMPPRocky/tokei>.

- Get a report on the code in a directory and all subdirectories:

```
tokei {{path/to/directory}}
```

- Get a report for a directory excluding `.min.js` files:

```
tokei {{path/to/directory}} -e {{*.min.js}}
```

- Print out statistics for individual files in a directory:

```
tokei {{path/to/directory}} --files
```

- Get a report for all files of type Rust and Markdown:

```
tokei {{path/to/directory}} -t={{Rust}},{{Markdown}}
```

topgrade

Update all applications on the system.

More at <https://github.com/r-darwish/topgrade>.

- Run updates:

```
topgrade
```

- Say yes to all updates:

```
topgrade -y
```

- Cleanup temporary/old files:

```
topgrade -c
```

- Disable a certain update operation:

```
topgrade -disable {{operation}}
```

- Only perform a certain update operation:

```
topgrade --only {{operation}}
```

- Edit the config file with default editor:

```
topgrade --edit-config
```

touch

Change a file access and modification times (atime, mtime).

- Create a new empty file(s) or change the times for existing file(s) to current time:

```
touch {{filename}}
```

- Set the times on a file to a specific date and time:

```
touch -t {{YYYYMMDDHHMM.SS}} {{filename}}
```

- Use the times from a file to set the times on a second file:

```
touch -r {{filename}} {{filename2}}
```

tox

Automate Python testing across multiple Python versions.

Use tox.ini to configure environments and test command.

More information: <https://github.com/tox-dev/tox>.

- Run tests on all test environments:

`tox`

- Create a tox.ini configuration:

`tox-quickstart`

- List the available environments:

`tox --listenvs-all`

- Run tests on a specific environment (e.g. python 3.6):

`tox -e {{py36}}`

- Force the virtual environment to be recreated:

`tox --recreate -e {{py27}}`

tpp

Command-Line based presentation tool.

More information: <https://github.com/cbbrowne/tpp>.

- View a presentation:

```
tpp {{filename}}
```

- Output a presentation:

```
tpp -t {{type}} -o {{outputname}} {{filename}}
```

tput

View and modify terminal settings and capabilities.

- Move the cursor to a screen location:

```
tput cup {{y_coordinate}} {{x_coordinate}}
```

- Set foreground (af) or background (ab) color:

```
tput {{setaf|setab}} {{ansi_color_code}}
```

- Show number of columns, lines, or colors:

```
tput {{cols|lines|colors}}
```

- Ring the terminal bell:

```
tput bel
```

- Reset all terminal attributes:

```
tput sgr0
```

- Enable / Disable word wrap:

```
tput {{smam|rmam}}
```

tr

Translate characters: run replacements based on single characters and character sets.

- Replace all occurrences of a character in a file, and print the result:

```
tr {{find_character}} {{replace_character}} < {{filename}}
```

- Replace all occurrences of a character from another command's output:

```
echo {{text}} | tr {{find_character}} {{replace_character}}
```

- Map each character of the first set to the corresponding character of the second set:

```
tr '{{abcd}}' '{{jkmn}}' < {{filename}}
```

- Delete all occurrences of the specified set of characters from the input:

```
tr -d '{{input_characters}}' < {{filename}}
```

- Compress a series of identical characters to a single character:

```
tr -s '{{input_characters}}' < {{filename}}
```

- Translate the contents of a file to upper-case:

```
tr "[lower]" "[upper]" < {{filename}}
```

- Strip out non-printable characters from a file:

```
tr -cd "[print]" < {{filename}}
```

traceroute

Print the route packets trace to network host.

- Traceroute to a host:

```
traceroute {{host}}
```

- Disable IP address and host name mapping:

```
traceroute -n {{host}}
```

- Specify wait time for response:

```
traceroute -w {{0.5}} {{host}}
```

- Specify number of queries per hop:

```
traceroute -q {{5}} {{host}}
```

- Specify size in bytes of probing packet:

```
traceroute {{host}} {{42}}
```

traefik

A HTTP reverse proxy and load balancer.

More information: <https://traefik.io>.

- Start server with default config:

`traefik`

- Start server with a custom config file:

`traefik --c {{config_file}}.toml`

- Start server with cluster mode enabled:

`traefik --cluster`

- Start server with web UI enabled:

`traefik --web`

trans

Translate Shell is a command-line translator.

More information: <https://github.com/soimort/translate-shell>.

- Translate a word (language is detected automatically):

```
trans "{{word_or_sentence_to_translate}}"
```

- Get a brief translation:

```
trans --brief "{{word_or_sentence_to_translate}}"
```

- Translate a word into french:

```
trans :{{fr}} {{word}}
```

- Translate a word from German to English:

```
trans {{de}}:{{en}} {{Schmetterling}}
```

- Behave like a dictionary to get the meaning of a word:

```
trans -d {{word}}
```

transcode

Transcode video and audio codecs, and convert between media formats.

- Create stabilisation file to be able to remove camera shakes:

```
transcode -J stabilize -i {{input_file}}
```

- Remove camera shakes after creating stabilisation file, transform video using xvid:

```
transcode -J transform -i {{input_file}} -y xvid -o  
{{output_file}}
```

- Resize the video to 640x480 pixels and convert to MPEG4 codec using xvid:

```
transcode -Z 640x480 -i {{input_file}} -y xvid -o  
{{output_file}}
```

transcrypt

Transparently encrypt files within a git repository.

More information: <https://github.com/elasticdog/transcrypt>.

- Initialize an unconfigured repository:

`transcrypt`

- List the currently encrypted files:

`git ls-crypt`

- Display the credentials of a configured repository:

`transcrypt --display`

- Initialize and decrypt a fresh clone of a configured repository:

`transcrypt --cipher={{cipher}}`

- Rekey to change the encryption cipher or password:

`transcrypt --rekey`

transmission-cli

A lightweight, command-line BitTorrent client.

This tool has been deprecated, please see [transmission-remote](#).

More information: <https://transmissionbt.com>.

- Download a specific torrent:

```
transmission-cli {{url|magnet|path/to/file}}
```

- Download a torrent to a specific directory:

```
transmission-cli --download-dir {{path/to/ download_directory}} {{url|magnet|path/to/file}}
```

- Create a torrent file from a specific file or directory:

```
transmission-cli --new {{path/to/source_file_or_directory}}
```

- Set the download speed limit to 50 KB/s:

```
transmission-cli --downlimit {{50}} {{url|magnet|path/to/ file}}
```

- Set the upload speed limit to 50 KB/s:

```
transmission-cli --uplimit {{50}} {{url|magnet|path/to/file}}
```

- Use a specific port for connections:

```
transmission-cli --port {{port_number}} {{url|magnet|path/to/ file}}
```

- Force encryption for peer connections:

```
transmission-cli --encryption-required {{url|magnet|path/to/ file}}
```

- Use a Bluetack-formatted peer blocklist:

```
transmission-cli --blocklist {{blocklist_url|path/to/ blocklist}} {{url|magnet|path/to/file}}
```

transmission-create

A CLI utility to create BitTorrent .torrent files.

More information: <https://linux.die.net/man/1/transmission-create>.

- Create a torrent with 2048 KB as the piece size:

```
transmission-create -o {{path/to/example.torrent}} --tracker
{{tracker_announce_url}} --piecesize {{2048}} {{path/to/
file_or_directory}}
```

- Create a private torrent with a 2048 KB piece size:

```
transmission-create -p -o {{path/to/example.torrent}} --
tracker {{tracker_announce_url}} --piecesize {{2048}} {{path/
to/file_or_directory}}
```

- Create a torrent with a comment:

```
transmission-create -o {{path/to/example.torrent}} --tracker
{{tracker_url1}} -c {{comment}} {{path/to/file_or_directory}}
```

- Create a torrent with multiple trackers:

```
transmission-create -o {{path/to/example.torrent}} --tracker
{{tracker_url1}} --tracker {{tracker_url2}} {{path/to/
file_or_directory}}
```

- Show help page:

```
transmission-create --help
```

transmission-remote

Remote control utility for transmission-daemon and transmission.

More information: <https://transmissionbt.com>.

- Add a torrent file or magnet link to Transmission and download to a specified directory:

```
transmission-remote {{hostname}} -a {{torrent|url}} -w  
{{path/to/download_directory}}
```

- Change the default download directory:

```
transmission-remote {{hostname}} -w {{path/to/  
download_directory}}
```

- List all torrents:

```
transmission-remote {{hostname}} --list
```

- Start torrent 1 and 2, stop torrent 3:

```
transmission-remote {{hostname}} -t "{{1,2}}" --start -t  
{3} --stop
```

- Remove torrent 1 and 2, and also delete local data for torrent 2:

```
transmission-remote {{hostname}} -t {{1}} --remove -t {{2}}  
--remove-and-delete
```

- Stop all torrents:

```
transmission-remote {{hostname}} -t {{all}} --stop
```

- Move torrents 1-10 and 15-20 to a new folder (folder will be created if it does not exist):

```
transmission-remote {{hostname}} -t "{{1-10,15-20}}" --move  
{{path/to/new_directory}}
```

trash-cli

A command line interface to the trashcan APIs.

More information: <https://github.com/andreafrancia/trash-cli>.

- Trash files and directories:

`trash-put {{filename}}`

- Empty the trashcan:

`trash-empty`

- List trashed files:

`trash-list`

- Restore a trashed file by choosing a number from the list that results from this command:

`trash-restore`

- Remove individual files from the trashcan:

`trash-rm {{filename}}`

travis

Command line client to interface with Travis CI.

More information: <https://github.com/travis-ci/travis.rb>.

- Display the client version:

```
travis version
```

- Authenticate the CLI client against the server, using an authentication token:

```
travis login
```

- List repositories the user has permissions on:

```
travis repos
```

- Encrypt values in `.travis.yml`:

```
travis encrypt {{token}}
```

- Generate a `.travis.yml` file and enable the project:

```
travis init
```

trawl

Prints out network interface information to the console, much like ifconfig/ipconfig/ip/ifdata.

More information: <https://github.com/robphoenix/trawl>.

- Show column names:

```
trawl -n
```

- Filter interface names using a case insensitive regular expression:

```
trawl -f wi
```

- Get a list of available interfaces:

```
trawl -i
```

- Include the loopback interface:

```
trawl -l
```

true

Returns a successful exit status code of 0.

Use this with the `||` operator to make a command always exit with 0.

- Return a successful exit code:

```
true
```

truncate

Shrink or extend the size of a file to the specified size.

- Set a size of 10 GB to an existing file, or create a new file with the specified size:

```
truncate -s {{10G}} {{filename}}
```

- Extend the file size by 50M, fill with holes (which reads as zero bytes):

```
truncate -s +{{50M}} {{filename}}
```

- Shrink the file by 2GiB, by removing data from the end of file:

```
truncate -s -{{2G}} {{filename}}
```

- Empty the file's content:

```
truncate -s 0 {{filename}}
```

tsc

TypeScript compiler.

More information: <https://www.typescriptlang.org/docs/handbook/compiler-options.html>.

- Compile a TypeScript file `foobar.ts` into a JavaScript file `foobar.js`:

```
tsc {{foobar.ts}}
```

- Compile a TypeScript file into JavaScript using a specific target syntax (default is `ES3`):

```
tsc --target {{ES5|ES2015|ES2016|ES2017|ES2018|ESNEXT}}  
{{foobar.ts}}
```

- Compile a TypeScript file into a JavaScript file with a custom name:

```
tsc --outFile {{output.js}} {{input.ts}}
```

- Compile all `.ts` files of a TypeScript project defined in a `tsconfig.json` file:

```
tsc --build {{tsconfig.json}}
```

- Run the compiler using command line options and arguments fetched from a text file:

```
tsc @{{args.txt}}
```

- Type-check multiple JavaScript files, and output only the errors:

```
tsc --allowJs --checkJs --noEmit {{src/**/*.js}}
```

tslint

A pluggable linting utility for TypeScript.

More information: <https://palantir.github.io/tslint>.

- Create tslint config:

```
tslint --init
```

- Lint on a given set of files:

```
tslint {{filename}}.js {{filename1}}.js
```

- Fix lint issues:

```
tslint --fix
```

- Lint with the config file in the project root:

```
tslint --project {{path/to/project_root}}
```

tsort

Perform a topological sort.

A common use is to show the dependency order of nodes in a directed acyclic graph.

- Perform a topological sort consistent with a partial sort per line of input separated by blanks:

```
tsort {{file}}
```

tty

Returns terminal name.

- Print the file name of this terminal:

```
tty
```

twm

A window manager for the X Window system.

More information: <https://gitlab.freedesktop.org/xorg/app/twm>.

- Connect to the default X server:

`twm`

- Connect to a specific X server:

`twm -display {{display}}`

- Only manage the default screen:

`twm -s`

- Use a specific startup file:

`twm -f {{path/to/file}}`

- Enable verbose mode and print unexpected errors in X:

`twm -v`

type

Display the kind of command the shell will execute.

- Display the kind of a command:

```
type {{command}}
```

- Display all locations containing the specified executable:

```
type -a {{command}}
```

- Display the name of the disk file that would be executed:

```
type -p {{command}}
```

ufraw-batch

Convert RAW files from cameras into standard image files.

- Simply convert RAW files to jpg:

```
ufraw-batch --out-type=jpg {{input_file(s)}}
```

- Simply convert RAW files to png:

```
ufraw-batch --out-type/png {{input_file(s)}}
```

- Extract the preview image from the raw file:

```
ufraw-batch --embedded-image {{input_file(s)}}
```

- Save the file with size up to the given maximums MAX1 and MAX2:

```
ufraw-batch --size=MAX1,MAX2 {{input_file(s)}}
```

ulimit

Get and set user limits.

- Get the properties of all the user limits:

```
ulimit -a
```

- Get hard limit for the number of simultaneously opened files:

```
ulimit -H -n
```

- Get soft limit for the number of simultaneously opened files:

```
ulimit -S -n
```

- Set max per-user process limit:

```
ulimit -u 30
```

umask

Manage the read/write/execute permissions that are masked out (i.e. restricted) for newly created files by the user.

- Display the current mask in octal notation:

```
umask
```

- Display the current mask in symbolic (human-readable) mode:

```
umask -S
```

- Change the mask symbolically to allow read permission for all users (the rest of the mask bits are unchanged):

```
umask {{a+r}}
```

- Set the mask (using octal) to restrict no permissions for the file's owner, and restrict all permissions for everyone else:

```
umask {{077}}
```

umount

Unlink a filesystem from its mount point, making it no longer accessible.

A filesystem cannot be unmounted when it is busy.

- Unmount a filesystem, by passing the path to the source it is mounted from:

```
umount {{path/to/device_file}}
```

- Unmount a filesystem, by passing the path to the target where it is mounted:

```
umount {{path/to/mounted_directory}}
```

- Unmount all mounted filesystems (except the **proc** filesystem):

```
umount -a
```

unalias

Remove aliases.

- Remove an alias:

```
unalias {{alias_name}}
```

- Remove all aliases:

```
unalias -a
```

uname

Print details about the current machine and the operating system running on it.

Note: for additional information about the operating system, try the **lsb_release** command.

- Print hardware-related information: machine and processor:

```
uname -mp
```

- Print software-related information: operating system, release number, and version:

```
uname -srv
```

- Print the nodename (hostname) of the system:

```
uname -n
```

- Print all available system information (hardware, software, nodename):

```
uname -a
```

unar

Extract contents from archive files.

- Extract an archive to the current directory:

```
unar {{archive}}
```

- Extract an archive to the specified directory:

```
unar -o {{path/to/directory}} {{archive}}
```

- Force overwrite if files to be unpacked already exist:

```
unar -f {{archive}}
```

- Force rename if files to be unpacked already exist:

```
unar -r {{archive}}
```

- Force skip if files to be unpacked already exist:

```
unar -s {{archive}}
```

unclutter

Hides the mouse cursor.

- Hide mouse cursor after 3 seconds:

```
unclutter -idle {{3}}
```

uncrustify

C, C++, C#, D, Java and Pawn source code formatter.

More information: <https://github.com/uncrustify/uncrustify>.

- Format a single file:

```
uncrustify -f {{path/to/file.cpp}} -o {{path/to/output.cpp}}
```

- Read filenames from stdin, and take backups before writing output back to the original filepaths:

```
find . -name "*.cpp" | uncrustify -F - --replace
```

- Don't make backups (useful if files are under version control):

```
find . -name "*.cpp" | uncrustify -F - --no-backup
```

- Use a custom configuration file and write the result to stdout:

```
uncrustify -c {{path/to/uncrustify.cfg}} -f {{path/to/file.cpp}}
```

- Explicitly set a configuration variable's value:

```
uncrustify --set {{option}}={{value}}
```

- Generate a new configuration file:

```
uncrustify --update-config -o {{path/to/new.cfg}}
```

unexpand

Convert spaces to tabs.

- Convert blanks in each file to tabs, writing to standard output:

```
unexpand {{file}}
```

- Convert blanks to tabs, reading from standard output:

```
unexpand
```

- Convert all blanks, instead of just initial blanks:

```
unexpand -a {{file}}
```

- Convert only leading sequences of blanks (overrides -a):

```
unexpand --first-only {{file}}
```

- Have tabs a certain number of characters apart, not 8 (enables -a):

```
unexpand -t {{number}} {{file}}
```

uniq

Output the unique lines from the given input or file.

Since it does not detect repeated lines unless they are adjacent, we need to sort them first.

- Display each line once:

```
sort {{file}} | uniq
```

- Display only unique lines:

```
sort {{file}} | uniq -u
```

- Display only duplicate lines:

```
sort {{file}} | uniq -d
```

- Display number of occurrences of each line along with that line:

```
sort {{file}} | uniq -c
```

- Display number of occurrences of each line, sorted by the most frequent:

```
sort {{file}} | uniq -c | sort -nr
```

unison

Bidirectional file synchronisation tool.

More information: <https://www.cis.upenn.edu/~bcpierce/unison/download/releases/stable/unison-manual.html>.

- Sync two directories (creates log first time these two directories are synchronised):

```
unison {{path/to/directory_1}} {{path/to/directory_2}}
```

- Automatically accept the (non-conflicting) defaults:

```
unison {{path/to/directory_1}} {{path/to/directory_2}} -auto
```

- Ignore some files using a pattern:

```
unison {{path/to/directory_1}} {{path/to/directory_2}} -ignore {{pattern}}
```

- Show documentation:

```
unison -doc {{topics}}
```

unlink

Remove a link to a file from the filesystem.

The file contents is lost if the link is the last one to the file.

- Remove the specified file if it is the last link:

```
unlink {{path/to/file}}
```

unrar

Extract RAR archives.

- Extract files with original directory structure:

```
unrar x {{compressed.rar}}
```

- Extract files to a specified path with the original directory structure:

```
unrar x {{compressed.rar}} {{path/to/extract}}
```

- Extract files into current directory, losing directory structure in the archive:

```
unrar e {{compressed.rar}}
```

- Test integrity of each file inside the archive file:

```
unrar t {{compressed.rar}}
```

- List files inside the archive file without decompressing it:

```
unrar l {{compressed.rar}}
```

unzip

Extract compressed files in a ZIP archive.

- Extract zip file(s) (for multiple files, separate file paths by spaces):

```
unzip {{file(s)}}
```

- Extract zip files(s) to given path:

```
unzip {{compressed_file(s)}} -d {{path/to/put/extracted_file(s)}}
```

- List the contents of a zip file without extracting:

```
unzip -l {{file.zip}}
```

- Extract the contents of the file(s) to **stdout** alongside the extracted file names:

```
unzip -c {{file.zip}}
```

- Extract a zip file created in windows, containing files with non-ascii (chinese) filenames:

```
unzip -O {{gbk}} {{file.zip}}
```

uptime

Tell how long the system has been running and other information.

- Print current time, uptime, number of logged-in users and other information:
`uptime`

- Show only the amount of time the system has been booted for:
`uptime --pretty`

- Print the date and time the system booted up at:
`uptime --since`

- Show version information:
`uptime --version`

upx

Compress or decompress executables.

More information: <https://upx.github.io>.

- Compress executable:

```
upx {{file}}
```

- Decompress executable:

```
upx -d {{file}}
```

- Detailed help:

```
upx --help
```

users

Display a list of logged in users.

- Display a list of logged in users:

```
users
```

- Display a list of logged in users according to a specific file:

```
users {{/var/log/wmtp}}
```

uvicorn

Python ASGI HTTP Server, for asynchronous projects.

More information: <https://www.uvicorn.org/>.

- Run Python web app:

```
uvicorn {{import.path:app_object}}
```

- Listen on port 8080 on localhost:

```
uvicorn --host {{localhost}} --port {{8080}}
{{import.path:app_object}}
```

- Turn on live reload:

```
uvicorn --reload {{import.path:app_object}}
```

- Use 4 worker processes for handling requests:

```
uvicorn --workers {{4}} {{import.path:app_object}}
```

- Run app over HTTPS:

```
uvicorn --ssl-certfile {{cert.pem}} --ssl-keyfile {{key.pem}}
{{import.path:app_object}}
```

vagrant

Manage lightweight, reproducible, and portable development environments.

More information: <https://www.vagrantup.com>.

- Create Vagrantfile in current directory with the base Vagrant box:

```
vagrant init
```

- Create Vagrantfile with the Ubuntu 14.04 (Trusty Tahr) box from HashiCorp Atlas:

```
vagrant init ubuntu/trusty32
```

- Start and provision the vagrant environment:

```
vagrant up
```

- Suspend the machine:

```
vagrant suspend
```

- Halt the machine:

```
vagrant halt
```

- Connect to machine via SSH:

```
vagrant ssh
```

- Output the SSH configuration file of the running Vagrant machine:

```
vagrant ssh-config
```

vala

Vala code runner.

Tutorial: <https://wiki.gnome.org/Projects/Vala/Tutorial>.

Doc homepage: <https://valadoc.org/>.

- Run a vala file, with gtk+:

```
vala {{path/to/file.vala}} --pkg {{gtk+-3.0}}
```

- Display version info:

```
vala --version
```

- Display helper message:

```
vala --help
```

valac

Vala code compiler.

Tutorial: <https://wiki.gnome.org/Projects/Vala/Tutorial>.

Doc homepage: <https://valadoc.org/>.

- Compile a vala file, with gtk+:

```
valac {{path/to/file.vala}} --pkg {{gtk+-3.0}}
```

- Display version info:

```
valac --version
```

- Display helper message:

```
valac --help
```

valgrind

Wrapper for a set of expert tools for profiling, optimizing and debugging programs.

Commonly used tools include **memcheck**, **cachegrind**, **callgrind**, **massif**, **helgrind**, and **drd**.

More information: <http://www.valgrind.org>.

- Use the (default) Memcheck tool to show a diagnostic of memory usage by **program**:

```
valgrind {{program}}
```

- Use Memcheck to report all possible memory leaks of **program** in full detail:

```
valgrind --leak-check=full --show-leak-kinds=all {{program}}
```

- Use the Cachegrind tool to profile and log CPU cache operations of **program**:

```
valgrind --tool=cachegrind {{program}}
```

- Use the Massif tool to profile and log heap memory and stack usage of **program**:

```
valgrind --tool=massif --stacks=yes {{program}}
```

var-dump-server

Symfony dump server.

Collects data dumped by the Symfony VarDumper component.

More information: https://symfony.com/doc/current/components/var_dumper.html#the-dump-server.

- Start the server:

```
var-dump-server
```

- Dump the data in an HTML file:

```
var-dump-server --format=html > {{path/to/file.html}}
```

- Make the server listen on a specific address and port:

```
var-dump-server --host {{127.0.0.1:9912}}
```

vault

A CLI to interact with HashiCorp Vault.

More information: <https://www.vaultproject.io/docs/commands>.

- Connect to a Vault server and initialize a new encrypted data store:

```
vault init
```

- Unseal (unlock) the vault, by providing one of the key shares needed to access the encrypted data store:

```
vault unseal {{key-share-x}}
```

- Authenticate the CLI client against the Vault server, using an authentication token:

```
vault auth {{authentication_token}}
```

- Store a new secret in the vault, using the generic back-end called "secret":

```
vault write secret/{{hello}} value={{world}}
```

- Read a value from the vault, using the generic back-end called "secret":

```
vault read secret/{{hello}}
```

- Read a specific field from the value:

```
vault read -field={{field_name}} secret/{{hello}}
```

- Seal (lock) the Vault server, by removing the encryption key of the data store from memory:

```
vault seal
```

VBoxManage

Command-line interface to VirtualBox.

Includes all the functionality of the GUI and more.

More information: <https://www.virtualbox.org/manual/ch08.html#vboxmanage-intro>.

- List all VirtualBox virtual machines:

```
VBoxManage list vms
```

- Show information about a particular virtual machine:

```
VBoxManage showvminfo {{name|uuid}}
```

- Start a virtual machine:

```
VBoxManage startvm {{name|uuid}}
```

- Start a virtual machine in headless mode:

```
VBoxManage startvm {{name|uuid}} -type headless
```

- Shutdown the virtual machine and save its current state:

```
VBoxManage controlvm {{name|uuid}} savestate
```

- Shutdown down the virtual machine without saving its state:

```
VBoxManage controlvm {{name|uuid}} poweroff
```

- Update VBox extension packs:

```
VBoxManage extpack install --replace  
{{VboxExtensionPackFileName}}
```

vcsh

Version Control System for the home directory using git repositories.

More information: <https://github.com/RichiH/vcsh>.

- Initialize an (empty) repository:

```
vcsh init {{repository_name}}
```

- Clone a repository into a custom directory name:

```
vcsh clone {{git_url}} {{repository_name}}
```

- List all managed repositories:

```
vcsh list
```

- Execute a git command on a managed repository:

```
vcsh {{repository_name}} {{git_command}}
```

- Push/pull all managed repositories to/from remotes:

```
vcsh {{push|pull}}
```

- Write a custom .gitignore file for a managed repository:

```
vcsh write-gitignore {{repository_name}}
```

vdir

List directory contents.

Drop-in replacement for `ls -l`.

- List files and directories in the current directory, one per line, with details:

`vdir`

- List with sizes displayed in human readable units (KB, MB, GB):

`vdir -h`

- List including hidden files (starting with a dot):

`vdir -a`

- List files and directories sorting entries by size (largest first):

`vdir -S`

- List files and directories sorting entries by modification time (newest first):

`vdir -t`

- List grouping directories first:

`vdir --group-directories-first`

- Recursively list all files and directories in a specific directory:

`vdir --recursive {{path/to/directory}}`

vegeta

A command line utility and a library for HTTP load testing.

See also [ab](#).

More information: <https://github.com/tsenart/vegeta>.

- Launch an attack lasting 30 seconds:

```
echo "{{GET https://example.com}}" | vegeta attack -duration={{30s}}
```

- Launch an attack on a server with a self-signed https certificate:

```
echo "{{GET https://example.com}}" | vegeta attack -insecure -duration={{30s}}
```

- Launch an attack with a rate of 10 requests per second:

```
echo "{{GET https://example.com}}" | vegeta attack -duration={{30s}} -rate={{10}}
```

- Launch an attack and display a report:

```
echo "{{GET https://example.com}}" | vegeta attack -duration={{30s}} | vegeta report
```

- Launch an attack and plot the results on a graph (latency over time):

```
echo "{{GET https://example.com}}" | vegeta attack -duration={{30s}} | vegeta plot > {{path/to/results.html}}
```

- Launch an attack against multiple URLs from a file:

```
vegeta attack -duration={{30s}} -targets={{requests.txt}} | vegeta report
```

vela

Command line tools for the Vela pipeline.

More information: <https://go-vela.github.io/docs/cli/>.

- Trigger a pipeline to run from a git branch, commit or tag:

```
vela add deployment --org {{organization}} --repo
{{repository_name}} --target {{environment}} --ref {{branch|commit|refs/tags/git_tag}} --description
"{{deploy_description}}"
```

- List deployments for a repository:

```
vela get deployment --org {{organization}} --repo
{{repository_name}}
```

- Inspect a specific deployment:

```
vela view deployment --org {{organization}} --repo
{{repository_name}} --deployment {{deployment_number}}
```

velero

Backup and migrate Kubernetes applications and their persistent volumes.

More information: <https://github.com/heptio/velero>.

- Create a backup containing all resources:

```
velero backup create {{backup_name}}
```

- List all backups:

```
velero backup get
```

- Delete a backup:

```
velero backup delete {{backup_name}}
```

- Create a weekly backup, each living for 90 days (2160 hours):

```
velero schedule create {{schedule_name}} --  
schedules="{{@every 7d}}" --ttl {{2160h0m0s}}
```

- Create a restore from the latest successful backup triggered by specific schedule:

```
velero restore create --from-schedule {{schedule_name}}
```

view

A read-only version of **vim**.

This is equivalent to **vim -R**.

- Open a file:

```
view {{file}}
```

vim

Vim (Vi IMproved), a command-line text editor, provides several modes for different kinds of text manipulation.

Pressing **i** enters edit mode. **<Esc>** goes back to normal mode, which doesn't allow regular text insertion.

More information: <https://www.vim.org>.

- Open a file:

```
vim {{path/to/file}}
```

- View Vim's help manual:

```
:help<Enter>
```

- Save and Quit:

```
:wq<Enter>
```

- Open a file at a specified line number:

```
vim +{{line_number}} {{path/to/file}}
```

- Undo the last operation:

```
u
```

- Search for a pattern in the file (press **n/N** to go to next/previous match):

```
/{{search_pattern}}<Enter>
```

- Perform a regex substitution in the whole file:

```
:%s/{{pattern}}/{{replacement}}/g<Enter>
```

- Display the line numbers:

```
:set nu<Enter>
```

vimdiff

Open up to four files in vim and show the differences between them.

See **vim** documentation for working with files and navigating within a window.

- Open two files and show the differences (up to four files can be compared):

```
vimdiff {{file1}} {{file2}}
```

- Open two files using a horizontal window split instead of the default vertical split:

```
vimdiff -o {{file1}} {{file2}}
```

- Move the cursor to the window on the left|right|up|down:

```
Ctrl + w {{h|l|k|j}}
```

vimtutor

Vim tutor, teaching the basic vim commands.

- Launch the vim tutor using the given language (en, fr, de, ...):

```
vimtutor {{language}}
```

- Exit the tutor:

```
<Esc> :q <Enter>
```

virsh

Manage virsh guest domains.

More information: <https://libvirt.org/virshcmdref.html>.

NOTE: 'guest_id' can be the id, name or UUID of the guest.

- Connect to a hypervisor session:

```
virsh connect {{qemu://system}}
```

- List all domains:

```
virsh list --all
```

- Dump guest configuration file:

```
virsh dumpxml {{guest_id}} > {{path/to/guest.xml}}
```

- Create a guest from a configuration file:

```
virsh create {{path/to/config_file.xml}}
```

- Edit a guest's configuration file (editor can be changed with \$EDITOR):

```
virsh edit {{guest_id}}
```

- Start/reboot/shutdown/suspend/resume a guest:

```
virsh {{command}} {{guest_id}}
```

- Save the current state of a guest to a file:

```
virsh save {{guest_id}} {{filename}}
```

- Delete a running guest:

```
virsh destroy {{guest_id}} && virsh undefine {{guest_id}}
```

virt-install

Create virtual machines with libvirt and begin OS installation.

More information: <https://virt-manager.org/>.

- Create a virtual machine with 1 GiB RAM and 12 GiB storage and start Debian installation:

```
virt-install --memory {{1024}} --disk path={{path/to/
image.qcow2}},size={{12}} --cdrom {{path/to/debian.iso}}
```

virt-sparsify

Make virtual machine drive images thin-provisioned.

NOTE: Use only for offline machines to avoid data corruption.

Home page: <https://libguestfs.org/>.

- Create a sparsified compressed image without snapshots from an unsparsified one:

```
virt-sparsify --compress {{path/to/image.qcow2}} {{path/to/ image_new.qcow2}}
```

- Sparsify an image in-place:

```
virt-sparsify --in-place {{path/to/image.img}}
```

virtualenv

Create virtual isolated Python environments.

More information: <https://virtualenv.pypa.io/>.

- Create a new environment:

```
virtualenv {{path/to/venv}}
```

- Customize the prompt prefix:

```
virtualenv --prompt={{prompt_prefix}} {{path/to/venv}}
```

- Use a different version of Python with virtualenv:

```
virtualenv --python={{path/to/pythonbin}} {{path/to/venv}}
```

- Start (select) the environment:

```
source {{path/to/venv}}/bin/activate
```

- Stop the environment:

```
deactivate
```

virtualenvwrapper

Group of simple wrapper commands for Python's **virtualenv** tool.

More information: <http://virtualenvwrapper.readthedocs.org>.

- Create a new Python **virtualenv** in \$WORKON_HOME:

```
mkvirtualenv {{virtualenv_name}}
```

- Create a **virtualenv** for a specific Python version:

```
mkvirtualenv --python {{/usr/local/bin/python3.8}}  
{{virtualenv_name}}
```

- Activate or use a different **virtualenv**:

```
workon {{virtualenv_name}}
```

- Stop the **virtualenv**:

```
deactivate
```

- List all virtual environments:

```
lsvirtualenv
```

- Remove a **virtualenv**:

```
rmvirtualenv {{virtualenv_name}}
```

- Get summary of all virtualenvwrapper commands:

```
virtualenvwrapper
```

visudo

Safely edit the sudoers file.

- Edit sudoers file:

```
sudo visudo
```

- Check sudoers file for errors:

```
sudo visudo -c
```

vlc

Cross-platform multimedia player.

More information: <https://www.videolan.org/vlc/>.

- Play a file:

```
vlc {{path/to/file}}
```

- Play in fullscreen:

```
vlc --fullscreen {{path/to/file}}
```

- Play muted:

```
vlc --no-audio {{path/to/file}}
```

- Play repeatedly:

```
vlc --loop {{path/to/file}}
```

- Play video from a URL:

```
vlc {{https://www.youtube.com/watch?v=oHg5SJYRHA0}}
```

VSCE

Extension manager for Visual Studio Code.

More information: <https://github.com/microsoft/vscode-vsce>.

- List all the extensions created by a publisher:

```
vsce list {{publisher}}
```

- Publish an extension as major, minor or patch version:

```
vsce publish {{major|minor|patch}}
```

- Unpublish an extension:

```
vsce unpublish {{extension_id}}
```

- Package the current working directory as .vsix file:

```
vsce package
```

- Show the metadata associated with an extension:

```
vsce show {{extension_id}}
```

vue build

A subcommand provided by `@vue/cli` and `@vue/cli-service-global` that enables quick prototyping.

More information: <https://cli.vuejs.org/guide/prototyping.html>.

- Build a `.js` or `.vue` file in production mode with zero config:

```
vue build {{filename}}
```

vue init

Legacy project initialization subcommand of the Vue.js framework.

More information: <https://cli.vuejs.org/guide/creating-a-project.html#pulling-2-x-templates-legacy>.

- Create a new project using one of the default templates:

```
vue init {{webpack|webpack-simple|browserify|browserify-simple|simple}} {{project_name}}
```

- Create a new project using a local template:

```
vue init {{path/to/template_directory}} {{project_name}}
```

- Create a new project using a template from GitHub:

```
vue init {{username}}/{{repo}} {{project_name}}
```

vue serve

A subcommand provided by `@vue/cli` and `@vue/cli-service-global` that enables quick prototyping.

More information: <https://cli.vuejs.org/guide/prototyping.html>.

- Serve a `.js` or `.vue` file in development mode with zero config:

```
vue serve {{filename}}
```

vue

Multi-purpose CLI for Vue.js.

More information: <https://cli.vuejs.org>.

- Create a new vue project interactively:

```
vue create {{project_name}}
```

- Create a new project with web UI:

```
vue ui
```

W

Show who is logged on and what they are doing.

Print user login, TTY, remote host, login time, idle time, current process.

- Show logged-in users info:

w

- Show logged-in users info without a header:

w -h

w3m

A text-based web browser.

Supports SSL and mouse input, even over SSH.

More information: <http://w3m.sourceforge.net>.

- Open a URL:

w3m {{http://example.com}}

- Open a URL in monochrome mode:

w3m {{http://example.com}} -M

- Open a URL without mouse support:

w3m {{http://example.com}} --no-mouse

- Open a new browser tab:

Shift + T

- Display your browser history:

Ctrl + H

- Quit w3m:

'q' then 'y'

wait

Wait for a process to complete before proceeding.

- Wait for a process to finish given its process ID (PID) and return its exit status:

```
wait {{pid}}
```

- Wait for all processes known to the invoking shell to finish:

```
wait
```

waitress-serve

Pure Python WSGI HTTP Server.

- Run a Python web app:

```
waitress-serve {{import.path:wsgi_func}}
```

- Listen on port 8080 on localhost:

```
waitress-serve --listen={{localhost}}:{{8080}}
{{import.path:wsgi_func}}
```

- Start waitress on a Unix socket:

```
waitress-serve --unix-socket={{path/to/socket}}
{{import.path:wsgi_func}}
```

- Use 4 threads to process requests:

```
waitress-serve --threads={{4}} {{import.path:wsgifunc}}
```

- Call a factory method that returns a WSGI object:

```
waitress-serve --call {{import.path:wsgi_factory}}
```

- Set the URL scheme to https:

```
waitress-serve --url-scheme={{https}}
{{import.path:wsgi_func}}
```

wal

A tool to create color schemes based on the dominant colors of a wallpaper.

More information: <https://github.com/dylanaraps/pywal>.

- Preview color scheme:

```
wal --preview {{image.png}}
```

- Create color scheme:

```
wal -i {{image.png}}
```

- Create a light color scheme:

```
wal -il {{image.png}}
```

- Skip setting the desktop wallpaper:

```
wal -in {{image.png}}
```

- Skip setting the terminal colors:

```
wal -is {{image.png}}
```

- Restore the previously generated color scheme and wallpaper:

```
wal -R
```

wapm

The WebAssembly package manager.

More information: <https://wapm.io/help/reference>.

- Interactively create a new wapm.toml file:

```
wapm init
```

- Download all the packages listed as dependencies in wapm.toml:

```
wapm install
```

- Download a specific version of a package and add it to the list of dependencies in wapm.toml:

```
wapm install {{package_name}}@{{version}}
```

- Download a package and install it globally:

```
wapm install --global {{package_name}}
```

- Uninstall a package and remove it from the list of dependencies in wapm.toml:

```
wapm uninstall {{package_name}}
```

- Print a tree of locally-installed dependencies:

```
wapm list
```

- List top-level globally installed packages:

```
wapm list --global
```

- Execute a package command using the Wasmer runtime:

```
wapm run {{command_name}} {{arguments}}
```

wasm-objdump

Display information from WebAssembly binaries.

- Display the section headers of a given binary:

```
wasm-objdump -h {{file.wasm}}
```

- Display the entire disassembled output of a given binary:

```
wasm-objdump -d {{file.wasm}}
```

- Display the details of each section:

```
wasm-objdump --details {{file.wasm}}
```

- Display the details of a given section:

```
wasm-objdump --section '{{import}}' --details {{file.wasm}}
```

wasm-opt

Optimize WebAssembly binary files.

- Apply default optimizations and write to a given file:

```
wasm-opt -O {{input.wasm}} -o {{output.wasm}}
```

- Apply all optimizations and write to a given file (takes more time, but generates optimal code):

```
wasm-opt -O4 {{input.wasm}} -o {{output.wasm}}
```

- Optimize a file for size:

```
wasm-opt -Oz {{input.wasm}} -o {{output.wasm}}
```

- Print the textual representation of the binary to console:

```
wasm-opt {{input.wasm}} --print
```

wasm2c

Convert a file from the WebAssembly binary format to a C source file and header.

- Convert a file to a C source file and header and display it to the console:

```
wasm2c {{file.wasm}}
```

- Write the output to a given file (file.h gets additionally generated):

```
wasm2c {{file.wasm}} -o {{file.c}}
```

wasm2wat

Convert a file from the WebAssembly binary format to the text format.

- Convert a file to the text format and display it to the console:

```
wasm2wat {{file.wasm}}
```

- Write the output to a given file:

```
wasm2wat {{file.wasm}} -o {{file.wat}}
```

wat2wasm

Convert a file from the WebAssembly text format to the binary format.

More information: <https://github.com/WebAssembly/wabt>.

- Parse and check a file for errors:

```
wat2wasm {{file.wat}}
```

- Write the output binary to a given file:

```
wat2wasm {{file.wat}} -o {{file.wasm}}
```

- Display simplified representation of every byte:

```
wat2wasm -v {{file.wat}}
```

watch

Execute a program periodically, showing output fullscreen.

- Repeatedly run a command and show the result:

```
watch {{command}}
```

- Re-run a command every 60 seconds:

```
watch -n {{60}} {{command}}
```

- Monitor the contents of a directory, highlighting differences as they appear:

```
watch -d {{ls -l}}
```

watchexec

Run arbitrary commands when files change.

More information: <https://github.com/watchexec/watchexec>.

- Call `ls -la` when any file in the current directory changes:

```
watchexec -- {{ls -la}}
```

- Run `make` when any JavaScript, CSS and HTML files in the current directory change:

```
watchexec --exts {{js,css,html}} make
```

- Run `make` when any file in the `lib` or `src` subdirectories change:

```
watchexec --watch {{lib}} --watch {{src}} {{make}}
```

- Call/restart `my_server` when any file in the current directory change, sending `SIGKILL` to stop the child process:

```
watchexec --restart --signal {{SIGKILL}} {{my_server}}
```

WC

Count lines, words, or bytes.

- Count lines in file:

```
wc -l {{file}}
```

- Count words in file:

```
wc -w {{file}}
```

- Count characters (bytes) in file:

```
wc -c {{file}}
```

- Count characters in file (taking multi-byte character sets into account):

```
wc -m {{file}}
```

- Use standard input to count lines, words and characters (bytes) in that order:

```
{{find .}} | wc
```

weasyprint

Render HTML to PDF or PNG.

More information: <https://weasyprint.org/>.

- Render a HTML file to PDF:

```
weasyprint {{path/to/input.html}} {{path/to/output}}.pdf
```

- Render a HTML file to PNG, including an additional user stylesheet:

```
weasyprint {{path/to/input.html}} {{path/to/output}}.png --  
stylesheet {{path/to/stylesheet.css}}
```

- Output additional debugging information when rendering:

```
weasyprint {{path/to/input.html}} {{path/to/output}}.pdf --  
verbose
```

- Specify a custom resolution when outputting to PNG:

```
weasyprint {{path/to/input.html}} {{path/to/output}}.png --  
resolution {{300}}
```

- Specify a base url for relative urls in the input HTML file:

```
weasyprint {{path/to/input.html}} {{path/to/output}}.png --  
base-url {{url_or_filename}}
```

web-ext

A command line tool for managing web extension development.

More information: <https://www.npmjs.com/package/web-ext>.

- Run the web extension in the current directory in Firefox:

```
web-ext run
```

- Run a web extension from a specific directory in Firefox:

```
web-ext run --source-dir {{path/to/directory}}
```

- Display verbose execution output:

```
web-ext run --verbose
```

- Run a web extension in Firefox Android:

```
web-ext run --target firefox-android
```

- Lint the manifest and source files for errors:

```
web-ext lint
```

- Build and package the extension:

```
web-ext build
```

- Display verbose build output:

```
web-ext build --verbose
```

- Sign a package for self-hosting:

```
web-ext sign --api-key {{api_key}} --api-secret {{api_secret}}
```

webpack

Bundle a web project's js files and other assets into a single output file.

More information: <https://webpack.js.org>.

- Create a single output file from an entry point file:

```
webpack {{app.js}} {{bundle.js}}
```

- Load css files too from the js file (this uses the css loader for .css files):

```
webpack {{app.js}} {{bundle.js}} --module-bind 'css=css'
```

- Pass a config file (with eg. the entry script and the output filename) and show compilation progress:

```
webpack --config {{webpack.config.js}} --progress
```

- Automatically recompile on changes to project files:

```
webpack --watch {{app.js}} {{bundle.js}}
```

webtorrent

The command line interface for WebTorrent.

Supports magnets, urls, info hashes and .torrent files.

More information: <https://github.com/webtorrent/webtorrent-cli>.

- Download a torrent:

```
webtorrent download "{{torrent_id}}"
```

- Stream a torrent to VLC media player:

```
webtorrent download "{{torrent_id}}" --vlc
```

- Stream a torrent to a Digital Living Network Alliance (DLNA) device:

```
webtorrent download "{{torrent_id}}" --dlna
```

- Display a list of files for a specific torrent:

```
webtorrent download "{{torrent_id}}" --select
```

- Specify a file index from the torrent to download:

```
webtorrent download "{{torrent_id}}" --select {{index}}
```

- Seed a specific file or directory:

```
webtorrent seed {{path/to/file_or_directory}}
```

- Create a new torrent file for the specified file path:

```
webtorrent create {{path/to/file}}
```

- Display information for a magnet uri or .torrent file:

```
webtorrent info {{path/to/file_or_magnet}}
```

wget

Download files from the Web.

Supports HTTP, HTTPS, and FTP.

More information: <https://www.gnu.org/software/wget>.

- Download the contents of an URL to a file (named "foo" in this case):

```
wget {{https://example.com/foo}}
```

- Download the contents of an URL to a file (named "bar" in this case):

```
wget -O {{bar}} {{https://example.com/foo}}
```

- Download a single web page and all its resources with 3-second intervals between requests (scripts, stylesheets, images, etc.):

```
wget --page-requisites --convert-links --wait=3 {{https://example.com/somepage.html}}
```

- Download all listed files within a directory and its sub-directories (does not download embedded page elements):

```
wget --mirror --no-parent {{https://example.com/somepath/}}
```

- Limit the download speed and the number of connection retries:

```
wget --limit-rate={{300k}} --tries={{100}} {{https://example.com/somepath/}}
```

- Download a file from an HTTP server using Basic Auth (also works for FTP):

```
wget --user={{username}} --password={{password}} {{https://example.com}}
```

- Continue an incomplete download:

```
wget -c {{https://example.com}}
```

- Download all URLs stored in a text file to a specific directory:

```
wget -P {{path/to/directory}} -i {{URLs.txt}}
```

where

Reports all known instances of a command.

It could be an executable in the PATH environment variable, an alias, or a shell builtin.

- Find all instances of a command:

```
where {{command}}
```

which

Locate a program in the user's path.

- Search the PATH environment variable and display the location of any matching executables:

```
which {{executable}}
```

- If there are multiple executables which match, display all:

```
which -a {{executable}}
```

while

Simple shell loop.

- Read `stdin` and perform an action on every line:

```
while read line; do echo "$line"; done
```

- Execute a command forever once every second:

```
while :; do {{command}}; sleep 1; done
```

who

Display who is logged in and related data (processes, boot time).

- Display the username, line, and time of all currently logged-in sessions:

`who`

- Display information only for the current terminal session:

`who am i`

- Display all available information:

`who -a`

- Display all available information with table headers:

`who -a -H`

whoami

Print the username associated with the current effective user ID.

- Display currently logged username:

`whoami`

- Display the username after a change in the user ID:

`sudo whoami`

whois

Commandline client for the WHOIS (RFC 3912) protocol.

More information: <https://github.com/rfc1036/whois>.

- Get information about a domain name:

```
whois {{example.com}}
```

- Get information about an IP address:

```
whois {{8.8.8.8}}
```

- Get abuse contact for an IP address:

```
whois -b {{8.8.8.8}}
```

wordgrinder

Command-line word processor.

More information: <https://cowlark.com/wordgrinder>.

- Start wordgrinder (loads a blank document by default):

`wordgrinder`

- Open a given file:

`wordgrinder {{filename}}`

- Show the menu:

`Alt + M`

wormhole

Get things from one computer to another, safely.

More information: <https://magic-wormhole.readthedocs.io/en/latest/>.

- Send a file:

```
wormhole send {{path/to/file}}
```

- Receive a file:

```
wormhole receive {{wormhole_code}}
```

- Send raw text:

```
wormhole send
```

wpa_supplicant

Manage protected wireless networks.

- Join a protected wireless network:

```
wpa_supplicant -i {{interface}} -c {{path/to/}}
wpa_supplicant.conf.conf}}
```

- Join a protected wireless network and run it in a daemon:

```
wpa_supplicant -B -i {{interface}} -c {{path/to/}}
wpa_supplicant.conf.conf}}
```

wpscan

Wordpress vulnerability scanner.

More information: <https://github.com/wpscanteam/wpscan>.

- Update the vulnerability database:

```
wpscan --update
```

- Scan a Wordpress website:

```
wpscan --url {{url}}
```

- Scan a Wordpress website, using random user agents and passive detection:

```
wpscan --url {{url}} --stealthy
```

- Scan a Wordpress website, checking for vulnerable plugins and specifying the path to the **wp-content** directory:

```
wpscan --url {{url}} --enumerate {{vp}} --wp-content-dir  
{{remote/path/to/wp-content}}
```

- Scan a Wordpress website through a proxy:

```
wpscan --url {{url}} --proxy {{protocol://ip:port}} --proxy-  
auth {{username:password}}
```

- Perform user identifiers enumeration on a Wordpress website:

```
wpscan --url {{url}} --enumerate {{u}}
```

- Execute a password guessing attack on a Wordpress website:

```
wpscan --url {{url}} --usernames {{username|path/to/  
usernames.txt}} --passwords {{path/to/passwords.txt}} threads  
{{20}}
```

- Scan a Wordpress website, collecting vulnerability data from the WPVulnDB (<https://wpvulndb.com/>):

```
wpscan --url {{url}} --api-token {{token}}
```

wrangler

Cloudflare Workers command line tool.

More information: <https://developers.cloudflare.com/workers/>.

- Initialize a project with a skeleton configuration:

```
wrangler init {{project_name}}
```

- Authenticate with Cloudflare:

```
wrangler login
```

- Start a local development server:

```
wrangler dev --host {{hostname}}
```

- Publish the worker script:

```
wrangler publish
```

- Aggregate logs from the production worker:

```
wrangler tail
```

write

Write a message on the terminal of a specified logged in user (ctrl-C to stop writing messages).

Use the **who** command to find out all terminal_ids of all active users active on the system. See also **mesg**.

- Send a message to a given user on a given terminal id:

```
write {{username}} {{terminal_id}}
```

- Send message to "testuser" on terminal "/dev/tty/5":

```
write {{testuser}} {{tty/5}}
```

- Send message to "jhondoe" on pseudo terminal "/dev/pts/5":

```
write {{jhondoe}} {{pts/5}}
```

wrk

HTTP benchmarking tool.

More information: <https://github.com/wg/wrk>.

- Run a benchmark for 30 seconds, using 12 threads, and keeping 400 HTTP connections open:

```
wrk -t{{12}} -c{{400}} -d{{30s}} "{{http://127.0.0.1:8080/index.html}}"
```

- Run a benchmark with a custom header:

```
wrk -t{{2}} -c{{5}} -d{{5s}} -H "{{Host: example.com}}" "{{http://example.com/index.html}}"
```

- Run a benchmark with a request timeout of 2 seconds:

```
wrk -t{{2}} -c{{5}} -d{{5s}} --timeout {{2s}} "{{http://example.com/index.html}}"
```

WUZZ

Tool to interactively inspect HTTP requests and responses.

More information: <https://github.com/asciimoo/wuzz>.

- Start wuzz:

wuzz

- Display help information:

F1

- Send an HTTP request:

Ctrl + R

- Switch to the next view:

Ctrl + J, Tab

- Switch to the previous view:

Ctrl + K, Shift + Tab

X_X

View Excel and CSV files from the command-line.

More information: https://github.com/kristianperkins/x_x.

- View an XLSX or CSV file:

```
x_x {{file.xlsx|file.csv}}
```

- View an XLSX or CSV file, using the first row as table headers:

```
x_x -h {{0}} {{file.xlsx|file.csv}}
```

- View a CSV file with unconventional delimiters:

```
x_x --delimiter={{';'}} --quotechar={{'|'}} {{file.csv}}
```

xargs

Execute a command with piped arguments coming from another command, a file, etc.

The input is treated as a single block of text and split into separate pieces on spaces, tabs, newlines and end-of-file.

- Run a command using the input data as arguments:

```
{arguments_source} | xargs {{command}}
```

- Run multiple chained commands on the input data:

```
{arguments_source} | xargs sh -c "{{command1}} && {{command2}} | {{command3}}"
```

- Delete all files with a .backup extension (-print0 uses a null character to split file names, and -0 uses it as delimiter):

```
find . -name {'*.backup'} -print0 | xargs -0 rm -v
```

- Execute the command once for each input line, replacing any occurrences of the placeholder (here marked as _) with the input line:

```
{arguments_source} | xargs -I _ {{command}} _ {{optional_extra_arguments}}
```

- Parallel runs of up to max-procs processes at a time; the default is 1. If max-procs is 0, xargs will run as many processes as possible at a time:

```
{arguments_source} | xargs -P {{max-procs}} {{command}}
```

xcaddy

The custom build tool for the Caddy Web Server.

More information: <https://github.com/caddyserver/xcaddy>.

- Build Caddy server from source:

```
xcaddy build
```

- Build Caddy server with a specific version (defaults to latest):

```
xcaddy build {{version}}
```

- Build Caddy with a specific module:

```
xcaddy build --with {{module_name}}
```

- Build Caddy and output to a specific file:

```
xcaddy build --output {{path/to/file}}
```

- Build and run Caddy for a development plugin in the current directory:

```
xcaddy run
```

- Build and run Caddy for a development plugin using a specific Caddy config:

```
xcaddy run --config {{path/to/file}}
```

XCV

Cut, copy, and paste in the command-line.

More information: <https://github.com/busterc/xcv>.

- Cut a file:

```
xsv x {{input_file}}
```

- Copy a file:

```
xsv c {{input_file}}
```

- Paste a file:

```
xsv v {{output_file}}
```

- List files available for pasting:

```
xsv l
```

xdg-user-dirs-update

Update XDG user directories.

More information: <https://manpages.ubuntu.com/manpages/bionic/man1/xdg-user-dirs-update.1.html>.

- Change XDG's DESKTOP directory to the specified directory (must be absolute):

```
xdg-user-dirs-update --set DESKTOP "{{path/to/directory}}"
```

- Write the result to the specified dry-run-file instead of the `user-dirs.dirs` file:

```
xdg-user-dirs-update --dummy-output "{{path/to/dry_run_file}}" --set {{xdg_user_directory}} "{{path/to/directory}}"
```

Xephyr

A nested X server that runs as an X application.

- Create a black window with display ID ":2":

```
Xephyr -br -ac -noreset -screen {{800x600}} {{:2}}
```

- Start an X application on the new screen:

```
DISPLAY=:2 {{command_name}}
```

xgettext

Extract gettext strings from code files.

More information: https://www.gnu.org/software/gettext/manual/html_node/xgettext-Invocation.html.

- Scan file and output strings to `messages.po`:

```
xgettext {{path/to/input_file}}
```

- Use a different output filename:

```
xgettext --output {{path/to/output_file}} {{path/to/ input_file}}
```

- Append new strings to an existing file:

```
xgettext --join-existing --output {{path/to/output_file}} {{path/to/ input_file}}
```

- Don't add a header containing metadata to the output file:

```
xgettext --omit-header {{path/to/input_file}}
```

xkcdpass

A flexible and scriptable password generator which generates strong passphrases.

Inspired by XKCD 936.

More information: <https://github.com/redacted/XKCD-password-generator>.

- Generate one passphrase with the default options:

`xkcdpass`

- Generate one passphrase whose first letters of each word match the provided argument:

`xkcdpass -a {{acrostic}}`

- Generate passwords interactively:

`xkcdpass -i`

xkill

Kill a window interactively in a graphical session.

See also [kill](#) and [killall](#).

- Display a cursor to kill a window when pressing the left mouse button (press any other mouse button to cancel):

[xkill](#)

xmllint

XML parser and linter that supports XPath, a syntax for navigating XML trees.

- Return all nodes (tags) named "foo":

```
xmllint --xpath "//{{foo}}" {{source_file.xml}}
```

- Return the contents of the first node named "foo" as a string:

```
xmllint --xpath "string(//{{foo}})" {{source_file.xml}}
```

- Return the href attribute of the second anchor element in an html file:

```
xmllint --html --xpath "string(//a[2]/@href)" webpage.xhtml
```

- Return human-readable (indented) XML from file:

```
xmllint --format {{source_file.xml}}
```

- Check that a XML file meets the requirements of its DOCTYPE declaration:

```
xmllint --valid {{source_file.xml}}
```

- Validate XML against DTD schema hosted online:

```
xmllint --dtdvalid {{URL}} {{source_file.xml}}
```

xmlto

Apply an XSL stylesheet to an XML document.

More information: <https://pagure.io/xmlto>.

- Convert a DocBook XML document to PDF format:

```
xmlto {{pdf}} {{document.xml}}
```

- Convert a DocBook XML document to HTML format and store the resulting files in a separate directory:

```
xmlto -o {{path/to/html_files}} {{html}} {{document.xml}}
```

- Convert a DocBook XML document to a single HTML file:

```
xmlto {{html-nochunks}} {{document.xml}}
```

- Specify a stylesheet to use while converting a DocBook XML document:

```
xmlto -x {{stylesheet.xsl}} {{output_format}}  
{{document.xml}}
```

XO

A pluggable, zero-configuration linting utility for JavaScript.

More information: <https://github.com/xojs/xo>.

- Lint files in the "src" directory:

`xo`

- Lint a given set of files:

`xo {{file1}}.js {{file2}}.js`

- Automatically fix any lint issues found:

`xo --fix`

- Lint using spaces as indentation instead of tabs:

`xo --space`

- Lint using the "prettier" code style:

`xo --prettier`

xpdf

Portable Document Format (PDF) file viewer.

More information: <https://www.xpdfreader.com/xpdf-man.html>.

- Open a PDF file:

```
xpdf {{path/to/file.pdf}}
```

- Open a specific page in a PDF file:

```
xpdf {{path/to/file.pdf}} :{{page_number}}
```

- Open a compressed PDF file:

```
xpdf {{path/to/file.pdf.tar}}
```

- Open a PDF file in fullscreen mode:

```
xpdf -fullscreen {{path/to/file.pdf}}
```

- Specify the initial zoom:

```
xpdf -z {{75}}% {{path/to/file.pdf}}
```

- Specify the initial zoom at page width or full page:

```
xpdf -z {{page|width}} {{path/to/file.pdf}}
```

XSV

A CSV command line toolkit written in Rust.

More information: <https://github.com/BurntSushi/xsv>.

- Inspect the headers of a file:

```
xsv headers {{path/to/file.csv}}
```

- Count the number of entries:

```
xsv count {{path/to/file.csv}}
```

- Get an overview of the shape of entries:

```
xsv stats {{path/to/file.csv}} | xsv table
```

- Select a few columns:

```
xsv select {{column_a,column_b}} {{path/to/file.csv}}
```

- Show 10 random entries:

```
xsv sample {{10}} {{path/to/file.csv}}
```

- Join a column from one file to another:

```
xsv join --no-case {{column_a}} {{path/to/file/a.csv}}  
{{column_b}} {{path/to/file/b.csv}} | xsv table
```

xxd

Create a hexadecimal representation (hexdump) from a binary file, or vice-versa.

- Generate a hexdump from a binary file and display the output:

```
xxd {{input_file}}
```

- Generate a hexdump from a binary file and save it as a text file:

```
xxd {{input_file}} {{output_file}}
```

- Display a more compact output, replacing consecutive zeros (if any) with a star:

```
xxd -a {{input_file}}
```

- Display the output with 10 columns of one octet (byte) each:

```
xxd -c {{10}} {{input_file}}
```

- Display output only up to a length of 32 bytes:

```
xxd -l {{32}} {{input_file}}
```

- Display the output in plain mode, without any gaps between the columns:

```
xxd -p {{input_file}}
```

- Revert a plaintext hexdump back into binary, and save it as a binary file:

```
xxd -r -p {{input_file}} {{output_file}}
```

XZ

Compress or decompress .xz and .lzma files.

More information: <https://tukaani.org/xz/format.html>.

- Compress a file to the xz file format:

```
xz {{file}}
```

- Decompress a xz file:

```
xz -d {{file.xz}}
```

- Compress a file to the lzma file format:

```
xz --format=lzma {{file}}
```

- Decompress an lzma file:

```
xz -d --format=lzma {{file.lzma}}
```

- Decompress a file and write to **stdout**:

```
xz -dc {{file.xz}}
```

- Compress a file, but don't delete the original:

```
xz -k {{file}}
```

- Compress a file using the fastest compression:

```
xz -0 {{file}}
```

- Compress a file using the best compression:

```
xz -9 {{file}}
```

yarn-why

Identifies why a Yarn package has been installed.

More information: <https://www.npmjs.com/package/yarn-why>.

- Show why a Yarn package is installed:

```
yarn-why {package_name}
```

yarn

JavaScript and Node.js package manager alternative.

More information: <https://yarnpkg.com>.

- Install a module globally:

```
yarn global add {{module_name}}
```

- Install all dependencies referenced in the `package.json` file (the `install` is optional):

```
yarn install
```

- Install a module and save it as a dependency to the `package.json` file (add `--dev` to save as a dev dependency):

```
yarn add {{module_name}}@{{version}}
```

- Uninstall a module and remove it from the `package.json` file:

```
yarn remove {{module_name}}
```

- Interactively create a `package.json` file:

```
yarn init
```

- Identify whether a module is a dependency and list other modules that depend upon it:

```
yarn why {{module_name}}
```

yes

Output something repeatedly.

This command is commonly used to answer yes to every prompt by install commands (such as `apt-get`).

- Repeatedly output "message":

```
yes {{message}}
```

- Repeatedly output "y":

```
yes
```

- Accept everything prompted by the `apt-get` command:

```
yes | sudo apt-get install {{program}}
```

yesod

Helper tool for Yesod, a Haskell-based web framework.

All Yesod commands are invoked through the **stack** project manager.

More information: <https://github.com/yesodweb/yesod>.

- Create a new scaffolded site, with sqlite as backend, in the "my-project" directory:

```
stack new {{my-project}} {{yesod-sqlite}}
```

- Install the Yesod CLI tool within a Yesod scaffolded site:

```
stack build yesod-bin cabal-install --install-ghc
```

- Start development server:

```
stack exec -- yesod devel
```

- Touch files with altered Template Haskell dependencies:

```
stack exec -- yesod touch
```

- Deploy application using Keter (Yesod's deployment manager):

```
stack exec -- yesod keter
```

youtube-dl

Download videos from YouTube and other websites.

More information: <http://rg3.github.io/youtube-dl/>.

- Download a video or playlist:

```
youtube-dl '{{https://www.youtube.com/watch?v=oHg5SJYRHA0}}'
```

- List all formats that a video or playlist is available in:

```
youtube-dl --list-formats '{{https://www.youtube.com/watch?v=Mwa0_nE9H7A}}'
```

- Download a video or playlist at a specific quality:

```
youtube-dl --format "{{best[height<=480]}}" '{{https://www.youtube.com/watch?v=oHg5SJYRHA0}}'
```

- Download the audio from a video and convert it to an MP3:

```
youtube-dl -x --audio-format {{mp3}} '{{url}}'
```

- Download the best quality audio and video and merge them:

```
youtube-dl -f bestvideo+bestaudio '{{url}}'
```

- Download video(s) as MP4 files with custom filenames:

```
youtube-dl --format {{mp4}} -o "{{%(title)s by %(uploader)s on %(upload_date)s in %(playlist)s.%ext)s}}" '{{url}}'
```

- Download a particular language's subtitles along with the video:

```
youtube-dl --sub-lang {{en}} --write-sub '{{https://www.youtube.com/watch?v=Mwa0_nE9H7A}}'
```

- Download a playlist and extract mp3 from it:

```
youtube-dl -i --extract-audio --audio-format mp3 -o "%(title)s.%ext)s" '{{url_to_playlist}}'
```

youtube-viewer

Command-line application for searching and playing videos from YouTube.

More information: <https://github.com/trizen/youtube-viewer>.

- Search for a video:

```
youtube-viewer {{search_term}}
```

- Login to your YouTube account:

```
youtube-viewer --login
```

- Watch a video with a specific URL in VLC:

```
youtube-viewer --player={{vlc}} {{https://youtube.com/watch?v=dQw4w9WgXcQ}}
```

- Display a search prompt and play the selected video in 720p:

```
youtube-viewer -{{7}}
```

Z

Tracks the most used directories and enables quickly navigating to them using string or regex patterns.

More information: <https://github.com/rupa/z>.

- Go to a directory that contains "foo" in the name:

```
z {{foo}}
```

- Go to a directory that contains "foo" and then "bar":

```
z {{foo}} {{bar}}
```

- Go to the highest-ranked directory matching "foo":

```
z -r {{foo}}
```

- Go to the most recently accessed directory matching "foo":

```
z -t {{foo}}
```

- List all directories in z's database matching "foo":

```
z -l {{foo}}
```

- Remove the current directory from z's database:

```
z -x .
```

zbarimg

Scan and decode bar codes from image file(s).

More information: <http://zbar.sourceforge.net>.

- Process an image file:

```
zbarimg {{image_file}}
```

zcat

Print data from gzip compressed files.

- Print the uncompressed contents of a gzipped file to the standard output:

```
zcat {{file.txt.gz}}
```

- Print compression details of a gzipped file to the standard output:

```
zcat -l {{file.txt.gz}}
```

zdb

ZFS debugger.

- Show detailed configuration of all mounted ZFS zpools:

`zdb`

- Show detailed configuration for a specific ZFS pool:

`zdb -C {{poolname}}`

- Show statistics about number, size and deduplication of blocks:

`zdb -b {{poolname}}`

zfs

Manage ZFS filesystems.

- List all available zfs filesystems:

```
zfs list
```

- Create a new ZFS filesystem:

```
zfs create {{pool_name/filesystem_name}}
```

- Delete a ZFS filesystem:

```
zfs destroy {{pool_name/filesystem_name}}
```

- Create a Snapshot of a ZFS filesystem:

```
zfs snapshot {{pool_name/filesystem_name}}@{{snapshot_name}}
```

- Enable compression on a filesystem:

```
zfs set compression=on {{pool_name/filesystem_name}}
```

- Change mountpoint for a filesystem:

```
zfs set mountpoint={{/my/mount/path}} {{pool_name/filesystem_name}}
```

zip

Package and compress (archive) files into zip file.

- Package and compress a directory and its contents, [r]ecursively:

```
zip -r {{compressed.zip}} {{path/to/directory}}
```

- E[x]clude unwanted files from being added to the compressed archive:

```
zip -r {{compressed.zip}} {{path/to/directory}} -x {{path/to/exclude}}
```

- Archive a directory and its contents with the highest level [9] of compression:

```
zip -r -{{9}} {{compressed.zip}} {{path/to/directory}}
```

- Package and compress multiple directories and files:

```
zip -r {{compressed.zip}} {{path/to/directory1}} {{path/to/directory2}} {{path/to/file}}
```

- Create an encrypted archive (user will be prompted for a password):

```
zip -e -r {{compressed.zip}} {{path/to/directory}}
```

- Add files to an existing zip file:

```
zip {{compressed.zip}} {{path/to/file}}
```

- Delete files from an existing zip file:

```
zip -d {{compressed.zip}} "{{foo/*.tmp}}"
```

- Archive a directory and its contents to a multi-part [s]plit zip file (e.g. 3GB parts):

```
zip -r -s {{3g}} {{compressed.zip}} {{path/to/directory}}
```

zipalign

Zip archive alignment tool.

Part of the Android SDK build tools.

More information: <https://developer.android.com/studio/command-line/zipalign>.

- Align the data of a ZIP file on 4-byte boundaries:

```
zipalign {{4}} {{path/to/input.zip}} {{path/to/output.zip}}
```

- Check that a ZIP file is correctly aligned on 4-byte boundaries and display the results in a verbose manner:

```
zipalign -v -c {{4}} {{path/to/input.zip}}
```

zless

View compressed files.

- Page through a compressed archive with `less`:

```
zless {{file.txt.gz}}
```

zmv

Move or rename files matching a specified extended glob pattern.

See also **zcp** and **zln**.

More information: <http://zsh.sourceforge.net/Doc/Release/User-Contributions.html>.

- Move files using a regex-like pattern:

```
zmv '{{$(*).log}}' '{{$1.txt}}'
```

- Preview the result of a move, without making any actual changes:

```
zmv -n '{{$(*).log}}' '{{$1.txt}}'
```

- Interactively move files, with a prompt before every change:

```
zmv -i '{{$(*).log}}' '{{$1.txt}}'
```

- Verbosely print each action as it's being executed:

```
zmv -v '{{$(*).log}}' '{{$1.txt}}'
```

zola

A static site generator in a single binary with everything built-in.

More information: <https://www.getzola.org/documentation/getting-started/cli-usage/>.

- Create the directory structure used by Zola at the given directory:

```
zola init {{my_site}}
```

- Build the whole site in the `public` directory after deleting it:

```
zola build
```

- Build the whole site into a different directory:

```
zola build --output-dir {{path/to/output_directory/}}
```

- Build and serve the site using a local server (default is `127.0.0.1:1111`):

```
zola serve
```

- Build all pages just like the build command would, but without writing any of the results to disk:

```
zola check
```

zopflipng

PNG image compression utility.

More information: <https://github.com/google/zopfli>.

- Optimize a PNG image:

```
zopflipng {{input.png}} {{output.png}}
```

- Optimize several PNG images and save with given prefix:

```
zopflipng --prefix={{prefix}} {{image1.png}} {{image2.png}}  
{{image3.png}}
```

zoxide

Keep track of the most frequently used directories.

Uses a ranking algorithm to navigate to the best match.

More information: <https://github.com/ajeetdsouza/zoxide>.

- Go to the highest-ranked directory that contains "foo" in the name:

```
zoxide query {{foo}}
```

- Go to the highest-ranked directory that contains "foo" and then "bar":

```
zoxide query {{foo}} {{bar}}
```

- Start an interactive directory search (requires `fzf`):

```
zoxide query --interactive
```

- Add a directory or increment its rank:

```
zoxide add {{path/to/directory}}
```

- Remove a directory from `zoxide`'s database:

```
zoxide remove {{path/to/directory}}
```

- Generate shell configuration for command aliases (`z`, `za`, `zi`, `zq`, `zr`):

```
zoxide init {{bash|fish|zsh}}
```

zpool

Manage ZFS pools.

- Show the configuration and status of all ZFS zpools:

```
zpool status
```

- Check a ZFS pool for errors (verifies the checksum of EVERY block). Very CPU and disk intensive:

```
zpool scrub {{pool_name}}
```

- List zpools available for import:

```
zpool import
```

- Import a zpool:

```
zpool import {{pool_name}}
```

- Export a zpool (unmount all filesystems):

```
zpool export {{pool_name}}
```

- Show the history of all pool operations:

```
zpool history {{pool_name}}
```

- Create a mirrored pool:

```
zpool create {{pool_name}} mirror {{disk1}} {{disk2}} mirror  
{{disk3}} {{disk4}}
```

- Add a cache (L2ARC) device to a zpool:

```
zpool add {{pool_name}} cache {{cache_disk}}
```

zsh

Z SHell.

bash and **sh**-compatible command line interpreter.

More information: <https://www.zsh.org>.

- Start interactive command line interpreter:

`zsh`

- Execute command passed as parameter:

`zsh -c {{command}}`

- Run commands from file (script):

`zsh {{file}}`

- Run commands from file and print them as they are executed:

`zsh -x {{file}}`

zstd

Compress or decompress files with Zstandard compression.

More information: <https://github.com/facebook/zstd>.

- Compress a file into a new file with the .zst suffix:

```
zstd {{file}}
```

- Decompress a file:

```
zstd -d {{file}}.zst
```

- Decompress to **stdout**:

```
zstd -dc {{file}}.zst
```

- Compress a file specifying the compression level, where 1=fastest, 19=slowest and 3=default:

```
zstd -{{level}} {{file}}
```

- Unlock higher compression levels (up to 22) using more memory (both for compression and decompression):

```
zstd --ultra -{{level}} {{file}}
```

zsteg

Steganography detection tool for PNG and BMP file formats.

It detects LSB steganography, ZLIB-compressed data, OpenStego, Camouflage and LSB with the Eratosthenes set.

More information: <https://github.com/zed-0xff/zsteg>.

- Detect embedded data in a PNG image:

```
zsteg {{path/to/image.png}}
```

- Detect embedded data in a BMP image, using all known methods:

```
zsteg --all {{path/to/image.bmp}}
```

- Detect embedded data in a PNG image, iterating pixels vertically and using MSB first:

```
zsteg --msb --order yx {{path/to/image.png}}
```

- Detect embedded data in a BMP image, specifying the bits to consider:

```
zsteg --bits {{1,2,3|1-3}} {{path/to/image.bmp}}
```

- Detect embedded data in a PNG image, extracting only prime pixels and inverting bits:

```
zsteg --prime --invert {{path/to/image.png}}
```

- Detect embedded data in a BMP image, specifying the minimum length of the strings to be found and the find mode:

```
zsteg --min-str-len {{10}} --strings {{first|all|longest|none}} {{path/to/image.bmp}}
```

Index.json

Linux

a2disconf

Disable an Apache configuration file on Debian-based OSes.

More information: <https://manpages.debian.org/buster/apache2/a2disconf.8.en.html>.

- Disable a configuration file:

```
sudo a2disconf {{configuration_file}}
```

- Don't show informative messages:

```
sudo a2disconf --quiet {{configuration_file}}
```

a2dismod

Disable an Apache module on Debian-based OSes.

More information: <https://manpages.debian.org/buster/apache2/a2dismod.8.en.html>.

- Disable a module:

```
sudo a2dismod {{module}}
```

- Don't show informative messages:

```
sudo a2dismod --quiet {{module}}
```

a2dissite

Disable an Apache virtual host on Debian-based OSes.

More information: <https://manpages.debian.org/buster/apache2/a2dissite.8.en.html>.

- Disable a virtual host:

```
sudo a2dissite {{virtual_host}}
```

- Don't show informative messages:

```
sudo a2dissite --quiet {{virtual_host}}
```

a2enconf

Enable an Apache configuration file on Debian-based OSes.

More information: <https://manpages.debian.org/buster/apache2/a2enconf.8.en.html>.

- Enable a configuration file:

```
sudo a2enconf {{configuration_file}}
```

- Don't show informative messages:

```
sudo a2enconf --quiet {{configuration_file}}
```

a2enmod

Enable an Apache module on Debian-based OSes.

More information: <https://manpages.debian.org/buster/apache2/a2enmod.8.en.html>.

- Enable a module:

```
sudo a2enmod {{module}}
```

- Don't show informative messages:

```
sudo a2enmod --quiet {{module}}
```

a2ensite

Enable an Apache virtual host on Debian-based OSes.

More information: <https://manpages.debian.org/buster/apache2/a2ensite.8.en.html>.

- Enable a virtual host:

```
sudo a2ensite {{virtual_host}}
```

- Don't show informative messages:

```
sudo a2ensite --quiet {{virtual_host}}
```

a2query

Retrieve runtime configuration from Apache on Debian-based OSes.

More information: <https://manpages.debian.org/buster/apache2/a2query.1.en.html>.

- List enabled Apache modules:

```
sudo a2query -m
```

- Check if a specific module is installed:

```
sudo a2query -m {{module_name}}
```

- List enabled virtual hosts:

```
sudo a2query -s
```

- Display the currently enabled Multi Processing Module:

```
sudo a2query -M
```

- Display the Apache version:

```
sudo a2query -v
```

ac

Print statistics on how long users have been connected.

- Print how long the current user has been connected in hours:

`ac`

- Print how long users have been connected in hours:

`ac --individual-totals`

- Print how long a particular user has been connected in hours:

`ac --individual-totals {{username}}`

- Print how long a particular user has been connected in hours per day (with total):

`ac --daily-totals --individual-totals {{username}}`

- Also display additional details:

`ac --compatibility`

acpi

Shows battery status or thermal information.

More information: <https://sourceforge.net/projects/acpiclient/files/acpiclient/>.

- Show battery information:

`acpi`

- Show thermal information:

`acpi -t`

- Show cooling device information:

`acpi -c`

- Show thermal information in Fahrenheit:

`acpi -tf`

- Show all information:

`acpi -V`

- Extract information from `/proc` instead of `/sys`:

`acpi -p`

add-apt-repository

Manages apt repository definitions.

- Add a new apt repository:

```
add-apt-repository {{repository_spec}}
```

- Remove an apt repository:

```
add-apt-repository --remove {{repository_spec}}
```

- Update the package cache after adding a repository:

```
add-apt-repository --update {{repository_spec}}
```

- Enable source packages:

```
add-apt-repository --enable-source {{repository_spec}}
```

addpart

Tells the Linux kernel about the existence of the specified partition.

The command is a simple wrapper around the **add partition** ioctl.

More information: <https://linux.die.net/man/8/addpart>.

- Tell the kernel about the existence of the specified partition:

```
addpart {{device}} {{partition}} {{start}} {{length}}
```

addr2line

Convert addresses of a binary into file names and line numbers.

- Display the filename and line number of the source code from an instruction address of an executable:

```
addr2line --exe={{path/to/executable}} {{address}}
```

- Display the function name, filename and line number:

```
addr2line --exe={{path/to/executable}} --functions  
{{address}}
```

- Demangle the function name for C++ code:

```
addr2line --exe={{path/to/executable}} --functions --demangle  
{{address}}
```

adduser

User addition utility.

- Create a new user with a default home directory and prompt the user to set a password:

```
adduser {{username}}
```

- Create a new user without a home directory:

```
adduser --no-create-home {{username}}
```

- Create a new user with a home directory at the specified path:

```
adduser --home {{path/to/home}} {{username}}
```

- Create a new user with the specified shell set as the login shell:

```
adduser --shell {{path/to/shell}} {{username}}
```

- Create a new user belonging to the specified group:

```
adduser --ingroup {{group}} {{username}}
```

- Add an existing user to the specified group:

```
adduser {{username}} {{group}}
```

alpine

An email client and Usenet newsgroup program with a pico/nano-inspired interface.

Supports most modern email services through IMAP.

- Open alpine normally:

`alpine`

- Open alpine directly to the message composition screen to send an email to a given email address:

`alpine {{email@example.net}}`

- Quit alpine:

`'q' then 'y'`

amixer

Mixer for ALSA soundcard driver.

- Turn up the master volume by 10%:

```
amixer -D pulse sset Master {{10%+}}
```

- Turn down the master volume by 10%:

```
amixer -D pulse sset Master {{10%-}}
```

apache2ctl

The CLI tool to administrate HTTP web server Apache.

This command comes with Debian based OSes, for RHEL based ones see [httpd](#).

- Start the Apache daemon. Throw a message if it is already running:

```
sudo apache2ctl start
```

- Stop the Apache daemon:

```
sudo apache2ctl stop
```

- Restart the Apache daemon:

```
sudo apache2ctl restart
```

- Test syntax of the configuration file:

```
sudo apache2ctl -t
```

- List loaded modules:

```
sudo apache2ctl -M
```

apk

Alpine Linux package management tool.

- Update repository indexes from all remote repositories:

```
apk update
```

- Install a new package:

```
apk add {{package}}
```

- Remove a package:

```
apk del {{package}}
```

- Repair package or upgrade it without modifying main dependencies:

```
apk fix {{package}}
```

- Search package via keyword:

```
apk search {{keyword}}
```

- Get info about a specific package:

```
apk info {{package}}
```

aplay

Command-line sound player for ALSA soundcard driver.

More information: <https://linux.die.net/man/1/aplay>.

- Play a specific file (sampling rate, bit depth, etc. will be automatically determined for the file format):

```
aplay {{path/to/file}}
```

- Play the first 10 seconds of a specific file at 2500Hz:

```
aplay --duration={{10}} --rate={{2500}} {{path/to/file}}
```

- Play the raw file as a 22050Hz, mono, 8-bit, Mu-Law .au file:

```
aplay --channels={{1}} --file-type {{raw}} --rate={{22050}}  
--format={{mu_law}} {{path/to/file}}
```

apport-bug

File a bug report on Ubuntu.

More information: <https://wiki.ubuntu.com/Apport>.

- Report a bug about the whole system:

`apport-bug`

- Report a bug about a specific package:

`apport-bug {{package}}`

- Report a bug about a specific executable:

`apport-bug {{path/to/executable}}`

- Report a bug about a specific process:

`apport-bug {{PID}}`

apt-add-repository

Manages apt repository definitions.

- Add a new apt repository:

```
apt-add-repository {{repository_spec}}
```

- Remove an apt repository:

```
apt-add-repository --remove {{repository_spec}}
```

- Update the package cache after adding a repository:

```
apt-add-repository --update {{repository_spec}}
```

- Enable source packages:

```
apt-add-repository --enable-source {{repository_spec}}
```

apt-cache

Debian and Ubuntu package query tool.

- Search for a package in your current sources:

```
apt-cache search {{query}}
```

- Show information about a package:

```
apt-cache show {{package}}
```

- Show whether a package is installed and up to date:

```
apt-cache policy {{package}}
```

- Show dependencies for a package:

```
apt-cache depends {{package}}
```

- Show packages that depend on a particular package:

```
apt-cache rdepends {{package}}
```

apt-file

Search for files in apt packages, including ones not yet installed.

- Update the metadata database:

```
sudo apt update
```

- Search for packages that contain the specified file or path:

```
apt-file search {{part/of/filename}}
```

- List the contents of a specific package:

```
apt-file list {{package_name}}
```

apt-get

Debian and Ubuntu package management utility.

Search for packages using **apt-cache**.

- Update the list of available packages and versions (it's recommended to run this before other **apt-get** commands):

```
apt-get update
```

- Install a package, or update it to the latest available version:

```
apt-get install {{package}}
```

- Remove a package:

```
apt-get remove {{package}}
```

- Remove a package and its configuration files:

```
apt-get purge {{package}}
```

- Upgrade all installed packages to their newest available versions:

```
apt-get upgrade
```

- Clean the local repository - removing package files (.deb) from interrupted downloads that can no longer be downloaded:

```
apt-get autoclean
```

- Remove all packages that are no longer needed:

```
apt-get autoremove
```

- Upgrade installed packages (like **upgrade**), but remove obsolete packages and install additional packages to meet new dependencies:

```
apt-get dist-upgrade
```

apt-key

Key management utility for the APT Package Manager on Debian and Ubuntu.

- List trusted keys:

```
apt-key list
```

- Add a key to the trusted keystore:

```
apt-key add {{public_key_file.asc}}
```

- Delete a key from the trusted keystore:

```
apt-key del {{key_id}}
```

- Add a remote key to the trusted keystore:

```
wget -qO - {{https://host.tld/filename.key}} | apt-key add -
```

- Add a key from keyserver with only key id:

```
apt-key adv --keyserver {{pgp.mit.edu}} --recv {{KEYID}}
```

apt-mark

Utility to change the status of installed packages.

- Mark a package as automatically installed:

```
sudo apt-mark auto {{package_name}}
```

- Hold a package at its current version and prevent updates to it:

```
sudo apt-mark hold {{package_name}}
```

- Allow a package to be updated again:

```
sudo apt-mark unhold {{package_name}}
```

- Show manually installed packages:

```
apt-mark showmanual
```

- Show held packages that aren't being updated:

```
apt-mark showhold
```

apt

Package management utility for Debian based distributions.

Recommended replacement for apt-get when used interactively in Ubuntu versions 16.04 and later.

- Update the list of available packages and versions (it's recommended to run this before other `apt` commands):

```
sudo apt update
```

- Search for a given package:

```
apt search {{package}}
```

- Show information for a package:

```
apt show {{package}}
```

- Install a package, or update it to the latest available version:

```
sudo apt install {{package}}
```

- Remove a package (using `purge` instead also removes its configuration files):

```
sudo apt remove {{package}}
```

- Upgrade all installed packages to their newest available versions:

```
sudo apt upgrade
```

- List all packages:

```
apt list
```

- List installed packages:

```
apt list --installed
```

aptitude

Debian and Ubuntu package management utility.

- Synchronize list of packages and versions available. This should be run first, before running subsequent aptitude commands:

`aptitude update`

- Install a new package and its dependencies:

`aptitude install {{package}}`

- Search for a package:

`aptitude search {{package}}`

- Search for an installed package (`?installed` is an aptitude search term):

`aptitude search '?installed({{package}})'`

- Remove a package and all packages depending on it:

`aptitude remove {{package}}`

- Upgrade installed packages to newest available versions:

`aptitude upgrade`

- Upgrade installed packages (like `aptitude upgrade`) including removing obsolete packages and installing additional packages to meet new package dependencies:

`aptitude full-upgrade`

- Put an installed package on hold to prevent it from being automatically upgraded:

`aptitude hold '?installed({{package}})'`

archey

Simple tool for stylishly displaying system information.

- Show system information:

`archey`

archlinux-java

A helper script that provides functionalities for Java environments.

More information: <https://github.com/michaellass/archlinux-java-run>.

- List installed Java environments:

```
archlinux-java status
```

- Set the default Java environment:

```
archlinux-java set {{java_environment}}
```

- Unset the default Java environment:

```
archlinux-java unset
```

- Set the default Java environment automatically:

```
archlinux-java fix
```

arecord

Sound recorder for ALSA soundcard driver.

More information: <https://linux.die.net/man/1/arecord>.

- Record a snippet in "CD" quality (finish with Ctrl-C when done):

```
arecord -vv --format=cd {{path/to/file.wav}}
```

- Record a snippet in "CD" quality, with a fixed duration of 10 seconds:

```
arecord -vv --format=cd --duration={{10}} {{path/to/ file.wav}}
```

- Record a snippet and save it as mp3 (finish with Ctrl-C when done):

```
arecord -vv --format=cd --file-type raw | lame -r - {{path/ to/file.mp3}}
```

- List all sound cards and digital audio devices:

```
arecord --list-devices
```

- Allow interactive interface (e.g. use space-bar or enter to play or pause):

```
arecord --interactive
```

arithmetic

Quiz on simple arithmetic problems.

More information: <https://manpages.debian.org/bsdgames/arithmetic.6.en.html>.

- Start an arithmetic quiz:

`arithmetic`

- Specify one or more arithmetic [o]peration symbols to get problems on them:

`arithmetic -o {{+|-|x|/}}`

- Specify a range. Addition and multiplication problems would feature numbers between 0 and range, inclusive. Subtraction and division problems would have required result and number to be operated on, between 0 and range:

`arithmetic -r {{7}}`

ark

KDE archiving tool.

More information: <https://docs.kde.org/stable5/en/kdeutils/ark/>.

- Extract an archive into the current directory:

```
ark --batch {{archive}}
```

- Change extraction directory:

```
ark --batch --destination {{path/to/directory}} {{archive}}
```

- Create an archive if it does not exist and add files to it:

```
ark --add-to {{archive}} {{file1}} {{file2}}
```

arp-scan

Send ARP packets to hosts (specified as IP addresses or hostnames) to scan the local network.

- Scan the current local network:

```
arp-scan --localnet
```

- Scan an IP network with a custom bitmask:

```
arp-scan {{192.168.1.1}}/{{24}}
```

- Scan an IP network within a custom range:

```
arp-scan {{127.0.0.0}}-{{127.0.0.31}}
```

- Scan an IP network with a custom net mask:

```
arp-scan {{10.0.0.0}}:{{255.255.255.0}}
```

as

Portable GNU assembler.

Primarily intended to assemble output from **gcc** to be used by **ld**.

- Assemble a file, writing the output to a.out:

```
as {{file.s}}
```

- Assemble the output to a given file:

```
as {{file.s}} -o {{out.o}}
```

- Generate output faster by skipping whitespace and comment preprocessing.
(Should only be used for trusted compilers):

```
as -f {{file.s}}
```

- Include a given path to the list of directories to search for files specified in .include directives:

```
as -I {{path/to/directory}} {{file.s}}
```

ascii

Show ASCII character aliases.

More information: <http://www.catb.org/~esr/ascii/>.

- Show ASCII aliases of a character:

`ascii {{a}}`

- Show ASCII aliases in short, script-friendly mode:

`ascii -t {{a}}`

- Show ASCII aliases of multiple characters:

`ascii -s {{tldr}}`

- Show ASCII table in decimal:

`ascii -d`

- Show ASCII table in hexadecimal:

`ascii -x`

- Show ASCII table in octal:

`ascii -o`

- Show ASCII table in binary:

`ascii -b`

- Show options summary and complete ASCII table:

`ascii`

asciart

Convert images to ASCII.

More information: <https://github.com/nodanaonlyzuul/asciart>.

- Read an image from a file and print in ASCII:

```
asciart {{path/to/image.jpg}}
```

- Read an image from a URL and print in ASCII:

```
asciart {{www.example.com/image.jpg}}
```

- Choose the output width (default is 100):

```
asciart -width {{50}} {{path/to/image.jpg}}
```

- Colorize the ASCII output:

```
asciart --color {{path/to/image.jpg}}
```

- Choose the output format (default format is text):

```
asciart --format {{text|html}} {{path/to/image.jpg}}
```

- Invert the character map:

```
asciart --invert-chars {{path/to/image.jpg}}
```

aspell

Interactive spell checker.

- Spell check a single file:

```
aspell check {{path/to/file}}
```

- List misspelled words from standard input:

```
cat {{file}} | aspell list
```

- Show available dictionary languages:

```
aspell dicts
```

- Run aspell with different language (takes two letter ISO 639 language code):

```
aspell --lang={{cs}}
```

- List misspelled words from standard input and ignore words from personal word list:

```
cat {{file}} | aspell --personal={{personal-word-list.pws}}
{{list}}
```

asterisk

Telephone and exchange (phone) server.

Used for running the server itself, and managing an already running instance.

More information: <https://wiki.asterisk.org/wiki/display/AST/Home>.

- [R]econnect to a running server, and turn on logging 3 levels of [v]erbosity:

```
asterisk -r -vvv
```

- [R]econnect to a running server, run a single command, and return:

```
asterisk -r -x "{{command}}"
```

- Show chan_SIP clients (phones):

```
asterisk -r -x "sip show peers"
```

- Show active calls and channels:

```
asterisk -r -x "core show channels"
```

- Show voicemail mailboxes:

```
asterisk -r -x "voicemail show users"
```

- Terminate a channel:

```
asterisk -r -x "hangup request {{channel_ID}}"
```

- Reload chan_SIP configuration:

```
asterisk -r -x "sip reload"
```

at

Executes commands at a specified time.

- Open an **at** prompt to create a new set of scheduled commands, press **Ctrl + D** to save and exit:

```
at {{hh:mm}}
```

- Execute the commands and email the result using a local mailing program such as sendmail:

```
at {{hh:mm}} -m
```

- Execute a script at the given time:

```
at {{hh:mm}} -f {{path/to/file}}
```

- Display a system notification at 11pm on February 18th:

```
echo "notify-send '{{Wake up!}}'" | at {{11pm}} {{Feb 18}}
```

auracle

Command line tool used to interact with Arch Linux's User Repository, commonly referred to as the AUR.

More information: <https://github.com/falconindy/auracle>.

- Display AUR packages that match a regular expression:

```
auracle search '{{regex}}'
```

- Display package information for a space-separated list of AUR packages:

```
auracle info {{package1}} {{package2}}
```

- Display the **PKGBUILD** file (build information) for a space-separated list of AUR packages:

```
auracle show {{package1}} {{package2}}
```

- Display updates for installed AUR packages:

```
auracle outdated
```

authconfig

A CLI interface for configuring system authentication resources.

- Display the current configuration (or dry run):

```
authconfig --test
```

- Configure the server to use a different password hashing algorithm:

```
authconfig --update --passalgo={{algorithm}}
```

- Enable LDAP authentication:

```
authconfig --update --enableldapauth
```

- Disable LDAP authentication:

```
authconfig --update --disableldapauth
```

- Enable Network Information Service (NIS):

```
authconfig --update --enablenis
```

- Enable Kerberos:

```
authconfig --update --enablekrb5
```

- Enable Winbind (Active Directory) authentication:

```
authconfig --update --enablewinbindauth
```

- Enable local authorization:

```
authconfig --update --enablelocauthorize
```

autorandr

Automatically change screen layout.

- Save the current screen layout:

```
autorandr -s {{profile_name}}
```

- Show the saved profiles:

```
autorandr
```

- Change the profile:

```
autorandr -l {{profile_name}}
```

- Set the default profile:

```
autorandr -d {{profile_name}}
```

avahi-browse

Displays services and hosts exposed on the local network via mDNS/DNS-SD.

Avahi is compatible with Bonjour (Zeroconf) found in Apple devices.

More information: <https://www.avahi.org/>.

- List all services available on the local network along with their addresses and ports while ignoring local ones:

```
avahi-browse --all --resolve --ignore-local
```

- List all domains:

```
avahi-browse --browse-domains
```

- Limit the search to a particular domain:

```
avahi-browse --all --domain={{domain}}
```

beep

A utility to beep the PC speaker.

- Play a beep:

```
beep
```

- Play a beep that repeats:

```
beep -r {{repetitions}}
```

- Play a beep at a specified frequency (Hz) and duration (milliseconds):

```
beep -f {{frequency}} -l {{duration}}
```

- Play each new frequency and duration as a distinct beep:

```
beep -f {{frequency}} -l {{duration}} -n -f {{frequency}} -l {{duration}}
```

- Play the C major scale:

```
beep -f 262 -n -f 294 -n -f 330 -n -f 349 -n -f 392 -n -f 440  
-n -f 494 -n -f 523
```

betterlockscreen

Simple, minimal lock screen.

- Lock the screen:

```
betterlockscreen --lock
```

- Change the lock screen background:

```
betterlockscreen -u {{path/to/image.png}}
```

- Lock the screen, showing some custom text:

```
betterlockscreen -l pixel -t "{{custom lock screen text}}"
```

- Lock the screen, with a custom monitor off timeout in seconds:

```
betterlockscreen --off {{5}} -l
```

binwalk

Firmware Analysis Tool.

More information: <https://github.com/ReFirmLabs/binwalk>.

- Scan a binary file:

```
binwalk {{path/to/binary}}
```

- Extract files from a binary, specifying the output directory:

```
binwalk --extract --directory {{output_directory}} {{path/to/binary}}
```

- Recursively extract files from a binary limiting the recursion depth to 2:

```
binwalk --extract --matryoshka --depth {{2}} {{path/to/binary}}
```

- Extract files from a binary with the specified file signature:

```
binwalk --dd '{{png image:png}}' {{path/to/binary}}
```

- Analyze the entropy of a binary, saving the plot with the same name as the binary and .png extension appended:

```
binwalk --entropy --save {{path/to/binary}}
```

- Combine entropy, signature and opcodes analysis in a single command:

```
binwalk --entropy --signature --opcodes {{path/to/binary}}
```

bitwise

Multi base interactive calculator supporting dynamic base conversion and bit manipulation.

More information: <https://github.com/mellowcandle/bitwise>.

- Run using interactive mode:

```
bitwise
```

- Convert from decimal:

```
bitwise {{12345}}
```

- Convert from hexadecimal:

```
bitwise {{0x563d}}
```

- Convert a C-style calculation:

```
bitwise "{{0x123 + 0x20 - 30 / 50}}"
```

blkdiscard

Discards device sectors on storage devices. Useful for SSDs.

- Discard all sectors on a device, removing all data:

```
blkdiscard /dev/{{device}}
```

- Securely discard all blocks on a device, removing all data:

```
blkdiscard --secure /dev/{{device}}
```

- Discard the first 100MB of a device:

```
blkdiscard --length {{100MB}} /dev/{{device}}
```

blkid

Lists all recognized partitions and their Universally Unique Identifier (UUID).

- List all partitions:

```
sudo blkid
```

- List all partitions in a table, including current mountpoints:

```
sudo blkid -o list
```

bluetoothctl

Handling bluetooth devices from the shell.

- Enter the bluetoothctl shell:

```
bluetoothctl
```

- List devices:

```
bluetoothctl -- devices
```

- Pair a device:

```
bluetoothctl -- pair {{mac_address}}
```

- Remove a device:

```
bluetoothctl -- remove {{mac_address}}
```

- Connect a paired device:

```
bluetoothctl -- connect {{mac_address}}
```

- Disconnect a paired device:

```
bluetoothctl -- disconnect {{mac_address}}
```

bmon

Monitor bandwidth and capture network related statistics.

- Display the list of all the interfaces:

```
bmon -a
```

- Display data transfer rates in bits per second:

```
bmon -b
```

- Set policy to define which network interface(s) is/are displayed:

```
bmon -p {{interface_1,interface_2,interface_3}}
```

- Set interval (in seconds) in which rate per counter is calculated:

```
bmon -R {2.0}
```

bpftrace

High-level tracing language for Linux eBPF.

More information: <https://github.com/iovisor/bpftrace>.

- Display bpftrace version:

```
bpftrace -V
```

- List all available probes:

```
sudo bpftrace -l
```

- Run a one-liner program (e.g syscall count by program):

```
sudo bpftrace -e '{{$tracepoint:raw_syscalls:sys_enter { @[comm] = count(); }}}'
```

- Run a program from a file:

```
sudo bpftrace {{path/to/file}}
```

- Trace a program by PID:

```
sudo bpftrace -e '{{$tracepoint:raw_syscalls:sys_enter /pid == 123/ { @[comm] = count(); }}}'
```

- Do a dry run and display the output in eBPF format:

```
sudo bpftrace -d -e '{{one_line_program}}'
```

bpytop

Display dynamic real-time information about running processes with graphs. Similar to **gtop** and **htop**.

More information: <https://github.com/aristocratos/bpytop>.

- Start bpytop:

`bpytop`

- Start in minimal mode without memory and networking boxes:

`bpytop -m`

- Show version:

`bpytop -v`

- Toggle minimal mode:

`m`

- Search for running programs or processes:

`f`

- Change settings:

`M`

brctl

Ethernet bridge administration.

- Show a list with information about currently existing ethernet bridges:

```
sudo brctl show
```

- Create a new ethernet bridge interface:

```
sudo brctl add {{bridge_name}}
```

- Delete an existing ethernet bridge interface:

```
sudo brctl del {{bridge_name}}
```

- Add an interface to an existing bridge:

```
sudo brctl addif {{bridge_name}} {{interface_name}}
```

- Remove an interface from an existing bridge:

```
sudo brctl delif {{bridge_name}} {{interface_name}}
```

brew

The Homebrew package manager for Linux.

- Search for available formulas:

```
brew search {{text}}
```

- Install the latest stable version of a formula (use `--devel` for development versions):

```
brew install {{formula}}
```

- List all installed formulae:

```
brew list
```

- Upgrade an installed formula (if no formula name is given, all installed formulae are upgraded):

```
brew upgrade {{formula}}
```

- Fetch the newest version of Linuxbrew and of all formulae from GitHub:

```
brew update
```

- Show formulae that have a more recent version available:

```
brew outdated
```

- Display information about a formula (version, installation path, dependencies, etc.):

```
brew info {{formula}}
```

- Check the local Linuxbrew installation for potential problems:

```
brew doctor
```

btrfs

A filesystem based on the copy-on-write (COW) principle for Linux.

- Create subvolume:

```
sudo btrfs subvolume create {{path/to/subvolume}}
```

- List subvolumes:

```
sudo btrfs subvolume list {{path/to/mount_point}}
```

- Show space usage information:

```
sudo btrfs filesystem df {{path/to/mount_point}}
```

- Enable quota:

```
sudo btrfs quota enable {{path/to/subvolume}}
```

- Show quota:

```
sudo btrfs qgroup show {{path/to/subvolume}}
```

cal

Prints calendar information, with the current day highlighted.

- Display a calendar for the current month:

`cal`

- Display previous, current and next month:

`cal -3`

- Use monday as the first day of the week:

`cal --monday`

- Display a calendar for a specific year (4 digits):

`cal {{year}}`

- Display a calendar for a specific month and year:

`cal {{month}} {{year}}`

calc

An interactive arbitrary-precision calculator on the terminal.

- Start calc in interactive mode:

```
calc
```

- Perform a calculation in non-interactive mode:

```
calc -p '{{85 * (36 / 4)}}'
```

calcurse

A text-based calendar and scheduling application for the command line.

More information: <https://calcurse.org>.

- Start calcurse on interactive mode:

`calcurse`

- Print the appointments and events for the current day and exit:

`calcurse --appointment`

- Remove all local calcurse items and import remote objects:

`calcurse-caldav --init=keep-remote`

- Remove all remote objects and push local calcurse items:

`calcurse-caldav --init=keep-local`

- Copy local objects to the CalDAV server and vice versa:

`calcurse-caldav --init=two-way`

ceph

A unified storage system.

More information: <https://ceph.io>.

- Check cluster health status:

```
ceph status
```

- Check cluster usage stats:

```
ceph df
```

- Get the statistics for the placement groups in a cluster:

```
ceph pg dump --format {{plain}}
```

- Create a storage pool:

```
ceph osd pool create {{pool_name}} {{page_number}}
```

- Delete a storage pool:

```
ceph osd pool delete {{pool_name}}
```

- Rename a storage pool:

```
ceph osd pool rename {{current_name}} {{new_name}}
```

- Self-repair pool storage:

```
ceph pg repair {{pool_name}}
```

certbot

The Let's Encrypt Agent for automatically obtaining and renewing TLS certificates.

Successor to **letsencrypt**.

More information: <https://certbot.eff.org/docs/using.html>.

- Obtain a new certificate via webroot authorization, but do not install it automatically:

```
sudo certbot certonly --webroot --webroot-path {{path/to/webroot}} --domain {{subdomain.example.com}}
```

- Obtain a new certificate via nginx authorization, installing the new certificate automatically:

```
sudo certbot --nginx --domain {{subdomain.example.com}}
```

- Obtain a new certificate via apache authorization, installing the new certificate automatically:

```
sudo certbot --apache --domain {{subdomain.example.com}}
```

- Renew all Let's Encrypt certificates that expire in 30 days or less (don't forget to restart any servers that use them afterwards):

```
sudo certbot renew
```

- Simulate the obtaining of a new certificate, but don't actually save any new certificates to disk:

```
sudo certbot --webroot --webroot-path {{path/to/webroot}} --domain {{subdomain.example.com}} --dry-run
```

- Obtain an untrusted test certificate instead:

```
sudo certbot --webroot --webroot-path {{path/to/webroot}} --domain {{subdomain.example.com}} --test-cert
```

cewl

URL spidering tool for making a cracking wordlist from web content.

More information: <https://digi.ninja/projects/cewl.php>.

- Create a wordlist file from the given URL up to 2 links depth:

```
cewl --depth {{2}} --write {{path/to/wordlist.txt}} {{url}}
```

- Output an alpha-numeric wordlist from the given URL with words of minimum 5 characters:

```
cewl --with-numbers --min_word_length {{5}} {{url}}
```

- Output a wordlist from the given URL in debug mode including email addresses:

```
cewl --debug --email {{url}}
```

- Output a wordlist from the given URL using HTTP Basic or Digest authentication:

```
cewl --auth_type {{basic|digest}} --auth_user {{username}} --auth_pass {{password}} {{url}}
```

- Output a wordlist from the given URL through a proxy:

```
cewl --proxy_host {{host}} --proxy_port {{port}} {{url}}
```

cfdisk

A program for managing partition tables and partitions on a hard disk using a curses UI.

More information: <https://linux.die.net/man/8/cfdisk>.

- Start the partition manipulator with a specific device:

```
cfdisk {{/dev/sdX}}
```

- Create a new partition table for a specific device and manage it:

```
cfdisk --zero {{/dev/sdX}}
```

chage

Change user account and password expiry information.

- List password information for the user:

```
chage -l {{username}}
```

- Enable password expiration in 10 days:

```
sudo chage -M {{10}} {{username}}
```

- Disable password expiration:

```
sudo chage -M -1 {{username}}
```

- Set account expiration date:

```
sudo chage -E {{YYYY-MM-DD}}
```

- Force user to change password on next log in:

```
sudo chage -d 0
```

chattr

Change attributes of files or directories.

- Make a file or directory immutable to changes and deletion, even by superuser:

```
chattr +i {{path/to/file_or_directory}}
```

- Make a file or directory mutable:

```
chattr -i {{path/to/file_or_directory}}
```

- Recursively make an entire directory and contents immutable:

```
chattr -R +i {{path/to/directory}}
```

chcpu

Enable/disable a system's CPUs.

- Disable CPUs via a list of CPU ID numbers:

```
chcpu -d {{1,3}}
```

- Enable a set of CPUs via a range of CPU ID numbers:

```
chcpu -e {{1-10}}
```

check-support-status

Identify installed Debian packages for which support has had to be limited or prematurely ended.

More information: <https://manpages.debian.org/buster/debian-security-support/check-support-status.1.en.html>.

- Display packages whose support is limited, has already ended or will end earlier than the distribution's end of life:

`check-support-status`

- Display only packages whose support has ended:

`check-support-status --type {{ended}}`

- Skip printing a headline:

`check-support-status --no-heading`

chfn

Update **finger** info for a user.

- Update a user's "Name" field in the output of **finger**:

```
chfn -f {{new_display_name}} {{username}}
```

- Update a user's "Office Room Number" field for the output of **finger**:

```
chfn -o {{new_office_room_number}} {{username}}
```

- Update a user's "Office Phone Number" field for the output of **finger**:

```
chfn -p {{new_office_telephone_number}} {{username}}
```

- Update a user's "Home Phone Number" field for the output of **finger**:

```
chfn -h {{new_home_telephone_number}} {{username}}
```

chkconfig

Manage the runlevel of services on CentOS 6.

- List services with runlevel:

```
chkconfig --list
```

- Show a service's runlevel:

```
chkconfig --list {{ntpd}}
```

- Enable service at boot:

```
chkconfig {{sshd}} on
```

- Enable service at boot for runlevels 2, 3, 4, and 5:

```
chkconfig --level {{2345}} {{sshd}} on
```

- Disable service at boot:

```
chkconfig {{ntpd}} off
```

- Disable service at boot for runlevel 3:

```
chkconfig --level {{3}} {{ntpd}} off
```

clamav

Open-source anti-virus program.

Designed especially for e-mail scanning on mail gateways, but can be used in other contexts.

More information: <https://www.clamav.net>.

- Update virus definitions:

`freshclam`

- Scan a file for viruses:

`clamscan {{path/to/file}}`

- Scan directories recursively and print out infected files:

`clamscan --recursive --infected {{path/to/directory}}`

- Scan directories recursively and move them into quarantine:

`clamscan --recursive --move={{directory}}`

cmus

Commandline Music Player.

Use arrow keys to navigate, <enter/return> to select, and numbers 1-8 switch between different views.

- Open cmus from specified directory:

```
cmus {{path/to/directory}}
```

- Add file/directory to library:

```
:add {{path/to/file_or_directory}}
```

- Pause/unpause current song:

```
c
```

- Toggle shuffle mode on/off:

```
s
```

- Quit cmus:

```
q
```

collectd

System statistics collection daemon.

More information: <https://collectd.org/>.

- Show usage help, including the program version:

```
collectd -h
```

- Test the configuration file and then exit:

```
collectd -t
```

- Test plugin data collection functionality and then exit:

```
collectd -T
```

- Start collectd:

```
collectd
```

- Specify a custom configuration file location:

```
collectd -C {{path/to/file}}
```

- Specify a custom PID file location:

```
collectd -P {{path/to/file}}
```

- Don't fork into the background:

```
collectd -f
```

colrm

Remove columns from **stdin**.

- Remove first column of **stdin**:

```
colrm {{1 1}}
```

- Remove from 3rd column till the end of each line:

```
colrm {{3}}
```

- Remove from the 3rd column till the 5th column of each line:

```
colrm {{3 5}}
```

compgen

A built-in command for auto-completion in bash, which is called on pressing TAB key twice.

- List all commands that you could run:

```
compgen -c
```

- List all aliases:

```
compgen -a
```

- List all functions that you could run:

```
compgen -A function
```

- Show shell reserved key words:

```
compgen -k
```

- See all available commands/aliases starting with 'ls':

```
compgen -ac {{ls}}
```

compose

An alias to a **run-mailcap**'s action compose.

Originally **run-mailcap** is used to mime-type/file.

- Compose action can be used to compose any existing file or new on default mailcap edit tool:

```
compose {{filename}}
```

- With **run-mailcap**:

```
run-mailcap --action=compose {{filename}}
```

conky

Light-weight system monitor for X.

More information: <https://github.com/brndnmthws/conky>.

- Launch with default, built-in config:

```
conky
```

- Create a new default config:

```
conky -C > ~/.conkyrc
```

- Launch conky with a given config file:

```
conky -c {{path/to/config}}
```

- Start in the background (daemonize):

```
conky -d
```

- Align conky on the desktop:

```
conky -a {{{top,bottom,middle}_ {left,right,middle}}}
```

- Pause for 5 seconds at startup before launching:

```
conky -p {{5}}
```

cp

Copy files and directories.

- Copy a file to another location:

```
cp {{path/to/source_file.ext}} {{path/to/target_file.ext}}
```

- Copy a file into another directory, keeping the filename:

```
cp {{path/to/source_file.ext}} {{path/to/
target_parent_directory}}
```

- Recursively copy a directory's contents to another location (if the destination exists, the directory is copied inside it):

```
cp -r {{path/to/source_directory}} {{path/to/
target_directory}}
```

- Copy a directory recursively, in verbose mode (shows files as they are copied):

```
cp -vr {{path/to/source_directory}} {{path/to/
target_directory}}
```

- Copy text files to another location, in interactive mode (prompts user before overwriting):

```
cp -i {{*.txt}} {{path/to/target_directory}}
```

- Dereference symbolic links before copying:

```
cp -L {{link}} {{path/to/target_directory}}
```

- Use the full path of source files, creating any missing intermediate directories when copying:

```
cp --parents {{source/path/to/file}} {{path/to/target_file}}
```

cpufreq-aperf

Calculate the average CPU frequency over a time period.

Requires root privileges.

- Start calculating, defaulting to all CPU cores and 1 second refresh interval:

```
sudo cpufreq-aperf
```

- Start calculating for CPU 1 only:

```
sudo cpufreq-aperf -c {{1}}
```

- Start calculating with a 3 seconds refresh interval for all CPU cores:

```
sudo cpufreq-aperf -i {{3}}
```

- Calculate only once:

```
sudo cpufreq-aperf -o
```

cpufreq-info

A tool to show CPU frequency information.

- Show CPU frequency information for all CPUs:

```
cpufreq-info
```

- Show CPU frequency information for the specified CPU:

```
cpufreq-info -c {{cpu_number}}
```

- Show the allowed minimum and maximum CPU frequency:

```
cpufreq-info -l
```

- Show the current minimum and maximum CPU frequency and policy in table format:

```
cpufreq-info -o
```

- Show available CPU frequency policies:

```
cpufreq-info -g
```

- Show current CPU work frequency in a human-readable format, according to the cpufreq kernel module:

```
cpufreq-info -f -m
```

- Show current CPU work frequency in a human-readable format, by reading it from hardware (only available to root):

```
sudo cpufreq-info -w -m
```

cpufreq-set

A tool to modify CPU frequency settings.

The frequency value should range between the output of command **cpufreq-info -l**.

- Set the CPU frequency policy of CPU 1 to "userspace":

```
sudo cpufreq-set -c {{1}} -g {{userspace}}
```

- Set the current minimum CPU frequency of CPU 1:

```
sudo cpufreq-set -c {{1}} --min {{min_frequency}}
```

- Set the current maximum CPU frequency of CPU 1:

```
sudo cpufreq-set -c {{1}} --max {{max_frequency}}
```

- Set the current work frequency of CPU 1:

```
sudo cpufreq-set -c {{1}} -f {{work_frequency}}
```

cpuid

Display detailed information about all CPUs.

- Display information for all CPUs:

cpuid

- Display information only for the current CPU:

cpuid -1

- Display raw hex information with no decoding:

cpuid -r

cpulimit

A tool to throttle the CPU usage of other processes.

More information: <http://cpulimit.sourceforge.net/>.

- Limit an existing process with PID 1234 to only use 25% of the CPU:

```
cpulimit --pid {{1234}} --limit {{25%}}
```

- Limit an existing program by its executable name:

```
cpulimit --exe {{program}} --limit {{25}}
```

- Launch a given program and limit it to only use 50% of the CPU:

```
cpulimit --limit {{50}} -- {{program arg1 arg2 ...}}
```

- Launch a program, limit its CPU usage to 50% and run cpulimit in the background:

```
cpulimit --limit {{50}} --background -- {{program}}
```

- Kill its process if the program's CPU usage goes over 50%:

```
cpulimit --limit 50 --kill -- {{program}}
```

- Throttle both it and its child processes so that none go about 25% CPU:

```
cpulimit --limit {{25}} --monitor-forks -- {{program}}
```

create_ap

Create an AP (Access Point) at any channel.

- Create an open network with no passphrase:

```
create_ap {{wlan0}} {{eth0}} {{access_point_ssid}}
```

- Use a WPA + WPA2 passphrase:

```
create_ap {{wlan0}} {{eth0}} {{access_point_ssid}}
{{passphrase}}
```

- Create an access point without Internet sharing:

```
create_ap -n {{wlan0}} {{acces_point_ssid}} {{passphrase}}
```

- Create a bridged network with Internet sharing:

```
create_ap -m bridge {{wlan0}} {{eth0}} {{access_point_ssid}}
{{passphrase}}
```

- Create a bridged network with Internet sharing and a pre-configured bridge interface:

```
create_ap -m bridge {{wlan0}} {{br0}} {{access_point_ssid}}
{{passphrase}}
```

- Create an access port for Internet sharing from the same WiFi interface:

```
create_ap {{wlan0}} {{wlan0}} {{access_point_ssid}}
{{passphrase}}
```

- Choose a different WiFi adapter driver:

```
create_ap --driver {{wifi_adapter}} {{wlan0}} {{eth0}}
{{access_point_ssid}} {{passphrase}}
```

cryptsetup

Manage plain dm-crypt and LUKS (Linux Unified Key Setup) encrypted volumes.

- Initialize a LUKS volume (overwrites all data on the partition):

```
cryptsetup luksFormat {{/dev/sda1}}
```

- Open a LUKS volume and create a decrypted mapping at /dev/mapper/{{target}}:

```
cryptsetup luksOpen {{/dev/sda1}} {{target}}
```

- Remove an existing mapping:

```
cryptsetup luksClose {{target}}
```

- Change the LUKS volume's passphrase:

```
cryptsetup luksChangeKey {{/dev/sda1}}
```

csplit

Split a file into pieces.

This generates files named "xx00", "xx01", and so on.

- Split a file at lines 5 and 23:

```
csplit {{file}} {{5}} {{23}}
```

- Split a file every 5 lines (this will fail if the total number of lines is not divisible by 5):

```
csplit {{file}} {{5}} {*}
```

- Split a file every 5 lines, ignoring exact-division error:

```
csplit -k {{file}} {{5}} {*} 
```

- Split a file at line 5 and use a custom prefix for the output files:

```
csplit {{file}} {{5}} -f {{prefix}}
```

- Split a file at a line matching a regular expression:

```
csplit {{file}} /{{regex}}/
```

ctr

Manage Containerd containers and images.

More information: <https://containerd.io>.

- List all containers (running and stopped):

```
ctr containers list
```

- List all images:

```
ctr images list
```

- Pull an image:

```
ctr images pull {{image}}
```

- Tag an image:

```
ctr images tag {{souce_image}}:{{source_tag}}  
{{target_image}}:{{target_tag}}
```

ctrlaltdel

Utility to control what happens when CTRL+ALT+DEL is pressed.

- Get current setting:

```
ctrlaltdel
```

- Set CRTL+ALT+DEL to reboot immediately, without any preparation:

```
sudo ctrlaltdel hard
```

- Set CTRL+ALT+DEL to reboot "normally", giving processes a chance to exit first (send SIGINT to PID1):

```
sudo ctrlaltdel soft
```

cuyo

Tetris like game.

More information: <https://www.karimmi.de/cuyo/>.

- Start a new game:

cuyo

- Navigate the piece horizontally:

`{{A|D}}` OR `{{Left|Right}}` arrow key

- Turn the piece:

`{{W|Up}}` arrow key}

- Hard drop the piece:

`{{S|Down}}` arrow key}

daemonize

Run a command (that does not daemonize itself) as a Unix daemon.

More information: <http://software.clapper.org/daemonize/>.

- Run a command as a daemon:

```
daemonize {{command}} {{command_arguments}}
```

- Write the pid to the specified file:

```
daemonize -p {{path/to/pidfile}} {{command}}  
{{command_arguments}}
```

- Use a lock file to ensure that only one instance runs at a time:

```
daemonize -l {{path/to/lockfile}} {{command}}  
{{command_arguments}}
```

- Use the specified user account:

```
sudo daemonize -u {{user}} {{command}} {{command_arguments}}
```

dash

Debian Almquist Shell.

Modern POSIX-compliant implementation of **sh** (isn't Bash compatible).

- Start interactive shell:

```
dash
```

- Execute a command:

```
dash -c "{{command}}"
```

- Run commands from a file:

```
dash {{file.sh}}
```

- Run commands from a file, logging all commands executed to the terminal:

```
dash -x {{file.sh}}
```

datamash

Tool to perform basic numeric, textual and statistical operations on input textual data files.

- Get max, min, mean and median of a single column of numbers:

```
seq 3 | datamash max 1 min 1 mean 1 median 1
```

- Get the mean of a single column of float numbers (floats must use "," and not "."):

```
echo -e '1.0\n2.5\n3.1\n4.3\n5.6\n5.7' | tr ',' '.' |  
datamash mean 1
```

- Get the mean of a single column of numbers with a given decimal precision:

```
echo -e '1\n2\n3\n4\n5' | datamash -R  
{number_of_decimals_wanted} mean 1
```

- Get the mean of a single column of numbers ignoring "Na" and "NaN" (literal) strings:

```
echo -e '1\n2\nNa\n3\nNaN' | datamash --narm mean 1
```

dbus-daemon

The D-Bus message daemon, allowing multiple programs to exchange messages.

- Run the daemon with a configuration file:

```
dbus-daemon --config-file {{path/to/file}}
```

- Run the daemon with the standard per-login-session message bus configuration:

```
dbus-daemon --session
```

- Run the daemon with the standard systemwide message bus configuration:

```
dbus-daemon --system
```

- Set the address to listen on and override the configuration value for it:

```
dbus-daemon --address {{address}}
```

- Output the process id to **stdout**:

```
dbus-daemon --print-pid
```

- Force the message bus to write to the system log for messages:

```
dbus-daemon --syslog
```

ddrescue

Data recovery tool that reads data from damaged block devices.

More information: <https://www.gnu.org/software/ddrescue/>.

- Take an image of a device, creating a log file:

```
sudo ddrescue {{/dev/sdb}} {{path/to/image.dd}} {{path/to/ log.txt}}
```

- Clone Disk A to Disk B, creating a log file:

```
sudo ddrescue --force --no-scrape {{/dev/sdX}} {{/dev/sdY}} {{path/to/log.txt}}
```

debchange

Tool for maintenance of the debian/changelog file in a Debian source package.

More information: <https://manpages.debian.org/debchange>.

- Add a new version for a non-maintainer upload to the changelog:

`debchange --nmu`

- Add a changelog entry to the current version:

`debchange --append`

- Add a changelog entry to close the bug with specified ID:

`debchange --closes {{bug_id}}`

debman

Read man pages from uninstalled packages.

- Read a man page for a command that is provided by a specified package name:

```
debman -p {{package_name}} {{command_name}}
```

- Specify a package version to download:

```
debman -p {{package_name}}={{version}} {{command_name}}
```

- Read a man page in a .deb file:

```
debman -f {{path/to/filename.deb}} {{command_name}}
```

debootstrap

Create a basic Debian system.

More information: <https://wiki.debian.org/Debootstrap>.

- Create a Debian stable release system inside the `debian-root` directory:

```
sudo debootstrap stable {{path/to/debian-root/}} http://  
deb.debian.org/debian
```

- Create an Ubuntu 20.04 system inside the `focal-root` directory with a local mirror:

```
sudo debootstrap focal {{path/to/focal-root/}} {{file:///  
path/to/mirror/}}
```

- Switch to a bootstrapped system:

```
sudo chroot {{path/to/root}}
```

- List available releases:

```
ls /usr/share/debootstrap/scripts/
```

debugfs

An interactive ext2/ext3/ext4 filesystem debugger.

- Open the filesystem in read only mode:

```
debugfs {{/dev/sdXN}}
```

- Open the filesystem in read write mode:

```
debugfs -w {{/dev/sdXN}}
```

- Read commands from a specified file, execute them and then exit:

```
debugfs -f {{path/to/cmd_file}} {{/dev/sdXN}}
```

- View the filesystem stats in debugfs console:

```
stats
```

- Close the filesystem:

```
close -a
```

- List all available commands:

```
lr
```

debuild

Tool to build a Debian package from source.

More information: <https://manpages.debian.org/debuild>.

- Build the package in the current directory:

`debuild`

- Build a binary package only:

`debuild -b`

- Do not run lintian after building the package:

`debuild --no-lintian`

dget

Download Debian packages.

More information: <https://manpages.debian.org/dget>.

- Download a binary package:

```
dget {{package_name}}
```

- Download and extract a package source from its .dsc file:

```
dget {{http://deb.debian.org/debian/pool/main/h/haskell-tldr/
haskell-tldr_0.4.0-2.dsc}}
```

- Download a package source tarball from its .dsc file but don't extract it:

```
dget -d {{http://deb.debian.org/debian/pool/main/h/haskell-
tldr/haskell-tldr_0.4.0-2.dsc}}
```

diff3

Compare three files line by line.

- Compare files:

```
diff3 {{file1}} {{file2}} {{file3}}
```

- Show all changes, outlining conflicts:

```
diff3 --show-all {{file1}} {{file2}} {{file3}}
```

disown

Allow sub-processes to live beyond the shell that they are attached to.

See also the **jobs** command.

- Disown the current job:

`disown`

- Disown a specific job:

`disown %{{job_number}}`

- Disown all jobs:

`disown -a`

- Keep job (do not disown it), but mark it so that no future SIGHUP is received on shell exit:

`disown -h %{{job_number}}`

dkms

A framework that allows for dynamic building of kernel modules.

More information: <https://github.com/dell/dkms>.

- List currently installed modules:

```
dkms status
```

- Rebuild all modules for the currently running kernel:

```
dkms autoinstall
```

- Install version 1.2.1 of the acpi_call module for the currently running kernel:

```
dkms install -m {{acpi_call}} -v {{1.2.1}}
```

- Remove version 1.2.1 of the acpi_call module from all kernels:

```
dkms remove -m {{acpi_call}} -v {{1.2.1}} --all
```

dmenu

Dynamic menu.

Creates a menu from a text input with each item on a new line.

- Display a menu of the output of the `ls` command:

```
{ls} | dmenu
```

- Display a menu with custom items separated by a new line (`\n`):

```
echo -e "{{red}}\n{{green}}\n{{blue}}" | dmenu
```

- Let the user choose between multiple items and save the selected one to a file:

```
echo -e "{{red}}\n{{green}}\n{{blue}}" | dmenu > {{color.txt}}
```

- Launch dmenu on a specific monitor:

```
ls | dmenu -m {{1}}
```

- Display dmenu at the bottom of the screen:

```
ls | dmenu -b
```

dmesg

Write the kernel messages to standard output.

- Show kernel messages:

`dmesg`

- Show kernel error messages:

`dmesg --level err`

- Show kernel messages and keep reading new ones, similar to `tail -f` (available in kernels 3.5.0 and newer):

`dmesg -w`

- Show how much physical memory is available on this system:

`dmesg | grep -i memory`

- Show kernel messages 1 page at a time:

`dmesg | less`

- Show kernel messages with a timestamp (available in kernels 3.5.0 and newer):

`dmesg -T`

- Show kernel messages in human-readable form (available in kernels 3.5.0 and newer):

`dmesg -H`

- Colorize output (available in kernels 3.5.0 and newer):

`dmesg -L`

dmidecode

Display the DMI (alternatively known as SMBIOS) table contents in a human-readable format.

Requires root privileges.

- Show all DMI table contents:

```
sudo dmidecode
```

- Show the BIOS version:

```
sudo dmidecode -s bios-version
```

- Show the system's serial number:

```
sudo dmidecode -s system-serial-number
```

- Show BIOS information:

```
sudo dmidecode -t bios
```

- Show CPU information:

```
sudo dmidecode -t processor
```

- Show memory information:

```
sudo dmidecode -t memory
```

dnf

Package management utility for RHEL, Fedora, and CentOS (replaces yum).

More information: <https://dnf.readthedocs.io/>.

- Upgrade installed packages to the newest available versions:

```
sudo dnf upgrade
```

- Search packages via keywords:

```
dnf search {{keywords}}
```

- Display details about a package:

```
dnf info {{package}}
```

- Install a new package:

```
sudo dnf install {{package}}
```

- Install a new package and assume yes to all questions:

```
sudo dnf -y install {{package}}
```

- Remove a package:

```
sudo dnf remove {{package}}
```

- List installed packages:

```
dnf list --installed
```

- Find which packages provide a given file:

```
dnf provides {{file}}
```

dnsrecon

DNS enumeration tool.

More information: <https://github.com/darkoperator/dnsrecon>.

- Scan a domain and save the results to a SQLite database:

```
dnsrecon --domain {{example.com}} --db {{path/to/ database.sqlite}}
```

- Scan a domain, specifying the nameserver and performing a zone transfer:

```
dnsrecon --domain {{example.com}} --name_server {{nameserver.example.com}} --type axfr
```

- Scan a domain, using a dictionary of subdomains and hostnames for bruteforcing:

```
dnsrecon --domain {{example.com}} --dictionary {{path/to/ dictionary.txt}} --type brt
```

- Scan a domain, performing a reverse lookup of IP ranges from the SPF record and saving the results to a JSON file:

```
dnsrecon --domain {{example.com}} -s --json
```

- Scan a domain, performing a Google enumeration and saving the results to a CSV file:

```
dnsrecon --domain {{example.com}} -g --csv
```

- Scan a domain, performing DNS cache snooping:

```
dnsrecon --domain {{example.com}} --type snoop --name_server {{nameserver.example.com}} --dictionary {{path/to/ dictionary.txt}}
```

- Scan a domain, performing zone walking:

```
dnsrecon --domain {{example.com}} --type zonewalk
```

do-release-upgrade

The Ubuntu release upgrader.

- Upgrade to the latest release:

```
sudo do-release-upgrade
```

- Upgrade to the latest development release:

```
sudo do-release-upgrade --devel-release
```

- Upgrade to the latest proposed release:

```
sudo do-release-upgrade --proposed
```

dockerd

A persistent process to start and manage docker containers.

More information: <https://docs.docker.com/engine/reference/commandline/dockerd/>.

- Run docker daemon:

`dockerd`

- Run docker daemon and config it to listen to specific sockets(unix,tcp):

`dockerd --host unix://{{path/to/tmp.sock}} --host tcp://{{ip}}`

- Run with specific daemon PID file:

`dockerd --pidfile {{path/to/pid_file}}`

- Run in debug mode:

`dockerd --debug`

- Run and set a specific log level:

`dockerd --log-level={{debug|info|warn|error|fatal}}`

dos2unix

Change DOS-style line endings to Unix-style.

Replaces CRLF with CR.

- Change the line endings of a file:

```
dos2unix {{filename}}
```

- Create a copy with Unix-style line endings:

```
dos2unix -n {{filename}} {{new_filename}}
```

dpkg-deb

Pack, unpack and provide information about Debian archives.

More information: <https://manpages.debian.org/buster/dpkg/dpkg-deb.1.en.html>.

- Display information about a package:

```
dpkg-deb --info {{path/to/file.deb}}
```

- Display the package's name and version on one line:

```
dpkg-deb --show {{path/to/file.deb}}
```

- List the package's contents:

```
dpkg-deb --contents {{path/to/file.deb}}
```

- Extract package's contents into a directory:

```
dpkg-deb --extract {{path/to/file.deb}} {{path/to/directory}}
```

- Create a package from a specified directory:

```
dpkg-deb --build {{path/to/directory}}
```

dpkg-query

A tool that shows information about installed packages.

- List all installed packages:

```
dpkg-query -l
```

- List installed packages matching a pattern:

```
dpkg-query -l '{{pattern}}'
```

- List all files installed by a package:

```
dpkg-query -L {{package_name}}
```

- Show information about a package:

```
dpkg-query -s {{package_name}}
```

dpkg

Debian package manager.

More information: <https://manpages.debian.org/buster/dpkg/dpkg.1.en.html>.

- Install a package:

```
dpkg -i {{path/to/file.deb}}
```

- Remove a package:

```
dpkg -r {{package_name}}
```

- List installed packages:

```
dpkg -l {{pattern}}
```

- List a package's contents:

```
dpkg -L {{package_name}}
```

- List contents of a local package file:

```
dpkg -c {{path/to/file.deb}}
```

- Find out which package owns a file:

```
dpkg -S {{filename}}
```

dstat

Versatile tool for generating system resource statistics.

More information: <http://dagwieers.com/home-made/dstat>.

- Display CPU, disk, net, paging and system statistics:

`dstat`

- Display statistics every 5 seconds and 4 updates only:

`dstat {{5}} {{4}}`

- Display CPU and memory statistics only:

`dstat --cpu --mem`

- List all available dstat plugins:

`dstat --list`

- Display the process using the most memory and most CPU:

`dstat --top-mem --top-cpu`

- Display battery percentage and remaining battery time:

`dstat --battery --battery-remain`

dumpe2fs

Print the super block and blocks group information for ext2/ext3/ext4 filesystems.

Unmount the partition before running this command using **umount {{device}}**.

More information: <https://linux.die.net/man/8/dumpe2fs>.

- Display ext2, ext3 and ext4 filesystem information:

```
dumpe2fs {{/dev/sdXN}}
```

- Display the blocks which are reserved as bad in the filesystem:

```
dumpe2fs -b {{/dev/sdXN}}
```

- Force display filesystem information even with non-recognisable feature flags:

```
dumpe2fs -f {{/dev/sdXN}}
```

- Only display the superblock information and not any of the block group descriptor detail information:

```
dumpe2fs -h {{/dev/sdXN}}
```

- Print the detailed group information block numbers in hexadecimal format:

```
dumpe2fs -x {{/dev/sdXN}}
```

dunstify

A notification tool that is an extension of notify-send, but has more features based around dunst.

Works with all options that work for notify-send.

- Show a notification with a given title and message:

```
dunstify "{{Title}}" "{{Message}}"
```

- Show a notification with specified urgency:

```
dunstify "{{Title}}" "{{Message}}" -u {{low|normal|critical}}
```

- Specify a message ID (overwrites any previous messages with the same ID):

```
dunstify "{{Title}}" "{{Message}}" -r {{123}}
```

- To see other possible options:

```
notify-send --help
```

duperemove

Finds duplicate filesystem extents and optionally schedule them for deduplication.

An extent is small part of a file inside the filesystem.

On some filesystems one extent can be referenced multiple times, when parts of the content of the files are identical.

More information: <https://markfasheh.github.io/duperemove/>.

- Search for duplicate extents in a directory and show them:

```
duperemove -r {{path/to/directory}}
```

- Deduplicate duplicate extents on a Btrfs or XFS (experimental) filesystem:

```
duperemove -r -d {{path/to/directory}}
```

- Use a hash file to store extent hashes (less memory usage and can be reused on subsequent runs):

```
duperemove -r -d --hashfile={{path/to/hashfile}} {{path/to/directory}}
```

- Limit I/O threads (for hashing and dedupe stage) and CPU threads (for duplicate extent finding stage):

```
duperemove -r -d --hashfile={{path/to/hashfile}} --io-threads={{N}} --cpu-threads={{N}} {{path/to/directory}}
```

e2freefrag

Print the free space fragmentation information for ext2/ext3/ext4 filesystems.

More information: <https://linux.die.net/man/8/e2freefrag>.

- Check how many free blocks are present as contiguous and aligned free space:

```
e2freefrag {{/dev/sdXN}}
```

- Specify chunk size in kilobytes to print how many free chunks are available:

```
e2freefrag -c {{chunk_size_in_kb}} {{/dev/sdXN}}
```

e2fsck

Check a Linux ext2/ext3/ext4 filesystem. The filesystem should be unmounted at the time the command is run.

- Check filesystem, reporting any damaged blocks:

```
e2fsck {{/dev/sdXN}}
```

- Check filesystem and automatically repair any damaged blocks:

```
e2fsck -p {{/dev/sdXN}}
```

- Check filesystem in read only mode:

```
e2fsck -c {{/dev/sdXN}}
```

e2image

Save critical ext2/ext3/ext4 filesystem metadata to a file.

More information: <https://linux.die.net/man/8/e2image>.

- Write metadata located on device to a specific file:

```
e2image {{/dev/sdXN}} {{path/to/image_file}}
```

- Print metadata located on device to **stdout**:

```
e2image {{/dev/sdXN}} -
```

- Restore the filesystem metadata back to the device:

```
e2image -I {{/dev/sdXN}} {{path/to/image_file}}
```

- Create a large raw sparse file with metadata at proper offsets:

```
e2image -r {{/dev/sdXN}} {{path/to/image_file}}
```

- Create a QCOW2 image file instead of a normal or raw image file:

```
e2image -Q {{/dev/sdXN}} {{path/to/image_file}}
```

e2label

Change the label on an ext2/ext3/ext4 filesystem.

- Change the volume label on a specific ext partition:

```
e2label {{/dev/sda1}} "{{label_name}}"
```

e4defrag

Defragment an ext4 filesystem.

- Defragment the filesystem:

```
e4defrag {{/dev/sdXN}}
```

- See how fragmented a filesystem is:

```
e4defrag -c {{/dev/sdXN}}
```

- Print errors and the fragmentation count before and after each file:

```
e4defrag -v {{/dev/sdXN}}
```

ebuild

A low level interface to the Gentoo Portage system.

- Create or update the package manifest:

```
ebuild {{path/to/file.ebuild}} manifest
```

- Clean the temporary build directories for the build file:

```
ebuild {{path/to/file.ebuild}} clean
```

- Fetch sources if they do not exist:

```
ebuild {{path/to/file.ebuild}} fetch
```

- Extract the sources to a temporary build directory:

```
ebuild {{path/to/file.ebuild}} unpack
```

- Compile the extracted sources:

```
ebuild {{path/to/file.ebuild}} compile
```

- Install the package to a temporary install directory:

```
ebuild {{path/to/file.ebuild}} install
```

- Install the temporary files to the live filesystem:

```
ebuild {{path/to/file.ebuild}} qmerge
```

- Fetch, unpack, compile, install and qmerge the specified ebuild file:

```
ebuild {{path/to/file.ebuild}} merge
```

edit

An alias to a **run-mailcap**'s action edit.

Originally **run-mailcap** is used to process/edit mime-type/file.

- Edit action can be used to view any file on default mailcap explorer:

```
edit {{filename}}
```

- With **run-mailcap**:

```
run-mailcap --action=edit {{filename}}
```

edquota

Edit quotas for a user or group. By default it operates on all filesystems with quotas.

Quota information is stored permanently in the **quota.user** and **quota.group** files in the root of the filesystem.

- Edit quota of the current user:

```
edquota --user $(whoami)
```

- Edit quota of a specific user:

```
sudo edquota --user {{username}}
```

- Edit quota for a group:

```
sudo edquota --group {{group}}
```

- Restrict operations to a given filesystem (by default edquota operates on all filesystems with quotas):

```
sudo edquota --file-system {{filesystem}}
```

- Edit the default grace period:

```
sudo edquota -t
```

- Duplicate a quota to other users:

```
sudo edquota -p {{reference_user}} {{destination_user1}}  
{{destination_user2}}
```

efibootmgr

Manipulate the UEFI Boot Manager (the Bootoptions).

More information: <https://linux.die.net/man/8/efibootmgr>.

- List the current settings / bootnums:

```
efibootmgr
```

- List the filepaths:

```
efibootmgr -v
```

- Add UEFI Shell v2 as a boot option:

```
sudo efibootmgr -c -d {{/dev/sda1}} -l {{\EFI\tools\Shell.efi}} -L "{{UEFI Shell}}"
```

- Change the current boot order:

```
sudo efibootmgr -o {0002,0008,0001,0005}
```

- Delete a boot option:

```
sudo efibootmgr -b {0008} --delete-bootnum
```

eix

Utilities for searching local Gentoo packages.

Update local package cache using **eix-update**.

- Search for a package:

```
eix {{package_name}}
```

- Search for installed packages:

```
eix --installed {{package_name}}
```

- Search in package descriptions:

```
eix --description "{{description}}"
```

- Search by package license:

```
eix --license {{license}}
```

- Exclude results from search:

```
eix --not --license {{license}}
```

eject

Eject cds, floppy disks and tape drives.

- Display the default device:

```
eject -d
```

- Eject the default device:

```
eject
```

- Eject a specific device (the default order is cd-rom, scsi, floppy and tape):

```
eject {{/dev/cdrom}}
```

- Toggle whether a device's tray is open or closed:

```
eject -T {{/dev/cdrom}}
```

- Eject a cd drive:

```
eject -r {{/dev/cdrom}}
```

- Eject a floppy drive:

```
eject -f {{/mnt/floppy}}
```

- Eject a tape drive:

```
eject -q {{/mnt/tape}}
```

emerge

Gentoo Linux package manager utility.

- Synchronize all packages:

```
emerge --sync
```

- Update all packages, including dependencies:

```
emerge -uDNav @world
```

- Resume a failed update, skipping the failing package:

```
emerge --resume --skipfirst
```

- Install a new package, with confirmation:

```
emerge -av {{package_name}}
```

- Remove a package, with confirmation:

```
emerge -Cav {{package_name}}
```

- Remove orphaned packages (that were installed only as dependencies):

```
emerge -avc
```

- Search the package database for a keyword:

```
emerge -S {{keyword}}
```

enum4linux

Tool for enumerating Windows and Samba information from remote systems.

It attempts to offer similar functionality to enum.exe formerly available from www.bindview.com.

- Try to enumerate using all methods:

```
enum4linux -a {{remote_host}}
```

- Enumerate using given login credentials:

```
enum4linux -u {{user_name}} -p {{password}} {{remote_host}}
```

- List usernames from a given host:

```
enum4linux -U {{remote_host}}
```

- List shares:

```
enum4linux -S {{remote_host}}
```

- Get OS information:

```
enum4linux -o {{remote_host}}
```

equity

View information about Portage packages.

- List all installed packages:

```
equity list '*'
```

- Search for installed packages in the Portage tree and in overlays:

```
equity list -po {{package_name}}
```

- List all packages that depend on a given package:

```
equity depends {{package_name}}
```

- List all packages that a given package depends on:

```
equity depgraph {{package_name}}
```

- List all files installed by a package:

```
equity files --tree {{package_name}}
```

etckeeper

Track system configuration files in git.

More information: <http://etckeeper.branchable.com/>.

- Set up a git repo and perform various setup tasks (run from /etc):

```
sudo etckeeper init
```

- Commit all changes in /etc:

```
sudo etckeeper commit {{message}}
```

- Run arbitrary git commands:

```
sudo etckeeper vcs {{status}}
```

- Check if there are uncommitted changes (only returns an exit code):

```
sudo etckeeper unclean
```

- Destroy existing repo and stop tracking changes:

```
sudo etckeeper uninit
```

ethtool

Display and modify Network Interface Controller (NIC) parameters.

More information: <http://man7.org/linux/man-pages/man8/ethtool.8.html>.

- Set the link speed, duplex mode, and parameter autonegotiation for a given interface:

```
ethtool -s {{eth0}} speed {{10|100|1000}} duplex {{half|full}} autoneg {{on|off}}
```

eval

Execute arguments as a single command in the current shell and return its result.

- Call `echo` with the "foo" argument:

```
eval "{{echo foo}}"
```

- Set a variable in the current shell:

```
eval "{{foo=bar}}"
```

exif

Show and change EXIF information in JPEG files.

More information: <https://github.com/libexif/exif/>.

- Show all recognized EXIF information in an image:

```
exif {{path/to/image.jpg}}
```

- Show a table listing known EXIF tags and whether each one exists in an image:

```
exif --list-tags --no-fixup {{image.jpg}}
```

- Extract the image thumbnail into the file thumbnail.jpg:

```
exif --extract-thumbnail --output={{thumbnail.jpg}}  
{{image.jpg}}
```

- Show the raw contents of the "Model" tag in the given image:

```
exif --ifd={{0}} --tag={{Model}} --machine-readable  
{{image.jpg}}
```

- Change the value of the "Artist" tag to John Smith and save to new.jpg:

```
exif --output={{new.jpg}} --ifd={{0}} --tag="{{Artist}}"  
--set-value="{{John Smith}} --no-fixup {{image.jpg}}
```

expect

Script executor that interacts with other programs that require user input.

More information: <https://linux.die.net/man/1/expect>.

- Execute an expect script from a file:

```
expect {{path/to/file}}
```

- Execute a specified expect script:

```
expect -c "{{commands}}"
```

- Enter an interactive REPL (use `exit` or Ctrl + D to exit):

```
expect -i
```

export

Command to mark shell variables in the current environment to be exported with any newly forked child processes.

- Set a new environment variable:

```
export {{VARIABLE}}={{value}}
```

- Remove an environment variable:

```
export -n {{VARIABLE}}
```

- Mark a shell function for export:

```
export -f {{FUNCTION_NAME}}
```

- Append something to the PATH variable:

```
export PATH=$PATH:{{path/to/append}}
```

extrace

Trace exec() calls.

More information: <https://github.com/chneukirchen/extrace>.

- Trace all program executions occurring on the system:

```
sudo extrace
```

- Run a command and only trace descendants of this command:

```
sudo extrace {{command}}
```

- Print the current working directory of each process:

```
sudo extrace -d
```

- Resolve the full path of each executable:

```
sudo extrace -l
```

- Display the user running each process:

```
sudo extrace -u
```

extundelete

Recover deleted files from ext3 or ext4 partitions by parsing the journal.

See also **date** for Unix time information and **umount** for unmounting partitions.

More information: <http://extundelete.sourceforge.net>.

- Restore all deleted files inside partition N on device X:

```
sudo extundelete {{/dev/sdXN}} --restore-all
```

- Restore a file from a path relative to root (Do not start the path with `/`):

```
extundelete {{/dev/sdXN}} --restore-file {{path/to/file}}
```

- Restore a directory from a path relative to root (Do not start the path with `/`):

```
extundelete {{/dev/sdXN}} --restore-directory {{path/to/directory}}
```

- Restore all files deleted after January 1st, 2020 (in Unix time):

```
extundelete {{/dev/sdXN}} --restore-all --after {{1577840400}}
```

eyeD3

Read and manipulate metadata of MP3 files.

More information: <https://eyed3.readthedocs.io/en/latest/>.

- View information about an MP3 file:

```
eyeD3 {{filename.mp3}}
```

- Set the title of an MP3 file:

```
eyeD3 --title "{{A Title}}" {{filename.mp3}}
```

- Set the album of all the MP3 files in a directory:

```
eyeD3 --album "{{Album Name}}" {{*.mp3}}
```

- Set the front cover art for an MP3 file:

```
eyeD3 --add-image {{front_cover.jpeg}}:FRONT_COVER:  
{{filename.mp3}}
```

f5fpc

A proprietary commercial SSL VPN client by BIG-IP Edge.

- Open a new VPN connection:

```
sudo f5fpc --start
```

- Open a new VPN connection to a specific host:

```
sudo f5fpc --start --host {{host.example.com}}
```

- Specify a username (user will be prompted for a password):

```
sudo f5fpc --start --host {{host.example.com}} --username  
{{user}}
```

- Show the current VPN status:

```
sudo f5fpc --info
```

- Shutdown the VPN connection:

```
sudo f5fpc --stop
```

fail2ban-client

Configure and control fail2ban server.

More information: <https://github.com/fail2ban/fail2ban>.

- Retrieve current status of the jail service:

```
fail2ban-client status {{jail}}
```

- Remove the specified IP from the jail service's ban list:

```
fail2ban-client set {{jail}} unbanip {{ip}}
```

- Verify fail2ban server is alive:

```
fail2ban-client ping
```

faketime

Fake the system time for a given command.

More information: <https://manpages.ubuntu.com/manpages/trusty/man1/faketime.1.html>.

- Fake the time to this evening, before printing the result of `date`:

```
faketime '{{today 23:30}}' {{date}}
```

- Open a new `bash` shell, which uses yesterday as the current date:

```
faketime '{{yesterday}}' {{bash}}
```

- Simulate how any program would act next friday night:

```
faketime '{{next Friday 1 am}}' {{path/to/any/program}}
```

fallocate

Reserve or deallocate disk space to files.

The utility allocates space without zeroing.

- Reserve a file taking up 700MB of disk space:

```
fallocate --length {{700M}} {{path/to/file}}
```

- Shrink an already allocated file by 200MB:

```
fallocate --collapse-range --length {{200M}} {{path/to/file}}
```

- Shrink 20MB of space after 100MB in a file:

```
fallocate --collapse-range --offset {{100M}} --length {{20M}} {{path/to/file}}
```

fatlabel

Sets or gets the label of a FAT32 partition.

- Get the label of a FAT32 partition:

```
fatlabel {{/dev/sda1}}
```

- Set the label of a FAT32 partition:

```
fatlabel {{/dev/sdc3}} "{{new_label}}"
```

fc-cache

Scan font directories in order to build font cache files.

- Generate font cache files:

`fc-cache`

- Force a rebuild of all font cache files, without checking if cache is up-to-date:

`fc-cache -f`

- Erase font cache files, then generate new font cache files:

`fc-cache -r`

fc-list

List available fonts installed on the system.

- Return a list of installed fonts in your system:

```
fc-list
```

- Return a list of installed fonts with given name:

```
fc-list | grep '{{DejaVu Serif}}'
```

- Return the number of installed fonts in your system:

```
fc-list | wc -l
```

fc-match

Match available fonts.

- Return a sorted list of best matching fonts:

```
fc-match -s '{{DejaVu Serif}}'
```

fc-pattern

Shows information about a font matching a pattern.

- Display default information about a font:

```
fc-pattern -d '{{DejaVu Serif}}'
```

fc

Open the most recent command and edit it.

- Open in the default system editor:

`fc`

- Specify an editor to open with:

`fc -e {{'emacs'}}`

- List recent commands from history:

`fc -l`

fcrackzip

ZIP archive password cracking utility.

- Brute-force a password with a length of 4 to 8 characters, and contains only alphanumeric characters (order matters):

```
fcrackzip --brute-force --length 4-8 --charset aA1  
{{archive}}
```

- Brute-force a password in verbose mode with a length of 3 characters that only contains lowercase characters, \$ and %:

```
fcrackzip -v --brute-force --length 3 --charset a:$%  
{{archive}}
```

- Brute-force a password that contains only lowercase and special characters:

```
fcrackzip --brute-force --length 4 --charset a! {{archive}}
```

- Brute-force a password containing only digits, starting from the password 12345:

```
fcrackzip --brute-force --length 5 --charset 1 --init-  
password 12345 {{archive}}
```

- Crack a password using a wordlist:

```
fcrackzip --use-unzip --dictionary --init-password  
{{wordlist}} {{archive}}
```

- Benchmark cracking performance:

```
fcrackzip --benchmark
```

fdisk

A program for managing partition tables and partitions on a hard disk.

- List partitions:

```
fdisk -l
```

- Start the partition manipulator:

```
fdisk {{/dev/sdX}}
```

feedreader

A GUI desktop RSS client.

More information: <https://jangernert.github.io/FeedReader/>.

- Print the count of unread articles:

```
feedreader --unreadCount
```

- Add a URL for a feed to follow:

```
feedreader --addFeed={{feed_url}}
```

- Grab a specific article using its URL:

```
feedreader --grabArticle={{article_url}}
```

- Download all images from a specific article:

```
feedreader --url={{feed_url}} --grabImages={{article_path}}
```

- Play media from a URL:

```
feedreader --playMedia={{article_url}}
```

feh

Lightweight image viewing utility.

- View images locally or using a URL:

```
feh {{path/to/images}}
```

- View images recursively:

```
feh --recursive {{path/to/images}}
```

- View images without window borders:

```
feh --borderless {{path/to/images}}
```

- Exit after the last image:

```
feh --cycle-once {{path/to/images}}
```

- Set the slideshow cycle delay:

```
feh --slideshow-delay {{seconds}} {{path/to/images}}
```

- Set your wallpaper (centered, filled, maximized, scaled or tiled):

```
feh --bg-{{center|fill|max|scale|tile}} {{path/to/image}}
```

- Create a montage of all images within a directory. Outputs as a new image:

```
feh --montage --thumb-height {{150}} --thumb-width {{150}} --  
index-info "{{%n%wx%h}}" --output {{path/to/}}  
montage_image.png
```

rename

Rename multiple files.

NOTE: this page refers to the command from the **file-rename** Debian package.

- Rename files using a Perl Common Regular Expression (substitute 'foo' with 'bar' wherever found):

```
rename {{'s/foo/bar/'}} {{*}}
```

- Dry-run - display which renames would occur without performing them:

```
rename -n {{'s/foo/bar/'}} {{*}}
```

- Force renaming even if the operation would remove existing destination files:

```
rename -f {{'s/foo/bar/'}} {{*}}
```

- Convert filenames to lower case (use **-f** in case-insensitive filesystems to prevent "already exists" errors):

```
rename 'y/A-Z/a-z/' {{*}}
```

- Replace whitespace with underscores:

```
rename 's/\s+/_g' {{*}}
```

file

Determine file type.

- Give a description of the type of the specified file. Works fine for files with no file extension:

```
file {{filename}}
```

- Look inside a zipped file and determine the file type(s) inside:

```
file -z {{foo.zip}}
```

- Allow file to work with special or device files:

```
file -s {{filename}}
```

- Don't stop at first file type match; keep going until the end of the file:

```
file -k {{filename}}
```

- Determine the mime encoding type of a file:

```
file -i {{filename}}
```

filefrag

Report how badly fragmented a particular file might be.

More information: <https://linux.die.net/man/8/filefrag>.

- Display a report for a specific file:

```
filefrag {{path/to/file}}
```

- Display a report for space-separated list of files:

```
filefrag {{path/to/file1}} {{path/to/file2}}
```

- Display a report using a 1024 byte blocksize:

```
filefrag -b {{path/to/file}}
```

- Sync the file before requesting the mapping:

```
filefrag -s {{path/to/files}}
```

- Display mapping of extended attributes:

```
filefrag -x {{path/to/files}}
```

- Display a report with verbose information:

```
filefrag -v {{path/to/files}}
```

findfs

Finds a filesystem by label or UUID.

More information: <https://mirrors.edge.kernel.org/pub/linux/utils/util-linux>.

- Search block devices by filesystem label:

```
findfs LABEL={{label}}
```

- Search by filesystem UUID:

```
findfs UUID={{uuid}}
```

- Search by partition label (GPT or MAC partition table):

```
findfs PARTLABEL={{partition_label}}
```

- Search by partition UUID (GPT partition table only):

```
findfs PARTUUID={{partition_uuid}}
```

findmnt

Find your filesystem.

- List all mounted filesystems:

```
findmnt
```

- Search for a device:

```
findmnt {{/dev/sdb1}}
```

- Search for a mountpoint:

```
findmnt {{/}}
```

- Find filesystems in specific type:

```
findmnt -t {{ext4}}
```

- Find filesystems with specific label:

```
findmnt LABEL={{BigStorage}}
```

firejail

Securely sandboxes processes to containers using built-in Linux capabilities.

- Integrate firejail with your desktop environment:

```
sudo firecfg
```

- Open a restricted Mozilla Firefox:

```
firejail {{firefox}}
```

- Start a restricted Apache server on a known interface and address:

```
firejail --net={{eth0}} --ip={{192.168.1.244}} {{/etc/init.d/apache2}} {{start}}
```

- List running sandboxes:

```
firejail --list
```

- List network activity from running sandboxes:

```
firejail --netstats
```

- Shutdown a running sandbox:

```
firejail --shutdown={{7777}}
```

firewall-cmd

The firewalld command line client.

- View the available firewall zones:

```
firewall-cmd --get-active-zones
```

- View the rules which are currently applied:

```
firewall-cmd --list-all
```

- Permanently move the interface into the block zone, effectively blocking all communication:

```
firewall-cmd --permanent --zone={{block}} --change-interface={{enp1s0}}
```

- Permanently open the port for a service in the specified zone (like port **443** when in the **public** zone):

```
firewall-cmd --permanent --zone={{public}} --add-service={{https}}
```

- Permanently close the port for a service in the specified zone (like port **80** when in the **public** zone):

```
firewall-cmd --permanent --zone={{public}} --remove-service={{http}}
```

- Permanently open two arbitrary ports in the specified zone:

```
firewall-cmd --permanent --zone={{public}} --add-port={{25565/tcp}} --add-port={{19132/udp}}
```

- Reload firewalld to force rule changes to take effect:

```
firewall-cmd --reload
```

flameshot

Screenshot utility with a gui interface.

Supports basic image editing, such as text, shapes, colors, and imgur.

More information: <https://flameshot.js.org>

- Launch flameshot in gui mode:

`flameshot launcher`

- Take a screenshot by clicking and dragging:

`flameshot gui`

- Take a full screen screenshot:

`flameshot full`

- Set the save path to write screenshots to:

`flameshot full --path {{path/to/directory}}`

- Delay the screenshot for N milliseconds and output to clipboard:

`flameshot full --delay {{2000}} --clipboard`

flash

Flash cards in the terminal.

More information: <https://github.com/tallguyjenks/fla.sh>.

- Open a menu of available flashcard decks for selection:

`flash`

- Display the program version:

`flash -v`

- Display information about the flashcard system:

`flash -i`

- Display a list of available commands:

`flash -h`

- Change the previewer from default `bat` to `cat`:

`flash -p {{cat}}`

flatpak

Build, install and run flatpak applications and runtimes.

- Run an installed application:

```
flatpak run {{name}}
```

- Install an application from a remote source:

```
flatpak install {{remote}} {{name}}
```

- List all installed applications and runtimes:

```
flatpak list
```

- Update all installed applications and runtimes:

```
flatpak update
```

- Add a remote source:

```
flatpak remote-add --if-not-exists {{remote_name}}  
{{remote_url}}
```

- List all configured remote sources:

```
flatpak remote-list
```

foreman

Manage Procfile-based applications.

- Start an application with the Procfile in the current directory:

```
foreman start
```

- Start an application with a specified Procfile:

```
foreman start -f {{Procfile}}
```

- Start a specific application:

```
foreman start {{process}}
```

- Validate Procfile format:

```
foreman check
```

- Run one-off commands with the process's environment:

```
foreman run {{command}}
```

- Start all processes except the one named "worker":

```
foreman start -m all=1,{{worker}}=0
```

free

Display amount of free and used memory in the system.

- Display system memory:

```
free
```

- Display memory in Bytes/KB/MB/GB:

```
free -{{b|k|m|g}}
```

- Display memory in human readable units:

```
free -h
```

- Refresh the output every 2 seconds:

```
free -s {{2}}
```

fsck

Check the integrity of a filesystem or repair it. The filesystem should be unmounted at the time the command is run.

- Check filesystem `/dev/sdX`, reporting any damaged blocks:

```
fsck {{/dev/sdX}}
```

- Check filesystem `/dev/sdX`, reporting any damaged blocks and interactively letting the user choose to repair each one:

```
fsck -r {{/dev/sdX}}
```

- Check filesystem `/dev/sdX`, reporting any damaged blocks and automatically repairing them:

```
fsck -a {{/dev/sdX}}
```

fstrim

Discard unused blocks on a mounted filesystem.

Only supported by flash memory devices such as SSDs and microSD cards.

- Trim unused blocks on all mounted partitions that support it:

```
sudo fstrim --all
```

- Trim unused blocks on a specified partition:

```
sudo fstrim {{/}}
```

- Display statistics after trimming:

```
sudo fstrim --verbose {{/}}
```

fuser

Display process IDs currently using files or sockets.

- Find which processes are accessing a file or directory:

```
fuser {{path/to/file_or_directory}}
```

- Show more fields (**USER**, **PID**, **ACCESS** and **COMMAND**):

```
fuser --verbose {{path/to/file_or_directory}}
```

- Identify processes using a TCP socket:

```
fuser --namespace tcp {{port}}
```

- Kill all processes accessing a file or directory (sends the **SIGKILL** signal):

```
fuser --kill {{path/to/file_or_directory}}
```

- Find which processes are accessing the filesystem containing a specific file or directory:

```
fuser --mount {{path/to/file_or_directory}}
```

gCOV

Code coverage analysis and profiling tool that discovers untested parts of a program.

Also displays a copy of source code annotated with execution frequencies of code segments.

More information: <https://gcc.gnu.org/onlinedocs/gcc/Invoking-Gcov.html>.

- Generate a coverage report named `file.cpp.gcov`:

```
gcov {{path/to/file.cpp}}
```

- Write individual execution counts for every basic block:

```
gcov --all-blocks {{path/to/file.cpp}}
```

- Write branch frequencies to the output file and print summary information to `stdout` as a percentage:

```
gcov --branch-probabilities {{path/to/file.cpp}}
```

- Write branch frequencies as the number of branches taken, rather than the percentage:

```
gcov --branch-counts {{path/to/file.cpp}}
```

- Do not create a `gcov` output file:

```
gcov --no-output {{path/to/file.cpp}}
```

- Write file level as well as function level summaries:

```
gcov --function-summaries {{path/to/file.cpp}}
```

gedit

Text editor of the GNOME Desktop project.

- Open a text file:

```
gedit {{path/to/file}}
```

- Open multiple text files:

```
gedit {{file1 file2 ...}}
```

- Open a text file with a specific encoding:

```
gedit --encoding={{UTF-8}} {{path/to/file}}
```

- Display a list of supported encodings:

```
gedit --list-encodings
```

genie

Set up and use a "bottle" namespace to run systemd under WSL (Windows Subsystem for Linux).

To run these from Windows rather than an already-running distribution, precede them with `wsl`.

More information: <https://github.com/arkane-systems/genie>.

- Initialize the bottle (run once, at start):

```
genie -i
```

- Run a login shell inside the bottle:

```
genie -s
```

- Run a specified command inside the bottle:

```
genie -c {{command}}
```

genkernel

Gentoo Linux utility to compile and install kernels.

- Automatically compile and install a generic kernel:

```
sudo genkernel all
```

- Build and install the bzImage|initramfs|kernel|ramdisk only:

```
sudo genkernel {{bzImage|initramfs|kernel|ramdisk}}
```

- Apply changes to the kernel configuration before compiling and installing:

```
sudo genkernel --menuconfig all
```

- Generate a kernel with a custom name:

```
sudo genkernel --kernname={{custom_name}} all
```

- Use a kernel source outside of the default directory /usr/src/linux:

```
sudo genkernel --kerneldir={{path/to/directory}} all
```

getent

Get entries from Name Service Switch libraries.

- Get list of all groups:

```
getent group
```

- See the members of a group:

```
getent group {{group_name}}
```

- Get list of all services:

```
getent services
```

- Find a username by UID:

```
getent passwd 1000
```

- Perform a reverse DNS lookup:

```
getent hosts {{host}}
```

getfacl

Get file access control lists.

- Display the file access control list:

```
getfacl {{path/to/file_or_directory}}
```

- Display the file access control list with numeric user and group IDs:

```
getfacl -n {{path/to/file_or_directory}}
```

- Display the file access control list with tabular output format:

```
getfacl -t {{path/to/file_or_directory}}
```

gnome-extensions

Manage gnome extensions from the terminal.

More information: <https://wiki.gnome.org/Projects/GnomeShell/Extensions>.

- Display the version:

```
gnome-extensions version
```

- List all the installed extensions:

```
gnome-extensions list
```

- Display information about a specific extension:

```
gnome-extensions info "{{extension_id}}"
```

- Display help for a subcommand (like `list`):

```
gnome-extensions help {{subcommand}}
```

- Enable a specific extension:

```
gnome-extensions enable "{{extension_id}}"
```

- Disable a specific extension:

```
gnome-extension disable "{{extension_id}}"
```

- Uninstall a specific extension:

```
gnome-extension unistall "{{extension_id}}"
```

gnome-terminal

The GNOME Terminal emulator.

- Open a new GNOME terminal window:

```
gnome-terminal
```

- Run a specific command in a new terminal window:

```
gnome-terminal -- {{command}}
```

- Open a new tab in the last opened window instead:

```
gnome-terminal --tab
```

- Set the title of the new tab:

```
gnome-terminal --tab --title "{{title}}"
```

google-chrome

The web browser from Google.

More information: <https://chrome.google.com>.

- Run with a custom profile directory:

```
google-chrome --user-data-dir={{path/to/directory}}
```

- Run without CORS validation, useful to test an API:

```
google-chrome --user-data-dir={{path/to/directory}} --  
disable-web-security
```

gpasswd

Administer "/etc/group" and "/etc/gshadow".

- Define group administrators:

```
sudo gpasswd -A {{user1,user2}} {{group}}
```

- Set the list of group members:

```
sudo gpasswd -M {{user1,user2}} {{group}}
```

- Create a password for the named group:

```
gpasswd {{group}}
```

- Add a user to the named group:

```
gpasswd -a {{user}} {{group}}
```

- Remove a user from the named group:

```
gpasswd -d {{user}} {{group}}
```

groupadd

Add user groups to the system.

- Create a new Linux group:

```
groupadd {{group_name}}
```

- Create new group with a specific groupid:

```
groupadd {{group_name}} -g {{group_id}}
```

groupdel

Delete existing user groups from the system.

- Delete an existing group:

```
groupdel {{group_name}}
```

groupmod

Modify existing user groups in the system.

- Change the group name:

```
groupmod -n {{new_group_name}} {{old_group_name}}
```

- Change the group id:

```
groupmod -g {{new_group_id}} {{old_group_name}}
```

gs

GhostScript is a PDF and PostScript interpreter.

- To view a file:

```
gs -dQUIET -dBATCH {{file.pdf}}
```

- Reduce PDF file size to 150 dpi images for reading on a ebook device:

```
gs -dNOPAUSE -dQUIET -dBATCH -sDEVICE=pdfwrite -  
dPDFSETTINGS=/ebook -sOutputFile={{output.pdf}} {{input.pdf}}
```

- Convert PDF file (pages 1 through 3) to an image with 150 dpi resolution:

```
gs -dQUIET -dBATCH -dNOPAUSE -sDEVICE=jpeg -r150 -  
dFirstPage={{1}} -dLastPage={{3}} -  
sOutputFile={{output_%d.jpg}} {{input.pdf}}
```

- Extract pages from a PDF file:

```
gs -dQUIET -dBATCH -dNOPAUSE -sDEVICE=pdfwrite -  
sOutputFile={{output.pdf}} {{input.pdf}}
```

- Merge PDF files:

```
gs -dQUIET -dBATCH -dNOPAUSE -sDEVICE=pdfwrite -  
sOutputFile={{output.pdf}} {{input1.pdf}} {{input2.pdf}}
```

- Convert from PostScript file to PDF file:

```
gs -dQUIET -dBATCH -dNOPAUSE -sDEVICE=pdfwrite -  
sOutputFile={{output.pdf}} {{input.ps}}
```

guake

A drop-down terminal for GNOME.

- Toggle Guake visibility:

F12

- Toggle fullscreen mode:

F11

- Open a new tab:

Ctrl+Shift+T

- Close the terminal:

Super+X

- Go to the previous tab:

Ctrl+PageUp

- Search the selected text in the browser:

Shift+Ctrl+L

guix package

Install, upgrade and remove Guix packages, or rollback to previous configurations.

- Install a new package:

```
guix package -i {{package_name}}
```

- Remove a package:

```
guix package -r {{package_name}}
```

- Search the package database for a regular expression:

```
guix package -s "{{search_pattern}}"
```

- List installed packages:

```
guix package -I
```

- List generations:

```
guix package -l
```

- Roll back to the previous generation:

```
guix package --roll-back
```

halt

Halt, power-off or reboot the machine.

More information: <https://www.freedesktop.org/software/systemd/man/halt.html>.

- Halt the machine:

`halt`

- Power the machine off:

`halt --poweroff`

- Reboot the machine:

`halt --reboot`

hardinfo

Show hardware information in GUI window.

- Start hardinfo:

```
hardinfo
```

- Print report to standard output:

```
hardinfo -r
```

- Save report to HTML file:

```
hardinfo -r -f html > hardinfo.html
```

hdparm

Get and set SATA and IDE hard drive parameters.

- Request the identification info of a given device:

```
sudo hdparm -I /dev/{{device}}
```

- Get the Advanced Power Management level:

```
sudo hdparm -B /dev/{{device}}
```

- Set the Advanced Power Management value (values 1-127 permit spin-down, and values 128-254 do not):

```
sudo hdparm -B {{1}} /dev/{{device}}
```

- Display the device's current power mode status:

```
sudo hdparm -C /dev/{{device}}
```

- Force a drive to immediately enter standby mode (usually causes a drive to spin down):

```
sudo hdparm -y /dev/{{device}}
```

- Put the drive into idle (low-power) mode, also setting its standby timeout:

```
sudo hdparm -S {{standby_timeout}} {{device}}
```

hello

Print "Hello, world!", "hello, world" or a customizable text.

More information: <https://www.gnu.org/software/hello/>.

- Print "Hello, world!":

```
hello
```

- Print "hello, world", the traditional type:

```
hello --traditional
```

- Print a text message:

```
hello --greeting="{{greeting_text}}"
```

hexdump

An ASCII, decimal, hexadecimal, octal dump.

- Print the hexadecimal representation of a file:

```
hexdump {{file}}
```

- Display the input offset in hexadecimal and its ASCII representation in two columns:

```
hexdump -C {{file}}
```

- Display the hexadecimal representation of a file, but interpret only n bytes of the input:

```
hexdump -C -n{{number_of_bytes}} {{file}}
```

hlint

Tool for suggesting improvements to Haskell code.

More information: <http://hackage.haskell.org/package/hlint>.

- Display suggestions for a given file:

```
hlint {{path/to/file}} options
```

- Check all Haskell files and generate a report:

```
hlint {{path/to/directory}} --report
```

- Automatically apply most suggestions:

```
hlint {{path/to/file}} --refactor
```

- Display additional options:

```
hlint {{path/to/file}} --refactor-options
```

- Generate a settings file ignoring all outstanding hints:

```
hlint {{path/to/file}} --default > {{.hlint.yaml}}
```

Homeshick

Synchronize Git dotfiles.

More information <https://github.com/andsens/homeshick/wiki>.

- Create a new castle:

```
homeshick generate {{castle_name}}
```

- Add a file to your castle:

```
homeshick track {{castle_name}} {{path/to/file}}
```

- Go to a castle:

```
homeshick cd {{castle_name}}
```

- Clone a castle:

```
homeshick clone {{github_username}}/{{repository_name}}
```

- Symlink all files from a castle:

```
homeshick link {{castle_name}}
```

hostname

Show or set the system's host name.

- Show current host name:

```
hostname
```

- Show the network address of the host name:

```
hostname -i
```

- Show all network addresses of the host:

```
hostname -I
```

- Show the FQDN (Fully Qualified Domain Name):

```
hostname --fqdn
```

- Set current host name:

```
hostname {{new_hostname}}
```

hostnamectl

Get or set the hostname of the computer.

- Get the hostname of the computer:

```
hostnamectl
```

- Set the hostname of the computer:

```
sudo hostnamectl set-hostname "{{some_hostname}}"
```

htpdate

Synchronize local date and time via HTTP headers from web servers.

More information: <http://www.vervest.org/htp/>.

- Synchronize date and time:

```
sudo htpdate {{host}}
```

- Perform simulation of syncronization, without any action:

```
htpdate -q {{host}}
```

- Compensate the systematisch clock drift:

```
sudo htpdate -x {{host}}
```

- Set time immediate after the syncronization:

```
sudo htpdate -s {{host}}
```

http-prompt

An interactive command-line HTTP client featuring autocomplete and syntax highlighting.

- Launch a session targeting the default url of http://localhost:8000 or the previous session:

```
http-prompt
```

- Launch a session with a given url:

```
http-prompt {{http://example.com}}
```

- Launch a session with some initial options:

```
http-prompt {{localhost:8000/api}} --auth  
{{username:password}}
```

http_load

A HTTP benchmarking tool.

Runs multiple HTTP fetches in parallel to test the throughput of a web server.

More information: http://www.acme.com/software/http_load/.

- Emulate 20 requests based on a given URL list file per second for 60 seconds:

```
http_load -rate {{20}} -seconds {{60}} {{path/to/urls.txt}}
```

- Emulate 5 concurrent requests based on a given URL list file for 60 seconds:

```
http_load -parallel {{5}} -seconds {{60}} {{path/to/urls.txt}}
```

- Emulate 1000 requests at 20 requests per second, based on a given URL list file:

```
http_load -rate {{20}} -fetches {{1000}} {{path/to/urls.txt}}
```

- Emulate 1000 requests at 5 concurrent requests at a time, based on a given URL list file:

```
http_load -parallel {{5}} -fetches {{1000}} {{path/to/urls.txt}}
```

httpie

A user friendly command line HTTP tool.

- Send a GET request (default method with no request data):

```
http {{https://example.com}}
```

- Send a POST request (default method with request data):

```
http {{https://example.com}} {{hello=World}}
```

- Send a POST request with redirected input:

```
http {{https://example.com}} < {{file.json}}
```

- Send a PUT request with a given json body:

```
http PUT {{https://example.com/todos/7}} {{hello=world}}
```

- Send a DELETE request with a given request header:

```
http DELETE {{https://example.com/todos/7}} {{API-Key:foo}}
```

- Show the whole HTTP exchange (both request and response):

```
http -v {{https://example.com}}
```

- Download a file:

```
http --download {{https://example.com}}
```

hwclock

Used for reading or changing the hardware clock. Usually requires root.

- Display the current time as reported by the hardware clock:

```
hwclock
```

- Write the current software clock time to the hardware clock (sometimes used during system setup):

```
hwclock --systohc
```

- Write the current hardware clock time to the software clock:

```
hwclock --hctosys
```

i3

A dynamic tiling window manager.

More information:<https://i3wm.org/docs/userguide.html>.

- Start i3 (Note that a pre-existing window manager must not be open when this command is run.):

`i3`

- Open a new terminal window:

`Super + Return`

- Create a new workspace:

`Super + Shift + {{number}}`

- Switch to workspace {{number}}:

`Super + {{number}}`

- Open new window horizontally:

`Super + h`

- Open new window vertically:

`Super + v`

- Open application (type out application name after executing command):

`Super + D`

i3lock

Simple screen locker built for the i3 window manager.

More information: <https://i3wm.org/i3lock>.

- Lock screen with a simple color background (rrggb format):

```
i3lock -c {{0000ff}}
```

- Lock screen to a PNG background:

```
i3lock -i {{path/to/picture.png}}
```

- Disable the unlock indicator (removes feedback on keypress):

```
i3lock -u
```

- Display mouse pointer instead of hiding it ('default' for default pointer, 'win' for a MS Windows pointer):

```
i3lock -p {{default|win}}
```

- Lock screen to a PNG background displayed in multiple monitors, with enabled mouse pointer:

```
i3lock -i {{path/to/picture.png}} -p {{default|win}} -t
```

i7z

An Intel CPU (only i3, i5 and i7) realtime reporting tool.

- Start i7z (needs to be run in super user mode):

```
sudo i7z
```

ifdown

Disable network interfaces.

- Disable interface eth0:

```
ifdown {{eth0}}
```

- Disable all interfaces which are enabled:

```
ifdown -a
```

iftop

Show bandwidth usage on an interface by host.

More information: <https://linux.die.net/man/8/iftop>.

- Show the bandwidth usage:

```
sudo iftop
```

- Show the bandwidth usage of a given interface:

```
sudo iftop -i {{interface}}
```

- Show the bandwidth usage with port information:

```
sudo iftop -P
```

- Do not show bar graphs of traffic:

```
sudo iftop -b
```

- Do not look up hostnames:

```
sudo iftop -n
```

- Get help about interactive commands:

```
?
```

ifup

Tool used to enable network interfaces.

- Enable interface eth0:

```
ifup {{eth0}}
```

- Enable all the interfaces defined with "auto" in /etc/network/interfaces:

```
ifup -a
```

imgp

Command line image resizer and rotator for JPEG and PNG images.

- Convert single images and/or whole directories containing valid image formats:

```
imgp -x {{1366x1000}} {{path/to/directory}} {{path/to/file}}
```

- Scale an image by 75% and overwrite the source image to a target resolution:

```
imgp -x {{75}} -w {{path/to/file}}
```

- Rotate an image clockwise by 90 degrees:

```
imgp -o {{90}} {{path/to/file}}
```

inotifywait

Waits for changes to one or more files.

- Run a command when a file changes:

```
while inotifywait {{path/to/file}}; do {{command}}; done
```

- Be quiet about watching for changes:

```
while inotifywait --quiet {{path/to/file}}; do {{command}}; done
```

- Watch a directory recursively for changes:

```
while inotifywait --recursive {{path/to/directory}}; do {{command}}; done
```

- Exclude files matching a regular expression:

```
while inotifywait --recursive {{path/to/directory}} --exclude '{{regex}}'; do {{command}}; done
```

- Wait at most 30 seconds:

```
while inotifywait --timeout {{30}} {{path/to/file}}; do {{command}}; done
```

- Only watch for file modification events:

```
while inotifywait --event {{modify}} {{path/to/file}}; do {{command}}; done
```

inxī

Print a summary of system information and resources for debugging purposes.

- Print a short summary of CPU, memory, hard drive and kernel information:

`inxī`

- Print a full description of CPU, memory, disk, network and process information:

`inxī -Fz`

- Print information about the distribution's repository:

`inxī -r`

iostat

Report statistics for devices and partitions.

- Display a report of CPU and disk statistics since system startup:

```
iostat
```

- Display a report of CPU and disk statistics with units converted to megabytes:

```
iostat -m
```

- Display CPU statistics:

```
iostat -c
```

- Display disk statistics with disk names (including LVM):

```
iostat -N
```

- Display extended disk statistics with disk names for device "sda":

```
iostat -xN {{sda}}
```

- Display incremental reports of CPU and disk statistics every 2 seconds:

```
iostat {{2}}
```

ip address

IP Address management subcommand.

- List network interfaces and their associated IP addresses:

```
ip address
```

- Filter to show only active network interfaces:

```
ip address show up
```

- Display information about a specific network interface:

```
ip address show dev {{eth0}}
```

- Add an IP address to a network interface:

```
ip address add {{ip_address}} dev {{eth0}}
```

- Remove an IP address from a network interface:

```
ip address delete {{ip_address}} dev {{eth0}}
```

- Delete all IP addresses in a given scope from a network interface:

```
ip address flush dev {{eth0}} scope {{global|host|link}}
```

ip

Show / manipulate routing, devices, policy routing and tunnels.

- List interfaces with detailed info:

```
ip address
```

- List interfaces with brief network layer info:

```
ip -brief address
```

- List interfaces with brief link layer info:

```
ip -brief link
```

- Display the routing table:

```
ip route
```

- Show neighbors (ARP table):

```
ip neighbour
```

- Make an interface up/down:

```
ip link set {{interface}} up/down
```

- Add/Delete an ip address to an interface:

```
ip addr add/del {{ip}}/{{mask}} dev {{interface}}
```

- Add a default route:

```
ip route add default via {{ip}} dev {{interface}}
```

ipcalc

Perform simple operations and calculations on IP addresses and networks.

- Show information about an address or network with a given subnet mask:

```
ipcalc {{1.2.3.4}} {{255.255.255.0}}
```

- Show information about an address or network in CIDR notation:

```
ipcalc {{1.2.3.4}}/{{24}}
```

- Show the broadcast address of an address or network:

```
ipcalc -b {{1.2.3.4}}/{{30}}
```

- Show the network address of provided IP address and netmask:

```
ipcalc -n {{1.2.3.4}}/{{24}}
```

- Display geographic information about a given IP address:

```
ipcalc -g {{1.2.3.4}}
```

ipcmk

Create IPC (Inter-process Communication) resources.

- Create a shared memory segment:

```
ipcmk --shmem {{segment_size_in_bytes}}
```

- Create a semaphore:

```
ipcmk --semaphore {{element_size}}
```

- Create a message queue:

```
ipcmk --queue
```

- Create a shared memory segment with specific permissions (default is 0644):

```
ipcmk --shmem {{segment_size_in_bytes}} {{octal_permissions}}
```

ipcrm

Delete IPC (Inter-process Communication) resources.

- Delete a shared memory segment by ID:

```
ipcrm --shmem-id {{shmem_id}}
```

- Delete a shared memory segment by key:

```
ipcrm --shmem-key {{shmem_key}}
```

- Delete an IPC queue by ID:

```
ipcrm --queue-id {{ipc_queue_id}}
```

- Delete an IPC queue by key:

```
ipcrm --queue-key {{ipc_queue_key}}
```

- Delete a semaphore by ID:

```
ipcrm --semaphore-id {{semaphore_id}}
```

- Delete a semaphore by key:

```
ipcrm --semaphore-key {{semaphore_key}}
```

- Delete all IPC resources:

```
ipcrm --all
```

iptables

Program that allows configuration of tables, chains and rules provided by the Linux kernel firewall.

More information: <https://www.netfilter.org/projects/iptables/>.

- View chains, rules, and packet/byte counters for the filter table:

```
sudo iptables -vnL
```

- Set chain policy rule:

```
sudo iptables -P {{chain}} {{rule}}
```

- Append rule to chain policy for IP:

```
sudo iptables -A {{chain}} -s {{ip}} -j {{rule}}
```

- Append rule to chain policy for IP considering protocol and port:

```
sudo iptables -A {{chain}} -s {{ip}} -p {{protocol}} --dport {{port}} -j {{rule}}
```

- Delete chain rule:

```
sudo iptables -D {{chain}} {{rule_line_number}}
```

- Save iptables configuration of a given table to a file:

```
sudo iptables-save -t {{tablename}} > {{path/to/iptables_file}}
```

- Restore iptables configuration from a file:

```
sudo iptables-restore < {{path/to/iptables_file}}
```

isoinfo

Utility programs for dumping and verifying ISO disk images.

- List all the files included in an ISO image:

```
isoinfo -f -i {{path/to/image.iso}}
```

- Extract a specific file from an ISO image and send it out **stdout**:

```
isoinfo -i {{path/to/image.iso}} -x {{/PATH/TO/FILE/INSIDE/ISO.EXT}}
```

- Show header information for an ISO disk image:

```
isoinfo -d -i {{path/to/image.iso}}
```

isosize

Display the size of an ISO file.

More information: <https://linux.die.net/man/8/isosize>.

- Display the size of an ISO file:

```
isosize {{path/to/file.iso}}
```

- Display the block count and block size of an ISO file:

```
isosize --sectors {{path/to/file.iso}}
```

- Display the size of an ISO file divided by a given number (only usable when --sectors is not given):

```
isosize --divisor={{number}} {{path/to/file.iso}}
```

iw

Show and manipulate wireless devices.

- Scan for available wireless networks:

```
iw dev {{wlp}} scan
```

- Join an open wireless network:

```
iw dev {{wlp}} connect {{SSID}}
```

- Close the current connection:

```
iw dev {{wlp}} disconnect
```

- Show information about the current connection:

```
iw dev {{wlp}} link
```

iwconfig

Configure and show the parameters of a wireless network interface.

More information: <https://linux.die.net/man/8/iwconfig>.

- Show the parameters and statistics of all the interfaces:

`iwconfig`

- Show the parameters and statistics of the specified interface:

`iwconfig {{interface}}`

- Set the ESSID (network name) of the specified interface (e.g., eth0 or wlp2s0):

`iwconfig {{interface}} {{new_network_name}}`

- Set the operating mode of the specified interface:

`iwconfig {{interface}} mode {{ad hoc|Managed|Master|Repeater|Secondary|Monitor|Auto}}`

iwctl

A command line tool for controlling the iwd network supplicant.

More information: <https://iwd.wiki.kernel.org/gettingstarted>.

- Start the interactive mode, in this mode you can enter the commands directly, with autocompletion:

```
iwctl
```

- Call general help:

```
iwctl --help
```

- Display your wifi stations:

```
iwctl station list
```

- Start looking for networks with a station:

```
iwctl station {{station}} scan
```

- Display the networks found by a station:

```
iwctl station {{station}} get-networks
```

- Connect to a network with a station, if credentials are needed they will be asked:

```
iwctl station {{station}} connect {{network_name}}
```

jobs

BASH builtin for viewing information about processes spawned by the current shell.

- View jobs spawned by the current shell:

`jobs`

- List jobs and their process ids:

`jobs -l`

- Display information about jobs with changed status:

`jobs -n`

- Display process id of process group leader:

`jobs -p`

- Display running processes:

`jobs -r`

- Display stopped processes:

`jobs -s`

journalctl

Query the systemd journal.

- Show all messages from this boot:

```
journalctl -b
```

- Show all messages from last boot:

```
journalctl -b -1
```

- Show all messages with priority level 3 (errors) from this boot:

```
journalctl -b --priority={{3}}
```

- Follow new messages (like `tail -f` for traditional syslog):

```
journalctl -f
```

- Show all messages by a specific unit:

```
journalctl -u {{unit}}
```

- Filter messages within a time range (either timestamp or placeholders like "yesterday"):

```
journalctl --since {{now|today|yesterday|tomorrow}} --until {{YYYY-MM-DD HH:MM:SS}}
```

- Show all messages by a specific process:

```
journalctl _PID={{pid}}
```

- Show all messages by a specific executable:

```
journalctl {{path/to/executable}}
```

jpegtran

Perform lossless transformation of JPEG files.

More information: <https://linux.die.net/man/1/jpegtran>.

- Mirror an image horizontally or vertically:

```
jpegtran -flip {{horizontal|vertical}} {{path/to/image.jpg}} > {{path/to/output.jpg}}
```

- Rotate an image 90, 180 or 270 degrees clockwise:

```
jpegtran -rotate {{90|180|270}} {{path/to/image.jpg}} > {{path/to/output.jpg}}
```

- Transpose the image across the upper left to lower right axis:

```
jpegtran -transpose {{path/to/image.jpg}} > {{path/to/output.jpg}}
```

- Transverse the image across the upper right to lower left axis:

```
jpegtran -transverse {{path/to/image.jpg}} > {{path/to/output.jpg}}
```

- Convert the image to grayscale:

```
jpegtran -grayscale {{path/to/image.jpg}} > {{path/to/output.jpg}}
```

- Crop the image to a rectangular region of width **W** and height **H** from the upper left corner, saving the output to a specific file:

```
jpegtran -crop {{W}}x{{H}} -outfile {{path/to/output.jpg}} {{path/to/image.jpg}}
```

- Crop the image to a rectangular region of width **W** and height **H**, starting at point **X** and **Y** from the upper left corner:

```
jpegtran -crop {{W}}x{{H}}+{{X}}+{{Y}} {{path/to/image.jpg}} > {{path/to/output.jpg}}
```

kexec

Directly reboot into a new kernel.

- Load a new kernel:

```
kexec -l {{path/to/kernel}} --initrd={{path/to/initrd}} --  
command-line={{arguments}}
```

- Load a new kernel with current boot parameters:

```
kexec -l {{path/to/kernel}} --initrd={{path/to/initrd}} --  
reuse-cmdline
```

- Execute a currently loaded kernel:

```
kexec -e
```

- Unload current kexec target kernel:

```
kexec -u
```

kjv

The word of God available right on your desktop.

More information: <https://github.com/bontibon/kjv>.

- Display books:

`kjv -l`

- Open a specific book:

`kjv {{Genesis}}`

- Open a specific chapter of a book:

`kjv {{Genesis}} {{2}}`

- Open a specific verse of a specific chapter of a book:

`kjv {{John}} {{3}}:{{16}}`

- Open a specific range of verses of a book's chapter:

`kjv {{Proverbs}} {{3}}:{{1-6}}`

- Display a specific range of verses of a book from different chapters:

`kjv {{Matthew}} {{1}}:{{7}}-{{2}}:{{6}}`

- Display all verses that match a pattern:

`kjv /{{Plagues}}`

- Display all verses that match a pattern in a specific book:

`kjv {{1Jn}}/{{antichrist}}`

konsole

Konsole: The KDE terminal emulator.

More information: <https://konsole.kde.org>.

- Open a new Konsole in a specific directory:

```
konsole --workdir {{path/to/directory}}
```

- Run a specific command and do not close the window after it exits:

```
konsole --noclose -e {{command}}
```

- Open a new tab:

```
konsole --new-tab
```

- Open a Konsole in the background and bring to the front when Ctrl+Shift+F12 (by default) is pressed:

```
konsole --background-mode
```

- Open a Konsole with the emergency FALBACK profile:

```
konsole --fallback-profile
```

kpackagetool5

KPackage Manager: Install, list, remove Plasma packages.

More information: <https://techbase.kde.org/Development/Tutorials/Plasma5/QML2/GettingStarted#Kpackagetool5>.

- List all known package types that can be installed:

```
kpackagetool5 --list-types
```

- Install the package from a directory:

```
kpackagetool5 --type {{package_type}} --install {{path/to/directory}}
```

- Update installed package from a directory:

```
kpackagetool5 --type {{package_type}} --upgrade {{path/to/directory}}
```

- List installed plasmoids (--global for all users):

```
kpackagetool5 --type Plasma/Applet --list --global
```

- Remove a plasmoid by name:

```
kpackagetool5 --type Plasma/Applet --remove "{{name}}"
```

kpartx

Create device maps from partition tables.

- Add partition mappings:

```
kpartx -a {{whole_disk.img}}
```

- Delete partition mappings:

```
kpartx -d {{whole_disk.img}}
```

- List partition mappings:

```
kpartx -l {{whole_disk.img}}
```

ksvgtopng5

Convert SVG files to PNG format.

- Convert an SVG file (should be an absolute path) to PNG:

```
ksvgtopng5 {{width}} {{height}} {{path/to/file.svg}}
{{output_filename.png}}
```

larasail

A CLI tool for managing Laravel on Digital Ocean servers.

More information: <https://github.com/thedevdojo/larasail>.

- Set up the server with Laravel dependencies using the default PHP version:

```
larasail setup
```

- Set up the server with Laravel dependencies using a specific PHP version:

```
larasail setup {{php71}}
```

- Add a new Laravel site:

```
larasail host {{domain}} {{path/to/site_directory}}
```

- Retrieve the Larasail user password:

```
larasail pass
```

- Retrieve the Larasail MySQL password:

```
larasail mysqlpass
```

lastb

Show a listing of last logged in users.

- Show a list of all last logged in users:

```
sudo lastb
```

- Show a list of all last logged in users since a given time:

```
sudo lastb --since {{YYYY-MM-DD}}
```

- Show a list of all last logged in users until a given time:

```
sudo lastb --until {{YYYY-MM-DD}}
```

- Show a list of all logged in users at a specific time:

```
sudo lastb --present {{hh:mm}}
```

- Show a list of all last logged in users and translate the IP into a hostname:

```
sudo lastb --dns
```

lastcomm

Show last commands executed.

More information: <https://manpages.debian.org/stable/acct/lastcomm.1.en.html>.

- Print informations about all of the commands in the acct (record file):

`lastcomm`

- Display commands executed by a given user:

`lastcomm --user {{user}}`

- Display information about a given command executed on the system:

`lastcomm --command {{command}}`

- Display information about commands executed on a given terminal:

`lastcomm --tty {{terminal_name}}`

lastlog

Show the most recent login of all users or of a given user.

- Display the most recent login of all users:

```
lastlog
```

- Display lastlog record of the specified user:

```
lastlog -u {{username}}
```

- Display records before than 7 days:

```
lastlog -b {{7}}
```

- Display records more recent than 3 days:

```
lastlog -t {{3}}
```

ldconfig

Configure symlinks and cache for shared library dependencies.

- Update symlinks and rebuild the cache (usually run when a new library is installed):

```
sudo ldconfig
```

- Update the symlinks for a given directory:

```
sudo ldconfig -n {{path/to/directory}}
```

- Print the libraries in the cache and check whether a given library is present:

```
ldconfig -p | grep {{library_name}}
```

ldd

Display shared library dependencies.

- Display shared library dependencies of a binary:

```
ldd {{path/to/binary}}
```

- Display unused direct dependencies:

```
ldd -u {{path/to/binary}}
```

legit

Complementary command-line interface for Git.

More information: <https://frostming.github.io/legit>.

- Switch to a specified branch, stashing and restoring unstaged changes:

```
git switch {{target_branch}}
```

- Synchronize current branch, automatically merging or rebasing, and stashing and unstashing:

```
git sync
```

- Publish a specified branch to the remote server:

```
git publish {{branch_name}}
```

- Remove a branch from the remote server:

```
git unpublish {{branch_name}}
```

- List all branches and their publication status:

```
git branches {{glob_pattern}}
```

- Remove the last commit from the history:

```
git undo {{--hard}}
```

lftp

Sophisticated file transfer program.

More information: <https://linux.die.net/man/1/lftp>.

- Connect to an FTP server:

```
lftp {{ftp.example.com}}
```

- Download multiple files (glob expression):

```
mget {{path/to/*.png}}
```

- Upload multiple files (glob expression):

```
mput {{path/to/*.zip}}
```

- Delete multiple files on the remote server:

```
mrm {{path/to/*.txt}}
```

- Rename a file on the remote server:

```
mv {{original_filename}} {{new_filename}}
```

- Download or update an entire directory:

```
mirror {{path/to/remote_dir}} {{path/to/local_output_dir}}
```

- Upload or update an entire directory:

```
mirror -R {{path/to/local_dir}} {{path/to/remote_output_dir}}
```

libreoffice

CLI for the powerful and free office suite LibreOffice.

More information: <https://www.libreoffice.org/>.

- Open a space-separated list of files in read-only mode:

```
libreoffice --view {{path/to/file1}} {{path/to/file2}}
```

- Display the content of specific files:

```
libreoffice --cat {{path/to/file1}} {{path/to/file2}}
```

- Print files to a specific printer:

```
libreoffice --pt {{printer_name}} {{path/to/file1}} {{path/to/file2}}
```

- Convert all .doc files in current directory to pdf:

```
libreoffice --convert-to {{pdf}} {{*.doc}}
```

light

CLI to control the backlight of your screen.

- Get the current backlight value in percent:

```
light
```

- Set the backlight value to 50 percent:

```
light -S {{50}}
```

- Reduce 20 percent from the current backlight value:

```
light -U {{20}}
```

- Add 20 percent to the current backlight value:

```
light -A {{20}}
```

line

Read a single line of input.

- Read input:

`line`

lldb

The LLVM Low-Level Debugger.

- Debug an executable:

```
lldb {{executable}}
```

- Attach **lldb** to a running process with a given PID:

```
lldb -p {{pid}}
```

- Wait for a new process to launch with a given name, and attach to it:

```
lldb -w -n {{process_name}}
```

locate

Find filenames quickly.

- Look for pattern in the database. Note: the database is recomputed periodically (usually weekly or daily):

```
locate {{pattern}}
```

- Look for a file by its exact filename (a pattern containing no globbing characters is interpreted as *pattern*):

```
locate */{{filename}}
```

- Recompute the database. You need to do it if you want to find recently added files:

```
sudo updatedb
```

logcat

Dump a log of system messages.

Native Android CLI tool.

More information: <https://developer.android.com/studio/command-line/logcat>.

- Display system logs:

```
logcat
```

- Write system logs to a file:

```
logcat -f {{path/to/file}}
```

- Display lines that match a regex:

```
logcat --regex {{regex}}
```

logger

Add messages to syslog (/var/log/syslog).

- Log a message to syslog:

```
logger {{message}}
```

- Take input from `stdin` and log to syslog:

```
echo {{log_entry}} | logger
```

- Send the output to a remote syslog server running at a given port. Default port is 514:

```
echo {{log_entry}} | logger --server {{hostname}} --port {{port}}
```

- Use a specific tag for every line logged. Default is the name of logged in user:

```
echo {{log_entry}} | logger --tag {{tag}}
```

- Log messages with a given priority. Default is `user.notice`. See `man logger` for all priority options:

```
echo {{log_entry}} | logger --priority {{user.warning}}
```

login

Initiates a session for a user.

- Login as a user:

```
login {{user}}
```

- Login as user without authentication if user is preauthenticated:

```
login -f {{user}}
```

- Login as user and preserve environment:

```
login -p {{user}}
```

- Login as a user on a remote host:

```
login -h {{host}} {{user}}
```

logsave

Save the output of a command in a logfile.

More information: <https://linux.die.net/man/8/logsave>.

- Execute command with specified argument(s) and save its output to log file:

```
logsave {{path/to/logfile}} {{command}}
```

- Take input from standard input and save it in a log file:

```
logsave {{logfile}} -
```

- Append the output to a log file, instead of replacing its current contents:

```
logsave -a {{logfile}} {{command}}
```

- Show verbose output:

```
logsave -v {{logfile}} {{command}}
```

logwatch

Summarizes many different logs for common services (e.g., apache, pam_unix, sshd, etc.) in a single report.

- Analyze logs for a range of dates at certain level of detail:

```
logwatch --range {{yesterday|today|all|help}} --detail {{low|medium|others}}
```

- Restrict report to only include information for a selected service:

```
logwatch --range {{all}} --service {{apache|pam_unix|etc}}
```

losetup

Set up and control loop devices.

- List loop devices with detailed info:

```
losetup -a
```

- Attach a file to a given loop device:

```
sudo losetup /dev/{{loop}}/{{path/to/file}}
```

- Attach a file to a new free loop device and scan the device for partitions:

```
sudo losetup --show --partscan -f /{{path/to/file}}
```

- Attach a file to a read-only loop device:

```
sudo losetup --read-only /dev/{{loop}}/{{path/to/file}}
```

- Detach all loop devices:

```
sudo losetup -D
```

- Detach a given loop device:

```
sudo losetup -d /dev/{{loop}}
```

lrunzip

A large file decompression program.

See also [lrzip](#), [lrztar](#), [lrzuntar](#).

- Decompress a file:

```
lrunzip {{filename.lrz}}
```

- Decompress a file using a specific number of processor threads:

```
lrunzip -p {{8}} {{filename.lrz}}
```

- Decompress a file and silently overwrite files if they exist:

```
lrunzip -f {{filename.lrz}}
```

- Keep broken or damaged files instead of deleting them when decompressing:

```
lrunzip -K {{filename.lrz}}
```

- Specify output file name and/or path:

```
lrunzip -o {{outfilename}} {{filename.lrz}}
```

lrzip

A large file compression program.

See also [lrunzip](#), [lrztar](#), [lrzuntar](#).

- Compress a file with LZMA - slow compression, fast decompression:

```
lrzip {{filename}}
```

- Compress a file with BZIP2 - good middle ground for compression/speed:

```
lrzip -b {{filename}}
```

- Compress with ZPAQ - extreme compression, but very slow:

```
lrzip -z {{filename}}
```

- Compress with LZO - light compression, extremely fast decompression:

```
lrzip -l {{filename}}
```

- Compress a file and password protect/encrypt it:

```
lrzip -e {{filename}}
```

- Override the number of processor threads to use:

```
lrzip -p {{8}} {{filename}}
```

lrztar

A wrapper for **lrzip** to simplify compression of directories.

See also: **tar**, **lrzuntar**, **lrunzip**.

- Archive a directory with **tar**, then compress:

```
lrztar {{path/to/directory}}
```

- Same as above, with ZPAQ - extreme compression, but very slow:

```
lrztar -z {{path/to/directory}}
```

- Specify the output file:

```
lrztar -o {{path/to/file}} {{path/to/directory}}
```

- Override the number of processor threads to use:

```
lrztar -p {{8}} {{path/to/directory}}
```

- Force overwriting of existing files:

```
lrztar -f {{path/to/directory}}
```

lrzuntar

A wrapper for **lrunzip** to simplify decompression of directories.

See also: **lrztar**, **lrzip**.

- Decompress from a file to the current directory:

```
lrzuntar {{path/to/archive.tar.lrz}}
```

- Decompress from a file to the current directory using a specific number of processor threads:

```
lrzuntar -p {{8}} {{path/to/archive.tar.lrz}}
```

- Decompress from a file to the current directory and silently overwrite items that already exist:

```
lrzuntar -f {{archive.tar.lrz}}
```

- Specify the output path:

```
lrzuntar -O {{path/to/directory}} {{archive.tar.lrz}}
```

- Delete the compressed file after decompression:

```
lrzuntar -D {{path/to/archive.tar.lrz}}
```

lsattr

List file attributes on a Linux filesystem.

- Display the attributes of the files in the current directory:

`lsattr`

- List the attributes of files in a particular path:

`lsattr {{path}}`

- List file attributes recursively in the current and subsequent directories:

`lsattr -R`

- Show attributes of all the files in the current directory, including hidden ones:

`lsattr -a`

- Display attributes of directories in the current directory:

`lsattr -d`

lsb_release

Provides certain LSB (Linux Standard Base) and distribution-specific information.

- Print all available information:

```
lsb_release -a
```

- Print a description (usually the full name) of the operating system:

```
lsb_release -d
```

- Print only the operating system name (ID), suppressing the field name:

```
lsb_release -i -s
```

- Print the release number and codename of the distribution, suppressing the field names:

```
lsb_release -rcs
```

lsblk

Lists information about devices.

- List all storage devices in a tree-like format:

```
lsblk
```

- Also list empty devices:

```
lsblk -a
```

- Print the SIZE column in bytes rather than in a human-readable format:

```
lsblk -b
```

- Output info about filesystems:

```
lsblk -f
```

- Use ASCII characters for tree formatting:

```
lsblk -i
```

- Output info about block-device topology:

```
lsblk -t
```

- Exclude the devices specified by the comma-separated list of major device numbers:

```
lsblk -e {{1,7}}
```

lscpu

Displays information about the CPU architecture.

- Display information about all CPUs:

```
lscpu
```

- Display information in a table:

```
lscpu --extended
```

- Display only information about offline CPUs in a table:

```
lscpu --extended --offline
```

lshw

List detailed information about hardware configurations as root user.

- Launch the GUI:

```
sudo lshw -X
```

- List all hardwares in tabular format:

```
sudo lshw -short
```

- List all disks and storage controllers in tabular format:

```
sudo lshw -class disk -class storage -short
```

- Save all network interfaces to an HTML file:

```
sudo lshw -class network -html > {{interfaces.html}}
```

lslocks

List local system locks.

- List all local system locks:

```
lslocks
```

- List locks with defined column headers:

```
lslocks --output {{PID}},{{COMMAND}},{{PATH}}
```

- List locks producing a raw output (no columns), and without column headers:

```
lslocks --raw --noheadings
```

- List locks by PID input:

```
lslocks --pid {{PID}}
```

- List locks with json output to **stdout**:

```
lslocks --json
```

lslogins

Show information about users on a Linux system.

More information: <https://man7.org/linux/man-pages/man1/lslogins.1.html>.

- Display users in the system:

`lslogins`

- Display users belonging to a specific group:

`lslogins --groups={{groups}}`

- Display user accounts:

`lslogins --user-accs`

- Display last logins:

`lslogins --last`

- Display system accounts:

`lslogins --system-accs`

- Display supplementary groups:

`lslogins --supp-groups`

lsmod

Shows the status of linux kernel modules.

See also **modprobe**, which loads kernel modules.

- List all currently loaded kernel modules:

lsmod

lspci

List all PCI devices.

- Show a brief list of devices:

`lspci`

- Display additional info:

`lspci -v`

- Display drivers and modules handling each device:

`lspci -k`

- Show a specific device:

`lspci -s {{00:18.3}}`

- Dump info in a readable form:

`lspci -vm`

lsscsi

List SCSI devices (or hosts) and their attributes.

- List all SCSI devices:

```
lsscsi
```

- List all SCSI devices with detailed attributes:

```
lsscsi -L
```

- List all SCSI devices with human readable disk capacity:

```
lsscsi -s
```

lsusb

Display information about USB buses and devices connected to them.

- List all the USB devices available:

```
lsusb
```

- List the USB hierarchy as a tree:

```
lsusb -t
```

- List verbose information about USB devices:

```
lsusb --verbose
```

- List detailed information about a USB device:

```
lsusb -D {{device}}
```

- List devices with a specified vendor and product id only:

```
lsusb -d {{vendor}}:{{product}}
```

ltrace

Display dynamic library calls of a process.

More information: <https://linux.die.net/man/1/ltrace>.

- Print (trace) library calls of a program binary:

```
ltrace ./{{program}}
```

- Count library calls. Print a handy summary at the bottom:

```
ltrace -c {{path/to/program}}
```

- Trace calls to malloc and free, omit those done by libc:

```
ltrace -e malloc+free-@libc.so* {{path/to/program}}
```

- Write to file instead of terminal:

```
ltrace -o {{file}} {{path/to/program}}
```

lvcreate

Creates a logical volume in an existing volume group.

A volume group is a collection of logical and physical volumes.

- Create a logical volume of 10 gigabytes in the volume group vg1:

```
lvcreate -L {{10G}} {{vg1}}
```

- Create a 1500 megabyte linear logical volume named mylv in the volume group vg1:

```
lvcreate -L {{1500}} -n {{mylv}} {{vg1}}
```

- Create a logical volume called mylv that uses 60% of the total space in volume group vg1:

```
lvcreate -l {{60%VG}} -n {{mylv}} {{vg1}}
```

- Create a logical volume called mylv that uses all of the unallocated space in the volume group vg1:

```
lvcreate -l {{100%FREE}} -n {{mylv}} {{vg1}}
```

lvextend

Increase the size of a logical volume.

- Increase a volume's size to 120GB:

```
lvextend --size {{120G}} {{logical_volume}}
```

- Increase a volume's size by 40GB as well as the underlying filesystem:

```
lvextend --size +{{40G}} -r {{logical_volume}}
```

- Increase a volume's size to 100% of the free physical volume space:

```
lvextend --size {{100}}%FREE {{logical_volume}}
```

lvreduce

Reduce the size of a logical volume.

- Reduce a volume's size to 120GB:

```
lvreduce --size {{120G}} {{logical_volume}}
```

- Reduce a volume's size by 40GB as well as the underlying filesystem:

```
lvreduce --size -{{40G}} -r {{logical_volume}}
```

lvremove

Remove one or more logical volumes.

More information: <https://sourceware.org/lvm2/>.

- Remove a logical volume in a volume group:

```
sudo lvremove {{volume_group}}/{{logical_volume}}
```

- Remove all logical volumes in a volume group:

```
sudo lvremove {{volume_group}}
```

lvresize

Change the size of a logical volume.

- Change a volume's size to 120GB:

```
lvresize -L {{120G}} {{logical_volume}}
```

- Reduce a volume's size by 120GB as well as the underlying filesystem:

```
lvresize --size -{{120G}} -r {{logical_volume}}
```

- Increase a volume's size to 100% of the free physical volume space:

```
lvresize --size {{100}}%FREE {{logical_volume}}
```

lvs

Display information about LVM logical volumes.

More information: <https://www.man7.org/linux/man-pages/man8/lvs.8.html>.

- Display information about logical volumes:

`lvs`

- Display all logical volumes:

`lvs -a`

- Change default display to show more details:

`lvs -v`

- Display only specific fields:

`lvs -o {{field_name_1}},{{field_name_2}}`

- Append field to default display:

`lvs -o +{{field_name}}`

- Suppress heading line:

`lvs --noheadings`

- Use a separator to separate fields:

`lvs --separator {{=}}`

lxc

Manage Linux containers using the lxd REST API.

Any container names or patterns can be prefixed with the name of a remote server.

- List local containers matching a string. Omit the string to list all local containers:

```
lxc list {{match_string}}
```

- List images matching a string. Omit the string to list all images:

```
lxc image list [{{remote}}:]{{match_string}}
```

- Create a new container from an image:

```
lxc init [{{remote}}:]{{image}} {{container}}
```

- Start a container:

```
lxc start [{{remote}}:]{{container}}
```

- Stop a container:

```
lxc stop [{{remote}}:]{{container}}
```

- Show detailed info about a container:

```
lxc info [{{remote}}:]{{container}}
```

- Take a snapshot of a container:

```
lxc snapshot [{{remote}}:]{{container}} {{snapshot}}
```

lynis

System and security auditing tool.

More information: <https://cisofy.com/documentation/lynis/>.

- Check that Lynis is up-to-date:

```
sudo lynis update info
```

- Run a security audit of the system:

```
sudo lynis audit system
```

- Run a security audit of a Dockerfile:

```
sudo lynis audit dockerfile {{path/to/dockerfile}}
```

mac2unix

Change macOS-style line endings to Unix-style.

Replaces LF with CR.

- Change the line endings of a file:

```
mac2unix {{filename}}
```

- Create a copy with Unix-style line endings:

```
mac2unix -n {{filename}} {{new_filename}}
```

macchanger

Command-line utility for manipulating network interface MAC addresses.

- View the current and permanent MAC addresses of a interface:

```
macchanger --show {{interface}}
```

- Set interface to a random MAC:

```
macchanger --random {{interface}}
```

- Set interface to a specific MAC:

```
macchanger --mac {{XX:XX:XX:XX:XX:XX}} {{interface}}
```

- Reset interface to its permanent hardware MAC:

```
macchanger --permanent {{interface}}
```

maim

Screenshot utility.

More information: <https://github.com/naelstrof/maim>.

- Capture a screenshot and save it to the given path:

```
maim {{path/to/screenshot.png}}
```

- Capture a screenshot of the selected region:

```
maim --select {{path/to/screenshot.png}}
```

- Capture a screenshot of the selected region and save it in the clipboard (requires `xclip`):

```
maim --select | xclip -selection clipboard -target image/png
```

- Capture a screenshot of the current active window (requires `xdotool`):

```
maim --window $(xdotool getactivewindow) {{path/to/screenshot.png}}
```

makepkg

Creates a package installable with the **pacman** package manager.

Runs the commands from a PKGBUILD file to build the package.

More information: <https://wiki.archlinux.org/index.php/Makepkg>.

- Make a package (run in the same directory as a PKGBUILD):

`makepkg`

- Make a package and install its dependencies:

`makepkg --syncdeps`

- Same as above, but install the package with **pacman** when done:

`makepkg --syncdeps --install`

- Make a package, but skip source checksums:

`makepkg --skipchecksums`

mandb

Manage the pre-formatted manual page database.

- Purge and process manual pages:

```
mandb
```

- Update a single entry:

```
mandb --filename {{path/to/file}}
```

- Create entries from scratch instead of updating:

```
mandb --create
```

- Only process user databases:

```
mandb --user-db
```

- Do not purge obsolete entries:

```
mandb --no-purge
```

- Check the validity of manual pages:

```
mandb --test
```

manpath

Determine the search path for manual pages.

- Display the search path used to find man pages:

manpath

- Show the entire global manpath:

manpath --global

mcookie

Generates random 128 bit hexadecimal numbers.

- Generate a random number:

```
mcookie
```

- Generate a random number, using the contents of a file as a seed for the randomness:

```
mcookie --file {{path/to/file}}
```

- Generate a random number, using a specific number of bytes from a file as a seed for the randomness:

```
mcookie --file {{path/to/file}} --max-size  
{{number_of_bytes}}
```

- Print the details of the randomness used, such as the origin and seed for each source:

```
mcookie --verbose
```

mdadm

RAID management utility.

More information: <https://linux.die.net/man/8/mdadm>.

- Create array:

```
mdadm --create {{/dev/md/MyRAID}} --level {{raid_level}} --  
  raid-devices {{number_of_disks}} {{/dev/sdXN}}
```

- Stop array:

```
mdadm --stop {{/dev/md0}}
```

- Mark disk as failed:

```
mdadm --fail {{/dev/md0}} {{/dev/sdXN}}
```

- Remove disk:

```
mdadm --remove {{/dev/md0}} {{/dev/sdXN}}
```

- Add disk to array:

```
mdadm --assemble {{/dev/md0}} {{/dev/sdXN}}
```

- Show RAID info:

```
mdadm --detail {{/dev/md0}}
```

mdbook

Create online books by writing makrdown files.

More information: <https://rust-lang.github.io/mdBook/>.

- Create a mdbook project in the current directory:

```
mdbook init
```

- Create a mdbook project in a specific directory:

```
mdbook init {{path/to/directory}}
```

- Clean the directory with the generated book:

```
mdbook clean
```

- Serve a book at `http://localhost:3000`, auto build when file changes:

```
mdbook serve
```

- Watch a set of markdown files and automatically build when a file is changed:

```
mdbook watch
```

Medusa

A modular and parallel login brute-forcer for a variety of protocols.

- Execute brute force against an FTP server using a file containing usernames and a file containing passwords:

```
medusa -M ftp -h host -U {{path/to/username_file}} -P {{path/to/password_file}}
```

- Execute a login attempt against a HTTP server using the username, password and user-agent specified:

```
medusa -M HTTP -h host -u {{username}} -p {{password}} -m USER-AGENT:"{{Agent}}"
```

- Execute a brute force against a MySQL server using a file cointaining usernames and a hash:

```
medusa -M mysql -h host -U {{path/to/username_file}} -p {{hash}} -m PASS:HASH
```

- Execute a brute force against a list of SMB servers using a username and a pwdump file:

```
medusa -M smbnt -H {{path/to/hosts_file}} -C {{path/to/pwdump_file}} -u {{username}} -m PASS:HASH
```

microcom

A minimalistic terminal program, used to access remote devices via a serial, CAN or telnet connection from the console.

- Open a serial port using the specified baud rate:

```
microcom --port {{path/to/serial_port}} --speed {{baud_rate}}
```

- Establish a telnet connection to the specified host:

```
microcom --telnet {{hostname}}:{{port}}
```

mimetype

Automatically determine the MIME type of a file.

- Print the MIME type of a given file:

```
mimetype {{path/to/file}}
```

- Display only the MIME type, and not the filename:

```
mimetype --brief {{path/to/file}}
```

- Display a description of the MIME type:

```
mimetype --describe {{path/to/file}}
```

- Determine the MIME type of stdin (does not check a filename):

```
{{some_command}} | mimetype --stdin
```

- Display debug information about how the MIME type was determined:

```
mimetype --debug {{path/to/file}}
```

- Display all the possible MIME types of a given file in confidence order:

```
mimetype --all {{path/to/file}}
```

- Explicitly specify the 2-letter language code of the output:

```
mimetype --language {{path/to/file}}
```

mke2fs

Creates a Linux filesystem inside a partition.

- Create an ext2 filesystem in partition 1 of device b (**sdb1**):

```
mkfs.ext2 {{/dev/sdb1}}
```

- Create an ext3 filesystem in partition 1 of device b (**sdb1**):

```
mkfs.ext3 {{/dev/sdb1}}
```

- Create an ext3 filesystem in partition 1 of device b (**sdb1**):

```
mkfs.ext3 {{/dev/sdb1}}
```

mkfs.cramfs

Creates a ROM filesystem inside a partition.

- Create a ROM filesystem inside partition 1 on device b (**sdb1**):

```
mkfs.cramfs {{/dev/sdb1}}
```

- Create a ROM filesystem with a volume-name:

```
mkfs.cramfs -n {{volume_name}} {{/dev/sdb1}}
```

mkfs.exfat

Creates an exfat filesystem inside a partition.

- Create an exfat filesystem inside partition 1 on device b (**sdb1**):

```
mkfs.exfat {{/dev/sdb1}}
```

- Create filesystem with a volume-name:

```
mkfs.exfat -n {{volume_name}} {{/dev/sdb1}}
```

- Create filesystem with a volume-id:

```
mkfs.exfat -i {{volume_id}} {{/dev/sdb1}}
```

mkfs.ext4

Creates an ext4 filesystem inside a partition.

- Create an ext4 filesystem inside partition 1 on device b (**sdb1**):

```
sudo mkfs.ext4 {{/dev/sdb1}}
```

- Create an ext4 filesystem with a volume-label:

```
sudo mkfs.ext4 -L {{volume_label}} {{/dev/sdb1}}
```

mkfs.fat

Creates an MS-DOS filesystem inside a partition.

- Create a fat filesystem inside partition 1 on device b (**sdb1**):

```
mkfs.fat {{/dev/sdb1}}
```

- Create filesystem with a volume-name:

```
mkfs.fat -n {{volume_name}} {{/dev/sdb1}}
```

- Create filesystem with a volume-id:

```
mkfs.fat -i {{volume_id}} {{/dev/sdb1}}
```

- Use 5 instead of 2 file allocation tables:

```
mkfs.fat -f 5 {{/dev/sdb1}}
```

mkfs

Build a Linux filesystem on a hard disk partition.

This command is deprecated in favor of filesystem specific mkfs. utils.

- Build a Linux ext2 filesystem on a partition:

```
mkfs {{path/to/partition}}
```

- Build a filesystem of a specified type:

```
mkfs -t {{ext4}} {{path/to/partition}}
```

- Build a filesystem of a specified type and check for bad blocks:

```
mkfs -c -t {{ntfs}} {{path/to/partition}}
```

mkfs.minix

Creates a Minix filesystem inside a partition.

- Create a Minix filesystem inside partition 1 on device b (**sdb1**):

```
mkfs.minix {{/dev/sdb1}}
```

mkfs.ntfs

Creates a NTFS filesystem inside a partition.

- Create a NTFS filesystem inside partition 1 on device b (**sdb1**):

```
mkfs.ntfs {{/dev/sdb1}}
```

- Create filesystem with a volume-label:

```
mkfs.ntfs -L {{volume_label}} {{/dev/sdb1}}
```

- Create filesystem with specific UUID:

```
mkfs.ntfs -U {{UUID}} {{/dev/sdb1}}
```

mkfs.vfat

Creates an MS-DOS filesystem inside a partition.

- Create a.vfat filesystem inside partition 1 on device b (**sdb1**):

```
mkfs.vfat {{/dev/sdb1}}
```

- Create filesystem with a volume-name:

```
mkfs.vfat -n {{volume_name}} {{/dev/sdb1}}
```

- Create filesystem with a volume-id:

```
mkfs.vfat -i {{volume_id}} {{/dev/sdb1}}
```

- Use 5 instead of 2 file allocation tables:

```
mkfs.vfat -f 5 {{/dev/sdb1}}
```

mkisofs

Create ISO files from directories.

Also aliased as **genisoimage**.

- Create an ISO from a directory:

```
mkisofs -o {{filename.iso}} {{path/to/source_directory}}
```

- Set the disc label when creating an ISO:

```
mkisofs -o {{filename.iso}} -V "{{label_name}}" {{path/to/source_directory}}
```

mknod

Create block or character device special files.

- Create a block device:

```
sudo mknod {{path/to/device_file}} b {{major_device_number}}  
{{minor_device_number}}
```

- Create a character device:

```
sudo mknod {{path/to/device_file}} c {{major_device_number}}  
{{minor_device_number}}
```

- Create a FIFO (queue) device:

```
sudo mknod {{path/to/device_file}} p
```

- Create a device file with default SELinux security context:

```
sudo mknod -Z {{path/to/device_file}} {{type}}  
{{major_device_number}} {{minor_device_number}}
```

mkswap

Sets up a Linux swap area on a device or in a file.

- Setup a given partition as swap area:

```
sudo mkswap {{/dev/sdb7}}
```

- Use a given file as swap area:

```
sudo mkswap {{path/to/file}}
```

- Check a partition for bad blocks before creating the swap area:

```
sudo mkswap -c {{/dev/sdb7}}
```

- Specify a label for the file (to allow `swapon` to use the label):

```
sudo mkswap -L {{swap1}} {{path/to/file}}
```

modinfo

Extract information about a Linux kernel module.

- List all attributes of a kernel module:

```
modinfo {{kernel_module}}
```

- List the specified attribute only:

```
modinfo -F {{author|description|license|parm|filename}}  
{{kernel_module}}
```

modprobe

Add or remove modules from the Linux kernel.

- Pretend to load a module into the kernel, but don't actually do it:

```
sudo modprobe --dry-run {{module_name}}
```

- Load a module into the kernel:

```
sudo modprobe {{module_name}}
```

- Remove a module from the kernel:

```
sudo modprobe --remove {{module_name}}
```

- Remove a module and those that depend on it from the kernel:

```
sudo modprobe --remove-dependencies {{module_name}}
```

- Show a kernel module's dependencies:

```
sudo modprobe --show-depends {{module_name}}
```

module

Modify a users' environment using the module command.

More information: https://lmod.readthedocs.io/en/latest/010_user.html.

- Display available modules:

```
module avail
```

- Search for a module by name:

```
module spider {{module_name}}
```

- Load a module:

```
module load {{module_name}}
```

- Display loaded modules:

```
module list
```

- Unload a specific loaded module:

```
module {{module_name}}
```

- Unload all loaded modules:

```
module purge
```

mono

Runtime for the .NET Framework.

More information: <https://www.mono-project.com/docs/>.

- Run a .NET assembly in debug mode:

```
mono --debug {{path/to/program.exe}}
```

- Run a .NET assembly:

```
mono {{path/to/program.exe}}
```

mons

A tool to quickly manage two displays.

More information: <https://github.com/Ventto/mons>.

- Enable only the primary monitor:

`mons -o`

- Enable only the secondary monitor:

`mons -s`

- Duplicate the primary monitor onto the secondary monitor, using the resolution of the primary monitor:

`mons -d`

- Mirror the primary monitor onto the secondary monitor, using the resolution of the secondary monitor:

`mons -m`

mountpoint

Test if a directory is a filesystem mountpoint.

- Check if a directory is a mountpoint:

```
mountpoint {{path/to/directory}}
```

- Check if a directory is a mountpoint without showing any output:

```
mountpoint -q {{path/to/directory}}
```

- Show major/minor numbers of a mountpoint's filesystem:

```
mountpoint --fs-devno {{path/to/directory}}
```

mpstat

Report CPU statistics.

- Display CPU statistics every 2 seconds:

```
mpstat {{2}}
```

- Display 5 reports, one by one, at 2 second intervals:

```
mpstat {{2}} {{5}}
```

- Display 5 reports, one by one, from a given processor, at 2 second intervals:

```
mpstat -P {{0}} {{2}} {{5}}
```

mssh

GTK+ based SSH client for interacting with multiple SSH servers at once.

- Open a new window and connect to multiple SSH servers:

```
mssh {{user@host1}} {{user@host2}} {{...}}
```

- Open a new window and connect to a group of servers predefined in `~/.mssh_clusters`:

```
mssh --alias {{alias_name}}
```

mullvad

CLI client for Mullvad VPN.

More information: <https://mullvad.net/>.

- Link your mullvad account with the specified account number:

```
mullvad account set {{account_number}}
```

- Enable LAN access while VPN is on:

```
mullvad lan set allow
```

- Establish the VPN tunnel:

```
mullvad connect
```

- Check status of VPN tunnel:

```
mullvad status
```

mycli

A CLI for MySQL, MariaDB, and Percona with auto-completion and syntax highlighting.

- Connect to a database with the currently logged in user:

```
mycli {{database_name}}
```

- Connect to a database with the specified user:

```
mycli -u {{user}} {{database_name}}
```

- Connect to a database on the specified host with the specified user:

```
mycli -u {{user}} -h {{host}} {{database_name}}
```

n

Tool to manage multiple node versions.

- Install a given version of node. If the version is already installed, it will be activated:

```
n {{version}}
```

- Display installed versions and interactively activate one of them:

```
n
```

- Remove a version:

```
n rm {{version}}
```

- Execute a file with a given version:

```
n use {{version}} {{file.js}}
```

- Output binary path for a version:

```
n bin {{version}}
```

named

Execute the DNS (Dynamic Name Service) server daemon that converts host names to IP addresses and vice versa.

More information: <https://linux.die.net/man/8/named>.

- Read the default configuration file `/etc/named.conf`, read any initial data and listen for queries:

`named`

- Read a custom configuration file:

`named -c {{path/to/named.conf}}`

- Use IPv4 or IPv6 only, even if the host machine is capable of utilising other protocols:

`named {{-4|-6}}`

- Listen for queries on a specific port instead of the default port `53`:

`named -p {{port}}`

- Run the server in the foreground and do not daemonize:

`named -f`

namei

Follows a pathname (which can be a symbolic link) until a terminal point is found (a file/directory/char device etc).

This program is useful for finding "too many levels of symbolic links" problems.

- Resolve the pathnames specified as the argument parameters:

```
namei {{path/to/a}} {{path/to/b}} {{path/to/c}}
```

- Display the results in a long-listing format:

```
namei --long {{path/to/a}} {{path/to/b}} {{path/to/c}}
```

- Show the mode bits of each file type in the style of **ls**:

```
namei --modes {{path/to/a}} {{path/to/b}} {{path/to/c}}
```

- Show owner and group name of each file:

```
namei --owners {{path/to/a}} {{path/to/b}} {{path/to/c}}
```

- Don't follow symlinks while resolving:

```
namei --nosymlinks {{path/to/a}} {{path/to/b}} {{path/to/c}}
```

ncat

Use the normal **cat** functionality over networks.

- Listen for input on the specified port and write it to the specified file:

```
ncat -l {{port}} > {{path/to/file}}
```

- Accept multiple connections and keep ncat open after they have been closed:

```
ncat -lk {{port}}
```

- Write output of specified file to the specified host on the specified port:

```
ncat {{address}} {{port}} < {{path/to/file}}
```

ncdu

Disk usage analyzer with an ncurses interface.

- Analyze the current working directory:

```
ncdu
```

- Analyze a given directory:

```
ncdu {{path/to/directory}}
```

- Save results to a file:

```
ncdu -o {{path/to/file}}
```

- Exclude files that match a pattern, argument can be given multiple times to add more patterns:

```
ncdu --exclude '{{*.txt}}'
```

ndctl

Utility for managing Non-Volatile DIMMs.

- Create an 'fsdax' mode namespace:

```
ndctl create-namespace --mode={{fsdax}}
```

- Change the mode of a namespace to 'raw':

```
ndctl create-namespace --reconfigure={{namespaceX.Y}} --mode={{raw}}
```

- Check a sector mode namespace for consistency, and repair if needed:

```
ndctl check-namespace --repair {{namespaceX.Y}}
```

- List all namespaces, regions, and buses (including disabled ones):

```
ndctl list --namespaces --regions --buses --idle
```

- List a specific namespace and include lots of additional information:

```
ndctl list -vvv --namespace={{namespaceX.Y}}
```

- Run a monitor to watch for SMART health events for NVDIMMs on the 'ACPI.NFIT' bus:

```
ndctl monitor --bus={{ACPI.NFIT}}
```

- Remove a namespace (when applicable) or reset it to an initial state:

```
ndctl destroy-namespace --force {{namespaceX.Y}}
```

nemo

File manager and graphical shell for Cinnamon.

More information: <https://github.com/linuxmint/nemo>.

- Open a new window showing the user's home directory:

`nemo`

- Open a new window showing the current directory:

`nemo .`

- Close all open nemo windows:

`nemo --quit`

nethogs

Monitor bandwidth usage per process.

- Start nethogs as root (default device is eth0):

```
sudo nethogs
```

- Monitor bandwidth on specific device:

```
sudo nethogs {{device}}
```

- Monitor bandwidth on multiple devices:

```
sudo nethogs {{device1}} {{device2}}
```

- Specify refresh rate:

```
sudo nethogs -t {{seconds}}
```

netselect-apt

Create a **sources.list** file for a Debian mirror with the lowest latency.

More information: <https://manpages.debian.org/buster/netselect-apt/netselect-apt.1.en.html>.

- Create **sources.list** using the lowest latency server:

```
sudo netselect-apt
```

- Specify Debian branch, stable is used by default:

```
sudo netselect-apt {{testing}}
```

- Include non-free section:

```
sudo netselect-apt --non-free
```

- Specify a country for the mirror list lookup:

```
sudo netselect-apt -c {{India}}
```

netselect

Speed test for choosing a fast network server.

More information: <https://github.com/apenwarr/netselect>.

- Choose the server with the lowest latency:

```
sudo netselect {{host_1}} {{host_2}}
```

- Display nameserver resolution and statistics:

```
sudo netselect -vv {{host_1}} {{host_2}}
```

- Define maximum TTL (time to live):

```
sudo netselect -m {{10}} {{host_1}} {{host_2}}
```

- Print fastest N servers among the hosts:

```
sudo netselect -s {{N}} {{host_1}} {{host_2}} {{host_3}}
```

- List available options:

```
netselect
```

netstat

Displays network-related information such as open connections, open socket ports, etc.

- List all ports:

```
netstat -a
```

- List all listening ports:

```
netstat -l
```

- List listening TCP ports:

```
netstat -t
```

- Display PID and program names:

```
netstat -p
```

- List information continuously:

```
netstat -c
```

- List routes and do not resolve IP to hostname:

```
netstat -rn
```

- List listening TCP and UDP ports (+ user and process if you're root):

```
netstat -lepn
```

- Print the routing table:

```
netstat -nr
```

newgrp

Switch primary group membership.

- Change user's primary group membership:

```
newgrp {{group_name}}
```

- Reset primary group membership to user's default group in /etc/passwd:

```
newgrp
```

nft

Allows configuration of tables, chains and rules provided by the Linux kernel firewall.

Nftables replaces iptables.

- View current configuration:

```
sudo nft list ruleset
```

- Add a new table with family "inet" and table "filter":

```
sudo nft add table {{inet}} {{filter}}
```

- Add a new chain to accept all inbound traffic:

```
sudo nft add chain {{inet}} {{filter}} {{input}} \{ type  
{{filter}} hook {{input}} priority {{0}} \; policy {{accept}}  
\}
```

- Add a new rule to accept several TCP ports:

```
sudo nft add rule {{inet}} {{filter}} {{input}} {{tcp}}  
{{dport \{ telnet, ssh, http, https \}}} accept
```

- Show rule handles:

```
sudo nft --handle --numeric list chain {{family}} {{table}}  
{chain}}
```

- Delete a rule:

```
sudo nft delete rule {{inet}} {{filter}} {{input}} handle  
{3}}
```

- Save current configuration:

```
sudo nft list ruleset > {{/etc/nftables.conf}}
```

nixos-rebuild

Reconfigure a NixOS machine.

More information: <https://nixos.org/nixos/manual/#sec-changing-config>.

- Build and switch to the new configuration, making it the boot default:

```
sudo nixos-rebuild switch
```

- Build and switch to the new configuration, making it the boot default and naming the boot entry:

```
sudo nixos-rebuild switch -p {{name}}
```

- Build and switch to the new configuration, making it the boot default and installing updates:

```
sudo nixos-rebuild switch --upgrade
```

- Rollback changes to the configuration, switching to the previous generation:

```
sudo nixos-rebuild switch --rollback
```

- Build the new configuration and make it the boot default without switching to it:

```
sudo nixos-rebuild boot
```

- Build and activate the new configuration, but don't make a boot entry (for testing purposes):

```
sudo nixos-rebuild test
```

- Build the configuration and open it in a virtual machine:

```
sudo nixos-rebuild build-vm
```

nm

List symbol names in object files.

- List global (extern) functions in a file (prefixed with T):

```
nm -g {{file.o}}
```

- List only undefined symbols in a file:

```
nm -u {{file.o}}
```

- List all symbols, even debugging symbols:

```
nm -a {{file.o}}
```

- Demangle C++ symbols (make them readable):

```
nm --demangle {{file.o}}
```

nmcli connection

Connection management with NetworkManager.

- List all NetworkManager connections (shows name, uuid, type and device):

```
nmcli connection
```

- Activate a connection by specifying an uuid:

```
nmcli connection up uuid {{uuid}}
```

- Deactivate a connection:

```
nmcli connection down uuid {{uuid}}
```

- Create an auto-configured dual stack connection:

```
nmcli connection add iface {{interface_name}} type
{{ethernet}} ipv4.method {{auto}} ipv6.method {{auto}}
```

- Create a static IPv6-only connection:

```
nmcli connection add iface {{interface_name}} type
{{ethernet}} ip6 {{2001:db8::2/64}} gw6 {{2001:db8::1}}
ipv6.dns {{2001:db8::1}} ipv4.method {{ignore}}
```

- Create a static IPv4-only connection:

```
nmcli connection add iface {{interface_name}} type
{{ethernet}} ip4 {{10.0.0.7/8}} gw4 {{10.0.0.1}} ipv4.dns
{{10.0.0.1}} ipv6.method {{ignore}}
```

nmcli device

Hardware device management with NetworkManager.

- Print the statuses of all network interfaces:

```
nmcli device status
```

- Print the available Wi-Fi access points:

```
nmcli device wifi
```

- Connect to the Wi-Fi network with a specified name and password:

```
nmcli device wifi connect {{ssid}} password {{password}}
```

nmcli

A command line tool for controlling NetworkManager.

- Check the nmcli version:

```
nmcli --version
```

- Call general help:

```
nmcli --help
```

- Call help on a command:

```
nmcli {{command}} --help
```

- Execute an **nmcli** command:

```
nmcli {{command}}
```

nmon

A system administrator, tuner, and benchmark tool.

- Start nmon:

```
nmon
```

- Save records to file (" -s 300 -c 288 " by default):

```
nmon -f
```

- Save records to file with a total of 240 measurements, by taking 30 seconds between each measurement:

```
nmon -f -s {{30}} -c {{240}}
```

nmtui

Text user interface for controlling NetworkManager.

Use arrow keys to navigate, enter to select an option.

- Open the user interface:

```
nmtui
```

- Show a list of available connections, with the option to activate or deactivate them:

```
nmtui connect
```

- Connect to a given network:

```
nmtui connect {{name|uuid|device|SSID}}
```

- Edit/Add/Delete a given network:

```
nmtui edit {{name|id}}
```

- Set the system hostname:

```
nmtui hostname
```

nologin

Alternative shell that prevents a user from logging in.

- Set a user's login shell to **nologin** to prevent the user from logging in:

```
chsh -s {{user}} nologin
```

- Customize message for users with the login shell of **nologin**:

```
echo "{{declined_login_message}}" > /etc/nologin.txt
```

notify-send

Uses the current desktop environment's notification system to create a notification.

- Show a notification with the title "Test" and the content "This is a test":

```
notify-send "{{Test}}" "{{This is a test}}"
```

- Show a notification with a custom icon:

```
notify-send -i {{icon.png}} "{{Test}}" "{{This is a test}}"
```

- Show a notification for 5 seconds:

```
notify-send -t 5000 "{{Test}}" "{{This is a test}}"
```

- Show a notification with an app's icon:

```
notify-send "{{Test}}" --icon={{google-chrome}}
```

nsenter

Run a new command in a running process' namespace.

Particularly useful for docker images or chroot jails.

More information: <https://github.com/jpetazzo/nsenter/>.

- Run command in existing processes network namespace:

```
nsenter -t {{pid}} -n {{command}} {{command_arguments}}
```

- Run a new command in an existing processes ps-table namespace:

```
nsenter -t {{pid}} -p {{command}} {{command_arguments}}
```

- Run command in existing processes IPC namespace:

```
nsenter -t {{pid}} -i {{command}} {{command_arguments}}
```

nsnake

Snake game in the terminal.

More information: <https://github.com/alexandantas/nsnake/>.

- Start a snake game:

`nsnake`

- Navigate the snake:

`\{Up|Down|Left|Right\} arrow key`

- Pause/unpause the game:

`p`

- Quit the game:

`q`

- Show help during the game:

`h`

ntfsfix

Fix common problems on an NTFS partition.

- Fix a given NTFS partition:

```
sudo ntfsfix {{/dev/sdXN}}
```

numlockx

Control the number lock key status in X11 sessions.

More information: <http://www.mike-devlin.com/linux/README-numlockx.htm>.

- Show the current number lock status:

`numlockx status`

- Turn the number lock on:

`numlockx on`

- Turn the number lock off:

`numlockx off`

- Toggle the current state:

`numlockx toggle`

openfortivpn

A VPN client, for Fortinet's proprietary PPP+SSL VPN solution.

More information: <https://github.com/adrienverge/openfortivpn>.

- Connect to a VPN with a username and password:

```
openfortivpn --username={{username}} --password={{password}}
```

- Connect to a VPN using a specific configuration file (defaults to `/etc/openfortivpn/config`):

```
sudo openfortivpn --config={{path/to/config}}
```

- Connect to a VPN by specifying the host and port:

```
openfortivpn {{host}}:{{port}}
```

- Trust a given gateway by passing in its certificate's sha256 sum:

```
openfortivpn --trusted-cert={{sha256_sum}}
```

openrc

The OpenRC service manager.

See also **rc-status**, **rc-update**, and **rc-service**.

More information: <https://wiki.gentoo.org/wiki/OpenRC>.

- Change to a specific runlevel:

```
sudo openrc {{runlevel_name}}
```

- Change to a specific runlevel, but don't stop any existing services:

```
sudo openrc --no-stop {{runlevel_name}}
```

opkg

A lightweight package manager used to install OpenWrt packages.

- Install a package:

```
opkg install {{package}}
```

- Remove a package:

```
opkg remove {{package}}
```

- Update the list of available packages:

```
opkg update
```

- Upgrade all the installed packages:

```
opkg upgrade
```

- Upgrade one or more specific package(s):

```
opkg upgrade {{package(s)}}
```

- Display informations for a specific package:

```
opkg info {{package}}
```

- List all the available packages:

```
opkg list
```

pacaur

A utility for Arch Linux to build and install packages from the Arch User Repository.

- Synchronize and update all packages (includes AUR):

```
pacaur -Syu
```

- Synchronize and update only AUR packages:

```
pacaur -Syua
```

- Install a new package (includes AUR):

```
pacaur -S {{package_name}}
```

- Remove a package and its dependencies (includes AUR packages):

```
pacaur -Rs {{package_name}}
```

- Search the package database for a keyword (includes AUR):

```
pacaur -Ss {{keyword}}
```

- List all currently installed packages (includes AUR packages):

```
pacaur -Qs
```

paccache

A pacman cache cleaning utility.

- Remove all but the 3 most recent package versions from the pacman cache:

```
paccache -r
```

- Set the number of package versions to keep:

```
paccache -rk {{num_versions}}
```

- Perform a dry-run and show the number of candidate packages for deletion:

```
paccache -d
```

- Move candidate packages to a directory instead of deleting them:

```
paccache -m {{path/to/directory}}
```

pacman

Arch Linux package manager utility.

- Synchronize and update all packages:

```
pacman -Syu
```

- Install a new package:

```
pacman -S {{package_name}}
```

- Remove a package and its dependencies:

```
pacman -Rs {{package_name}}
```

- Search the package database for a regular expression or keyword:

```
pacman -Ss "{{search_pattern}}"
```

- List installed packages and versions:

```
pacman -Q
```

- List only the explicitly installed packages and versions:

```
pacman -Qe
```

- Find which package owns a certain file:

```
pacman -Qo {{filename}}
```

- Empty package cache to free up space:

```
pacman -Scc
```

pacman4console

A text-based console game inspired by the original Pacman.

More information: <https://github.com/YoctoForBeaglebone/pacman4console>.

- Start a game at Level 1:

`pacman4console`

- Start a game on a certain level (there are nine official levels):

`pacman4console --level={{level_number}}`

- Start the pacman4console level editor, saving to a specified text file:

`pacman4consoleedit {{path/to/level_file}}`

- Play a custom level:

`pacman4console --level={{path/to/level_file}}`

pamac

A command line utility for the GUI package manager pamac.

- Install a new package:

```
pamac install {{package_name}}
```

- Remove a package and its no longer required dependencies (orphans):

```
pamac remove -o {{package_name}}
```

- Search the package database for a package:

```
pamac search {{package_name}}
```

- List installed packages:

```
pamac list -i
```

- Check for package updates:

```
pamac checkupdates
```

paru

An AUR helper and pacman wrapper.

More information: <https://github.com/morganamilo/paru>.

- Interactively search for and install a package:

```
paru {{package_name_or_search_term}}
```

- Synchronize and update all packages:

```
paru
```

- Upgrade AUR packages:

```
paru -Sua
```

- Get information about a package:

```
paru -Si {{package_name}}
```

- Show statistics for installed packages and system health:

```
paru -P --stats
```

pasuspender

Temporarily suspends **pulseaudio** while another command is running to allow access to alsas.

- Suspend pulseaudio while running **jackd**:

```
pasuspender -- {{jackd -d alsal --device hw:0}}
```

pdfgrep

Search text in PDF files.

- Find lines that match pattern in a PDF:

```
pdfgrep {{pattern}} {{file.pdf}}
```

- Include file name and page number for each matched line:

```
pdfgrep --with-filename --page-number {{pattern}}
{{file.pdf}}
```

- Do a case insensitive search for lines that begin with "foo" and return the first 3 matches:

```
pdfgrep --max-count {{3}} --ignore-case {{'^foo'}}
{{file.pdf}}
```

- Find pattern in files with a .pdf extension in the current directory recursively:

```
pdfgrep --recursive {{pattern}}
```

- Find pattern on files that match a specific glob in the current directory recursively:

```
pdfgrep --recursive --include {{'*book.pdf'}} {{pattern}}
```

perf

Framework for linux performance counter measurements.

- Display basic performance counter stats for a command:

```
perf stat {{gcc hello.c}}
```

- Display system-wide real time performance counter profile:

```
sudo perf top
```

- Run a command and record its profile into "perf.data":

```
sudo perf record {{command}}
```

- Read "perf.data" (created by **perf record**) and display the profile:

```
sudo perf report
```

rename

Rename multiple files.

NOTE: this page refers to the command from the **perl-rename** Arch Linux package.

- Rename files using a Perl Common Regular Expression (substitute 'foo' with 'bar' wherever found):

```
rename {{'s/foo/bar/'}} {{*}}
```

- Dry-run - display which renames would occur without performing them:

```
rename -n {{'s/foo/bar/'}} {{*}}
```

- Force renaming even if the operation would remove existing destination files:

```
rename -f {{'s/foo/bar/'}} {{*}}
```

- Convert filenames to lower case (use **-f** in case-insensitive filesystems to prevent "already exists" errors):

```
rename 'y/A-Z/a-z/' {{*}}
```

- Replace whitespace with underscores:

```
rename 's/\s+/_g' {{*}}
```

phar

Create, update or extract PHP archives (PHAR).

- Add space-separated files or directories to a Phar file:

```
phar add -f {{path/to/phar_file}} {{files_or_directories}}
```

- Display the contents of a Phar file:

```
phar list -f {{path/to/phar_file}}
```

- Delete the specified file or directory from a Phar file:

```
phar delete -f {{path/to/phar_file}} -e {{file_or_directory}}
```

- Display full usage information and available hashing/compression algorithms:

```
phar help
```

- Compress or uncompress files and directories in a Phar file:

```
phar compress -f {{path/to/phar_file}} -c {{algorithm}}
```

- Get information about a Phar file:

```
phar info -f {{path/to/phar_file}}
```

- Sign a Phar file with a specific hash algorithm:

```
phar sign -f {{path/to/phar_file}} -h {{algorithm}}
```

- Sign a Phar file with an OpenSSL private key:

```
phar sign -f {{path/to/phar_file}} -h openssl -y {{path/to/private_key}}
```

photorec

Deleted file recovery tool.

It is recommended to write recovered files to a disk separate to the one being recovered from.

More information: <https://www.cgsecurity.org/wiki/PhotoRec>.

- Run PhotoRec on a specific device:

```
sudo photorec {{/dev/sdb}}
```

- Run PhotoRec on a disk image (image.dd):

```
sudo photorec {{path/to/image.dd}}
```

phpdismod

Disable PHP extensions on Debian-based OSes.

- Disable the json extension for every SAPI of every PHP version:

```
sudo phpdismod {{json}}
```

- Disable the json extension for PHP 7.3 with the cli SAPI:

```
sudo phpdismod -v {{7.3}} -s {{cli}} {{json}}
```

phpenmod

Enable PHP extensions on Debian-based OSes.

- Enable the json extension for every SAPI of every PHP version:

```
sudo phpenmod {{json}}
```

- Enable the json extension for PHP 7.3 with the cli SAPI:

```
sudo phpenmod -v {{7.3}} -s {{cli}} {{json}}
```

phpquery

PHP extension manager for Debian-based OSes.

- List available PHP versions:

```
sudo phpquery -V
```

- List available SAPIs for PHP 7.3:

```
sudo phpquery -v {{7.3}} -S
```

- List enabled extensions for PHP 7.3 with the cli SAPI:

```
sudo phpquery -v {{7.3}} -s {{cli}} -M
```

- Check if the json extension is enabled for PHP 7.3 with the apache2 SAPI:

```
sudo phpquery -v {{7.3}} -s {{apache2}} -m {{json}}
```

physlock

Lock all consoles and virtual terminals.

More information: <http://github.com/muennich/physlock>.

- Lock every console (require current user or root to unlock):

`physlock`

- Mute kernel messages on console while locked:

`physlock -m`

- Disable SysRq mechanism while locked:

`physlock -s`

- Display a message before the password prompt:

`physlock -p "{{Locked!}}"`

- Fork and detach physlock (useful for suspend or hibernate scripts):

`physlock -d`

pi

Compute decimal Archimedes' constant Pi on the command line.

More information: <http://manpages.ubuntu.com/manpages/trusty/man1/pi.1.html>.

- Display 100 decimal digits of Archimedes' constant Pi:

`pi`

- Display a specified number of decimal digits of Archimedes' constant Pi:

`pi {{number}}`

- Display help:

`pi --help`

- Display version:

`pi --version`

- Display recommended readings:

`pi --bibliography`

pidof

Gets the ID of a process using its name.

- List all process IDs with given name:

```
pidof {{bash}}
```

- List a single process ID with given name:

```
pidof -s {{bash}}
```

- List process IDs including scripts with given name:

```
pidof -x {{script.py}}
```

- Kill all processes with given name:

```
kill $(pidof {{name}})"
```

pidstat

Show system resource usage, including CPU, memory, IO etc.

- Show CPU statistics at a 2 second interval for 10 times:

```
pidstat {{2}} {{10}}
```

- Show page faults and memory utilization:

```
pidstat -r
```

- Show input/output usage per process id:

```
pidstat -d
```

- Show information on a specific PID:

```
pidstat -p {{PID}}
```

- Show memory statistics for all processes whose command name include "fox" or "bird":

```
pidstat -C "{{fox|bird}}" -r -p ALL
```

pihole

Terminal interface for the Pi-Hole ad-blocking DNS server.

More information: <https://pi-hole.net>.

- Check the Pi-hole daemon's status:

```
pihole status
```

- Monitor detailed system status:

```
pihole chronometer
```

- Start or stop the daemon:

```
pihole {{enable|disable}}
```

- Restart the daemon (not the server itself):

```
pihole restartdns
```

- Whitelist or blacklist a domain:

```
pihole {{whitelist|blacklist}} {{example.com}}
```

- Search the lists for a domain:

```
pihole query {{example.com}}
```

pivpn

Easy security-hardened OpenVPN setup and manager.

Originally designed for the Raspberry Pi, but works on other Linux devices too.

More information: <http://www.pivpn.io/>.

- Add a new client device:

```
sudo pivpn add
```

- List all client devices:

```
sudo pivpn list
```

- List currently connected devices and their statistics:

```
sudo pivpn clients
```

- Revoke a previously authenticated device:

```
sudo pivpn revoke
```

- Uninstall PiVPN:

```
sudo pivpn uninstall
```

pkg-config

Provide the details of installed libraries for compiling applications.

More information: <https://www.freedesktop.org/wiki/Software/pkg-config/>.

- Get the list of libraries and their dependencies:

```
pkg-config --libs {{library1 library2 ...}}
```

- Get the list of libraries, their dependencies, and proper cflags for gcc:

```
pkg-config --cflags --libs {{library1 library2 ...}}
```

- Compile your code with libgtk-3, libwebkit2gtk-4.0 and all their dependencies:

```
c++ example.cpp $(pkg-config --cflags --libs gtk+-3.0  
webkit2gtk-4.0) -o example
```

pkgadd

Add a package to a CRUX system.

- Install a local software package:

```
pkgadd {{package_name}}
```

- Update an already installed package from a local package:

```
pkgadd -u {{package_name}}
```

pkginfo

Query the package database on a CRUX system.

- List installed packages and their versions:

```
pkginfo -i
```

- List files owned by a package:

```
pkginfo -l {{package_name}}
```

- List the owner(s) of files matching a pattern:

```
pkginfo -o {{pattern}}
```

- Print the footprint of a file:

```
pkginfo -f {{file}}
```

pkgmk

Make a binary package for use with pkgadd on CRUX.

- Make and download a package:

pkgmk -d

- Install the package after making it:

pkgmk -d -i

- Upgrade the package after making it:

pkgmk -d -u

- Ignore the footprint when making a package:

pkgmk -d -if

- Ignore the MD5 sum when making a package:

pkgmk -d -im

- Update the package's footprint:

pkgmk -uf

pkgrm

Remove a package from a CRUX system.

- Remove an installed package:

```
pkgrm {{package_name}}
```

playerctl

Utility to control different media players.

More information: <https://github.com/altdesktop/playerctl>.

- Toggle play:

```
playerctl play-pause
```

- Next media:

```
playerctl next
```

- Previous media:

```
playerctl previous
```

- List all players:

```
playerctl --list-all
```

- Send a command to a specific player:

```
playerctl --player={{player_name}} {{command}}
```

- Send a command to all players:

```
playerctl --all-players {{command}}
```

- Show now playing:

```
playerctl metadata --format "Now playing: {{artist}} - {{album}} - {{title}}"
```

pmount

Mount arbitrary hotpluggable devices as a normal user.

More information: <https://linux.die.net/man/1/pmount>.

- Mount a device below `/media/` (using device as mount point):

```
pmount {{/dev/to/block/device}}
```

- Mount a device with a specific filesystem type to `/media/label:`

```
pmount --type {{filesystem}} {{/dev/to/block/device}}
{{label}}
```

- Mount a CD-ROM (filesystem type ISO9660) in read-only mode:

```
pmount --type {{iso9660}} --read-only {{/dev/cdrom}}
```

- Mount an NTFS-formatted disk, forcing read-write access:

```
pmount --type {{ntfs}} --read-write {{/dev/sdX}}
```

- Display all mounted removable devices:

```
pmount
```

popd

Remove a directory placed on the directory stack by the **pushd** command.

- Remove the top directory from the stack and cd to it:

popd

- Remove the Nth directory (starting from zero to the left from the list printed with **dirs**):

popd +N

- Remove the Nth directory (starting from zero to the right from the list printed with **dirs**):

popd -N

ports

Update/list the ports tree on a CRUX system.

- Update the ports tree:

```
ports -u
```

- List the ports in the current tree:

```
ports -l
```

- Check the differences between installed packages and the ports tree:

```
ports -d
```

postfix

Postfix mail transfer agent (MTA) control program.

See also **dovecot**, a mail delivery agent (MDA) that integrates with Postfix.

More information: <http://postfix.org>.

- Check the configuration:

```
sudo postfix check
```

- Check the status of the Postfix daemon:

```
sudo postfix status
```

- Start Postfix:

```
sudo postfix start
```

- Gracefully stop Postfix:

```
sudo postfix stop
```

- Flush the mail queue:

```
sudo postfix flush
```

- Reload the configuration files:

```
sudo postfix reload
```

poweroff

Shutdown the system.

- Poweroff the system:

```
sudo poweroff
```

powertop

Optimize battery power usage.

- Calibrate power usage measurements:

```
sudo powertop --calibrate
```

- Generate HTML power usage report in the current directory:

```
sudo powertop --html={{power_report.html}}
```

- Tune to optimal settings:

```
sudo powertop --auto-tune
```

rename

Rename multiple files.

NOTE: this page refers to the command from the **prename** Fedora package.

- Rename files using a Perl Common Regular Expression (substitute 'foo' with 'bar' wherever found):

```
rename {{'s/foo/bar/'}} {{*}}
```

- Dry-run - display which renames would occur without performing them:

```
rename -n {{'s/foo/bar/'}} {{*}}
```

- Force renaming even if the operation would remove existing destination files:

```
rename -f {{'s/foo/bar/'}} {{*}}
```

- Convert filenames to lower case (use **-f** in case-insensitive filesystems to prevent "already exists" errors):

```
rename 'y/A-Z/a-z/' {{*}}
```

- Replace whitespace with underscores:

```
rename 's/\s+/_g' {{*}}
```

print

An alias to a **run-mailcap**'s action print.

Originally **run-mailcap** is used to process mime-type/file.

- Print action can be used to print any file on default run-mailcap tool:

```
print {{filename}}
```

- With **run-mailcap**:

```
run-mailcap --action=print {{filename}}
```

progress

Display/Monitor the progress of running coreutils.

More information: <https://github.com/Xfennec/progress>.

- Show the progress of running coreutils:

`progress`

- Show the progress of running coreutils in quiet mode:

`progress -q`

- Launch and monitor a single long-running command:

`{{command}} & progress -mp $!`

protontricks

A simple wrapper that does winetricks things for Proton enabled games, requires Winetricks.

More information: <https://github.com/Matoking/protontricks>.

- Show the protontricks help message:

```
protontricks
```

- Run the protontricks GUI:

```
protontricks --gui
```

- Run winetricks for a specific game:

```
protontricks {{appid}} {{winetricks_args}}
```

- Run a command within a games installation directory:

```
protontricks -c {{command}} {{appid}}
```

prt-get

The CRUX package manager.

- Install a package:

```
prt-get install {{package_name}}
```

- Install a package with dependency handling:

```
prt-get depinst {{package_name}}
```

- Update a package manually:

```
prt-get upgrade {{package_name}}
```

- Remove a package:

```
prt-get remove {{package_name}}
```

- Upgrade the system from the local ports tree:

```
prt-get sysup
```

- Search the ports tree:

```
prt-get search {{package_name}}
```

- Search for a file in a package:

```
prt-get fsearch {{file}}
```

pstree

A convenient tool to show running processes as a tree.

- Display a tree of processes:

```
pstree
```

- Display a tree of processes with PIDs:

```
pstree -p
```

- Display all process trees rooted at processes owned by specified user:

```
pstree {{user}}
```

ptx

Generate a permuted index of words from one or more text files.

- Generate a permuted index where the first field of each line is an index reference:

```
ptx --references {{path/to/file}}
```

- Generate a permuted index with automatically generated index references:

```
ptx --auto-reference {{path/to/file}}
```

- Generate a permuted index with a fixed width:

```
ptx --width={{width_in_columns}} {{path/to/file}}
```

- Generate a permuted index with a list of filtered words:

```
ptx --only-file={{path/to/filter}} {{path/to/file}}
```

- Generate a permuted index with SYSV-style behaviors:

```
ptx --traditional {{path/to/file}}
```

pulseaudio

The pulseaudio sound system daemon and manager.

- Check if pulseaudio is running (a non-zero exit code means it is not running):

```
pulseaudio --check
```

- Start the pulseaudio daemon in the background:

```
pulseaudio --start
```

- Kill the running pulseaudio daemon:

```
pulseaudio --kill
```

- List available modules:

```
pulseaudio --dump-modules
```

- Load a module into the currently running daemon with the specified arguments:

```
pulseaudio --load="{{module_name}} {{arguments}}"
```

pushd

Place a directory on a stack so it can be accessed later.

See also **popd** to switch back to original directory.

- Switch to directory and push it on the stack:

```
pushd < {{directory}}
```

- Switch first and second directories on the stack:

```
pushd
```

- Rotate stack by making the 5th element the top of the stack:

```
pushd +4
```

pvcreate

Initialize a physical volume (disk or partition) for use by the Logical Volume Manager (LVM).

- Initialize the `/dev/sda1` volume for use by LVM:

```
pvcreate {{/dev/sda1}}
```

- Force the creation without any confirmation prompts:

```
pvcreate --force {{/dev/sda1}}
```

pvs

Display information about LVM physical volumes.

More information: <https://www.man7.org/linux/man-pages/man8/pvs.8.html>.

- Display information about physical volumes:

`pvs`

- Display non-physical volumes:

`pvs -a`

- Change default display to show more details:

`pvs -v`

- Display only specific fields:

`pvs -o {{field_name_1}},{{field_name_2}}`

- Append field to default display:

`pvs -o +{{field_name}}`

- Suppress heading line:

`pvs --noheadings`

- Use separator to separate fields:

`pvs --separator {{special_character}}`

pwdx

Print working directory of a process.

- Print current working directory of a process:

```
pwdx {{process_id}}
```

pwgen

Generate pronounceable passwords.

- Generate random password with s[y]mbols:

```
pwgen -y {{length}}
```

- Generate secure, hard-to-memorize passwords:

```
pwgen -s {{length}}
```

- Generate password with at least one capital letter in them:

```
pwgen -c {{length}}
```

qsub

Submits a script to the queue management system TORQUE.

- Submit a script with default settings (depends on TORQUE settings):

```
qsub {{script.sh}}
```

- Submit a script with a specified wallclock runtime limit of 1 hour, 2 minutes and 3 seconds:

```
qsub -l walltime={{1}}:{{2}}:{{3}} {{script.sh}}
```

- Submit a script that is executed on 2 nodes using 4 cores per node:

```
qsub -l nodes={{2}}:ppn={{4}} {{script.sh}}
```

- Submit a script to a specific queue. Note that different queues can have different maximum and minimum runtime limits:

```
qsub -q {{queue_name}} {{script.sh}}
```

quotacheck

Scan a filesystem for disk usage; create, check and repair quota files.

It is best to run quota check with quotas turned off to prevent damage or loss to quota files.

- Check quotas on all mounted non-NFS filesystems:

```
sudo quotacheck --all
```

- Force check even if quotas are enabled (this can cause damage or loss to quota files):

```
sudo quotacheck --force {{mountpoint}}
```

- Check quotas on a given filesystem in debug mode:

```
sudo quotacheck --debug {{mountpoint}}
```

- Check quotas on a given filesystem, displaying the progress:

```
sudo quotacheck --verbose {{mountpoint}}
```

- Check user quotas:

```
sudo quotacheck --user {{user}} {{mountpoint}}
```

- Check group quotas:

```
sudo quotacheck --group {{group}} {{mountpoint}}
```

radeonstop

Show utilisation of AMD GPUs.

More information: <https://github.com/clbr/radeonstop>.

- Show the utilisation of the default AMD GPU:

```
sudo radeonstop
```

- Enable colourised output:

```
sudo radeonstop --colour
```

- Select a specific GPU (the bus number is the first number in the output of `lspci`):

```
sudo radeonstop --bus {{bus_number}}
```

- Specify the display refresh rate (higher means more GPU overhead):

```
sudo radeonstop --ticks {{samples_per_second}}
```

rc-service

Locate and run OpenRC services with arguments.

See also [openrc](#).

- Show a service's status:

```
rc-service {{service_name}} status
```

- Start a service:

```
sudo rc-service {{service_name}} start
```

- Stop a service:

```
sudo rc-service {{service_name}} stop
```

- Restart a service:

```
sudo rc-service {{service_name}} restart
```

- Simulate running a service's custom command:

```
sudo rc-service --dry-run {{service_name}} {{command_name}}
```

- Actually run a service's custom command:

```
sudo rc-service {{service_name}} {{command_name}}
```

- Resolve the location of a service definition on disk:

```
sudo rc-service --resolve {{service_name}}
```

rc-status

Show status info about runlevels.

See also [openrc](#).

- Show a summary of services and their status:

`rc-status`

- Include services in all runlevels in the summary:

`rc-status --all`

- List services that have crashed:

`rc-status --crashed`

- List manually started services:

`rc-status --manual`

- List supervised services:

`rc-status --supervised`

- Get the current runlevel:

`rc-status --runlevel`

- List all runlevels:

`rc-status --list`

rc-update

Add and remove OpenRC services to and from runlevels.

See also [openrc](#).

- List all services and the runlevels they are added to:

```
rc-update show
```

- Add a service to a runlevel:

```
sudo rc-update add {{service_name}} {{runlevel}}
```

- Delete a service from a runlevel:

```
sudo rc-update delete {{service_name}} {{runlevel}}
```

- Delete a service from all runlevels:

```
sudo rc-update --all delete {{service_name}}
```

rdesktop

Remote Desktop Protocol client.

It can be used to connect the remote computer using the RDP protocol.

- Connect to a remote computer (default port is 3389):

```
rdesktop -u {{username}} -p {{password}} {{host:port}}
```

- Simple Examples:

```
rdesktop -u Administrator -p passwd123 192.168.1.111:3389
```

- Connect to a remote computer with full screen (press **Ctrl + Alt + Enter** to exist):

```
rdesktop -u {{username}} -p {{password}} -f {{host:port}}
```

- Use the customized resolution (use the letter 'x' between the number):

```
rdesktop -u {{username}} -p {{password}} -g 1366x768  
{{host:port}}
```

- Connect to a remote computer using domain user:

```
rdesktop -u {{username}} -p {{password}} -d {{domainname}}  
{{host:port}}
```

- Use the 16 bit color (speed up):

```
rdesktop -u {{username}} -p {{password}} -a 16 {{host:port}}
```

readelf

Displays information about ELF files.

More information: <http://man7.org/linux/man-pages/man1/readelf.1.html>.

- Display all information about the ELF file:

```
readelf -all {{path/to/binary}}
```

- Display all the headers present in the ELF file:

```
readelf --headers {{path/to/binary}}
```

- Display the entries in symbol table section of the ELF file, if it has one:

```
readelf --symbols {{path/to/binary}}
```

- Display the information contained in the ELF header at the start of the file:

```
readelf --file-header {{path/to/binary}}
```

reboot

Reboot the system.

- Reboot immediately:

`reboot`

- Reboot immediately without gracefully shutting down:

`reboot -f`

reflector

Arch script to fetch and sort mirrorlists.

- Get all mirrors, sort for download speed and save them:

```
sudo reflector --sort {{rate}} --save {{/etc/pacman.d/mirrorlist}}
```

- Only get German HTTPS mirrors:

```
reflector --country {{Germany}} --protocol {{https}}
```

- Only get the 10 recently sync'd mirrors:

```
reflector --latest {{10}}
```

rename

Rename multiple files.

NOTE: this page refers to the command from the **util-linux** package.

For the Perl version, see **file-rename** or **perl-rename**.

Warning: This command has no safeguards and will overwrite files without prompting.

- Rename files using simple substitutions (substitute 'foo' with 'bar' wherever found):

```
rename {{foo}} {{bar}} {{*}}
```

- Dry-run - display which renames would occur without performing them:

```
rename -vn {{foo}} {{bar}} {{*}}
```

- Do not overwrite existing files:

```
rename -o {{foo}} {{bar}} {{*}}
```

- Change file extensions:

```
rename {{.ext}} {{.bak}} {{*.ext}}
```

- Prepend "foo" to all filenames in the current directory:

```
rename {{' '}} {{'foo'}} {{*}}
```

- Rename a group of increasingly numbered files zero-padding the numbers up to 3 digits:

```
rename {{foo}} {{foo00}} {{foo?}} && rename {{foo}} {{foo0}} {{foo??}}
```

reportbug

Bug report tool of Debian distribution.

More information: <https://manpages.debian.org/buster/reportbug/reportbug.1.en.html>.

- Generate a bug report about a specific package, then send it by e-mail:

`reportbug {{package}}`

- Report a bug that is not about a specific package (general problem, infrastructure, etc.):

`reportbug other`

- Write the bug report to a file instead of sending it by e-mail:

`reportbug -o {{filename}} {{package}}`

repquota

Display a summary of existing file quotas for a filesystem.

- Report stats for all quotas in use:

```
sudo repquota -all
```

- Report quota stats for all users, even those who aren't using any of their quota:

```
sudo repquota -v {{filesystem}}
```

- Report on quotas for users only:

```
repquota --user {{filesystem}}
```

- Report on quotas for groups only:

```
sudo repquota --group {{filesystem}}
```

- Report on used quota and limits in a human-readable format:

```
sudo repquota --human-readable {{filesystem}}
```

- Report on all quotas for users and groups in a human-readable format:

```
sudo repquota -augs
```

reset

Reinitialises the current terminal. Clears the entire terminal screen.

- Reinitialise the current terminal:

```
reset
```

- Display the terminal type instead:

```
reset -q
```

resize2fs

Resize an ext2, ext3 or ext4 filesystem.

Does not resize the underlying partition, and the filesystem must be unmounted.

- Automatically resize a filesystem:

```
resize2fs {{/dev/sdXN}}
```

- Resize the filesystem to a size of 40G, displaying a progress bar:

```
resize2fs -p {{/dev/sdXN}} {{40G}}
```

- Shrink the filesystem to its minimum possible size:

```
resize2fs -M {{/dev/sdXN}}
```

resolveip

Resolve hostnames to their IP addresses and vice versa.

More information: <https://mariadb.com/kb/en/resolveip/>.

- Resolve a hostname to an IP address:

```
resolveip {{example.org}}
```

- Resolve an IP address to a hostname:

```
resolveip {{1.1.1.1}}
```

- Silent mode. Produces less output:

```
resolveip --silent {{example.org}}
```

rfkill

Enable and disable wireless devices.

- List devices:

```
rfkill
```

- Filter by columns:

```
rfkill -o {{ID,TYPE,DEVICE}}
```

- Block devices by type (e.g. bluetooth, wlan):

```
rfkill block {{bluetooth}}
```

- Unblock devices by type (e.g. bluetooth, wlan):

```
rfkill unblock {{wlan}}
```

- Output in JSON format:

```
rfkill -J
```

rig

Utility to piece together a random first name, last name, street number and address, along with a geographically consistent (ie, they all match the same area) city, state, ZIP code, and area code.

More information: <https://manpages.ubuntu.com/manpages/focal/man6/ig.6.html>.

- Display a random name (male or female) and address:

`rig`

- Display a [m]ale (or [f]emale) random name and address:

`rig -{{m|f}}`

- Use data files from a specific directory (default is `/usr/share/ig`):

`rig -d {{path/to/directory}}`

- Display a specific number of identities:

`rig -c {{number}}`

- Display a specific number of female identities:

`rig -f -c {{number}}`

rofi

An application launcher and window switcher.

More Information: <https://github.com/davatorium/rofi>.

- Show the list of apps:

```
rofi -show drun
```

- Show the list of all commands:

```
rofi -show run
```

- Switch between windows:

```
rofi -show window
```

- Pipe a list of items to stdin and print the selected item to stdout:

```
printf "{{Choice1\nChoice2\nChoice3}}" | rofi -dmenu
```

rpcclient

MS-RPC client tool (part of the samba suite).

More information: <https://www.samba.org/samba/docs/current/man-html/rpcclient.1.html>.

- Connect to a remote host:

```
rpcclient --user {{domain}}\{{username}}%{{password}} {{ip}}
```

- Connect to a remote host on a domain without a password:

```
rpcclient --user {{username}} --workgroup {{domain}} --no-pass {{ip}}
```

- Connect to a remote host, passing the password hash:

```
rpcclient --user {{domain}}\{{username}} --pw-nt-hash {{ip}}
```

- Execute shell commands on a remote host:

```
rpcclient --user {{domain}}\{{username}}%{{password}} --command {{semicolon_separated_commands}} {{ip}}
```

- Display domain users:

```
rpcclient $> enumdomusers
```

- Display privileges:

```
rpcclient $> enumprivs
```

- Display information about a specific user:

```
rpcclient $> queryuser {{username|rid}}
```

- Create a new user in the domain:

```
rpcclient $> createdomuser {{username}}
```

rpcinfo

Makes an RPC call to an RPC server and reports what it finds.

- Show full table of all RPC services registered on localhost:

```
rpcinfo
```

- Show concise table of all RPC services registered on localhost:

```
rpcinfo -s {{localhost}}
```

- Display table of statistics of rpcbind operations on localhost:

```
rpcinfo -m
```

- Display list of entries of given service name (mountd) and version number (2) on a remote nfs share:

```
rpcinfo -l {{remote_nfs_server_ip}} {{mountd}} {{2}}
```

- Delete the registration for version 1 of the mountd service for all transports:

```
rpcinfo -d {{mountd}} {{1}}
```

rpm

RPM Package Manager.

- Show version of httpd package:

```
rpm -q {{httpd}}
```

- List versions of all matching packages:

```
rpm -qa '{{mariadb*}}'
```

- Forcibly install a package regardless of currently installed versions:

```
rpm -U {{package_name.rpm}} --force
```

- Identify owner of a file and show version of the package:

```
rpm -qf {{/etc/postfix/main.cf}}
```

- List package-owned files:

```
rpm -ql {{kernel}}
```

- Show scriptlets from an RPM file:

```
rpm -qp --scripts {{package_name.rpm}}
```

- Show changed, missing and/or incorrectly installed files of matching packages:

```
rpm -Va '{{php-*}}'
```

rpmbuild

RPM Package Build tool.

More information: <https://docs.fedoraproject.org/en-US/quick-docs/creating-rpm-packages/>.

- Build binary and source packages:

```
rpmbuild -ba {{path/to/spec_file}}
```

- Build a binary package without source package:

```
rpmbuild -bb {{path/to/spec_file}}
```

- Specify additional variables when building a package:

```
rpmbuild -bb {{path/to/spec_file}} --define "{{variable1}} {{value1}}" --define "{{variable2}} {{value2}}"
```

rspamc

Command line client for `rspamd` servers.

- Train the bayesian filter to recognise an email as spam:

```
rspamc learn_spam {{path/to/email_file}}
```

- Train the bayesian filter to recognise an email as ham:

```
rspamc learn_ham {{path/to/email_file}}
```

- Generate a manual report on an email:

```
rspamc symbols {{path/to/email_file}}
```

- Show server statistics:

```
rspamc stat
```

rtcwake

Enter a system sleep state until specified wakeup time relative to your bios clock.

- Show whether an alarm is set or not:

```
sudo rtcwake -m show -v
```

- Suspend to ram and wakeup after 10 seconds:

```
sudo rtcwake -m mem -s {{10}}
```

- Suspend to disk (higher power saving) and wakeup 15 minutes later:

```
sudo rtcwake -m disk --date +{{15}}min
```

- Freeze the system (more efficient than suspend-to-ram but linux > 3.9 required) and wakeup at a given date and time:

```
sudo rtcwake -m freeze --date {{YYYYMMDDhhmm}}
```

- Disable a previously set alarm:

```
sudo rtcwake -m disable
```

- Perform a dry run to wakeup the computer at a given time. (Press Ctrl + C to abort):

```
sudo rtcwake -m on --date {{hh:ss}}
```

rtorrent

Download torrents over the command line.

- Add a torrent file or magnet to be downloaded:

`rtorrent {{torrent_or_magnet}}`

- Start the download:

`<Ctrl>S`

- View details about downloading torrent:

`->`

- Close rtorrent safely:

`<Ctrl>Q`

run-mailcap

Run MailCap Programs.

Run mailcap view, see, edit, compose, print - execute programs via entries in the mailcap file (or any of its aliases) will use the given action to process each mime-type/file.

- Individual actions/programs on run-mailcap can be invoked with action flag:

```
run-mailcap --action=ACTION [--option[=value]]
```

- In simple language:

```
run-mailcap --action=ACTION {{filename}}
```

- Turn on extra information:

```
run-mailcap --action=ACTION --debug {{filename}}
```

- Ignore any "copiousoutput" directive and forward output to standard output:

```
run-mailcap --action=ACTION --nopager {{filename}}
```

- Display the found command without actually executing it:

```
run-mailcap --action=ACTION --norun {{filename}}
```

runcon

Run a program in a different SELinux security context.

With neither context nor command, print the current security context.

- Determine the current domain:

```
runcon
```

- Specify the domain to run a command in:

```
runcon -t {{domain}}_t {{command}}
```

- Specify the context role to run a command with:

```
runcon -r {{role}}_r {{command}}
```

- Specify the full context to run a command with:

```
runcon {{user}}_u:{{role}}_r:{{domain}}_t {{command}}
```

runit

3-stage init system.

- Start runit's 3-stage init scheme:

```
runit
```

- Shut down runit:

```
kill --CONT {{runit_pid}}
```

runsv

Start and manage a runit service.

- Start a runit service as the current user:

```
runsv {{path/to/service}}
```

- Start a runit service as root:

```
sudo runsv {{path/to/service}}
```

runsvchdir

Change the directory **runsvdir** uses by default.

More information: <http://manpages.ubuntu.com/manpages/focal/man8/runsvchdir.8.html>.

- Switch **runsvdir** directories:

```
sudo runsvchdir {{path/to/directory}}
```

runsvdir

Run an entire directory of services.

- Start and manage all services in a directory as the current user:

```
runsvdir {{path/to/services}}
```

- Start and manage all services in a directory as root:

```
sudo runsvdir {{path/to/services}}
```

- Start services in separate sessions:

```
runsvdir -P {{path/to/services}}
```

runuser

Run commands as a specific user and group without asking for password (needs root privileges).

- Run command as a different user:

```
runuser {{user}} -c '{{command}}'
```

- Run command as a different user and group:

```
runuser {{user}} -g {{group}} -c '{{command}}'
```

- Start a login shell as a specific user:

```
runuser {{user}} -l
```

- Specify a shell for running instead of the default shell (also works for login):

```
runuser {{user}} -s {{/bin/sh}}
```

- Preserve the entire environment of root (only if `--login` is not specified):

```
runuser {{user}} --preserve-environment -c '{{command}}'
```

sa

Summarizes accounting information. Part of the acct package.

Shows commands called by users, including basic info on CPU time spent processing and I/O rates.

- Display executable invocations per user (username not displayed):

```
sudo sa
```

- Display executable invocations per user, showing responsible usernames:

```
sudo sa --print-users
```

- List resources used recently per user:

```
sudo sa --user-summary
```

sacct

Display accounting data from the Slurm service.

More information: <https://slurm.schedmd.com/sacct.html>.

- Display job id, job name, partition, account, number of allocated cpus, job state, and job exit codes for recent jobs:

`sacct`

- Display job id, job state, job exit code for recent jobs:

`sacct --brief`

- Display the allocations of a job:

`sacct --jobs {{job_id}} --allocations`

- Display elapsed time, job name, number of requested CPUs, and memory requested of a job:

`sacct --jobs {{job_id}} --format={{elapsed}},{{jobname}},{{reqcpus}},{{reqmem}}`

sacctmgr

View, setup, and manage Slurm accounts.

More information: <https://slurm.schedmd.com/sacctmgr.html>.

- Show current configuration:

```
sacctmgr show configuration
```

- Add a cluster to the slurm database:

```
sacctmgr add cluster {{cluster_name}}
```

- Add an account to the slurm database:

```
sacctmgr add account {{account_name}}
cluster={{cluster_of_account}}
```

- Show details of user/association/cluster/account:

```
sacctmgr show {{user/association/cluster/account}}
```

Sam

AWS Serverless Application Model (SAM) CLI.

More information: <https://github.com/awslabs/aws-sam-cli>.

- Initialize a serverless application:

```
sam init
```

- Initialize a serverless application with a specific runtime:

```
sam init --runtime {{python3.7}}
```

- Package a SAM application:

```
sam package
```

- Build your Lambda function code:

```
sam build
```

- Run your serverless application locally:

```
sam local start-api
```

- Deploy an AWS SAM application:

```
sam deploy
```

sar

Monitor performance of various Linux subsystems.

- Report I/O and transfer rate issued to physical devices, one per second (press CTRL+C to quit):

```
sar -b {{1}}
```

- Report a total of 10 network device statistics, one per 2 seconds:

```
sar -n DEV {{2}} {{10}}
```

- Report CPU utilization, one per 2 seconds:

```
sar -u ALL {{2}}
```

- Report a total of 20 memory utilization statistics, one per second:

```
sar -r ALL {{1}} {{20}}
```

- Report the run queue length and load averages, one per second:

```
sar -q {{1}}
```

- Report paging statistics, one per 5 seconds:

```
sar -B {{5}}
```

sbatch

Submit a batch job to the SLURM scheduler.

- Submit a batch job:

```
sbatch {{path/to/job.sh}}
```

- Submit a batch job with a custom name:

```
sbatch --job-name={{myjob}} {{path/to/job.sh}}
```

- Submit a batch job with a time limit of 30 minutes:

```
sbatch --time={{00:30:00}} {{path/to/job.sh}}
```

- Submit a job and request multiple nodes:

```
sbatch --nodes={{3}} {{path/to/job.sh}}
```

scancel

Cancel a Slurm job.

More information: <https://slurm.schedmd.com/scancel.html>.

- Cancel a job using its ID:

```
scancel {{job_id}}
```

- Cancel all jobs from a user:

```
scancel {{user_name}}
```

scainimage

Scan images with the Scanner Access Now Easy API.

More information: <http://sane-project.org/man/scainimage.1.html>.

- List available scanners to ensure the target device is connected and recognized:

```
scainimage -L
```

- Scan an image and save it to a file:

```
scainimage --format={{pnm|tiff|png|jpeg}} > {{path/to/
new_image}}
```

schroot

Run command or start an interactive shell with a different root directory. More customizable than **chroot**.

More information: <https://wiki.debian.org/Schroot>.

- Run a command in a specific chroot:

```
schroot --chroot {{chroot}} {{command}}
```

- Run a command with options in a specific chroot:

```
schroot --chroot {{chroot}} {{command}} --  
{{command_options}}
```

- Run a command in all available chroots:

```
schroot --all {{command}}
```

- Start an interactive shell with in a specific chroot as a specific user:

```
schroot --chroot {{chroot}} --user {{user}}
```

- List available chroots:

```
schroot --list
```

scontrol

View information about and modify jobs.

More information: <https://slurm.schedmd.com/scontrol.html>.

- Show information for job:

```
scontrol show job {{job_id}}
```

- Suspend a comma-separated list of running jobs:

```
scontrol suspend {{job_id}}
```

- Resume a comma-separated list of suspended jobs:

```
scontrol resume {{job_id}}
```

- Hold a comma-separated list of queued jobs (Use `release` command to permit the jobs to be scheduled):

```
scontrol hold {{job_id}}
```

- Release a comma-separated list of suspended job:

```
scontrol release {{job_id}}
```

script

Record all terminal output to file.

- Record a new session to a file named `typescript` in the current directory:

```
script
```

- Record a new session to a custom filepath:

```
script {{path/to/session.out}}
```

- Record a new session, appending to an existing file:

```
script -a {{path/to/session.out}}
```

- Record timing information (data is outputted to the standard error):

```
script -t 2> {{path/to/timingfile}}
```

scriptreplay

Replay a typescript created by the **script** command to the standard output.

- Replay a typescript at the speed it was recorded:

```
scriptreplay {{path/to/timing_file}} {{path/to/typescript}}
```

- Replay a typescript at double the original speed:

```
scriptreplay {{path/to/timingfile}} {{path/to/typescript}} 2
```

- Replay a typescript at half the original speed:

```
scriptreplay {{path/to/timingfile}} {{path/to/typescript}}  
0.5
```

scrot

Screen capture utility.

- Capture a screenshot and save it to the current directory with the current date as the filename:

```
scrot
```

- Capture a screenshot and save it as "capture.png":

```
scrot {{capture.png}}
```

- Capture a screenshot interactively:

```
scrot --select
```

- Capture a screenshot from the currently focused window:

```
scrot --focused
```

see

Alias to **run-mailcap**'s view.

An alias to a **run-mailcap**'s action print.

- See action can be used to view any file (usually image) on default mailcap explorer:

```
see {{filename}}
```

- Using with **run-mailcap**:

```
run-mailcap --action=view {{filename}}
```

semanage

SELinux Policy Management tool.

More information: <https://linux.die.net/man/8/semanage>.

- Output local customizations:

```
semanage -S {{store}} -o {{path/to/output_file}}
```

- Take a set of commands from a specified file and load them in a single transaction:

```
semanage -S {{store}} -i {{path/to/input_file}}
```

- Manage booleans. Booleans allow the administrator to modify the confinement of processes based on the current configuration:

```
semanage boolean -S {{store}} {{--delete|--modify|--list| --noheading|--deleteall}} {{-on|-off}} -F {{boolean| boolean_file}}
```

- Manage policy modules:

```
semanage module -S {{store}} {{--add|--delete|--list| --modify}} {{--enable|--disable}} {{module_name}}
```

- Disable/Enable dontaudit rules in policy:

```
semanage dontaudit -S {{store}} {{on|off}}
```

sensible-browser

Open the default browser.

- Open a new window of the default browser:

`sensible-browser`

- Open a url in the default browser:

`sensible-browser {{url}}`

sensible-editor

Open the default editor.

- Open a file in the default editor:

```
sensible-editor {{file}}
```

- Open a file in the default editor, with the cursor at the end of the file:

```
sensible-editor + {{file}}
```

- Open a file in the default editor, with the cursor at the beginning of line 10:

```
sensible-editor +10 {{file}}
```

- Open 3 files in vertically split editor windows at the same time:

```
sensible-editor -03 {{file_1}} {{file_2}} {{file_3}}
```

sensors

Report sensors information.

- Show the current readings of all sensor chips:

`sensors`

- Show temperatures in degrees Fahrenheit:

`sensors --fahrenheit`

service

Manage services by running init scripts.

The full script path should be omitted (/etc/init.d/ is assumed).

- List the name and status of all services:

```
service --status-all
```

- Start/Stop/Restart/Reload service (start/stop should always be available):

```
service {{service_name}} {{start|stop|restart|reload}}
```

- Do a full restart (runs script twice with start and stop):

```
service {{service_name}} --full-restart
```

- Show the current status of a service:

```
service {{service_name}} status
```

setfacl

Set file access control lists (ACL).

- Modify ACL of a file for user with read and write access:

```
setfacl -m u:{username}:rw {{file}}
```

- Modify default ACL of a file for all users:

```
setfacl -d -m u::rw {{file}}
```

- Remove ACL of a file for an user:

```
setfacl -x u:{username} {{file}}
```

- Remove all ACL entries of a file:

```
setfacl -b {{file}}
```

setxkbmap

Set the keyboard using the X Keyboard Extension.

- Set the keyboard in French AZERTY:

```
setxkbmap {{fr}}
```

- Set multiple keyboard layouts, their variants and switching option:

```
setxkbmap -layout {{us,de}} -variant {{,qwerty}} -option
{{'grp:alt_caps_toggle'}}}
```

- Get help:

```
setxkbmap -help
```

- List all layouts:

```
localectl list-x11-keymap-layouts
```

- List variants for the layout:

```
localectl list-x11-keymap-variants {{de}}
```

- List available switching options:

```
localectl list-x11-keymap-options | grep grp:
```

shutdown

Shutdown and reboot the system.

- Power off (halt) immediately:

```
shutdown -h now
```

- Reboot immediately:

```
shutdown -r now
```

- Reboot in 5 minutes:

```
shutdown -r +{5} &
```

- Shutdown at 1:00 pm (Uses 24h clock):

```
shutdown -h 13:00
```

- Cancel a pending shutdown/reboot operation:

```
shutdown -c
```

silentcast

Silent screencast creator. Saves in **.mkv** and animated gif formats.

More information: <https://github.com/colinkeenan/silentcast>.

- Launch silentcast:

```
silentcast
```

- Launch silentcast on a specific display:

```
silentcast --display={{display}}
```

sinfo

View information about Slurm nodes and partitions.

See also **squeue** and **sbatch**, which are also part of the Slurm workload manager.

More information: <https://slurm.schedmd.com/sinfo.html>.

- Show a quick summary overview of the cluster:

```
sinfo --summarize
```

- View the detailed status of all partitions across the entire cluster:

```
sinfo
```

- View the detailed status of a specific partition:

```
sinfo --partition {{partition_name}}
```

- View information about idle nodes:

```
sinfo --states {{idle}}
```

- Summarise dead nodes:

```
sinfo --dead
```

- List dead nodes and the reasons why:

```
sinfo --list-reasons
```

slapt-get

An apt like system for Slackware package management.

Package sources need to be configured in the slapt-getrc file.

- Update the list of available packages and versions:

```
slapt-get --update
```

- Install a package, or update it to the latest available version:

```
slapt-get --install {{package_name}}
```

- Remove a package:

```
slapt-get --remove {{package_name}}
```

- Upgrade all installed packages to their latest available versions:

```
slapt-get --upgrade {{package_name}}
```

- Locate packages of interest by the package name, disk set, or version:

```
slapt-get --search {{package_name}}
```

- Show information about a package:

```
slapt-get --show {{package_name}}
```

slop

Get a selection of the screen.

More information: <https://github.com/naelstrof/slop>.

- Wait for the user to make a selection and output its geometry to standard output:

`slop`

- Double click, rather than click and drag, to draw a selection:

`slop -D`

- Highlight the selection rather than outlining it:

`slop -l`

- Specify the output format:

`slop -f {{format_string}}`

- Specify the selection rectangle's color:

`slop -c {{red}},{{green}},{{blue}},{{alpha}}`

sm

Displays a short message fullscreen.

More information: <https://github.com/nomeata/screen-message>.

- Display a message in full-screen:

```
sm "{{Hello World!}}"
```

- Display a message with inverted colors:

```
sm -i "{{Hello World!}}"
```

- Display a message with a custom foreground color:

```
sm -f {{blue}} "{{Hello World!}}"
```

- Display a message with a custom background color:

```
sm -b {{#008888}} "{{Hello World!}}"
```

- Display a message rotated 3 times (in steps of 90 degrees, counterclockwise):

```
sm -r {{3}} "{{Hello World!}}"
```

- Display a message using the output from another command:

```
{{echo "Hello World!"}} | sm -
```

smbclient

FTP-like client to access SMB/CIFS resources on servers.

- Connect to a share (user will be prompted for password; **exit** to quit the session):

```
smbclient {{//server/share}}
```

- Connect with a different username:

```
smbclient {{//server/share}} --user {{username}}
```

- Connect with a different workgroup:

```
smbclient {{//server/share}} --workgroup {{domain}} --user {{username}}
```

- Connect with a username and password:

```
smbclient {{//server/share}} --user {{username%password}}
```

- Download a file from the server:

```
smbclient {{//server/share}} --directory {{path/to/directory}} --command "get {{file.txt}}"
```

- Upload a file to the server:

```
smbclient {{//server/share}} --directory {{path/to/directory}} --command "put {{file.txt}}"
```

smbmap

SMB enumeration tool.

More information: <https://github.com/ShawnDEvans/smbmap>.

- Display SMB shares and permissions on a host, prompting for user's password or NTLM hash:

```
smbmap -u {{username}} --prompt -H {{ip}}
```

- Display SMB shares and permissions on a host, specifying the domain and passing the password NTLM hash:

```
smbmap -u {{username}} --prompt -d {{domain}} -H {{ip}}
```

- Display SMB shares and list a single level of directories and files:

```
smbmap -u {{username}} --prompt -H {{ip}} -r
```

- Display SMB shares and recursively list a defined number of levels of directories and files:

```
smbmap -u {{username}} --prompt -H {{ip}} -R --depth {{3}}
```

- Display SMB shares and recursively list directories and files, downloading the files matching a regular expression:

```
smbmap -u {{username}} --prompt -H {{ip}} -R -A {{pattern}}
```

- Display SMB shares and recursively list directories and files, searching for file content matching a regular expression:

```
smbmap -u {{username}} --prompt -H {{ip}} -R -F {{pattern}}
```

- Execute a shell command on a remote system:

```
smbmap -u {{username}} --prompt -H {{ip}} -x {{command}}
```

- Upload a file to a remote system:

```
smbmap -u {{username}} --prompt -H {{ip}} --upload {{source}} {{destination}}
```

smbpasswd

Change a user's SMB password.

Samba users must also have a local Unix account.

- Change the current user's SMB password:

`smbpasswd`

- Add a specified user to Samba and set password(user should already exist in system):

`smbpasswd -a {{username}}`

- Modify an existing Samba user's password:

`smbpasswd {{username}}`

- Delete a Samba user:

`smbpasswd -x {{username}}`

snake4

Snake game in the terminal.

More information: <https://manpages.debian.org/snake4/snake4.6.en.html>.

- Start a snake game:

`snake4`

- Choose level:

`\{ \{1|2|3|4|5\} \}`

- Navigate the snake:

`\{ \{Up|Down|Left|Right\} \}` arrow key

- Pause game:

`Spacebar`

- Quit game:

`q`

- Show the high scores:

`snake4 --highscores`

snake4scores

Show the high scores from the snake4 game.

More information: <https://manpages.debian.org/snake4/snake4.6.en.html>.

- Show the highscores:

snake4scores

snap

Tool for managing the "snap" self-contained software packages.

Similar to what **apt** is for ".deb".

- Search for a package:

```
snap find {{package_name}}
```

- Install a package:

```
snap install {{package_name}}
```

- Update a package:

```
snap refresh {{package_name}}
```

- Update all packages:

```
snap refresh
```

- Display basic information about installed snap software:

```
snap list
```

- Uninstall a package:

```
snap remove {{package_name}}
```

- Check for recent snap changes in the system:

```
snap changes
```

snapper

Filesystem snapshot management tool.

More information: <http://snapper.io/manpages/snapper.html>.

- List snapshot configs:

```
snapper list-configs
```

- Create snapper config:

```
snapper -c {{config}} create-config {{path/to/directory}}
```

- Create a snapshot with a description:

```
snapper -c {{config}} create -d "{{snapshot_description}}"
```

- List snapshots for a config:

```
snapper -c {{config}} list
```

- Delete a snapshot:

```
snapper -c {{config}} delete {{snapshot_number}}
```

- Delete a range of snapshots:

```
snapper -c {{config}} delete {{snapshot_X}}-{{snapshot_Y}}
```

snmpwalk

SNMP query tool.

More information: <https://linux.die.net/man/1/snmpwalk>.

- Query the system information of a remote host using SNMPv1 and a community string:

```
snmpwalk -v1 -c {{community}} {{ip}}
```

- Query specific system information on a remote host by OID using SNMPv2 on a specified port:

```
snmpwalk -v2c -c {{community}} {{ip}}:{{port}} {{oid}}
```

- Query specific system information on a remote host by OID using SNMPv3 and authentication without encryption:

```
snmpwalk -v3 -l {{authNoPriv}} -u {{username}} -a {{MD5|SHA}} -A {{passphrase}} {{ip}} {{oid}}
```

- Query specific system information on a remote host by OID using SNMPv3, authentication, and encryption:

```
snmpwalk -v3 -l {{authPriv}} -u {{username}} -a {{MD5|SHA}} -A {{auth_passphrase}} -x {{DES|AES}} -X {{enc_passphrase}} {{ip}} {{oid}}
```

- Query specific system information on a remote host by OID using SNMPv3 without authentication or encryption:

```
snmpwalk -v3 -l {{noAuthNoPriv}} -u {{username}} {{ip}} {{oid}}
```

speedometer

Python script that shows a network traffic graph in the terminal.

More information: <http://excess.org/speedometer>.

- Show graph for a specific interface:

```
speedometer -r {{eth0}} -t {{eth0}}
```

squeue

View the jobs queued in the SLURM scheduler.

- View the queue:

```
squeue
```

- View jobs queued by a specific user:

```
squeue -u {{username}}
```

- View the queue and refresh every 5 seconds:

```
squeue -i {{5}}
```

- View the queue with expected start times:

```
squeue --start
```

sreport

Generate reports on jobs, users, and clusters from accounting data.

More information: <https://slurm.schedmd.com/sreport.html>.

- Show pipe delimited cluster utilization data:

```
sreport --parsable cluster utilization
```

- Show number of jobs run:

```
sreport job sizes printjobcount
```

- Show users with highest cpu time use:

```
sreport user topuser
```

srun

Create an interactive slurm job or connect to an existing job.

More information: <https://slurm.schedmd.com/srun.html>.

- Submit a basic interactive job:

```
srun --pty /bin/bash
```

- Submit an interactive job with different attributes:

```
srun --ntasks-per-node={{num_cores}} --mem-per-cpu={{memory_MB}} --pty /bin/bash
```

- Connect to a worker node with a job running:

```
srun --jobid={{job_id}} --pty /bin/bash
```

SS

Utility to investigate sockets.

- Show all TCP/UDP/RAW/UNIX sockets:

```
ss -a {{-t|-u|-w|-x}}
```

- Filter TCP sockets by states, only/exclude:

```
ss {{state/exclude}} {{bucket/big/connected/\
synchronized/...}}
```

- Show all TCP sockets connected to the local HTTPS port (443):

```
ss -t src :{{443}}
```

- Show all TCP sockets listening on the local 8080 port:

```
ss -lt src :{{8080}}
```

- Show all TCP sockets along with processes connected to a remote ssh port:

```
ss -pt dst :{{ssh}}
```

- Show all UDP sockets connected on specific source and destination ports:

```
ss -u 'sport == :{{source_port}} and dport == :\
{{destination_port}}'
```

- Show all TCP IPv4 sockets locally connected on the subnet 192.168.0.0/16:

```
ss -4t src {{192.168/16}}
```

ssh-add

Manage loaded ssh keys in the ssh-agent.

Ensure that ssh-agent is up and running for the keys to be loaded in it.

- Add the default ssh keys in "~/.ssh" to the ssh-agent:

`ssh-add`

- Add a specific key to the ssh-agent:

`ssh-add {{path/to/private_key}}`

- List fingerprints of currently loaded keys:

`ssh-add -l`

- Delete a key from the ssh-agent:

`ssh-add -d {{path/to/private_key}}`

- Delete all currently loaded keys from the ssh-agent:

`ssh-add -D`

sshuttle

Transparent proxy server that tunnels traffic over an SSH connection.

Doesn't require root or any special setup on the remote SSH server, though root access on the local machine is prompted for.

- Forward all IPv4 TCP traffic via a remote SSH server:

```
sshuttle --remote={{username}}@{{sshserver}} {{0.0.0.0/0}}
```

- Also forward all DNS traffic to the server's default DNS resolver:

```
sshuttle --dns --remote={{username}}@{{sshserver}} {{0.0.0.0/0}}
```

- Forward all traffic except that which is bound for a specific subnet:

```
sshuttle --remote={{username}}@{{sshserver}} {{0.0.0.0/0}} --exclude {{192.168.0.1/24}}
```

- Use the tproxy method to forward all IPv4 and IPv6 traffic:

```
sshuttle --method=tproxy --remote={{username}}@{{sshserver}} {{0.0.0.0/0}} {{::/0}} --exclude={{your_local_ip_address}} --exclude={{ssh_server_ip_address}}
```

sstat

View information about running jobs.

More information: <https://slurm.schedmd.com/sstat.html>.

- Display status information of a comma-separated list of jobs:

```
sstat --jobs={{job_id}}
```

- Display job ID, average CPU and average virtual memory size of a comma-separated list of jobs, with pipes as column delimiters:

```
sstat --parsable --jobs={{job_id}} --format={{JobID}},  
{{AveCPU}},{{AveVMSize}}
```

- Display list of fields available:

```
sstat --helpformat
```

steghide

Steganography tool for JPEG, BMP, WAV and AU file formats.

More information: <https://github.com/StefanoDeVuono/steghide>.

- Embed data in a PNG image, prompting for a passphrase:

```
steghide embed --coverfile {{path/to/image.png}} --embedfile  
{{path/to/data.txt}}
```

- Extract data from a WAV audio file:

```
steghide extract --stegofile {{path/to/sound.wav}}
```

- Display file information, trying to detect an embedded file:

```
steghide info {{path/to/file.jpg}}
```

- Embed data in a JPEG image, using maximum compression:

```
steghide embed --coverfile {{path/to/image.jpg}} --embedfile  
{{path/to/data.txt}} --compress {{9}}
```

- Get the list of supported encryption algorithms and modes:

```
steghide encinfo
```

- Embed encrypted data in a JPEG image, e.g. with Blowfish in CBC mode:

```
steghide embed --coverfile {{path/to/image.jpg}} --embedfile  
{{path/to/data.txt}} --encryption {{blowfish|...}}  
{{cbc|...}}
```

strace

Troubleshooting tool for tracing system calls.

- Start tracing a specific process by its PID:

```
strace -p {{pid}}
```

- Trace a process and filter output by system call:

```
strace -p {{pid}} -e {{system_call_name}}
```

- Count time, calls, and errors for each system call and report a summary on program exit:

```
strace -p {{pid}} -c
```

- Show the time spent in every system call:

```
strace -p {{pid}} -T
```

- Start tracing a program by executing it:

```
strace {{program}}
```

- Start tracing file operations of a program:

```
strace -e trace=file {{program}}
```

stress

A tool to stress test CPU, memory, and IO on a Linux system.

- Spawn 4 workers to stress test CPU:

```
stress -c {{4}}
```

- Spawn 2 workers to stress test IO and timeout after 5 seconds:

```
stress -i {{2}} -t {{5}}
```

- Spawn 2 workers to stress test memory (each worker allocates 256M bytes):

```
stress -m {{2}} --vm-bytes {{256M}}
```

- Spawn 2 workers spinning on write()/unlink() (each worker writes 1G bytes):

```
stress -d {{2}} --hdd-bytes {{1GB}}
```

SV

Control a running runsv service.

- Start a service:

```
sudo sv up {{path/to/service}}
```

- Stop a service:

```
sudo sv down {{path/to/service}}
```

- Get service status:

```
sudo sv status {{path/to/service}}
```

swapoff

Disables device or file for swapping.

- Disable a given swap partition:

```
swapoff {{/dev/sdb7}}
```

- Disable a given swap file:

```
swapoff {{path/to/file}}
```

- Disable all swap areas:

```
swapoff -a
```

- Disable swap by label of a device or file:

```
swapoff -L {{swap1}}
```

swapon

Enables device or file for swapping.

- Get swap information:

```
swapon -s
```

- Enable a given swap partition:

```
swapon {{/dev/sdb7}}
```

- Enable a given swap file:

```
swapon {{path/to/file}}
```

- Enable all swap areas:

```
swapon -a
```

- Enable swap by label of a device or file:

```
swapon -L {{swap1}}
```

swupd

Package management utility for Clear Linux.

More information: <https://docs.01.org/clearlinux/latest/guides/clear/swupd.html>.

- Update to latest version:

```
sudo swupd update
```

- Show current version, and check whether a newer one exists:

```
swupd check-update
```

- List installed bundles:

```
swupd bundle-list
```

- Locate the bundle where a wanted package exists:

```
swupd search -b {{package}}
```

- Install a new bundle:

```
sudo swupd bundle-add {{bundle}}
```

- Remove a bundle:

```
sudo swupd bundle-remove {{bundle}}
```

- Correct broken or missing files:

```
sudo swupd verify
```

Sxiv

Simple X Image Viewer.

More information: <https://github.com/muennich/sxiv>.

- Open an image:

```
sxiv {{path/to/file}}
```

- Open an image in fullscreen mode:

```
sxiv -f {{path/to/file}}
```

- Open a newline-separated list of images, reading filenames from standard input:

```
echo {{path/to/file}} | sxiv -i
```

- Open a space-separated list of images as a slideshow:

```
sxiv -S {{seconds}} {{path/to/file}}
```

- Open a space-separated list of images in thumbnail mode:

```
sxiv -t {{path/to/file}}
```

sysctl

List and change kernel runtime variables.

- Show all available variables and their values:

```
sysctl -a
```

- Set a changeable kernel state variable:

```
sysctl -w {{section.tunable}}={{value}}
```

- Get currently open file handlers:

```
sysctl fs.file-nr
```

- Get limit for simultaneous open files:

```
sysctl fs.file-max
```

- Apply changes from /etc/sysctl.conf:

```
sysctl -p
```

systemctl

Control the systemd system and service manager.

More information: <https://www.freedesktop.org/software/systemd/man/systemctl.html>.

- List failed units:

```
systemctl --failed
```

- Start/Stop/Restart/Reload a service:

```
systemctl start/stop/restart/reload {{unit}}
```

- Show the status of a unit:

```
systemctl status {{unit}}
```

- Enable/Disable a unit to be started on bootup:

```
systemctl enable/disable {{unit}}
```

- Mask/Unmask a unit, prevent it to be started on bootup:

```
systemctl mask/unmask {{unit}}
```

- Reload systemd, scanning for new or changed units:

```
systemctl daemon-reload
```

- Check if a unit is active:

```
systemctl is-active {{unit}}
```

- Check if a unit is enabled:

```
systemctl is-enabled {{unit}}
```

systemd-analyze

Show timing details about the boot process of units (services, mount points, devices, sockets).

- List time of each unit to start up:

```
systemd-analyze blame
```

- Print a tree of the time critical chain of units:

```
systemd-analyze critical-chain
```

taskset

Get or set a process' CPU affinity or start a new process with a defined CPU affinity.

- Get a running process' CPU affinity by PID:

```
taskset --pid --cpu-list {{pid}}
```

- Set a running process' CPU affinity by PID:

```
taskset --pid --cpu-list {{cpu_id}} {{pid}}
```

- Start a new process with affinity for a single CPU:

```
taskset --cpu-list {{cpu_id}} {{command}}
```

- Start a new process with affinity for multiple non-sequential CPUs:

```
taskset --cpu-list {{cpu_id_1}} {{cpu_id_2}} {{cpu_id_3}}
```

- Start a new process with affinity for CPUs 1 through 4:

```
taskset --cpu-list {{cpu_id_1}},{{cpu_id_4}}
```

tcpflow

Capture TCP traffic for debugging and analysis.

- Show all data on the given interface and port:

```
tcpflow -c -i {{eth0}} port {{80}}
```

tcpkill

Kills specified in-progress TCP connections.

- Kill in-progress connections at a specified interface, host and port:

```
tcpkill -i {{eth1}} host {{192.95.4.27}} and port {{2266}}
```

tcptraceroute

A traceroute implementation using TCP packets.

More information: <https://github.com/mct/tcptraceroute>.

- Trace the route to a host:

```
tcptraceroute {{host}}
```

- Specify the destination port and packet length in bytes:

```
tcptraceroute {{host}} {{destination_port}} {{packet_length}}
```

- Specify the local source port and source address:

```
tcptraceroute {{host}} -p {{source_port}} -s  
{{source_address}}
```

- Set the first and maximum TTL:

```
tcptraceroute {{host}} -f {{first_ttl}} -m {{max_ttl}}
```

- Specify the wait time and number of queries per hop:

```
tcptraceroute {{host}} -w {{wait_time}} -q  
{{number_of_queries}}
```

- Specify the interface:

```
tcptraceroute {{host}} -i {{interface}}
```

terminator

Arrange multiple GNOME terminals in one window.

- Start terminator window:

`terminator`

- Start with a fullscreen window:

`terminator -f`

- Split terminals horizontally:

`Ctrl + Shift + 0`

- Split terminals vertically:

`Ctrl + Shift + E`

- Open new tab:

`Ctrl + Shift + T`

thunar

Graphical file manager for XFCE desktop environments.

- Open a new window showing the current directory:

`thunar`

- Open the bulk rename utility:

`thunar --bulk-rename`

- Close all open thunar windows:

`thunar --quit`

tic

Compile terminfo and install for ncurses.

More information: <https://pubs.opengroup.org/onlinepubs/007908799/xcurses/terminfo.html>.

- Compile and install terminfo for a terminal:

```
tic -xe {{terminal}} {{path/to/terminal.info}}
```

- Check terminfo file for errors:

```
tic -c {{path/to/terminal.info}}
```

- Print database locations:

```
tic -D
```

timedatectl

Control the system time and date.

- Check the current system clock time:

```
timedatectl
```

- Set the local time of the system clock directly:

```
timedatectl set-time "{{yyyy-MM-dd hh:mm:ss}}"
```

- List available timezones:

```
timedatectl list-timezones
```

- Set the system timezone:

```
timedatectl set-timezone {{timezone}}
```

- Enable Network Time Protocol (NTP) synchronization:

```
timedatectl set-ntp on
```

timeshift

System restore utility.

More information: <https://github.com/teejee2008/timeshift>.

- List snapshots:

```
sudo timeshift --list
```

- Create a new snapshot (if scheduled):

```
sudo timeshift --check
```

- Create a new snapshot (even if not scheduled):

```
sudo timeshift --create
```

- Restore a snapshot (selecting which snapshot to restore interactively):

```
sudo timeshift --restore
```

- Restore a specific snapshot:

```
sudo timeshift --restore --snapshot '{{snapshot}}'
```

- Delete a specific snapshot:

```
sudo timeshift --delete --snapshot '{{snapshot}}'
```

tlp-stat

A tool to generate TLP status reports. See also [tlp](#).

- Generate status report with configuration and all active settings:

```
sudo tlp-stat
```

- Show battery information:

```
sudo tlp-stat -b
```

- Show configuration:

```
sudo tlp-stat -c
```

tlp

Advanced power management for Linux. See [tlp-stat](#) page for additional information.

- Apply settings (according to the actual power source):

```
sudo tlp start
```

- Apply battery settings (ignoring the actual power source):

```
sudo tlp bat
```

- Apply AC settings (ignoring the actual power source):

```
sudo tlp ac
```

toilet

A tool to display ASCII-art fonts.

More information: <http://caca.zoy.org/wiki/toilet>.

- Generate ASCII art for a given text:

```
toilet {{input_text}}
```

- Generate ASCII art using a custom font file:

```
toilet {{input_text}} -f {{font_filename}}
```

- Generate ASCII art using a filter:

```
toilet {{input_text}} --filter {{filter_name}}
```

- Show available toilet filters:

```
toilet --filter list
```

tomb

Manage encrypted storage directories that can be safely transported and hidden in a filesystem.

- Create a new tomb with an initial size of 100MB:

```
tomb dig -s {{100}} {{encrypted_directory.tomb}}
```

- Create a new key file that can be used to lock a tomb; user will be prompted for a password for the key:

```
tomb forge {{encrypted_directory.tomb.key}}
```

- Initialize and lock an empty tomb using a key made with `forge`:

```
tomb lock {{encrypted_directory.tomb}} -k  
{{encrypted_directory.tomb.key}}
```

- Mount a tomb (by default in /media) using its key, making it usable as a regular filesystem directory:

```
tomb open {{encrypted_directory.tomb}} -k  
{{encrypted_directory.tomb.key}}
```

- Close a tomb (fails if the tomb is being used by a process):

```
tomb close {{encrypted_directory.tomb}}
```

- Forcefully close all open tombs, killing any applications using them:

```
tomb slam all
```

- List all open tombs:

```
tomb list
```

top

Display dynamic real-time information about running processes.

- Start top:

```
top
```

- Do not show any idle or zombie processes:

```
top -i
```

- Show only processes owned by given user:

```
top -u {{username}}
```

- Sort processes by a field:

```
top -o {{field_name}}
```

- Show the individual threads of a given process:

```
top -Hp {{process_id}}
```

- Show only the processes with the given PID(s), passed as a comma-separated list. (Normally you wouldn't know PIDs off hand. This example picks the PIDs from the process name):

```
top -p $(pgrep -d ',' {{process_name}})
```

- Get help about interactive commands:

```
?
```

trap

Automatically execute commands after receiving signals by processes or the operating system.

Can be used to perform cleanups for interruptions by the user or other actions.

- List available signals to set traps for:

```
trap -l
```

- List active traps for the current shell:

```
trap -p
```

- Set a trap to execute commands when one or more signals are detected:

```
trap 'echo "Caught signal {{SIGHUP}}"' {{SIGHUP}}
```

- Remove active traps:

```
trap - {{SIGHUP}} {{SIGINT}}
```

trash

A CLI for managing your trashcan / recycling bin.

More information: <https://github.com/andreafrancia/trash-cli>.

- Delete a file (send to trash):

```
trash {{path/to/file}}
```

- List files in trash:

```
trash-list
```

- Restore file from trash:

```
trash-restore
```

- Empty trash:

```
trash-empty
```

- Empty trash, keeping files trashed less than {{10}} days ago:

```
trash-empty {{10}}
```

- Remove all files named 'foo' from the trash:

```
trash-rm foo
```

- Remove all files with a given original location:

```
trash-rm {{/absolute/path/to/file_or_directory}}
```

tree

Show the contents of the current directory as a tree.

More information: <http://mama.indstate.edu/users/ice/tree/>.

- Print files and directories up to 'num' levels of depth (where 1 means the current directory):

```
tree -L {{num}}
```

- Print directories only:

```
tree -d
```

- Print hidden files too with colorization on:

```
tree -a -C
```

- Print the tree without indentation lines, showing the full path instead (use **-N** to not escape non-printable characters):

```
tree -i -f
```

- Print the size of each file and the cumulative size of each directory, in human-readable format:

```
tree -s -h --du
```

- Print files within the tree hierarchy, using a wildcard (glob) pattern, and pruning out directories that don't contain matching files:

```
tree -P '{*.*}' --prune
```

- Print directories within the tree hierarchy, using the wildcard (glob) pattern, and pruning out directories that aren't ancestors of the wanted one:

```
tree -P {{directory_name}} --matchdirs --prune
```

- Print the tree ignoring the given directories:

```
tree -I '{{directory_name1|directory_name2}}'
```

trizen

Arch Linux utility for building packages from the Arch User Repository (AUR).

- Synchronize and update all AUR packages:

```
trizen -Syua
```

- Install a new package:

```
trizen -S {{package}}
```

- Remove a package and its dependencies:

```
trizen -Rs {{package}}
```

- Search the package database for a keyword:

```
trizen -Ss {{keyword}}
```

- Show information about a package:

```
trizen -Si {{package}}
```

- List installed packages and versions:

```
trizen -Qe
```

tshark

Packet analysis tool, CLI version of wireshark.

- Monitor everything on localhost:

```
tshark
```

- Only capture packets matching a specific capture filter:

```
tshark -f '{{udp port 53}}'
```

- Only show packets matching a specific output filter:

```
tshark -Y '{{http.request.method == "GET"}}'
```

- Decode a TCP port using a specific protocol (e.g. HTTP):

```
tshark -d tcp.port=={{8888}},{{http}}
```

- Specify the format of captured output:

```
tshark -T {{json|text|ps|...}}
```

- Select specific fields to output:

```
tshark -T {{fields|ek|json|pdml}} -e {{http.request.method}}  
-e {{ip.src}}
```

- Write captured packet to a file:

```
tshark -w {{path/to/file}}
```

- Analyze packets from a file:

```
tshark -r {{filename}}.pcap
```

tune2fs

Adjust parameters of an ext2, ext3 or ext4 filesystem.

May be used on mounted filesystems.

- Set the max number of counts before a filesystem is checked to 2:

```
tune2fs -c {{2}} {{/dev/sdXN}}
```

- Set the filesystem label to MY_LABEL:

```
tune2fs -L {{'MY_LABEL'}} {{/dev/sdXN}}
```

- Enable discard and user-specified extended attributes for a filesystem:

```
tune2fs -o {{discard,user_xattr}} {{/dev/sdXN}}
```

- Enable journaling for a filesystem:

```
tune2fs -o^{{nobarrier}} {{/dev/sdXN}}
```

udisksctl

A command-line program used to interact with the udisksd daemon process.

More information: <http://storaged.org/doc/udisks2-api/latest/udisksctl.1.html>.

- Show high-level information about disk drives and block devices:

```
udisksctl status
```

- Show detailed information about a device:

```
udisksctl info --block-device {{/dev/sdX}}
```

- Show detailed information about a device partition:

```
udisksctl info --block-device {{/dev/sdXN}}
```

- Mount a device partition and prints the mount point:

```
udisksctl mount --block-device {{/dev/sdXN}}
```

- Unmount a device partition:

```
udisksctl unmount --block-device {{/dev/sdXN}}
```

- Monitor the daemon for events:

```
udisksctl monitor
```

ufw

Uncomplicated Firewall.

Frontend for iptables aiming to make configuration of a firewall easier.

- Enable ufw:

```
ufw enable
```

- Disable ufw:

```
ufw disable
```

- Show ufw rules, along with their numbers:

```
ufw status numbered
```

- Allow incoming traffic on port 5432 on this host with a comment identifying the service:

```
ufw allow {{5432}} comment "{{Service}}"
```

- Allow only TCP traffic from 192.168.0.4 to any address on this host, on port 22:

```
ufw allow proto {{tcp}} from {{192.168.0.4}} to {{any}} port {{22}}
```

- Deny traffic on port 80 on this host:

```
ufw deny {{80}}
```

- Deny all UDP traffic to port 22:

```
ufw deny proto {{udp}} from {{any}} to {{any}} port {{22}}
```

- Delete a particular rule. The rule number can be retrieved from the `ufw status numbered` command:

```
ufw delete {{rule_number}}
```

ul

Performs the underlining of a text.

Each character in a given string must be underlined separately.

- Display the contents of the file with underlines where applicable:

ul {{file.txt}}

- Display the contents of the file with underlines made of dashes - :

ul -i {{file.txt}}

units

Provide the conversion between two units of measure.

Typing `search {{text}}` in the prompt will display a list of all of the units containing `{{text}}`.

More information: <https://www.gnu.org/software/units/units.html>.

- Run in interactive mode:

```
units
```

- Show the conversion between two simple units:

```
units {{quarts}} {{tablespoons}}
```

- Convert between units with quantities:

```
units {{15 pounds}} {{kilograms}}
```

- Show the conversion between two compound units:

```
units "{{meters / second}}" "{{inches / hour}}
```

- Show the conversion between units with different dimensions:

```
units "{{acres}}" "{{ft^2}}"
```

unix2dos

Change Unix-style line endings to DOS-style.

Replaces CR with CRLF.

- Change the line endings of a file:

```
unix2dos {{filename}}
```

- Create a copy with DOS-style line endings:

```
unix2dos -n {{filename}} {{new_filename}}
```

unix2mac

Change Unix-style line endings to macOS-style.

Replaces CR with LF.

- Change the line endings of a file:

```
unix2mac {{filename}}
```

- Create a copy with macOS-style line endings:

```
unix2mac -n {{filename}} {{new_filename}}
```

unset

Remove shell variables or functions.

- Remove the variable `foo`, or if the variable doesn't exist, remove the function `foo`:

```
unset {{foo}}
```

- Remove the variables `foo` and `bar`:

```
unset -v {{foo}} {{bar}}
```

- Remove the function `my_func`:

```
unset -f {{my_func}}
```

unshadow

Utility provided by the John the Ripper project to obtain the traditional Unix password file if the system uses shadow passwords.

More information: <https://www.openwall.com/john/>.

- Combine the /etc/shadow and /etc/passwd of the current system:

```
sudo unshadow /etc/passwd /etc/shadow
```

- Combine two arbitrary shadow and password files:

```
sudo unshadow {{path/to/passwd}} {{path/to/shadow}}
```

update-alternatives

A convenient tool for maintaining symbolic links to determine default commands.

- Add a symbolic link:

```
sudo update-alternatives --install {{path/to/symlink}}  
{{command_name}} {{path/to/command_binary}} {{priority}}
```

- Configure a symbolic link for "java":

```
sudo update-alternatives --config {{java}}
```

- Remove a symbolic link:

```
sudo update-alternatives --remove {{java}} {{/opt/java/  
jdk1.8.0_102/bin/java}}
```

- Display information about a specified command:

```
update-alternatives --display {{java}}
```

- Display all commands and their current selection:

```
update-alternatives --get-selections
```

update-rc.d

Install and remove services which are System-V style init script links.

Init scripts are in the /etc/init.d/.

- Install a service:

```
update-rc.d {{mysql}} defaults
```

- Enable a service:

```
update-rc.d {{mysql}} enable
```

- Disable a service:

```
update-rc.d {{mysql}} disable
```

- Forcibly remove a service:

```
update-rc.d -f {{mysql}} remove
```

updatedb

Create or update the database used by **locate**.

It is usually run daily by cron.

- Refresh database content:

```
sudo updatedb
```

- Display file names as soon as they are found:

```
sudo updatedb --verbose
```

uprecords

Displays a summary of historical uptime records.

- Display a summary of the top 10 historical uptime records:

```
uprecords
```

- Display the top 25 records:

```
uprecords -m {{25}}
```

- Display the downtime between reboots instead of the kernel version:

```
uprecords -d
```

- Show the most recent reboots:

```
uprecords -B
```

- Don't truncate information:

```
uprecords -w
```

urxvt

Rxvt-unicode.

A customizable terminal emulator.

- Open a new urxvt window:

`urxvt`

- Run in a specific directory:

`urxvt -cd {{path/to/directory}}`

- Run a command in a new urxvt window:

`urxvt -e {{command}}`

- Run a command and keep the window open:

`urxvt --hold -e {{command}}`

- Run a command within the "sh" shell:

`urxvt -e {{sh}} -c {{command}}`

useradd

Create a new user.

- Create new user:

```
useradd {{name}}
```

- Create new user with a default home directory:

```
useradd --create-home {{name}}
```

- Create new user with specified shell:

```
useradd --shell {{path/to/shell}} {{name}}
```

- Create new user belonging to additional groups (mind the lack of whitespace):

```
useradd --groups {{group1,group2}} {{name}}
```

- Create new system user without a home directory:

```
useradd --no-create-home --system {{name}}
```

userdel

Remove a user.

- Remove a user and their home directory:

```
userdel -r {{name}}
```

usermod

Modifies a user account.

- Change a user's name:

```
usermod -l {{newname}} {{user}}
```

- Add user to supplementary groups (mind the whitespace):

```
usermod -a -G {{group1,group2}} {{user}}
```

- Create a new home directory for a user and move their files to it:

```
usermod -m -d {{path/to/home}} {{user}}
```

utmpdump

Dump and load btmp, utmp and wtmp accounting files.

- Dump the `/var/log/wtmp` file to the standard output as plain text:

```
utmpdump {{/var/log/wtmp}}
```

- Load a previously dumped file into `/var/log/wtmp`:

```
utmpdump -r {{dumpfile}} > {{/var/log/wtmp}}
```

uuidgen

Generate unique identifiers (UUIDs).

- Create a random UUID:

```
uuidgen --random
```

- Create a UUID based on the current time:

```
uuidgen --time
```

- Create a UUID based on the hash of a URL:

```
uuidgen --sha1 --namespace {{@url}} --name {{object_name}}
```

uvcdynctrl

A libwebcam command line tool to manage dynamic controls in uvcvideo.

- List all available cameras:

```
uvcdynctrl -l
```

- Specify the device to use (defaults to `video0`):

```
uvcdynctrl -d {{device_name}}
```

- List available controls:

```
uvcdynctrl -c
```

- Set a new control value (for negative values, add `--` before `{-value}`):

```
uvcdynctrl -s {{control_name}} {{value}}
```

- Get the current control value:

```
uvcdynctrl -g {{control_name}}
```

- Save the state of the current controls to a file:

```
uvcdynctrl -W {{filename}}
```

- Load the state of the controls from a file:

```
uvcdynctrl -L {{filename}}
```

veracrypt

Free and open source disk encryption software.

More information: <https://www.veracrypt.fr/code/VeraCrypt/plain/doc/html/Documentation.html>.

- Create a new volume through a text user interface and use `/dev/urandom` as a source of random data:

```
veracrypt --text --create --random-source={{/dev/urandom}}
```

- Decrypt a volume interactively through a text user interface and mount it to a directory:

```
veracrypt --text {{path/to/volume}} {{path/to/mount_point}}
```

- Decrypt a partition using a keyfile and mount it to a directory:

```
veracrypt --keyfiles={{path/to/keyfile}} {{/dev/sdXN}}  
{{path/to/mount_point}}
```

- Dismount a volume on the directory it is mounted to:

```
veracrypt --dismount {{path/to/mounted_point}}
```

vgcreate

Create volume groups combining multiple mass-storage devices.

- Create a new volume group called vg1 using the `/dev/sda1` device:

```
vgcreate {{vg1}} {{/dev/sda1}}
```

- Create a new volume group called vg1 using multiple devices:

```
vgcreate {{vg1}} {{/dev/sda1}} {{/dev/sdb1}} {{/dev/sdc1}}
```

vgs

Display information about LVM volume groups.

More information: <https://man7.org/linux/man-pages/man8/vgs.8.html> .

- Display information about volume groups:

`vgs`

- Display all volume groups:

`vgs -a`

- Change default display to show more details:

`vgs -v`

- Display only specific fields:

`vgs -o {{field_name_1}},{{field_name_2}}`

- Append field to default display:

`vgs -o +{{field_name}}`

- Suppress heading line:

`vgs --noheadings`

- Use separator to separate fields:

`vgs --separator =`

viewnior

Simple and elegant image viewer.

- View an image:

```
viewnior {{path/to/image.ext}}
```

- View in fullscreen mode:

```
viewnior --fullscreen {{path/to/image.ext}}
```

- View fullscreen in slideshow mode:

```
viewnior --slideshow {{path/to/image.ext}}
```

vipw

Edit the password file.

More information: <https://linux.die.net/man/8/vipw>.

- Edit the password file:

`vipw`

- Display the current version of `vipw`:

`vipw --version`

vmstat

Report information about processes, memory, paging, block IO, traps, disks and CPU activity.

More information: <https://linux.die.net/man/8/vmstat>.

- Display virtual memory statistics:

```
vmstat
```

- Display reports every 2 seconds for 5 times:

```
vmstat {{2}} {{5}}
```

vmware-checkvm

Checks to see if the current host is a VMWare VM or not.

- Return the current VMWare software version (exit status determines whether the system is a VM or not):

`vmware-checkvm`

- Return the VMWare hardware version:

`vmware-checkvm -h`

vncserver

Launches a VNC (Virtual Network Computing) desktop.

- Launch a VNC Server on next available display:

```
vncserver
```

- Launch a VNC Server with specific screen geometry:

```
vncserver --geometry {{width}}x{{height}}
```

- Kill an instance of VNC Server running on a specific display:

```
vncserver --kill :{{display_number}}
```

vncviewer

Launches a VNC (Virtual Network Computing) client.

- Launch a VNC client which connects to a host on a given display:

```
vncviewer {{host}}:{{display_number}}
```

- Launch in full-screen mode:

```
vncviewer -FullScreen {{host}}:{{display_number}}
```

- Launch a VNC client with a specific screen geometry:

```
vncviewer --geometry {{width}}x{{height}} {{host}}:{{display_number}}
```

- Launch a VNC client which connects to a host on a given port:

```
vncviewer {{host}}::{{port}}
```

vnstat

A console-based network traffic monitor.

- Display traffic summary for all interfaces:

`vnstat`

- Display traffic summary for a specific network interface:

`vnstat -i {{eth0}}`

- Display live stats for a specific network interface:

`vnstat -l -i {{eth0}}`

- Show traffic statistics on an hourly basis for the last 24 hours using a bar graph:

`vnstat -hg`

- Measure and show average traffic for 30 seconds:

`vnstat -tr {{30}}`

vpnc

A VPN client for the Cisco 3000 VPN Concentrator.

- Connect with a defined configuration file:

```
sudo vpnc {{config_file}}
```

- Terminate the previously created connection:

```
sudo vpnc-disconnect
```

vrms

Report non-free packages installed on Debian-based OSes.

More information: <https://debian.pages.debian.net/vrms/>.

- List non-free and contrib packages (and their description):

`vrms`

- Only output the package names:

`vrms --sparse`

W

Display who is logged in and their processes.

More information: <https://www.geeksforgeeks.org/w-command-in-linux-with-examples/>.

- Display information about all users who are currently logged in:

w

- Display information about a specific user:

w {{user}}

- Display information without including the header:

w --no-header

- Display information without including the login, JCPU and PCPU columns:

w --short

wall

Write a message on the terminals of users currently logged in.

- Send a message:

```
echo "{{message}}" | wall
```

- Send a message from a file:

```
wall {{file}}
```

- Send a message with timeout (default 300):

```
wall -t {{seconds}} {{file}}
```

watch

Execute a command repeatedly, and monitor the output in full-screen mode.

- Monitor files in the current directory:

```
watch {{ls}}
```

- Monitor disk space and highlight the changes:

```
watch -d {{df}}
```

- Monitor "node" processes, refreshing every 3 seconds:

```
watch -n {{3}} "{{ps aux | grep node}}"
```

whatis

Display one-line descriptions from manual pages.

- Display a description from a man page:

```
whatis {{command}}
```

- Don't cut the description off at the end of the line:

```
whatis --long {{command}}
```

- Display descriptions for all commands matching a glob:

```
whatis --wildcard {{net*}}
```

- Search man page descriptions with a regular expression:

```
whatis --regex '{{wish[0-9]\.[0-9]}}'
```

whereis

Locate the binary, source, and manual page files for a command.

- Locate binary, source and man pages for ssh:

```
whereis {{ssh}}
```

- Locate binary and man pages for ls:

```
whereis -bm {{ls}}
```

- Locate source of gcc and man pages for git:

```
whereis -s {{gcc}} -m {{git}}
```

- Locate binaries for gcc in /usr/bin/ only:

```
whereis -b -B {{/usr/bin/}} -f {{gcc}}
```

- Locate unusual binaries (those that have more or less than one binary on the system):

```
whereis -u *
```

- Locate binaries that have unusual manual entries (binaries that have more or less than one manual installed):

```
whereis -u -m *
```

whiptail

Display text-based dialog boxes from shell scripts.

- Display a simple message:

```
whiptail --title "{{title}}" --msgbox "{{message}}"
{{height_in_chars}} {{width_in_chars}}
```

- Display a boolean choice, returning the result through the exit code:

```
whiptail --title "{{title}}" --yesno "{{message}}"
{{height_in_chars}} {{width_in_chars}}
```

- Customise the text on the yes / no buttons:

```
whiptail --title "{{title}}" --yes-button "{{text}}" --no-
button "{{text}}" --yesno "{{message}}" {{height_in_chars}}
{{width_in_chars}}
```

- Display a text input box:

```
{{result_variable_name}}=$(whiptail --title "{{title}}" --
inputbox "{{message}}" {{height_in_chars}} {{width_in_chars}}
{{default_text}} 3>&1 1>&2 2>&3)"
```

- Display a password input box:

```
{{result_variable_name}}=$(whiptail --title "{{title}}" --
passwordbox "{{message}}" {{height_in_chars}}
{{width_in_chars}} 3>&1 1>&2 2>&3)"
```

- Display a multiple-choice menu:

```
{{result_variable_name}}=$(whiptail --title "{{title}}" --
menu "{{message}}" {{height_in_chars}} {{width_in_chars}}
{{menu_display_height}} "{{value_1}}" "{{display_text_1}}"
 "{{value_n}}" "{{display_text_n}}" .... 3>&1 1>&2 2>&3)
```

wine

Run Windows programs on Unix.

More information: <https://wiki.winehq.org/>.

- Run ipconfig.exe program:

```
wine {{ipconfig}} {{/all}}
```

- Run cmd.exe in background:

```
wine start {{cmd}}
```

- Run Windows-like Package Manager:

```
wine uninstaller
```

- Install MSI packages:

```
wine msieexec /i {{package}}
```

wipefs

Wipe filesystem, raid, or partition-table signatures from a device.

- Display signatures for specified device:

```
sudo wipefs {{/dev/sdX}}
```

- Wipe all available signatures for specified device:

```
sudo wipefs --all {{/dev/sdX}}
```

- Perform dry run:

```
sudo wipefs --all --no-act {{/dev/sdX}}
```

- Force wipe, even if the filesystem is mounted:

```
sudo wipefs --all --force {{/dev/sdX}}
```

wmctrl

CLI for X Window Manager.

- List all windows, managed by the window manager:

```
wmctrl -l
```

- Switch to the first window whose (partial) title matches:

```
wmctrl -a {{window_title}}
```

- Move a window to the current workspace, raise it and give it focus:

```
wmctrl -R {{window_title}}
```

- Switch to a workspace:

```
wmctrl -s {{workspace_number}}
```

- Select a window and toggle fullscreen:

```
wmctrl -r {{window_title}} -b toggle,fullscreen
```

- Select a window and move it to a workspace:

```
wmctrl -r {{window_title}} -t {{workspace_number}}
```

wodim

Command (aliased as **cdrecord** on some systems) for recording data to CDs or DVDs.

Some invocations of wodim can cause destructive actions, such as erasing all the data on a disc.

- Display optical drives available to **wodim**:

```
wodim --devices
```

- Record ("burn") an audio-only disc:

```
wodim dev=/dev/{{optical_drive}} -audio {{track*.cdaudio}}
```

- Burn a file to a disc, ejecting the disc once done (some recorders require this):

```
wodim -eject dev=/dev/{{optical_drive}} -data {{file.iso}}
```

- Burn a file to the disc in an optical drive, potentially writing to multiple discs in succession:

```
wodim -tao dev=/dev/{{optical_drive}} -data {{file.iso}}
```

wpa_cli

Add and configure wlan interfaces.

- Scan for available networks:

```
wpa_cli scan
```

- Show scan results:

```
wpa_cli scan_results
```

- Add a network:

```
wpa_cli add_network {{number}}
```

- Set a network's SSID:

```
wpa_cli set_network {{number}} ssid "{{SSID}}"
```

- Enable network:

```
wpa_cli enable_network {{number}}
```

- Save config:

```
wpa_cli save_config
```

wpa_passphrase

Generate a WPA-PSK key from an ASCII passphrase for a given SSID.

- Compute and display the WPA-PSK key for a given SSID reading the passphrase from stdin:

```
wpa_passphrase {{SSID}}
```

- Compute and display WPA-PSK key for a given SSID specifying the passphrase as an argument:

```
wpa_passphrase {{SSID}} {{passphrase}}
```

wtf

Show the expansions of acronyms.

More information: <https://manpages.debian.org/bsdgames/wtf.6.en.html>.

- Expand a given acronym:

```
wtf {{IMO}}
```

- Specify a computer related search type:

```
wtf -t {{comp}} {{WWW}}
```

x0vncserver

TigerVNC Server for X displays.

More information: <https://tigervnc.org/doc/x0vncserver.html>.

- Start a VNC server using a passwordfile:

```
x0vncserver -display {{:0}} -passwordfile {{path/to/file}}
```

- Start a VNC server using a specific port:

```
x0vncserver -display {{:0}} -rfbport {{port}}
```

x11vnc

A VNC server that will enable VNC on an existing display ser.

By default, the server will automatically terminate once all clients disconnect from it.

- Launch a VNC server that allows multiple clients to connect:

```
x11vnc -shared
```

- Launch a VNC server in view-only mode, and which won't terminate once the last client disconnects:

```
x11vnc -forever -viewonly
```

- Launch a VNC server on a specific display and screen (both starting at index zero):

```
x11vnc -display :{{display}}.{{screen}}
```

- Launch a VNC server on the third display's default screen:

```
x11vnc -display :{{2}}
```

- Launch a VNC server on the first display's second screen:

```
x11vnc -display :{{0}}.{{1}}
```

xar

Manage .xar archives.

- Create a xar archive of all files in a given directory:

```
xar -cf {{archive.xar}} {{path/to/directory}}
```

- List the contents of a given xar archive:

```
xar -tf {{archive.xar}}
```

- Extract the contents of a given xar archive to the current directory:

```
xar -xf {{archive.xar}}
```

xbacklight

Utility to adjust backlight brightness using the RandR extension.

More information: <https://gitlab.freedesktop.org/xorg/app/xbacklight>.

- Get the current screen brightness as a percentage:

`xbacklight`

- Set the screen brightness to 40%:

`xbacklight -set {{40}}`

- Increase current brightness by 25%:

`xbacklight -inc {{25}}`

- Decrease current brightness by 75%:

`xbacklight -dec {{75}}`

- Increase backlight to 100%, over 60 seconds (value given in ms), using 60 steps:

`xbacklight -set {{100}} -time {{60000}} -steps {{60}}`

xbps

The X Binary Package System (or xbps) is the binary package system used by Void Linux.

More information: <https://github.com/void-linux/xbps>.

- Install packages and synchronize them with the remote repository:

```
xbps-install --synchronize {{package_name1}}
{{package_name2}}
```

- Search for a package in the remote repository:

```
xbps-query --repository -s {{package_name}}
```

- Remove a package, leaving all of its dependencies installed:

```
xbps-remove {{package_name}}
```

- Remove a package and all of its dependencies recursively that are not required by other packages:

```
xbps-remove --recursive {{package_name}}
```

- Synchronize your repository databases and update your system and dependencies:

```
xbps-install --synchronize -u
```

- Remove packages that were installed as dependencies and aren't currently needed:

```
xbps-remove --remove-orphans
```

- Remove obsolete packages from the cache:

```
xbps-remove --clean-cache
```

xclip

X11 clipboard manipulation tool, similar to **xsel**.

Handles the X primary and secondary selections, plus the system clipboard (**Ctrl + C**/
Ctrl + V).

- Copy the output from a command to the X11 primary selection area (clipboard):

```
echo 123 | xclip
```

- Copy the output from a command to a given X11 selection area:

```
echo 123 | xclip -selection {{primary|secondary|clipboard}}
```

- Copy the output from a command to the system clipboard, using short notation:

```
echo 123 | xclip -sel clip
```

- Copy the contents of a file into the system clipboard:

```
xclip -sel clip {{input_file.txt}}
```

- Copy the contents of a PNG image into the system clipboard (can be pasted in other programs correctly):

```
xclip -sel clip -t image/png {{input_file.png}}
```

- Copy the user input in the console into the system clipboard:

```
xclip -i
```

- Paste the contents of the X11 primary selection area to the console:

```
xclip -o
```

- Paste the contents of the system clipboard to the console:

```
xclip -o -sel clip
```

xclock

Display the time in analog or digital form.

- Display an analog clock:

`xclock`

- Display a 24-hour digital clock with the hour and minute fields only:

`xclock -digital -brief`

- Display a digital clock using an strftime format string (see `strftime(3)`):

`xclock -digital -strftime {{format}}`

- Display a 24-hour digital clock with the hour, minute and second fields that updates every second:

`xclock -digital -strftime '%H:%M:%S' -update 1`

- Display a 12-hour digital clock with the hour and minute fields only:

`xclock -digital -twelve -brief`

xdg-mime

Query and manage MIME types according to the XDG standard.

More information: <https://portland.freedesktop.org/doc/xdg-mime.html>.

- Display the MIME type of a file:

```
xdg-mime query filetype {{path/to/file}}
```

- Display the default application for opening PNG images:

```
xdg-mime query default {{image/png}}
```

- Display the default application for opening a specific file:

```
xdg-mime query default $(xdg-mime query filetype {{path/to/file}})
```

- Set imv as the default application for opening PNG and JPEG images:

```
xdg-mime default {{imv.desktop}} {{image/png}} {{image/jpeg}}
```

xdotool

Command line automation for X11.

- Retrieve the X-Windows window ID of the running Firefox window(s):

```
xdotool search --onlyvisible --name {{firefox}}
```

- Click the right mouse button:

```
xdotool click {{3}}
```

- Get the id of the currently active window:

```
xdotool getactivewindow
```

- Focus on the window with id of 12345:

```
xdotool windowfocus --sync {{12345}}
```

- Type a message, with a 500ms delay for each letter:

```
xdotool type --delay {{500}} "Hello world"
```

- Press the enter key:

```
xdotool key {{KP_Enter}}
```

xeyes

Display eyes on the screen that follow the mouse cursor.

- Launch xeyes on the local machine's default display:

```
xeyes
```

- Launch xeyes on a remote machine's display 0, screen 0:

```
xeyes -display {{remote_host}}:{{0}}.{{0}}
```

xfce4-screenshoter

The XFCE4 screenshot tool.

- Launch the screenshoter GUI:

```
xfce4-screenshoter
```

- Take a screenshot of the entire screen and launch the GUI to ask how to proceed:

```
xfce4-screenshoter --fullscreen
```

- Take a screenshot of the entire screen and save it in the specified directory:

```
xfce4-screenshoter --fullscreen --save {{path/to/directory}}
```

- Wait some time before taking the screenshot:

```
xfce4-screenshoter --delay {{seconds}}
```

- Take a screenshot of a region of the screen (select using the mouse):

```
xfce4-screenshoter --region
```

- Take a screenshot of the active window, and copy it to the clipboard:

```
xfce4-screenshoter --window --clipboard
```

- Take a screenshot of the active window, and open it with a chosen program:

```
xfce4-screenshoter --window --open {{gimp}}
```

xfce4-terminal

The XFCE4 terminal emulator.

- Open a new terminal window:

```
xfce4-terminal
```

- Set the initial title:

```
xfce4-terminal --initial-title "{{initial_title}}"
```

- Open a new tab in the current terminal window:

```
xfce4-terminal --tab
```

- Execute a command in a new terminal window:

```
xfce4-terminal --command "{{command_with_args}}"
```

- Keep the terminal around after the executed command finishes executing:

```
xfce4-terminal --command "{{command_with_args}}" --hold
```

- Open multiple new tabs, executing a command in each:

```
xfce4-terminal --tab --command "{{command_a}}" --tab --command "{{command_b}}"
```

xinput

List available input devices, query information about a device and change input device settings.

- List all input devices:

```
xinput list
```

- Disable an input:

```
xinput disable {{id}}
```

- Enable an input:

```
xinput enable {{id}}
```

- Disconnect an input from its master:

```
xinput float {{id}}
```

- Reattach an input as slave to a master:

```
xinput reattach {{id}} {{master_id}}
```

xman

Manual page viewer for X Window System.

- Start xman in three-button window:

`xman`

- Open the manual page output stored in a given file:

`xman -helpfile {{filename}}`

- Show both manual page and directory:

`xman -bothshown`

xrandr

Set the size, orientation and/or reflection of the outputs for a screen.

- Display the current state of the system (known screens, resolutions, ...):

```
xrandr --query
```

- Disable disconnected outputs and enable connected ones with default settings:

```
xrandr --auto
```

- Change the resolution and update frequency of DisplayPort 1 to 1920x1080, 60Hz:

```
xrandr --output {{DP1}} --mode {{1920x1080}} --rate {{60}}
```

- Set the resolution of HDMI2 to 1280x1024 and put it on the right of DP1:

```
xrandr --output {{HDMI2}} --mode {{1280x1024}} --right-of {{DP1}}
```

- Disable the VGA1 output:

```
xrandr --output {{VGA1}} --off
```

- Set brightness for LVDS1 to 50%:

```
xrandr --output {{LVDS1}} --brightness {{0.5}}
```

- See display hardware information:

```
xrandr -q
```

xsel

X11 selection and clipboard manipulation tool.

- Use a command's output as input of the clip[b]oard (equivalent to **Ctrl + C**):

```
echo 123 | xsel -ib
```

- Use the contents of a file as input of the clipboard:

```
cat {{file}} | xsel -ib
```

- Output the clipboard's contents into the terminal (equivalent to **Ctrl + V**):

```
xsel -ob
```

- Output the clipboard's contents into a file:

```
xsel -ob > {{file}}
```

- Clear the clipboard:

```
xsel -cb
```

- Output the X11 primary selection's contents into the terminal (equivalent to a mouse middle-click):

```
xsel -op
```

xsetwacom

Command line tool to change settings for Wacom pen tablets at runtime.

- List all the available wacom devices. The device name is in the first column:

```
xsetwacom list
```

- Set Wacom area to specific screen. Get name of the screen with `xrandr`:

```
xsetwacom set "{{device_name}}" MapToOutput {{screen}}
```

- Set mode to relative (like a mouse) or absolute (like a pen) mode:

```
xsetwacom set "{{device_name}}" Mode "{{Relative|Absolute}}
```

- Rotate the input (useful for tablet-PC when rotating screen) by 0|90|180|270 degrees from "natural" rotation:

```
xsetwacom set "{{device_name}}" Rotate {{none|half|cw|ccw}}
```

- Set button to only work when the tip of the pen is touching the tablet:

```
xsetwacom set "{{device_name}}" TabletPCButton "on"
```

xterm

A terminal emulator for the X Window System.

- Open the terminal with a title of **Example**:

```
xterm -T {{Example}}
```

- Open the terminal in fullscreen mode:

```
xterm -fullscreen
```

- Open the terminal with a dark blue background and yellow foreground (font color):

```
xterm -bg {{darkblue}} -fg {{yellow}}
```

- Open the terminal with 100 characters per line and 35 lines, in screen position x=200px, y=20px:

```
xterm -geometry {{100}}x{{35}}+{{200}}+{{20}}
```

- Open the terminal using a Serif font and a font size equal to 20:

```
xterm -fa {{'Serif'}} -fs {{20}}
```

xtrlock

Lock the X display until the user supplies their password.

- Lock the display and show a padlock instead of the cursor:

`xtrlock`

- Display a blank screen as well as the padlock cursor:

`xtrlock -b`

- Fork the xtrlock process and return immediately:

`xtrlock -f`

xvfb-run

Run a command in a virtual X server environment.

More information: <https://www.x.org/wiki/>.

- Run the specified command in a virtual X server:

```
xvfb-run {{command}}
```

- Try to get a free server number, if the default (99) is not available:

```
xvfb-run --auto-servernum {{command}}
```

- Pass arguments to the Xvfb server:

```
xvfb-run --server-args "{{-screen 0 1024x768x24}}"  
{{command}}
```

yank

Read input from **stdin** and display a selection interface that allows a field to be selected and copied to the clipboard.

- Yank using the default delimiters (\f, \n, \r, \s, \t):

```
{ {sudo dmesg} } | yank
```

- Yank an entire line:

```
{ {sudo dmesg} } | yank -l
```

- Yank using a specific delimiter:

```
{ {echo hello=world} } | yank -d { = }
```

- Only yank fields matching a specific pattern:

```
{ {ps ux} } | yank -g "[0-9]+"
```

yaourt

Arch Linux utility for building packages from the Arch User Repository.

- Synchronize and update all packages (including AUR):

`yaourt -Syua`

- Install a new package (includes AUR):

`yaourt -S {{package_name}}`

- Remove a package and its dependencies (includes AUR packages):

`yaourt -Rs {{package_name}}`

- Search the package database for a keyword (including AUR):

`yaourt -Ss {{package_name}}`

- List installed packages, versions, and repositories (AUR packages will be listed under the repository name 'local'):

`yaourt -Q`

yay

Yet Another Yogurt: A utility for Arch Linux to build and install packages from the Arch User Repository.

Also see [pacman](#).

- Interactively search and install packages from the repos and AUR:

```
yay {{package_name|search_term}}
```

- Synchronize and update all packages from the repos and AUR:

```
yay
```

- Synchronize and update only AUR packages:

```
yay -Sua
```

- Install a new package from the repos and AUR:

```
yay -S {{package_name}}
```

- Search the package database for a keyword from the repos and AUR:

```
yay -Ss {{keyword}}
```

- Show statistics for installed packages and system health:

```
yay -Ps
```

yetris

Clone of the game Tetris in the terminal.

More information: <https://github.com/alexandantas/yetris>.

- Start a tetris game:

`yetris`

- Navigate the piece horizontally:

`{{Left|Right}} arrow key`

- Rotate the piece clockwise or counterclockwise:

`{{x|z}}`

- Hold a piece (only one allowed at a time):

`c`

- Soft drop the piece:

`Down arrow key`

- Hard drop the piece:

`Spacebar`

- Pause/unpause the game:

`p`

- Quit the game:

`q`

- Show the help during the game:

`h`

yum

Package management utility for RHEL, Fedora, and CentOS (for older versions).

More information: <https://man7.org/linux/man-pages/man8/yum.8.html>.

- Install a new package:

```
yum install {{package}}
```

- Install a new package and assume yes to all questions (also works with update, great for automated updates):

```
yum -y install {{package}}
```

- Find the package that provides a particular command:

```
yum provides {{command}}
```

- Remove a package:

```
yum remove {{package}}
```

- Display available updates for installed packages:

```
yum check-update
```

- Upgrade installed packages to newest available versions:

```
yum upgrade
```

zenity

Display dialogs from the command line/shell scripts.

Return user-inserted values or 1 if error.

- Display the default question dialog:

```
zenity --question
```

- Display an info dialog displaying the text "Hello!":

```
zenity --info --text="{{Hello!}}"
```

- Display a name/password form and output the data separated by ";" :

```
zenity --forms --add-entry="{{Name}}" --add-
password="{{Password}}" --separator="{{;}}"
```

- Display a file selection form in which the user can only select directories:

```
zenity --file-selection --directory
```

- Display a progress bar which updates its message every second and show a progress percent:

```
{{(echo "#1"; sleep 1; echo "50"; echo "#2"; sleep 1; echo
"100")}} | zenity --progress
```

zgrep

Grep text patterns from files within compressed file (equivalent to grep -Z).

- Grep a pattern in a compressed file (case-sensitive):

```
zgrep {{pattern}} {{path/to/compressed/file}}
```

- Grep a pattern in a compressed file (case-insensitive):

```
zgrep -i {{pattern}} {{path/to/compressed/file}}
```

- Output count of lines containing matched pattern in a compressed file:

```
zgrep -c {{pattern}} {{path/to/compressed/file}}
```

- Display the lines which don't have the pattern present (Invert the search function):

```
zgrep -v {{pattern}} {{path/to/compressed/file}}
```

- Grep a compressed file for multiple patterns:

```
zgrep -e "{{pattern_1}}" -e "{{pattern_2}}" {{path/to/compressed/file}}
```

- Use extended regular expressions (supporting ?, +, {}, (), and |):

```
zgrep -E {{^regex$}} {{path/to/file}}
```

- Print 3 lines of [C]ontext around, [B]efore, or [A]fter each match:

```
zgrep -{{C|B|A}} {{3}} {{pattern}} {{path/to/compressed/file}}
```

zile

Zile is a lightweight clone of the Emacs text editor.

More information: <https://www.gnu.org/software/zile/>.

- Start a buffer for temporary notes, which won't be saved:

`zile`

- Open a file:

`zile {{path/to/file}}`

- Save a file:

`Ctrl + X, Ctrl + S`

- Quit:

`Ctrl + X, Ctrl + C`

- Open a file at a specified line number:

`zile +{{line_number}} {{path/to/file}}`

- Undo changes:

`Ctrl + X, U`

zramctl

Setup and control zram devices.

Use **mkfs** or **mkswap** to format zram devices to partitions.

- Check if zram is enabled:

```
lsmod | grep -i zram
```

- Enable zram with a dynamic number of devices (use **zramctl** to configure devices further):

```
sudo modprobe zram
```

- Enable zram with exactly 2 devices:

```
sudo modprobe zram num_devices={2}
```

- Find and initialise the next free zram device to a 2GB virtual drive using LZ4 compression:

```
sudo zramctl --find --size {{2GB}} --algorithm {{lz4}}
```

- List currently initialised devices:

```
zramctl
```

zypper

SUSE & openSUSE package management utility.

- Synchronize list of packages and versions available:

```
zypper refresh
```

- Install a new package:

```
zypper install {{package}}
```

- Remove a package:

```
zypper remove {{package}}
```

- Upgrade installed packages to newest available versions:

```
zypper update
```

- Search package via keyword:

```
zypper search {{keyword}}
```

Osx

GetFileInfo

Get information about a file in an HFS+ directory.

- Display infomation about a given file:

```
GetFileInfo {{path/to/filename}}
```

- Display the date and time a given file was created:

```
GetFileInfo -d {{path/to/filename}}
```

- Display the date and time a given file was last modified:

```
GetFileInfo -m {{path/to/filename}}
```

- Display the creator of a given file:

```
GetFileInfo -c {{path/to/filename}}
```

afinfo

Audio file metadata parser for OS X.

Built-in command of OS X.

- Display info of a given audio file:

```
afinfo {{path/to/file}}
```

- Print a one line description of the audio file:

```
afinfo -b {{path/to/file}}
```

- Print metadata info and contents of the audio file's InfoDictionary:

```
afinfo -i {{path/to/file}}
```

- Print output in xml format:

```
afinfo -x {{path/to/file}}
```

- Print warnings for the audio file if any:

```
afinfo --warnings {{path/to/file}}
```

- Display help for full usage:

```
afinfo -h
```

afplay

Command-line audio player.

- Play a sound file (waits until playback ends):

```
afplay {{path/to/file}}
```

- Play a sound file at 2x speed (playback rate):

```
afplay --rate {{2}} {{path/to/file}}
```

- Play a sound file at half speed:

```
afplay --rate {{0.5}} {{path/to/file}}
```

- Play the first N seconds of a sound file:

```
afplay --time {{seconds}} {{path/to/file}}
```

airport

Wireless network configuration utility.

- Show current wireless status information:

```
airport -I
```

- Sniff wireless traffic on channel 1:

```
airport sniff {{1}}
```

- Scan for available wireless networks:

```
airport -s
```

- Disassociate from current airport network:

```
sudo airport -z
```

apachectl

Apache HTTP Server control interface for macOS.

- Start the org.apache.httpd launchd job:

```
apachectl start
```

- Stop the launchd job:

```
apachectl stop
```

- Stop, then start launchd job:

```
apachectl restart
```

archey

Simple tool for stylishly displaying system information.

- Show system information:

`archey`

- Show system information without colored output:

`archey --nocolor`

- Show system information, using MacPorts instead of Homebrew:

`archey --macports`

- Show system information without IP address check:

`archey --offline`

as

Portable GNU assembler.

Primarily intended to assemble output from **gcc** to be used by **ld**.

- Assemble a file, writing the output to a.out:

```
as {{file.s}}
```

- Assemble the output to a given file:

```
as {{file.s}} -o {{out.o}}
```

- Generate output faster by skipping whitespace and comment preprocessing.
(Should only be used for trusted compilers):

```
as -f {{file.s}}
```

- Include a given path to the list of directories to search for files specified in .include directives:

```
as -I {{path/to/directory}} {{file.s}}
```

asr

Restore (copy) a disk image onto a volume.

The command name stands for Apple Software Restore.

- Restore a disk image to a target volume:

```
sudo asr restore --source {{image_name}}.dmg --target {{path/to/volume}}
```

- Erase the target volume before restoring:

```
sudo asr restore --source {{image_name}}.dmg --target {{path/to/volume}} --erase
```

- Skip verification after restoring:

```
sudo asr restore --source {{image_name}}.dmg --target {{path/to/volume}} --noverify
```

- Clone volumes without the use of an intermediate disk image:

```
sudo asr restore --source {{path/to/volume}} --target {{path/to/cloned_volume}}
```

base64

Encode and decode using Base64 representation.

- Encode a file:

```
base64 -i {{plain_file}}
```

- Decode a file:

```
base64 -D -i {{base64_file}}
```

- Encode from `stdin`:

```
echo -n {{plain_text}} | base64
```

- Decode from `stdin`:

```
echo -n {{base64_text}} | base64 -D
```

bless

Set volume bootability and startup disk options.

- FOLDER MODE: bless a volume with only Mac OS X or Darwin, and create the BootX and boot.efi files as needed:

```
bless --folder {{/Volumes/Mac OS X/System/Library/CoreServices}} --bootinfo --bootefi
```

- MOUNT MODE: set a volume containing either Mac OS 9 and Mac OS X to be the active volume:

```
bless --mount {{/Volumes/Mac OS}} --setBoot
```

- NETBOOT MODE: set the system to NetBoot and broadcast for an available server:

```
bless --netboot --server {{bsdp://255.255.255.255}}
```

- INFO MODE: gather information about the currently selected volume (as determined by the firmware), suitable for piping to a program capable of parsing Property Lists:

```
bless --info --plist
```

brew bundle

Bundler for Homebrew, Homebrew Cask and the Mac App Store.

More information: <https://github.com/Homebrew/homebrew-bundle>.

- Install packages from a Brewfile at the current path:

```
brew bundle
```

- Install packages from a specific Brewfile at a specific path:

```
brew bundle --file={{path/to/file}}
```

- Create a Brewfile from all installed packages:

```
brew bundle dump
```

- Uninstall all formulae not listed in the Brewfile:

```
brew bundle cleanup --force
```

- Check if there is anything to install or upgrade in the Brewfile:

```
brew bundle check
```

- Output a list of all entries in the Brewfile:

```
brew bundle list --all
```

brew cask

Package manager for macOS applications distributed as binaries.

More information: <https://github.com/Homebrew/homebrew-cask>.

- Search for formulas and casks:

```
brew search {{text}}
```

- Install a cask:

```
brew cask install {{cask_name}}
```

- List all installed casks:

```
brew list --cask
```

- List installed casks that have newer versions available:

```
brew outdated --cask
```

- Upgrade an installed cask (if no cask name is given, all installed casks are upgraded):

```
brew upgrade --cask {{cask_name}}
```

- Uninstall a cask:

```
brew cask uninstall {{cask_name}}
```

- Uninstall a cask and remove related settings and files:

```
brew cask zap {{cask_name}}
```

- Display information about a given cask:

```
brew cask info {{cask_name}}
```

brew

Package manager for macOS.

More information: <https://brew.sh>.

- Search for available formulae and casks:

```
brew search {{text}}
```

- Install the latest stable version of a formula (use `--devel` for development versions):

```
brew install {{formula}}
```

- List all installed formulae:

```
brew list
```

- List installed formulae that are not dependencies of another installed formula:

```
brew leaves
```

- Upgrade an installed formula (if no formula name is given, all installed formulae are upgraded):

```
brew upgrade {{formula}}
```

- Fetch the newest version of Homebrew and of all formulae from GitHub:

```
brew update
```

- Remove old versions of installed formulae (if no formula name is given, all installed formulae are processed):

```
brew cleanup {{formula}}
```

- Display information about a formula (version, installation path, dependencies, etc.):

```
brew info {{formula}}
```

- Check the local Homebrew installation for potential problems:

```
brew doctor
```

brightness

Get and set the brightness level of all internal and certain external displays.

- Show current brightness:

```
brightness -l
```

- Set the brightness to 100%::

```
brightness {{1}}
```

- Set the brightness to 50%::

```
brightness {{0.5}}
```

caffeinate

Prevent mac from sleeping.

- Prevent from sleeping for 1 hour (3600 seconds):

```
caffeinate -u -t {{3600}}
```

- Prevent from sleeping until a command completes:

```
caffeinate -s {{command}}
```

- Prevent from sleeping until you type Ctrl-C:

```
caffeinate -i
```

cal

Prints calendar information.

- Display a calendar for the current month:

`cal`

- Display previous, current and next month:

`cal -3`

- Display a calendar for a specific month (1-12 or name):

`cal -m {{month}}`

- Display a calendar for the current year:

`cal -y`

- Display a calendar for a specific year (4 digits):

`cal {{year}}`

- Display a calendar for a specific month and year:

`cal {{month}} {{year}}`

- Display date of Easter (Western Christian churches) in a given year:

`ncal -e {{year}}`

carthage

A dependency management tool for Cocoa applications.

- Download the latest version of all dependencies mentioned in Cartfile, and build them:

```
carthage update
```

- Update dependencies, but only build for iOS:

```
carthage update --platform ios
```

- Update dependencies, but don't build any of them:

```
carthage update --no-build
```

- Download and rebuild the current version of dependencies (without updating them):

```
carthage bootstrap
```

- Rebuild a specific dependency:

```
carthage build {{dependency}}
```

chflags

Change file or directory flags.

- Set the **hidden** flag for a file:

```
chflags {{hidden}} {{path/to/file}}
```

- Unset the **hidden** flag for a file:

```
chflags {{nohidden}} {{path/to/file}}
```

- Recursively set the **uchg** flag for a directory:

```
chflags -R {{uchg}} {{path/to/directory}}
```

- Recursively unset the **uchg** flag for a directory:

```
chflags -R {{nouchg}} {{path/to/directory}}
```

codesign

Create and manipulate code signatures for macOS.

- Sign an application with a certificate:

```
codesign -s "{{My Company Name}}" {{path/to/App.app}}
```

- Verify the certificate of an application:

```
codesign -v {{path/to/App.app}}
```

compgen

A built-in command for auto-completion in bash, which is called on pressing TAB key twice.

- List all commands that you could run:

```
compgen -c
```

- List all aliases:

```
compgen -a
```

- List all functions that you could run:

```
compgen -A function
```

- Show shell reserved key words:

```
compgen -k
```

- See all available commands/aliases starting with 'ls':

```
compgen -ac {{ls}}
```

csshX

Cluster SSH tool for MacOS.

More information: <https://github.com/brockgr/csshx>.

- Connect to multiple hosts:

```
csshX {{hostname1}} {{hostname2}}
```

- Connect to multiple hosts with a given SSH key:

```
csshX {{user@hostname1}} {{user@hostname2}} '--ssh_args' '-i  
{{path/to/ssh_key.pem}}'
```

- Connect to a pre-defined cluster from /etc/clusters:

```
csshX cluster1
```

date

Set or display the system date.

- Display the current date using the default locale's format:

```
date +"%c"
```

- Display the current date in UTC and ISO 8601 format:

```
date -u +"%Y-%m-%dT%H:%M:%S%Z"
```

- Display the current date as a Unix timestamp (seconds since the Unix epoch):

```
date +%s
```

- Display a specific date (represented as a Unix timestamp) using the default format:

```
date -r 1473305798
```

dd

Convert and copy a file.

- Make a bootable usb drive from an isohybrid file (such like archlinux-xxx.iso):

```
dd if={{file.iso}} of=/dev/{{usb_drive}}
```

- Clone a drive to another drive with 4MB block and ignore error:

```
dd if=/dev/{{source_drive}} of=/dev/{{dest_drive}} bs=4m  
conv=noerror
```

- Generate a file of 100 random bytes by using kernel random driver:

```
dd if=/dev/urandom of={{random_file}} bs=100 count=1
```

- Benchmark the write performance of a disk:

```
dd if=/dev/zero of={{file_1GB}} bs=1024 count=1000000
```

defaults

Read and write macOS user configuration for applications.

- Read system defaults for an application option:

```
defaults read {{application}} {{option}}
```

- Read default values for an application option:

```
defaults read -app {{application}} {{option}}
```

- Write the default value of an application option:

```
defaults write {{application}} {{option}} {{-type}} {{value}}
```

- Speed up Mission Control animations:

```
defaults write com.apple.Dock expose-animation-duration -float 0.1
```

- Delete all defaults of an application:

```
defaults delete {{application}}
```

diskutil

Utility to manage local disks and volumes.

- List all currently available disks, partitions and mounted volumes:

```
diskutil list
```

- Repair the filesystem data structures of a volume:

```
diskutil repairVolume {{/dev/diskX}}
```

- Unmount a volume:

```
diskutil unmountDisk {{/dev/diskX}}
```

- Eject a CD/DVD (unmount first):

```
diskutil eject {{/dev/disk1}}
```

ditto

Copy files and directories.

- Overwrite contents of destination directory with contents of source directory:

```
ditto {{path/to/source}} {{path/to/destination}}
```

- Print a line to the Terminal window for every file that's being copied:

```
ditto -V {{path/to/source}} {{path/to/destination}}
```

- Copy a given file or directory, while retaining the original file permissions:

```
ditto -rsr {{path/to/source}} {{path/to/destination}}
```

dmesg

Write the kernel messages to standard output.

- Show kernel messages:

```
dmesg
```

- Show how much physical memory is available on this system:

```
dmesg | grep -i memory
```

- Show kernel messages 1 page at a time:

```
dmesg | less
```

drutil

Interact with DVD burners.

- Eject a disk from the drive:

```
drutil eject
```

- Burn a directory as an ISO9660 filesystem onto a DVD. Don't verify and eject when complete:

```
drutil burn -noverify -eject -iso9660
```

du

Disk usage: estimate and summarize file and directory space usage.

- List the sizes of a directory and any subdirectories, in the given unit (KB/MB/GB):

```
du -{{k|m|g}} {{path/to/directory}}
```

- List the sizes of a directory and any subdirectories, in human-readable form (i.e. auto-selecting the appropriate unit for each size):

```
du -h {{path/to/directory}}
```

- Show the size of a single directory, in human readable units:

```
du -sh {{path/to/directory}}
```

- List the human-readable sizes of a directory and of all the files and directories within it:

```
du -ah {{path/to/directory}}
```

- List the human-readable sizes of a directory and any subdirectories, up to N levels deep:

```
du -h -d {{N}} {{path/to/directory}}
```

- List the human-readable size of all .jpg files in subdirectories of the current directory, and show a cumulative total at the end:

```
du -ch */*.jpg
```

duti

Set default applications for document types and URL schemes on macOS.

- Set Safari as the default handler for HTML documents:

```
duti -s {{com.apple.Safari}} {{public.html}} all
```

- Set VLC as the default viewer for files with .m4v extensions:

```
duti -s {{org.videolan.vlc}} {{m4v}} viewer
```

- Set Finder as the default handler for the ftp:// URL scheme:

```
duti -s {{com.apple.Finder}} {{ftp}}
```

- Display information about the default application for a given extension:

```
duti -x {{ext}}
```

- Display the default handler for a given UTI:

```
duti -d {{uti}}
```

- Display all handlers of a given UTI:

```
duti -l {{uti}}
```

eval

Execute arguments as a single command in the current shell and return its result.

- Call `echo` with the "foo" argument:

```
eval "{{echo foo}}"
```

- Set a variable in the current shell:

```
eval "{{foo=bar}}"
```

export

Command to mark shell variables in the current environment to be exported with any newly forked child processes.

- Set a new environment variable:

```
export {{VARIABLE}}={{value}}
```

- Remove an environment variable:

```
export -n {{VARIABLE}}
```

- Append something to the PATH variable:

```
export PATH=$PATH:{{path/to/append}}
```

fc

Open the most recent command and edit it.

- Open in the default system editor:

`fc`

- Specify an editor to open with:

`fc -e {{'emacs'}}`

- List recent commands from history:

`fc -l`

fdesetup

Set and retrieve FileVault related information.

- List current FileVault enabled users:

```
sudo fdesetup list
```

- Get current FileVault status:

```
fdesetup status
```

- Add FileVault enabled user:

```
sudo fdesetup add -usertoadd user1
```

- Enable FileVault:

```
sudo fdesetup enable
```

- Disable FileVault:

```
sudo fdesetup disable
```

feh

Lightweight image viewing utility.

- View images locally or using a URL:

```
feh {{path/to/images}}
```

- View images recursively:

```
feh --recursive {{path/to/images}}
```

- View images without window borders:

```
feh --borderless {{path/to/images}}
```

- Exit after the last image:

```
feh --cycle-once {{path/to/images}}
```

- Set the slideshow cycle delay:

```
feh --slideshow-delay {{seconds}} {{path/to/images}}
```

- Set your wallpaper (centered, filled, maximized, scaled or tiled):

```
feh --bg-{{center|fill|max|scale|tile}} {{path/to/image}}
```

file

Determine file type.

- Give a description of the type of the specified file. Works fine for files with no file extension:

```
file {{filename}}
```

- Look inside a zipped file and determine the file type(s) inside:

```
file -z {{foo.zip}}
```

- Allow file to work with special or device files:

```
file -s {{filename}}
```

- Don't stop at first file type match; keep going until the end of the file:

```
file -k {{filename}}
```

- Determine the mime encoding type of a file:

```
file -I {{filename}}
```

fsck

Check the integrity of a filesystem or repair it. The filesystem should be unmounted at the time the command is run.

It is a wrapper that calls `fsck_hfs`, `fsck_apfs`, `fsck_msdos`, `fsck_exfat`, and `fsck_udf` as needed.

- Check filesystem `/dev/sdX`, reporting any damaged blocks:

```
fsck {{/dev/sdX}}
```

- Check filesystem `/dev/sdX` only if it is clean, reporting any damaged blocks and interactively letting the user choose to repair each one:

```
fsck -f {{/dev/sdX}}
```

- Check filesystem `/dev/sdX` only if it is clean, reporting any damaged blocks and automatically repairing them:

```
fsck -fy {{/dev/sdX}}
```

- Check filesystem `/dev/sdX`, reporting whether it has been cleanly unmounted:

```
fsck -q {{/dev/sdX}}
```

hdiutil

Utility to create and manage disk images.

- Mount an image:

```
hdiutil attach {{path/to/image_file}}
```

- Unmount an image:

```
hdiutil detach /Volumes/{{volume_name}}
```

- List mounted images:

```
hdiutil info
```

- Create an ISO image from the contents of a directory:

```
hdiutil makehybrid -o {{path/to/output_file}} {{path/to/directory}}
```

head

Output the first part of files.

- Output the first few lines of a file:

```
head -n {{count_of_lines}} {{filename}}
```

- Output the first few bytes of a file:

```
head -c {{number_in_bytes}} {{filename}}
```

hexdump

An ASCII, decimal, hexadecimal, octal dump.

- Print the hexadecimal representation of a file:

```
hexdump {{file}}
```

- Display the input offset in hexadecimal and its ASCII representation in two columns:

```
hexdump -C {{file}}
```

- Display the hexadecimal representation of a file, but interpret only n bytes of the input:

```
hexdump -C -n{{number_of_bytes}} {{file}}
```

hostname

Show or set the system's host name.

- Show current host name:

```
hostname
```

- Set current host name:

```
hostname {{new_hostname}}
```

icalBuddy

Command-line utility for printing events and tasks from the macOS calendar database.

More information: <https://hasseg.org/icalBuddy/>.

- Show events later today:

```
icalBuddy -n eventsToday
```

- Show uncompleted tasks:

```
icalBuddy uncompletedTasks
```

- Show a formatted list separated by calendar for all events today:

```
icalBuddy -f -sc eventsToday
```

- Show tasks for a specified number of days:

```
icalBuddy -n tasksDueBefore:today+{{days}}
```

- Show events in a time range:

```
icalBuddy eventsFrom:'{{start_date}}' to:'{{end_date}}'
```

imgcat

A utility to display images directly on the command line.

Requires a compatible terminal such as iTerm2.

- Display an image on the command line:

```
imgcat {{filename}}
```

indent

Change the appearance of a C/C++ program by inserting or deleting whitespace.

More information: <https://www.freebsd.org/cgi/man.cgi?query=indent>.

- Format C/C++ source according to the Berkeley style:

```
indent {{path/to/source.c}} {{path/to/indented_source.c}} -  
nbad -nbap -bc -br -c33 -cd33 -cdb -ce -ci4 -cli0 -di16 -fc1  
-fcb -i4 -ip -l75 -lp -npcs -nprs -psl -sc -nsob -ts8
```

- Format C/C++ source according to the style of Kernigan & Ritchie (K&R):

```
indent {{path/to/source.c}} {{path/to/indented_source.c}} -  
nbad -bap -nbc -br -c33 -cd33 -ncdb -ce -ci4 -cli0 -cs -d0 -  
di1 -nfcl -nfcb -i4 -nip -l75 -lp -npcs -nprs -npsl -nsc -  
nsob
```

iStats

CLI tool that shows statistics such as CPU temperature, fan speeds and battery status.

More information: <https://github.com/Chris911/iStats>.

- Show all the stats:

`iStats`

- Show all CPU stats:

`iStats cpu`

- Show all fan stats:

`iStats fan`

- Scan and print temperatures:

`iStats scan`

launchctl

A command-line interface to Apple's **launchd** manager for launch daemons (system-wide services) and launch agents (per-user programs).

launchd loads XML-based ***.plist** files placed in the appropriate locations, and runs the corresponding commands according to their defined schedule.

- Activate a user-specific agent to be loaded into **launchd** whenever the user logs in:

```
launchctl load ~/Library/LaunchAgents/{{my_script}}.plist
```

- Activate an agent which requires root privileges to run and/or should be loaded whenever any user logs in (note the absence of `~` in the path):

```
sudo launchctl load /Library/LaunchAgents/{{root_script}}.plist
```

- Activate a system-wide daemon to be loaded whenever the system boots up (even if no user logs in):

```
sudo launchctl load /Library/LaunchDaemons/{{system_daemon}}.plist
```

- Show all loaded agents/daemons, with the PID if the process they specify is currently running, and the exit code returned the last time they ran:

```
launchctl list
```

- Unload a currently loaded agent, e.g. to make changes (note: the plist file is automatically loaded into **launchd** after a reboot and/or logging in):

```
launchctl unload ~/Library/LaunchAgents/{{my_script}}.plist
```

- Manually run a known (loaded) agent/daemon, even if it is not the right time (note: this command uses the agent's label, rather than the filename):

```
launchctl start {{my_script}}
```

- Manually kill the process associated with a known agent/daemon, if it is running:

```
launchctl stop {{my_script}}
```

lldb

The LLVM Low-Level Debugger.

- Debug an executable:

```
lldb {{executable}}
```

- Attach **lldb** to a running process with a given PID:

```
lldb -p {{pid}}
```

- Wait for a new process to launch with a given name, and attach to it:

```
lldb -w -n {{process_name}}
```

locate

Find filenames quickly.

- Look for pattern in the database. Note: the database is recomputed periodically (usually weekly or daily):

```
locate {{pattern}}
```

- Look for a file by its exact filename (a pattern containing no globbing characters is interpreted as ***pattern***):

```
locate */{{filename}}
```

- Recompute the database. You need to do it if you want to find recently added files:

```
sudo /usr/libexec/locate.updatedb
```

logger

Add messages to syslog (/var/log/syslog).

- Log a message to syslog:

```
logger {{message}}
```

- Take input from `stdin` and log to syslog:

```
echo {{log_entry}} | logger
```

- Send the output to a remote syslog server running at a given port. Default port is 514:

```
echo {{log_entry}} | logger -h {{hostname}} -P {{port}}
```

- Use a specific tag for every line logged. Default is the name of logged in user:

```
echo {{log_entry}} | logger -t {{tag}}
```

- Log messages with a given priority. Default is `user.notice`. See `man logger` for all priority options:

```
echo {{log_entry}} | logger -p {{user.warning}}
```

look

Look for lines in sorted file.

- Look for lines which begins with the given prefix:

```
look {{prefix}} {{file}}
```

- Look for lines ignoring case:

```
look -f {{prefix}} {{file}}
```

m

Swiss Army Knife for macOS.

- Get the battery status:

```
m battery status
```

- Turn off bluetooth:

```
m bluetooth off
```

- List available filesystems for formatting:

```
m disk filesystems
```

- Enable Dock's auto hide feature:

```
m dock autohide YES
```

- Disable the firewall:

```
m firewall disable
```

mas

Command line interface for the Mac App Store.

More information: <https://github.com/mas-cli/mas>.

- Sign into the Mac App Store for the first time:

```
mas signin {{user@example.com}}
```

- Show all installed applications and their product identifiers:

```
mas list
```

- Search for an application, displaying the price alongside the results:

```
mas search {{application}} --price
```

- Install or update an application:

```
mas install {{product_identifier}}
```

- Install all pending updates:

```
mas upgrade
```

md5

Calculate MD5 cryptographic checksums.

- Calculate the MD5 checksum for a file:

```
md5 {{filename}}
```

- Calculate MD5 checksums for multiple files:

```
md5 {{filename1}} {{filename2}}
```

- Output only the md5 checksum (no filename):

```
md5 -q {{filename}}
```

- Print a checksum of the given string:

```
md5 -s {{string}}
```

mdfind

List files matching a given query.

- Find a file by its name:

```
mdfind -name {{file}}
```

- Find a file by its content:

```
mdfind {{query}}
```

- Find a file containing a string, in a given directory:

```
mdfind -onlyin {{directory}} {{query}}
```

mdls

Display the metadata attributes for a file.

- Display the list of metadata attributes for file:

```
mdls {{path/to/file}}
```

- Display a specific metadata attribute:

```
mdls -name {{attribute}} {{path/to/file}}
```

mdutil

Manage the metadata stores used by Spotlight for indexing.

- Show the indexing status of the startup volume:

```
mdutil -s {{/}}
```

- Turn on/off the Spotlight indexing for a given volume:

```
mdutil -i {{on|off}} {{path/to/volume}}
```

- Erase the metadata stores and restart the indexing process:

```
mdutil -E {{path/to/volume}}
```

mkfile

Create one or more empty files of any size.

- Create an empty file of 15 kilobytes:

```
mkfile -n {{15k}} {{filename}}
```

- Create a file of a given size and unit (bytes, KB, MB, GB):

```
mkfile -n {{size}}{{b|k|m|g}} {{filename}}
```

- Create two files of 4 megabytes each:

```
mkfile -n {{4m}} {{first_filename}} {{second_filename}}
```

n

Tool to manage multiple node versions.

- Install a given version of node. If the version is already installed, it will be activated:

```
n {{version}}
```

- Display installed versions and interactively activate one of them:

```
n
```

- Remove a version:

```
n rm {{version}}
```

- Execute a file with a given version:

```
n use {{version}} {{file.js}}
```

- Output binary path for a version:

```
n bin {{version}}
```

netstat

Displays network-related information such as open connections, open socket ports, etc.

- List all ports:

```
netstat -a
```

- List all listening ports:

```
netstat -l
```

- List listening TCP ports:

```
netstat -t
```

- Display PID and program names for a specific protocol:

```
netstat -p {{protocol}}
```

- Print the routing table:

```
netstat -nr
```

networksetup

Configuration tool for Network System Preferences.

- List available network service providers (Ethernet, Wi-Fi, Bluetooth, etc):

```
networksetup -listallnetworkservices
```

- Show network settings for a particular networking device:

```
networksetup -getinfo "{{Wi-Fi}}"
```

- Get currently connected Wi-Fi network name (Wi-Fi device usually en0 or en1):

```
networksetup -getairportnetwork {{en0}}
```

- Connect to a particular Wi-Fi network:

```
networksetup -setairportnetwork {{en0}} "{{Airport Network SSID}}" {{password}}
```

nm

List symbol names in object files.

- List global (extern) functions in a file (prefixed with T):

```
nm -g {{file.o}}
```

- List only undefined symbols in a file:

```
nm -u {{file.o}}
```

- List all symbols, even debugging symbols:

```
nm -a {{file.o}}
```

- Demangle C++ symbols (make them readable):

```
nm -demangle {{file.o}}
```

oathtool

OATH one-time password tool.

- Generate TOTP token (behaves like Google Authenticator):

```
oathtool --totp --base32 {{secret}}
```

- Generate a TOTP token for a specific time:

```
oathtool --totp --now {{2004-02-29 16:21:42}} --base32  
{{secret}}
```

- Validate a TOTP token:

```
oathtool --totp --base32 {{secret}} {{token}}
```

open

Opens files, directories and applications.

- Open a file with the associated application:

```
open {{file.ext}}
```

- Run a graphical macOS application:

```
open -a {{Application}}
```

- Run a graphical macOS app based on the bundle identifier (refer to [osascript](#) for an easy way to get this):

```
open -b {{com.domain.application}}
```

- Open the current directory in Finder:

```
open .
```

- Reveal a file in Finder:

```
open -R {{path/to/file}}
```

- Open all the files of a given extension in the current directory with the associated application:

```
open {{*.ext}}
```

opensnoop

Tool that tracks file opens on your system.

- Print all file opens as they occur:

```
sudo opensnoop
```

- Track all file opens by a process by name:

```
sudo opensnoop -n {{process_name}}
```

- Track all file opens by a process by PID:

```
sudo opensnoop -p {{PID}}
```

- Track which processes open a specified file:

```
sudo opensnoop -f {{path/to/file}}
```

osascript

Run AppleScript or JavaScript for Automation (JXA) from the command line.

- Run an AppleScript command:

```
osascript -e '{{say "Hello world"}}'
```

- Run multiple AppleScript commands:

```
osascript -e '{{say "Hello"}}' -e '{{say "world"}}'
```

- Run a compiled (*.scpt), bundled (*.scptd), or plaintext (*.applescript) AppleScript file:

```
osascript {{path/to/apple.scpt}}
```

- Get the bundle identifier of an application (useful for `open -b`):

```
osascript -e 'id of app "{{Application}}"'
```

- Run a JavaScript command:

```
osascript -l JavaScript -e '{{console.log("Hello world");}}'
```

- Run a JavaScript file:

```
osascript -l JavaScript {{path/to/script.js}}
```

pbcopy

Place standard output in the clipboard.

- Place the contents of a file in the clipboard:

```
pbcopy < {{file}}
```

- Place the results of a command in the clipboard:

```
find . -type t -name "*.png" | pbcopy
```

pbpaste

Send the contents of the clipboard to standard output.

- Write the contents of the clipboard to a file:

```
pbpaste > {{file}}
```

- Use the contents of the clipboard as input to a command:

```
pbpaste | grep foo
```

pdfgrep

Search text in PDF files.

- Find lines that match pattern in a PDF:

```
pdfgrep {{pattern}} {{file.pdf}}
```

- Include file name and page number for each matched line:

```
pdfgrep --with-filename --page-number {{pattern}}
{{file.pdf}}
```

- Do a case insensitive search for lines that begin with "foo" and return the first 3 matches:

```
pdfgrep --max-count {{3}} --ignore-case {{'^foo'}}
{{file.pdf}}
```

- Find pattern in files with a .pdf extension in the current directory recursively:

```
pdfgrep --recursive {{pattern}}
```

- Find pattern on files that match a specific glob in the current directory recursively:

```
pdfgrep --recursive --include {{'*book.pdf'}} {{pattern}}
```

ping

Send ICMP ECHO_REQUEST packets to network hosts.

- Ping the specified host:

```
ping {{host}}
```

- Ping a host a specific number of times:

```
ping -c {{count}} {{host}}
```

- Ping **host**, specifying the interval in **seconds** between requests (default is 1 second):

```
ping -i {{seconds}} {{host}}
```

- Ping **host** without trying to lookup symbolic names for addresses:

```
ping -n {{host}}
```

- Ping **host** and ring the bell when a packet is received (if your terminal supports it):

```
ping -a {{host}}
```

- Ping **host** and prints the time a packet was received (this option is an Apple addition):

```
ping --apple-time {{host}}
```

pkgutil

Query and manipulate Mac OS X Installer packages and receipts.

- List package IDs for all installed packages:

```
pkgutil --pkgs
```

- Verify cryptographic signatures of a package file:

```
pkgutil --check-signature {{path/to/filename.pkg}}
```

- List all the files for an installed package given its ID:

```
pkgutil --files {{com.microsoft.Word}}
```

- Extract the contents of a package file into a directory:

```
pkgutil --expand-full {{path/to/filename.pkg}} {{path/to/directory}}
```

plutil

View, convert, validate, or edit property list ("plist") files.

- Display the contents of one or more plist files in human-readable format:

```
plutil -p {{file1.plist file2.plist ...}}
```

- Convert one or more plist files to XML format, overwriting the original files in-place:

```
plutil -convert xml1 {{file1.plist file2.plist ...}}
```

- Convert one or more plist files to binary format, overwriting the original files in-place:

```
plutil -convert binary1 {{file1.plist file2.plist ...}}
```

- Convert a plist file to a different format, writing to a new file:

```
plutil -convert {{xml1|binary1|json|swift|objc}} {{path/to/file.plist}} -o {{path/to/new_file.plist}}
```

- Convert a plist file to a different format, writing to `stdout`:

```
plutil -convert {{xml1|binary1|json|swift|objc}} {{path/to/file.plist}} -o -
```

pmset

Configure macOS power management settings, as one might do in System Preferences > Energy Saver.

Commands that modify settings must begin with **sudo**.

- Display the current power management settings:

```
pmset -g
```

- Display the current power source and battery levels:

```
pmset -g batt
```

- Put display to sleep immediately:

```
pmset displaysleepnow
```

- Set display to never sleep when on charger power:

```
sudo pmset -c displaysleep 0
```

- Set display to sleep after 15 minutes when on battery power:

```
sudo pmset -b displaysleep 15
```

- Schedule computer to automatically wake up every weekday at 9 AM:

```
sudo pmset repeat wake MTWRF 09:00:00
```

- Restore to system defaults:

```
sudo pmset -a displaysleep 10 disksleep 10 sleep 30 womp 1
```

pod

Dependency manager for Swift and Objective-C Cocoa projects.

- Create a Podfile for the current project with the default contents:

```
pod init
```

- Download and install all pods defined in the Podfile (that haven't been installed before):

```
pod install
```

- List all available pods:

```
pod list
```

- Show the outdated pods (of those currently installed):

```
pod outdated
```

- Update all currently installed pods to their newest version:

```
pod update
```

- Update a specific (previously installed) pod to its newest version:

```
pod update {{pod_name}}
```

- Remove CocoaPods from a Xcode project:

```
pod deintegrate {{xcode_project}}
```

popd

Remove a directory placed on the directory stack via the `pushd` shell built-in.

- Remove the top directory from the stack and cd to it:

`popd`

- Remove the Nth directory (starting from zero to the left from the list printed with `dirs`):

`popd +N`

- Remove the Nth directory (starting from zero to the right from the list printed with `dirs`):

`popd -N`

port

Package manager for macOS.

- Search for a package:

```
port search {{search_term}}
```

- Install a package:

```
sudo port install {{package_name}}
```

- List installed packages:

```
port installed
```

- Update port and fetch latest list of available packages:

```
sudo port selfupdate
```

- Upgrade outdated packages:

```
sudo port upgrade outdated
```

- Remove old versions of installed packages:

```
sudo port uninstall inactive
```

pushd

Place a directory on a stack so it can be accessed later.

See also **popd** to switch back to original directory.

- Switch to directory and push it on the stack:

`pushd {{directory}}`

- Switch first and second directories on the stack:

`pushd`

- Rotate stack by making the 5th element the top of the stack:

`pushd +4`

pwgen

Generate pronounceable passwords.

- Generate random password with s[y]mbols:

```
pwgen -y {{length}}
```

- Generate secure, hard-to-memorize passwords:

```
pwgen -s {{length}}
```

- Generate password with at least one capital letter in them:

```
pwgen -c {{length}}
```

qlmanage

QuickLook server tool.

- Display QuickLook for one or multiple files:

```
qlmanage -p {{filename}} {{filename2}}
```

- Compute 300px wide PNG thumbnails of all JPEGs in the current directory and put them in a directory:

```
qlmanage {{*.jpg}} -t -s {{300}} {{path/to/directory}}
```

- Reset Quicklook:

```
qlmanage -r
```

reboot

Reboot the system.

- Reboot immediately:

```
sudo reboot
```

- Reboot immediately without gracefully shutting down:

```
sudo reboot -q
```

rename

Rename a file or group of files with a regex.

- Replace **from** with **to** in the filenames of the specified files:

```
rename 's/{{from}}/{{to}}/' {{*.txt}}
```

route

Manually manipulate the routing tables.

Necessitates to be root.

- Add a route to a destination through a gateway:

```
sudo route add {{dest_ip_address}} {{gateway_address}}
```

- Add a route to a /24 subnet through a gateway:

```
sudo route add {{subnet_ip_address}}/24 {{gateway_address}}
```

- Run in test mode (does not do anything, just print):

```
sudo route -t add {{dest_ip_address}}/24 {{gateway_address}}
```

- Remove all routes:

```
sudo route flush
```

- Delete a specific route:

```
sudo route delete {{dest_ip_address}}/24
```

- Lookup and display the route for a destination (hostname or IP address):

```
sudo route get {{destination}}
```

rubocop

Lint Ruby files.

- Check all files in the current directory (including subdirectories):

`rubocop`

- Check one or more specific files or directories:

`rubocop {{path/to/file}} {{path/to/directory}}`

- Write output to file:

`rubocop --out {{path/to/file}}`

- View list of cops (linter rules):

`rubocop --show-cops`

- Exclude a cop:

`rubocop --except {{cop_1}} {{cop_2}}`

- Run only specified cops:

`rubocop --only {{cop_1}} {{cop_2}}`

- Auto-correct files (experimental):

`rubocop --auto-correct`

runit

3-stage init system.

- Start runit's 3-stage init scheme:

```
runit
```

- Shut down runit:

```
kill --CONT {{runit_pid}}
```

runsv

Start and manage a runit service.

- Start a runit service as the current user:

```
runsv {{path/to/service}}
```

- Start a runit service as root:

```
sudo runsv {{path/to/service}}
```

runsvchdir

Change the directory **runsvdir** uses by default.

- Switch **runsvdir** directories:

```
sudo runsvchdir {{path/to/directory}}
```

runsvdir

Run an entire directory of services.

- Start and manage all services in a directory as the current user:

```
runsvdir {{path/to/services}}
```

- Start and manage all services in a directory as root:

```
sudo runsvdir {{path/to/services}}
```

- Start services in separate sessions:

```
runsvdir -P {{path/to/services}}
```

say

Converts text to speech.

- Say a phrase aloud:

```
say "{{I like to ride my bike.}}"
```

- Read a file aloud:

```
say -f {{filename.txt}}
```

- Say a phrase with a custom voice and speech rate:

```
say -v {{voice}} -r {{words_per_minute}} "{{I'm sorry Dave, I can't let you do that.}}"
```

- List the available voices:

```
say -v "?"
```

- Create an audio file of the spoken text:

```
say -o {{filename.aiff}} "{{Here's to the Crazy Ones.}}"
```

screencapture

Utility to take screenshots and screen recordings.

- Take a screenshot and save it to a file:

```
screencapture {{path/to/file.png}}
```

- Take a screenshot including the mouse cursor:

```
screencapture -C {{path/to/file.png}}
```

- Take a screenshot and open it in Preview, instead of saving:

```
screencapture -P
```

- Take a screenshot of a selected rectangular area:

```
screencapture -i {{path/to/file.png}}
```

- Take a screenshot after a delay:

```
screencapture -T {{seconds}} {{path/to/file.png}}
```

- Make a screen recording and save it to a file:

```
screencapture -v {{path/to/file.mp4}}
```

scutil

Manage system configuration parameters.

Necessitates to be root when setting configuration.

- Display DNS Configuration:

```
scutil --dns
```

- Display proxy configuration:

```
scutil --proxy
```

- Get computer name:

```
scutil --get ComputerName
```

- Set computer name:

```
sudo scutil --set ComputerName {{computer_name}}
```

- Get hostname:

```
scutil --get HostName
```

- Set hostname:

```
scutil --set HostName {{hostname}}
```

sed

Edit text in a scriptable manner.

- Replace the first occurrence of a string in a file, and print the result:

```
sed 's/{{find}}/{{replace}}/' {{filename}}
```

- Replace all occurrences of an extended regular expression in a file:

```
sed -E 's/{{regex}}/{{replace}}/g' {{filename}}
```

- Replace all occurrences of a string [i]n a file, overwriting the file (i.e. in-place):

```
sed -i '' 's/{{find}}/{{replace}}/g' {{filename}}
```

- Replace only on lines matching the line pattern:

```
sed '/{{line_pattern}}/s/{{find}}/{{replace}}/' {{filename}}
```

- Print only text between n-th line till the next empty line:

```
sed -n '{{line_number}},/^$/p' {{filename}}
```

- Apply multiple find-replace expressions to a file:

```
sed -e 's/{{find}}/{{replace}}/' -e 's/{{find}}/{{replace}}/' {{filename}}
```

- Replace separator / by any other character not used in the find or replace patterns, e.g., #:

```
sed 's#{{find}}##{{replace}}#' {{filename}}
```

- [d]elete the line at the specific line number [i]n a file, overwriting the file:

```
sed -i '' '{{line_number}}d' {{filename}}
```

shuf

Generate random permutations.

- Randomize the order of lines in a file and output the result:

```
shuf {{filename}}
```

- Only output the first 5 entries of the result:

```
shuf -n {{5}} {{filename}}
```

- Write output to another file:

```
shuf {{filename}} -o {{output_filename}}
```

- Generate random numbers in range 1-10:

```
shuf -i {{1-10}}
```

shutdown

Shutdown and reboot the system.

- Power off (halt) immediately:

```
shutdown -h now
```

- Sleep immediately:

```
shutdown -s now
```

- Reboot immediately:

```
shutdown -r now
```

- Reboot in 5 minutes:

```
shutdown -r +{5}
```

- Power off (halt) at 1:00 pm (Uses 24h clock):

```
shutdown -h {{1300}}
```

- Reboot on May 10th 2042 at 11:30 am (Input format: YYMMDDHHMM):

```
shutdown -r {{4205101130}}
```

sips

Apple Scriptable Image Processing System.

Raster/Query images and ColorSync ICC Profiles.

- Specify an output directory so that originals do not get modified:

```
sips --out {{path/to/out_dir}}
```

- Resample image at specified size, Image aspect ratio may be altered:

```
sips -z {{1920}} {{300}} {{image.ext}}
```

- Resample image so height and width aren't greater than specified size (notice the capital Z):

```
sips -Z {{1920}} {{300}} {{image.ext}}
```

- Resample all images in a directory to fit a width of 960px (honoring aspect ratio):

```
sips --resampleWidth {{960}} {{path/to/images}}
```

- Convert an image from CMYK to RGB:

```
sips --matchTo '/System/Library/ColorSync/Profiles/Generic  
RGB Profile.icc' {{path/to/image.ext}} {{path/to/out_dir}}
```

- Remove ColorSync ICC profile from an image:

```
sips -d profile --deleteColorManagementProperties {{path/to/  
image.ext}}
```

softwareupdate

A tool for updating MacOS App Store apps via the command line.

- List all available updates:

```
softwareupdate -l
```

- Download and install all updates:

```
softwareupdate -ia
```

- Download and install all recommended updates:

```
softwareupdate -ir
```

- Download and install a specific app:

```
softwareupdate -i {{update_name}}
```

split

Split a file into pieces.

- Split a file, each split having 10 lines (except the last split):

```
split -l {{10}} {{filename}}
```

- Split a file by a regular expression. The matching line will be the first line of the next output file:

```
split -p {{cat|[dh]og}} {{filename}}
```

- Split a file with 512 bytes in each split (except the last split; use 512k for kilobytes and 512m for megabytes):

```
split -b {{512}} {{filename}}
```

spotify

A command-line interface to Spotify.

More information: <https://github.com/hnarayanan/shpotify>.

- Find a song by name and play it:

```
spotify play {{song_name}}
```

- Find a playlist by name and play it:

```
spotify play list {{playlist_name}}
```

- Pause (or resume) playback:

```
spotify pause
```

- Skip to the next song in a playlist:

```
spotify next
```

- Change volume:

```
spotify vol {{up|down|value}}
```

- Show the playback status and song details:

```
spotify status
```

ssh-add

Manage loaded ssh keys in the ssh-agent.

Ensure that ssh-agent is up and running for the keys to be loaded in it.

- Add the default ssh keys in "~/.ssh" to the ssh-agent:

`ssh-add`

- Add a specific key to the ssh-agent:

`ssh-add {{path/to/private_key}}`

- List fingerprints of currently loaded keys:

`ssh-add -l`

- Delete a key from the ssh-agent:

`ssh-add -d {{path/to/private_key}}`

- Delete all currently loaded keys from the ssh-agent:

`ssh-add -D`

- Add a key to the ssh-agent and the keychain:

`ssh-add -K {{path/to/private_key}}`

sshuttle

Transparent proxy server that tunnels traffic over an SSH connection.

Doesn't require admin, or any special setup on the remote SSH server.

More information: <https://github.com/sshuttle/sshuttle>.

- Forward all IPv4 TCP traffic via a remote SSH server:

```
sshuttle --remote={{username}}@{{sshserver}} {{0.0.0.0/0}}
```

- Forward all IPv4 TCP and DNS traffic:

```
sshuttle --dns --remote={{username}}@{{sshserver}} {{0.0.0.0/0}}
```

- Use the tproxy method to forward all IPv4 and IPv6 traffic:

```
sudo sshuttle --method=tproxy --remote={{username}} @{{sshserver}} {{0.0.0.0/0}} {{::/0}} -- exclude={{your_local_ip_address}} -- exclude={{ssh_server_ip_address}}
```

stat

Display file status.

- Show file properties such as size, permissions, creation and access dates among others:

```
stat {{file}}
```

- Same as above but verbose (more similar to linux's **stat**):

```
stat -x {{file}}
```

- Show only octal file permissions:

```
stat -f %Mp%Lp {{file}}
```

- Show owner and group of the file:

```
stat -f "%Su %Sg" {{file}}
```

- Show the size of the file in bytes:

```
stat -f "%z %N" {{file}}
```

SV

Control a running runsv service.

- Start a service:

```
sudo sv up {{path/to/service}}
```

- Stop a service:

```
sudo sv down {{path/to/service}}
```

- Get service status:

```
sudo sv status {{path/to/service}}
```

sw_vers

Print macOS operating system version information.

- Print all available information (OS name, version number, and build):

sw_vers

- Print only the version number of the operating system:

sw_vers -productVersion

- Print only the build identifier:

sw_vers -buildVersion

sysctl

Access kernel state information.

- Show all available variables and their values:

```
sysctl -a
```

- Show Apple model identifier:

```
sysctl -n hw.model
```

- Show CPU model:

```
sysctl -n machdep.cpu.brand_string
```

- Show available CPU features (MMX, SSE, SSE2, SSE3, AES, etc):

```
sysctl -n machdep.cpu.features
```

- Set a changeable kernel state variable:

```
sysctl -w {{section.tunable}}={{value}}
```

system_profiler

Report system hardware and software configuration.

- Display a full system profiler report which can be opened by System Profiler.app:

```
system_profiler -xml > MyReport.spx
```

- Display a hardware overview (Model, CPU, Memory, Serial, etc):

```
system_profiler SPHardwareDataType
```

- Print the system serial number:

```
system_profiler SPHardwareDataType|grep "Serial Number  
(system)" |awk '{print $4}'
```

systemsetup

Configure System Preferences machine settings.

- Enable remote login (SSH):

```
systemsetup -setremotelogin on
```

- Specify TimeZone, NTP Server and enable network time:

```
systemsetup -settimezone {{US/Pacific}} -setnetworktimeserver  
{{us.pool.ntp.org}} -setusingnetworktime on
```

- Make the machine never sleep and automatically restart on power failure or kernel panic:

```
systemsetup -setsleep off -setrestartpowerfailure on -  
setrestartfreeze on
```

- List valid startup disks:

```
systemsetup -liststartupdisks
```

- Specify a new startup disk:

```
systemsetup -setstartupdisk {{path}}
```

textutil

Used to manipulate text files of various formats.

- Display information about foo.rtf:

```
textutil -info {{foo.rtf}}
```

- Convert foo.rtf into foo.html:

```
textutil -convert {{html}} {{foo.rtf}}
```

- Convert rich text to normal text:

```
textutil {{foo.rtf}} -convert {{txt}}
```

- Convert foo.txt into foo.rtf, using Times 10 for the font:

```
textutil -convert {{rtf}} -font {{Times}} -fontsize {{10}}  
{{foo.txt}}
```

- Load all RTF files in the current directory, concatenates their contents, and writes the result out as index.html with the HTML title set to "Several Files":

```
textutil -cat {{html}} -title "Several Files" -output  
{{index.html}} *.rtf
```

top

Display dynamic real-time information about running processes.

- Start top, all options are available in the interface:

`top`

- Start top sorting processes by internal memory size (default order - process ID):

`top -o mem`

- Start top sorting processes first by CPU, then by running time:

`top -o cpu -O time`

- Start top displaying only processes owned by given user:

`top -user {{user_name}}`

- Get help about interactive commands:

`?`

trap

Automatically execute commands after receiving signals by processes or the operating system.

Can be used to perform cleanups for interruptions by the user or other actions.

- List available signals to set traps for:

```
trap -l
```

- List active traps for the current shell:

```
trap -p
```

- Set a trap to execute commands when one or more signals are detected:

```
trap 'echo "Caught signal {{SIGHUP}}"' {{SIGHUP}}
```

- Remove active traps:

```
trap - {{SIGHUP}} {{SIGINT}}
```

tree

Show the contents of the current directory as a tree.

More information: <http://mama.indstate.edu/users/ice/tree/>.

- Print files and directories up to 'num' levels of depth (where 1 means the current directory):

```
tree -L {{num}}
```

- Print directories only:

```
tree -d
```

- Print hidden files too with colorization on:

```
tree -a -C
```

- Print the tree without indentation lines, showing the full path instead (use **-N** to not escape whitespace and special characters):

```
tree -i -f
```

- Print the size of each node next to it, in human-readable format, with directories displaying their cumulative size (as in the **du** command):

```
tree -s -h --du
```

- Print files within the tree hierarchy, using a wildcard (glob) pattern, and pruning out directories that don't contain matching files:

```
tree -P '{{*.txt}}' --prune
```

- Print directories within the tree hierarchy, using the wildcard (glob) pattern, and pruning out directories that aren't ancestors of the wanted one:

```
tree -P {{directory_name}} --matchdirs --prune
```

- Print the tree ignoring the given directories:

```
tree -I '{{directory_name1|directory_name2}}'
```

uname

Print details about the current machine and the operating system running on it.

Note: for additional information about the operating system, try the **sw_vers** command.

- Print hardware-related information: machine and processor:

```
uname -mp
```

- Print software-related information: operating system, release number, and version:

```
uname -s rv
```

- Print the nodename (hostname) of the system:

```
uname -n
```

- Print all available system information (hardware, software, nodename):

```
uname -a
```

units

Provide the conversion between two units of measure.

- Run in interactive mode:

```
units
```

- Show the conversion between two simple units:

```
units {{quarts}} {{tablespoons}}
```

- Convert between units with quantities:

```
units "{{15 pounds}}" {{kilograms}}
```

- Show the conversion between two compound units:

```
units "{{meters / second}}" "{{inches / hour}}
```

- Show the conversion between units with different dimensions:

```
units "{{acres}}" "{{ft^2}}"
```

- Show the conversion of byte multipliers:

```
units "{{15 megabytes}}" {{bytes}}
```

uptime

Tell how long the system has been running and other information.

- Print current time, uptime, number of logged-in users and other information:

```
uptime
```

valet

A Laravel development environment that allows hosting sites via local tunnels on <http://<example>.test>.

More information: <https://laravel.com/docs/5.8/valet>.

- Start the valet daemon:

```
valet start
```

- Register the current working directory as a path that Valet should search for sites:

```
valet park
```

- View 'parked' paths:

```
valet paths
```

- Serve a single site instead of an entire directory:

```
valet link app-name
```

- Share a project via an Ngrok tunnel:

```
valet share
```

W

Show who is logged on and what they are doing.

Print user login, TTY, remote host, login time, idle time, current process.

- Show logged-in users info:

w

- Show logged-in users info without a header:

w -h

- Show info about logged-in users, sorted by their idle time:

w -i

wacaw

A little command-line tool for macOS that allows you to capture both still pictures and video from an attached camera.

More information: <http://webcam-tools.sourceforge.net>.

- Take a picture from webcam:

```
wacaw {{filename}}
```

- Record a video:

```
wacaw --video {{filename}} -D {{duration_in_seconds}}
```

- Take a picture with custom resolution:

```
wacaw -x {{width}} -y {{height}} {{filename}}
```

- Copy image just taken to clipboard:

```
wacaw --to-clipboard
```

- List the devices available:

```
wacaw -L
```

whatis

Tool that searches a set of database files containing short descriptions of system commands for keywords.

More information: <http://www.linfo.org/whatis.html>.

- Search for informations about keyword:

```
whatis {{keyword}}
```

- Search for information about multiple keywords:

```
whatis {{first_keyword}} {{second_keyword}}
```

whence

A zsh builtin to indicate how a given command would be interpreted.

- Interpret {{command}}, with expansion if defined as an **alias** (similar to the **command -v** builtin):

```
whence {{command}}
```

- Display type of {{command}}, with location if defined as a function, or binary (equivalent to the **type** and **command -V** builtins):

```
whence -v {{command}}
```

- Same as above, except display content of shell functions instead of location (equivalent to **which** builtin):

```
whence -c {{command}}
```

- Same as above, but show all occurrences on command path (equivalent to the **where** builtin):

```
whence -ca {{command}}
```

- Search only the **PATH** for {{command}}, ignoring builtins, aliases or shell functions (equivalent to the **where** command):

```
whence -p {{command}}
```

whereis

Locate the binary, source, and manual page files for a command.

- Locate binary, source and man pages for ssh:

```
whereis {{ssh}}
```

- Locate binary and man pages for ls:

```
whereis -bm {{ls}}
```

- Locate source of gcc and man pages for git:

```
whereis -s {{gcc}} -m {{git}}
```

- Locate binaries for gcc in /usr/bin/ only:

```
whereis -b -B {{/usr/bin/}} -f {{gcc}}
```

wifi-password

Get the password of the wifi.

More information: <https://github.com/rauchg/wifi-password>.

- Get the password for the wifi you are currently logged onto:

`wifi-password`

- Get the password for the wifi with a specific SSID:

`wifi-password {{ssid}}`

- Print only the password as output:

`wifi-password -q`

xar

Manage .xar archives.

More information: <https://linux.die.net/man/1/xar>.

- Create a xar archive of all files in a given directory:

```
xar -cf {{archive.xar}} {{path/to/directory}}
```

- Lis[t] the contents of a given xar archive:

```
xar -tf {{archive.xar}}
```

- Extract the contents of a given xar archive to the current directory:

```
xar -xf {{archive.xar}}
```

xattr

Utility to work with extended filesystem attributes.

- List key:value extended attributes for a given file:

```
xattr -l {{file}}
```

- Write an attribute for a given file:

```
xattr -w {{attribute_key}} {{attribute_value}} {{file}}
```

- Delete an attribute from a given file:

```
xattr -d {{com.apple.quarantine}} {{file}}
```

- Delete all extended attributes from a given file:

```
xattr -c {{file}}
```

- Recursively delete an attribute in a given directory:

```
xattr -rd {{attribute_key}} {{directory}}
```

xcode-select

Switch between different versions of Xcode and the included developer tools.

Also used to update the path to Xcode if it is moved after installation.

- Install Xcode's command-line tools:

```
xcode-select --install
```

- Select a given path as the active developer directory:

```
xcode-select -s {{path/to/Xcode.app/Contents/Developer}}
```

- Select a given Xcode instance and use its developer directory as the active one:

```
xcode-select -s {{path/to/Xcode.app}}
```

- Print the currently selected developer directory:

```
xcode-select -p
```

- Discard any user-specified developer directory so that it will be found via the default search mechanism:

```
sudo xcode-select -r
```

xcodetool

Build Xcode projects.

- Build workspace:

```
xcodetool -workspace {{workspace_name.workspace}} -scheme  
{{scheme_name}} -configuration {{configuration_name}} clean  
build SYMR00T={{SYMR00T_path}}
```

- Build project:

```
xcodetool -target {{target_name}} -configuration  
{{configuration_name}} clean build SYMR00T={{SYMR00T_path}}
```

- Show SDKs:

```
xcodetool -showsdk
```

xctool

Tool for building Xcode projects.

More information: <https://github.com/facebook/xctool>.

- Build a single project without any workspace:

```
xctool -project {{YourProject.xcodeproj}} -scheme  
{{YourScheme}} build
```

- Build a project that is part of a workspace:

```
xctool -workspace {{YourWorkspace.xcworkspace}} -scheme  
{{YourScheme}} build
```

- Clean, build and execute all the tests:

```
xctool -workspace {{YourWorkspace.xcworkspace}} -scheme  
{{YourScheme}} clean build test
```

xed

Opens files for editing in XCode.

- Open file in XCode:

```
xed {{file1}}
```

- Open file(s) in XCode, create if it doesn't exist:

```
xed -c {{filename1}}
```

- Open a file in XCode and jump to line number 75:

```
xed -l 75 {{filename}}
```

xip

Create or expand compressed files in a secure xip archive.

Only archives signed by Apple are trusted, so this tool should not be used to create archives.

- Expand the archive into the current working directory:

```
xip --expand {{path/to/file.xip}}
```

xsltproc

Transform XML with XSLT to produce output (usually HTML or XML).

- Transform an XML file with a specific XSLT stylesheet:

```
xsltproc --output {{output.html}} {{stylesheet.xslt}}
{{xmlfile.xml}}
```

- Pass a value to a parameter in the stylesheet:

```
xsltproc --output {{output.html}} --stringparam {{name}}
{{value}} {{stylesheet.xslt}} {{xmlfile.xml}}
```

yaa

Create and manipulate YAA archives.

- Create an archive from a directory:

```
yaa archive -d {{path/to/directory}} -o {{path/to/output.yaa}}
```

- Create an archive from a file:

```
yaa archive -i {{path/to/file}} -o {{path/to/output.yaa}}
```

- Extract an archive to the current directory:

```
yaa extract -i {{path/to/archive.yaa}}
```

- List the contents of an archive:

```
yaa list -i {{path/to/archive.yaa}}
```

- Create an archive with a specific compression algorithm:

```
yaa archive -a {{algorithm}} -d {{path/to/directory}} -o {{path/to/output.yaa}}
```

- Create an archive with an 8MB block size:

```
yaa archive -b {{8m}} -d {{path/to/directory}} -o {{path/to/output.yaa}}
```

yabai

A tiling window manager for macOS based on binary space partitioning.

More information: <https://github.com/koekeishiya/yabai>.

- Set the layout to bsp:

```
yabai -m config layout {{bsp}}
```

- Set the window gap to 10pt:

```
yabai -m config window_gap {{10}}
```

- Enable opacity:

```
yabai -m config window_opacity on
```

- Disable window shadow:

```
yabai -m config window_shadow off
```

- Enable status bar:

```
yabai -m config status_bar on
```

yank

Read input from **stdin** and display a selection interface that allows a field to be selected and copied to the clipboard.

- Yank using the default delimiters (\f, \n, \r, \s, \t):

```
{ {sudo dmesg} } | yank
```

- Yank an entire line:

```
{ {sudo dmesg} } | yank -l
```

- Yank using a specific delimiter:

```
{ {echo hello=world} } | yank -d { = }
```

- Only yank fields matching a specific pattern:

```
{ {ps ux} } | yank -g "[0-9]+"
```

Sunos

devfsadm

Administration command for **/dev**. Maintains the **/dev** namespace.

- Scan for new disks:

```
devfsadm -c disk
```

- Cleanup any dangling /dev links and scan for new device:

```
devfsadm -C -v
```

- Dry-run - output what would be changed but make no modifications:

```
devfsadm -C -v -n
```

dmesg

Write the kernel messages to standard output.

- Show kernel messages:

```
dmesg
```

- Show how much physical memory is available on this system:

```
dmesg | grep -i memory
```

- Show kernel messages 1 page at a time:

```
dmesg | less
```

prctl

Get or set the resource controls of running processes.,.

Tasks, and projects.

- Examine process limits and permissions:

```
prctl {{PID}}
```

- Examine process limits and permissions in machine parseable format:

```
prctl -P {{PID}}
```

- Get specific limit for a running process:

```
prctl -n process.max-file-descriptor {{PID}}
```

prstat

Report active process statistics.

- Examine all processes and reports statistics sorted by CPU usage:

```
prstat
```

- Examine all processes and reports statistics sorted by memory usage:

```
prstat -s rss
```

- Report total usage summary for each user:

```
prstat -t
```

- Report microstate process accounting information:

```
prstat -m
```

- Print out a list of top 5 CPU using processes every second:

```
prstat -c -n 5 -s cpu 1
```

runit

3-stage init system.

- Start runit's 3-stage init scheme:

```
runit
```

- Shut down runit:

```
kill --CONT {{runit_pid}}
```

runsv

Start and manage a runit service.

- Start a runit service as the current user:

```
runsv {{path/to/service}}
```

- Start a runit service as root:

```
sudo runsv {{path/to/service}}
```

runsvchdir

Change the directory **runsvdir** uses by default.

- Switch **runsvdir** directories:

```
sudo runsvchdir {{path/to/directory}}
```

runsvdir

Run an entire directory of services.

- Start and manage all services in a directory as the current user:

```
runsvdir {{path/to/services}}
```

- Start and manage all services in a directory as root:

```
sudo runsvdir {{path/to/services}}
```

- Start services in separate sessions:

```
runsvdir -P {{path/to/services}}
```

snoop

Network packet sniffer.

SunOS equivalent of tcpdump.

- Capture packets on a specific network interface:

```
snoop -d {{e1000g0}}
```

- Save captured packets in a file instead of displaying them:

```
snoop -o {{filename}}
```

- Display verbose protocol layer summary of packets from a file:

```
snoop -V -i {{filename}}
```

- Capture network packets that come from a hostname and go to a given port:

```
snoop to port {{port}} from host {{hostname}}
```

- Capture and show an hex-dump of network packets exchanged between two IP addresses:

```
snoop -x0 -p4 {{ip_address_1}} {{ip_address_2}}
```

SV

Control a running runsv service.

- Start a service:

```
sudo sv up {{path/to/service}}
```

- Stop a service:

```
sudo sv down {{path/to/service}}
```

- Get service status:

```
sudo sv status {{path/to/service}}
```

svcadm

Manipulate service instances.

- Enable a service in the service database:

```
svcadm enable {{service_name}}
```

- Disable service:

```
svcadm disable {{service_name}}
```

- Restart a running service:

```
svcadm restart {{service_name}}
```

- Command service to re-read configuration files:

```
svcadm refresh {{service_name}}
```

- Clear a service from maintenance state and command it to start:

```
svcadm clear {{service_name}}
```

svccfg

Import, export, and modify service configurations.

- Validate configuration file:

```
svccfg validate {{smf.xml}}
```

- Export service configurations to file:

```
svccfg export {{servicename}} > {{smf.xml}}
```

- Import/update service configurations from file:

```
svccfg import {{smf.xml}}
```

SVCS

List information about running services.

- List all running services:

```
svcs
```

- List services that are not running:

```
svcs -vx
```

- List information about a service:

```
svcs apache
```

- Show location of service log file:

```
svcs -L apache
```

- Display end of a service log file:

```
tail $(svcs -L apache)
```

truss

Troubleshooting tool for tracing system calls.

SunOS equivalent of strace.

- Start tracing a program by executing it, following all child processes:

```
truss -f {{program}}
```

- Start tracing a specific process by its PID:

```
truss -p {{pid}}
```

- Start tracing a program by executing it, showing arguments and environment variables:

```
truss -a -e {{program}}
```

- Count time, calls, and errors for each system call and report a summary on program exit:

```
truss -c -p {{pid}}
```

- Trace a process filtering output by system call:

```
truss -p {{pid}} -t {{system_call_name}}
```

Windows

assoc

Display or modify file extension associations.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/assoc>.

- Display all associated filetypes:

```
assoc
```

- Display the associated filetype for a specific extension:

```
assoc {{.txt}}
```

- Modify the associated filetype for a specific extension:

```
assoc {{.txt}}={{txtfile}}
```

attrib

Displays or changes file and directory attributes.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/attrib>.

- Display the attributes of the files in the current directory:

`attrib`

- Display the attributes of the files in the current directory and sub-directories:

`attrib /S`

- Display the attributes of the files and directories in the current directory and sub-directories:

`attrib /S /D`

- Add the read-only attribute to a file:

`attrib +R {{document.txt}}`

- Remove the system and hidden attributes of a file:

`attrib -S -H {{document.txt}}`

- Add the hidden attribute to a directory:

`attrib +H {{path\to\directory}}`

azcopy

A file transfer tool for uploading to Azure Cloud Storage Accounts.

More information: <https://docs.microsoft.com/azure/storage/common/storage-use-azcopy-v10>.

- Login to an Azure Tenant:

```
azcopy login
```

- Upload a local file:

```
azcopy copy '{{path/to/source/file}}' 'https://{{storage_account_name}}.blob.core.windows.net/{{container_name}}/{{blob_name}}'
```

- Upload files with .txt and .jpg extensions:

```
azcopy copy '{{path/to/source}}' 'https://{{storage_account_name}}.blob.core.windows.net/{{container_name}}' --include-pattern '{{*.txt;*.jpg}}'
```

- Copy a container directly between two Azure storage accounts:

```
azcopy copy 'https://{{source_storage_account_name}}.blob.core.windows.net/{{container_name}}' 'https://{{destination_storage_account_name}}.blob.core.windows.net/{{container_name}}'
```

- Synchronize a local directory and delete files in the destination if they no longer exist in the source:

```
azcopy sync '{{path/to/source}}' 'https://{{storage_account_name}}.blob.core.windows.net/{{container_name}}' --recursive --delete-destination=true
```

- Display detailed usage information:

```
azcopy --help
```

cd

Displays the name of or changes the current working directory.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/cd>.

- Go to a directory in the same drive:

```
cd {{path/to/directory}}
```

- Display the name of the current directory:

```
cd
```

- Go up to the parent of the current directory:

```
cd ..
```

- Go to a directory in a different drive:

```
cd {{path/to/directory}} /d
```

chkdsk

Check file system and volume metadata for errors.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/chkdsk>.

- Specify the drive letter (followed by a colon), mount point, or volume name to check:

`chkdsk {{volume}}`

- Fix errors on a specific volume:

`chkdsk {{volume}} /f`

- Dismount a specific volume before checking:

`chkdsk {{volume}} /x`

- Change the log file size to the specified size (only for NTFS):

`chkdsk /l{{size}}`

choco-apikey

Manage API keys for Chocolatey sources.

More information: <https://chocolatey.org/docs/commands-apikey>.

- Display a list of sources and their API keys:

```
choco apikey
```

- Display a specific source and its API key:

```
choco apikey --source "{{source_url}}"
```

- Set an API key for a source:

```
choco apikey --source "{{source_url}}" --key "{{api_key}}"
```

- Remove an API key for a source:

```
choco apikey --source "{{source_url}}" --remove
```

choco feature

Interact with features with Chocolatey.

More information: <https://chocolatey.org/docs/commands-feature>.

- Display a list of available features:

```
choco feature list
```

- Enable a feature:

```
choco feature enable --name {{name}}
```

- Disable a feature:

```
choco feature disable --name {{name}}
```

choco info

Display detailed information about a package with Chocolatey.

More information: <https://chocolatey.org/docs/commands-info>.

- Display information on a specific package:

```
choco info {{package}}
```

- Display information for a local package only:

```
choco info {{package}} --local-only
```

- Specify a custom source to receive packages information from:

```
choco info {{package}} --source {{source_url|alias}}
```

- Provide a username and password for authentication:

```
choco info {{package}} --user {{username}} --password  
{{password}}
```

choco install

Install one or more packages with Chocolatey.

More information: <https://chocolatey.org/docs/commands-install>.

- Install one or more space-separated packages:

```
choco install {{package(s)}}
```

- Install packages from a custom configuration file:

```
choco install {{path/to/packages.config}}
```

- Install a specific "nuspec" or "nupkg" file:

```
choco install {{path/to/file}}
```

- Install a specific version of a package:

```
choco install {{package}} --version {{version}}
```

- Allow installing multiple versions of a package:

```
choco install {{package}} --allow-multiple
```

- Confirm all prompts automatically:

```
choco install {{package}} --yes
```

- Specify a custom source to receive packages from:

```
choco install {{package}} --source {{source_url|alias}}
```

- Provide a username and password for authentication:

```
choco install {{package}} --user {{username}} --password {{password}}
```

choco list

Display a list of packages with Chocolatey.

More information: <https://chocolatey.org/docs/commands-list>.

- Display all available packages:

```
choco list
```

- Display all locally installed packages:

```
choco list --local-only
```

- Display a list including local programs:

```
choco list --include-programs
```

- Display only approved packages:

```
choco list --approved-only
```

- Specify a custom source to display packages from:

```
choco list --source {{source_url|alias}}
```

- Provide a username and password for authentication:

```
choco list --user {{username}} --password {{password}}
```

choco new

Generate new package specification files with Chocolatey.

More information: <https://chocolatey.org/docs/commands-new>.

- Create a new package skeleton:

```
choco new {{package_name}}
```

- Create a new package with a specific version:

```
choco new {{package_name}} --version {{version}}
```

- Create a new package with a specific maintainer name:

```
choco new {{package_name}} --maintainer {{maintainer_name}}
```

- Create a new package in a custom output directory:

```
choco new {{package_name}} --output-directory {{path/to/directory}}
```

- Create a new package with specific 32-bit and 64-bit installer urls:

```
choco new {{package_name}} url="{{url}}" url64="{{url64}}
```

choco outdated

Check for outdated packages with Chocolatey.

More information: <https://chocolatey.org/docs/commands-outdated>.

- Display a list of outdated packages in table format:

```
choco outdated
```

- Ignore pinned packages in the output:

```
choco outdated --ignore-pinned
```

- Specify a custom source to check packages from:

```
choco outdated --source {{source_url|alias}}
```

- Provide a username and password for authentication:

```
choco outdated --user {{username}} --password {{password}}
```

choco pack

Package a NuGet specification into a nupkg file.

More information: <https://chocolatey.org/docs/commands-pack>.

- Package a NuGet specification to a nupkg file:

```
choco pack {{path/to/specification}}
```

- Package a NuGet specification specifying the version of the resulting file:

```
choco pack {{path/to/specification}} --version {{version}}
```

- Package a NuGet specification to a specific directory:

```
choco pack {{path/to/specification}} --output-directory  
{{path/to/output_directory}}
```

choco pin

Pin a package at a specific version with Chocolatey.

Pinned packages are skipped automatically when upgrading.

More information: <https://chocolatey.org/docs/commands-pin>.

- Display a list of pinned packages and their versions:

```
choco pin list
```

- Pin a package at its current version:

```
choco pin add --name {{package}}
```

- Pin a package at a specific version:

```
choco pin add --name {{package}} --version {{version}}
```

- Remove a pin for a specific package:

```
choco pin remove --name {{package}}
```

choco search

Search for a local or remote package with Chocolatey.

More information: <https://chocolatey.org/docs/commands-search>.

- Search for a package:

```
choco search {{query}}
```

- Search for a package locally:

```
choco search {{query}} --local-only
```

- Only include exact matches in the results:

```
choco search {{query}} --exact
```

- Confirm all prompts automatically:

```
choco search {{query}} --yes
```

- Specify a custom source to search for packages in:

```
choco search {{query}} --source {{source_url|alias}}
```

- Provide a username and password for authentication:

```
choco search {{query}} --user {{username}} --password  
{{password}}
```

choco source

Manage sources for packages with Chocolatey.

More information: <https://chocolatey.org/docs/commands-source>.

- List currently available sources:

```
choco source list
```

- Add a new package source:

```
choco source add --name {{name}} --source {{url}}
```

- Add a new package source with credentials:

```
choco source add --name {{name}} --source {{url}} --user {{username}} --password {{password}}
```

- Add a new package source with a client certificate:

```
choco source add --name {{name}} --source {{url}} --cert {{path/to/certificate}}
```

- Enable a package source:

```
choco source enable --name {{name}}
```

- Disable a package source:

```
choco source disable --name {{name}}
```

- Remove a package source:

```
choco source remove --name {{name}}
```

choco uninstall

Uninstall one or more packages with Chocolatey.

More information: <https://chocolatey.org/docs/commands-uninstall>.

- Uninstall one or more space-separated packages:

```
choco uninstall {{package(s)}}}
```

- Uninstall a specific version of a package:

```
choco uninstall {{package}} --version {{version}}
```

- Confirm all prompts automatically:

```
choco uninstall {{package}} --yes
```

- Remove all dependencies when uninstalling:

```
choco uninstall {{package}} --remove-dependencies
```

- Uninstall all packages:

```
choco uninstall all
```

choco upgrade

Upgrade one or more packages with Chocolatey.

More information: <https://chocolatey.org/docs/commands-upgrade>.

- Upgrade one or more space-separated packages:

```
choco upgrade {{package(s)}}}
```

- Upgrade to a specific version of a package:

```
choco upgrade {{package}} --version {{version}}
```

- Upgrade all packages:

```
choco upgrade all
```

- Upgrade all except specified comma-separated packages:

```
choco upgrade all --except "{{package(s)}}"
```

- Confirm all prompts automatically:

```
choco upgrade {{package}} --yes
```

- Specify a custom source to receive packages from:

```
choco upgrade {{package}} --source {{source_url|alias}}
```

- Provide a username and password for authentication:

```
choco upgrade {{package}} --user {{username}} --password {{password}}
```

choco

A command line interface for the Chocolatey package manager.

See **choco install**, **choco upgrade** and other pages for additional information.

More information: <https://chocolatey.org>.

- Execute Chocolatey command:

```
choco {{command}}
```

- Call general help:

```
choco -?
```

- Call help on a specific command:

```
choco {{command}} -?
```

- Check the Chocolatey version:

```
choco --version
```

choice

Prompts the user to select one item from a list of single-character choices in a batch program, and then returns the index of the selected choice.

If used without parameters, choice displays the default choices Y and N.

More Information: <https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/choice>.

- A,B and C as list of choices to be used:

```
choice /c {{ABC}}
```

- Use the default [Y,N] list of choices:

```
choice
```

- Specify that the choices are case-sensitive:

```
choice /CS {{AaBb}}
```

- Specify the number of seconds to pause before using the default choice specified by /d:

```
choice /C {{AaBb}} /t {{3}} /d {{b}}
```

- Specify a message to display before the list of choices. If /m is not specified, only the choice prompt is displayed:

```
choice /m {{message}} /C {{ABC}}
```

- Display help message:

```
choice /?
```

cipher

Encrypt or decrypt files on NTFS drives.

- Encrypt a file or directory:

```
cipher /e:{path/to/file_or_directory}
```

- Decrypt a file or directory:

```
cipher /d:{path/to/file_or_directory}
```

- Securely remove a file or directory:

```
cipher /w:{path/to/file_or_directory}
```

clip

Copy input content to the Windows clipboard.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/clip>.

- Pipe command line output to the Windows clipboard:

```
{{dir}} | clip
```

- Copy the contents of a file to the Windows clipboard:

```
clip < {{path/to/file.ext}}
```

- Copy text with a trailing newline to the Windows clipboard:

```
echo {{some text}} | clip
```

- Copy text without a trailing newline to the Windows clipboard:

```
echo | set /p="some text" | clip
```

cls

Clears the screen.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/cls>.

- Clear the screen:

```
cls
```

cmd

The Windows command interpreter.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/cmd>.

- Start a new instance of the command interpreter:

```
cmd
```

- Run the specified command and then exit:

```
cmd /c "{{command}}"
```

- Run the specified command and then enter an interactive shell:

```
cmd /k "{{command}}"
```

- Disable the usage of **echo** in command output:

```
cmd /q
```

- Enable or disable command extensions:

```
cmd /e:{on|off}
```

- Enable or disable file or directory completion:

```
cmd /f:{on|off}
```

- Enable or disable environment variable expansion:

```
cmd /v:{on|off}
```

- Force output to use unicode encoding:

```
cmd /u
```

cmstp

A command line tool for managing connection service profiles.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/cmstp>.

- Install a specific profile:

```
cmstp "{{path/to/profile}}"
```

- Install without creating a desktop shortcut:

```
cmstp /ns "{{path/to/profile}}"
```

- Install without checking for dependencies:

```
cmstp /nf "{{path/to/profile}}"
```

- Only install for the current user:

```
cmstp /su "{{path/to/profile}}"
```

- Install for all users (requires administrator privileges):

```
cmstp /au "{{path/to/profile}}"
```

- Install silently without any prompts:

```
cmstp /s "{{path/to/profile}}"
```

- Uninstall a specific profile:

```
cmstp /u "{{path/to/profile}}"
```

- Uninstall silently without a confirmation prompt:

```
cmstp /u /s "{{path/to/profile}}"
```

color

Set the console foreground and background colors.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/color>.

- Set the console colors to the default values:

```
color
```

- List available color values and detailed information:

```
color /?
```

- Set the console foreground and background to a specific color:

```
color {{foreground_code}} {{background_code}}
```

comp

Compare the contents of two files or sets of files.

Use wildcards (*) to compare sets of files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/comp>.

- Compare files interactively:

```
comp
```

- Compare two specified files:

```
comp {{path/to/file_1}} {{path/to/file_2}}
```

- Compare two sets of files:

```
comp {{path/to/directory_1/*}} {{path/to/directory_2/*}}
```

- Display differences in decimal format:

```
comp /d {{path/to/file_1}} {{path/to/file_2}}
```

- Display differences in ASCII format:

```
comp /a {{path/to/file_1}} {{path/to/file_2}}
```

- Display line numbers for differences:

```
comp /l {{path/to/file_1}} {{path/to/file_2}}
```

- Compare files case-insensitively:

```
comp /c {{path/to/file_1}} {{path/to/file_2}}
```

- Compare only the first 5 lines of each file:

```
comp /n={{5}} {{path/to/file_1}} {{path/to/file_2}}
```

del

Delete one or more files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/del>.

- Delete one or more space-separated files or patterns:

```
del {{file_pattern}}
```

- Prompt for confirmation before deleting each file:

```
del {{file_pattern}} /p
```

- Force the deletion of read-only files:

```
del {{file_pattern}} /f
```

- Recursively delete file(s) from all subdirectories:

```
del {{file_pattern}} /s
```

- Do not prompt when deleting files based on a global wildcard:

```
del {{file_pattern}} /q
```

- Display the help and list available attributes:

```
del /?
```

- Delete files based on specified attributes:

```
del {{file_pattern}} /a {{attribute}}
```

dir

List directory contents.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/dir>.

- Show the contents of the current directory:

```
dir
```

- Show the contents of a given directory:

```
dir {{path/to/directory}}
```

- Show the contents of the current directory, including hidden ones:

```
dir /A
```

- Show the contents of a given directory, including hidden ones:

```
dir {{path/to/directory}} /A
```

doskey

Manage macros, windows commands and command lines.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/doskey>.

- List available macros:

```
doskey /macros
```

- Create a new macro:

```
doskey {{name}} = "{{command}}"
```

- Create a new macro for a specific executable:

```
doskey /exename={{executable}} {{name}} = "{{command}}"
```

- Remove a macro:

```
doskey {{name}} =
```

- Display all commands that are stored in memory:

```
doskey /history
```

- Save macros to a file for portability:

```
doskey /macros > {{macinit}}
```

- Load macros from a file:

```
doskey /macrofile = {{macinit}}
```

driverquery

Display information about installed device drivers.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/driverquery>.

- Display a list of all installed device drivers:

```
driverquery
```

- Display a list of drivers in the specified format:

```
driverquery /fo {{table|list|csv}}
```

- Display a list of drivers with a column to indicate if they are signed:

```
driverquery /si
```

- Exclude the header in the output list:

```
driverquery /nh
```

- Display a list of drivers for a remote machine:

```
driverquery /s {{hostname}} /u {{username}} /p {{password}}
```

- Display a list of drivers with verbose information:

```
driverquery /v
```

- Display detailed usage information:

```
driverquery /?
```

eventcreate

Create custom entries in the event log.

Event IDs can be any number between 1 and 1000.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/eventcreate>.

- Create a new event with a given id (1-1000) in the log:

```
eventcreate /t {{success|error|warning|information}} /id  
{{id}} /d "{{message}}"
```

- Create an event in a specific event log:

```
eventcreate /l {{log_name}} /t {{type}} /id {{id}} /d  
"{{message}}"
```

- Create an event with a specific source:

```
eventcreate /so {{source_name}} /t {{type}} /id {{id}} /d  
"{{message}}"
```

- Create an event in a remote machine's event log:

```
eventcreate /s {{hostname}} /u {{username}} /p {{password}} /  
t {{type}} /id {{id}} /d "{{message}}"
```

exit

Quit the current CMD instance or the current batch file.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/exit>.

- Quit the current CMD instance:

```
exit
```

- Quit the current batch script:

```
exit /b
```

- Quit using a specific exit code:

```
exit {{exit_code}}
```

expand

Uncompress one or more Windows Cabinet files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/expand>.

- Uncompress a single-file Cabinet file to the specified directory:

```
expand {{path/to/file.cab}} {{path/to/directory}}
```

- Display the list of files in a source Cabinet file:

```
expand {{path/to/file.cab}} {{path/to/directory}} -d
```

- Uncompress all files from the Cabinet file:

```
expand {{path/to/file.cab}} {{path/to/directory}} -f:*
```

- Uncompress a specific file from a Cabinet file:

```
expand {{path/to/file.cab}} {{path/to/directory}} -f:{{file}}
```

- Ignore the directory structure when uncompressing, and add them to a single directory:

```
expand {{path/to/file.cab}} {{path/to/directory}} -i
```

explorer

The Windows File Explorer.

- Open Windows Explorer:

```
explorer
```

- Open Windows Explorer in the current directory:

```
explorer .
```

- Open Windows Explorer in a specific directory:

```
explorer {{path/to/directory}}
```

fc

Compare the differences between two files or sets of files.

Use wildcards (*) to compare sets of files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/fc>.

- Compare 2 specified files:

```
fc {{path/to/file_1}} {{path/to/file_2}}
```

- Perform a case-insensitive comparison:

```
fc /c {{path/to/file_1}} {{path/to/file_2}}
```

- Compare files as Unicode text:

```
fc /u {{path/to/file_1}} {{path/to/file_2}}
```

- Compare files as ASCII text:

```
fc /l {{path/to/file_1}} {{path/to/file_2}}
```

- Compare files as binary:

```
fc /b {{path/to/file_1}} {{path/to/file_2}}
```

- Disable tab-to-space expansion:

```
fc /t {{path/to/file_1}} {{path/to/file_2}}
```

- Compress whitespace (tabs and spaces) for comparisons:

```
fc /w {{path/to/file_1}} {{path/to/file_2}}
```

find

Find a specified string in one or more files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/find>.

- Find lines that contain a specified string:

```
find {{string}} {{path/to/file_or_directory}}
```

- Display lines that do not contain the specified string:

```
find {{string}} {{path/to/file_or_directory}} /v
```

- Display the count of lines that contain the specified string:

```
find {{string}} {{path/to/file_or_directory}} /c
```

- Display line numbers with the list of lines:

```
find {{string}} {{path/to/file_or_directory}} /n
```

findstr

Find specified text within one or more files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/findstr>.

- Find space-separated string(s) in all files:

```
findstr "{{query}}" *
```

- Find space-separated string(s) in a piped command's output:

```
{{dir}} | findstr "{{query}}"
```

- Find space-separated string(s) in all files recur[s]ively:

```
findstr /s "{{query}}" *
```

- Find strings using a case-insensitive search:

```
findstr /i "{{query}}" *
```

- Find strings in all files using regular expressions:

```
findstr /r "{{expression}}" *
```

- Find a literal string (containing spaces) in all text files:

```
findstr /c:"{{query}}" *.txt
```

- Display the line number before each matching line:

```
findstr /n "{{query}}" *
```

- Display only the filenames that contain a match:

```
findstr /m "{{query}}" *
```

finger

Return information about one or more users on a specified system.

The remote system must be running the Finger service.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/finger>.

- Display information about a specific user:

```
finger {{user}}@{{host}}
```

- Display information about all users on the specified host:

```
finger @{{host}}
```

- Display information in a longer format:

```
finger {{user}}@{{host}} -l
```

- Display help information:

```
finger /?
```

fondué

A command line installer for optional Windows features.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/fondué>.

- Enable a specific Windows feature:

```
fondué /enable-feature:{{feature}}
```

- Hide all output messages to the user:

```
fondué /enable-feature:{{feature}} /hide-ux:all
```

- Specify a caller process name for error reporting:

```
fondué /enable-feature:{{feature}} /caller-name:{{name}}
```

forfiles

Select one or more files to execute a specified command on.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/forfiles>.

- Search for files in the current directory:

```
forfiles
```

- Search for files in a specific directory:

```
forfiles /p {{path/to/directory}}
```

- Run the specified command for each file:

```
forfiles /c "{{command}}"
```

- Search for files using a specific glob mask:

```
forfiles /m {{glob_pattern}}
```

- Search for files recursively:

```
forfiles /s
```

- Search for files older than 5 days:

```
forfiles /d {{+5}}
```

ftp

Interactively transfer files between a local and remote FTP server.

- Connect to a remote FTP server interactively:

```
ftp {{host}}
```

- Log in as an anonymous user:

```
ftp -A {{host}}
```

- Disable automatic login upon initial connection:

```
ftp -n {{host}}
```

- Run a file containing a list of FTP commands:

```
ftp -s:{{path/to/file}} {{host}}
```

- Download multiple files (glob expression):

```
mget {{*.png}}
```

- Upload multiple files (glob expression):

```
mput {{*.zip}}
```

- Delete multiple files on the remote server:

```
mdelete {{*.txt}}
```

- Display detailed help:

```
ftp --help
```

ftype

Display or modify file types used for file extension association.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/ftype>.

- Display a list of all file types:

```
ftype
```

- Display the associated program for a specific file type:

```
ftype {{file_type}}
```

- Set the associated program for a specific file type:

```
ftype {{file_type}}="{{path/to/executable_command}}"
```

Get-Content

Get the content of the item at the specified location.

More information: <https://docs.microsoft.com/powershell/module/microsoft.powershell.management/get-content>.

- Display the content of a file:

```
Get-Content -Path {{path/to/file}}
```

- Display the first few lines of a file:

```
Get-Content -Path {{path/to/file}} -TotalCount {{count}}
```

- Display the content of the file and keep reading from it until **Ctrl + C** is pressed:

```
Get-Content -Path {{path/to/file}} -Wait
```

getmac

Display the MAC addresses of a system.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/getmac>.

- Display the MAC addresses for the current system:

```
getmac
```

- Display the details in a specific format:

```
getmac /fo {{table|list|csv}}
```

- Exclude the header in the output list:

```
getmac /nh
```

- Display the MAC addresses for a remote machine:

```
getmac /s {{hostname}} /u {{username}} /p {{password}}
```

- Display the MAC addresses with verbose information:

```
getmac /v
```

- Display detailed usage information:

```
getmac /?
```

gpupdate

A tool to check and apply Windows Group Policy settings.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/gpupdate>.

- Check and apply updated Group Policy settings:

`gpupdate`

- Specify the target Group Policy settings to check for update:

`gpupdate /target=:{{computer|user}}`

- Force all Group Policy settings to be reapplied:

`gpupdate /force`

- Display detailed usage information:

`gpupdate /?`

ipconfig

Display and manage the network configuration of Windows.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/ipconfig>.

- Show a list of network adapters:

```
ipconfig
```

- Show a detailed list of network adapters:

```
ipconfig /all
```

- Renew the IP addresses for a network adapter:

```
ipconfig /renew {{adapter}}
```

- Free up the IP addresses for a network adapter:

```
ipconfig /release {{adapter}}
```

- Remove all data from the DNS cache:

```
ipconfig /flushdns
```

ISCC

Compiler for Inno Setup installers.

It compiles an Inno Setup scripts into an Windows installer executable.

- Compile an Inno Setup script:

```
iscc {{path/to/file.iss}}
```

- Quietly compile an Inno Setup installer:

```
iscc /Q {{path/to/file.iss}}
```

- Compile a signed Inno Setup installer:

```
iscc /S={{name}}={{command}} {{path/to/file.iss}}
```

logoff

Terminate a login session.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/logoff>.

- Terminate the current session:

```
logoff
```

- Terminate a session by its name or id:

```
logoff {{session_name|session_id}}
```

- Terminate a session on a specific server connected through RDP:

```
logoff {{session_name|session_id}} /server:{{servername}}
```

mkdir

Creates a directory.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/mkdir>.

- Create a directory:

```
mkdir {{directory_name}}
```

- Recursively create a nested directory tree:

```
mkdir {{path/to/sub_directory_name}}
```

mklink

Create symbolic links.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/mklink>.

- Create a symbolic link to a file:

```
mklink {{path/to/link}} {{path/to/source_file}}
```

- Create a symbolic link to a directory:

```
mklink /d {{path/to/link}} {{path/to/source_directory}}
```

- Create a hard link to a file:

```
mklink /h {{path/to/link}} {{path/to/source_file}}
```

- Create a directory junction:

```
mklink /j {{path/to/link}} {{path/to/source_file}}
```

more

Display paginated output from `stdin` or a file.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/more>.

- Display paginated output from `stdin`:

```
{{echo test}} | more
```

- Display paginated output from one or more files:

```
more {{path/to/file}}
```

- Convert tabs to the specified number of spaces:

```
more {{path/to/file}} /t{{spaces}}
```

- Clear the screen before displaying the page:

```
more {{path/to/file}} /c
```

- Display the output starting at line 5:

```
more {{path/to/file}} +{{5}}
```

- Enable extended interactive mode (see help for usage):

```
more {{path/to/file}} /e
```

- Display full usage information:

```
more /?
```

mount

Mount Network File System (NFS) network shares.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/mount>.

- Mount a share to the "Z" drive letter:

```
mount \\{{computer_name}}\{{share_name}} {{Z:}}
```

- Mount a share to the next available drive letter:

```
mount \\{{computer_name}}\{{share_name}} *
```

- Mount a share with a read timeout in seconds (defaults to 0.8, can be 0.9 or 1 to 60):

```
mount -o timeout={{seconds}} \\{{computer_name}}\{{share_name}} {{Z:}}
```

- Mount a share and retry up to 10 times if it fails:

```
mount -o retry={{retries}} \\{{computer_name}}\{{share_name}} {{Z:}}
```

- Mount a share with forced case sensitivity:

```
mount -o casesensitive \\{{computer_name}}\{{share_name}} {{Z:}}
```

- Mount a share as an anonymous user:

```
mount -o anon \\{{computer_name}}\{{share_name}} {{Z:}}
```

- Mount a share using a specific mount type:

```
mount -o mtype={{soft|hard}} \\{{computer_name}}\{{share_name}} {{Z:}}
```

msg

Send a message to a specific user or session.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/msg>.

- Send a message to a specified user or session:

```
msg {{username|session_name|session_id}} {{message}}
```

- Send a message from `stdin`:

```
echo "{{message}}" | msg {{username|session_name|session_id}}
```

- Send a message to a specific server:

```
msg /server:{{server_name}} {{username|session_name|session_id}}
```

- Send a message to all users of the current machine:

```
msg *
```

- Set a delay in seconds for a message:

```
msg /time:{{seconds}}
```

nfsstat

Display or reset the number of calls made to the NFS server.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/nfsstat>.

- Display the recorded number of calls made to the NFS server:

`nfsstat`

- Reset the recorded number of calls made to the NFS server:

`nfsstat -z`

octo

Command line tools for Octopus Deploy.

More information: <https://octopus.com/docs/octopus-rest-api/octo.exe-command-line>.

- Create a package:

```
octo pack --id={{package_name}}
```

- Push a package to a repository on the Octopus server:

```
octo push --package={{package_name}}
```

- Create a release:

```
octo create-release --project={{project_name}} --  
packageversion={{version}}
```

- Deploy a release:

```
octo deploy-release --project={{project_name}} --  
packageversion={{version}} --deployto={{environment_name}} --  
tenant={{deployment_target}}
```

path

Display or set the search path for executable files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/path>.

- Display the current path:

```
path
```

- Set the path to one or more semicolon-separated directories:

```
path {{path/to/directory(s)}}
```

- Append a new directory to the original path:

```
path {{path/to/directory}};%path%
```

- Set command prompt to only search the current directory for executables:

```
path ;
```

pathping

A trace route tool combining features of **ping** and **tracert**.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/pathping>.

- Ping and trace the route to a host:

```
pathping {{hostname}}
```

- Do not perform reverse lookup of ip-address to hostname:

```
pathping {{hostname}} -n
```

- Specify the maximum number of hops to search for the target (the default is 30):

```
pathping {{hostname}} -h {{max_hops}}
```

- Specify the milliseconds to wait between pings (the default is 240):

```
pathping {{hostname}} -p {{time}}
```

- Specify the number of queries per hop (the default is 100):

```
pathping {{hostname}} -q {{queries}}
```

- Force IPV4 usage:

```
pathping {{hostname}} -4
```

- Force IPV6 usage:

```
pathping {{hostname}} -6
```

- Display detailed usage information:

```
pathping /?
```

popd

Changes the current directory to the directory stored by the **pushd** command.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/popd>.

- Switch to directory at the top of the stack:

popd

powershell

Command-line shell and scripting language designed especially for system administration.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/powershell>.

- Start a Windows PowerShell session in a Command Prompt window:

```
powershell
```

- Load a specific PowerShell console file:

```
powershell -PSConsoleFile {{path/to/file}}
```

- Start a session with a specified version of PowerShell:

```
powershell -Version {{version}}
```

- Prevent the shell from exit after running startup commands:

```
powershell -NoExit
```

- Describe the format of data sent to PowerShell:

```
powershell -InputFormat {{Text|XML}}
```

- Determine how output from PowerShell is formatted:

```
powershell -OutputFormat {{Text|XML}}
```

- Display help:

```
powershell -Help
```

print

Print a text file to a printer.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/print>.

- Print a text file to the default printer:

```
print {{path/to/file}}
```

- Print a text file to a specific printer:

```
print /d:{{printer}} {{path/to/file}}
```

psping

A ping tool that includes TCP ping, latency and bandwidth measurement.

More information: <https://docs.microsoft.com/sysinternals/downloads/psping>.

- Ping a host using ICMP:

```
psping {{hostname}}
```

- Ping a host over a TCP port:

```
psping {{hostname}}:{{port}}
```

- Specify the number of pings and perform it quietly:

```
psping {{hostname}} -n {{pings}} -q
```

- Ping the target over TCP 50 times and produce a histogram of the results:

```
psping {{hostname}}:{{port}} -q -n {{50}} -h
```

- Display usage information:

```
psping /?
```

pushd

Place a directory on a stack so it can be accessed later.

See also **popd** to switch back to original directory.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/pushd>.

- Switch to directory and push it on the stack:

```
pushd {{directory}}
```

pwlauncher

A command line tool for managing the Windows To Go startup options.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/pwlauncher>.

- Display the current Windows To Go status:

```
pwlauncher
```

- Enable or disable the Windows To Go startup options:

```
pwlauncher /{{enable|disable}}
```

rdpsign

A tool for signing Remote Desktop Protocol (RDP) files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/rdpsign>.

- Sign an RDP file:

```
rdpsign {{path/to/file.rdp}}
```

- Sign an RDP file using a specific sha256 hash:

```
rdpsign {{path/to/file.rdp}} /sha256 {{hash}}
```

- Enable quiet output:

```
rdpsign {{path/to/file.rdp}} /q
```

- Display verbose warnings, messages and statuses:

```
rdpsign {{path/to/file.rdp}} /v
```

- Test the signing by displaying the output to **stdout** without updating the file:

```
rdpsign {{path/to/file.rdp}} /l
```

reg add

Add new keys and their values to the registry.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-add>.

- Add a new registry key:

```
reg add {{key_name}}
```

- Add a new value under a specific key:

```
reg add {{key_name}} /v {{value}}
```

- Add a new value with specific data:

```
reg add {{key_name}} /d {{data}}
```

- Add a new value to a key with a specific data type:

```
reg add {{key_name}} /t {{type}}
```

- Forcefully overwrite the existing registry value without a prompt:

```
reg add {{key_name}} /f
```

reg compare

Compare keys and their values in the registry.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-compare>.

- Compare all values under a specific key with a second key:

```
reg compare {{first_key_name}} {{second_key_name}}
```

- Compare a specific value under two keys:

```
reg compare {{first_key_name}} {{second_key_name}} /v  
{{value}}
```

- Compare all sub keys and values for two keys:

```
reg compare {{first_key_name}} {{second_key_name}} /s
```

- Only output the matches between the specified keys:

```
reg compare {{first_key_name}} {{second_key_name}} /os
```

- Output the differences and matches between the specified keys:

```
reg compare {{first_key_name}} {{second_key_name}} /oa
```

reg copy

Copy keys and their values in the registry.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-copy>.

- Copy a registry key to a new registry location:

```
reg copy {{old_key_name}} {{new_key_name}}
```

- Copy a registry key recursively to a new registry location:

```
reg copy {{old_key_name}} {{new_key_name}} /s
```

- Forcefully copy a registry key without a prompt:

```
reg copy {{old_key_name}} {{new_key_name}} /f
```

reg delete

Delete keys or their values from the registry.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-delete>.

- Delete a specific registry key:

```
reg delete {{key_name}}
```

- Delete a value under a specific key:

```
reg delete {{key_name}} /v {{value}}
```

- Delete all values recursively under the specified key:

```
reg delete {{key_name}} /va
```

- Forcefully delete all values recursively under a key without a prompt:

```
reg delete {{key_name}} /f /va
```

reg export

Export the specified sub keys and values into a file.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-export>.

- Export all sub keys and values of a specific key:

```
reg export {{key_name}} {{path/to/file.reg}}
```

- Force overwriting of an existing file without prompt:

```
reg export {{key_name}} {{path/to/file.reg}} /y
```

reg flags

Display or set flags on registry keys.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-flags>.

- Display current flags for a specific key:

```
reg flags {{key_name}} query
```

- Display help and available flag types:

```
reg flags /?
```

- Set specified space-separated flags, and unset unmentioned flags, for a specific key:

```
reg flags {{key_name}} set {{flag_names}}
```

- Set specified flags for a specific key and its sub keys:

```
reg flags {{key_name}} set {{flag_names}} /s
```

reg import

Import all available keys, subkeys, and values from a file.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-import>.

- Import all keys, subkeys and values from a file:

```
reg import {{path/to/file.reg}}
```

reg load

Load saved sub keys into a different sub key in the registry.

This is intended for troubleshooting and temporary keys.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-load>.

- Load a backup file into the specified key:

```
reg load {{key_name}} {{path/to/file}}
```

reg query

Display the values of keys and sub keys in the registry.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-query>.

- Display all values of a key:

```
reg query {{key_name}}
```

- Display a specific value of a key:

```
reg query {{key_name}} /v {{value}}
```

- Display all values of a key and its sub keys:

```
reg query {{key_name}} /s
```

- Search for keys and values matching a specific pattern:

```
reg query {{key_name}} /f "{{query_pattern}}"
```

- Display a value of a key matching a specified data type:

```
reg query {{key_name}} /t {{type}}
```

reg restore

Restore a key and its values from a backup file.

See **reg-save** for more information.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-restore>.

- Overwrite a specified key with data from a backup file:

```
reg restore {{key_name}} {{path/to/file}}
```

reg save

Save a registry key, its sub keys and values to a file.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-save>.

- Save a registry key, its sub keys and values to a specific file:

```
reg save {{key_name}} {{path/to/file}}
```

- Forcefully overwrite an existing file without a prompt:

```
reg save {{key_name}} {{path/to/file}} /y
```

reg unload

Remove data from the registry that was loaded using the **reg load** command.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg-unload>.

- Remove data from the registry for a specified key:

```
reg unload {{key_name}}
```

reg

A command line interface for managing keys and their values in the Windows registry.

See [reg-query](#), [reg-add](#) and other pages for additional information.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/reg>

- Execute registry commands:

```
reg {{command}}
```

- Display general information and list all available commands:

```
reg /?
```

- Call help on a specific command:

```
reg {{command}} /?
```

repair-bde

Attempt to repair or decrypt a damaged BitLocker-encrypted volume.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/repair-bde>.

- Attempt to repair a specified volume:

```
repair-bde {{C:}}
```

- Attempt to repair a specified volume and output to another volume:

```
repair-bde {{C:}} {{D:}}
```

- Attempt to repair a specified volume using the provided recovery key file:

```
repair-bde {{C:}} -RecoveryKey {{path/to/file.bek}}
```

- Attempt to repair a specified volume using the provided numerical recovery password:

```
repair-bde {{C:}} -RecoveryPassword {{password}}
```

- Attempt to repair a specified volume using the provided password:

```
repair-bde {{C:}} -Password {{password}}
```

- Attempt to repair a specified volume using the provided key package:

```
repair-bde {{C:}} -KeyPackage {{path/to/directory}}
```

- Log all output to a specific file:

```
repair-bde {{C:}} -LogFile {{path/to/file}}
```

- Display all available options:

```
repair-bde /?
```

replace

Replace files.

See also: **robocopy**, **move**, **copy**, and **del**.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/replace>.

- Replace the destination file with the one from the source directory:

```
replace {{path/to/file_or_directory}} {{path/to/destination}}
```

- Add files to the destination directory instead of replacing existing files:

```
replace {{path/to/file_or_directory}} {{path/to/destination}}
/a
```

- Interactively copy multiple files, with a prompt before replacing or adding a destination file:

```
replace {{path/to/file_or_directory}} {{path/to/destination}}
/p
```

- Replace even read only files:

```
replace {{path/to/file_or_directory}} {{path/to/destination}}
/r
```

- Wait for you to insert a disk before it replaces files (originally to allow inserting a floppy disk):

```
replace {{path/to/file_or_directory}} {{path/to/destination}}
/w
```

- Replace all files in subfolders of the destination:

```
replace {{path/to/file_or_directory}} {{path/to/destination}}
/s
```

- Replace only files in the destination directory which are older than the files in the source directory:

```
replace {{path/to/file_or_directory}} {{path/to/destination}}
/u
```

- Display detailed usage information:

```
replace /?
```

rmdir

Remove a directory and its contents.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/rmdir>.

- Remove an empty directory:

```
rmdir {{path/to/directory}}
```

- Remove a directory and its contents recursively:

```
rmdir {{path/to/directory}} /s
```

- Remove a directory and its contents recursively without prompting:

```
rmdir {{path/to/directory}} /s /q
```

robocopy

Robust File and Folder Copy.

By default files will only be copied if the source and destination have different time stamps or different file sizes.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/robocopy>.

- Copy all .jpg and .bmp files from one directory to another:

```
robocopy {{path/to/source}} {{path/to/destination}} {{*.jpg}}  
{{*.bmp}}
```

- Copy all files and subdirectories, including empty ones:

```
robocopy {{path/to/source}} {{path/to/destination}} /E
```

- Mirror/Sync a directory, deleting anything not in source and include all attributes and permissions:

```
robocopy {{path/to/source}} {{path/to/destination}} /MIR /  
COPYALL
```

- Copy all files and subdirectories, excluding source files that are older than destination files:

```
robocopy {{path/to/source}} {{path/to/destination}} /E /XO
```

- List all files 50 MBytes or larger in size instead of copying them:

```
robocopy {{path/to/source}} {{path/to/destination}} /MIN:  
52428800 /L
```

- Allow resuming if network connection is lost and limit retries to 5 and wait time to 15 sec:

```
robocopy {{path/to/source}} {{path/to/destination}} /Z /R:5 /  
W:15
```

- Display detailed usage information:

```
robocopy /?
```

rpcinfo

List programs via RPC on remote computers.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/rpcinfo>.

- List all programs registered on the local computer:

`rpcinfo`

- List all programs registered on a remote computer:

`rpcinfo /p {{computer_name}}`

- Call a specific program on a remote computer using TCP:

`rpcinfo /t {{computer_name}} {{program_name}}`

- Call a specific program on a remote computer using UDP:

`rpcinfo /u {{computer_name}} {{program_name}}`

scoop bucket

Manage buckets: Git repositories containing files which describe how scoop installs applications.

If Scoop doesn't know where the bucket is located its repository location must be specified.

More information: <https://github.com/lukesampson/scoop/wiki/Buckets>.

- List all buckets currently in use:

```
scoop bucket list
```

- List all known buckets:

```
scoop bucket known
```

- Add a known bucket by its name:

```
scoop bucket add {{name}}
```

- Add an unknown bucket by its name and Git repository URL:

```
scoop bucket add {{name}} {{https://example.com/
repository.git}}
```

- Remove a bucket by its name:

```
scoop bucket rm {{name}}
```

scoop

A command-line installer for Windows.

More information: <https://scoop.sh>.

- Install a package:

```
scoop install {{package}}
```

- Remove a package:

```
scoop uninstall {{package}}
```

- Update all installed packages:

```
scoop update *
```

- List installed packages:

```
scoop list
```

- Display information about a package:

```
scoop info {{package}}
```

- Search for a package:

```
scoop search {{package}}
```

- Remove old versions of all packages and clear the download cache:

```
scoop cleanup -k *
```

set

Display or set environment variables for the current instance of CMD.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/set>.

- List all current environment variables:

```
set
```

- Set an environment variable to a specific value:

```
set {{name}}={{value}}
```

- List environment variables starting with the specified string:

```
set {{name}}
```

- Prompt the user for a value for the specified variable:

```
set /p {{name}}={{prompt_string}}
```

sfc

Scans the integrity of Windows system files.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/sfc>.

- Display information about the usage of the command:

```
sfc
```

- Scan all system files and, if possible, repair any problems:

```
sfc /scannow
```

- Scan all system files without attempting to repair any:

```
sfc /verifyonly
```

- Scan a specific file and, if possible, repair any problems:

```
sfc /scanfile={{path/to/file}}
```

- Scan a specific file without attempting to repair it:

```
sfc /verifyfile={{path/to/file}}
```

- When repairing offline, specify the boot directory:

```
sfc /offbootdir={{path/to/directory}}
```

- When repairing offline, specify the Windows directory:

```
sfc /offwindir={{path/to/directory}}
```

showmount

Display information about NFS filesystems on Windows Server.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/showmount>.

- Display all exported filesystems:

```
showmount -e
```

- Display all NFS clients and their mounted directories:

```
showmount -a
```

- Display all NFS mounted directories:

```
showmount -d
```

- Display all exported filesystems for a remote server:

```
showmount -e {server_address}
```

shutdown

A tool for shutting down, restarting or logging off a machine.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/shutdown>.

- Shutdown the current machine:

```
shutdown /s
```

- Shutdown the current machine force-closing all apps:

```
shutdown /s /f
```

- Restart the current machine:

```
shutdown /r
```

- Hibernate the current machine:

```
shutdown /h
```

- Log off the current machine:

```
shutdown /l
```

- Specify a timeout in seconds to wait before shutting down:

```
shutdown /s /t {{seconds}}
```

- Specify a comment for the shutdown reason:

```
shutdown /s /c "{{reason}}"
```

- Abort a shutdown sequence whose timeout is yet to expire:

```
shutdown /a
```

- Shutdown a remote machine:

```
shutdown /m {{\\hostname}}
```

sigverif

A GUI signature verification tool for checking system files.

- Open the File Signature Verification interface:

sigverif

subst

Associates a path with a virtual drive letter.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/subst>.

- List active associations:

```
subst
```

- Add an association:

```
subst {{Z:}} {{C:\Python2.7}}
```

- Remove an association:

```
subst {{Z:}} /d
```

systeminfo

Display operating system configuration for a local or remote machine.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/systeminfo>.

- Display system configuration for the local machine:

`systeminfo`

- Display system configuration in a specified output format:

`systeminfo /fo {{table|list|csv}}`

- Display system configuration for a remote machine:

`systeminfo /s {{remote_name}} /u {{username}} /p {{password}}`

- Display detailed usage information:

`systeminfo /?`

takeown

Take ownership of a file or directory.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/takeown>.

- Take ownership of the specified file:

```
takeown /f {{path/to/file}}
```

- Take ownership of the specified directory:

```
takeown /d {{path/to/directory}}
```

- Take ownership of the specified directory and all subdirectories:

```
takeown /r /d {{path/to/directory}}
```

- Change ownership to the Administrator group instead of the current user:

```
takeown /a /f {{path/to/file}}
```

taskkill

Terminate a process by its process id or name.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/taskkill>.

- Terminate a process by its id:

```
taskkill /pid {{process_id}}
```

- Terminate a process by its name:

```
taskkill /im {{process_name}}
```

- Forcefully terminate a specified process:

```
taskkill /pid {{process_id}} /f
```

- Terminate a process and its child processes:

```
taskkill /im {{process_name}} /t
```

- Terminate a process on a remote machine:

```
taskkill /pid {{process_id}} /s {{remote_name}}
```

- Display information about the usage of the command:

```
taskkill /?
```

tasklist

Display a list of currently running processes on a local or remote machine.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/tasklist>.

- Display currently running processes:

```
tasklist
```

- Display running processes in a specified output format:

```
tasklist /fo {{table|list|csv}}
```

- Display running processes using the specified .exe or .dll file name:

```
tasklist /m {{module_pattern}}
```

- Display processes running on a remote machine:

```
tasklist /s {{remote_name}} /u {{username}} /p {{password}}
```

- Display services using each process:

```
tasklist /svc
```

title

Set the title of the command prompt window.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/title>.

- Set the title of the current command prompt window:

```
title {{new_title}}
```

tree

Display a graphical tree of the directory structure for a path.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/tree>.

- Display the tree for the current directory:

```
tree
```

- Display the tree for a specific directory:

```
tree {{path/to/directory}}
```

- Display the tree for a directory including files:

```
tree {{path/to/directory}} /f
```

- Display the tree using ASCII characters instead of extended characters:

```
tree {{path/to/directory}} /a
```

tskill

Ends a process running in a session on a Remote Desktop Session Host.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/tskill>.

- Terminate a process by its process identifier:

```
tskill {{process_id}}
```

- Terminate a process by its name:

```
tskill {{process_name}}
```

type

Display the contents of a file.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/type>.

- Display the contents of a specific file:

```
type {{path/to/file}}
```

tzutil

A tool for displaying or configuring the system time zone.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/tzutil>.

- Get the current time zone:

```
tzutil /g
```

- Display a list of available time zones:

```
tzutil /l
```

- Set the system time zone to the specific value:

```
tzutil /s {{timezone_id}}
```

units

Provide the conversion between two units of measure.

- Run in interactive mode:

```
units
```

- Show the conversion between two simple units:

```
units {{quarts}} {{tablespoons}}
```

- Convert between units with quantities:

```
units {{15 pounds}} {{kilograms}}
```

- Show the conversion between two compound units:

```
units "{{meters / second}}" "{{inches / hour}}"
```

- Show the conversion between units with different dimensions:

```
units "{{acres}}" "{{ft^2}}"
```

ver

Display the current Windows or MS-DOS version number.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/ver>.

- Display the current version number:

ver

virtualboxvm

The VirtualBox virtual machine management CLI.

More information: <https://www.virtualbox.org>.

- Start a virtual machine:

```
virtualboxvm --startvm {{name|uuid}}
```

- Start a virtual machine in fullscreen mode:

```
virtualboxvm --startvm {{name|uuid}} --fullscreen
```

- Mount the specified DVD image file:

```
virtualboxvm --startvm {{name|uuid}} --dvd {{path/to/
image_file}}
```

- Display a command line window with debug information:

```
virtualboxvm --startvm {{name|uuid}} --debug-command-line
```

- Start a virtual machine in a paused state:

```
virtualboxvm --startvm {{name|uuid}} --start-paused
```

vol

Display information about volumes.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/vol>.

- Display the label and serial number for the current drive:

```
vol
```

- Display the label and serial number for a specific volume:

```
vol {{D:}}
```

where

Display the location of files that match the search pattern.

Defaults to current work directory and paths in the PATH environment variable.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/where>.

- Display the location of file pattern:

```
where {{file_pattern}}
```

- Display the location of file pattern including file size and date:

```
where /T {{file_pattern}}
```

- Recursively search for file pattern at specified path:

```
where /R {{path/to/directory}} {{file_pattern}}
```

- Display only the error code for the location of file pattern:

```
where /Q {{file_pattern}}
```

whoami

Display details about the current user.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/whoami>.

- Display the username of the current user:

`whoami`

- Display the groups that the current user is a member of:

`whoami /groups`

- Display the privileges of the current user:

`whoami /priv`

- Display the user principal name (UPN) of the current user:

`whoami /upn`

- Display the logon id of the current user:

`whoami /logonid`

winget

Windows Package Manager CLI.

More information: <https://docs.microsoft.com/windows/package-manager/winget>.

- Install a package:

```
winget install {{package}}
```

- Display information about a package:

```
winget show {{package}}
```

- Search for a package:

```
winget search {{package}}
```

wmic

Interactive shell for detailed information about running processes.

More information: <https://docs.microsoft.com/windows-server/administration/windows-commands/wmic>.

- Fundamental grammar:

```
wmic {{alias}} {{where_clause}} {{verb_clause}}
```

- Show brief details about the currently running processes:

```
wmic process list brief
```

- Show full details about the currently running processes:

```
wmic process list full
```

- Access specific fields such as process name, process ID and parent process ID:

```
wmic process get {{name,processid,parentprocessid}}
```

- Display information about a specific process:

```
wmic process where {{name="example.exe"}} list full
```

- Display specific fields for a specific process:

```
wmic process where processid={{pid}} get {{name,commandline}}
```

- Kill a process:

```
wmic process {{pid}} delete
```

WSL

Manage the Windows Subsystem for Linux from the command line.

More information: <https://docs.microsoft.com/windows/wsl/reference>.

- Start a Linux shell (in the default distribution):

```
wsl {{shell_command}}
```

- Run a Linux command without using a shell:

```
wsl --exec {{command}} {{command_arguments}}
```

- Specify a particular distribution:

```
wsl --distribution {{distribution}} {{shell_command}}
```

- List available distributions:

```
wsl --list
```

- Export a distribution to a .tar file:

```
wsl --export {{distribution}} {{path/to/distro_fs.tar}}
```

- Import a distribution from a .tar file:

```
wsl --import {{distribution}} {{path/to/install_location}}  
{{path/to/distro_fs.tar}}
```

- Change the version of the specified distribution:

```
wsl --set-version {{distribution}} {{version}}
```

- Shut down Windows Subsystem for Linux:

```
wsl --shutdown
```

Xcopy

Copy files and directory trees.

- Copy the file(s) to the specified destination:

```
xcopy {{path/to/file_or_directory}} {{path/to/destination}}
```

- List files that will be copied before copying:

```
xcopy {{path/to/file_or_directory}} {{path/to/destination}} /p
```

- Copy the directory structure only, excluding files:

```
xcopy {{path/to/file_or_directory}} {{path/to/destination}} /t
```

- Include empty directories when copying:

```
xcopy {{path/to/file_or_directory}} {{path/to/destination}} /e
```

- Keep the source ACL in the destination:

```
xcopy {{path/to/file_or_directory}} {{path/to/destination}} /o
```

- Allow resuming when network connection is lost:

```
xcopy {{path/to/file_or_directory}} {{path/to/destination}} /z
```

- Disable the prompt when the file exists in the destination:

```
xcopy {{path/to/file_or_directory}} {{path/to/destination}} /y
```

- Display detailed usage information:

```
xcopy /?
```