

# scd - smart change of directory

Define `scd` shell function for changing to any directory with a few keystrokes.

`scd` keeps history of the visited directories, which serves as an index of the known paths. The directory index is updated after every `cd` command in the shell and can be also filled manually by running `scd -a`. To switch to some directory, `scd` needs few fragments of the desired path to match with the index. A selection menu is displayed in case of several matches, with a preference given to recently visited paths. `scd` can create permanent directory aliases, which appear as named directories in zsh session.

## INSTALLATION NOTES

Besides oh-my-zsh, `scd` can be used with *bash*, *dash* or *tcsh* shells and is also available as Vim plugin [scd.vim](#) and [IPython](#) extension. For installation details, see <https://github.com/pavoljuhas/smart-change-directory>.

## SYNOPSIS

```
scd [options] [pattern1 pattern2 ...]
```

## PATTERNS

Patterns may use all zsh [glob operators](#) available with *extendedglob* option. Specified patterns must match the absolute path and at least one of them must match in the tail. Several special patterns are also recognized as follows:

`^PAT`  
PAT must match at the beginning of the path, for example, "`^/home`"

`PAT$`  
require PAT to match the end of the path, "`man$`"

`./`  
match only subdirectories of the current directory

`:PAT`  
require PAT to match over the tail component, "`:doc`", "`:re/doc`"

## OPTIONS

`-a, --add`  
add current or specified directories to the directory index.

`--unindex`  
remove current or specified directories from the index.

`-r, --recursive`  
apply options `--add` or `--unindex` recursively.

`--alias=ALIAS`  
create alias for the current or specified directory and save it to `~/.scdalias.zsh`.

`--unalias`

remove ALIAS definition for the current or specified directory from `~/scdalias.zsh`. Use "OLD" to purge aliases to non-existent directories.

`-A, --all`

display all directories even those excluded by patterns in `~/scdignore`. Disregard the unique matching for a directory alias and filtering of less likely paths.

`-p, --push`

use "pushd" to change to the target directory.

`--list`

show matching directories and exit.

`-v, --verbose`

display directory rank in the selection menu.

`-h, --help`

display this options summary and exit.

## Examples

```
# Index recursively some paths for the very first run
scd -ar ~/Documents/

# Change to a directory path matching "doc"
scd doc

# Change to a path matching all of "a", "b" and "c"
scd a b c

# Change to a directory path that ends with "ts"
scd "ts$"

# Show selection menu and ranking of 20 most likely directories
scd -v

# Alias current directory as "xray"
scd --alias=xray

# Jump to a previously defined aliased directory
scd xray
```

## FILES

`~/scdhistory`

time-stamped index of visited directories.

`~/scdalias.zsh`

scd-generated definitions of directory aliases.

~/scdignore

[glob patterns](#) for paths to be ignored in the scd search, for example, `/mnt/backup/*`. The patterns are specified one per line and are matched assuming the *extendedglob* zsh option. Lines starting with `"#"` are skipped as comments. The `.scdignore` patterns are not applied in the *--all* mode.

## ENVIRONMENT

SCD\_HISTFILE

path to the scd index file (by default `~/scdhistory`).

SCD\_HISTSZIE

maximum number of entries in the index (5000). Index is trimmed when it exceeds *SCD\_HISTSZIE* by more than 20%.

SCD\_MENUSIZE

maximum number of items for directory selection menu (20).

SCD\_MEANLIFE

mean lifetime in seconds for exponential decay of directory likelihood (86400).

SCD\_THRESHOLD

threshold for cumulative directory likelihood. Directories with a lower likelihood compared to the best match are excluded (0.005).

SCD\_SCRIPT

command script file where scd writes the final `cd` command. This variable must be defined when scd runs in its own process rather than as a shell function. It is up to the scd caller to use the output in *SCD\_SCRIPT*.