Universal Ctags

Source code indexer

CONCEPTS

ctags scans source files and writes a sorted index (the tags file) mapping each name to its file and location. Editors read it to jump to definitions without a language server.

Source files many languages
↓ `ctags -R`
tags file name, file, location
↓ `editor reads`
Jump Ctrl+] in Vim

Re-run ctags after larger edits: the index is a snapshot and does not update itself.

GENERATE TAGS

`ctags -R`
Index current directory recursively

`ctags -R <dir>...`
Index only these directories

`ctags <file>...`
Index specific files

`ctags -f <tagfile> -R`
Write to another file name

`ctags -f - <file>`
Write tags to stdout

`ctags -a <file>`
Append instead of overwrite

`ctags -L <list>`
Read file names from a list

`find . -name '*.c' | ctags -L -`
Read file names from stdin

SELECT FILES AND LANGUAGES

`ctags --exclude=<pattern>`
Skip matching files or dirs

`ctags --languages=<list>`
Only parse these languages

`ctags --languages=-<lang>`
Disable one language

`ctags --exclude=@<file>`
Read exclude patterns from a file

SELECT FILES AND LANGUAGES (cont.)

`ctags --list-languages`
List supported languages

`ctags --list-maps`
Show extension to language map

`ctags --map-<lang>=+<ext>`
Add an extension to a language

TAG CONTENT

`ctags --list-kinds=<lang>`
List kinds of a language

`ctags --kinds-<lang>=+<kinds>`
Add kinds, e.g. --kinds-c=+p

`ctags --fields=+n`
Add line numbers

`ctags --extras=+q`
Add qualified names (Class.member)

OUTPUT FORMATS

`ctags -x <file>`
Cross-reference table on stdout

`ctags --output-format=json`
One JSON object per tag

CONFIG FILES

`ctags --options=<path>`
Read options from file or directory

`~/.ctags.d/*.ctags`
Per-user options, one per line

`.ctags.d/*.ctags`
Per-project options

USE IN VIM

Vim looks for ./tags then the parent directories when 'tags' contains ./tags;, so run ctags -R at the project root.

`Ctrl+]`
Jump to tag under cursor

`Ctrl+T`
Jump back up the tag stack

`:tag <name>`
Jump to a tag by name