# Difftastic Structural diff tool

## CONCEPTS

difftastic compares syntax trees, not lines: reformatting and re-wrapping show up as no change, and moved code stays aligned.

**Two inputs** files, dirs, stdin
↓ detect language
**Parse** tree-sitter syntax tree
↓ graph search
**Structural diff** nodes added / removed
↓ too big or parse error
**Line diff fallback** or plain text

If a file cannot be parsed, is over the byte or graph limit, or has no known language, difft falls back to a line-based diff.

difft is a viewer, not a patch tool: its output cannot be applied with patch or git apply.

## BASICS

**difft** *<old> <new>*
Diff two files

**difft** *<dir1> <dir2>*
Diff two directories recursively

**difft -** *<file>*
Read one side from stdin

**difft** *<conflicted-file>*
Diff the two sides of conflict markers

**difft --help**
List every option

**difft --version**
Print installed version

**difft --list-languages**
Show languages and extensions

**difft --skip-unchanged** *<d1> <d2>*
Show only files that differ

**difft --exit-code** *<a> <b>*
Exit 1 when there are changes

## DISPLAY

**difft --display side-by-side** *<a> <b>*
Two columns (default)

**difft --display inline** *<a> <b>*
Single column, diff style

**difft --context** *<n> <a> <b>*
Lines of context around changes

**difft --color always** *<a> <b>*
Force colour (also never / auto)

**difft --background light** *<a> <b>*
Colours for a light terminal

## LANGUAGES AND LIMITS

**difft --override** '*<glob>*:*<lang>*' *<a> <b>*
Force a language by file glob

## GIT

**git -c diff.external=difft diff**
Use difft for one command

**git config --global diff.external difft**
Use difft for every git diff

**git show --ext-diff** *<commit>*
Show a commit with difft

**git log -p --ext-diff**
History with structural diffs

**git diff --no-ext-diff**
Back to the normal diff

## CONFIGURATION

**DFT_BACKGROUND=light**
Environment form of --background

**DFT_DISPLAY=inline**
Default display mode

Every option has a DFT_<NAME> environment variable, which is the way to set defaults when a VCS invokes difft for you.