

## NAME

`typog-grep` – grep for `typog-inspect` elements in LaTeX log files

## SYNOPSIS

**typog-grep** `-a` | `--all` | `--any` [*OPTION...*] *LOG-FILE*...

**typog-grep** [*OPTION...*] *REGEXP* *LOG-FILE*...

The first form shows all `<typog-inspect id="ID" ...>`elements in *LOG-FILE*.

The second form shows the contents of `<typog-inspect id="ID" ...>`elements whose *IDs* match *REGEXP* in *LOG-FILE*.

If no *LOG-FILE* is given read from *stdin*. The filename- is synonymous to *stdin*.

## DESCRIPTION

**typog-grep** is a tailored post-processor for LaTeX log files and the `typoginspect` environment as provided by package `typog`. It shares more with the venerable **sgrep** <https://www.cs.helsinki.fi/u/jjaakkol/sgrep.html> than with POSIX **grep** <https://pubs.opengroup.org/onlinepubs/9699919799/utilities/grep.html>.

The LaTeX user brackets her text in

```
\begin{typoginspect}{ID}
  Text and code to investigate
\end{typoginspect}
```

where *ID* is used to identify one or more bracketed snippets. *ID* does not have to be unique. The *REGEXP* mechanism makes it easy to select groups of related *IDs* if they are named accordingly.

In *LOG-FILE* the environment shows up, packed with tracing information, as

```
<typog-inspect id="ID" job="JOB-NAME" line="LINE-NUMBER" page="PAGE-NUMBER">
  Trace Data
</typog-inspect>
```

where all the capital-letter sequences are meta-variables and in particular *JOB-NAME* is the expansion of `\jobname`, *LINE-NUMBER* is the LaTeX source file line number of the beginning of the `typoginspect` environment, and *PAGE-NUMBER* is the page where the output of `Text and code to investigate` occurs.

**typog-grep** reveals the contents of *LOG-FILE* between `<typog-inspect id="ID" ...>` and `</typog-inspect>` excluding the XML-tags. Access the *JOB-NAME*, *LINE-NUMBER*, and *PAGE-NUMBER* with the commandline options `--job-name`, `--line-number`, and `--page-number`, respectively. Use `--id` to show the name of the *IDs* that matched *REGEXP*.

`typoginspect` environments can be nested. **typog-grep** respects the nesting, i.e., if the *ID* of the nested environment does not match *REGEXP* it will not be included in the program's output.

## OPTIONS

The list of options is sorted by the names of the long options.

**-a, --all, --any**

ID-discovery mode: Show all `typog-inspect` elements independent of any matching patterns.

**--color, colour** *WHEN*

Colorize specific log contents for the matching ids. The argument *WHEN* determines when to apply color: *always*, *never*, or *auto*. The setting *auto* checks whether standard output has been redirected. This is the default.

**-C, --config** *KEY=VALUE[:KEY=VALUE[:...]]*

Set one or more configuration *KEY* to *VALUE* pairs. See Sec. CONFIGURATION below for a description of all available configuration items. Use option `--show-config` to display the default configuration.

- debug**  
Turn on debug output on *stderr*.
- h, --help**  
Display brief help then exit.
- i, --[no-]id**  
Print the actual id name that matched *REGEXP*. Control the appearance of the matching id with configuration item *id-heading*.
- y, --[no-]ignore-case**  
Match ids while ignoring case distinctions in patterns and data.
- j, --[no-]job-name**  
Print the `\jobname` that `tex` associated with the input file.
- n, --[no-]line-number**  
Print the line number where the `typoginspect` environment was encountered in the LaTeX source file.
- N, --[no-]log-line-number**  
Print the line number of the *log*-file where the current line was encountered.
- p, --[no-]page-number**  
Print page number where the contents of the `typoginspect` environment starts in the typeset document.
- P, --[no-]pager**  
Redirect output from *stdout* to the configured pager.
- show-config**  
Show the default configuration and exit.
- V, --version**  
Show version information and exit.
- w, --[no-]word-regexp**  
Match only whole words.

## CONFIGURATION

- id-format=FORMAT*  
Control the *FORMAT* for printing matching ids in inline-mode, where *FORMAT* is passed to Perl's `printf`. Default: `%s:`.
- id-heading=0|1*  
Choose between printing the matching ids with option `--id`: Inline (0) or heading before the matching data (1). Default: 0.
- id-heading-format=FORMAT*  
Control the *FORMAT* for printing matching ids in heading-mode, where *FORMAT* is passed to Perl's `printf`. Default: `--> %s <--`.
- id-indent=INDENT*  
Indentation of nested typog-inspect tags. Only used in "discovery" mode (first form), i.e., if `--all` is active. Default: 8.
- id-max-length=MAXIMUM-LENGTH*  
Set the maximum length of a matching id for printing. If a matching id exceeds this length it will be truncated and the last three characters (short of *MAXIMUM-LENGTH*) will be replaced by dots. Default: 40.
- line-number-format=FORMAT*  
Control the *FORMAT* for printing TeX source line numbers, where *FORMAT* is passed to Perl's `printf`. Default: `%5d`.
- log-line-number-format=FORMAT*  
Control the *FORMAT* for printing log line numbers, where *FORMAT* is passed to Perl's `printf`. Default: `%6d`.

`page-number-format=FORMAT`

Control the *FORMAT* for printing page numbers, where *FORMAT* is passed to Perl's `printf`. Default: `[%3d]`.

`pager=PAGER`

Name of pager application to pipe output into if run with option `--pager`.  
Default: `less`.

`pager-flags=FLAGS`

Pass *FLAGS* to *PAGER*. Default: `--quit-if-one-screen`.

### Color Configuration

For the syntax of the color specifications consult the manual page of `Term::ANSIColor(pm)`.

`file-header-color`

Color of the filename header.

`fill-state-color`

Color of the messages that report "Underfull hbox" or "Overfull hbox".

`first-vbox-color`

Color of the first vbox on a page.

`font-spec-color`

Color of font specifications.

`horizontal-break-candidate-color`

Color of lines with horizontal-breakpoint candidates @.

`horizontal-breakpoint-color`

Color of lines with horizontal breakpoints @@.

`id-color`

Color of matching ids when printed inline.

`id-heading-color`

Color of matching ids when printed in heading form.

`line-break-pass-color`

Color of the lines showing which pass (e.g., `@firstpass`) of the line-breaking algorithm is active.

`line-number-color`

Color of TeX-source-file line numbers.

`log-line-number-color`

Color of log-file line numbers.

`math-color`

Color used for math expressions including their font specs.

`page-number-color`

Color of page numbers of the final output.

`tightness-color`

Color of lines with Tight/Loose hbox reports.

`vertical-breakpoint-color`

Color of possible vertical breakpoints.

### Brief summary of colors and attributes

Foreground Color

`black`, `red`, `green`, `yellow`, `blue`, `magenta`, `cyan`, `white`,

Prefix with `bright_` for high-intensity or bold foreground.

Foreground Grey

`grey0`, ..., `grey23`

### Background Color

`on_black`, `on_red`, `on_green`, `on_yellow`, `on_blue`, `on_magenta`, `on_cyan`,  
`on_white`

Replace `on_` with `on_bright_` for high-intensity or bold background.

### Background Grey

`on_grey0`, ..., `on_grey23`

### Text Attribute

`bold`, `dark`, `italic`, `underline`, `reverse`

## EXIT STATUS

The exit status is 0 if at least one *ID* matched *REGEXP*, 1 if no *ID* matched *REGEXP*, and 2 if an error occurred.

## SEE ALSO

`grep(1)`, `printf(3)`, `Term::ANSIColor(pm)`