

Grind

Troff preprocessor which highlight source code

Grind readme	2	COMMON DEVELOPMENT AND DISTRIBUTION LICENSE Version 1.0	6
Manual of Grind	3		
BSD License	5		

Grind readme

Presentation

Grind is a pre-processor for troff which highlight source code. It is a hack of *vfontedpr*, the utility used by the mostly forgotten *vgrind* script.

Build and installation

Edit the makefile to suit your needs, and run :

```
make all
make install
make clean
```

If the *Heirloom Library Macro* is installed on your system, you can rebuild the whole documentation (including this readme file and the licenses files), by running :

```
cd doc
make all
make install
```

Uninstall

The makefile contain an option to uninstall :

```
make uninstall
```

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Bugs and patches

Please, send bugs and patches to [sygne at ombres dot eu](mailto:sygne@ombres.eu).



Manual of Grind

NAME

grind – troff preprocessor which highlight source code

SYNOPSIS

#{BINDIR}/grind [-d *file*] [-h *header*] [-l *language*] [-t *size*] *name* ...

DESCRIPTION

Grind insert string definition in files to highlight the source code they contain. *Grind* runs in two basic modes : regular mode or whole file mode.

- In regular mode, *grind* only highlight code which is between the **vs** and **ve** macros. The language is specified by the first argument of the **vs** macro.
- In whole file mode, *grind* highlight the whole file. The language is specified by the **-l** argument.

The options are :

- d** Specifies an alternate language definitions file (default is **#{LIBDIR}/grindefs**).
- h** Specify a header string. The header will be printed as argument of the **.vH** macro.
- l** Enter whole file mode, and specifies the language to use.
- t** Specify a nondefault tab size (default is 4).

Currently, known languages are C (**-lc**), C++ (**-lc++**), CSH (**-lcsh**), FORTRAN (**-lfortran**), ICON (**-li**), ISP (**-lisp**), LDL (**-ldl**), LISP LIKE (**-ml**), MODEL (**-lm**), MODULA2 (**-lmod2**), PASCAL (**-lp**), RATFOR (**-lr**), RUSSEL (**russell**), SHELL (**-lsh**), TROFF (**-ltr**), and YACC (**-lyacc**),

PROGRAMMING STYLE

Grind assumes that a certain programming style is followed :

- C Functions names can be preceded on a line only by spaces, tabs, or an asterisk. The parenthesized arguments must also be on the same line.
- PASCAL Function names need to appear on the same line as the keywords *functions* or *procedure*.
- MODEL Function names need to appear on the same line as the keywords *is* *beginproc*.
- TROFF Between **.vS** and **.vE** macros in regular mode, and in the whole file in whole file mode, *Grind* will take care to escape all the commands, macros, strings and number register that could be interpreted by troff. That means that to highlight troff source code, one just has to write the code as is. That also means that it is not possible to insert formatting commands inside the code that has to be highlighted.

More generally, arbitrary formatting styles for programs mostly look bad. The use of spaces to align source code fails miserably ; if you plan to *grind* your program you should use tabs. This is somewhat inevitable since the font used by *grind* is variable width.

MACROS AND STRINGS

To highlight code, *Grind* insert strings in the file, and use some macros, so, to format the output of *grind* with *troff*, the following strings and macros must be defined by your macro file.

MACROS

- vS In regular mode, start a code block to highlight. The first argument define the language. See the **-l** option to get the list of supported languages.
- vE In regular mode, end a code block to highlight.
- vF In whole file mode, start a new file. The first argument is the name of the file.
- vH The header defined by the **-h** option is defined as argument of this macro.
- vO Indicate that a function begins on the next line. The first argument is the function name.
- vC Indicate that a function gets closed on the previous line.

STRINGS

- +C Begin a comment,
- C End a comment,
- +K Begin a keyword,
- K End a keyword,
- +S Begin a string,
- S End a string,
- +V Begin a variable,
- V End a variable,
- e a slash (\),
- a tiret (-),
- _ a bottom tiret (_).

HISTORY

Grind is a hack of *vfontedpr* (that probably means *visual-font-edit-print*), which is the preprocessor used by the mostly forgotten *vgrind* script, which aims to visually "grind nice listing of programmes" with *troff*. The code that *vfontedpr* use to read the language description file is "stolen almost totally from *termcap*". *Vgrind* and *vfontedpr* have been written by Dave Presotto and William Joy, for 4.3BSD-Tahoe. They have been modified by Gunnar Ritter as part of the *Heirloom documentation tools*.

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FILES

#{BINDIR}/grind preprocessor
#{LIBDIR}/grindefs language descriptions

SEE ALSO

troff(1B)

AUTHORS

Written by Dave Presotto and William Joy. Modified by Gunnar Ritter and Pierre-Jean Fichet.



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