NAME

vgrind – grind nice program listings

SYNOPSIS

vgrind [**–2fntwWx**] [**–d** *defs-file*] [**–h** *header*] [**–l***language*] [**–s***n*] [**–o***pagelist*]
[**–P***printer*] [**–T***output-device*] *filename*. . .

AVAILABILITY

SUNWdoc

DESCRIPTION

vgrind formats the program sources named by the *filename* arguments in a nice style using **troff**(1). Comments are placed in italics, keywords in bold face, and as each function is encountered its name is listed on the page margin.

vgrind runs in two basic modes, filter mode or regular mode. In filter mode **vgrind** acts as a filter in a manner similar to **tbl**(1). The standard input is passed directly to the standard output except for lines bracketed by the **troff**-like macros:

.vS starts processing

.vE ends processing

These lines are formatted as described above. The output from this filter can be passed to **troff** for output. There need be no particular ordering with **eqn**(1) or **tbl**.

In regular mode **vgrind** accepts input *filename*s, processes them, and passes them to **troff** for output. If no *filename* is given, or if the '–' argument is given, **vgrind** reads from the standard input (default if –**f** is specified).

In both modes **vgrind** passes any lines beginning with a decimal point without conversion.

OPTIONS

Note: The syntax of options with arguments is important. Some require a SPACE between the option name and the argument, while those that do not have a SPACE below will not tolerate one.

–2 Produce two column output. Specifying this option changes the default point size to 8 (as if the –**s8** option were supplied). It also arranges for output to appear in landscape mode, by supplying the –**L** flag to the formatter and changing the page height and width accordingly.

–f Force filter mode.

–n Do not make keywords boldface.

–w Consider TAB characters to be spaced four columns apart instead of the usual eight.

–x Output the index file in a "pretty" format. The index file itself is produced whenever **vgrind** is run with a file called **index** present in the current directory. The index of function definitions can then be run off by giving **vgrind** the –**x** option and the file **index** as argument.

–d *defs-file* Specify an alternate language definitions file (default is **/usr/lib/vgrindefs**).

–h *header* Specify a header to appear in the center of every output page.

–l*language* Specify the language to use. Among the languages currently known are: Bourne shell (**–lsh**), C (**–lc**, the default), C++ (**–lc++**), C shell (**–lcsh**), emacs MLisp, (**–lml**), FORTRAN (**–lf**), Icon (**–lI**), ISP (**–i**), LDL (**–lLDL**), Model (**–lm**), Pascal (**–lp**), and RATFOR (**–lr**).

–s*n* Specify a point size to use on output (exactly the same as the argument of a **troff .ps** point size request).

vgrind passes the following options to the formatter specified by the **TROFF** environment variable, see **ENVIRONMENT** below.

–t Similar to the same option in **troff**; that is, formatted text goes to the standard output.

–W Force output to the (wide) Versatec printer rather than the (narrow) Varian.

–o*pagelist*
Print only those pages whose page numbers appear in the comma-separated *pagelist* of numbers and ranges. A range *N*–*M* means pages *N* through *M*; an initial –*N* means from the beginning to page *N*; and a final *N*– means from *N* to the end.

–P*printer*
Send output to the named *printer*.

–T*output-device*
Format output for the specified *output-device*.

ENVIRONMENT

In regular mode **vgrind** feeds its intermediate output to the text formatter given by the value of the **TROFF** environment variable, or to **troff** if this variable is not defined in the environment. This mechanism allows for local variations in **troff**'s name.

FILES

index	file where source for index is created
/usr/lib/vgrindefs	language descriptions
/usr/lib/vfontedpr	preprocessor
/usr/share/lib/tmac/tmac.vgrind	macro package

SEE ALSO

troff(1)

BUGS

vgrind assumes that a certain programming style is followed:

C Function names can be preceded on a line only by SPACE, TAB, or an asterisk. The parenthesized arguments must also be on the same line.

FORTRAN Function names need to appear on the same line as the keywords *function* or *subroutine*.

MLisp Function names should not appear on the same line as the preceding *defun*.

Model Function names need to appear on the same line as the keywords *is beginproc*.

Pascal Function names need to appear on the same line as the keywords *function* or *procedure*.

If these conventions are not followed, the indexing and marginal function name comment mechanisms will fail.

More generally, arbitrary formatting styles for programs mostly look bad. The use of SPACE characters to align source code fails miserably; if you plan to **vgrind** your program you should use TAB characters. This is somewhat inevitable since the fonts **vgrind** uses are variable width.

The mechanism of **ctags**(1) in recognizing functions should be used here.

The −**w** option is a crock, but there is no other way to achieve the desired effect.

The macros defined in **tmac.vgrind** do not coexist gracefully with those of other macro packages, making filter mode difficult to use effectively.

vgrind does not process certain special characters in **csh**(1) scripts correctly.

The **tmac.vgrind** formatting macros wire in the page height and width used in two column mode, effectively making two column output useless for paper sizes other than the standard American size of 8.5 by 11 inches. For other paper sizes, it is necessary to edit the size values given in **tmac.vgrind**. A better solution would be to create a **troff** output device specification intended specifically for landscape output and record size information there.