NAME

vgrindefs – vgrind's language definition data base

SYNOPSIS

/usr/lib/vgrindefs

DESCRIPTION

vgrindefs contains all language definitions for **vgrind**(1). Capabilities in **vgrindefs** are of two types: Boolean capabilities which indicate that the language has some particular feature and string capabilities which give a regular expression or keyword list. Entries may continue onto multiple lines by giving a \ as the last character of a line. Lines starting with # are comments.

Capabilities

The following table names and describes each capability.

Name	Type	Description
ab	str	Regular expression for the start of an alternate form comment
ae	str	Regular expression for the end of an alternate form comment
bb	str	Regular expression for the start of a block
be	str	Regular expression for the end of a lexical block
cb	str	Regular expression for the start of a comment
ce	str	Regular expression for the end of a comment
id	str	String giving characters other than letters and digits that may legally occur in identifiers (default '_')
kw	str	A list of keywords separated by spaces
lb	str	Regular expression for the start of a character constant
le	str	Regular expression for the end of a character constant
oc	bool	Present means upper and lower case are equivalent
pb	str	Regular expression for start of a procedure
pl	bool	Procedure definitions are constrained to the lexical level matched by the 'px' capability
px	str	A match for this regular expression indicates that procedure definitions may occur at the next lexical level. Useful for lisp-like languages in which procedure definitions occur as subexpressions of defuns.
sb	str	Regular expression for the start of a string
se	str	Regular expression for the end of a string
tc	str	Use the named entry as a continuation of this one
tl	bool	Present means procedures are only defined at the top lexical level

Regular Expressions

vgrindefs uses regular expressions similar to those of **ex**(1) and **lex**(1). The characters '^', '$', ':', and '\' are reserved characters and must be 'quoted' with a preceding \ if they are to be included as normal characters. The metasymbols and their meanings are:

$ The end of a line

^ The beginning of a line

\d A delimiter (space, tab, newline, start of line)

\a Matches any string of symbols (like '.*' in lex)

\p Matches any identifier. In a procedure definition (the 'pb' capability) the string that matches this symbol is used as the procedure name.

() Grouping

| Alternation

? Last item is optional

\e Preceding any string means that the string will not match an input string if the input string is preceded by an escape character (\). This is typically used for languages (like C) that can include the string delimiter in a string by escaping it.

Unlike other regular expressions in the system, these match words and not characters. Hence something like ‘(tramp | steamer)flies?’ would match ‘tramp’, ‘steamer’, ‘trampflies’, or ‘steamerflies’. Contrary to some forms of regular expressions, **vgrindef** alternation binds very tightly. Grouping parentheses are likely to be necessary in expressions involving alternation.

Keyword List

The keyword list is just a list of keywords in the language separated by spaces. If the ‘oc’ boolean is specified, indicating that upper and lower case are equivalent, then all the keywords should be specified in lower case.

EXAMPLE

The following entry, which describes the C language, is typical of a language entry.

```
C | c | the C programming language:\
  :pb=^\d?*?\d?\p\d?(\a?\)(\d | {):bb={:be=}:cb=/*:ce=*/:sb=":se=\e":\
  :le=\e':tl:\
  :kw=asm auto break case char continue default do double else enum\
  extern float for fortran goto if int long register return short\
  sizeof static struct switch typedef union unsigned void while #define\
  #else #endif #if #ifdef #ifndef #include #undef # define endif\
  ifdef ifndef include undef defined:
```

Note that the first field is just the language name (and any variants of it). Thus the C language could be specified to **vgrind**(1) as ‘c’ or ‘C’.

FILES

/usr/lib/vgrindefs file containing vgrind descriptions

SEE ALSO

ex(1), **lex**(1), **troff**(1), **vgrind**(1)