Bell Telephone Laboratories, Incorporated PROGRAM APPLICATION INSTRUCTION

GET(I)

NAME

get - get generation from SCCS file

SYNOPSIS

get [-rrel[.lev]] [-ccutoff] [-iincl-list] [-xexcl-list] [-k] [-e] [-l[p]] [-p] [-m] [-n] [-s] name ...

DESCRIPTION

Get generates an ASCII text file from each named SCCS file accoring to the specifications given by its keyletter arguments, which begin with "-". The arguments may be specified in any order, but all keyletter arguments apply to all named SCCS files. If a directory is named, get behaves as though each file in the directory were specified as a named file, except that non-SCCS files, as determined by their magic numbers (see *sccsfile* (V)), and unreadable files are silently ignored. If a name of "-" is given, the standard input is read; each line of the standard input is taken to be the name of an SCCS file to be processed. Again, non-SCCS files, and unreadable files are silently ignored.

The generated text is normally written into a file called the *g*-file See FILES, below, for an explanation of how the name of this file is determined.

The keyletter arguments are as follows. Each is explained as though only one named file is to be processed, but the effects of any keyletter argument apply independently to each named file.

- r	Release or release and level to be generated. If only the release is specified, the level defaults to the highest level in that release. If the entire argument is omitted, the meaning is the same as if the default release were specified (see <i>admin</i> (I)). A level may not be specified if the e argument is supplied (see below).

- -c Cutoff date-time. in the form YY[MM[DD[HH[MM[SS]]]]]. No delta which was created after the specified cutoff date-time will be applied. Units omitted from the date-time default to their maximum possible values; that is, "-c7502" means the same as "-c750228235959".
- -i This argument is used to specify a list of deltas to be included (forced to be applied). The list has the following syntax:

- If a level is omitted from a delta specification the latest level of the specified release is assumed.
- -x This argument is similar to i except that it is followed by a list of deltas to be excluded (forced to not be applied).
- -k This argument suppresses re placement of identifiaction keywords (see below) by specific values. The k argument is implied by the i, x or e arguments.
- -e This argument indicates the this get is for the purpose of making a delta with a later execution of delta. It causes creation of a p-file (see **FILES**). Another get with an **e** argument may not be executed until the delta is made. If the g-file generated by a get with an **e** argument is ruined, a new one may be obtained by executing another get with a **k** argument instead of an **e**. Note that although the **c**, **i** and/or **x** arguments may be used in combination with **e**, delta will not use any of the

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three when regenerating the *g*-file. When the e argument is supplied the protection restrictions determined by the ceiling, the floor, the release locks and the list of users authorized to make deltas are enforced.

This argument causes a delta summary to be written into an *l-file* (see **FILES**). if -lp is used then an *l-file* is not created; the delta summary is written on the standard output instead. The *reform*(VI) command can be used to truncate lines of the *l-file*.

The following procedure can be used to get a neatly formatted *l-file* sed 's/.*/.x "&"/' <*l-file* (nroff m -

where file m contains:

- .ll 80 .pl 1 .na .in 46 .de x .ti 0 \\&\\\$1
- $-\mathbf{p}$ This argument causes the generated text to be written to the standard output instead of to a *g-file*. All output which normally goes to the standard output goes to file descriptor 2 instead, unless the s argument is supplied, in which case it disappears.
- -s This argument suppresses all output normally written on the standard output. However, fatal error messages (which always go to file descriptor 2) remain unaffected.
- -m This argument caused each generated text line to be preceded by the release and level of the delta which inserted the text line. The format is: a 4-character, blank-filled, right-justified release number, followed by a period, followed by a 4-character, blank-filled, left-justified level number, followed by a horizontal tab, followed by the text line.
- -n This argument causes each generated text line to be preceded with the name of the g-file. The format is: g-file name, followed by a horizontal tab, followed by the text line. When both the m and n arguments are supplied the format is: g-file name, followed by a horizontal tab, followed by the m argument format.

For each file processed, *get* responds (on the standard output) with the release and level being accessed and with the number of lines generated. If there is more than one named file or if a directory or standard input is named, each file name is printed (preceded by a newline) before it is processed. Unapplied unacknowledged non-propagating deltas are listed along with the notation "Non-prop". If the **i** argument is supplied included deltas are listed following the notation "Included"; if the **x** argument is supplied excluded deltas are listed following the notation "Excluded".

Identifying information is inserted into the generated text by replacing *identification keywords* by appropriate values, wherever they occur. The following keywords are available:

Keyword Value

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% M %	Module name (actually, the <i>g-file</i> name $-$ see FILES).
% R %	Release.
%L%	Level.
% D %	Current date (YY/MM/DD).
% H %	Current date (MM/DD/YY).
% E %	Date of newest applied delta(YY/MM/DD).
% G %	Date of newest applied delta(MM/DD/YY).
% T %	Current time (HH:MM:SS).
%U%	Time of newest applied delta (HH:MM:SS).
% X %	"P" if any unacknowledged non-propagating deltas were not ap-
	plied (see <i>delts</i> (I)); otherwise blank.
% Z %	The 4 characters @(#) (used to construct strings recognizable
	by what(I).
% P %	The person field of the header (see $admin(I)$).
% Y %	The type field of the header (see <i>admin</i> (I)).
% S %	The description field of the header (see <i>admin(I)</i>). RJE users
	N.B.: the description can be up to 99 (i.e. greater than 80) char-
	acters long.

FILES

Several auxiliary files may be created by get. These files are known generically as the g-file, *l*-file, and p-file. The letter before the hyphen is called the tag. An auxiliary file name is formed fron the SCCS file name: all SCCS file names must be of the form "s.modulename", the auxiliary files are named by replacing the leading "s" with the tag. The g-file is an exception to this scheme: the g-file is named by removing the "s". For example, if the SCCS file name is "s.xyz.c", the auxiliary file names would be "xyz.c", "l.xyz.c" and "p.xyz.c" respectively.

The g-file, which contains the generated text, is created in the current directory (unless the **p** argument is supplied, or zero lines of text were generated). It is owned by the real user. If the **k** argument is supplied or implied its mode is 644; otherwise its mode is 444. Only the real user need have write permission (either explicitly or implicitly) in the current directory.

The *l-file* is also created (unless a **p** follows the -l) in the current directory, if the l argument is supplied; its mode is 444 and it is owned by the real user. Only the real user need nave write permission (either explicitly or implicitly) in the current directory. The *l-file* contains a table showing which deltas were applied. The table has the following fixed format:

Contents

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Columns	Contents
1 2	Blank if delta was applied; "*" otherwise. A code indicating a "special" reason why the delta was or was not applied: "I": Included. "X": Excluded. "C": Cut off (by a c argument). "P": Non-propagating.
3-6 7	Release number (right justified).
8-11	Level number (left justified).
12-35	Date and time (in the form returned by ctime(III) of creation.)
37-42	Creator (left justified).
44-?	History (maximum of 200 characters).

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The *p*-file is used to pass information resulting from a get with an e argument along to delta. Its existence also serves to prevent a subsequent execution of get with an e argument until the delta is executed. The *p*-file is created in the directory containing the SCCS file (which might, of course, also be the current directory), and the effective user must have write permission (either explicitly or implicitly) in that directory. Its mode is 444 and it is owned by the effective user. The format of the *p*-file is: the release number (in ASCII), followed by a blank, followed by the login name of the real user, followed by a newline.

SEE ALSO

admin(I), delta(I), prt(I), what(I), help(I), ctime(III), sccsfile(V), SCCS/PWB User's Manual, The Source Code Control System (which should not be taken too literally).

DIAGNOSTICS

Use help(I) for explanations.

BUGS

If the effective user has write permission (either explicitly or implicitly) in the directory containing the SCCS files, but the real user doesn't, then only one file may be named when the e argument is supplied.