

tgoto(3) - Linux man page

Name

tgetent, **tgetflag**, **tgetnum**, **tgetstr**, **tgoto**, **tputs** - direct **curses** interface to the terminfo capability database

Synopsis

```
#include <curses.h>
```

```
#include <term.h>
```

```
extern char PC;  
extern char * UP;  
extern char * BC;  
extern unsigned ospeed;
```

```
int tgetent(char *bp, const char *name);  
int tgetflag(char *id);  
int tgetnum(char *id);  
char *tgetstr(char *id, char **area);  
char *tgoto(const char *cap, int col, int row);  
int tputs(const char *str, int affcnt, int (*putc)(int));
```

Description

These routines are included as a conversion aid for programs that use the *termcap* library. Their parameters are the same and the routines are emulated using the *terminfo* database. Thus, they can only be used to query the capabilities of entries for which a terminfo entry has been compiled.

The **tgetent** routine loads the entry for *name*. It returns 1 on success, 0 if there is no such entry, and -1 if the terminfo database could not be found. The emulation ignores the buffer pointer *bp*.

The **tgetflag** routine gets the boolean entry for *id*, or zero if it is not available.

The **tgetnum** routine gets the numeric entry for *id*, or -1 if it is not available.

The **tgetstr** routine returns the string entry for *id*, or zero if it is not available. Use **tputs** to output the returned string. The return value will also be copied to the buffer pointed to by *area*, and the *area* value will be updated to point past the null ending this value.

Only the first two characters of the **id** parameter of **tgetflag**, **tgetnum** and **tgetstr** are compared in lookups.

The **tgoto** routine instantiates the parameters into the given capability. The output from this routine is to be passed to **tputs**.

The **tputs** routine is described on the **curs_terminfo(3X)** manual page. It can retrieve capabilities by either termcap or terminfo name.

The variables **PC**, **UP** and **BC** are set by **tgetent** to the terminfo entry's data for **pad_c**, **cursor_up** and **backspace_if_not_bs**, respectively. **UP** is not used by ncurses. **PC** is used in the **tdelay_output** function. **BC** is used in the **tgoto** emulation. The variable **ospeed** is set by ncurses in a system-specific coding to reflect the terminal speed.

Return Value

Except where explicitly noted, routines that return an integer return **ERR** upon failure and **OK** (SVr4 only specifies "an integer value other than **ERR**") upon successful completion.

Routines that return pointers return **NULL** on error.

Bugs

If you call **tgetstr** to fetch **ca** or any other parameterized string, be aware that it will be returned in terminfo notation, not the older and not-quite-compatible termcap notation. This will not cause problems if all you do with it is call **tgoto** or **tparm**, which both expand terminfo-style strings as terminfo. (The **tgoto** function, if configured to support termcap, will check if the string is indeed terminfo-style by looking for "%p" parameters or "\$<..>" delays, and invoke a termcap-style parser if the string does not appear to be terminfo).

Because terminfo conventions for representing padding in string capabilities differ from termcap's, **tputs("50");** will put out a literal "50" rather than busy-waiting for 50 milliseconds. Cope with it.

Note that termcap has nothing analogous to terminfo's **sgr** string. One consequence of this is that termcap applications assume me (terminfo **sgr0**) does not reset the alternate character set. This implementation checks for, and modifies the data shown to the termcap interface to accommodate termcap's limitation in this respect.

Portability

The XSI Curses standard, Issue 4 describes these functions. However, they are marked TO BE WITHDRAWN and may be removed in future versions.

Neither the XSI Curses standard nor the SVr4 man pages documented the return values of **tgetent** correctly, though all three were in fact returned ever since SVr1. In particular, an omission in the XSI Curses documentation has been misinterpreted to mean that **tgetent** returns **OK** or **ERR**. Because the purpose of these functions is to provide compatibility with the *termcap* library, that is a defect in XCurseS, Issue 4, Version 2 rather than in ncurses.

External variables are provided for support of certain termcap applications. However, termcap applications' use of those variables is poorly documented, e.g., not distinguishing between input and output. In particular, some applications are reported to declare and/or modify **ospeed**.

See Also

curses(3X), **terminfo(5)**, **putc(3)**.