



## ***Red Hat Enterprise Linux Release 9.2 Manual Pages on 'termcap.5' command***

***\$ man termcap.5***

TERMCAP(5)      Linux Programmer's Manual      TERMCAP(5)

### **NAME**

termcap - terminal capability database

### **DESCRIPTION**

The termcap database is an obsolete facility for describing the capabilities of character-cell terminals and printers. It is retained only for compatibility with old programs; new programs should use the terminfo(5) database and associated libraries.

/etc/termcap is an ASCII file (the database master) that lists the capabilities of many different types of terminals. Programs can read termcap to find the particular escape codes needed to control the visual attributes of the terminal actually in use. (Other aspects of the terminal are handled by stty(1).) The termcap database is indexed on the TERM environment variable.

Termcap entries must be defined on a single logical line, with '\ ' used to suppress the newline. Fields are separated by ':'. The first field of each entry starts at the left-hand margin, and contains a list of names for the terminal, separated by '|'.

The first subfield may (in BSD termcap entries from versions 4.3 and earlier) contain a short name consisting of two characters. This short name may consist of capital or small letters. In 4.4BSD, termcap entries where this field is omitted.

The second subfield (first, in the newer 4.4BSD format) contains the

name used by the environment variable TERM. It should be spelled in lowercase letters. Selectable hardware capabilities should be marked by appending a hyphen and a suffix to this name. See below for an example. Usual suffixes are w (more than 80 characters wide), am (automatic margins), nam (no automatic margins), and rv (reverse video display). The third subfield contains a long and descriptive name for this termcap entry.

Subsequent fields contain the terminal capabilities; any continued capability lines must be indented one tab from the left margin.

Although there is no defined order, it is suggested to write first boolean, then numeric, and then string capabilities, each sorted alphabetically without looking at lower or upper spelling. Capabilities of similar functions can be written in one line.

Example for:

Head line: vt|vt101|DEC VT 101 terminal in 80 character mode:\

Head line: Vt|vt101-w|DEC VT 101 terminal in (wide) 132 character mode:\

Boolean: :bs:\

Numeric: :co#80:\

String: :sr=\E[H:\

#### Boolean capabilities

- 5i Printer will not echo on screen
- am Automatic margins which means automatic line wrap
- bs Control-H (8 dec.) performs a backspace
- bw Backspace on left margin wraps to previous line and right margin
- da Display retained above screen
- db Display retained below screen
- eo A space erases all characters at cursor position
- es Escape sequences and special characters work in status line
- gn Generic device
- hc This is a hardcopy terminal
- HC The cursor is hard to see when not on bottom line
- hs Has a status line
- hz Hazeltine bug, the terminal can not print tilde characters

in Terminal inserts null bytes, not spaces, to fill whitespace

km Terminal has a meta key

mi Cursor movement works in insert mode

ms Cursor movement works in standout/underline mode

NP No pad character

NR ti does not reverse te

nx No padding, must use XON/XOFF

os Terminal can overstrike

ul Terminal underlines although it can not overstrike

xb Beehive glitch, f1 sends ESCAPE, f2 sends ^C

xn Newline/wraparound glitch

xo Terminal uses xon/xoff protocol

xs Text typed over standout text will be displayed in standout

xt Teleray glitch, destructive tabs and odd standout mode

#### Numeric capabilities

co Number of columns

dB Delay in milliseconds for backspace on hardcopy terminals

dC Delay in milliseconds for carriage return on hardcopy terminals

dF Delay in milliseconds for form feed on hardcopy terminals

dN Delay in milliseconds for new line on hardcopy terminals

dT Delay in milliseconds for tabulator stop on hardcopy terminals

dV Delay in milliseconds for vertical tabulator stop on  
hardcopy terminals

it Difference between tab positions

lh Height of soft labels

lm Lines of memory

lw Width of soft labels

li Number of lines

NI Number of soft labels

pb Lowest baud rate which needs padding

sg Standout glitch

ug Underline glitch

vt virtual terminal number

ws Width of status line if different from screen width

## String capabilities

!1 shifted save key  
!2 shifted suspend key  
!3 shifted undo key  
#1 shifted help key  
#2 shifted home key  
#3 shifted input key  
#4 shifted cursor left key  
%0 redo key  
%1 help key  
%2 mark key  
%3 message key  
%4 move key  
%5 next-object key  
%6 open key  
%7 options key  
%8 previous-object key  
%9 print key  
%a shifted message key  
%b shifted move key  
%c shifted next key  
%d shifted options key  
%e shifted previous key  
%f shifted print key  
%g shifted redo key  
%h shifted replace key  
%i shifted cursor right key  
%j shifted resume key  
&0 shifted cancel key  
&1 reference key  
&2 refresh key  
&3 replace key

&4 restart key

&5 resume key

&6 save key

&7 suspend key

&8 undo key

&9 shifted begin key

\*0 shifted find key

\*1 shifted command key

\*2 shifted copy key

\*3 shifted create key

\*4 shifted delete character

\*5 shifted delete line

\*6 select key

\*7 shifted end key

\*8 shifted clear line key

\*9 shifted exit key

@0 find key

@1 begin key

@2 cancel key

@3 close key

@4 command key

@5 copy key

@6 create key

@7 end key

@8 enter/send key

@9 exit key

al Insert one line

AL Insert %1 lines

ac Pairs of block graphic characters to map alternate character set

ae End alternative character set

as Start alternative character set for block graphic characters

bc Backspace, if not ^H

bl Audio bell

bt Move to previous tab stop

cb Clear from beginning of line to cursor

cc Dummy command character

cd Clear to end of screen

ce Clear to end of line

ch Move cursor horizontally only to column %1

cl Clear screen and cursor home

cm Cursor move to row %1 and column %2 (on screen)

CM Move cursor to row %1 and column %2 (in memory)

cr Carriage return

cs Scroll region from line %1 to %2

ct Clear tabs

cv Move cursor vertically only to line %1

dc Delete one character

DC Delete %1 characters

dl Delete one line

DL Delete %1 lines

dm Begin delete mode

do Cursor down one line

DO Cursor down #1 lines

ds Disable status line

eA Enable alternate character set

ec Erase %1 characters starting at cursor

ed End delete mode

ei End insert mode

ff Formfeed character on hardcopy terminals

fs Return character to its position before going to status line

F1 The string sent by function key f11

F2 The string sent by function key f12

F3 The string sent by function key f13

... ..

F9 The string sent by function key f19

FA The string sent by function key f20

FB The string sent by function key f21  
... ...  
FZ The string sent by function key f45  
Fa The string sent by function key f46  
Fb The string sent by function key f47  
... ...  
Fr The string sent by function key f63  
hd Move cursor a half line down  
ho Cursor home  
hu Move cursor a half line up  
i1 Initialization string 1 at login  
i3 Initialization string 3 at login  
is Initialization string 2 at login  
ic Insert one character  
IC Insert %1 characters  
if Initialization file  
im Begin insert mode  
ip Insert pad time and needed special characters after insert  
iP Initialization program  
K1 upper left key on keypad  
K2 center key on keypad  
K3 upper right key on keypad  
K4 bottom left key on keypad  
K5 bottom right key on keypad  
k0 Function key 0  
k1 Function key 1  
k2 Function key 2  
k3 Function key 3  
k4 Function key 4  
k5 Function key 5  
k6 Function key 6  
k7 Function key 7  
k8 Function key 8

k9 Function key 9

k; Function key 10

ka Clear all tabs key

kA Insert line key

kb Backspace key

kB Back tab stop

kC Clear screen key

kd Cursor down key

kD Key for delete character under cursor

ke turn keypad off

kE Key for clear to end of line

kF Key for scrolling forward/down

kh Cursor home key

kH Cursor hown down key

kl Insert character/Insert mode key

kl Cursor left key

kL Key for delete line

kM Key for exit insert mode

kN Key for next page

kP Key for previous page

kr Cursor right key

kR Key for scrolling backward/up

ks Turn keypad on

kS Clear to end of screen key

kt Clear this tab key

kT Set tab here key

ku Cursor up key

I0 Label of zeroth function key, if not f0

I1 Label of first function key, if not f1

I2 Label of first function key, if not f2

... ..

la Label of tenth function key, if not f10

le Cursor left one character



ll Move cursor to lower left corner

LE Cursor left %1 characters

LF Turn soft labels off

LO Turn soft labels on

mb Start blinking

MC Clear soft margins

md Start bold mode

me End all mode like so, us, mb, md, and mr

mh Start half bright mode

mk Dark mode (Characters invisible)

ML Set left soft margin

mm Put terminal in meta mode

mo Put terminal out of meta mode

mp Turn on protected attribute

mr Start reverse mode

MR Set right soft margin

nd Cursor right one character

nw Carriage return command

pc Padding character

pf Turn printer off

pk Program key %1 to send string %2 as if typed by user

pl Program key %1 to execute string %2 in local mode

pn Program soft label %1 to show string %2

po Turn the printer on

pO Turn the printer on for %1 (<256) bytes

ps Print screen contents on printer

px Program key %1 to send string %2 to computer

r1 Reset string 1 to set terminal to sane modes

r2 Reset string 2 to set terminal to sane modes

r3 Reset string 3 to set terminal to sane modes

RA disable automatic margins

rc Restore saved cursor position

rf Reset string filename

RF Request for input from terminal

RI Cursor right %1 characters

rp Repeat character %1 for %2 times

rP Padding after character sent in replace mode

rs Reset string

RX Turn off XON/XOFF flow control

sa Set %1 %2 %3 %4 %5 %6 %7 %8 %9 attributes

SA enable automatic margins

sc Save cursor position

se End standout mode

sf Normal scroll one line

SF Normal scroll %1 lines

so Start standout mode

sr Reverse scroll

SR scroll back %1 lines

st Set tabulator stop in all rows at current column

SX Turn on XON/XOFF flow control

ta move to next hardware tab

tc Read in terminal description from another entry

te End program that uses cursor motion

ti Begin program that uses cursor motion

ts Move cursor to column %1 of status line

uc Underline character under cursor and move cursor right

ue End underlining

up Cursor up one line

UP Cursor up %1 lines

us Start underlining

vb Visible bell

ve Normal cursor visible

vi Cursor invisible

vs Standout cursor

wi Set window from line %1 to %2 and column %3 to %4

XF XOFF character if not ^S

There are several ways of defining the control codes for string capabilities:

capabilities:

Every normal character represents itself, except '^', '\', and '%'.

A ^x means Control-x. Control-A equals 1 decimal.

\x means a special code. x can be one of the following characters:

E Escape (27)

n Linefeed (10)

r Carriage return (13)

t Tabulation (9)

b Backspace (8)

f Form feed (12)

0 Null character. A \xxx specifies the octal character xxx.

i Increments parameters by one.

r Single parameter capability

+ Add value of next character to this parameter and do binary out?

put

2 Do ASCII output of this parameter with a field width of 2

d Do ASCII output of this parameter with a field width of 3

% Print a '%'

If you use binary output, then you should avoid the null character

(' ') because it terminates the string. You should reset tabulator

expansion if a tabulator can be the binary output of a parameter.

Warning:

The above metacharacters for parameters may be wrong: they document

Minix termcap which may not be compatible with Linux termcap.

cap.

The block graphic characters can be specified by three string capabilities:

ties:

as start the alternative charset

ae end the alternative charset

ac pairs of characters. The first character is the name of the

block graphic symbol and the second character is its definition.

tion.

The following names are available:

- + right arrow (>)
- , left arrow (<)
- . down arrow (v)
- O full square (#)
- I lantern (#)
- upper arrow (^)
- ' rhombus (+)
- a chess board (:)
- f degree (')
- g plus-minus (#)
- h square (#)
- j right bottom corner (+)
- k right upper corner (+)
- l left upper corner (+)
- m left bottom corner (+)
- n cross (+)
- o upper horizontal line (-)
- q middle horizontal line (-)
- s bottom horizontal line ( \_ )
- t left tee (+)
- u right tee (+)
- v bottom tee (+)
- w normal tee (+)
- x vertical line (|)
- ~ paragraph (???)

The values in parentheses are suggested defaults which are used by the curses library, if the capabilities are missing.

## SEE ALSO

ncurses(3), termcap(3), terminfo(5)

## COLOPHON

This page is part of release 5.10 of the Linux man-pages project. A description of the project, information about reporting bugs, and the

latest version of this page, can be found at

<https://www.kernel.org/doc/man-pages/>.

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