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Rocky Enterprise Linux 9.2 Manual Pages on command 'termcap.5'

\$ 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 '\n' 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 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

... ..

Ia 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:

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 output

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 ('\0') 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.

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

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.

The following names are available:

+ right arrow (>)

, left arrow (<)

. down arrow (v)

0 full square (#)

l 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/>.