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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 '\' 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
- nl 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
l0 Label of zeroth function key, if not f0
l1 Label of first function key, if not f1
l2 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:

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/>.