Tk Widget Reference Card

(for version 3.3)

All widgets have the method:

widget configure *?option value ...?*

Widgets **frame, label, message** and **toplevel** have no other methods.

button

button activate
button deactivate
button flash
button invoke

checkbutton

checkbutton activate
checkbutton deactivate
checkbutton deselect
checkbutton flash
checkbutton invoke
checkbutton select
checkbutton toggle

entry

entry delete *first ?last?*
entry get
entry icursor *index*
entry index *index*
entry insert *index string*
entry scan mark *x*
entry scan dragto *x*
entry select adjust *index*
entry select clear
entry select from *index*
entry select to *index*
entry view *index*
Indices: *number*, end, insert, sel.first, sel.last, @*number*

listbox

listbox curselection
listbox delete *first ?last?*
listbox get *index*
listbox insert *index ?element element ...?*
listbox nearest *y*
listbox scan mark *x y*
listbox scan dragto *x y*
listbox select adjust *index*
listbox select clear
listbox select from *index*
listbox select to *index*
listbox size
listbox xview *index*
listbox yview *index*

canvas

canvas addtag *tag searchSpec ?arg arg ...?*
canvas bbox *tagOrId ?tagOrId tagOrId ...?*
canvas bind *tagOrId ?sequence? ?command?*
canvas canvasx *screenx ?gridspacing?*
canvas canvasy *screeny ?gridspacing?*
canvas coords *tagOrId ?x0 y0 ...?*
canvas create *type x y ?x y ...? ?option value ...?*
canvas dchars *tagOrId first ?last?*
canvas delete *?tagOrId tagOrId ...?*
canvas dtag *tagOrId ?tagToDelete?*
canvas find *searchCommand ?arg arg ...?*
canvas focus *?tagOrId?*
canvas gettags *tagOrId*
canvas icursor *tagOrId index*
canvas index *tagOrId index*
canvas insert *tagOrId beforeThis string*
canvas itemconfigure *tagOrId ?option value ...?*
canvas lower *tagOrId ?belowThis?*
canvas move *tagOrId xAmount yAmount*
canvas postscript *?option value option value ...?*
canvas raise *tagOrId ?aboveThis?*
canvas scale *tagOrId xOrigin yOrigin xScale yScale*
canvas scan mark *x y*
canvas scan dragto *x y*
canvas select adjust *tagOrId index*
canvas select clear
canvas select from *tagOrId index*
canvas select item
canvas select to *tagOrId index*
canvas type *tagOrId*
canvas xview *index*
canvas yview *index*
canvas create arc *x1 y1 x2 y2 ?option value ...?*
canvas create bitmap *x y ?option value ...?*
canvas create line *x1 y1... xn yn ?option value ...?*
canvas create oval *x1 y1 x2 y2 ?option value ...?*
canvas create polygon *x1 y1 ... xn yn ?option value ...?*
canvas create rectangle *x1 y1 x2 y2 ?option value ...?*
canvas create text *x y ?option value ...?*
canvas create window *x y ?option value ...?*

menu

menu activate *index*
menu add *type ?option value ...?*
menu delete *index1 ?index2?*
menu disable *index*
menu enable *index*
menu entryconfigure *index ?options?*
menu index *index*
menu invoke *index*
menu post *x y*
menu unpost
menu yposition *index*
Indices: *number*, active, last, none, @*number*, *pattern*
Types: cascade, checkbutton, command, radiobutton, separator

menubutton

menubutton activate
menubutton deactivate

radiobutton

radiobutton activate
radiobutton deactivate
radiobutton deselect
radiobutton flash
radiobutton invoke
radiobutton select

scale

scale get
scale set *value*

scrollbar

scrollbar get
scrollbar set *totalUnits windowUnits firstUnit lastUnit*

text

text compare *index1 op index2*
text debug *?boolean?*
text delete *index1 ?index2?*
text get *index1 ?index2?*
text index *index*
text insert *index chars*
text mark names
text mark set *markName index*
text mark unset *markName ?markName markName ...?*
text scan mark *y*
text scan dragto *y*
text tag add *tagName index1 ?index2?*
text tag bind *tagName ?sequence? ?command?*
text tag *configure tagName ?option? ?value? ?option*
text tag delete *tagName ?tagName ...?*
text tag lower *tagName ?belowThis?*
text tag names *?index?*
text tag nextrange *tagName index1 ?index2?*
text tag raise *tagName ?aboveThis?*
text tag ranges *tagName*
text tag remove *tagName index1 ?index2?*
text yview *?-pickplace? what*
Indices: *line.char*, @*x,y*, end, *mark*, *tag*.first, *tag*.last
Modifiers: + |- *count* chars |lines, linestart, lineend, wordstart, wordend

tk_dialog

tk_dialog *window title text bitmap default string string...*
Bitmaps: error, gray50, gray25, hourglass, info questhead, question, warning

Widget Options

button

-activebackground	-cursor	-relief
-activeforeground	-disabledforeground	-state
-anchor	-font	-text
-background	-foreground	-textvariable
-bitmap	-height	-width
-borderwidth	-padx	
-command	-pady	

canvas

-background	-insertofftime	-selectborderwidth
-borderwidth	-insertontime	-selectforeground
-cursor	-insertwidth	-width
-height	-relief	-xscrollcommand
-insertbackground	-selectbackground	-yscrollcommand
-insertborderwidth		

-closeenough	*float*
-confine	*boolean*
-scrollincrement	*coordinate*
-scrollregion	*coordiante_corners*

checkbutton

-activebackground	-cursor	-relief
-activeforeground	-disabledforeground	-state
-anchor	-font	-text
-background	-foreground	-textvariable
-bitmap	-height	-variable
-borderwidth	-padx	-width
-command	-pady	

-offvalue	*value*
-onvalue	*value*
-selector	*color*

entry

-background	-insertborderwidth	-selectbackground
-borderwidth	-insertofftime	-selectborderwidth
-cursor	-insertontime	-selectforeground
-exportselection	-insertwidth	-state
-font	-relief	-textvariable
-foreground	-scrollcommand	-width
-insertbackground		

frame

-background	-geometry	-relief
-borderwidth	-height	-width

label

-anchor	-font	-relief
-background	-foreground	-text
-bitmap	-height	-textvariable
-borderwidth	-padx	-width
-cursor	-pady	

listbox

-background	-foreground	-selectforeground
-borderwidth	-geometry	-setgrid
-cursor	-relief	-xscrollcommand
-exportselection	-selectbackground	-yscrollcommand
-font	-selectborderwidth	

menu

-activebackground	-background	-disabledforeground
-activeborderwidth	-borderwidth	-font
-activeforeground	-cursor	-foreground

-postcommand	*command*
-selector	*color*

menubutton

-activebackground	-cursor	-pady
-activeforeground	-disabledforeground	-relief
-anchor	-font	-state
-background	-foreground	-text
-bitmap	-height	-textvariable
-borderwidth	-padx	-width

-menu	*menuPath*
-underline	*charIndex*

message

-anchor	-font	-relief
-background	-foreground	-text
-borderwidth	-padx	-textvariable
-cursor	-pady	-width

-ascpect	*integer*
-justify	left|center|right

radiobutton

-activebackground	-cursor	-relief
-activeforeground	-disabledforeground	-state
-anchor	-font	-text
-background	-foreground	-textvariable
-bitmap	-height	-value
-borderwidth	-padx	-variable
-command	-pady	-width

-selector	*color*

scale

-activeforeground	-cursor	-orient
-background	-font	-relief
-borderwidth	-foreground	-state
-command	-length	-width

-from	*integer*
-label	*string*
-showvalue	*boolean*
-sliderforeground	*boolean*
-sliderlength	*pixels*
-tickinterval	*integer*
-to	*integer*

scrollbar

-activeforeground	-cursor	-repeatdelay
-background	-foreground	-repeatinterval
-borderwidth	-orient	-width
-command	-relief	

text

-background	-insertborderwidth	-selectborderwidth
-borderwidth	-insertofftime	-selectforeground
-cursor	-insertontime	-setgrid
-exportselection	-insertwidth	-state
-font	-padx	-textvariable
-foreground	-pady	-width
-height	-relief	-yscrollcommand
-insertbackground	-selectbackground	

-wrap	none|char|word

toplevel

-background	-geometry	-relief
-borderwidth		

Standard Options

-activebackground	*color*
-activeborderwidth	*pixelWidth*
-activeforeground	*color*
-anchor	n|ne|e|se|s|sw|w|nw|center
-background or -bg	*color*
-bitmap	*bitmap*
-borderwidth or -bd	*pixelWidth*
-command	*tclCommand*
-cursor	*cursor*
-disabledforeground	*color*
-exportselection	*boolean*
-font	*font*
-foreground or -fg	*color*
-geometry	*width*x*height*
-height	*pixelWidth* or *textLines*
-insertbackground	*color*
-insertborderwidth	*pixelWidth*
-insertofftime	*milliseconds*
-insertontime	*milliseconds*
-insertwidth	*pixelWidth*
-orient	horizontal|vertical
-padx	*pixelWidth*
-pady	*pixelWidth*
-relief	flat|groove|raised|ridge|sunken
-repeatdelay	*milliseconds*
-repeatinterval	*milliseconds*
-scrollcommand	*cmdPrefix*
-selectbackground	*color*
-selectborderwidth	*pixelWidth*
-selectforeground	*color*
-setgrid	*boolean*
-state	normal|disabled (|active *for buttons*)
-text	*string*
-textvariable	*variable*
-variable	*variable*
-width	*pixelWidth* or *textChars*
-xscrollcommand	*cmdPrefix*
-yscrollcommand	*cmdPrefix*

Tk Misc Reference Card

(for version 3.3)

Window Information

winfo atom *name*
winfo atomname *id*
winfo cells *window*
winfo children *window*
winfo class *window*
winfo containing *rootX rootY*
winfo depth *window*
winfo exists *window*
winfo fpixels *window number*
winfo geometry *window*
winfo height *window*
winfo id *window*
winfo interps
winfo ismapped *window*
winfo name *window*
winfo parent *window*
winfo pathname *id*
winfo pixels *window number*
winfo reqheight *window*
winfo reqwidth *window*
winfo rgb *window color*
winfo rootx *window*
winfo rooty *window*
winfo screen *window*
winfo screencells *window*
winfo screendepth *window*
winfo screenheight *window*
winfo screenmmheight *window*
winfo screenmmwidth *window*
winfo screenvisual *window*
winfo screenwidth *window*
winfo toplevel *window*
winfo visual *window*
winfo vrootheight *window*
winfo vrootwidth *window*
winfo vrootx *window*
winfo vrooty *window*
winfo width *window*
winfo x *window*
winfo y *window*

Binding

bind *windowSpec*
bind *windowSpec* <*modifier-modifier-type-detail*>
bind *windowSpec* <*modifier-modifier-type-detail*> *command*
bind *windowSpec* <*modifier-modifier-type-detail*> +*command*

Modifiers:

Control	Any
Shift	Double
Lock	Triple
Button1, B1	Mod1, M1, Meta, M
Button2, B2	Mod2, M2, Alt
Button3, B3	Mod3, M3
Button4, B4	Mod4, M4
Button5, B5	Mod5, M5

Type:

ButtonPress, Button	Expose	Leave
ButtonRelease	FocusIn	Map
Circulate	FocusOut	Property
CirculateRequest	Gravity	Reparent
Colormap	Keymap	ResizeRequest
Configure	KeyPress, Key	Unmap
ConfigureRequest	KeyRelease	Visibility
Destroy	MapRequest	
Enter	Motion	

Detail: for buttons a number 1-5
or keys a keysym (/usr/include/X11/keysymdef)

Codes:

%%	single % sign	%w	*width* field
%a	*above* field	%x	*x* field
%b	button number	%y	*y* field
%c	*count* field	%A	ASCII character
%d	*detail* field	%B	*border_width* field
%f	*focus* field	%D	*display* field
%h	*height* field	%E	*send_event* field
%k	*keycode* field	%K	keysym as text
%m	*mode* field	%N	keysym as decimal
%o	*override_redirect* field	%R	*root* window
%p	*place* field	%S	*sub_window* identifier
%s	*state* field	%T	*type* field
%t	*time* field	%W	window pathname
%v	*value_mask* field	%X	*x_root* field
		%Y	*y_root* field

Examples:

bind .mywin <Meta-Key-i> "wm withdraw %W"
bind .mywin <Shift-Control-Key-S> "searchtxt %W"
bind Text <B1-Motion> "bind_textB1motion %W @%x,%y"

Other Tk Commands

after *ms ?arg1 arg2 arg3 ...?*
destroy *?window window ...?*
focus
focus *window*
focus default *?window?*
focus none
grab ?-global? *window*
grab current *?window?*
grab release *window*
grab set ?-global? *window*
grab status *window*
lower *window ?belowThis?*
option add *pattern value ?priority?*
option clear
option get *window name class*
option readfile *fileName ?priority?*
raise *window ?aboveThis?*
selection clear *window*
selection get *?type?*
selection handle *window command ?type? ?format?*
selection own *?window? ?command?*
send *interp cmd ?arg arg ...?*
tk colormodel *window ?newValue?*
tkwait variable *name*
tkwait visibility *name*
tkwait window *name*
tk_bindForTraversal *arg arg ...*
tk_listboxSingleSelect *listbox ?listbox ...?*
tk_listboxSingleSelect Listbox
tk_menuBar *frame ?menu menu ...?*
update ?idletasks?

Widget Method Options

canvas searchSpec

above *tagGrid*
all
below *tagGrid*
closest *x y ?halo? ?start?*
enclosed *x1 y1 x2 y2*
overlapping*x1 y1 x2 y2*
withtag *tagOrId*

canvas postscript options

-colormap *varName*
-colormode color|grey|mono
-file *fileName*
-fontmap *varName*
-height *size*
-pageanchor *anchor*
-pageheight *size*
-pagewidth *size*
-pagex *position*
-pagey *position*
-rotate *boolean*
-width *size*
-x *postion*
-y *postion*

canvas arc options

-extent *degrees*
-fill *color*
-outline *color*
-start *degrees*
-stipple *bitmap*
-style pieslice|chord|arc
-tags *tagList*
-width *outlineWidth*

canvas bitmap options

-anchor *anchorPos*
-background *color*
-bitmap *bitmap*
-foreground *color*
-tags *tagList*

canvas line options

-arrow *where*
-arrowshape *shape*
-capstyle butt|projecting|round
-fill *color*
-joinstyle bevel|miter|round
-smooth *boolean*
-splinesteps *number*
-stipple *bitmap*
-tags *tagList*
-width *lineWidth*

canvas oval options

-fill *color*
-outline *color*
-stipple *bitmap*
-tags *tagList*
-width *outlineWidth*

canvas polygon options

-fill *color*
-smooth *boolean*
-splinesteps *number*
-stipple *bitmap*
-tags *tagList*

canvas rectange options

-fill *color*
-outline *color*
-stipple *bitmap*
-tags *tagList*
-width *outlineWidth*

canvas text options

-anchor *anchorPos*
-fill *color*
-font *fontName*
-justify left|right|center
-stipple *bitmap*
-tags *tagList*
-text *string*
-width *lineLength*

canvas window options

-anchor *anchorPos*
-height *pixels*
-tags *tagList*
-width *pixels*
-window *pathName*

menu add options

-activebackground *color*
-accelerator *string*
-background *color*
-bitmap *bitmap*
-command *cmd*
-font *font*
-label *string*
-menu *menu*
-offvalue *value*
-onvalue *value*
-state normal|active|disabled
-underline *charIndex*
-value *value*
-variable *variable*

text tag options

-background *color*
-bgstipple *bitmap*
-borderwidth *pixels*
-fgstipple *bitmap*
-font *font*
-foreground *color*
-relief *relief*
-underline *boolean*

Window Manager

wm aspect *window ?minNumer minDenom maxNumer maxDenom?*
wm client *window ?name?*
wm command *window ?value?*
wm deiconify *window*
wm focusmodel *window ?active—passive?*
wm geometry *window ?newGeometry?*
wm grid *window ?baseWidth baseHeight widthInc heightInc?*
wm group *window ?pathName?*
wm iconbitmap *window ?bitmap?*
wm iconify *window*
wm iconmask *window ?bitmap?*
wm iconname *window ?newName?*
wm iconposition *window ?x y?*
wm iconwindow *window ?pathName?*
wm maxsize *window ?width height?*
wm minsize *window ?width height?*
wm overrideredirect *window ?boolean?*
wm positionfrom *window ?who?*
wm protocol *window ?name? ?command?*
wm sizefrom *window ?who?*
wm title *window ?string?*
wm transient *window ?master?*
wm withdraw *window*

Geometry Management

packing (old)

pack after *sibling window options ?window options ...?*
pack append *parent window options ?window options ...?*
pack before *sibling window options ?window options ...?*
pack info *parent*
pack unpack *window*
Options: *edge padding filling* frame *anchor*
edge: top, bottom, left, right
padding: padx *num*, pady *num*, expand
filling: fill, fillx, filly
anchor: center, n, ne, e, se, sw, w, nw

packing (new)

pack *slave ?slave ...? ?options?*
pack configure *slave ?slave ...? ?options?*
pack forget *slave ?slave ...?*
pack newinfo *slave*
pack propagate *master ?boolean?*
pack slaves *master*
Options: *for* pack configure
-after *other*
-anchor *anchor*
-before *other*
-expand *boolean*
-fill *style*
-in *other*
-ipady *amount*
-padx *amount*
-pady *amount*
-side *edge*
Fill styles: none, x, y, boht

placing

place window *option value ?option value ...?*
place configure *window option value ?option value ...?*
place forget *window*
place info *window*
place slaves *window*
Options:
-in *master*
-x *location*
-relx *location*
-y *location*
-rely *location*
-bordermode inside|outside|ignore
-width *size*
-relwidth *size*
-relwidth *size*
-height *size*
-relheight *size*
-anchor *where*