

NAME

bitmap – Images that display two colors

SYNOPSIS

image create bitmap ?*name*? ?*options*?

imageName **cget** *option*

imageName **configure** ?*option*? ?*value option value* ...?

DESCRIPTION

A bitmap is an image whose pixels can display either of two colors or be transparent. A bitmap image is defined by four things: a background color, a foreground color, and two bitmaps, called the *source* and the *mask*. Each of the bitmaps specifies 0/1 values for a rectangular array of pixels, and the two bitmaps must have the same dimensions. For pixels where the mask is zero, the image displays nothing, producing a transparent effect. For other pixels, the image displays the foreground color if the source data is one and the background color if the source data is zero.

CREATING BITMAPS

Like all images, bitmaps are created using the **image create** command. Bitmaps support the following *options*:

-background *color*

Specifies a background color for the image in any of the standard ways accepted by Tk. If this option is set to an empty string then the background pixels will be transparent. This effect is achieved by using the source bitmap as the mask bitmap, ignoring any **-maskdata** or **-maskfile** options.

-data *string*

Specifies the contents of the source bitmap as a string. The string must adhere to X11 bitmap format (e.g., as generated by the **bitmap** program). If both the **-data** and **-file** options are specified, the **-data** option takes precedence.

-file *name*

name gives the name of a file whose contents define the source bitmap. The file must adhere to X11 bitmap format (e.g., as generated by the **bitmap** program).

-foreground *color*

Specifies a foreground color for the image in any of the standard ways accepted by Tk.

-maskdata *string*

Specifies the contents of the mask as a string. The string must adhere to X11 bitmap format (e.g., as generated by the **bitmap** program). If both the **-maskdata** and **-maskfile** options are specified, the **-maskdata** option takes precedence.

-maskfile *name*

name gives the name of a file whose contents define the mask. The file must adhere to X11 bitmap format (e.g., as generated by the **bitmap** program).

IMAGE COMMAND

When a bitmap image is created, Tk also creates a new command whose name is the same as the image. This command may be used to invoke various operations on the image. It has the following general form:

imageName *option* ?*arg arg* ...?

Option and the *args* determine the exact behavior of the command. The following commands are possible for bitmap images:

imageName **cget** *option*

Returns the current value of the configuration option given by *option*. *Option* may have any of the values accepted by the **image create bitmap** command.

imageName **configure** ?*option*? ?*value* *option* *value* ...?

Query or modify the configuration options for the image. If no *option* is specified, returns a list describing all of the available options for *imageName* (see **Tk_ConfigureInfo** for information on the format of this list). If *option* is specified with no *value*, then the command returns a list describing the one named option (this list will be identical to the corresponding sublist of the value returned if no *option* is specified). If one or more *option*–*value* pairs are specified, then the command modifies the given option(s) to have the given value(s); in this case the command returns an empty string. *Option* may have any of the values accepted by the **image create bitmap** command.

KEYWORDS

bitmap, image