NAME

XReadBitmapFile, XReadBitmapFileData, XWriteBitmapFile, XCreatePixmapFromBitmapData, XCreateBitmapFromData - manipulate bitmaps

SYNTAX

int XReadBitmapFile(Display *_display_, Drawable _d_, _Xconst char *_filename_, unsigned int *_width_return_, unsigned int *_height_return_, Pixmap *_bitmap_return_, int *_x_hot_return_, int *_y_hot_return_);

int XReadBitmapFileData(_Xconst char *_filename_, unsigned int *_width_return_, unsigned int *_height_return_, unsigned char **_data_return_, int *_x_hot_return_, int *_y_hot_return_);

int XWriteBitmapFile(Display *_display_, _Xconst char *_filename_, Pixmap _bitmap_, unsigned int _width_, unsigned int _height_, int _x_hot_, int _y_hot_);

Pixmap XCreatePixmapFromBitmapData(Display *_display_, Drawable _d_, char *_data_, unsigned int _width_, unsigned int _height_, unsigned long _fg_, unsigned long _bg_, unsigned int _depth_);

Pixmap XCreateBitmapFromData(Display *_display_, Drawable _d_, _Xconst char *_data_, unsigned int _width_, unsigned int _height_);

ARGUMENTS

bitmap Specifies the bitmap.

bitmap_return Returns the bitmap that is created.

d Specifies the drawable that indicates the screen.

data Specifies the data in bitmap format.

data Specifies the location of the bitmap data.

data_return Returns the bitmap data.

depth Specifies the depth of the pixmap.

display Specifies the connection to the X server.

fg

bg Specify the foreground and background pixel values to use.

filename Specifies the file name to use. The format of the file name is operating-system dependent.

width

height Specify the width and height.

width_return

height_return Return the width and height values of the read in bitmap file.

x_hot

y_hot Specify where to place the hotspot coordinates (or -1,-1 if none are present) in the file.

x_hot_return

y_hot_return Return the hotspot coordinates.

DESCRIPTION

The **XReadBitmapFile** function reads in a file containing a bitmap. The file is parsed in the encoding of the current locale. The ability to read other than the standard format is implementation-dependent. If the file cannot be opened, **XReadBitmapFile** returns **BitmapOpenFailed**. If the file can be opened but does not contain valid bitmap data, it returns **BitmapFileInvalid**. If insufficient working storage is allocated, it returns **BitmapNoMemory**. If the file is readable and valid, it returns **BitmapSuccess**.

XReadBitmapFile returns the bitmap's height and width, as read from the file, to width_return and height_return. It then creates a pixmap of the appropriate size, reads the bitmap data from the file into the pixmap, and assigns the pixmap to the caller's variable bitmap. The caller must free the bitmap using **XFreePixmap** when finished. If *name*_x_hot and *name*_y_hot exist, **XReadBitmapFile** returns them to x_hot_return and y_hot_return; otherwise, it returns -1,-1.

XReadBitmapFile can generate **BadAlloc** and **BadDrawable** errors.

The **XReadBitmapFileData** function reads in a file containing a bitmap, in the same manner as **XReadBitmapFile**, but returns the data directly rather than creating a pixmap in the server. The bitmap data is returned in data_return; the client must free this storage when finished with it by calling **XFree**. The status and other return values are the same as for **XReadBitmapFile**.

The **XWriteBitmapFile** function writes a bitmap out to a file in the X Version 11 format. The name used in the output file is derived from the file name by deleting the directory prefix. The file is written in the encoding of the current locale. If the file cannot be opened for writing, it returns **BitmapOpenFailed**. If insufficient memory is allocated, **XWriteBitmapFile** returns **BitmapNoMemory**; otherwise, on no error, it returns **BitmapSuccess**. If x_hot and y_hot are not -1, -1, **XWriteBitmapFile** writes them out as the hotspot coordinates for the bitmap.

XWriteBitmapFile can generate **BadDrawable** and **BadMatch** errors.

The **XCreatePixmapFromBitmapData** function creates a pixmap of the given depth and then does a bitmap-format **XPutImage** of the data into it. The depth must be supported by the screen of the specified drawable, or a **BadMatch** error results.

XCreatePixmapFromBitmapData can generate **BadAlloc** and **BadMatch** errors.

The **XCreateBitmapFromData** function allows you to include in your C program (using **#include**) a bitmap file that was written out by **XWriteBitmapFile** (X version 11 format only) without reading in the bitmap file. The following example creates a gray bitmap:

```
#include "gray.bitmap"
Pixmap bitmap;
bitmap = XCreateBitmapFromData(display, window, gray_bits, gray_width, gray_height);
```

If insufficient working storage was allocated, **XCreateBitmapFromData** returns **None**. It is your responsibility to free the bitmap using **XFreePixmap** when finished.

XCreateBitmapFromData can generate a **BadAlloc** error.

DIAGNOSTICS

BadAlloc The server failed to allocate the requested resource or server memory.

BadDrawable A value for a Drawable argument does not name a defined Window or Pixmap.

BadMatch An **InputOnly** window is used as a Drawable.

SEE ALSO

XCreatePixmap(3), XPutImage(3)
Xlib - C Language X Interface