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