NAME

XDrawRectangle, XDrawRectangles, XRectangle - draw rectangles and rectangles structure

SYNTAX

int XDrawRectangle(Display **display*, Drawable *d*, GC *gc*, int *x*, int *y*, unsigned int *width*, unsigned int *height*);

int XDrawRectangles(Display **display*, Drawable *d*, GC *gc*, XRectangle *rectangles*[], int *nrectangles*);

ARGUMENTS

d Specifies the drawable.

display Specifies the connection to the X server.

gc Specifies the GC.

nrectangles Specifies the number of rectangles in the array.

rectangles Specifies an array of rectangles.

width

height Specify the width and height, which specify the dimensions of the rectangle.

x

y Specify the x and y coordinates, which specify the upper-left corner of the rectangle.

DESCRIPTION

The **XDrawRectangle** and **XDrawRectangles** functions draw the outlines of the specified rectangle or rectangles as if a five-point **PolyLine** protocol request were specified for each rectangle:

[x,y] [x+width,y] [x+width,y+height] [x,y+height] [x,y]

For the specified rectangle or rectangles, these functions do not draw a pixel more than once. **XDrawRectangles** draws the rectangles in the order listed in the array. If rectangles intersect, the intersecting pixels are drawn multiple times.

Both functions use these GC components: function, plane-mask, line-width, line-style, cap-style, join-style, fill-style, subwindow-mode, clip-x-origin, clip-y-origin, and clip-mask. They also use these GC

mode-dependent components: foreground, background, tile, stipple, tile-stipple-x-origin, tile-stipple-y-origin, dash-offset, and dash-list.

XDrawRectangle and **XDrawRectangles** can generate **BadDrawable**, **BadGC**, and **BadMatch** errors.

STRUCTURES

The **XRectangle** structure contains:

```
typedef struct {
    short x, y;
    unsigned short width, height;
} XRectangle;
```

All x and y members are signed integers. The width and height members are 16-bit unsigned integers. You should be careful not to generate coordinates and sizes out of the 16-bit ranges, because the protocol only has 16-bit fields for these values.

DIAGNOSTICS

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

BadGC A value for a GContext argument does not name a defined GContext.

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

BadMatch Some argument or pair of arguments has the correct type and range but fails to match in some other way required by the request.

SEE ALSO

XDrawArc(3), XDrawLine(3), XDrawPoint(3)
Xlib - C Language X Interface