

XEmptyRegion, **XEqualRegion**, **XPointInRegion**, **XRectInRegion** – determine if regions are empty or equal

```
Bool XEmptyRegion(r)
    Region r;
Bool XEqualRegion(r1, r2)
    Region r1, r2;
Bool XPointInRegion(r, x, y)
    Region r;
    int x, y;
int XRectInRegion(r, x, y, width, height)
    Region r;
    int x, y;
    unsigned int width, height;
```

r Specifies the region.

r1

r2 Specify the two regions.

width

height Specify the width and height, which define the rectangle.

x

y Specify the x and y coordinates, which define the point or the coordinates of the upper-left corner of the rectangle.

The **XEmptyRegion** function returns **True** if the region is empty.

The **XEqualRegion** function returns **True** if the two regions have the same offset, size, and shape.

The **XPointInRegion** function returns **True** if the point (*x*, *y*) is contained in the region *r*.

The **XRectInRegion** function returns **RectangleIn** if the rectangle is entirely in the specified region, **RectangleOut** if the rectangle is entirely out of the specified region, and **RectanglePart** if the rectangle is partially in the specified region.

XCreateRegion(3X11), XIntersectRegion(3X11)

Xlib – C Language X Interface