## XDrawPoint, XDrawPoints, XPoint – draw points and points structure

```
XDrawPoint(display, d, gc, x, y)
   Display *display;
   Drawable d;
   GC gc;
   int x, y;
XDrawPoints(display, d, gc, points, npoints, mode)
   Display *display;
   Drawable d;
   GC gc;
   XPoint *points;
   int npoints;
   int mode;
d
                 Specifies the drawable.
                 Specifies the connection to the X server.
display
                 Specifies the GC.
gc
mode
                 Specifies the coordinate mode. You can pass CoordModeOrigin or CoordModePrevi-
                 Specifies the number of points in the array.
npoints
                 Specifies an array of points.
points
                 Specify the x and y coordinates where you want the point drawn.
y
```

**The XDrawPoint** function uses the foreground pixel and function components of the GC to draw a single point into the specified drawable; **XDrawPoints** draws multiple points this way. **CoordModeOrigin** treats all coordinates as relative to the origin, and **CoordModePrevious** treats all coordinates after the first as relative to the previous point. **XDrawPoints** draws the points in the order listed in the array.

Both functions use these GC components: function, plane-mask, foreground, subwindow-mode, clip-x-origin, clip-y-origin, and clip-mask.

XDrawPoint can generate BadDrawable, BadGC, and BadMatch errors. XDrawPoints can generate BadDrawable, BadGC, BadMatch, and BadValue errors.

## The XPoint structure contains:

```
typedef struct {
            short x, y;
} XPoint;
```

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.

**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. **BadValue** Some numeric value falls outside the range of values accepted by the request. Unless a specific range is specified for an argument, the full range defined by the argument's type is accepted. Any argument defined as a set of alternatives can generate this error.

## $\begin{aligned} \textbf{XDrawArc(3X11), XDrawLine(3X11), XDrawRectangle(3X11)} \\ \textit{Xlib-C Language X Interface} \end{aligned}$