XDrawImageString, XDrawImageString16 – draw image text

XDrawImageString(display, d, gc, x, y, string, length)
  Display *display;
  Drawable d;
  GC gc;
  int x, y;
  char *string;
  int length;

XDrawImageString16(display, d, gc, x, y, string, length)
  Display *display;
  Drawable d;
  GC gc;
  int x, y;
  XChar2b *string;
  int length;

d Specifies the drawable.
display Specifies the connection to the X server.
gc Specifies the GC.
length Specifies the number of characters in the string argument.
string Specifies the character string.
x y Specify the x and y coordinates, which are relative to the origin of the specified drawable and define the origin of the first character.

The XDrawImageString16 function is similar to XDrawImageString except that it uses 2-byte or 16-bit characters. Both functions also use both the foreground and background pixels of the GC in the destination. The effect is first to fill a destination rectangle with the background pixel defined in the GC and then to paint the text with the foreground pixel. The upper-left corner of the filled rectangle is at:

  [x, y − font-ascent]

The width is:

  overall-width

The height is:

  font-ascent + font-descent

The overall-width, font-ascent, and font-descent are as would be returned by XQueryTextExtents using gc and string. The function and fill-style defined in the GC are ignored for these functions. The effective function is GXcopy, and the effective fill-style is FillSolid.

For fonts defined with 2-byte matrix indexing and used with XDrawImageString, each byte is used as a byte2 with a byte1 of zero.

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

XDrawImageString and XDrawImageString16 can generate BadDrawable, BadGC, and BadMatch errors.
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.

XDrawString(3X11), XDrawText(3X11), XLoadFont(3X11), XTextExtents(3X11)

Xlib – C Language X Interface