

## **XmbTextExtents, XwcTextExtents – compute text extents**

**int XmbTextExtents**(*font\_set, string, num\_bytes, overall\_return*)

```
XFontSet font_set;  
char *string;  
int num_bytes;  
XRectangle *overall_ink_return;  
XRectangle *overall_logical_return;
```

**int XwcTextExtents**(*font\_set, string, num\_wchars, overall\_return*)

```
XFontSet font_set;  
wchar_t *string;  
int num_wchars;  
XRectangle *overall_ink_return;  
XRectangle *overall_logical_return;
```

*font\_set*            Specifies the font set.  
*num\_bytes*        Specifies the number of bytes in the string argument.  
*num\_wchars*       Specifies the number of characters in the string argument.  
*overall\_ink\_return* Returns the overall ink dimensions.  
*overall\_logical\_return*  
                    Returns the overall logical dimensions.  
*string*            Specifies the character string.

The **XmbTextExtents** and **XwcTextExtents** functions set the components of the specified *overall\_ink\_return* and *overall\_logical\_return* arguments to the overall bounding box of the string's image and a logical bounding box for spacing purposes, respectively. They return the value returned by **XmbTextEscapement** or **XwcTextEscapement**. These metrics are relative to the drawing origin of the string, using the fonts loaded for the specified font set.

If the *overall\_ink\_return* argument is non-NULL, it is set to the bounding box of the string's character ink. The *overall\_ink\_return* for a nondescending, horizontally drawn Latin character is conventionally entirely above the baseline; that is, *overall\_ink\_return.height*  $\leq$   $-\text{overall\_ink\_return.y}$ . The *overall\_ink\_return* for a nonkerned character is entirely at, and to the right of, the origin; that is, *overall\_ink\_return.x*  $\geq$  0. A character consisting of a single pixel at the origin would set *overall\_ink\_return* fields *y* = 0, *x* = 0, *width* = 1, and *height* = 1.

If the *overall\_logical\_return* argument is non-NULL, it is set to the bounding box that provides minimum spacing to other graphical features for the string. Other graphical features, for example, a border surrounding the text, should not intersect this rectangle.

When the **XFontSet** has missing charsets, metrics for each unavailable character are taken from the default string returned by **XCreateFontSet** so that the metrics represent the text as it will actually be drawn. The behavior for an invalid codepoint is undefined.

**XmbTextEscapement(3X11), XmbTextPerCharExtents(3X11)** *Xlib – C Language X Interface*