

NAME

XmbTextExtents, XwcTextExtents, Xutf8TextExtents - compute text extents

SYNTAX

```
int XmbTextExtents(XFontSet font_set, _Xconst char *string, int num_bytes, XRectangle
    *overall_ink_return, XRectangle *overall_logical_return);
```

```
int XwcTextExtents(XFontSet font_set, _Xconst wchar_t *string, int num_wchars, XRectangle
    *overall_ink_return, XRectangle *overall_logical_return);
```

```
int Xutf8TextExtents(XFontSet font_set, _Xconst char *string, int num_bytes, XRectangle
    *overall_ink_return, XRectangle *overall_logical_return);
```

ARGUMENTS

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.

DESCRIPTION

The **XmbTextExtents**, **XwcTextExtents** and **Xutf8TextExtents** 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**, **XwcTextEscapement** or **Xutf8TextEscapement**. 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, $\text{overall_ink_return.height} \leq -\text{overall_ink_return.y}$. The *overall_ink_return* for a nonkerned character is entirely at, and to the right of, the origin; that is, $\text{overall_ink_return.x} \geq 0$. 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.

The function **Xutf8TextExtents** is an extension introduced by The XFree86 Project, Inc., in their 4.0.2 release. Its presence is indicated by the macro **X_HAVE_UTF8_STRING**.

SEE ALSO

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