

NAME

XkbOpenDisplay - Checks for a compatible version of the Xkb extension in both the library and the server, and initializes the extension for use.

SYNOPSIS

```
Display *XkbOpenDisplay (_Xconst char *display_name, int *event_rtrn, int *error_rtrn, int *major_in_out, int *minor_in_out, int *reason_rtrn);
```

ARGUMENTS

display_name

hardware display name, which determines the display and communications domain to be used

event_rtrn

backfilled with the extension base event code

error_rtrn

backfilled with the extension base error code

major_in_out

compile time lib major version in, server major version out

minor_in_out

compile time lib min version in, server minor version out

reason_rtrn

backfilled with a status code

DESCRIPTION

As a convenience, you can use the function *XkbOpenDisplay* to perform these three tasks at once: open a connection to an X server, check for a compatible version of the Xkb extension in both the library and the server, and initialize the extension for use.

XkbOpenDisplay is a convenience function that opens an X display connection and initializes the X keyboard extension. In all cases, upon return *reason_rtrn* contains a status value indicating success or the type of failure. If *major_in_out* and *minor_in_out* are not NULL, *XkbOpenDisplay* first calls *XkbLibraryVersion* to determine whether the client library is compatible, passing it the values pointed to by *major_in_out* and *minor_in_out*. If the library is incompatible, *XkbOpenDisplay* backfills *major_in_out* and *minor_in_out* with the major and minor extension versions of the library being used and returns NULL. If the library is compatible, *XkbOpenDisplay* next calls *XOpenDisplay* with the *display_name*. If this fails, the function returns NULL. If successful, *XkbOpenDisplay* calls

XkbQueryExtension and backfills the major and minor Xkb server extension version numbers in *major_in_out* and *minor_in_out*. If the server extension version is not compatible with the library extension version or if the server extension is not present, *XkbOpenDisplay* closes the display and returns NULL. When successful, the function returns the display connection.

The possible values for *reason_rtrn* are:

- ⊕ *XkbOD_BadLibraryVersion* indicates *XkbLibraryVersion* returned False.
- ⊕ *XkbOD_ConnectionRefused* indicates the display could not be opened.
- ⊕ *XkbOD_BadServerVersion* indicates the library and the server have incompatible extension versions.
- ⊕ *XkbOD_NonXkbServer* indicates the extension is not present in the X server.
- ⊕ *XkbOD_Success* indicates that the function succeeded.

RETURN VALUES

NULL The *XkbOpenDisplay* function returns NULL if the library is incompatible.

The *XkbOpenDisplay* function returns NULL if the call to *XOpenDisplay* with the *display_name* fails.

The *XkbOpenDisplay* function returns NULL and closes the display if the server extension version is not compatible with the library extension version or if the server extension is not present.

DIAGNOSTICS

BadAccess The Xkb extension has not been properly initialized

SEE ALSO

XkbLibraryVersion(3), **XkbQueryExtension(3)**, **XOpenDisplay(3)**