

NAME

XSelectExtensionEvent, XGetSelectedExtensionEvents - select extension events, get the list of currently selected extension events

SYNOPSIS

```
#include <X11/extensions/XInput.h>
```

```
XSelectExtensionEvent( Display *display,  
                      Window w,  
                      XEventClass *event_list,  
                      int event_count);
```

```
XGetSelectedExtensionEvents( Display *display,  
                             Window w,  
                             int *this_client_event_count_return,  
                             XEventClass **this_client_event_list_return,  
                             int *all_clients_event_count_return,  
                             XEventClass **all_clients_event_list_return);
```

display

Specifies the connection to the X server.

w

Specifies the window whose events you are interested in.

event_list

Specifies the list of event classes that describe the events you are interested in.

event_count

Specifies the count of event classes in the event list.

this_client_event_count_return

Returns the count of event classes selected by this client.

this_client_event_list_return

Returns a pointer to the list of event classes selected by this client.

`all_clients_event_count_return`

Returns the count of event classes selected by all clients.

`all_clients_event_list_return`

Returns a pointer to the list of event classes selected by all clients.

DESCRIPTION

The `XSelectExtensionEvent` request causes the X server to report the events associated with the specified list of event classes. Initially, X will not report any of these events. Events are reported relative to a window. If a window is not interested in a device event, it usually propagates to the closest ancestor that is interested, unless the `do_not_propagate` mask prohibits it.

Multiple clients can select for the same events on the same window with the following restrictions:

- * Multiple clients can select events on the same window because their event masks are disjoint. When the X server generates an event, it reports it to all interested clients.
- * Only one client at a time can select a `DeviceButtonPress` event with automatic passive grabbing enabled, which is associated with the event class `DeviceButtonPressGrab`. To receive `DeviceButtonPress` events without automatic passive grabbing, use event class `DeviceButtonPress` but do not specify event class `DeviceButtonPressGrab`.

The server reports the event to all interested clients.

Information contained in the `XDevice` structure returned by `XOpenDevice` is used by macros to obtain the event classes that clients use in making `XSelectExtensionEvent` requests. Currently defined macros include `DeviceKeyPress`, `DeviceKeyRelease`, `DeviceButtonPress`, `DeviceButtonRelease`, `DeviceMotionNotify`, `DeviceFocusIn`, `DeviceFocusOut`, `ProximityIn`, `ProximityOut`, `DeviceStateNotify`, `DeviceMappingNotify`, `ChangeDeviceNotify`, `DevicePointerMotionHint`, `DeviceButton1Motion`,

DeviceButton2Motion, DeviceButton3Motion, DeviceButton4Motion, DeviceButton5Motion, DeviceButtonMotion, DeviceOwnerGrabButton, DeviceButtonPressGrab, and NoExtensionEvent.

To obtain the proper event class for a particular device, one of the above macros is invoked using the XDevice structure for that device. For example,

```
DeviceKeyPress (*device, type, eventclass);
```

returns the DeviceKeyPress event type and the eventclass for selecting DeviceKeyPress events from this device.

XSelectExtensionEvent can generate a BadWindow or BadClass error. The XGetSelectedExtensionEvents request reports the extension events selected by this client and all clients for the specified window. This request returns pointers to two XEventClass arrays. One lists the input extension events selected by this client from the specified window. The other lists the event classes selected by all clients from the specified window. You should use XFree to free these two arrays.

XGetSelectedExtensionEvents can generate a BadWindow error.

DIAGNOSTICS

BadWindow

A value for a Window argument does not name a defined window.

BadClass

A value for an XEventClass is invalid.