XGrabKeyboard, XUngrabKeyboard – grab the keyboard

int XGrabKeyboard(*display***,** *grab_window***,** *owner_events***,** *pointer_mode***,** *keyboard_mode***,** *time***)**
Display ****display*;**
Window *grab_window***;**
Bool *owner_events***;**
int *pointer_mode***,** *keyboard_mode***;**
Time *time***;**

XUngrabKeyboard(*display*, *time*)
Display **display*;*
Time *time*;

display	Specifies the connection to the X server.
grab_window	Specifies the grab window.
keyboard_mode	Specifies further processing of keyboard events. You can pass **GrabModeSync** or **GrabModeAsync**.
owner_events	Specifies a Boolean value that indicates whether the keyboard events are to be reported as usual.
pointer_mode	Specifies further processing of pointer events. You can pass **GrabModeSync** or **GrabModeAsync**.
time	Specifies the time. You can pass either a timestamp or **CurrentTime**.

The XGrabKeyboard function actively grabs control of the keyboard and generates **FocusIn** and **FocusOut** events. Further key events are reported only to the grabbing client. **XGrabKeyboard** overrides any active keyboard grab by this client. If owner_events is **False**, all generated key events are reported with respect to grab_window. If owner_events is **True** and if a generated key event would normally be reported to this client, it is reported normally; otherwise, the event is reported with respect to the grab_window. Both **KeyPress** and **KeyRelease** events are always reported, independent of any event selection made by the client.

If the keyboard_mode argument is **GrabModeAsync**, keyboard event processing continues as usual. If the keyboard is currently frozen by this client, then processing of keyboard events is resumed. If the keyboard_mode argument is **GrabModeSync**, the state of the keyboard (as seen by client applications) appears to freeze, and the X server generates no further keyboard events until the grabbing client issues a releasing **XAllowEvents** call or until the keyboard grab is released. Actual keyboard changes are not lost while the keyboard is frozen; they are simply queued in the server for later processing.

If pointer_mode is **GrabModeAsync**, pointer event processing is unaffected by activation of the grab. If pointer_mode is **GrabModeSync**, the state of the pointer (as seen by client applications) appears to freeze, and the X server generates no further pointer events until the grabbing client issues a releasing **XAllowEvents** call or until the keyboard grab is released. Actual pointer changes are not lost while the pointer is frozen; they are simply queued in the server for later processing.

If the keyboard is actively grabbed by some other client, **XGrabKeyboard** fails and returns **AlreadyGrabbed**. If grab_window is not viewable, it fails and returns **GrabNotViewable**. If the keyboard is frozen by an active grab of another client, it fails and returns **GrabFrozen**. If the specified time is earlier than the last-keyboard-grab time or later than the current X server time, it fails and returns **GrabInvalidTime**. Otherwise, the last-keyboard-grab time is set to the specified time (**CurrentTime** is replaced by the current X server time).

XGrabKeyboard can generate **BadValue** and **BadWindow** errors.

The **XUngrabKeyboard** function releases the keyboard and any queued events if this client has it actively grabbed from either **XGrabKeyboard** or **XGrabKey**. **XUngrabKeyboard** does not release the keyboard and any queued events if the specified time is earlier than the last-keyboard-grab time or is later than the current X server time. It also generates **FocusIn** and **FocusOut** events. The X server automatically

performs an **UngrabKeyboard** request if the event window for an active keyboard grab becomes not viewable.

BadValue Some numeric value falls outside the range of values accepted by the request. Unless a specific range is specified for an argument, the full range defined by the argument's type is accepted. Any argument defined as a set of alternatives can generate this error. **BadWindow** A value for a Window argument does not name a defined Window.

XAllowEvents(3X11), XGrabButton(3X11), XGrabKey(3X11), XGrabPointer(3X11)
Xlib – C Language X Interface