

XtGrabKey, XtUngrabKey, XtGrabKeyboard, XtUngrabKeyboard, XtGrabButton, XtUngrabButton, XtGrabPointer, XtUngrabPointer – manage grabs

```
void XtGrabKey(widget, keycode, modifiers, owner_events, pointer_mode, keyboard_mode)
    Widget widget;
    KeyCode keycode;
    Modifiers modifiers;
    Boolean owner_events;
    int pointer_mode;
    int keyboard_mode;

void XtUngrabKey(widget, keycode, modifiers)
    Widget widget;
    KeyCode keycode;
    Modifiers modifiers;

int XtGrabKeyboard(widget, owner_events, pointer_mode, keyboard_mode, time)
    Widget widget;
    Boolean owner_events;
    int pointer_mode;
    int keyboard_mode;
    Time time;

void XtUngrabKeyboard(widget, time)
    Widget widget;
    Time time;

void XtGrabButton(widget, button, modifiers, owner_events, event_mask, pointer_mode, keyboard_mode, confine_to, cursor)
    Widget widget;
    int button;
    Modifiers modifiers;
    Boolean owner_events;
    unsigned int event_mask;
    int pointer_mode;
    int keyboard_mode;
    Window confine_to;
    Cursor cursor;

void XtUngrabButton(widget, button, modifiers)
    Widget widget;
    KeyCode button;
    Modifiers modifiers;

int XtGrabPointer(widget, owner_events, event_mask, pointer_mode, keyboard_mode, confine_to, cursor, time)
    Widget widget;
    Boolean owner_events;
    unsigned int event_mask;
    int pointer_mode;
    int keyboard_mode;
    Window confine_to;
    Cursor cursor;
    Time time;

void XtUngrabPointer(widget, time)
    Widget widget;
    Time time;
```

widget Specifies the widget in whose window the grab will occur. Must be of class **Core** or a subclass thereof.

keycode

modifiers

owner_events

pointer_mode

keyboard_mode

time

button

confine_to

cursor

Specifies arguments to the associated Xlib function call.

XtGrabKey calls **XGrabKey** specifying the widget's window as the grab window if the widget is realized. The remaining arguments are exactly as for **XGrabKey**. If the widget is not realized, or is later unrealized, the call to **XGrabKey** will be performed (again) when the widget is realized and its window becomes mapped. In the future, if **XtDispatchEvent** is called with a **KeyPress** event matching the specified keycode and modifiers (which may be **AnyKey** or **AnyModifier**, respectively) for the widget's window, the Intrinsics will call **XtUngrabKeyboard** with the timestamp from the **KeyPress** event if either of the following conditions is true:

- There is a modal cascade and the widget is not in the active subset of the cascade and the keyboard was not previously grabbed, or
- **XFilterEvent** returns **True**.

XtUngrabKey calls **XUngrabKey** specifying the widget's window as the ungrab window if the widget is realized. The remaining arguments are exactly as for **XUngrabKey**. If the widget is not realized, **XtUngrabKey** removes a deferred **XtGrabKey** request, if any, for the specified widget, keycode, and modifiers.

If the specified widget is realized **XtGrabKeyboard** calls **XGrabKeyboard** specifying the widget's window as the grab window. The remaining arguments and return value are exactly as for **XGrabKeyboard**. If the widget is not realized, **XtGrabKeyboard** immediately returns **GrabNotViewable**. No future ungrab is implied by **XtGrabKeyboard**.

XtUngrabKeyboard calls **XUngrabKeyboard** with the specified time.

XtGrabButton calls **XGrabButton** specifying the widget's window as the grab window if the widget is realized. The remaining arguments are exactly as for **XGrabButton**. If the widget is not realized, or is later unrealized, the call to **XGrabButton** will be performed (again) when the widget is realized and its window becomes mapped. In the future, if **XtDispatchEvent** is called with a **ButtonPress** event matching the specified button and modifiers (which may be **AnyButton** or **AnyModifier**, respectively) for the widget's window, the Intrinsics will call **XtUngrabPointer** with the timestamp from the **ButtonPress** event if either of the following conditions is true:

- There is a modal cascade and the widget is not in the active subset of the cascade and the pointer was not previously grabbed, or
- **XFilterEvent** returns **True**.

XtUngrabButton calls **XUngrabButton** specifying the widget's window as the ungrab window if the widget is realized. The remaining arguments are exactly as for **XUngrabButton**. If the widget is not realized, **XtUngrabButton** removes a deferred **XtGrabButton** request, if any, for the specified widget, button, and modifiers.

XtGrabPointer calls **XGrabPointer** specifying the widget's window as the grab window. The remaining arguments and return value are exactly as for **XGrabPointer**. If the widget is not realized, **XtGrabPointer** immediately returns **GrabNotViewable**. No future ungrab is implied by **XtGrabPointer**.

XtUngrabPointer calls **XUngrabPointer** with the specified time.

X Toolkit Intrinsic – C Language Interface
Xlib – C Language X Interface