

NAME

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

SYNTAX

```
#include <X11/Intrinsic.h>
```

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

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

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

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

```
void XtGrabButton(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 widget, unsigned button, Modifiers modifiers);
```

```
int XtGrabPointer(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 widget, Time time);
```

ARGUMENTS

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.

DESCRIPTION

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 key-code 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.

SEE ALSO

X Toolkit Intrinsics – C Language Interface

Xlib – C Language X Interface