

## **XIfEvent, XCheckIfEvent, XPeekIfEvent – check the event queue with a predicate procedure**

**XIfEvent**(*display, event\_return, predicate, arg*)

```
Display *display;  
XEvent *event_return;  
Bool (*predicate)();  
XPointer arg;
```

Bool XCheckIfEvent(*display, event\_return, predicate, arg*)

```
Display *display;  
XEvent *event_return;  
Bool (*predicate)();  
XPointer arg;
```

XPeekIfEvent(*display, event\_return, predicate, arg*)

```
Display *display;  
XEvent *event_return;  
Bool (*predicate)();  
XPointer arg;
```

*arg* Specifies the user-supplied argument that will be passed to the predicate procedure.

*display* Specifies the connection to the X server.

*event\_return* Returns either a copy of or the matched event's associated structure.

*predicate* Specifies the procedure that is to be called to determine if the next event in the queue matches what you want.

The **XIfEvent** function completes only when the specified predicate procedure returns **True** for an event, which indicates an event in the queue matches. **XIfEvent** flushes the output buffer if it blocks waiting for additional events. **XIfEvent** removes the matching event from the queue and copies the structure into the client-supplied **XEvent** structure.

When the predicate procedure finds a match, **XCheckIfEvent** copies the matched event into the client-supplied **XEvent** structure and returns **True**. (This event is removed from the queue.) If the predicate procedure finds no match, **XCheckIfEvent** returns **False**, and the output buffer will have been flushed. All earlier events stored in the queue are not discarded.

The **XPeekIfEvent** function returns only when the specified predicate procedure returns **True** for an event. After the predicate procedure finds a match, **XPeekIfEvent** copies the matched event into the client-supplied **XEvent** structure without removing the event from the queue. **XPeekIfEvent** flushes the output buffer if it blocks waiting for additional events.

**XAnyEvent(3X11), XNextEvent(3X11), XPutBackEvent(3X11) XSendEvent(3X11)**

*Xlib – C Language X Interface*