

**NAME**

XNextEvent, XPeekEvent, XWindowEvent, XCheckWindowEvent, XMaskEvent, XCheckMaskEvent, XCheckTypedEvent, XCheckTypedWindowEvent - select events by type

**SYNTAX**

```
int XNextEvent(Display *display, XEvent *event_return);
```

```
int XPeekEvent(Display *display, XEvent *event_return);
```

```
int XWindowEvent(Display *display, Window w, long event_mask, XEvent *event_return);
```

```
Bool XCheckWindowEvent(Display *display, Window w, long event_mask, XEvent *event_return);
```

```
int XMaskEvent(Display *display, long event_mask, XEvent *event_return);
```

```
Bool XCheckMaskEvent(Display *display, long event_mask, XEvent *event_return);
```

```
Bool XCheckTypedEvent(Display *display, int event_type, XEvent *event_return);
```

```
Bool XCheckTypedWindowEvent(Display *display, Window w, int event_type, XEvent  
    *event_return);
```

**ARGUMENTS**

*display* Specifies the connection to the X server.

*event\_mask* Specifies the event mask.

*event\_return* Returns the matched event's associated structure.

*event\_return* Returns the next event in the queue.

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

*event\_type* Specifies the event type to be compared.

*w* Specifies the window whose event you are interested in.

**DESCRIPTION**

The **XNextEvent** function copies the first event from the event queue into the specified **XEvent** structure and then removes it from the queue. If the event queue is empty, **XNextEvent** flushes the

output buffer and blocks until an event is received.

The **XPeekEvent** function returns the first event from the event queue, but it does not remove the event from the queue. If the queue is empty, **XPeekEvent** flushes the output buffer and blocks until an event is received. It then copies the event into the client-supplied **XEvent** structure without removing it from the event queue.

The **XWindowEvent** function searches the event queue for an event that matches both the specified window and event mask. When it finds a match, **XWindowEvent** removes that event from the queue and copies it into the specified **XEvent** structure. The other events stored in the queue are not discarded. If a matching event is not in the queue, **XWindowEvent** flushes the output buffer and blocks until one is received.

The **XCheckWindowEvent** function searches the event queue and then the events available on the server connection for the first event that matches the specified window and event mask. If it finds a match, **XCheckWindowEvent** removes that event, copies it into the specified **XEvent** structure, and returns **True**. The other events stored in the queue are not discarded. If the event you requested is not available, **XCheckWindowEvent** returns **False**, and the output buffer will have been flushed.

The **XMaskEvent** function searches the event queue for the events associated with the specified mask. When it finds a match, **XMaskEvent** removes that event and copies it into the specified **XEvent** structure. The other events stored in the queue are not discarded. If the event you requested is not in the queue, **XMaskEvent** flushes the output buffer and blocks until one is received.

The **XCheckMaskEvent** function searches the event queue and then any events available on the server connection for the first event that matches the specified mask. If it finds a match, **XCheckMaskEvent** removes that event, copies it into the specified **XEvent** structure, and returns **True**. The other events stored in the queue are not discarded. If the event you requested is not available, **XCheckMaskEvent** returns **False**, and the output buffer will have been flushed.

The **XCheckTypedEvent** function searches the event queue and then any events available on the server connection for the first event that matches the specified type. If it finds a match, **XCheckTypedEvent** removes that event, copies it into the specified **XEvent** structure, and returns **True**. The other events in the queue are not discarded. If the event is not available, **XCheckTypedEvent** returns **False**, and the output buffer will have been flushed.

The **XCheckTypedWindowEvent** function searches the event queue and then any events available on the server connection for the first event that matches the specified type and window. If it finds a match, **XCheckTypedWindowEvent** removes the event from the queue, copies it into the specified **XEvent** structure, and returns **True**. The other events in the queue are not discarded. If the event is not

available, **XCheckTypedWindowEvent** returns **False**, and the output buffer will have been flushed.

**SEE ALSO**

XAnyEvent(3), XIfEvent(3), XPutBackEvent(3), XSendEvent(3)

*Xlib - C Language X Interface*