

**NAME**

XGetEventData, XFreeEventData, XGenericEventCookie - retrieve and free additional event data through cookies.

**SYNTAX**

```
Bool XGetEventData(Display *display, XGenericEventCookie *cookie);
```

```
void XFreeEventData(Display *display, XGenericEventCookie *cookie);
```

**ARGUMENTS**

*display* Specifies the connection to the X server.

*cookie* Specifies the cookie to free or retrieve the data for.

**STRUCTURES**

```
typedef struct {
    int type;
    unsigned long serial;
    Bool send_event;
    Display *display;
    int extension;
    int evtype;
    unsigned int cookie;
    void *data;
} XGenericEventCookie;
```

**DESCRIPTION**

Some extension **XGenericEvents** require additional memory to store information. For these events, the library returns a **XGenericEventCookie** with a token ('cookie') unique to this event. The **XGenericEventCookie**'s data pointer is undefined until **XGetEventData** is called.

The **XGetEventData** function retrieves this extra data for the given cookie. No round-trip to the server is required. If the cookie is invalid or the event is not an event handled by cookie handlers, **False** is returned. If **XGetEventData** returns **True**, the cookie's data pointer points to the memory containing the event information. A client must call **XFreeEventData** to free this memory. **XGetEventData** returns **False** for multiple calls for the same event cookie.

The **XFreeEventData** function frees the data associated with a cookie. A client must call **XFreeEventData** for each cookie claimed with **XGetEventData**.

#### EXAMPLE CODE

```
XEvent event;
XGenericEventCookie *cookie = &ev;

XNextEvent(display, &event);
if (XGetEventData(display, cookie)) {
    handle_cookie_event(cookie->data);
} else
    handle_event(&event);
}
XFreeEventData(display, cookie);
```

#### NOTES

A cookie is defined as unclaimed if it has been returned to the client through **XNextEvent** but its data has not been retrieved via **XGetEventData**. Subsequent calls to **XNextEvent** may free memory associated with unclaimed cookies. Multi-threaded X clients must ensure that **XGetEventData** is called before the next call to **XNextEvent**.

#### SEE ALSO

XNextEvent(3),  
*Xlib - C Language X Interface*