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