

XGravityEvent – GravityNotify event structure

The structure for GravityNotify events contains:

```
typedef struct {
    int type; /* GravityNotify */
    unsigned long serial; /* # of last request processed by server */
    Bool send_event; /* true if this came from a SendEvent request */
    Display *display; /* Display the event was read from */
    Window event;
    Window window;
    int x, y;
} XGravityEvent;
```

When you receive this event, the structure members are set as follows.

The type member is set to the event type constant name that uniquely identifies it. For example, when the X server reports a **GraphicsExpose** event to a client application, it sends an **XGraphicsExposeEvent** structure with the type member set to **GraphicsExpose**. The display member is set to a pointer to the display the event was read on. The send_event member is set to **True** if the event came from a **SendEvent** protocol request. The serial member is set from the serial number reported in the protocol but expanded from the 16-bit least-significant bits to a full 32-bit value. The window member is set to the window that is most useful to toolkit dispatchers.

The event member is set either to the window that was moved or to its parent, depending on whether **StructureNotify** or **SubstructureNotify** was selected. The window member is set to the child window that was moved. The x and y members are set to the coordinates relative to the new parent window's origin and indicate the position of the upper-left outside corner of the window.

XAnyEvent(3X11), XButtonEvent(3X11), XCreateWindowEvent(3X11), XCirculateEvent(3X11),
XCirculateRequestEvent(3X11), XColormapEvent(3X11), XConfigureEvent(3X11),
XConfigureRequestEvent(3X11), XCrossingEvent(3X11), XDestroyWindowEvent(3X11),
XErrorEvent(3X11), XExposeEvent(3X11), XFocusChangeEvent(3X11),
XGraphicsExposeEvent(3X11), XKeymapEvent(3X11), XMapEvent(3X11),
XMapRequestEvent(3X11), XPropertyEvent(3X11), XReparentEvent(3X11),
XResizeRequestEvent(3X11), XSelectionClearEvent(3X11), XSelectionEvent(3X11),
XSelectionRequestEvent(3X11), XUnmapEvent(3X11), XVisibilityEvent(3X11)

Xlib – C Language X Interface