

## XExposeEvent – Expose event structure

The structure for **Expose** events contains:

```
typedef struct {
    int type; /* Expose */
    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 window;
    int x, y;
    int width, height;
    int count; /* if nonzero, at least this many more */
} XExposeEvent;
```

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 window member is set to the exposed (damaged) window. The x and y members are set to the coordinates relative to the window's origin and indicate the upper-left corner of the rectangle. The width and height members are set to the size (extent) of the rectangle. The count member is set to the number of **Expose** events that are to follow. If count is zero, no more **Expose** events follow for this window. However, if count is nonzero, at least that number of **Expose** events (and possibly more) follow for this window. Simple applications that do not want to optimize redisplay by distinguishing between subareas of its window can just ignore all **Expose** events with nonzero counts and perform full redisplays on events with zero counts.

**XAnyEvent(3X11), XButtonEvent(3X11), XCreateWindowEvent(3X11), XCirculateEvent(3X11), XCirculateRequestEvent(3X11), XColormapEvent(3X11), XConfigureEvent(3X11), XConfigureRequestEvent(3X11), XCrossingEvent(3X11), XDestroyWindowEvent(3X11), XErrorEvent(3X11), XFocusChangeEvent(3X11), XGraphicsExposeEvent(3X11), XGravityEvent(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*