

XPropertyEvent – PropertyNotify event structure

The structure for **PropertyNotify** events contains:

```
typedef struct {
    int type; /* PropertyNotify */
    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;
    Atom atom;
    Time time;
    int state; /* PropertyNewValue or PropertyDelete */
} XPropertyEvent;
```

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 window whose associated property was changed. The atom member is set to the property's atom and indicates which property was changed or desired. The time member is set to the server time when the property was changed. The state member is set to indicate whether the property was changed to a new value or deleted and can be **PropertyNewValue** or **PropertyDelete**. The state member is set to **PropertyNewValue** when a property of the window is changed using **XChangeProperty** or **XRotateWindowProperties** (even when adding zero-length data using **XChangeProperty**) and when replacing all or part of a property with identical data using **XChangeProperty** or **XRotateWindowProperties**. The state member is set to **PropertyDelete** when a property of the window is deleted using **XDeleteProperty** or, if the delete argument is **True**, **XGetWindowProperty**.

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),
XGetWindowProperty(3X11), XGraphicsExposeEvent(3X11), XGravityEvent(3X11),
XKeymapEvent(3X11), XMapEvent(3X11), XMapRequestEvent(3X11), XReparentEvent(3X11),
XResizeRequestEvent(3X11), XSelectionClearEvent(3X11), XSelectionEvent(3X11),
XSelectionRequestEvent(3X11), XUnmapEvent(3X11), XVisibilityEvent(3X11)

Xlib – C Language X Interface