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), XExposureEvent(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