

## **XVisibilityNotifyEvent – VisibilityNotify event structure**

The structure for **VisibilityNotify** events contains:

```
typedef struct {
    int type; /* VisibiltyNotify */
    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 state;
} XVisibilityEvent;
```

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 visibility state changes. The state member is set to the state of the window's visibility and can be **VisibilityUnobscured**, **VisibilityPartiallyObscured**, or **VisibilityFullyObscured**. The X server ignores all of a window's subwindows when determining the visibility state of the window and processes **VisibilityNotify** events according to the following:

- When the window changes state from partially obscured, fully obscured, or not viewable to viewable and completely unobscured, the X server generates the event with the state member of the **XVisibilityEvent** structure set to **VisibilityUnobscured**.
- When the window changes state from viewable and completely unobscured or not viewable to viewable and partially obscured, the X server generates the event with the state member of the **XVisibilityEvent** structure set to **VisibilityPartiallyObscured**.
- When the window changes state from viewable and completely unobscured, viewable and partially obscured, or not viewable to viewable and fully obscured, the X server generates the event with the state member of the **XVisibilityEvent** structure set to **VisibilityFullyObscured**.

**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), XGravityEvent(3X11), XKeymapEvent(3X11), XMapEvent(3X11), XMapRequestEvent(3X11), XPropertyEvent(3X11), XReparentEvent(3X11), XResizeRequestEvent(3X11), XSelectionClearEvent(3X11), XSelectionEvent(3X11), XSelectionRequestEvent(3X11), XUnmapEvent(3X11),**

*Xlib – C Language X Interface*