

## **XKeymapEvent – KeymapNotify event structure**

The structure for **KeymapNotify** events contains:

```
/* generated on EnterWindow and FocusIn when KeymapState selected */
typedef struct {
    int type; /* KeymapNotify */
    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;
    char key_vector[32];
} XKeymapEvent;
```

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 not used but is present to aid some toolkits. The key\_vector member is set to the bit vector of the keyboard. Each bit set to 1 indicates that the corresponding key is currently pressed. The vector is represented as 32 bytes. Byte N (from 0) contains the bits for keys 8N to 8N + 7 with the least significant bit in the byte representing key 8N.

**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), 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*