

**NAME**

XkbAllocControls - Allocates an XkbControlsRec structure in the XkbDescRec

**SYNOPSIS**

**Status** XkbAllocControls (**XkbDescPtr** *xkb*, **unsigned int** *which*);

**ARGUMENTS**

*xkb* Xkb description in which to allocate ctrls rec

*which*

mask of components of ctrls to allocate

**DESCRIPTION**

The need to allocate an XkbControlsRec structure seldom arises; Xkb creates one when an application calls *XkbGetControls* or a related function. For those situations where there is not an XkbControlsRec structure allocated in the XkbDescRec, allocate one by calling *XkbAllocControls*.

*XkbAllocControls* allocates the *ctrls* field of the *xkb* parameter, initializes all fields to zero, and returns Success. If the *ctrls* field is not NULL, *XkbAllocControls* simply returns Success. If *xkb* is NULL, *XkbAllocControls* reports a BadMatch error. If the *ctrls* field could not be allocated, it reports a BadAlloc error.

The *which* mask specifies the individual fields of the *ctrls* structure to be allocated and can contain any of the valid masks defined in Table 1. (SHOULD THIS COMMENT BE LEFT IN????) Because none of the currently existing controls have any structures associated with them, which is currently of little practical value in this call.

Table 1 shows the actual values for the individual mask bits used to select controls for modification and to enable and disable the control. Note that the same mask bit is used to specify general modifications to the parameters used to configure the control (*which*), and to enable and disable the control (*enabled\_ctrls*). The anomalies in the table (no "ok" in column) are for controls that have no configurable attributes; and for controls that are not boolean controls and therefore cannot be enabled or disabled.

Table 1 Controls Mask

Bits

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Mask	which	enabledValue
Bit	or	

## changed\_ctrls\_ctrls

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XkbRepeatKeysMask	ok	ok	(1L<<0)
XkbSlowKeysMask	ok	ok	(1L<<1)
XkbBounceKeysMask	ok	ok	(1L<<2)
XkbStickyKeysMask	ok	ok	(1L<<3)
XkbMouseKeysMask	ok	ok	(1L<<4)
XkbMouseKeysAccelMask	ok	ok	(1L<<5)
XkbAccessXKeysMask	ok	ok	(1L<<6)
XkbAccessXTimeoutMask	ok	ok	(1L<<7)
XkbAccessXFeedbackMask	ok	ok	(1L<<8)
XkbAudibleBellMask		ok	(1L<<9)
XkbOverlay1Mask		ok	(1L<<10)
XkbOverlay2Mask		ok	(1L<<11)
XkbIgnoreGroupLockMask		ok	(1L<<12)
XkbGroupsWrapMask	ok		(1L<<27)
XkbInternalModsMask	ok		(1L<<28)
XkbIgnoreLockModsMask	ok		(1L<<29)
XkbPerKeyRepeatMask	ok		(1L<<30)
XkbControlsEnabledMask	ok		(1L<<31)
XkbAccessXOptionsMask	ok	ok	(XkbStickyKeysMask   XkbAccessXFeedbackMask)
XkbAllBooleanCtrlsMask		ok	(0x00001FFF)
XkbAllControlsMask	ok		(0xF8001FFF)

**RETURN VALUES**

**SUCCESS** allocates the ctrl field of the xkb parameter, initializes all fields to zero  
the ctrl field is not NULL

**DIAGNOSTICS**

**BadAlloc** Unable to allocate storage

**BadMatch** A compatible version of Xkb was not available in the server or an argument has correct type and range, but is otherwise invalid

**SEE ALSO**

**XkbGetControls(3)**