

NAME

XkbFreeCompatMap - Free an entire compatibility map or selected portions of one

SYNOPSIS

```
void XkbFreeCompatMap (XkbDescPtr xkb, unsigned int which, Bool free_map);
```

ARGUMENTS

xkb Xkb description in which to free compatibility map

which

mask of compatibility map components to free

free_map

True => free XkbCompatMap structure itself

DESCRIPTION

which specifies the compatibility map components to be freed (see XkbGetCompatMap). *which* is an inclusive OR of the bits shown in Table 1.

Table 1 Compatibility Map Component

Masks

Mask	Value	Affecting
XkbSymInterpMask	(1<<0)	Symbol interpretations
XkbGroupCompatMask	(1<<1)	Group maps
XkbAllCompatMask	(0x3)	All compatibility map components

free_map indicates whether the XkbCompatMap structure itself should be freed. If *free_map* is True, *which* is ignored, all non-NULL compatibility map components are freed, and the *compat* field in the XkbDescRec referenced by *xkb* is set to NULL.

STRUCTURES

```
typedef struct _XkbCompatMapRec {
    XkbSymInterpretPtr sym_interpret; /* symbol based key semantics*/
    XkbModsRec groups[XkbNumKbdGroups]; /* group => modifier map */
}
```

```

    unsigned short    num_si;          /* # structures used in sym_interpret */
    unsigned short    size_si;        /* # structures allocated in sym_interpret */
} XkbCompatMapRec, *XkbCompatMapPtr;

```

The complete description of an Xkb keyboard is given by an XkbDescRec. The component structures in the XkbDescRec represent the major Xkb components outlined in Figure 1.1.

```

typedef struct {
    struct _XDisplay * display; /* connection to X server */
    unsigned short  flags;     /* private to Xkb, do not modify */
    unsigned short  device_spec; /* device of interest */
    KeyCode         min_key_code; /* minimum keycode for device */
    KeyCode         max_key_code; /* maximum keycode for device */
    XkbControlsPtr  ctrls;      /* controls */
    XkbServerMapPtr server;     /* server keymap */
    XkbClientMapPtr map;       /* client keymap */
    XkbIndicatorPtr indicators; /* indicator map */
    XkbNamesPtr     names;     /* names for all components */
    XkbCompatMapPtr compat;    /* compatibility map */
    XkbGeometryPtr  geom;      /* physical geometry of keyboard */
} XkbDescRec, *XkbDescPtr;

```

The *display* field points to an X display structure. The *flags* field is private to the library: modifying *flags* may yield unpredictable results. The *device_spec* field specifies the device identifier of the keyboard input device, or XkbUseCoreKeyboard, which specifies the core keyboard device. The *min_key_code* and *max_key_code* fields specify the least and greatest keycode that can be returned by the keyboard. The other fields specify structure components of the keyboard description and are described in detail in other sections of this document. Table 2 identifies the subsequent sections of this document that discuss the individual components of the XkbDescRec.

Table 2 XkbDescRec Component References

XkbDescRec Field	For more info
ctrls	Chapter 10
server	Chapter

	16
map	Chapter
	15
indicators	Chapter
	8
names	Chapter
	18
compat	Chapter
	17
geom	Chapter
	13

Each structure component has a corresponding mask bit that is used in function calls to indicate that the structure should be manipulated in some manner, such as allocating it or freeing it. These masks and their relationships to the fields in the `XkbDescRec` are shown in Table 3.

Table 3 Mask Bits for
`XkbDescRec`

Mask Bit	XkbDescRec Field	Value
<code>XkbControlsMask</code>	<code>ctrls</code>	$(1L \ll 0)$
<code>XkbServerMapMask</code>	<code>server</code>	$(1L \ll 1)$
<code>XkbIClientMapMask</code>	<code>map</code>	$(1L \ll 2)$
<code>XkbIndicatorMapMask</code>	<code>indicators</code>	$(1L \ll 3)$
<code>XkbNamesMask</code>	<code>names</code>	$(1L \ll 4)$
<code>XkbCompatMapMask</code>	<code>compat</code>	$(1L \ll 5)$
<code>XkbGeometryMask</code>	<code>geom</code>	$(1L \ll 6)$
<code>XkbAllComponentsMask</code>	<code>All</code>	$(0x7f)$

Fields

SEE ALSO

`XkbGetCompatMap(3)`