

**NAME**

XkbCopyKeyType - Copy one XkbKeyTypeRec structures

**SYNOPSIS**

**Status** XkbCopyKeyType (XkbKeyTypePtr *from*, XkbKeyTypePtr *into*);

**ARGUMENTS**

*from*

pointer to XkbKeyTypeRec to be copied

*into*

pointer to XkbKeyTypeRec to be changed

**DESCRIPTION**

*XkbCopyKeyType* copies the key type specified by *from* to the key type specified by *into*. Both must point to legal XkbKeyTypeRec structures. Xkb assumes *from* and *into* point to different places. As a result, overlaps can be fatal. *XkbCopyKeyType* frees any existing *map*, *preserve*, and *level\_names* in *into* prior to copying. If any allocation errors occur while copying *from* to *into*, *XkbCopyKeyType* returns BadAlloc. Otherwise, *XkbCopyKeyType* copies *from* to *into* and returns Success.

**STRUCTURES**

Key types are used to determine the shift level of a key given the current state of the keyboard. The set of all possible key types for the Xkb keyboard description are held in the *types* field of the client map, whose total size is stored in *size\_types*, and whose total number of valid entries is stored in *num\_types*. Key types are defined using the following structure:

```
typedef struct {
    /* Key Type */
    XkbModsRec    mods;    /* modifiers used to compute shift level */
    unsigned char num_levels; /* total # shift levels, do not modify directly */
    unsigned char map_count; /* # entries in map, preserve (if non-NULL) */
    XkbKTMapEntryPtr map;    /* vector of modifiers for each shift level */
    XkbModsPtr    preserve; /* mods to preserve for corresponding map entry */
    Atom          name;     /* name of key type */
    Atom *        level_names; /* array of names of each shift level */
} XkbKeyTypeRec, *XkbKeyTypePtr;
```

**DIAGNOSTICS**

**BadAlloc**           Unable to allocate storage