

**NAME**

XkbSARedirectSetVModsMask - Sets the `vmods_mask0` and `vmods_mask1` fields of `act` from `vm`

**SYNOPSIS**

```
void XkbSARedirectSetVModsMask (XkbRedirectKeyAction act, unsigned int vm);
```

**ARGUMENTS**

*act* action in which to set `vmods`

*vm* new value for virtual modifier mask

**DESCRIPTION**

Actions associated with the `XkbRedirectKeyAction` structure generate `KeyPress` and `KeyRelease` events containing a keycode different from the key that was pressed or released.

The `type` field for the `XkbRedirectKeyAction` structure should always be `XkbSA_RedirectKey`. Key presses cause a `KeyPress` event for the key specified by the `new_key` field instead of the actual key. The state reported in this event reports the current effective modifiers changed as follows: any real modifiers selected by the `mods_mask` field are set to corresponding values from the `mods` field. Any real modifiers bound to the virtual modifiers specified by the `vmods_mask0` and `vmods_mask1` fields are either set or cleared, depending on the corresponding values in the `vmods0` and `vmods1` fields. If the real and virtual modifier definitions specify conflicting values for a single modifier, the real modifier definition has priority.

Key releases cause a `KeyRelease` event for the key specified by the `new_key` field instead of the actual key. The state for this event consists of the effective keyboard modifiers at the time of the release, changed as described previously.

The `XkbSA_RedirectKey` action normally redirects to another key on the same device as the key that caused the event, unless that device does not belong to the input extension `KeyClass`, in which case this action causes an event on the core keyboard device. (The input extension categorizes devices by breaking them into classes. Keyboards, and other input devices with keys, are classified as `KeyClass` devices by the input extension.)

The `vmods_mask0` and `vmods_mask1` fields actually represent one `vmods_mask` value. `Xkb` provides macros to convert between the two formats.

`XkbSARedirectSetVModsMask` sets the `vmods_mask0` and `vmods_mask1` fields of `act` from `vm`.

**STRUCTURES**

```
typedef struct_XkbRedirectKeyAction {
    unsigned char type; /* XkbSA_RedirectKey */
    unsigned char new_key; /* keycode to be put in event */
    unsigned char mods_mask; /* mask of real mods to be reset */
    unsigned char mods; /* mask of real mods to take values from */
    unsigned char vmods_mask0; /* first half of mask of virtual mods to be reset */
    unsigned char vmods_mask1; /* other half of mask of virtual mods to be reset */
    unsigned char vmods0; /* first half of mask of virtual mods to take values from */
    unsigned char vmods1; /* other half of mask of virtual mods to take values from */
} XkbRedirectKeyAction;
```