

**XQueryDeviceState** – query the state of an extension input device.

**XQueryDeviceState**(*display*, *device*)

**Display** \**display*;

**XDevice** \**device*;

*display* Specifies the connection to the X server. *device* Specifies the device whose state is to be queried.

The *XQueryDeviceState* request queries the state of an input device. The current state of keys and buttons (up or down), and valuator (current value) on the device is reported by this request. Each key or button is represented by a bit in the *XDeviceState* structure that is returned. Valuator on the device report 0 if they are reporting relative information, and the current value if they are reporting absolute information.

*XQueryDeviceState* can generate a *BadDevice* error.

**The *XDeviceState* structure contains:**

```
typedef struct {
    XID device_id;
    int num_classes;
    XInputClass *data;
} XDeviceState;
```

The *XValuatorState* structure contains:

```
typedef struct {
    unsigned char class;
    unsigned char length;
    unsigned char num_valuators;
    unsigned char mode;
    int *valuators;
} XValuatorState;
```

The *XKeyState* structure contains:

```
typedef struct {
    unsigned char class;
    unsigned char length;
    short num_keys;
    char keys[32];
} XKeyState;
```

The *XButtonState* structure contains:

```
typedef struct {
    unsigned char class;
    unsigned char length;
    short num_buttons;
    char buttons[32];
} XButtonState;
```

***BadDevice*** An invalid device was specified. The specified device does not exist or has not been opened by this client via *XOpenInputDevice*. This error may also occur if some other client has caused the specified device to become the X keyboard or X pointer device via the *XChangeKeyboardDevice* or *XChangePointerDevice* requests.

*Programming with Xlib*