NAME

XQueryDeviceState - query the state of an extension input device.

SYNOPSIS

#include <X11/extensions/XInput.h>

XDeviceState* XQueryDeviceState(Display *display,
                    XDevice *device);

display

Specifies the connection to the X server.

device

Specifies the device whose state is to be queried.

DESCRIPTION

The XQueryDeviceState request queries the state of an input device. The current state of keys and buttons (up or down), and valuators (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. Valuators 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.

Structures:

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;
```

DIAGNOSTICS

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.