
Subject: Trouble with IsMinimized / IsMaximized on X11
Posted by [oan1971](#) on Mon, 06 Dec 2010 10:18:42 GMT
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The window state retrieval with TopWindow::IsMinimized / TopWindow::IsMaximized does not seem to work on X11.

When closing the TopWindow of the following program I always get the log entry "is_minimized: false, is_maximized: false" no matter if the window is minimized or maximized.

```
#include <CtrlLib/CtrlLib.h>

using namespace Upp;

class MinMaxTest : public TopWindow
{
public:
    typedef TopWindow BASECLASS;

    MinMaxTest()
    {
        Sizeable().MinimizeBox().MaximizeBox();
    }

    virtual void Close()
    {
        const bool is_minimized = IsMinimized();
        const bool is_maximized = IsMaximized();
        LOG("is_minimized: " << is_minimized << ", is_maximized: " << is_maximized);
        BASECLASS::Close();
    }
};

GUI_APP_MAIN
{
    MinMaxTest().Run();
}
```

The reason seems to be that TopWindow::state is updated on window state changes only for Win32. On X11 the corresponding code seems to be missing.

I don't know much about X11, but from various web resource I gather that something like the following code could be added to the if clause in TopWindow::EventProc in TopWinX11.cpp to detect a minimized / maximized window state:

```

else if(event->type == PropertyNotify) {
if(event->xproperty.atom == XAtom("_NET_WM_STATE")) {
    bool minimized = false;
    bool maximizedhorz = false;
    bool maximizedvert = false;
    Atom type;
    int format;
    ulong numitems, bytesafter;
    byte * properties = 0;
    XGetWindowProperty(Xdisplay, event->xany.window, XAtom("_NET_WM_STATE"), 0,
LONG_MAX,
    false, AnyPropertyType, &type, &format, &numitems, &bytesafter, &properties);
if(properties && (format == 32)) {
    for(int i = 0; i < numitems; ++i) {
        const Atom prop = (reinterpret_cast<ulong *>(properties))[i];
        if (prop == XAtom("_NET_WM_STATE_MAXIMIZED_HORZ"))
            maximizedhorz = true;
        if (prop == XAtom("_NET_WM_STATE_MAXIMIZED_VERT"))
            maximizedvert = true;
        if (prop == XAtom("_NET_WM_STATE_HIDDEN"))
            minimized = true;
    }
}
XFree(properties);
if(minimized)
    state = MINIMIZED;
else if(maximizedhorz && maximizedvert)
    state = MAXIMIZED;
else state = OVERLAPPED;
}
}

```

Thanks and best regards,
Oliver

File Attachments

1) [TopWinX11.cpp](#), downloaded 538 times

Subject: Re: Trouble with IsMinimized / IsMaximized on X11
Posted by [mirek](#) on Mon, 27 Dec 2010 17:55:58 GMT
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Thanks, patch applied (after a bit of refactoring).

Mirek

Subject: Re: Trouble with IsMinimized / IsMaximized on X11

Posted by [oan1971](#) on Wed, 29 Dec 2010 09:33:09 GMT

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That's really great. Thanks a lot!

Oliver
