Subject: Toggling between FullScreen and not
Posted by Tom1 on Fri, 15 Feb 2008 13:41:24 GMT
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Hi,

I do not seem to be able to toggle the TopWindow between FullScreen and normal size.
FullScreen works OK from the constructor of the TopWindow derived class, but not after that.
Help, anybody?

// Tom

Subject: Re: Toggling between FullScreen and not
Posted by mirek on Fri, 15 Feb 2008 15:20:35 GMT
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Tom1 wrote on Fri, 15 February 2008 08:41Hi,

I do not seem to be able to toggle the TopWindow between FullScreen and normal size.
FullScreen works OK from the constructor of the TopWindow derived class, but not after that.
Help, anybody?

// Tom

I am afraid you will have to close it and open again after changing the flag.

E.g.:

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

using namespace Upp;

struct App : TopWindow {
 bool fullscreen;

 virtual void LeftDown(Point, dword) {
  Close();
  DUMP(IsOpen());
  FullScreen(fullscreen = !fullscreen);
  SetRect(100, 100, 400, 400);
  OpenMain();
 }
```

```
 App() { fullscreen = false; }
};

GUI_APP_MAIN
{
 App app;
 app.OpenMain();
 Ctrl::EventLoop();
}
```

Mirek

Subject: Re: Toggling between FullScreen and not
Posted by Tom1 on Fri, 15 Feb 2008 16:01:11 GMT
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Thanks Mirek, that helped a lot. It is not that bad that I need to close the window temporarily this way since the application still keeps its state.

// Tom

Subject: Re: Toggling between FullScreen and not
Posted by Tom1 on Sat, 16 Feb 2008 09:37:09 GMT
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In fullscreen mode on (K)ubuntu linux I'm not able to open pop-up menus nor dialogs. This really cuts down the usefulness of this feature. I read about this problem in another post here on the forum. Still I suspect there is some way to go around this in X11 since e.g. Mozilla Firefox does this beautifully (hotkey F11) allowing other windows to co-exist.

Does anybody know a way to make this happen?

// Tom

Subject: Re: Toggling between FullScreen and not
Posted by mirek on Tue, 19 Feb 2008 22:44:42 GMT
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Tom1 wrote on Sat, 16 February 2008 04:37In fullscreen mode on (K)ubuntu linux I'm not able to open pop-up menus nor dialogs. This really cuts down the usefulness of this feature. I read about this problem in another post here on the forum. Still I suspect there is some way to go

around this in X11 since e.g. Mozilla Firefox does this beautifully (hotkey F11) allowing other windows to co-exist.

Does anybody know a way to make this happen?

// Tom

Which U++? There was improvement since 2007.1, but now I am not sure whether it was win32 only... (but in win32, it works).

Mirek

Subject: Re: Toggling between FullScreen and not
Posted by Tom1 on Sat, 23 Feb 2008 10:08:55 GMT
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2008.1beta. And yes, I agree it works on Windows very well indeed, but on X11 it does not.

// Tom

Subject: Re: Toggling between FullScreen and not
Posted by mirek on Tue, 26 Feb 2008 23:29:24 GMT
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I have just tested with X11, seems to be OK...

Maybe try with latest .deb...

http://www.ultimatepp.org/svnbuilds/upp-svn_SVN.165_i386.deb

Mirek

Subject: Re: Toggling between FullScreen and not
Posted by Tom1 on Wed, 27 Feb 2008 09:29:04 GMT
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I downloaded the upp-svn_SVN.165_i386.deb, but had no luck. Note that going to the fullscreen and back to normal size is not the problem but opening a context menu while in fullscreen mode is. I.e. the context menu does not pop up when in fullscreen mode although the context menu works correctly when window is in its normal size.

// Tom

Subject: Re: Toggling between FullScreen and not
Posted by mirek on Wed, 27 Feb 2008 09:46:41 GMT
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Tom1 wrote on Wed, 27 February 2008 04:29I downloaded the upp-svn_SVN.165_i386.deb, but had no luck. Note that going to the fullscreen and back to normal size is not the problem but opening a context menu while in fullscreen mode is. I.e. the context menu does not pop up when in fullscreen mode although the context menu works correctly when window is in its normal size.

// Tom

I am sorry, I have missed the part about popup...

Mirek

Subject: Re: Toggling between FullScreen and not
Posted by mirek on Wed, 27 Feb 2008 11:49:16 GMT
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Tom1 wrote on Wed, 27 February 2008 04:29I downloaded the upp-svn_SVN.165_i386.deb, but had no luck. Note that going to the fullscreen and back to normal size is not the problem but opening a context menu while in fullscreen mode is. I.e. the context menu does not pop up when in fullscreen mode although the context menu works correctly when window is in its normal size.

// Tom

Well, after some investigation, I have fixed all X11 issues by changing the fullscreen implementation from popup to using _NET_WM_STATE_FULLSCREEN.

Now it seems to work much better

Please try:

```
void TopWindow::SyncCaption()
{
 LLOG("SyncCaption");
 SyncTitle();
 if(IsOpen() && GetWindow()) {
  unsigned long wina[6];
  int n = 0;
  Window w = GetWindow();
  if(tool)
   wina[n++] = XAtom("_NET_WM_WINDOW_TYPE_TOOLBAR");
  if(GetOwner())
   wina[n++] = XAtom("_NET_WM_WINDOW_TYPE_DIALOG");
  wina[n++] = XAtom("_NET_WM_WINDOW_TYPE_NORMAL");
```

```
  XChangeProperty(Xdisplay, GetWindow(), XAtom("_NET_WM_WINDOW_TYPE"),
XAtom("ATOM"), 32,
                  PropModeReplace, (const unsigned char *)wina, n);
  n = 0;
  if(topmost)
   wina[n++] = XAtom("_NET_WM_STATE_ABOVE");
  if(state == MAXIMIZED) {
   wina[n++] = XAtom("_NET_WM_STATE_MAXIMIZED_HORZ");
   wina[n++] = XAtom("_NET_WM_STATE_MAXIMIZED_VERT");
  }
  if(fullscreen)
   wina[n++] = XAtom("_NET_WM_STATE_FULLSCREEN");
  XChangeProperty(Xdisplay, GetWindow(), XAtom("_NET_WM_STATE"), XAtom("ATOM"), 32,
                  PropModeReplace, (const unsigned char *)wina, n);
  wm_hints->flags = InputHint|WindowGroupHint|StateHint;
  wm_hints->initial_state = NormalState;
  wm_hints->input = XTrue;
  Ctrl *owner = GetOwner();
  wm_hints->window_group = owner ? owner->GetWindow() : w;
  if(!icon.IsEmpty()) {
   Size isz = icon.GetSize();
   int len = 2 + isz.cx * isz.cy;
   Buffer<unsigned long> data(len);
   unsigned long *t = data;
   *t++ = isz.cx;
   *t++ = isz.cy;
   for(int y = 0; y < isz.cy; y++) {
    const RGBA *q = icon[y];
    for(int x = isz.cx; x--;) {
     *t++ = ((dword)q->a << 24) |
            (dword)q->b | ((dword)q->g << 8) | ((dword)q->r << 16);
     q++;
    }
   }
   XChangeProperty(Xdisplay, w, XAtom("_NET_WM_ICON"), XA_CARDINAL, 32,
PropModeReplace,
                   (const unsigned char *)~data, len);
  }
  XSetWMHints(Xdisplay, w, wm_hints);
 }
}

void TopWindow::Open(Ctrl *owner)
{
 if(dokeys && (!GUI_AKD_Conservative() || GetAccessKeysDeep() <= 1))
  DistributeAccessKeys();
 UsrLogT(3, "OPEN " + Desc(this));
 LLOG("OPEN " << Name() << " owner: " << UPP::Name(owner));
```

```
IgnoreMouseUp();
if(fullscreen)
 SetRect(0, 0, Xwidth, Xheight);
else
 CenterRect(owner);
LLOG("Open NextRequest " << NextRequest(Xdisplay));
Create(owner, false, false);
xminsize.cx = xmaxsize.cx = Null;
title2.Clear();
LLOG("SyncCaption");
SyncCaption();
LLOG("SyncSizeHints");
size_hints->flags = 0;
SyncSizeHints();
Rect r = GetRect();
size_hints->x = r.left;
size_hints->y = r.top;
size_hints->width = r.Width();
size_hints->height = r.Height();
size_hints->win_gravity = StaticGravity;
size_hints->flags |= PPosition|PSize|PWinGravity;
if(owner) {
 ASSERT(owner->IsOpen());
 LLOG("XSetTransientForHint");
 XSetTransientForHint(Xdisplay, GetWindow(), owner->GetWindow());
}
LLOG("XSetWMNormalHints");
XSetWMNormalHints(Xdisplay, GetWindow(), size_hints);
Atom protocols[2];
protocols[0] = XAtom("WM_DELETE_WINDOW");
protocols[1] = XAtom("WM_TAKE_FOCUS");
LLOG("XSetWMProtocols");
XSetWMProtocols(Xdisplay, GetWindow(), protocols, 2);
String x = GetExeTitle().ToString();
const char *progname = ~x;
class_hint->res_name = (char *)progname;
class_hint->res_class = (char *)progname;
XSetClassHint(Xdisplay, GetWindow(), class_hint);
LLOG("WndShow(" << visible << ")");
WndShow(visible);
if(visible) {
 XEvent e;
 LLOG("XWindowEvent");
 XWindowEvent(Xdisplay, top->window, VisibilityChangeMask, &e);
 ignoretakefocus = true;
 SetTimeCallback(500, THISBACK(EndIgnoreTakeFocus));
 LLOG("SetWndFocus");
 SetWndFocus();
```

```
  for(int i = 0; i < 50; i++) {
   if(XCheckTypedWindowEvent(Xdisplay, top->window, FocusIn, &e)) {
    ProcessEvent(&e);
    if(e.xfocus.window = top->window)
     break;
   }
   Sleep(10);
  }
 }
 LLOG(">Open NextRequest " << NextRequest(Xdisplay));
 LLOG(">OPENED " << Name());
 PlaceFocus();
 StateH(OPEN);
 Vector<int> fe = GetPropertyInts(top->window, XAtom("_NET_FRAME_EXTENTS"));
 if(fe.GetCount() >= 4 &&
    fe[0] >= 0 && fe[0] <= 16 && fe[1] >= 0 && fe[1] <= 16 && //fluxbox returns wrong numbers -
quick&dirty workaround
    fe[2] >= 0 && fe[2] <= 64 && fe[3] >= 0 && fe[3] <= 48)
 {
  windowFrameMargin.left = max(windowFrameMargin.left, fe[0]);
  windowFrameMargin.right = max(windowFrameMargin.right, fe[1]);
  windowFrameMargin.top = max(windowFrameMargin.top, fe[2]);
  windowFrameMargin.bottom = max(windowFrameMargin.bottom, fe[3]);
 }
 if(IsOpen() && top)
  top->owner = owner;

 int version = 5;
 XChangeProperty(Xdisplay, GetWindow(), XAtom("XdndAware"), XA_ATOM, 32,
     0, (byte *)&version, 1);
 FixIcons();
}
```

Mirek

Subject: Re: Toggling between FullScreen and not
Posted by Tom1 on Wed, 27 Feb 2008 13:36:26 GMT
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Thanks Mirek, it is much better now!

I do not know if this is critical to users, but at least in KDE the task bar still remains visible on screen when the application is in the fullscreen mode. Is it possible to get all of the screen covered with the fullscreen mode?

// Tom

Subject: Re: Toggling between FullScreen and not
Posted by mirek on Wed, 27 Feb 2008 18:16:25 GMT
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Tom1 wrote on Wed, 27 February 2008 08:36Thanks Mirek, it is much better now!

I do not know if this is critical to users, but at least in KDE the task bar still remains visible on screen when the application is in the fullscreen mode. Is it possible to get all of the screen covered with the fullscreen mode?

// Tom

Not sure. Basically, using "_NET_WM_STATE_FULLSCREEN" I am telling KDE WM to run application in fullscreen. If it does not want to do so, then IMO not much more can be done.

OTOH, you can try to google this situation... Perhaps you can come with some fix. With Gnome/Metacity, it seems to work OK.

Mirek

Subject: Re: Toggling between FullScreen and not
Posted by guido on Wed, 27 Feb 2008 22:16:44 GMT
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Well, there where ways to indicate fs before freedesktop.org.
I'm not into that stuff anymore, but I can look it up.
Will add 50 bytes to Linux binaries by estimate.
I guess <5% of Linux install are affected. That number will go down only as Linux grows, not in absolute numbers, as people using those WMs fiercly resist change

Sorry, KDE ist affected. I should learn to read
I think I know what might be up. Looking into it...

Subject: Re: Toggling between FullScreen and not
Posted by guido on Wed, 27 Feb 2008 22:57:33 GMT
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What does upp use Ctrl::GetPrimaryWorkArea() for?
If those values where used for the fs window, that would explain it.

Subject: Re: Toggling between FullScreen and not
Posted by Tom1 on Thu, 28 Feb 2008 09:16:31 GMT
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Just noticed an interesting feature: on KDE (both 3.5.8 and 4) the system menu selection Advanced->Fullscreen gives a complete full screen view for an application window regardless if the application supports fullscreen mode or not. This certainly puts the application in fullscreen mode at will but obviously it would be nice to have the application's fullscreen feature to toggle the window managers fullscreen setting. I guess KDE is not playing the game the same way as Gnome.

// Tom
