Subject: TopWindow::SerializePlacement () on dual-head display
Posted by Tom1 on Mon, 07 Nov 2011 08:42:02 GMT
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Hi,

I'm having trouble using SerializePlacement() with a dual head display system. It always pulls windows stored on the secondary display (i.e. the right side display) to the primary display (i.e. left side) when restored.

I noticed changing the limit to use GetVirtualWorkArea() instead of GetWorkArea() rectifies this problem on Windows. (No idea what happens on Linux though.)

Anyway, would it be possible to have this changed in TopWindow.cpp:: TopWindow::SerializePlacement(Stream& s, bool reminimize): as follows:


```
 if(s.IsLoading()) {
  if(mn) rect = overlapped;
  Rect limit = GetWorkArea();
```

To this:


```
 if(s.IsLoading()) {
  if(mn) rect = overlapped;
  Rect limit = GetVirtualWorkArea();
```

Please?

Best regards,

Tom

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by mirek on Mon, 07 Nov 2011 08:51:19 GMT
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Thanks, patch applied.

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by unodgs on Mon, 07 Nov 2011 09:52:05 GMT

Thanks! That really annoyed me

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by Tom1 on Mon, 07 Nov 2011 09:56:50 GMT

Well, that was fast, Mirek! Thanks!

Best regards,

Tom

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by Tom1 on Mon, 07 Nov 2011 14:54:38 GMT

Hi,

Yet more. The maximized status is not properly retained (at least in Windows 7) if the window is already opened. (See below the if(IsOpen()) statement.) Also restoring to secondary display in maximized state does not work correctly.

Here is the new tail part of the TopWindow::SerializePlacement() as I have it now and this works for me. Please check if it works for you and merge to upp.

```
  ...

  if(IsOpen()) {
#ifdef PLATFORM_WIN32
  WINDOWPLACEMENT wp;
  memset(&wp,0,sizeof(WINDOWPLACEMENT));
  wp.length=sizeof(WINDOWPLACEMENT);
  wp.showCmd = state==MINIMIZED ? SW_MINIMIZE : state==MAXIMIZED ? SW_MAXIMIZE :
SW_RESTORE;
  wp.rcNormalPosition.left=rect.left;
  wp.rcNormalPosition.top=rect.top;
  wp.rcNormalPosition.right=rect.right;
  wp.rcNormalPosition.bottom=rect.bottom;
  ::SetWindowPlacement(GetHWND(),&wp);
#endif
#ifdef PLATFORM_X11
  if(state == MINIMIZED)
   Minimize(false);
  if(state == MAXIMIZED)
```

```
   Maximize(false);
#endif
 }
 }
#endif
}
```

Best regards,

Tom

Hi,

I found that having stored maximized window loses the normal size information when restored. Here's the fixed version of SerializePlacement:

```
void TopWindow::SerializePlacement(Stream& s, bool reminimize)
{
 GuiLock __;
#ifndef PLATFORM_WINCE
 int version = 0;
 s / version;
 Rect rect = GetRect();
 s % overlapped % rect;
 bool mn = state == MINIMIZED;
 bool mx = state == MAXIMIZED;
 s.Pack(mn, mx);
 LLOG("TopWindow::SerializePlacement / " << (s.IsStoring() ? "write" : "read"));
 LLOG("minimized = " << mn << ", maximized = " << mx);
 LLOG("rect = " << rect << ", overlapped = " << overlapped);
 if(s.IsLoading()) {
  rect = overlapped;
  Rect limit = GetVirtualWorkArea();
  Rect outer = rect;
  ::AdjustWindowRect(outer, WS_OVERLAPPEDWINDOW, FALSE);
  limit.left   += rect.left   - outer.left;
  limit.top    += rect.top    - outer.top;
  limit.right  += rect.right  - outer.right;
  limit.bottom += rect.bottom - outer.bottom;
  Size sz = min(rect.Size(), limit.Size());
```

```
  rect = RectC(
   minmax(rect.left, limit.left, limit.right - sz.cx),
   minmax(rect.top,  limit.top,  limit.bottom - sz.cy),
   sz.cx, sz.cy);
  state = OVERLAPPED;
  SetRect(rect);
  if(mn && reminimize)
   state = MINIMIZED;
  if(mx)
   state = MAXIMIZED;
  if(IsOpen()) {
   WINDOWPLACEMENT wp;
   memset(&wp,0,sizeof(WINDOWPLACEMENT));
   wp.length=sizeof(WINDOWPLACEMENT);
   wp.showCmd = state==MINIMIZED ? SW_MINIMIZE : state==MAXIMIZED ? SW_MAXIMIZE :
SW_RESTORE;
   wp.rcNormalPosition.left=rect.left;
   wp.rcNormalPosition.top=rect.top;
   wp.rcNormalPosition.right=rect.right;
   wp.rcNormalPosition.bottom=rect.bottom;
   ::SetWindowPlacement(GetHWND(),&wp);
  }
 }
#endif
}
```

Unfortunately, I'm still unable to fix another problem with FullScreen mode: At this time it is
serialized as if it was a maximized window. Additionally, it also loses the normal window position
information in the process.

Best regards,

Tom

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by Tom1 on Wed, 23 May 2012 10:58:22 GMT
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Hi,

I had a severe and exhausting battle with TopWindow::SerializePlacement and friends...

Finally, here is the version of TopWin32.cpp that properly stores and restores windows in
dual-head display environment in all modes, including fullscreen. Additionally on the way, I
enabled fullscreen mode on the monitor where the window is when FullScreen is activated.

Mirek, please test, cleanup if you wish and merge. For me it worked on Windows 7 Pro 64-bit (dual-head displays) and Win XP Pro 32-bit (only one display).

Best regards,

Tom

File Attachments
1) TopWin32.cpp, downloaded 408 times

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by mirek on Wed, 23 May 2012 13:40:02 GMT
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Patch applied: I have fixed versioning, then being there, I attempted to fix issue with maximized windows I have encountered as well. Please check.

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by Tom1 on Thu, 24 May 2012 06:53:22 GMT
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Hi,

I could not figure out any behavioral change with maximized windows, but it does not matter as long as it works. And it does.

As for the comments "// Tom added, changed, removed" etc... They were in the file just for you to easily find the location of changes. I think you can remove these comments from the source now.

Best regards,

Tom

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by mirek on Thu, 24 May 2012 06:59:28 GMT
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Tom1 wrote on Thu, 24 May 2012 02:53Hi,

I could not figure out any behavioral change with maximized windows, but it does not matter as long as it works. And it does.

As for the comments "// Tom added, changed, removed" etc... They were in the file just for you to

easily find the location of changes. I think you can remove these comments from the source now.

In changes like these, I like to keep them for a while (like year or so). If you scan through CtrlCore, you might find similar comments with origin being me or 'trc' (Tomas Rylek).

Subject: Re: TopWindow::SerializePlacement () on dual-head display
Posted by Tom1 on Thu, 24 May 2012 07:02:15 GMT
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OK, by all means!

Thanks and best regards,

Tom