subtle - Bug #242

Recent clients order

08/07/2011 11:27 AM - david unric

Status:	Confirmed		**Start date:**	08/07/2011
Priority:	Urgent		**Due date:**	
Assignee:	Christoph Kappel		**% Done:**	0%
Category:	Bugfix		**Estimated time:**	0.00 hour
Target version:				

Description

Hi,

I've found inconsistent results of Subtlext::Client.recent method.

If I switch between clients within a one view, returned Array of recent clients keeps an order where last client is pushed into the head (ie. at 0 index) and remaining are shifted to the right (ie. their index is increased by 1).

However if I switch between clients on different views (within a one screen), order 'sometimes' gets lost:

- Two xterms on 1st view running irb sessions
  left one> Subtlext::Client.current.win 41943074
  right one> Subtlext::Client.current.win 18874402
- Firefox on 2nd view, win == 16777340

1. Left xterm (result of cycling between xterms within one view)
   irb(main):047:0> Subtlext::Client.recent.collect {|c| c.win}
   => [41943074, 18874402, 41943074, 18874402, 41943074]
2. After switching to 2nd view with Firefox and back
   irb(main):048:0> Subtlext::Client.recent.collect {|c| c.win}
   => [*41943074*, *16777340*, 41943074, 18874402, 41943074]

   Good, order was kept.

1. Right xterm (result of cycling between xterms within one view)
   irb(main):046:0> Subtlext::Client.recent.collect {|c| c.win}
   => [18874402, 41943074, 18874402, 41943074, 18874402]
2. After switching to 2nd view with Firefox and back
   irb(main):047:0> Subtlext::Client.recent.collect {|c| c.win}
   => [18874402, 41943074, 18874402, *16777340*, 18874402]

   Bad, order is lost, unexpected behaviour.

Is this a bug or am I missing something there ?

History

#1 - 08/07/2011 11:55 AM - Christoph Kappel

Next time please use instance or window names, just the window ids make it tough to read and to understand.

Actually I have no idea, I just tested this in the current devel and I don't see any inconsistency there.

#2 - 08/07/2011 07:52 PM - david unric

More explicit example:

1. I'm in view named "terms", launch two xterms, set left gravity for the first, right for the second.
2. Set focus on right xterm and run an irb session from within:
   irb(main):008:0> Subtlext::Client.recent.collect {|c| c.instance}
   => ["xterm", "xterm", "xterm", "xterm", "xterm"]
3. Now I switch to view named "www" and back to "terms" (by ViewSwitch action) and check how result of .recent has changed
   irb(main):009:0> Subtlext::Client.recent.collect {|c| c.instance}

=> ["xterm", "xterm", "xterm", **"Navigator"**, "xterm"]

```
Wrong order, the returned array should look like:
  => ["xterm", "Navigator", "xterm", "xterm", "xterm"]
```

The issue manifest only if the focus is on right xterm before switching forth & back to other view.

#3 - 08/07/2011 08:43 PM - Christoph Kappel

I cannot reproduce that. What version of [subtle](#)?

#4 - 08/07/2011 09:04 PM - david unric

dunric@darkstar:~$ subtle -v
subtle 0.10.2988 - Copyright (c) 2005-2011 Christoph Kappel
Released under the GNU General Public License
Compiled for X11R0 and Ruby 1.9.1

#5 - 08/07/2011 10:51 PM - david unric

- File 10.png added

- File 07.png added

- File 26.png added

- File 39.png added

- File 58.png added

- File 04.png added

Some screenshots to get issue description even more obvious ...

EDIT: what a coincidence, even attached screenshots placed carefully by each step lost their order
07.png -> 26.png -> 39.png (starting with focus on right xterm)
58.png -> 04.png -> 10.png (starting with focus on left xterm)

#6 - 08/08/2011 12:56 AM - david unric

I've discovered the issue is caused by multiple re-focusing of a client.

- Let's have two windows in one view. Left covers 66% of a view, right covers remaining 34%.
- Focus right window with a keyboard or a mouse. If focused with a keyboard, mouse cursor reappears in the centre of the focused window.
- Now switch to other view (by keyboard) with only one window covering whole area. Mouse cursor is placed in the centre.
- Now switch back to the original view (by keyboard). The right (smaller) window gets focus, but then unintentionaly gets focus the left (larger) window and then again back the right. Thus list of recent focused windows is updated 3 times.

You can check it out by implementing client_focus hook with debugging output:

```
on :client_focus do |c|
  $stderr.puts "=> GOT FOCUS: #{c.instance}"
  $stderr.puts "=> RECENT: #{Subtlext::Client.recent.collect {|c| c.instance}}"
end
```

and monitoring .xsession-errors log with tailf or other way.

I'm suspecting it has something to do with improperly placed mouse cursor causing loss of originaly focused window.

#7 - 08/08/2011 04:16 PM - Christoph Kappel

As I told you, I cannot reproduce this. There is no improperly placed pointer.

Can you post your config? Did you verify, that this happens with the stock config? Running any layout sublets or sublets that modify the focus history?

#8 - 08/08/2011 05:45 PM - david unric

- File subtle.rb added

Did tried with stock config (see an attachment), no sublets. Still repeatedly reproducible on my computer :(

Installed X server version:

dunric@darkstar:~$ X -version

X.Org X Server 1.9.5
Release Date: 2011-03-17
X Protocol Version 11, Revision 0

#9 - 08/08/2011 07:54 PM - Christoph Kappel

- Category set to Bugfix

- Status changed from Unconfirmed to Confirmed

- Assignee set to Non member users

- Target version set to Nu

Ok, I can confirm that now. Tested it just with urxvt's and no problems there. So that just happens with windows that use this odd focus model, going to look into it.

#10 - 08/18/2011 01:28 PM - Christoph Kappel

- Target version changed from Nu to 28

#11 - 08/18/2011 01:30 PM - Christoph Kappel

- Target version changed from 28 to Xi

#12 - 11/08/2011 04:53 PM - Christoph Kappel

- Target version deleted (Xi)

Files

10.png	11.2 KB	08/07/2011	david unric
07.png	11 KB	08/07/2011	david unric
26.png	54.1 KB	08/07/2011	david unric
39.png	10.2 KB	08/07/2011	david unric
58.png	12.8 KB	08/07/2011	david unric
04.png	54 KB	08/07/2011	david unric
subtle.rb	21.9 KB	08/08/2011	david unric