This bug does not effect the -sdl2, the -qt, or (surprisingly) the -gtk2 client. It does effect both the gtk3 and gtk3.22 clients. Since it is client specific, I'll quote the full versions strings. The exact version of the gtk2 client that does NOT have the problem:

This is Freeciv version 3.0.0-alpha3+ (41e42cbc47), gui-gtk-2.0 client.
Built against gtk+ 2.24.32, using 2.24.32
Built against glib 2.62.1, using 2.62.1

The two clients (gtk3 and gtk3.22) that DO have the problem are:

This is Freeciv version 3.0.0-alpha3+ (41e42cbc47), gui-gtk-3.0 client.
Built against gtk+ 3.24.12, using 3.24.12
Built against glib 2.62.1, using 2.62.1

and

This is Freeciv version 3.0.0-alpha3+ (41e42cbc47), gui-gtk-3.22 client.
Built against gtk+ 3.24.12, using 3.24.12
Built against glib 2.62.1, using 2.62.1

This bug exists in at least the rulesets 'classic', 'default' and 'civ2civ3' (probably all rulesets).

In the attached savegame, I have two cities, with populations 1 and 2. Open up the city dialog on the pop-1 city (either left-click on it in the map, or double left-click on it in the Cities tab). In the top left of the City dialog, you'll see 1 population icon (correct). Either left- or right-click on the green left/right arrows to move to the pop-2 city. In the top-left, you'll (correctly) see 2 population icons. Then, either left- or right-click to go back the the pop-1 city. It now incorrectly displays 2 population icons in the top left.

As this bug effects the particular clients that it does, it seems likely (to me) that it is a Gtk bug, but since we are so close to the 3.0 release, maybe it would be best to brute-force fix it in Freeciv. A possible way would be to kill/destroy the City dialog windowlet/thingy and instantly re-create it, so that it can't remember any prior artifacts, when moving left/right through the cities.

Related issues:
Related to Freeciv - Bug #856465: Gtk3.22: minor artifact on right-hand-side ...
Closed

History
#1 - 2020-01-18 02:04 PM - Jacob Nevins
- File 26_gtk322_citypop.png added
Reproduced from savegame, with Gtk3 and Gtk3.22 S3_0 on Debian Buster:
Built against gtk+ 3.24.5, using 3.24.5
Built against glib 2.58.3, using 2.58.3

I have also noticed a possibly-related symptom on Gtk3.22 only on S2_6, where moving from a larger city to a smaller one leaves a little bit of the left side of a citizen icon after the correct number of full icons (see attached). I don't see this with the S2_6 Gtk3 client.

#2 - 2020-01-18 02:22 PM - Marko Lindqvist
S2_6 gtk3-client still uses gtkpixcomm, and is compatible with gtk+-3.8 (uses old enough constructs)
S3_0 and later even gtk3-client has gotten rid of gtkpixcomm and requires gtk+-3.10 (and uses no constructs deprecated in gtk+-3.10)

#3 - 2020-01-18 03:05 PM - Marko Lindqvist
- Category set to gui-gtk-3.22
- Status changed from New to In Progress
- Assignee set to Marko Lindqvist
- Sprint/Milestone set to 3.0.0

#4 - 2020-01-18 03:44 PM - Marko Lindqvist
- File 0015-gtk-Clear-citizens-icons-beyond-topmost-when-refresh.patch added
- File 0013-gtk3.-22-Clear-citizens-icons-beyond-topmost-when-re.patch added
- Status changed from In Progress to Resolved

#5 - 2020-01-18 03:55 PM - Marko Lindqvist
Jacob Nevins wrote:

I have also noticed a possibly-related symptom on Gtk3.22 only on S2_6, where moving from a larger city to a smaller one leaves a little bit of
the left side of a citizen icon after the correct number of full icons (see attached).

The S2_6 gtk3.22-client code is different enough from the one causing the bug in later branches that I would consider this completely different bug.
In later branches the image is always the size of the full citizen icon area, and it was not cleared but contained what was left there from previous
draw. In S2_6 the image is supposed to be size of current icons only, but apparently is a bit too big (and has parts of the surface that should not be
there)

#6 - 2020-01-18 03:58 PM - Jacob Nevins
OK, will raise new bug for my observation.

#7 - 2020-01-18 04:04 PM - Jacob Nevins
- Related to Bug #856465: Gtk3.22: minor artifact on right-hand-side of city dialog citizen bar added

#8 - 2020-01-18 05:02 PM - Chippo Elder
I know that this is an inappropriate place to ask git/build questions, but I don't know where the correct place is, and if I did and someone responded, it
would likely be one of you two anyway.

I saw the text 'Status changed from In Progress to Resolved' in this thread and wanted to test the fixes. I saw two patches, one for master and one for
S3_0 ("S3_0 - Marko Lindqvist, 2020-01-18 03:44 PM"). Should the above two facts lead me to conclude that it is fixed in S3_0?

I did a 'git pull' and got some stuff for S3_0. I then got really confused as to why the version string hadn't been updated, but finally found out that I had
to run configure with -gitrevs again to fix that. So now I have 3.0.0-alpha3+ (887c896696), gui-gtk-3.22. Is that the correct up-to-date version?

If the answer to both my questions is 'yes', then I must report that it's not fixed is S3_0. Behaviour seems unchanged.

#9 - 2020-01-18 05:57 PM - Jacob Nevins
While the ticket is still in "Resolved" state, you will have to download the .patch files from hostedredmine and apply them yourself ("git apply" is
probably your friend).
The patches are currently under review and will not be pushed to Github until the ticket reaches "Closed" state.
So, it's expected that refreshing S3_0 from Github will not fix the symptom yet.
http://www.freeciv.org/wiki/Commit_rules#Normal_patches

#10 - 2020-01-18 06:15 PM - Chippo Elder
'git apply' is indeed my new friend.
The bug is fixed in S3_0.

#11 - 2020-01-21 03:47 AM - Marko Lindqvist
- Status changed from Resolved to Closed

Chippo Elder wrote:

'git apply' is indeed my new friend.

If you still have the patch applied locally when you 'git pull' next time now that commit is also in the git master, you will experience an error. 'git reset'
(maybe 'git reset --hard') to get rid of the local modification may then be your newest friend.

#12 - 2020-01-21 07:03 AM - Chippo Elder
Marko Lindqvist wrote:

If you still have the patch applied locally when you 'git pull' next time now that commit is also in the git master, you will experience an error. 'git reset' (maybe 'git reset --hard') to get rid of the local modification may then be your newest friend.

Tx. I'll do that next time. Last time I resolved it with 'git checkout -f', but that's only useful if you actually want to change branches at that point. I had even contemplated 'rm -rf' followed by 'git clone', but decided there must be a better way.

Files

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