# QGIS Application - Bug report #2596
# avoid useless canvas redraws

2010-03-27 01:31 PM - aperi2007 -

| | | | | |
|---|---|---|---|---|
| **Status:** | Closed | | | |
| **Priority:** | Normal | | | |
| **Assignee:** | | | | |
| **Category:** | Map Canvas | | | |
| **Affected QGIS version:** | master | **Regression?:** | No | |
| **Operating System:** | | **Easy fix?:** | No | |
| **Pull Request or Patch supplied:** | No | **Resolution:** | duplicate | |
| **Crashes QGIS or corrupts data:** | No | **Copied to github as #:** | 12656 | |

**Description**

Starting with a layer switch-on, if the layer is switch-off.
The canvas is redraw one time again with the layer switch-on before draw the canvas without the layer.

This is time consuming action if the layer switched-off is a big archive with a large extent.

**Related issues:**

| | | |
|---|---|---|
| Related to QGIS Application - Bug report # 5087: An action that makes the Ide... | **Closed** | **2012-02-24** |

**History**

**#1 - 2010-06-12 01:41 AM - Paolo Cavallini**

Does enabling cache improve this significantly?

**#2 - 2010-06-12 05:13 AM - aperi2007 -**

I do some tests.
It happened even with shapefile.

If I checked the "use cache render" this don't happened.

It don't happened even if I deselect the "use cache render", but set
the number of features to draw before updating the display to zero (0).

In effect it seem happened only when this settings is set to some number other than zero.

Infact I usually use as settings 3000 or 5000 features because I have postres with
some table very big (1.000.000 features and so on).
And use the 0 setting is unacceptable because it mean wait some minutes before to see something (to full-extent).
I surely prefer set to 5000 features before drawing to have a feedback of progress of display-ing.
But this double redrawing is quite boring.

Now I test better with the use of caching.

Replying to [comment:1 pcav]:

> *Does enabling cache improve this significantly?*

**#3 - 2010-11-13 06:05 PM - Volker Fröhlich**

Can't see that happen at all using Trunk on Linux -- with or without rendering cache.

Can you test with Trunk?

**#4 - 2010-11-14 01:51 AM - Giovanni Manghi**

I'm able to see what Andrea is saying.

*) With render caching enabled, then the "number of features to be drawn before updating the display" does not work anymore. If you refresh the map the vector will be rendered as if the option is set to "0", so I guess that it would be needed to disabled this option when the render caching is enabled.

*) With the render caching is disabled and you choose something different from "0" in "number of features to be drawn before updating the display" (and you are using a vector with many features, I'm testing myself a 50000 polygons vector) then the problem is evident.

Add another (small) vector and then start enabling/disabling it in the TOC, the big vector is continuously redrawn at each click... very annoying.

In general without render caching enabled (and "number of features to be drawn before updating the display" set to 0), enabling/disabling a vector in a project where there are many others vectors, or a few big ones, it takes really a lot.

I'm on trunk/ubuntu 10,04 and with the render caching enabled, on the contrary, it works really smooth.

It the options enabled by default?

**#5 - 2010-11-14 02:06 AM - Giovanni Manghi**

Now I can see even better:

have a look at the following screencast:

http://www.faunalia.pt/downlaods/redrawns.mpeg

the vectors seems to be redrawn TWICE when toggling editing and it is even redrawn when clicking "Ok" or "apply" in QGIS menus.

**#6 - 2010-11-14 02:10 AM - Giovanni Manghi**

sorry wrong link

http://www.faunalia.pt/downloads/redrawns.mpeg

**#7 - 2010-11-14 03:01 AM - Volker Fröhlich**

Thank you, can see it now.

**#8 - 2011-07-25 09:13 AM - Paolo Cavallini**
*- Tracker changed from Bug report to 4*
*- Assignee deleted (nobody -)*

*- Start date set to 2011-07-25*

*- Pull Request or Patch supplied set to No*

**#9 - 2011-09-25 02:53 AM - Giovanni Manghi**

*- Target version deleted (Version 1.7.0)*

*- Subject changed from One draw too much on switch off to avoid useless canvas redraws*

*- Priority changed from Low to Normal*

Another useless redraw is when clicking "OK" after having clicked on "APPLY", for example in vector or raster properties.

**#10 - 2011-10-06 03:15 AM - Giovanni Manghi**

another useless redraw:

when the identify window is set to be opened docked but it is not (yet) visible: picking the identify tool (or any other one) causes the canvas to be refreshed.

**#11 - 2011-10-15 07:14 AM - Giovanni Manghi**

another useless redraw, see #2352

**#12 - 2011-12-16 02:12 PM - Giovanni Manghi**

*- Target version set to Version 1.7.4*

**#13 - 2011-12-23 07:13 AM - Giovanni Manghi**

Another huge waste of time:

in a project add a group of layers plus other layers and  some kind of overlay. I tested with a bunch of PostGIS layers, some of them grouped and a WMS overlay. When removing the group it seems that the canvas is redrawn as many times as the number of layers in the group being removed.

**#14 - 2012-01-12 12:47 AM - Giovanni Manghi**

*- Affected QGIS version set to master*

*- Crashes QGIS or corrupts data set to No*

Another useless redraws (from #4789):

If I open the Add PostGIS layer dialog and do nothing, just hit Close, the whole view re-renders. This causes needless CPU usage and delays when no re-render was needed.

**#15 - 2012-01-12 12:50 AM - Giovanni Manghi**

see also #3427

**#16 - 2012-02-24 02:41 PM - Aren Cambre**

If I do anything that causes the **Identify Results** dock to appear, such as clicking on the **Identify Features** or **Select single feature** buttons, the entire canvas redraws. Seems like a pointless redraw since the dock, in my case, does not change the canvas dimensions when it opens; it just encroaches on the **Layers** dock.

If I close the **Identify Results** dock, there's no redraw, but it happens again if I click on one of those buttons.

(from #5087)

**#17 - 2012-04-15 09:22 AM - Giovanni Manghi**

*- Tracker changed from 4 to Bug report*

**#18 - 2012-04-16 06:24 AM - Paolo Cavallini**

*- Target version changed from Version 1.7.4 to Version 1.8.0*

**#19 - 2012-09-04 12:02 PM - Paolo Cavallini**

*- Target version changed from Version 1.8.0 to Version 2.0.0*

**#20 - 2012-11-23 07:34 AM - Regis Haubourg**

Another useless redraw:  Data is redrawn twice if "option/rendering/feature of feature to draw before updating the display " is set to something different than 0. Not good since this option is really nice to let user be patient for huge datasets, he has to be twice more patient ;-)
Régis

**#21 - 2014-01-30 11:43 PM - Paolo Cavallini**

*- Target version changed from Version 2.0.0 to Future Release - High Priority*

**#22 - 2014-07-24 04:23 AM - Matthias Kuhn**

*- Status changed from Open to Feedback*

Can this topic be closed since MT rendering is implemented?

**#23 - 2014-07-24 08:49 AM - Giovanni Manghi**

*- Operating System deleted (All)*

*- Status info deleted (1)*

Matthias Kuhn wrote:

> *Can this topic be closed since MT rendering is implemented?*

I see your point, because of MTR the canvas does not block anymore, then a canvas redraw is harmless. I would say that I agree, but useless redraws can still hurt when layers are big (millions of features) and/or projects complex.

I guess that this ticket was too general from the beginning, and we should close this in favor of keeping specific ones like:

#10441
#9676

**#24 - 2014-10-11 07:42 AM - Giovanni Manghi**

*- Status changed from Feedback to Closed*

*- Resolution set to duplicate*


closing in favor of tickets for specific cases.