QGIS Application - Bug report #15855
Composer -> Export as PDF produced bigger file/crash qgis

2016-11-16 08:09 AM - Alain Lachance

Status:	Closed		
Priority:	High		
Assignee:			
Category:	Map Composer/Printing		
Affected QGIS version:	2.18.4	**Regression?:**	Yes
Operating System:	Windows 7	**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	not reproducable
Crashes QGIS or corrupts data:	Yes	**Copied to github as #:**	23773

Description

In QGIS 2.18.0, my exported PDF file take a very long time to display in Adobe Reader (more than 20 second for small map) and printer also take a very long time to processing it before printing (more than 5 minutes). I didn't have this problem with QGIS 2.16.0, PDF file open very quickly(less than 1 second) and printer received it in less than 30 second (I don't know how long because it is ready after I walk to the printer). I didn't have QGIS 2.16.0 installed anymore but I checked the same project with QGIS 2.12.3 and exported PDF file size is half as big than PDF file exported with QGIS 2.18.0.

History

#1 - 2016-11-17 12:42 PM - Alain Lachance

Today in QGIS 2.18.0, I work on an heavy map and I can't use Export as PDF in composer because Memory jump to 100% and QGIS crash (Usage memory jump from 12 GB to 16 GB). I tried in QGIS 2.12.3 and it works.

#2 - 2016-11-17 03:11 PM - Nyall Dawson

- Status changed from Open to Feedback

I'm not aware of any related changes since 2.16. Can you do some troubleshooting, such as removing layers from the project one-by-one and see if you can pinpoint exactly what causes this increased file size? It may be a particular symbol style or layer which is doing it...

#3 - 2016-11-18 06:16 AM - Alain Lachance

I did many tests to specify the bug. I used many .ecw raster file of aerial photograph (50 in total). In QGIS 2.16.3, when I export my print composer map the size of pdf file stay the same when I activate more raster file that wasn't show in my composer. In QGIS 2.18.0, when I select more raster file to be visible in my project, but wasn't visible in my composer, the size change. Thus, QGIS 2.18.0 export raster file that wasn't visible in my map canvas extent. So I must check only visible layers that I want in my print composer otherwise the size increase drastically.

#4 - 2017-01-03 04:00 AM - Giovanni Manghi

- Status changed from Feedback to Open

- Priority changed from Normal to Severe/Regression

this seems also confirmed by others

http://lists.osgeo.org/pipermail/qgis-developer/2016-December/046413.html

#5 - 2017-03-03 02:18 AM - Giovanni Manghi

- Status changed from Open to Feedback

Can the reporter give feedback about QGIS 2.18.4? I just tried to print a large map (A0) with aerial images and the output pdf size seemed very reasonable in size to me (4MB at 150dpi). Thanks.

#6 - 2017-03-03 03:16 AM - R. R.

Exporting an A3 sheet containing raster images at 300 dpi crashes QGIS 2.18.4. Windows says 'not enough memory' after a few minutes. To me, this is a really severe regression. I can't even export orthophotos in a higher resolution than 150 dpi. The file size of an exported A0 .pdf sheet containing only vector layers is around 30 MB. Similar .pdf files created in a proprietary GIS software have around 2 - 3 MB.

#7 - 2017-03-03 03:24 AM - Giovanni Manghi

Reinhard Reiterer wrote:

> *Exporting an A3 sheet containing raster images at 300 dpi crashes QGIS 2.18.4. Windows says 'not enough memory' after a few minutes. To me, this is a really serve regression. I can't even export orthophotos in a higher resolution than 150 dpi. The file size of an exported A0 .pdf sheet containg only vector layers is around 30 MB. Similar .pdf files created in a proprietary GIS software have around 2 - 3 MB.*

is that Windows 32 bit or 64?

#8 - 2017-03-03 03:25 AM - Giovanni Manghi

- Crashes QGIS or corrupts data changed from No to Yes
- Subject changed from Composer -> Export as PDF produced bigger file. to Composer -> Export as PDF produced bigger file/crash qgis
- Affected QGIS version changed from 2.18.0 to 2.18.4

Reinhard Reiterer wrote:

> *Exporting an A3 sheet containing raster images at 300 dpi crashes QGIS 2.18.4. Windows says 'not enough memory' after a few minutes. To me, this is a really serve regression. I can't even export orthophotos in a higher resolution than 150 dpi. The file size of an exported A0 .pdf sheet containg only vector layers is around 30 MB. Similar .pdf files created in a proprietary GIS software have around 2 - 3 MB.*

can you share (even privately) the project and data and layout that are causing this?

#9 - 2017-03-03 03:25 AM - R. R.

Win7 - 64bit

#10 - 2017-03-03 03:50 AM - Giovanni Manghi

Reinhard Reiterer wrote:

> *Win7 - 64bit*

can you share (even privately) the project and data and layout that are causing this?

#11 - 2017-03-03 06:39 AM - R. R.

...sample files send by mail. Please do not share the files!

#12 - 2017-03-07 01:46 AM - Giovanni Manghi

Reinhard Reiterer wrote:

> *...sample files send by mail. Please do not share the files!*

with the provided project and data, printing a PDF in A0 at 360dpi (vector mode) produced a ~14/15mb file on both Linux and Windows, that seems very reasonable to me, or ami i wrong?

#13 - 2017-03-11 10:32 AM - R. R.

As noted above, the proprietary GIS software, that we use at the moment, produces much smaller files than QGIS.

#14 - 2017-03-11 11:08 AM - R. R.
- File pdf_size_2_18_4_inkscape_workaround.m4v added
- File pdf_comparison_gimp_1200dpi.mp4 added
- File pdf_size_2_18_4.m4v added

Inkscape can be used to reduce the size of .pdf files created in QGIS (see screencasts).

#15 - 2017-03-17 03:54 AM - R. R.
- File proprietary__gis_and_pdfcreator-1-7-3.pdf added

To reproduce this issue, please download sample shape files from http://data.statistik.gv.at/data/OGDEXT_GEM_1_STATISTIK_AUSTRIA_20170101.zip and export the map (1:1.500.000) as an A3 sheet. The size of the .pdf file is around 32MB (QGIS 2.18.4). Exporting the same shapes from a proprietary GIS software using PDFCreator 1.7.3, the file size is around 2MB (see attachment).

pdf_comparison.png

#16 - 2017-03-17 04:35 AM - R. R.
- File pdf_comparison.png added

#17 - 2017-03-17 04:40 AM - Andre Jesus

Windows 10 64 bits

QGIS 2.8.9 32 bits

A3 300 dpi, 3.92 MB PDF, ~5 seconds
A0 160 dpi, 12.8 MB PDF, ~5 seconds

QGIS 2.18.4 64 bits
A3 300 dpi, 3.92 MB PDF, ~10 seconds (also 5% higher cpu usage)
A0 160 dpi, 12.8 MB PDF, ~10 seconds (also 5% higher cpu usage)
A0 300 dpi, 43.7 MB PDF, ~50 seconds

4 active layers, 16 GeoTIFF images (20,4 GB)
http://i.imgur.com/SPIZHkM.png

#18 - 2017-03-17 05:13 AM - Andre Jesus
- File Template_Formato_A3.qpt added

Now I see something interesting.

I have a composer template (*Template Format A3.qpt* attachment) I use since 2.x.x. If I use It to generate the PDF I get a sub-4 MB PDF, but If I create a new composer and select A3 present It creates a 29.5 MB PDF. This occurs in all versions (2.8.9+).

I tried to see what that composer template has different but I couldn't figure It out.

#19 - 2017-04-30 05:06 PM - Giovanni Manghi
- Regression? set to Yes

#20 - 2017-04-30 05:08 PM - Giovanni Manghi
- Priority changed from Severe/Regression to High

#21 - 2017-05-01 01:10 AM - Giovanni Manghi
- Easy fix? set to No

#22 - 2017-05-03 12:59 PM - Giovanni Manghi
- File a3_300_pdfcreator_high.pdf added
- File a3_300_qgis_raster.pdf added

Reinhard Reiterer wrote:

> *To reproduce this issue, please download sample shape files from http://data.statistik.gv.at/data/OGDEXT_GEM_1_STATISTIK_AUSTRIA_20170101.zip and export the map (1:1.500.000) as an A3 sheet. The size of the .pdf file is around 32MB (QGIS 2.18.4). Exporting the same shapes from a proprietary GIS software using PDFCreator 1.7.3, the file size is around 2MB (see attachment).*

The export from QGIS is ~32MB **if you export as vector**, if you export **as raster** the size produced by QGIS is exactly the same as the one created by PDF creator using the option "high quality". See attached files. PDFcreator seems to **only** export as raster, so this explains a lot (of not everything).

#23 - 2017-05-03 12:59 PM - Giovanni Manghi

Andre Jesus wrote:

> *Now I see something interesting.*
>
> *I have a composer template (Template Format A3.qpt* attachment) I use since 2.x.x. If I use It to generate the PDF I get a sub-4 MB PDF, but If I create a new composer and select A3 present It creates a 29.5 MB PDF. This occurs in all versions (2.8.9+).
>
> I tried to see what that composer template has different but I couldn't figure It out.

is the template configured to print as raster?

#24 - 2017-05-03 01:02 PM - Giovanni Manghi

The crash is not replicable here on 2.18.7 (Windows, Linux) even with large projects and heavy data. Can the reporter add further informations? a project with data would help a lot.

#25 - 2017-05-03 01:48 PM - Andre Jesus

Giovanni Manghi wrote:

> *is the template configured to print as raster?*

It is configured to print as raster. Trying to replicate using 2.14.14 and 2.18.7 they all performed the same: Vector= ~5.6 MB and Raster= ~1.4 MB.

Adding satellite background raised the sizes to: Vector= ~9.6 MB and Raster= ~2.9 MB. Still way smaller than those near 30 MB it created before.

#26 - 2017-05-03 02:00 PM - Giovanni Manghi

Andre Jesus wrote:

> *Giovanni Manghi wrote:*
>
> > *is the template configured to print as raster?*
>
> *It is configured to print as raster.*

so this explains the reduced size.

#27 - 2017-05-07 10:21 PM - R. R.

Giovanni Manghi wrote:

> *The export from QGIS is ~32MB* ***if you export as vector****, if you export* ***as raster*** *the size produced by QGIS is exactly the same as the one created by PDF creator using the option "high quality". See attached files. PDFcreator seems to* ***only*** *export as raster, so this explains a lot (of not everything).*

Hi Giovanni,

proprietary__gis_and_pdfcreator-1-7-3.pdf contains vector geometries. You can check this using Inkscape. I noticed that the exported PDF file contains simplified geometries. This explains the small file size.

Have yo tried to save the QGIS PDF export again using Inkscape? (see # 15)

#28 - 2017-05-07 11:12 PM - Giovanni Manghi

- File a3_300dpi_qgis_simply.pdf added

> *Hi Giovanni,*
>
> *proprietary__gis_and_pdfcreator-1-7-3.pdf contains vector geometries. You can check this using Inkscape. I noticed that the exported PDF file contains simplified geometries. This explains the small file size.*

´

I simplified your vector, and created with QGIS a A3, 300dpi, 2.2MB, printed as vector PDF (attached).
It seems to me that we can close this:

your software simplifies the geometries (possibly without telling you, in case this is a bug to me)
QGIS does not so any simplification in the print compose, but you can do easily with the Processing toolbox.

#29 - 2017-05-12 02:53 PM - Giovanni Manghi

- Resolution set to not reproducable
- Status changed from Feedback to Closed

The size comparison is now pretty much explained to me now.

If you can print (as vector) a NOT simplified version of the vector and still get sizes well below the ones created by QGIS then reopen this ticket.

About crashes:
be sure you are using a 64bit version of QGIS. Remove all 3rd party plugins and if this does not yet help then post here a project+data+layouts to allow use replicate locally.

Files

pdf_size_2_18_4.m4v	2.28 MB	2017-03-11	R. R.
pdf_size_2_18_4_inkscape_workaround.m4v	3.88 MB	2017-03-11	R. R.
pdf_comparison_gimp_1200dpi.mp4	1.12 MB	2017-03-11	R. R.
proprietary__gis_and_pdfcreator-1-7-3.pdf	1.85 MB	2017-03-17	R. R.
pdf_comparison.png	209 KB	2017-03-17	R. R.
Template_Formato_A3.qpt	54.1 KB	2017-03-17	Andre Jesus
a3_300_pdfcreator_high.pdf	2.3 MB	2017-05-03	Giovanni Manghi
a3_300_qgis_raster.pdf	2.34 MB	2017-05-03	Giovanni Manghi
a3_300dpi_qgis_simply.pdf	2.2 MB	2017-05-07	Giovanni Manghi