

## QGIS Application - Feature request #2271

### print composer large format A0

2009-12-11 02:28 PM - Gerhard Spieles

<b>Status:</b>	Closed	
<b>Priority:</b>	Low	
<b>Assignee:</b>	ersts -	
<b>Category:</b>		
<b>Pull Request or Patch supplied:</b>		<b>Resolution:</b> fixed
<b>Easy fix?:</b>	No	<b>Copied to github as #:</b> 12331
<b>Description</b>  Print composers behavior seems to have a memory lack when printing large format A0. Only part of objects (p.e aerial photos) will be print. If the the amount of data grow up (data intensive raster layers, qgis crash		

#### History

##### #1 - 2009-12-12 02:22 AM - Giovanni Manghi

Would you mind give a try to the composer in the developer version of qgis (you can install it trough the osgeo4w installer, is labelled "qgis-dev")? There were major updates in the composer since 1.3 and in the tests I made with a few aerial photos I'm not seeing the same problem. Please leave further feedback, thanks.

##### #2 - 2009-12-12 05:57 AM - Marco Hugentobler

This is a known problem. It is because rasterlayer keeps the whole image that is printed in virtual memory. In case of A0 and a high resolution, this can be too much (even without leak).

##### #3 - 2009-12-14 12:11 AM - Horst Düster

Maybe an other option could be to check the "Print as raster" option in the Composer General Tab. Some PS-Printers with limited memory have problems to plot complex PS-Files ( Orthofoto with transparent overlays etc..). With the "Print as Raster" optition your map will be rendered as an image before it is embedded into the PS-File.

##### #4 - 2009-12-14 12:55 AM - Giovanni Manghi

How big images are we speaking before the composer starts giving problems? I just printed in A0 a 7.5GB image and it worked fine (under linux, qgis trunk).

##### #5 - 2009-12-22 07:37 AM - Marco Hugentobler

Attached is a work-in-progress patch that draws rasters in tiles of appr. 200 MByte (this can be configured in `[[QgRasterImageBuffer]]::reset()`). It adds a new class `[[QgsRasterImageBuffer]]` that takes care of partitioning the image and the requests to retrieve data from GDAL. So all the partitioning happens transparent to `[[QgsRasterLayer]]`.

In the patch, `[[QgsRasterImageBuffer]]` is only applied in the method `[[QgsRasterLayer]]::drawPalettedSingleBandColor`. But I'm going to change the other ones too once the raster team reviewed the patch (and thinks the approach is ok).

**#6 - 2009-12-26 01:12 PM - Gerhard Spieles**

Hello,  
have installed version 1.4.0 commit:6a4fbd78 (SVN r12620).  
Printing a large format A0 with spatial images and reducing the print quality to 200dpi shows the complete spatial images. The document produced with "Freepdf" printer has 35MB.  
220dpi brings a pdf document with 73MB.  
At 250dpi, nearly 66% of the spatial image are lost.  
At 300 dpi, the complete spatial images are missing.

In all produced pdf-documents, a part of a vector layer is also not printed.(It begins near 1/3 left of the right margin in the pdf-document.)  
A screenshot is attached.

**#7 - 2009-12-28 02:57 AM - Giovanni Manghi**

Replying to [comment:8 gespiel]:

*Hello,  
have installed version 1.4.0 commit:6a4fbd78 (SVN r12620).  
Printing a large format A0 with spatial images and reducing the print quality to 200dpi shows the complete spatial images. The document produced with "Freepdf" printer*

Have you tested a different pdf printer? I cannot replicate your problems under linux as I regularly create 300dpi pdfs with a lot of heavy data.

**#8 - 2010-01-04 02:48 PM - Gerhard Spieles**

Replying to [comment:10 lutra]:

*Replying to [comment:8 gespiel]:  
  
Hello,  
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Printing a large format A0 with spatial images and reducing the print quality to 200dpi shows the complete spatial images. The document produced with "Freepdf" printer  
  
Have you tested a different pdf printer? I cannot replicate your problems under linux as I regularly create 300dpi pdfs with a lot of heavy data.*

Hello,  
I tried it with dopdf v7 also (this printer don't use ghost script) with the same result.

**#9 - 2010-01-05 01:37 PM - Giovanni Manghi**

I just tested one of my big projects (a couple of hundred mb of vectors plus 3/4 gb of rasters) under windows xp sp3 and qgis 1.4. Printed a A0 at 300 dpi with the "primo pdf" driver produced a 50mb pdf file that shows perfectly the print layout.

**#10 - 2010-01-06 11:21 AM - Gerhard Spieles**

Hello,

have tested it again. It seems, that the problem depends what map scale is used.

Attached are jpg-images with the results of two A0 prints. The only difference is the choosen mapscale in the composers item, Map, Scale.

At scale of 1:2500, the complete spatial images are printed. At scale of 1:600, only a part of the spatial images is printed.

**#11 - 2010-01-06 05:48 PM - Giovanni Manghi**

I still see no problems even at very high scales, at least with my data.

**#12 - 2010-01-08 01:59 AM - Marco Hugentobler**

Hi gespiel

Did you work with or without the patch applied?

If without patch: I think it is because current svn version keeps all the image data in virtual memory.

Also: instead of using the PDF printer, you could use the (platform independent) pdf export in composer. Maybe the results are better reproducible on other systems like that.

Marco

**#13 - 2010-01-08 10:48 AM - Gerhard Spieles**

Hi Marco,

have tested the pdf-print icon in the composer.

Using A0-Format, Qgis crashes. (see attached jpg)

I Use qgis 1.5.0-dev, rel. 12704 installed by OS4GeoW.

Does this release contain your patch?

If not, how can I install the patch?

**#14 - 2010-01-21 02:48 AM - Giovanni Manghi**

Replying to [comment:16 gespiel]:

*Hi Marco,*

*have tested the pdf-print icon in the composer.*

*Using A0-Format, Qgis crashes. (see attached jpg)*

*I Use qgis 1.5.0-dev, rel. 12704 installed by OS4GeoW.*

*Does this release contain your patch?*

*If not, how can I install the patch?*

It seems that in commit:6d4e233b (SVN r12810) changes have been made that can help solve your issues. In the next days (maybe already tomorrow) you should be able to install qgis-dev with osgeo4w including this code update. Please give it a try and leave feedback.

#15 - 2010-01-22 11:55 AM - Gerhard Spieles

Replying to [comment:17 lutra]:

Replying to [comment:16 gespiel]:

Hi Marco,

have tested the pdf-print icon in the composer.  
Using A0-Format, Qgis crashes. (see attached jpg)  
I Use qgis 1.5.0-dev, rel. 12704 installed by OS4GeoW.  
Does this release content your patch?  
If not, how can I install the patch?

It seems that in commit:6d4e233b (SVN r12810) changes have been made that can help solve your issues. In the next days (maybe already tomorrow) you should be able to install qgis-dev with osgeo4w including this code update. Please give it a try and leave feedback.

Hello,

have just installed r1281M and all is good. The pdf-print content the complete spatial images.  
Thank you verry much!!

Gerhard

#16 - 2010-01-22 11:57 AM - Giovanni Manghi

- Status changed from Open to Closed
- Resolution set to fixed

Files

a0printcomposer4.jpg	160 KB	2009-12-11	Gerhard Spieles
091222_raster_patch.diff	13.4 KB	2009-12-22	Marco Hugentobler
091223_qgis_raster.diff	22.4 KB	2009-12-23	Marco Hugentobler
printa0partofvectorlayerismissing.jpg	90.5 KB	2009-12-26	Gerhard Spieles
print_a0_scale-1_2500.jpg	123 KB	2010-01-06	Gerhard Spieles
print_a0_scale-1_600.jpg	107 KB	2010-01-06	Gerhard Spieles
largeprintformat_a0_use_pdf_icon_in_composer.jpg	122 KB	2010-01-08	Gerhard Spieles