

## QGIS Application - Bug report #21240

### Map Compose: adding/moving legend is very slow with large projects

2019-02-12 10:19 AM - Cesar Herrera

<b>Status:</b>	Open	
<b>Priority:</b>	High	
<b>Assignee:</b>		
<b>Category:</b>	Map Composer/Printing	
<b>Affected QGIS version:</b>	3.4.4	<b>Regression?:</b> Yes
<b>Operating System:</b>		<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>		<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b>		<b>Copied to github as #:</b> 29058
<b>Description</b>		
In map composer, when you want to create a new legend, if you have several items, the creation is extremely slow. (2.18 was faster)		

#### History

**#1 - 2019-02-12 10:32 AM - Niall Dawson**

- Status changed from Open to Feedback

Can you elaborate? What exactly is the issue here?

**#2 - 2019-02-13 12:09 PM - Cesar Herrera**

When you have several layers in a GIS project and then you move to the map composer and you want to create a legend it takes a lot of time. Example: I'm working with around 50 layers (not very complex layers) and when you create the legend you have to wait around 5 minutes till all the layers are showed in the legend. Then, if you move the legend or modify the layers showed in the legend it also takes a lot of time

**#3 - 2019-02-13 12:17 PM - Giovanni Manghi**

Cesar Herrera wrote:

*When you have several layers in a GIS project and then you move to the map composer and you want to create a legend it takes a lot of time.  
Example: I'm working with around 50 layers (not very complex layers) and when you create the legend you have to wait around 5 minutes till all the layers are showed in the legend. Then, if you move the legend or modify the layers showed in the legend it also takes a lot of time*

can you possibly attach/link a sample project with data?

**#4 - 2019-02-13 01:47 PM - Steve Lowman**

I think I can support this. We have hundreds of layers in our GIS. I just tried adding a legend with the Add Legend tool, and it took a long time to appear. Then, with the legend visible in the layout, the whole application is very slow to respond to any command, so bad, in fact, that I think I may have to terminate the application from Windows.

I never liked that the legend appears with all layers already in it, so we add legends from a set of Legend .qpt templates, formatted for different page sizes, which appear with no layers added, so then we can just add the layers we want.

Because we do it that way, I really like that you can add multiple layers in one command in QGIS 3, because it was always an annoyance to have to add them one-at-a-time in QGIS 2.

I suggest it would be far preferable for the Add Legend tool to create an empty legend by default, or maybe in the 'New Item Properties' dialog for legends, have three radio button options for the user to choose Add empty legend, Add with visible layers only, or Add with all layers.

**#5 - 2019-02-14 07:59 AM - Cesar Herrera**

- File LEGEND-SLOW.qgz added
- File INV-2.gpkg added
- File INV.gpkg added
- File 7.gpkg added
- File 6.gpkg added
- File 4.gpkg added
- File 3.gpkg added
- File 2.gpkg added

Including a nonreal QGIS project. I adapted some layers and QGZ file in order to reproduce the problem.

**#6 - 2019-02-18 02:41 PM - Giovanni Manghi**

Cesar Herrera wrote:

| *Including a nonreal QGIS project. I adapted some layers and QGZ file in order to reproduce the problem.*

I tested on my clean Windows and Linux testing VMs, and add the legend does not take more than 2/3 seconds (which is ok to me considered its size).

**#7 - 2019-03-09 11:23 AM - Giovanni Manghi**

| *I tested on my clean Windows and Linux testing VMs, and add the legend does not take more than 2/3 seconds (which is ok to me considered its size).*

can you please test again on the latest versions and on new/clean profile?

**#8 - 2019-04-04 04:15 PM - Steve Lowman**

I tested using the current versions (not master) of 3.6.1 and 3.4.6. I tried installing the nightly master of 3.4.6, but there seems to be something wrong with the OSGeo4W network installer - failing to copy some essential files or environment path variables or something.

Anyway, for the versions that I tested, using our very large .qgz project the time to add a legend varied between 74 seconds (on Citrix) and 230 seconds (on Windows laptop). Once the legend was completed, then the time taken to respond to a click on another item was between 38 seconds (Citrix) and 70 seconds (laptop).

You would probably agree that these are not okay performances.

**#9 - 2019-04-04 08:12 PM - Giovanni Manghi**

Steve Lowman wrote:

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*You would probably agree that these are not okay performances.*

can you add/link such project?

**#10 - 2019-04-05 11:05 AM - Steve Lowman**

Hi. Sorry, I can't do that. Our project has far too many layers, and many of them are subject to copyrights.

**#11 - 2019-04-05 11:15 AM - Steve Lowman**

I also just tested using Cesar's project and layers. The legend loading and other performance timings were okay with that one, so it does not reproduce the problem that you get with a lot more layers.

**#12 - 2019-04-06 11:12 AM - Giovanni Manghi**

Steve Lowman wrote:

*Hi. Sorry, I can't do that. Our project has far too many layers, and many of them are subject to copyrights.*

can you say if with the same type of project things were better in 2.18?

**#13 - 2019-04-08 10:28 AM - Steve Lowman**

I just tested the same project in 2.18, and the Add Legend tool worked fine rendering the legend with all the layers listed almost instantly, and then no delay in selecting a different item.

I also tested a .qgs project in 3.4, and I can confirm the problem occurs in 3.4 for both .qgz and .qgs projects.

It was a slightly better performance for the .qgs project, taking approx 60 seconds to add the legend and then 30 seconds to select a different item, but I only tested it once, so the small difference compared to last week's test of the same project as .qgz might have been for no particular reason.

**#14 - 2019-04-08 11:09 AM - Giovanni Manghi**

- Regression? changed from No to Yes
- Priority changed from Normal to High
- Status changed from Feedback to Open
- Subject changed from Map Composer - Legend to Map Compose: adding/moving legend is very slow with large projects

Files				
2.gpkg	548 KB	2019-02-14	Cesar Herrera	
3.gpkg	1.04 MB	2019-02-14	Cesar Herrera	
4.gpkg	808 KB	2019-02-14	Cesar Herrera	
6.gpkg	3.1 MB	2019-02-14	Cesar Herrera	
INV.gpkg	120 KB	2019-02-14	Cesar Herrera	
7.gpkg	3.09 MB	2019-02-14	Cesar Herrera	
INV-2.gpkg	120 KB	2019-02-14	Cesar Herrera	
LEGEND-SLOW.qgz	30.6 KB	2019-02-14	Cesar Herrera	