

## QGIS Application - Bug report #16462

### QGIS Server lost the ability to cascade WMS layers published using HTTPS

2017-04-23 09:36 AM - Giovanni Manghi

<b>Status:</b>	Closed	
<b>Priority:</b>	High	
<b>Assignee:</b>		
<b>Category:</b>	QGIS Server	
<b>Affected QGIS version:</b>	2.18.17	<b>Regression?:</b> Yes
<b>Operating System:</b>		<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	No	<b>Resolution:</b> duplicate
<b>Crashes QGIS or corrupts data:</b>	No	<b>Copied to github as #:</b> 24371
<b>Description</b>		
<p>At some point (likely in qgis 2.14 point release) QGIS projects containing an external WMS layer (possibly affected also WFS) published using HTTPS stopped to cascade correctly that layers when publishing the project with QGIS Server.</p> <p>I tested the bug using the latest available versions of QGIS server 2.14 and 2.18, while using a QGIS Server 2.8.8 instance it works ok.</p>		
<b>Related issues:</b>		
Duplicated by QGIS Application - Bug report # 17951: QGIS Server lost (most ...		<b>Closed</b> <b>2018-01-24</b>

#### History

##### #1 - 2017-04-23 09:36 AM - Giovanni Manghi

- Subject changed from QGIS Server lost the hability to cascade WMS layers published using HTTPS to QGIS Server lost the ability to cascade WMS layers published using HTTPS

##### #2 - 2017-04-23 09:38 AM - Giovanni Manghi

- Affected QGIS version changed from 2.18.5 to 2.18.6

##### #3 - 2017-04-24 10:13 AM - Giovanni Manghi

I can't pinpoint when this exactly happened by my guess is still sometime along the 2.14.\* releases. I had services based in qgis-server 2.14 that did the cascading of other wms/https services correctly.

##### #4 - 2017-04-30 11:17 AM - Giovanni Manghi

- Description updated

- Affected QGIS version changed from 2.18.6 to 2.18.7

##### #5 - 2017-04-30 05:08 PM - Giovanni Manghi

- Regression? set to Yes

##### #6 - 2017-04-30 05:09 PM - Giovanni Manghi

- Priority changed from Severe/Regression to High

##### #7 - 2017-05-01 01:10 AM - Giovanni Manghi

- Easy fix? set to No

##### #8 - 2017-11-27 10:35 AM - Alessandro Pasotti

- Assignee set to Alessandro Pasotti

##### #9 - 2017-11-28 12:30 PM - Alessandro Pasotti

What does exactly mean "stopped to cascade correctly"?

**#10 - 2017-11-28 02:48 PM - Alessandro Pasotti**

- File *bug\_16462.qgs* added

- Status changed from Open to Feedback

I could not reproduce this neither on master or in 2.18.x.

Please attach a project that shows the issue (see my test project attached: all layers in the project are cascaded WMS on https ).

**#11 - 2017-11-28 03:21 PM - René-Luc ReLuc**

I have tested this URL [https://gis.tirol.gv.at/arcgis/services/Service\\_Public/orthofoto/MapServer/WMSServer](https://gis.tirol.gv.at/arcgis/services/Service_Public/orthofoto/MapServer/WMSServer)

The GetCapabilities it's OK but the GetLegendGraphic doesn't provide the same image.

**#12 - 2017-11-28 04:31 PM - René-Luc ReLuc**

No issue with master, issue with 2.18

**#13 - 2017-11-29 12:45 PM - Alessandro Pasotti**

Renè, do I understand right that the issue is only with the cascading GetLegendGraphic not being tranferred/copied/merged?

To be honest I've never used cascading WMS, but I'd be surprised if that was working: what would be the outcome when you ask a legend with multiple layers coming from cascading and not-cascading layers?

Do we have any logic to merge the QGIS-Server-generated image with the one coming from the cascading service?

Can you please attach a sample project and sample calls that are supposed to work and do not?

**#14 - 2017-11-30 12:49 PM - René-Luc ReLuc**

Firstly, I can't use the project you provide.

For the Request **MAP=/tmp/bug\_16462.qgs&SERVICE=WMS&REQUEST=GetCapabilities**

I have the result:

```
<ServerException>Project file error</ServerException>
```

And this log:

```
fcgi query string: "MAP=/tmp/bug_16462.qgs&SERVICE=WMS&REQUEST=GetCapabilities"
src/core/qgsmessagelog.cpp: 27: (logMessage) [0ms] 2017-11-30T12:45:02 Server[0] ***** New request *****
src/core/qgsmessagelog.cpp: 27: (logMessage) [0ms] 2017-11-30T12:45:02 Server[0] REMOTE_ADDR: 127.0.0.1
src/core/qgsmessagelog.cpp: 27: (logMessage) [0ms] 2017-11-30T12:45:02 Server[0] HTTP_USER_AGENT: Mozilla/5.0 (X11; Ubuntu; Linux
x86_64; rv:57.0) Gecko/20100101 Firefox/57.0
src/core/qgsmessagelog.cpp: 27: (logMessage) [0ms] 2017-11-30T12:45:02 Server[0] MAP:/tmp/bug_16462.qgs
```

```
src/core/qgsmessagelog.cpp: 27: (logMessage) [0ms] 2017-11-30T12:45:02 Server[0] REQUEST:GetCapabilities
src/core/qgsmessagelog.cpp: 27: (logMessage) [0ms] 2017-11-30T12:45:02 Server[0] SERVICE:WMS
src/server/qgsserver.cpp: 176: (configPath) [0ms] MAP:/tmp/bug_16462.qgs
"Sent 1 blocks of 54 bytes"
src/core/qgsmessagelog.cpp: 27: (logMessage) [5ms] 2017-11-30T12:45:02 Server[0] Request finished in 5 ms
```

I use this apache vhost:

```
<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
#ServerName www.example.com

ServerAdmin webmaster@localhost
    ServerName qgis-server.localhost
    ServerAlias qgis-server.localhost
    DocumentRoot /var/www/html

    ErrorLog ${APACHE_LOG_DIR}/qgis-server-error.log
    CustomLog ${APACHE_LOG_DIR}/qgis-server-access.log combined

    # Longer timeout for WPS... default = 40
    FcgidIOTimeout 120
    FcgidInitialEnv DISPLAY ":99"
    FcgidInitialEnv LC_ALL "en_US.UTF-8"
    FcgidInitialEnv PYTHONIOENCODING UTF-8
    FcgidInitialEnv LANG "en_US.UTF-8"
    #FcgidInitialEnv QGIS_LOG_FILE /tmp/qgis.log
    #FcgidInitialEnv QGIS_DEBUG_FILE /tmp/qgis-debug.log
    FcgidInitialEnv QGIS_DEBUG 1
    FcgidInitialEnv QGIS_SERVER_LOG_FILE /tmp/qgis-server.log
    FcgidInitialEnv QGIS_SERVER_LOG_LEVEL 0
    #FcgidInitialEnv QGIS_PLUGINPATH "/home/dhont/.qgis2/python/plugins"
    FcgidInitialEnv HOME "/tmp"

    # ABP: needed for QGIS HelloServer plugin HTTP BASIC auth
    <IfModule mod_fcgid.c>
        RewriteEngine on
        RewriteCond %{HTTP:Authorization} .
        RewriteRule .* - [E=HTTP_AUTHORIZATION:%{HTTP:Authorization}]
    </IfModule>

    ScriptAlias /cgi-bin/ /usr/lib/cgi-bin/
    <Directory "/usr/lib/cgi-bin">
        AllowOverride All
        Options +ExecCGI -MultiViews +FollowSymLinks
```

```
Require all granted
#Allow from all
</Directory>
```

```
</VirtualHost>
```

I have build the server the 30th november 2017

**#15 - 2017-11-30 01:01 PM - René-Luc ReLuc**

- File *tirol\_getmap\_214.png* added
- File *tirol\_getmap\_master.png* added
- File *tirol\_getmap\_218.png* added
- File *tirol\_getlegendgraphics\_master.png* added

So i have created a project with the layer **Image\_Aktuell\_RGB** from this WMS service

[https://gis.tirol.gv.at/arcgis/services/Service\\_Public/orthofoto/MapServer/WMSServer](https://gis.tirol.gv.at/arcgis/services/Service_Public/orthofoto/MapServer/WMSServer) and a vector layer (SHP).

I have tested this project with:

- QGIS 2.14
- QGIS 2.18
- QGIS master 30th november

I have tested 3 request:

- GetCapabilities SERVICE=WMS&Request=GetCapabilities
- GetLegendGraphics

SERVICE=WMS&VERSION=1.3.0&REQUEST=GetLegendGraphic&LAYER=Image\_Aktuell\_RGB&FORMAT=image/png&STYLE=default&SLD\_VERSION=1.1.0  
ON=1.1.0

I can't really help more, I have lost the logs files.

- GetMap

LAYERS=Image\_Aktuell\_RGB&STYLES=default&CRS=EPSG%3A31254&FORMAT=image%2Fpng&TRANSPARENT=true&EXCEPTIONS=application%2Fvnd.ogc.se\_inimage&SERVICE=WMS&VERSION=1.1.1&REQUEST=GetMap&SRS=EPSG%3A31254&BBOX=931.9853487034507,261926.27369830207,69830207,17957.956900646554,267151.80498269794&WIDTH=1287&HEIGHT=395

The result is :

- for GetLegendGraphics, the image provided by all QGIS Server gives only the layer name
- for GetMap, 2.14 and master provides the image, 2.18 provides a blank image.

**#16 - 2017-12-01 10:40 AM - Alessandro Pasotti**

- Assignee deleted (Alessandro Pasotti)
- Subject changed from *QGIS Server lost the ability to cascade WMS layers published using HTTPS to QGIS Server returns a blank image with GetImage on a WMS Cascading layer*
- Status changed from *Feedback* to *Open*

Thanks for your tests René, from the results we can conclude that:

- this ticket title must be changed to "QGIS Server returns a blank image with GetImage on a WMS Cascading layer"
- we should file a separate issue type "Feature request" for composing the the legend from the cascading server (which as I suspected it was never implemented and it is not a trivial task).

I'm focusing mainly on master at this time, so I'll pass this bug over because it does not affect master.

**#17 - 2018-01-19 08:27 PM - Giovanni Manghi**

- Subject changed from *QGIS Server returns a blank image with GetImage on a WMS Cascading layer to QGIS Server lost the ability to cascade WMS layers published using HTTPS*
- Affected QGIS version changed from 2.18.7 to 2.18.15

I'm changing back the description to the original one after having chatted with Alessandro and having provided a clear example (which I cannot share here) that shows that the issue is cascading from a service which uses https (the same service/maps cascaded using http behave as expected).

**#18 - 2018-03-01 03:46 PM - René-Luc ReLuc**

Does some one has any clue to fix it ?

**#19 - 2018-03-03 10:56 AM - Giovanni Manghi**

- Affected QGIS version changed from 2.18.15 to 2.18.17

**#20 - 2018-03-21 02:30 PM - René-Luc ReLuc**

I have tested the futur 2.18.18 and I can't reproduced the issue.

**#21 - 2018-03-30 05:00 PM - René-Luc ReLuc**

I have found this error message:

Download of capabilities failed: SSL handshake failed

Is it possible to explicitly ignore SSL errors ?

The issue is also available for XYZ layers.

**#22 - 2018-03-31 06:46 PM - Alessandro Pasotti**

maybe: it's possible but it must be done for each certificate verification failure by adding a custom SSL configuration to the authentication DB, this is what normally happens in QGIS desktop when you encounter such an error.

What happens normally is that when the connection fails due to an SSL error, a dialog pops up asking if you want to ignore the error and/or store the exception permanently (more or less what happens in a normal browser), if you ignore the exception permanently this information is stored in the authentication DB.

So: it is not currently possible from the server. Btw, I agree that it might be a useful implementation, even if you should normally be careful to accept insecure connections.

**#23 - 2018-04-05 12:02 PM - Alessandro Pasotti**

- Duplicated by Bug report #17951: *QGIS Server lost (most of the times) the ability to cascade WFS layers added*

**#24 - 2018-05-14 06:22 PM - Anne Blankert**

I am having the same problem: SSL handshake failed (QGIS server 2.18.19, Ubuntu 16.04). Example WMS service <https://geodata.nationaalgeoregister.nl/bag/ows>

Other software on the Ubuntu machine running QGIS server is able to connect to the same remote HTTPS WMS server without problems. Also QGIS Desktop can connect to the HTTPS WMS server without problems.

Maybe QGIS server does not know where to look for CA-certificates? If QGIS server can't validate the HTTPS server certificate, it may abort with an SSL handshake error?

I tried to set in the Apache configuration:  
FcgidInitialEnv REQUESTS\_CA\_BUNDLE "/etc/ssl/certs/ca-certificates.crt"  
FcgidInitialEnv SSL\_CERT\_FILE "/etc/ssl/certs/ca-certificates.crt"  
also tried:  
FcgidInitialEnv SSL\_CERT\_DIR "/etc/ssl/certs"

restarted Apache, but same result:  
SSL handshake failed

**#25 - 2018-06-01 02:01 PM - René-Luc ReLuc**

To fix this issue, you have to add HOME environmental variable to a directory in which the directory .qgis2 is writable for the user used by QGIS Server, with Apache2, it's www-data.

For exemple, do these commands:

```
mkdir /srv/qgis/.qgis2
chown www-data:www-data /srv/qgis/.qgis2
chmod 774 /srv/qgis/.qgis2
```

And add this in your apache virtual host:

```
FcgidInitialEnv HOME "/srv/qgis"
```

**#26 - 2018-06-03 08:39 PM - Giovanni Manghi**

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

duplicate of #17951

Files			
bug_16462.qgs	23.6 KB	2017-11-28	Alessandro Pasotti
tirol_getlegendgraphics_master.png	77.3 KB	2017-11-30	René-Luc ReLuc
tirol_getmap_218.png	2.04 KB	2017-11-30	René-Luc ReLuc
tirol_getmap_214.png	760 KB	2017-11-30	René-Luc ReLuc
tirol_getmap_master.png	1.94 MB	2017-11-30	René-Luc ReLuc