QGIS Application - Bug report #10379
Qgis mapserv: Flaky WFS GetFeature

2014-05-28 02:37 AM - Henrik Uggla

Status:	Closed			
Priority:	Severe/Regression			
Assignee:	René-Luc ReLuc			
Category:	QGIS Server			
Affected QGIS version:	master	**Regression?:**	No	
Operating System:	Ubuntu	**Easy fix?:**	No	
Pull Request or Patch supplied:		**Resolution:**		
Crashes QGIS or corrupts data:		**Copied to github as #:**	18798	

Description

This call used to work fine in early Ubuntugis builds of 2.3:

http://193.17.67.229/cgi-bin/externt/bug/qgis_mapserv.fcgi?service=WFS&srs=EPSG:3008&typename=byggnadsminne_punkt ,byggnadsminne_yta_&version=1.0.0&request=GetFeature&outputformat=GML2&format=text/xml&bbox=193235.426686, 426686,6210676.553781,193447.093774,6210888.220869&maxfeatures=20&width=1920&height=650

In latest build it sometimes work, but mostly not. Sometimes I get "500 Internal server error" sometimes I get "RequestNotWellFormed".

This call seems to work all the time:

http://193.17.67.229/cgi-bin/externt/bug/qgis_mapserv.fcgi?service=WFS&srs=EPSG:3008&typename=omr_stadsdel&ver ion=1.0.0&request=GetFeature&outputformat=GML2&format=text/xml&bbox=190285.316647,6214327.811049,190496.98373 6.983735,6214539.478137&maxfeatures=20&width=1920&height=650

No matter if I get the right return or not it is always very slow.

Related issues:

Related to QGIS Application - Bug report # 5520: Wrong boundingbox values in ...	**Closed**	**2012-04-30**

History

#1 - 2014-05-28 11:10 AM - Giovanni Manghi

- Status changed from Open to Feedback

is this a regression compared to qgis server 2.2 (or older)?

#2 - 2014-05-28 12:45 PM - Henrik Uggla

This is a regression compared to qgis server 1.8. WFS is broken in 2.2

#3 - 2014-05-29 02:04 AM - Giovanni Manghi

- Status changed from Feedback to Open

- Priority changed from Normal to Severe/Regression

Henrik Uggla wrote:

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> *This is a regression compared to qgis server 1.8. WFS is broken in 2.2*

then tagging this as a blocker.

#4 - 2014-05-29 02:37 AM - Marco Hugentobler

> *WFS is broken in 2.2*

Also in current developer version (2.3)?

#5 - 2014-05-29 03:55 AM - Henrik Uggla

I was referring to bug #9674, which is fixed in 2.3 and not related to this bug.

#6 - 2014-06-09 01:53 AM - Henrik Uggla

We are prepared to donate some money if we get a guarantee that this issue is resolved before the release of 2.4.

Also, is it possible to download old 2.3 builds to test when the bug was introduced? We're using Ubuntu 12.04.

#7 - 2014-06-09 02:00 AM - Paolo Cavallini

Thanks Henrik for this. Please hire a developer you trust to fix this. In case you need help, I'm here: cavallini@faunalia.eu

#8 - 2014-06-09 02:28 AM - Jürgen Fischer

Henrik Uggla wrote:

> *Also, is it possible to download old 2.3 builds to test when the bug was introduced? We're using Ubuntu 12.04.*

Unfortunately we only keep the latest build. To get older versions I can only point you at INSTALL which describes how to build packages from source and git bisect to help with identifying which commit introduced the problem.

#9 - 2014-06-10 03:09 AM - Marco Hugentobler

- Assignee set to Marco Hugentobler

Possibly this got broken during the server class redesign.

#10 - 2014-06-10 08:52 AM - Marco Hugentobler

Does the 'RequestNotWellFormed" only appear if the feature count is zero (because of bbox constraint)?

#11 - 2014-06-10 10:18 AM - Henrik Uggla

No it does not. Try to load the first url I gave ten times in a row. You will get different result (almost) every time and those times it does succeed it returns a feature.

#12 - 2014-06-12 04:07 AM - René-Luc ReLuc

- Assignee changed from Marco Hugentobler to René-Luc ReLuc

I thought I has corrected it. I'll review the code and propose a patch if necessary.

#13 - 2014-06-13 07:31 AM - René-Luc ReLuc

Henrik Uggla wrote:

> *No it does not. Try to load the first url I gave ten times in a row. You will get different result (almost) every time and those times it does succeed it returns a feature.*

Does the commit:5d1eb4e0d92de8209484ea8a64b17eee3560fdca fixed the bug?

#14 - 2014-06-13 09:27 AM - Giovanni Manghi

- Status changed from Open to Feedback

#15 - 2014-06-15 12:26 PM - Henrik Uggla

Why is the bounding box always reported as 0,0,0,0 when the feature type given is not found?

A query with a bounding box given (fex 10,555,5,800) and a typename that doesn't exist in the project returns:
<gml:boundedBy><gml:Box><gml:coordinates cs="," ts=" ">0,0 0,0</gml:coordinates></gml:Box></gml:boundedBy>

I think it should return:
<gml:boundedBy><gml:Box><gml:coordinates cs="," ts=" ">10,555 5,800</gml:coordinates></gml:Box></gml:boundedBy>

No big deal though.

#16 - 2014-06-16 12:44 AM - Henrik Uggla

I've now done some more testing. The slowness and random response still exist but it only happens for big projects. Remove some random layers from a big project and it works. Earlier Qgis versions doesn't have this problem.

#17 - 2014-06-16 03:02 AM - Jukka Rahkonen

What if the boundedBy should be "Null" for GML2 or "Nil" for GML3 when no features are found? I took some excerpts from GML 3.2.1 standard

"9.4.1 boundedBy: This property describes the minimum bounding box or rectangle that encloses the entire feature.

A nil value shall be encoded as described in 8.2.3.2. The attribute nilReason may be used in such cases to specify the reason for the nil value.

The value of gml:Null, used in previous versions of GML to encode that an extent is not applicable or not available for some reason, has been deprecated. NOTE 1 Since an envelope is defined simply by the positions of two diagonally opposing corners, the exact footprint of an envelope depends on the coordinate reference system used. If the feature being described has zero extent, then the two corners will coincide and the envelope has zero size. The gml:boundedBy property is provided by a data supplier for convenience. The value of the envelope is usually computable by the data consumer from the spatio-temporal properties of a feature. As for all properties, it is the responsibility of the data provider to ensure that the value is correct."

I did not find any examples about how to give boundedBy for an empty geometry collection. However, it is said that when feature is a point (zero extent) then boundedBy must shrink to point as well. It would feel odd that in case of no geometries at all the boundedBy could expand to rectangle.

#18 - 2014-06-16 01:05 PM - Henrik Uggla

The bounding box issue is related to #5520

#19 - 2014-06-16 11:28 PM - Marco Hugentobler

> *The slowness and random response still exist but it only happens for big projects*

Is the random response because of a server timeout (fcgi process killed because it took too long)?

#20 - 2014-06-17 01:11 AM - Henrik Uggla

When I get "Internal server error" the following is written to apache2/error.log:

[Tue Jun 17 09:49:42 2014] [warn] [client 127.0.0.1] mod_fcgid: error reading data, FastCGI server closed connection

[Tue Jun 17 09:49:42 2014] [error] [client 127.0.0.1] Premature end of script headers: qgis_mapserv.fcgi

[Tue Jun 17 09:49:42 2014] [error] [client 127.0.0.1] File does not exist: /var/www/favicon.ico

[Tue Jun 17 09:49:43 2014] [error] mod_fcgid: process /usr/lib/cgi-bin/externt/bug/qgis_mapserv.fcgi(10126) exit(communication error), get signal 11, possible coredump generated

And this is from apport.log:

ERROR: apport (pid 10132) Tue Jun 17 09:49:42 2014: called for pid 10126, signal 11

ERROR: apport (pid 10132) Tue Jun 17 09:49:42 2014: executable: /usr/lib/cgi-bin/qgis_mapserv.fcgi (command line "/usr/lib/cgi-bin/externt/bug/qgis_mapserv.fcgi")

ERROR: apport (pid 10132) Tue Jun 17 09:49:42 2014: is_closing_session(): no DBUS_SESSION_BUS_ADDRESS in environment

ERROR: apport (pid 10132) Tue Jun 17 09:49:42 2014: apport: report /var/crash/_usr_lib_cgi-bin_qgis_mapserv.fcgi.33.crash already exists and unseen, doing nothing to avoid disk usage DoS

syslog:

Jun 17 09:49:42 sbk-pc114l kernel: [688928.606517] qgis_mapserv.fc[10126]: segfault at fffffffffffffff8 ip 00007f57eab931ea sp 00007fff9945afb0 error 5 in libstdc++.so.6.0.16[7f57eaadf000+e2000]

A .crash file is written to /var/crash (size 15,6MB).

When the call succeeds (and returns features) or when it returns no feature (fail), nothing is written to the files above. As I've said, those tree results of the same query appear randomly.

#21 - 2014-06-23 05:51 AM - Henrik Uggla

- Status changed from Feedback to Closed

Working fine in latest nightly. Thanks!