QGIS Application - Bug report #13117
cached wfs not downloading new features while panning

2015-07-15 06:55 AM - Raymond Nijssen

Status:	Closed		
Priority:	Severe/Regression		
Assignee:			
Category:	Web Services clients/WFS		
Affected QGIS version:	master	**Regression?:**	No
Operating System:		**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	fixed/implemented
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	21182

Description

When I zoom in to some area in nl:

epsg:28992
centroid: (149957,410248)
scale 1:800

and i add a wfs layer: bag:pand
from: http://geodata.nationaalgeoregister.nl/bag/wfs
with the "cache feature" unchecked

I get the features in my view extent as expected.

But when I pan, qgis is not downloading any new features. The layer keeps on being filled with the initial set of features.

I used this before and it worked. And it does work as it should at the qgis 2.8 osx version at my colleagues laptop.

Related issues:

Related to QGIS Application - Bug report # 11968: WFS-GetFeature broken (with...	**Closed**	**2015-01-08**
Related to QGIS Application - Bug report # 13401: WFS Cache Features option d...	**Closed**	**2015-09-22**
Related to QGIS Application - Bug report # 13293: WCS server broken on Windows	**Closed**	**2015-08-31**
Related to QGIS Application - Feature request # 14121: WFS client implement s...	**Open**	**2016-01-16**

History

#1 - 2015-07-31 06:19 AM - Giovanni Manghi

- Priority changed from Normal to Severe/Regression

- Target version set to Future Release - High Priority

- Operating System deleted (linux)

- OS version deleted (ubuntu 14.04)

confirmed, it worked until 2.8.*, stopped in 2.10 and master.

#2 - 2015-09-18 12:31 AM - Richard Duivenvoorde

Yep the 'caching' behaviour changed.

Before when you added a &BBOX to the provider uri (when using python interface), the layer was NON-cached and for every extent change there was a new WFS GetFeature request fired (desired behaviour)

In 2.10 and in current master adding this &BBOX to the uri does not work anymore.

As there is a tickbox 'Only request feature overlapping the current view extent' I would think that
Unchecking 'Cache Feature' and Unchecking 'Only overlapping' would give me the desired behaviour as before

But I do not see any difference between tickend en unticked 'Only overlapping' when uncached...

I think something is broken there...

And for the python interface, it would be helpfull if there were params like 'caching' or 'only_overlapped'...

#3 - 2015-10-07 07:41 AM - Richard Duivenvoorde

related tickets: #13293, #13401, #11968

#4 - 2015-10-11 08:17 AM - Richard Duivenvoorde

Adding more info:

The use case is this wfs:
http://geodata.nationaalgeoregister.nl/bag/wfs
holding ALL houses in The Netherlands (couple million)
the wfs maximizes the number of feature returned ot ... I think 15000 or so...

The working (2.8 behaviour) was:
- if UNchecked the 'Cache features' then the client added a bbox (good!) AND refetched the features after every Pan and Zoom Action (good!)

Now not anymore: only a first set is retrieved, and after that nothing happens anymore.

To me the two options 'Cache features' and ' only request in current bbox' more or less mimic there behaviour

Anyway: create a project:

EPSG:28992
xy: 104676.3,490097.6
scale: 1:1000

The possible combinations

combi 1

'Cache Feature' UNchecked
'Only request... overlapping' UNchecked

http://geodata.nationaalgeoregister.nl/bag/wfs?SERVICE":"WFS&VERSION=1.0.0&REQUEST=GetFeature&TYPENAME=bag:
and&SRSNAME=EPSG:28992&BBOX=104403.35250264131173026,490059.08999344159383327,104862.29637185942556243,490342.0983812302
38123025838286

BBOX in request! Good, though it is hard to do caching AND retrieving new features I think...
But it does not retrieve new features anymore after the retrieval of the first set (like it did in earlier versions)...

combi 2

'Cache Feature' CHECKED
'Only request... overlapping' UNchecked

http://geodata.nationaalgeoregister.nl/bag/wfs?SERVICE=WFS&VERSION=1.0.0&REQUEST=GetFeature&TYPENAME=bag:pand&SNAME=EPSG:28992

OK, no bbox: we just request the first 15000 features (very outside the current bbox), but hey, that is what we asked for.
Pan action: does not add anything...

combi 3

'Cache Feature' UNchecked
'Only request... overlapping' CHECKED

http://geodata.nationaalgeoregister.nl/bag/wfs?SERVICE=WFS&VERSION=1.0.0&REQUEST=GetFeature&TYPENAME=bag:pand&SNAME=EPSG:28992&BBOX=104556.77736899332376197,490097.08506930683506653,104851.63538065302418545,490278.909680339449550965096

OK, adding a bbox to the feature request (apparently because of the 'only request with current bbox'...
BUT panning or zooming OUT does NOT get new features :-(

combi 4

'Cache Feature' CHECKED
'Only request... overlapping' CHECKED

http://geodata.nationaalgeoregister.nl/bag/wfs?SERVICE=WFS&VERSION=1.0.0&REQUEST=GetFeature&TYPENAME=bag:pand&SNAME=EPSG:28992&BBOX=104556.77736899332376197,490097.08506930683506653,104851.63538065302418545,490278.909680339449550965096

OK, adding a bbox to the feature request (apparently because of the 'Cache Features'
BUT panning or zooming OUT does NOT get new features :-(

#5 - 2015-11-06 12:11 PM - Raymond Nijssen

Today I dug in this issue and all related ones. In my opinion, the reason this works badly (or not at all) is the complexity. Therefore I suggest to bring the number of options back to 2 "strategies":

1. cached: Download complete dataset one time and cache it in memory.

2. bbox: Fire a request with bounding box every time you pan/zoom.

We should get rid of the checkboxes in the interface because they provide too many (and also useless/illogical) combinations that are hard to understand and implement. If we add these 2 options as a combobox to the interface, it is more clear. And there is space to ever add some extra (nifty) option without breaking these existing ones.

Basically this will make things work again. But there are another 2 enhancements I'd like to propose:

1. Having this same strategy combobox in the Layer properties of a WFS layer. So you can change your strategy after adding the layer.

2. Show a warning when the number of received features is a multiple of 500, since there is high probability that the dataset is truncated server-side. issue #9444

Any thoughts on this?

#6 - 2015-11-13 03:40 AM - Phil Mountain

Panning WFS in version 2.2 refreshes the map and works perfectly, finding out how this functionality was lost and reintroducing it will return us to the status quo ante.

#7 - 2016-01-16 03:54 AM - Jeremy Palmer

@Raymond Nijssen: I agree your comments about simplifying the UI to just have 2 simple options. You should raise another ticket for this.

However this issue has now been resolved in master commit:188625c. Closing ticket.

#8 - 2016-01-31 10:07 AM - Giovanni Manghi

- Status changed from Open to Closed

- Resolution set to fixed/implemented

Raymond please add your notes here:

https://github.com/qgis/QGIS-Enhancement-Proposals/issues/53

#9 - 2017-05-19 09:22 AM - Jürgen Fischer

- Related to Feature request #14121: WFS client implement simple logic for caching and non-caching added