QGIS Application - Bug report #11076
MSSQL vector layer filtering problem

2014-08-19 04:25 AM - Stefan Loehr

Status:	Closed		
Priority:	Normal		
Assignee:			
Category:	Data Provider/MSSQL		
Affected QGIS version:	2.4.0	**Regression?:**	No
Operating System:		**Easy fix?:**	No
Pull Request or Patch supplied:	No	**Resolution:**	
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	19409

Description

There seems to be a bug in the MSSQL provider when accessed from python.
If you retrieve objects from a featurelayer with a QgsFeatureRequest, the filter expression ist not applied.
For example if you use this python code to retrieve features:

```
featReq=QgsFeatureRequest()
it = my_mssql_layer.getFeatures( featReq )
```

the resulting SQL Query as reported from SQL Server Profiler is:

```
select [objectid],... lots of columns ... ,[shape] from [dbo].[testpolygons]
```

Thats ok. It returns all features.
But if you add a filter expression:

```
featReq=QgsFeatureRequest()
featReq=featReq.setFilterExpression ('users>1')
my_feature_iterator = my_mssql_layer.getFeatures( featReq )
```

the resulting SQL is corrupt:

```
select [objectid],... lots of columns ... ,[shape] from [dbo].[flurstueck_f] where
[shape].STIntersects([geometry]::STGeomFromText('POLYGON((0.00000000 0.00000000, 0.00000000 0.00000000,
0.00000000 0.00000000, 0.00000000 0.00000000, 0.00000000 0.00000000))',25832)) = 1 and [objectid] = 30681189080760422
```

As you can see, a filter rectangle with unusable coordinates and an ID filter with a non existant id-number is applied.
This query returns nothing of course.

It seems that the FilterType of the QgsFeatureRequest is incorrectly interpreted as soon as the "setFilterExpression" is executed.
The result value of print featReq.filterType() befor the "setFilterExpression" is "0" and afterwards "3".
As I understand it, "3" is FilterType::FilterExpression, but the SQL Query is constructed as if the FilterType was "FilterRect" or something.

You can test this behavior by loading an MSSQL Layer in qgis and pasting following python code in the console:

(insert correct layername and filterexpression)

```
    LegInt = iface.legendInterface()
    layers = LegInt.layers()
    for layer in layers:
        layerType = layer.type()
        if layer.name() == "testpolygone":
            my_mssql_layer=layer
            break

    featReq=QgsFeatureRequest()
    featReq=featReq.setFilterExpression ('users>1')
    my_feature_iterator = my_mssql_layer.getFeatures( featReq )

    for feature in my_feature_iterator:
        attrs = feature.attributes()
            print "Feature ID: " + str(feature.id()) + " " + str(attrs)
        break
```

I tested it in 2.2 and 2.4 on Windows.

I'm not shure which Category is correct for this issue. Perhaps rather "PyQGIS Console" ???

Associated revisions

Revision 7fe45db7 - 2014-09-09 08:44 PM - Jürgen Fischer

mssql provider: fix filter type interpretation (fixes #11076)

History

#1 - 2014-08-21 01:21 AM - Stefan Loehr

- Assignee set to Matthias Kuhn

The issue seems somehow related to #10900

#2 - 2014-09-09 11:28 AM - Jürgen Fischer

- Assignee deleted (Matthias Kuhn)

#3 - 2014-09-09 11:45 AM - Jürgen Fischer

- Status changed from Open to Closed

Fixed in changeset commit:"7fe45db70c7e5d583703b9e022e9c666237305a5".

#4 - 2014-09-09 11:22 PM - Jürgen Fischer

- Category changed from Data Provider to Data Provider/MSSQL