

# QGIS Application - Bug report #5322

## ODBC connection window queries all database content

2012-04-05 07:02 AM - Regis Haubourg

<b>Status:</b> Closed	
<b>Priority:</b> High	
<b>Assignee:</b>	
<b>Category:</b> Data Provider	
<b>Affected QGIS version:</b> master	<b>Regression?:</b> No
<b>Operating System:</b> All	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b> No	<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b> No	<b>Copied to github as #:</b> 15024
<b>Description</b>	
<p>Hi all,</p> <p>odbc interface in QGis does "SELECT * from mytable" for <b>ALL</b> tables when trying to collect table list, just before allowing user to choose which table to open.</p> <p>This is very slow, unefficient, and dangerous for big databases with number of tables and huge ones. I almost crashed one Oracle instance this morning, waiting for Qgis to unfreeze.</p> <p>IMHO it needs urgent fixing since that bad behaviour could lead to very bad advertising on QGis in system administrator and database administrator communities.</p> <p>SQL "LIMIT " clause is not implemented on every database.. Indeed, qgis should retrieve table lists with ODBC standard function "SQLTables()" <a href="http://msdn.microsoft.com/en-us/library/windows/desktop/ms711831(v=vs.85).aspx">http://msdn.microsoft.com/en-us/library/windows/desktop/ms711831(v=vs.85).aspx</a>. Is it available through OGR?</p> <p>Sorry, not able to sponsor right at the moment (2 months to go?)</p> <p>Régis</p> <p>tested on 1.7.4 and trunk f3b78ef.</p>	
<b>Related issues:</b>	
Related to QGIS Application - Bug report # 5844: When adding a gpx the dialog...	<b>Closed</b> <b>2012-06-21</b>

### Associated revisions

#### Revision bf82454d - 2012-06-01 08:11 PM - Jürgen Fischer

cache sublayer feature counts and don't retrieve expensive ones (fixes #5322)

### History

#### #1 - 2012-04-05 07:04 AM - Regis Haubourg

I forgot to check "causes crash" checkbox.. Not true, but freezes Qgis until OGR as read every single line in all database.. or until database crashes.

#### #2 - 2012-04-05 07:13 AM - Regis Haubourg

partially answering to myself , ogr does support odbc SQLTables() : <http://www.osgeo.org/pipermail/gdal-dev/2009-October/022477.html>

#### #3 - 2012-04-15 08:46 AM - Giovanni Manghi

- Priority changed from 6 to High

**#4 - 2012-06-01 05:36 AM - Hugo Mercier**

I couldn't find any explicit "SELECT \*" in the ODBC handling code. So I am not sure SQLTables() is the solution.

I confirm ODBC connection can be very slow, which is not something we want.

From my own investigations, it seems a call to OGR\_L\_GetFeatureCount() is made (qgsprovider.cpp, method 'subLayers()') with the 'FORCE' option (see [http://www.gdal.org/ogr/ogr\\_api\\_8h.html](http://www.gdal.org/ogr/ogr_api_8h.html)) which can, as expected, be very slow. I don't know if the number of features is a critical information to retrieve, but a quick work-around would be not to force the feature counting.

**#5 - 2012-06-01 05:49 AM - Regis Haubourg**

SQL "select \* " was seen when logging QGIS ODBC connection queries to postgresql. Maybe this is not coded so, but this is how it behaves.

If it is an ogr behaviour, please confirm so that I submit an issue there.

regis

**#6 - 2012-06-01 06:18 AM - Hugo Mercier**

Not sure yet if it comes from the ODBC driver.

What is done in QGIS is something like OGR\_L\_GetFeatureCount( OGR\_GetLayer( ... ), 1 ). Which has great chance of involving a "SELECT \*".

Maybe we could use something more "direct" in QGIS to count features.

**#7 - 2012-06-01 11:11 AM - Jürgen Fischer**

- Status changed from Open to Closed

Fixed in changeset commit:"bf82454d9639816bd4ad1c7c8a15d7d9c1f5f200".