

QGIS Application - Bug report #11231

Function rand() only gives values up to ~32000

2014-09-19 07:03 AM - Matthias Kuhn

Status:	Closed	
Priority:	Normal	
Assignee:		
Category:	Expressions	
Affected QGIS version:	master	Regression?: No
Operating System:	Windows 7, 64 bit	Easy fix?: No
Pull Request or Patch supplied:	No	Resolution: end of life
Crashes QGIS or corrupts data:	No	Copied to github as #: 19539
Description		
<p>On a spatialite layer, creating a new field with the field calculator and the expression "rand(100000, 5000000)" gives values of 100000 - 140000.</p> <p>This seems not to be a problem on linux.</p> <p>"randf()" also works properly.</p> <p>The data type of the field was Integer.</p> <p>QGIS was installed as 32bit.</p>		

History

#1 - 2014-10-04 05:25 AM - Giovanni Manghi

- Affected QGIS version changed from 2.4.0 to master

confirmed on the latest master on Windows (qgis 32 and 64 bit). Ok on Linux.

#2 - 2014-10-07 07:46 AM - Matthias Kuhn

Investigating a bit:

Visual Studio (up to 2013) has RAND_MAX defined as 0x7fff: 32767. Author's note: which seems quite stupid on a 32bit/64bit system.

<http://msdn.microsoft.com/en-us/library/2dfe3bzd.aspx>

A possibility to overcome this is to call rand() twice and bitshift/combine the values:

<http://stackoverflow.com/questions/4832975/win32-higher-random-max-value>

Or to use the <random> header file which is part of C++ 2011 and boost

<http://msdn.microsoft.com/en-us/library/bb982398.aspx>

#3 - 2017-05-01 01:08 AM - Giovanni Manghi

- Easy fix? set to No

- Regression? set to No

#4 - 2019-03-09 04:09 PM - Giovanni Manghi

- *Resolution set to end of life*
- *Status changed from Open to Closed*

End of life notice: QGIS 2.18 LTR

Source:

<http://blog.qgis.org/2019/03/09/end-of-life-notice-qgis-2-18-ltr/>