QGIS Application - Bug report #3371
Random points is terribly slow with complex features

2010-12-26 12:51 AM - Paolo Cavallini

Status:	Closed		
Priority:	Low		
Assignee:	cfarmer -		
Category:	Processing/QGIS		
Affected QGIS version:	master	**Regression?:**	
Operating System:	All	**Easy fix?:**	
Pull Request or Patch supplied:	No	**Resolution:**	fixed/implemented
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	13431

Description

If random points is applied to a complex shape (I'm taking ITA_adm0, I think from OSM), generating even a few points takes ages, while CPU goes to 100%. With 1 point it takes a few seconds, with 10 it is already very slow, with 1k points I had to force quit. This on a low power machine, 4
cores Intel(R) Atom(TM) CPU N550 @ 1.50GHz.

History

#1 - 2010-12-26 09:32 AM - Giovanni Manghi

it takes quite a long also on a much powerful machine... and it is confirmed that it seems to depend on the complexity of the input polygon.

#2 - 2011-03-05 08:15 AM - Borys Jurgiel

Carson, do you (or somebody) have an idea for any optimalization? If not, I'd close it and wait for move to the analysis lib.

#3 - 2011-03-05 09:57 AM - Paolo Cavallini

Please do not close it: it causes QGIS to freeze for ages, and users have to kill it, with potential loss of data. You can postpone to 2.0 if you wish.

#4 - 2011-03-05 10:02 AM - Borys Jurgiel

Ok. Carson, what about threading and a small STOP button (ftools-wide)?

#5 - 2011-03-05 10:31 AM - cfarmer -

Replying to [comment:4 borysiasty]:

> *Ok. Carson, what about threading and a small STOP button (ftools-wide)?*

This is a possibility, but would likely require a full re-write of the tool. So far only the geometry tools and geoprocessing tools use threading. I will have a look and see what kind of alterations are required... though it is unlikely that I'll have time to implement anything before the next release :-(

Carson

#6 - 2011-12-16 01:50 PM - Giovanni Manghi

- Target version changed from Version 1.7.0 to Version 1.7.4

#7 - 2012-04-16 06:24 AM - Paolo Cavallini

- Affected QGIS version set to master

- Crashes QGIS or corrupts data set to No

- Target version changed from Version 1.7.4 to Version 1.8.0

#8 - 2012-09-04 12:03 PM - Paolo Cavallini

- Target version changed from Version 1.8.0 to Version 2.0.0

#9 - 2014-06-28 07:38 AM - Jürgen Fischer

- Target version changed from Version 2.0.0 to Future Release - Lower Priority

#10 - 2015-11-19 06:17 AM - Médéric RIBREUX

- % Done changed from 0 to 100

- Resolution set to fixed/implemented

- Status changed from Open to Closed

- Pull Request or Patch supplied set to No

Hello, bug triage...

it takes about 40 seconds to create 1k random points on the polygon of french boundary from OSM with Processing tool "Random points inside polygons (fixed)" and about 60 seconds with fTools Random Points on an core i5-3470@3.2Ghz.

I think that the two tools have been optimized (otherwise I would have wait much more time than less than a minute) and I am closing this bug.

#11 - 2017-05-01 01:23 AM - Giovanni Manghi

The "ftools" category is being removed from the tracker, changing the category of this ticket to "Processing/QGIS" to not leave the category orphaned.