QGIS Application - Bug report #19762
QgsApplication.setMaxThreads not work appropriately

2018-09-03 08:13 PM - Francisco Raga

Status:	Closed			
Priority:	Normal			
Assignee:				
Category:	Unknown			
Affected QGIS version:	3.3(master)	**Regression?:**	No	
Operating System:		**Easy fix?:**	No	
Pull Request or Patch supplied:	No	**Resolution:**	invalid	
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	27587	

Description

qgis documentation say that if maxthreads is -1 means use all available cores.but no set any value if put -1

sample code :

from qgis.core import QgsApplication
from qgis.core import QgsApplication
QgsApplication.setMaxThreads(-1)

for solved this issue now:

from PyQt5.QtCore import QThread
from qgis.core import QgsApplication
threadcount = QThread.idealThreadCount()
QgsApplication.setMaxThreads(threadcount)

c++ code: https://qgis.org/api/qgsapplication_8cpp_source.html#l01645

History

#1 - 2018-09-25 11:23 AM - Jürgen Fischer

- Status changed from Open to Feedback

How is that different from the quoted code?

#2 - 2018-09-28 04:22 PM - Francisco Raga

Jürgen Fischer wrote:

> *How is that different from the quoted code?*

then -1 set max thread if we see the API and it just does not do anything

#3 - 2018-09-29 09:18 AM - Jürgen Fischer

Francisco Raga wrote:

> *Jürgen Fischer wrote:*
>
> > *How is that different from the quoted code?*
>
> *then -1 set max thread if we see the API and it just does not do anything*

What do you mean? If maxThreads is -1 it fetches QThread::idealThreadCount() and set that - like your code.

```
  void QgsApplication::setMaxThreads( int maxThreads )
 {
   QgsDebugMsg( QString( "maxThreads: %1" ).arg( maxThreads ) );

   // make sure value is between 1 and #cores, if not set to -1 (use #cores)
   // 0 could be used to disable any parallel processing
   if ( maxThreads < 1 || maxThreads > QThread::idealThreadCount() )
     maxThreads = -1;

   // save value
   ABISYM( mMaxThreads ) = maxThreads;

   // if -1 use #cores
   if ( maxThreads == -1 )
     maxThreads = QThread::idealThreadCount();

   // set max thread count in QThreadPool
   QThreadPool::globalInstance()->setMaxThreadCount( maxThreads );
   QgsDebugMsg( QString( "set QThreadPool max thread count to %1" ).arg( QThreadPool::globalInstance()->maxThreadCount() ) );
 }
```

#4 - 2018-09-29 12:15 PM - Francisco Raga

- File 3cores.png added

- File minus1.png added

- File 8cores.png added

Jürgen Fischer wrote:

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>
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>
> *[...]*

Yes ,I know,but it doesn't work , When I put -1 , it doesn't check the QComboBox and doesn't change the spinbox,(attach minus1.png) but my pc have 8

cores,and now I write 3 or 8 , it sets the value well . It's weird,I know

#5 - 2018-09-29 01:33 PM - Jürgen Fischer

- Resolution set to invalid

- Status changed from Feedback to Closed

Francisco Raga wrote:

> *Yes ,I know,but it doesn't work , When I put -1 , it doesn't check the QComboBox and doesn't change the spinbox,(attach minus1.png) but my pc*
> *have 8 cores,and now I write 3 or 8 , it sets the value well . It's weird,I know*

That's the intended behavior. The checkbox expresses a limit and the spinbox shows what the limit is. -1 means unlimited and so the checkbox isn't
checked. It just doesn't check whether the upper limit is also the physical limit - but effectively it's the same.

Files

3cores.png	153 KB	2018-09-29	Francisco Raga
8cores.png	155 KB	2018-09-29	Francisco Raga
minus1.png	138 KB	2018-09-29	Francisco Raga