

# QGIS Application - Bug report #19332

## QGIS 2.18.21 fails to build with SIP 4.19.11

2018-07-04 08:17 AM - Bas Couwenberg

<b>Status:</b> Closed	
<b>Priority:</b> High	
<b>Assignee:</b>	
<b>Category:</b> Python bindings / sipify	
<b>Affected QGIS version:</b> 2.18.21	<b>Regression?:</b> Yes
<b>Operating System:</b> Debian GNU/Linux (unstable)	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b>	<b>Resolution:</b>
<b>Crashes QGIS or corrupts data:</b>	<b>Copied to github as #:</b> 27160

### Description

QGIS 2.18.21 fails to build in Debian unstable where sip4 was recently updated to 4.19.11.

Applying the `sip\_mod\_dir` changes to `cmake/FindSIP.py` is not sufficient, the build still fails to find SIP headers:

```
[...]
[ 42%] Building CXX object python/CMakeFiles/python_module_qgis__analysis.dir/analysis/sip_analysispart0.cpp.o
cd /build/qgis-2.18.21+dfsg/debian/build/python && /usr/bin/c++ -DQT_CORE_LIB -DQT_GUI_LIB -DQT_NETWORK_LIB
-DQT_NO_CAST_TO_ASCII -DQT_NO_DEBUG -DQT_SQL_LIB -DQT_SVG_LIB -DQT_XML_LIB -Dprotected=public
-Dpython_module_qgis__analysis_EXP
ORTS -isystem /usr/include/qt4 -isystem /usr/include/qt4/QtSvg -isystem /usr/include/qt4/QtGui -isystem /usr/include/qt4/QtXml
-isystem /usr/include/qt4/QtSql -isystem /usr/include/qt4/QtNetwork -isystem /usr/include/qt4/QtCore -l/build/
qgis-2.18.21+dfsg/debian/build -isystem /usr/include/python2.7 -isystem /usr/include/gdal -isystem /usr/include/qwt -isystem
/build/qgis-2.18.21+dfsg/src/core/gps/qextserialport -isystem /usr/include/QtCrypto -l/build/qgis-2.18.21+dfsg/p
ython/./src/core -l/build/qgis-2.18.21+dfsg/python/./src/core/auth -l/build/qgis-2.18.21+dfsg/python/./src/core/pal
-l/build/qgis-2.18.21+dfsg/python/./src/core/composer -l/build/qgis-2.18.21+dfsg/python/./src/core/diagram -l/build/
qgis-2.18.21+dfsg/python/./src/core/effects -l/build/qgis-2.18.21+dfsg/python/./src/core/dxf
-l/build/qgis-2.18.21+dfsg/python/./src/core/geometry -l/build/qgis-2.18.21+dfsg/python/./src/core/gps
-l/build/qgis-2.18.21+dfsg/python/./
src/core/layertree -l/build/qgis-2.18.21+dfsg/python/./src/core/raster -l/build/qgis-2.18.21+dfsg/python/./src/core/symbology-ng
-l/build/qgis-2.18.21+dfsg/python/./src/gui/raster -l/build/qgis-2.18.21+dfsg/python/./src/gui/attribute
table -l/build/qgis-2.18.21+dfsg/python/./src/gui/auth -l/build/qgis-2.18.21+dfsg/python/./src/gui/editorwidgets
-l/build/qgis-2.18.21+dfsg/python/./src/gui/editorwidgets/core -l/build/qgis-2.18.21+dfsg/python/./src/gui/effects -l/bu
ild/qgis-2.18.21+dfsg/python/./src/gui/layertree -l/build/qgis-2.18.21+dfsg/python/sip_helpers
-l/build/qgis-2.18.21+dfsg/python/./src/gui -l/build/qgis-2.18.21+dfsg/python/./src/gui/symbology-ng
-l/build/qgis-2.18.21+dfsg/python/./s
rc/plugins -l/build/qgis-2.18.21+dfsg/debian/build/src/gui -l/build/qgis-2.18.21+dfsg/debian/build/src/ui
-l/build/qgis-2.18.21+dfsg/python/./src/server -l/build/qgis-2.18.21+dfsg/debian/build/src/server -l/build/qgis-2.18.21+dfsg/pytho
n/./src/analysis/vector -l/build/qgis-2.18.21+dfsg/python/./src/analysis/raster
-l/build/qgis-2.18.21+dfsg/python/./src/analysis/network -l/build/qgis-2.18.21+dfsg/python/./src/analysis/interpolation
-l/build/qgis-2.18.21+dfsg/python
/./src/analysis/openstreetmap -l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/vector
-l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/network -l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/raster
-l/build/qgis-2.18.21+dfs
g/debian/build/src/analysis/interpolation -l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/openstreetmap -g -O2
-fdebug-prefix-map=/build/qgis-2.18.21+dfsg=. -fstack-protector-strong -Wformat -Werror=format-security -Wdate-time -D_F
ORTIFY_SOURCE=2 -O2 -Wdate-time -D_FORTIFY_SOURCE=2 -DSPATIALITE_VERSION_GE_4_0_0
-DSPATIALITE_VERSION_G_4_1_1 -DSPATIALITE_HAS_INIT_EX -std=c++11 -Wall -Wextra -Wno-long-long
-Wformat-security -Wno-strict-aliasing -fPIC -fvisibility=def
ault -DCORE_EXPORT= -DGUI_EXPORT= -DPYTHON_EXPORT= -DANALYSIS_EXPORT= -DAPP_EXPORT=
```

```

-DCUSTOMWIDGETS_EXPORT= -DSERVER_EXPORT= -w -Wno-deprecated-declarations -fpermissive -w
-Wno-deprecated-declarations -fpermissive -w -Wno-deprecated-d
eclarations -fpermissive -w -Wno-deprecated-declarations -fpermissive -w -Wno-deprecated-declarations -fpermissive -o
CMakeFiles/python_module_qgis__analysis.dir/analysis/sip_analysispart0.cpp.o -c /build/qgis-2.18.21+dfsg/debian/build/p
ython/analysis/sip_analysispart0.cpp
/build/qgis-2.18.21+dfsg/debian/build/python/analysis/sip_analysispart0.cpp:7:10: fatal error: sipAPI_analysis.h: No such file or
directory
#include "sipAPI_analysis.h"
      ^~~~~~
compilation terminated.
make[4]: *** [python/CMakeFiles/python_module_qgis__analysis.dir/build.make:437:
python/CMakeFiles/python_module_qgis__analysis.dir/analysis/sip_analysispart0.cpp.o] Error 1
make[4]: Leaving directory '/build/qgis-2.18.21+dfsg/debian/build'
make[3]: *** [CMakeFiles/Makefile2:4375: python/CMakeFiles/python_module_qgis__analysis.dir/all] Error 2
make[3]: *** Waiting for unfinished jobs....
[...]
[ 42%] Building CXX object python/CMakeFiles/python_module_qgis__core.dir/core/sip_corepart0.cpp.o
cd /build/qgis-2.18.21+dfsg/debian/build/python && /usr/bin/c++ -DQT_CORE_LIB -DQT_GUI_LIB -DQT_NETWORK_LIB
-DQT_NO_CAST_TO_ASCII -DQT_NO_DEBUG -DQT_SQL_LIB -DQT_SVG_LIB -DQT_XML_LIB -Dprotected=public
-Dpython_module_qgis__core_EXPORTS -isystem /usr/include/qt4 -isystem /usr/include/qt4/QtSvg -isystem
/usr/include/qt4/QtGui -isystem /usr/include/qt4/QtXml -isystem /usr/include/qt4/QtSql -isystem /usr/include/qt4/QtNetwork
-isystem /usr/include/qt4/QtCore -l/build/qgis-2.18.21+dfsg/debian/build -isystem /usr/include/python2.7 -isystem
/usr/include/gdal -isystem /usr/include/qwt -isystem /build/qgis-2.18.21+dfsg/src/core/gps/qextserialport -isystem
/usr/include/QtCrypto -l/build/qgis-2.18.21+dfsg/python/./src/core -l/build/qgis-2.18.21+dfsg/python/./src/core/auth
-l/build/qgis-2.18.21+dfsg/python/./src/core/pal -l/build/qgis-2.18.21+dfsg/python/./src/core/composer
-l/build/qgis-2.18.21+dfsg/python/./src/core/diagram -l/build/qgis-2.18.21+dfsg/python/./src/core/effects
-l/build/qgis-2.18.21+dfsg/python/./src/core/dxf -l/build/qgis-2.18.21+dfsg/python/./src/core/geometry
-l/build/qgis-2.18.21+dfsg/python/./src/core/gps -l/build/qgis-2.18.21+dfsg/python/./src/core/layertree
-l/build/qgis-2.18.21+dfsg/python/./src/core/raster -l/build/qgis-2.18.21+dfsg/python/./src/core/symbology-ng
-l/build/qgis-2.18.21+dfsg/python/./src/gui/raster -l/build/qgis-2.18.21+dfsg/python/./src/gui/attributetable
-l/build/qgis-2.18.21+dfsg/python/./src/gui/auth -l/build/qgis-2.18.21+dfsg/python/./src/gui/editorwidgets
-l/build/qgis-2.18.21+dfsg/python/./src/gui/editorwidgets/core -l/build/qgis-2.18.21+dfsg/python/./src/gui/effects
-l/build/qgis-2.18.21+dfsg/python/./src/gui/layertree -l/build/qgis-2.18.21+dfsg/python/sip_helpers
-l/build/qgis-2.18.21+dfsg/python/./src/gui -l/build/qgis-2.18.21+dfsg/python/./src/gui/symbology-ng
-l/build/qgis-2.18.21+dfsg/python/./src/plugins -l/build/qgis-2.18.21+dfsg/debian/build/src/gui
-l/build/qgis-2.18.21+dfsg/debian/build/src/ui -l/build/qgis-2.18.21+dfsg/python/./src/server
-l/build/qgis-2.18.21+dfsg/debian/build/src/server -l/build/qgis-2.18.21+dfsg/python/./src/analysis/vector
-l/build/qgis-2.18.21+dfsg/python/./src/analysis/raster -l/build/qgis-2.18.21+dfsg/python/./src/analysis/network
-l/build/qgis-2.18.21+dfsg/python/./src/analysis/interpolation -l/build/qgis-2.18.21+dfsg/python/./src/analysis/openstreetmap
-l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/vector -l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/network
-l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/raster -l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/interpolation
-l/build/qgis-2.18.21+dfsg/debian/build/src/analysis/openstreetmap -g -O2 -fdebug-prefix-map=/build/qgis-2.18.21+dfsg=.
-fstack-protector-strong -Wformat -Werror=format-security -Wdate-time -D_FORTIFY_SOURCE=2 -O2 -Wdate-time
-D_FORTIFY_SOURCE=2 -DSPATIALITE_VERSION_GE_4_0_0 -DSPATIALITE_VERSION_G_4_1_1
-DSPATIALITE_HAS_INIT_EX -std=c++11 -Wall -Wextra -Wno-long-long -Wformat-security -Wno-strict-aliasing -fPIC
-fvisibility=default -DCORE_EXPORT= -DGUI_EXPORT= -DPYTHON_EXPORT= -DANALYSIS_EXPORT= -DAPP_EXPORT=
-DCUSTOMWIDGETS_EXPORT= -DSERVER_EXPORT= -w -Wno-deprecated-declarations -fpermissive -w
-Wno-deprecated-declarations -fpermissive -w -Wno-deprecated-declarations -fpermissive -w -Wno-deprecated-declarations
-fpermissive -w -Wno-deprecated-declarations -fpermissive -o
CMakeFiles/python_module_qgis__core.dir/core/sip_corepart0.cpp.o -c
/build/qgis-2.18.21+dfsg/debian/build/python/core/sip_corepart0.cpp
/build/qgis-2.18.21+dfsg/debian/build/python/core/sip_corepart0.cpp:7:10: fatal error: sipAPI_core.h: No such file or directory
#include "sipAPI_core.h"

```

```
~~~~~
compilation terminated.
make[4]: *** [python/CMakeFiles/python_module_qgis__core.dir/build.make:397:
python/CMakeFiles/python_module_qgis__core.dir/core/sip_corepart0.cpp.o] Error 1
make[4]: Leaving directory '/build/qgis-2.18.21+dfsg/debian/build'
make[3]: *** [CMakeFiles/Makefile2:4235: python/CMakeFiles/python_module_qgis__core.dir/all] Error 2
```

## Associated revisions

**Revision a0b6dc2d - 2018-07-05 01:45 AM - Jürgen Fischer**

fix build with SIP 4.19.11 (fixes #19332)

## History

**#1 - 2018-07-04 09:55 AM - Jürgen Fischer**

Bas Couwenberg wrote:

[?](#)

*QGIS 2.18.21 fails to build in Debian unstable where sip4 was recently updated to 4.19.11.*

[?](#)

*Applying the `sip\_mod\_dir` changes to `cmake/FindSIP.py` is not sufficient, the build still fails to find SIP headers:*

[?](#)

here sip crashes, but SUPPRESS\_SIP\_WARNINGS causes the error to be ignored and the build goes on with an incompletely generated cpp and w/o the header. Without SUPPRESS\_SIP\_WARNINGS I get:

...

```
[100%] Generating core/sip_corepart0.cpp, core/sip_corepart1.cpp, core/sip_corepart2.cpp, core/sip_corepart3.cpp
cd /home/fischer/src/qgis-2.18/debian/build/python && /usr/bin/cmake -E echo
```

```
cd /home/fischer/src/qgis-2.18/debian/build/python && /usr/bin/cmake -E touch
/home/fischer/src/qgis-2.18/debian/build/python/core/sip_corepart0.cpp /home/fischer/src/qgis-2.18/debian/build/python/core/sip_corepart1.cpp
/home/fischer/src/qgis-2.18/debian/build/python/core/sip_corepart2.cpp /home/fischer/src/qgis-2.18/debian/build/python/core/sip_corepart3.cpp
cd /home/fischer/src/qgis-2.18/debian/build/python && /usr/bin/sip -w -e -x QT5_SUPPORT -x ANDROID -x ARM -x HAVE_TOUCH -x
MOBILITY_LOCATION -x QSETINT_CONVERSION -x QSETTYPE_CONVERSION -x QVECTORINT_CONVERSION -x
CHIMERA_NULL_VARIANT_CONVERSION -x VendorID -t WS_X11 -x PyQt_NoPrintRangeBug -t Qt_4_8_6 -x Py_v3 -g -o -a
```

```
/home/fischer/src/qgis-2.18/debian/build/python/qgis.core.api -j 4 -c /home/fischer/src/qgis-2.18/debian/build/python/core -l /usr/share/sip/PyQt4
-l /home/fischer/src/qgis-2.18/python /home/fischer/src/qgis-2.18/python/core/core.sip
Segmentation fault
make[4]: *** [python/CMakeFiles/python_module_qgis__core.dir/build.make:383: python/core/sip_corepart0.cpp] Error 139
make[4]: *** Deleting file 'python/core/sip_corepart0.cpp'
...
```

## #2 - 2018-07-04 10:34 AM - Jürgen Fischer

Jürgen Fischer wrote:

```
| here sip crashes,
```

sip-dev=4.19.11+dfsg-1 also segfaults with 3.2

## #3 - 2018-07-04 11:04 AM - Jürgen Fischer

Apparently caused by an unset module name (QGIS doesn't use *newsip -n*) - sip doesn't have a sane default, leaves sipName=NULL and crashes here in sipgen/gencode.c:

```
2775 prcode(fp,
2776 " /* Get the SIP module's API. */\n"
2777 "#if PY_VERSION_HEX >= 0x02050000\n"
2778 " sip_sipmod = PyImport_ImportModule(\"%s\");\n"
2779 "#else\n"
2780 " , sipName);
```

## #4 - 2018-07-05 01:44 AM - Jürgen Fischer

- % Done changed from 0 to 100  
- Status changed from Open to Closed

Applied in changeset commit:qgis|a0b6dc2d0dc1eda466ad9caae7e4fdb70b9892d8.

## #5 - 2018-07-09 07:34 AM - Bas Couwenberg

FYI: sip4 (4.19.12+dfsg-1) fixed this upstream:

```
| - New upstream release.
| - Fixes segfault when -n option is not specified (closes: #903263).
```