

Quassel IRC - Bug #1401

CMake HAVE_SSL test failing due to missing -fPIC

03/29/2016 06:15 AM - Fylwind

Status:	New	Start date:	03/29/2016
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	Build System	Estimated time:	0.00 hour
Target version:		OS:	Linux
Version:	0.10.0		

Description

HAVE_SSL test seems to be failing on my system when -DUSE_QT5=ON is set (Arch Linux 4.4.5-1). CMake is trying to compile the test without -fPIC but the library was built with -reduce-relocations.

The rest of the software builds just fine, but this particular test fails so it causes SSL to be disabled by default, unless forced on by HAVE_SSL.

Quassel version is 0.12.3, but the dropdown menu of the bugtracker doesn't have that.

Error log:

```
Performing C++ SOURCE FILE Test HAVE_SSL failed with the following output:
Change Dir: /tmp/foo/CMakeFiles/CMakeTmp

Run Build Command:"/usr/bin/make" "cmTC_ae013/fast"
/usr/bin/make -f CMakeFiles/cmTC_ae013.dir/build.make CMakeFiles/cmTC_ae013.dir/build
make[1]: Entering directory '/tmp/foo/CMakeFiles/CMakeTmp'
Building CXX object CMakeFiles/cmTC_ae013.dir/src.cxx.o
/usr/bin/c++ -I/usr/include/qt -I/usr/include/qt/QtCore -I/usr/lib/qt/mkspecs/linux-g++ -std=c
++11 -Wall -Wextra -Wnon-virtual-dtor -fno-strict-aliasing -Wundef -Wcast-align -Wpointer-arith -W
format-security -fno-check-new -fno-common -Woverloaded-virtual -DHAVE_SSL -o CMakeFiles/cmTC_a
e013.dir/src.cxx.o -c /tmp/foo/CMakeFiles/CMakeTmp/src.cxx
In file included from /tmp/foo/CMakeFiles/CMakeTmp/src.cxx:2:0:
/usr/include/qt/QtCore/qglobal.h:1090:4: error: #error "You must build your code with position ind
ependent code if Qt was built with -reduce-relocations. " "Compile your code with -fPIC (-fPIE is
not enough). "
# error "You must build your code with position independent code if Qt was built with -reduce-re
locations. "\
^
CMakeFiles/cmTC_ae013.dir/build.make:65: recipe for target 'CMakeFiles/cmTC_ae013.dir/src.cxx.o' f
ailed
make[1]: *** [CMakeFiles/cmTC_ae013.dir/src.cxx.o] Error 1
make[1]: Leaving directory '/tmp/foo/CMakeFiles/CMakeTmp'
Makefile:126: recipe for target 'cmTC_ae013/fast' failed
make: *** [cmTC_ae013/fast] Error 2
```

Source file was:

```
#include "qglobal.h"
#ifdef QT_NO_SSL
# error "No SSL support"
#endif
int main() {}
```

History

#1 - 04/24/2016 10:10 PM - oxc

I tried moving the code block which sets CMAKE_POSITION_INDEPENDENT_CODE above the check, which indeed causes -fPIE to be added, but according to Qt that is not sufficient:

```
"You must build your code with position independent code if Qt was built with -reduce-relocations. " "Compile your code with -fPIC (-fPIE is not
enough)."
```

I could not figure out how to cause -fPIC to get added instead.