Quassel IRC - Bug #1544

Quassel does not compile with qt 5.14.0

12/24/2019 04:47 PM - buzo

Status:	Confirmed	**Start date:**	12/24/2019
Priority:	High	**Due date:**	
Assignee:		**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:	0.14.0		
Version:	0.13.0	**OS:**	Any

Description

Compiling Quassel 0.13.1 with qt 5.14.0 gives compilation errors:

```
In file included from /usr/include/qt/QtCore/QDataStream:1,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/syncableobject.h:24,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.h:25,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.cpp:21:
/usr/include/qt/QtCore/qdatastream.h:389:1: note: candidate: 'typename std::enable_if<std::is_enum
<_Tp>::value, QDataStream&>::type& operator<<(QDataStream&, const T&) [with T = DccConfig::PortSel
ectionMode; typename std::enable_if<std::is_enum<_Tp>::value, QDataStream&>::type = QDataStream&]'
  389 | operator<<(QDataStream &s, const T &t)
      | ^~~~~~~~
In file included from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.cpp:25:
/build/quassel-core-small/src/quassel-0.13.1/src/common/types.h:152:14: note: candidate: 'QDataStr
eam& operator<<(QDataStream&, T) [with T = DccConfig::PortSelectionMode; <template-parameter-1-2>
= void]'
  152 | QDataStream &operator<<(QDataStream &out, T value) {
      |              ^~~~~~~~
In file included from /usr/include/qt/QtCore/qobject.h:54,
                 from /usr/include/qt/QtCore/qiodevice.h:45,
                 from /usr/include/qt/QtNetwork/qabstractsocket.h:44,
                 from /usr/include/qt/QtNetwork/qhostaddress.h:48,
                 from /usr/include/qt/QtNetwork/QHostAddress:1,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.h:23,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.cpp:21:
/usr/include/qt/QtCore/qmetatype.h: In instantiation of 'static void QtMetaTypePrivate::QMetaTypeF
unctionHelper<T, Accepted>::Load(QDataStream&, void*) [with T = DccConfig::PortSelectionMode; bool
 Accepted = true]':
/usr/include/qt/QtCore/qmetatype.h:1802:39:   required from 'void qRegisterMetaTypeStreamOperators
(const char*, T*) [with T = DccConfig::PortSelectionMode]'
/build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.cpp:34:91:   required from here
/usr/include/qt/QtCore/qmetatype.h:823:16: error: ambiguous overload for 'operator>>' (operand typ
es are 'QDataStream' and 'DccConfig::PortSelectionMode')
  823 |         stream >> *static_cast<T*>(t);
      |         ~~~~~~~^~~~~~~~~~~~~~~~~~~~~
In file included from /usr/include/qt/QtCore/QDataStream:1,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/syncableobject.h:24,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.h:25,
                 from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.cpp:21:
/usr/include/qt/QtCore/qdatastream.h:394:1: note: candidate: 'typename std::enable_if<std::is_enum
<_Tp>::value, QDataStream&>::type& operator>>(QDataStream&, T&) [with T = DccConfig::PortSelection
Mode; typename std::enable_if<std::is_enum<_Tp>::value, QDataStream&>::type = QDataStream&]'
  394 | operator>>(QDataStream &s, T &t)
      | ^~~~~~~~
In file included from /build/quassel-core-small/src/quassel-0.13.1/src/common/dccconfig.cpp:25:
/build/quassel-core-small/src/quassel-0.13.1/src/common/types.h:166:14: note: candidate: 'QDataStr
eam& operator>>(QDataStream&, T&) [with T = DccConfig::PortSelectionMode; <template-parameter-1-2>
 = void]'
  166 | QDataStream &operator>>(QDataStream &in, T &value) {
      |              ^~~~~~~~
[82/172] Building CXX object src/common/CMakeFiles/mod_common.dir/mod_common_autogen/mocs_compilat
ion.cpp.o
```

```
[83/172] Building CXX object src/common/CMakeFiles/mod_common.dir/ctcpevent.cpp.o
[84/172] Building CXX object src/common/CMakeFiles/mod_common.dir/coreinfo.cpp.o
[85/172] Building CXX object src/common/CMakeFiles/mod_common.dir/event.cpp.o
[86/172] Building CXX object src/common/CMakeFiles/mod_common.dir/eventmanager.cpp.o
ninja: build stopped: subcommand failed.
==> ERROR: A failure occurred in build().
```

History

#1 - 01/04/2020 02:14 PM - Anonymous

There's a similar issue in musescore:
https://musescore.org/en/node/299162

They fixed it with a commit:
https://github.com/musescore/MuseScore/pull/5583
" Specializes template routines.

Qt 5.14 introduces serialisation/deserialisation for enum classes,
this results in ambiguous templates between qdatastream.h and preferences.h.
we specialize everything to workaround this."

#2 - 01/07/2020 11:42 PM - rex4539

https://github.com/quassel/quassel/pull/518

#3 - 01/08/2020 05:35 PM - buzo

Thanks. When can I expect a new Quassel release containing these changes?

#4 - 04/11/2020 12:45 PM - buzo

The package built from the current Github version works fine on Arch Linux: https://aur.archlinux.org/packages/quassel-core-small-git/

Building version 0.13.1 still fails: https://aur.archlinux.org/packages/quassel-core-small/

Main bug report on Arch Linux: https://bugs.archlinux.org/task/65085

#5 - 06/20/2020 11:58 PM - digitalcircuit

We're hoping to have a 0.14-rc1 in the upcoming weeks, so this will hopefully be addressed soon. The Quassel CI was also updated to test against Debian testing/etc (https://github.com/quassel/quassel/commit/1193d9d1f3f7c1c26e2c659b137046a31fe43bb4) to catch this sooner in the future.

Thanks for your patience!

#6 - 06/21/2020 12:04 AM - digitalcircuit

- Status changed from New to Confirmed

- Target version set to 0.14.0

#7 - 08/01/2020 02:27 PM - Morbius

Thanks for fixing this issue. About five months ago I opened a related MacPorts ticket , and I am looking forward to the next Quassel release.

#8 - 04/10/2021 06:57 PM - buzo

By the way, qt 6 is out since a few months …

#9 - 09/23/2022 01:41 PM - Christophermorgan

This package does not build since Arch switched to qt 5.14.0, see upsteam bug #1544. They have fixed this on Github, but won't release a new version soon apparently. As a workaround, I have made the AUR package quassel-core-small-git, which seems to work fine.