

## Quassel IRC - Bug #1583

### Regression in "Mouse wheel changes selected chat" causing crash

07/12/2020 10:47 PM - oprypin

<b>Status:</b>	Resolved	<b>Start date:</b>	07/12/2020
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	digitalcircuit	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	0.14.0	<b>OS:</b>	Any
<b>Version:</b>	0.13.0		

**Description**

On latest master (not in 0.13.1 release), if "Mouse wheel changes selected chat" is enabled, scrolling over the chat list in many situations leads to a crash. One of such situations is if you just closed a chat room that was active.

Video of repro: <https://i.imgur.com/2iPiyIn.mp4>  
quassel-scroll.webm

<https://github.com/quassel/quassel/commit/a453c963cf1872e14c83adf1d40a31821c166805>  
**is the first bad commit**

Reproduce it:

-   
make  
printf "[ItemViews]\nMouseWheelChangesBuffer=true" >quasselclient.conf  
./quassel --configdir=.
- Accept all default setup
- ~~Enable Settings > Interface > Chat & Nick Lists > Mouse wheel changes selected chat~~  
^(already ensured by the command above)
- /query yourself
- Right click on yourself, Hide Chat(s) Permanently
- Hover over the chat list, scroll the mouse wheel  
**crash**

#### Associated revisions

##### Revision 47b54cd3 - 10/04/2020 06:18 PM - Shane Synan

uisupport: Fix invalid model segfault from index

The Qt implementation of `QModelIndex::child(...)` automatically checks if the `QAbstractItemModel` is valid, and if not, it returns an invalid `QModelIndex`. Quassel relied upon this in several places, checking if the `QModelIndex` was valid without checking the `QAbstractItemModel` itself, which introduced crashes upon migrating away from the deprecated `QModelIndex::child(...)` function.

Specifically...

```
#if QT_DEPRECATED_SINCE(5, 8)
inline QModelIndex QModelIndex::child(int arow, int acolumn) const { return m ? m->index(arow, acolumn, *this) : QModelIndex(); }
#endif
```

To address this, check the `QModelIndex`'s model to verify it's valid wherever Quassel had previously relied upon a check to `QModelIndex::isValid()` to ensure validity. Places without a validity check aren't adjusted under the assumption it won't ever be an issue.

Follow-up to the Qt deprecation fixes in

a453c963cf1872e14c83adf1d40a31821c166805

(It's unfortunate that Qt's deprecation warning mentioned this, but only in the detailed documentation and not as clearly as expected: <https://doc.qt.io/qt-5/qmodelindex-obsolete.html> )

Special thanks to oprypin for reporting this with a detailed, reproducible test case!

Fixes #1583

## History

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### #1 - 07/12/2020 11:16 PM - digitalcircuit

- Assignee set to digitalcircuit
- Target version set to 0.14.0

### #2 - 07/17/2020 10:10 PM - digitalcircuit

This has been [fixed in a pull request, client: Fix crash on switching buffers with no buffer selected #544](#) . Once merged, this issue should automatically be closed.

If you don't mind re-compiling with the above patch, would you confirm that this issue is fixed for you as well? Optionally, if you have a GitHub account, you can comment there as well.

### #3 - 07/29/2020 08:30 AM - digitalcircuit

- Status changed from New to Confirmed

### #4 - 10/04/2020 06:18 PM - Anonymous

- Status changed from Confirmed to Resolved
- % Done changed from 0 to 100

Applied in changeset [quassel|47b54cd3ad35201ff2ab9ef6bfdba83fc086558d](#).

## Files

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quassel-scroll.webm	1.22 MB	07/12/2020	oprypin
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