

Test Results

Test Number	Source code configuration ("comment" means "can't be executed")		Number of BP hits and trigger sources of octave_qscintilla::focusInEvent (extract from breakpoint / backtrace at line 1048) passed failed = Test Results from the GUI Handling Tests	
	SetFocusProxy () file-editor-tab.cc:266	m_edit_area->setFocus file-editor-tab.cc:954	"Switching Tab" - Test	"Close Tab" - Test
1	uncomment	uncomment	Hit #1: other source No #2 trig GUI test passed	No halt GUI test failed
2	comment	uncomment	Hit #1: other source Hit #2: file_editor_tab::set_focus GUI test passed	Hit #1: file_editor_tab::set_focus Hit #2: file_editor_tab::set_focus GUI test passed
3	uncomment	comment	Hit #1: other source No #2 trig GUI test passed	No halt GUI test failed
4	comment	comment	Hit #1: other source No #2 trig GUI test failed	No halt GUI test failed

GDB indicates that "focusInEvent" is executed two times. Both times triggered by "m_edit_area->setFocus"

In the GUI the "Close Tab" handling test is passed (i.e. the cursor is transferred und keyboard input is possible)

"Close Tab" - Handling Test Description

- 1.) Open file A.m and B.m
- 2.) Set cursor to line 3 in A.m and line 2 in B.m
- 3.) B.m must be the active tab
- 4.) Close B.m by clicking the cross in the tab bar
- 5.) Test passed if B.m gets closed & A.m becomes active & the cursor is set to line 3 & A.m responds to keyboard input. The test fails in all other cases. For example if A.m blocks keyboard, has no cursor etc.

"Switching Tab" - Handling Test Description

- Step 1.) up to 3.) same as "Close Tab" - Testprocedure
- 4.) With the mouse click on the A.m Tab
- 5.) Test passed if A.m becomes active & the cursor is set to line 3 & A.m responds to keyboard input. The test fails in all other cases. For example if A.m blocks keyboard, has no cursor etc.

Test-Environment

```
hg id
493d46a02edc+ @
```

```
rpm -q --whatprovides /lib64/libQt5Widgets.so.5
qt5-qtbase-gui-5.13.2-2.fc31.x86_64
Name      : qt5-qtbase-gui
Version   : 5.13.2
Release   : 2.fc31
Vendor    : Fedora Project
```

The backtrace is created with the following script. In order to avoid notify events when switching between octave GUI and the console, gdb automatically continues after hitting the breakpoint.

```
gdb -p `pidof lt-octave-gui`

set backtrace limit 50
set height unlimited
break octave-qscintilla.cc:1048
commands
backtrace
cont
end
cont
```

Trigger source is identified in the backtrace. For example in “Test #2 / Close Tab “ octave_qscintilla::focusInEvent is triggered via -> emit (fetab_set_focus) -> void file_editor_tab::set_focus (const QWidget *ID).

“other source” means that no “file_editor_tab::set_focus” line can be found in the backtrace.

```
Thread 1 "lt-octave-gui" hit Breakpoint 1, octave:octave_qscintilla::focusInEvent (this=0x18b95f0, focusEvent=0x7ffd2ab767e0) at libgui/src/m-editor/octave-qsci
1048 emit status_update (isRedoAvailable (), isRedoAvailable ());
#0 octave:octave_qscintilla::focusInEvent(QFocusEvent*) (this=0x18b95f0, focusEvent=0x7ffd2ab767e0) at libgui/src/m-editor/octave-qscintilla.cc:1048
#1 0x00007f15601d7229 in QWidget::event(QEvent*) () at /lib64/libQt5Widgets.so.5
#2 0x00007f1560285f62 in QFrame::event(QEvent*) () at /lib64/libQt5Widgets.so.5
#3 0x00007f1560288c71 in QAbstractScrollArea::event(QEvent*) () at /lib64/libQt5Widgets.so.5
#4 0x00007f1560193ab6 in QApplicationPrivate::notify_helper(QObject*, QEvent*) () at /lib64/libQt5Widgets.so.5
#5 0x00007f156019d150 in QApplication::notify(QObject*, QEvent*) () at /lib64/libQt5Widgets.so.5
#6 0x00007f156273dc6b in octave:octave_qapplication::notify(QObject*, QEvent*) (this=0x76e300, receiver=0x18b95f0, ev=0x7ffd2ab767e0) at libgui/src/octave-qobj
#7 0x00007f155f81f3e8 in QCoreApplication::notifyInternal2(QObject*, QEvent*) () at /lib64/libQt5Core.so.5
#8 0x00007f156019aad9 in QApplicationPrivate::setFocusWidget(QWidget*, Qt::FocusReason) () at /lib64/libQt5Widgets.so.5
#9 0x00007f15601d10ef in QWidget::setFocus(Qt::FocusReason) () at /lib64/libQt5Widgets.so.5
#10 0x00007f156263f833 in QWidget::setFocus() (this=0x18b95f0) at /usr/include/qt3/qtwidgets/qwidget.h:413
#11 0x00007f15626d3d32 in octave:file_editor_tab::set_focus(QWidget const*) (this=0x19bc000, ID=0x19bc000) at libgui/src/m-editor/file-editor-tab.cc:954
#12 0x00007f15627c782c in octave:file_editor::set_focus(QWidget const*) (this=0x19bc000, ID=0x19bc000) at libgui/src/m-editor/file-editor.cc:104
#13 0x00007f155f84991b in QObject::activate(QObject*, int, int, void**) () at /lib64/libQt5Core.so.5
#14 0x00007f15627ce4a3 in octave:file_editor::fetab_set_focus(QWidget const*) (this=0xbcad20, _t1=0x19bc000) at libgui/src/m-editor/moc-file-editor.cc:1439
#15 0x00007f15626eb12c in octave:file_editor::activate() (this=0xbcad20) at libgui/src/m-editor/file-editor.cc:345
#16 0x00007f15626ed154 in octave:file_editor::handle_tab_remove_request() (this=0xbcad20) at libgui/src/m-editor/file-editor.cc:945
#17 0x00007f15627cb7a5 in octave:file_editor::qt_static_metacall(QObject*, QMetaObject::Call, int, void**) (_o=0xbcad20, _c=QMetaObject::InvokeMetaMethod, _id=1
#18 0x00007f155f84991b in QObject::activate(QObject*, int, int, void**) () at /lib64/libQt5Core.so.5
#19 0x00007f15627c9735 in octave:file_editor_tab::tab_remove_request() (this=0x191ec80) at libgui/src/m-editor/moc-file-editor-tab.cc:956
#20 0x00007f1562640422 in octave:file_editor_tab::closeEvent(QCloseEvent*) (this=0x191ec80, e=0x7ffd2ab774f0) at libgui/src/m-editor/file-editor-tab.cc:321
#21 0x00007f15601d6c7e in QWidget::event(QEvent*) () at /lib64/libQt5Widgets.so.5
#22 0x00007f1560193ab6 in QApplicationPrivate::notify_helper(QObject*, QEvent*) () at /lib64/libQt5Widgets.so.5
#23 0x00007f156019d150 in QApplication::notify(QObject*, QEvent*) () at /lib64/libQt5Widgets.so.5
#24 0x00007f156273dc6b in octave:octave_qapplication::notify(QObject*, QEvent*) (this=0x76e300, receiver=0x191ec80, ev=0x7ffd2ab774f0) at libgui/src/octave-qobj
#25 0x00007f155f81f3e8 in QCoreApplication::notifyInternal2(QObject*, QEvent*) () at /lib64/libQt5Core.so.5
```