

General and Desktop (/category/10/general-and-desktop) / Signal/Slot unresolved overloaded function type QSpinBox  (/topic/70868.rss)



/user/pauledd (user/pauledd) 3 Sep 2016, 17:11 (/post/345593) 

Hi there,

Today I stumbled upon an error that comes from connecting a QSpinBox valueChanged Signal to a void member function:

the connect statement:

```
connect(spinBoxUtc, &QSpinBox::valueChanged, this, &MainWindow::fillData);
```

and this is the private function fillData():

```
void MainWindow::fillData()
{
    SendDataToPol dataToPol;
    dataToPol.timeSelection = comboBoxTime->currentText();
    dataToPol.timezone = spinBoxUtc->value();
    dataToPol.longitude = doubleSpinBoxLong->value();
    dataToPol.polarisRa = timeEditPolarisRa->time();
    emit sendData(dataToPol);
}
```

On compiling I get this error:

FORUM UPDATED



This forum has just been updated to the latest version. Click here to refresh the page.

```
connect(spinBoxUtc, &QSpinBox::valueChanged, this, &MainWindow::fillData);
^
In file included from /usr/include/qt5/QtWidgets/qwidget.h:38:0,
                 from /usr/include/qt5/QtWidgets/QWidget:1,
                 from ../pat_tab/mainwindow.h:4,
                 from ../pat_tab/mainwindow.cpp:1:
/usr/include/qt5/QtCore/qobject.h:254:13: note: template<class Func1, class Func2> static typename QtPrivate::QEnableIf<(((int)(Qt
connect(const typename QtPrivate::FunctionPointer<Func1>::Object *sender, Func1 signal, const QObject *context, Func2
^
/usr/include/qt5/QtCore/qobject.h:254:13: note:   template argument deduction/substitution failed:
../pat_tab/mainwindow.cpp:99:74: note:   couldn't deduce template parameter 'Func1'
connect(spinBoxUtc, &QSpinBox::valueChanged, this, &MainWindow::fillData);
^
```

Then I googled for a solution and found out to replace the connect statement with this which seems to work:

```
connect(spinBoxUtc, static_cast<void(QSpinBox::*)(int)>(&QSpinBox::valueChanged), this, &MainWindow::fillData);
```


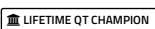

Can someone explain what this does and why all other connect statements in my code (see below) are working exept those that use a "valueChanged" ?

```
...
connect(comboBoxTime, &QComboBox::currentTextChanged, this, &MainWindow::fillData);
connect(timeEditPolarisRa, &QTimeEdit::timeChanged, this, &MainWindow::fillData);
connect(dateTimeEditCurrentTime, &QDateTimeEdit::dateTimeChanged, this, &MainWindow::fillData);
...
```

^0v⋮

SIGNAL & SLOT 74 (/tags/signal & slot) QSPINBOX 8 (/tags/qspinbox) CONNECT 33 (/tags/connect) ERROR 88 (/tags/error) OVERLOADED 1 (/tags/overloaded)

Log in to reply (/login)

 (/user/sgaist)Sgaist (/user/sgaist)  (/groups/lifetime-qt-champion) 3 Sep 2016, 17:45 (/post/345598) 

Hi,  
~~Do you have several fillData methods?~~  
Mis-read...


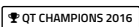
*Need programmers to hire ? [www.edeltech.ch](http://www.edeltech.ch) (<http://www.edeltech.ch>)*

^0v⋮

 (/user/nischu)nischu (/user/nischu) 3 Sep 2016, 17:45 (/post/345599) 

The 'connect' needs at argument 2 and 4 a function pointer.  
Here in your compiler message you see some  
note: no known conversion for argument 2 from '<unresolved overloaded function type>  
That means argument 2 is overloaded, so that the compiler needs the exact signature for determining the exact method. So you give it this hint with your static cast.  
  
The signature of a pointer to a method is: `return_type (class_name::*)(argument_type1, ...)`  
The points of matter are the argument's types, that's needed for determining the right method.  
  
If your methods are not overloaded, you can omit the cast, due this methods are unambiguous.

^1v⋮

 (/user/kshegunov)kshegunov (/user/kshegunov)  (/groups/qt-champions-2016) 3 Sep 2016, 17:50 (/post/345600)


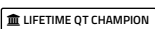
You can also use (Qt 5.7+):

```
qOverload<int>(&QSpinBox::valueChanged)
```

instead of the static cast.

*Even if we accept, as the basic tenet of true democracy, that one moron is equal to one genius, is it necessary to go a further step and hold that two morons are better than one genius?*

^1v⋮

 (/user/sgaist)Sgaist (/user/sgaist)  (/groups/lifetime-qt-champion) 3 Sep 2016, 17:50 (/post/345601)

static\_cast<void (QSpinBox::\*)(int)>(&QSpinBox::valueChanged) is what you need. Or the QString version. Which one doesn't matter since you don't use the argument.

Starting with Qt 5.7 you can use qOverload (<http://doc.qt.io/qt-5/qtglobal.html#qOverload>).

*Need programmers to hire ? [www.edeltech.ch](http://www.edeltech.ch) (<http://www.edeltech.ch>)*