Receiving an SMS in Qt

This code snippet demonstrates how to listen for incoming SMS messages in Qt. The snippet uses the Qt Mobility Messaging module to show the received message to the user and then to remove it from the **inbox** folder.

Qt project file

Link the Messaging Qt Mobility module into project.

```
CONFIG += mobility
MOBILITY = messaging
```

Using Messaging requires the ReadDeviceData and WriteDeviceData capabilities from Open Signed Online. For more information, see the User guide: Symbian Signed.

```
symbian {
TARGET.CAPABILITY = ReadUserData \
    WriteUserData \
    ReadDeviceData \
    WriteDeviceData
}
```

Header

```
#include <QMainWindow>
#include <QPointer>
#include <QMessageBox>

#include <qmessage.h>
#include <qmessagemanager.h>

// QtMobility namespace
QTM_USE_NAMESPACE

class qtSnippets : public QMainWindow
{
    Q_OBJECT

public:
    qtSnippets(QWidget *parent = 0);

private slots:
    void processIncomingSMS();
    // Listening signals from QMessageManager
    void messageAdded(const QMessageId&,
                      const QMessageManager::NotificationFilterIdSet&);

private:
    QPointer<QMessageManager> m_manager;
    QMessageManager::NotificationFilterIdSet m_notifFilterSet;
    QMessageId m_messageId;
};
```


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Source

```
#include <QTimer>

qtSnippets::qtSnippets(QWidget *parent)
    : QMainWindow(parent)
{
    // Manager for listening messages
    m_manager = new QMessageManager(this);

    // Listen new added messages
    connect(m_manager, SIGNAL(messageAdded(const QMessageId&,
                              const QMessageManager::NotificationFilterIdSet&)),
            this, SLOT(messageAdded(const QMessageId&,
                       const QMessageManager::NotificationFilterIdSet&)));

    // Create 2 filers set for filtering messages
    // - SMS filter
    // - InboxFolder filter
    m_notifFilterSet.insert(m_manager->registerNotificationFilter(
        QMessageFilter::byType(QMessage::Sms) &
        QMessageFilter::byStandardFolder(QMessage::InboxFolder)));
}

void qtSnippets::messageAdded(const QMessageId& id,
    const QMessageManager::NotificationFilterIdSet& matchingFilterIds)
{
    // Message added...
    if (matchingFilterIds.contains(m_notifFilterSet)) {
        // ...and it fits into our filters, lets process it
        m_messageId = id;
        QTimer::singleShot(0, this, SLOT(processIncomingSMS()));
    }
}

void qtSnippets::processIncomingSMS()
{
    QMessage message = m_manager->message(m_messageId);
    // SMS message body
    QString messageString = message.textContent();
    // Show message to user
    QMessageBox::information(this, "Incoming SMS", messageString);
    // Remove message from inbox
    m_manager->removeMessage(m_messageId);
}
```

Postconditions

An SMS message has been received and shown to the user, and then removed from the **inbox** folder.

See also

- Setting up Qt Mobility
- http://doc.qt.nokia.com/qtmobility-1.0/messaging.html
- User guide: Symbian Signed

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- http://www.symbiansigned.com/

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