

Qt5 & Qt Multimedia

Jens Weller
C++ User Group Belgium
12.6.13

About me



- C++ since '98
- C++ Freelancer '07
- C++ UG NRW '11
- Meeting C++



Qt Overview



- License
 - LGPL
 - GPL
 - Commercial (digia)
- C++ Application Framework
 - Desktop
 - Mobile
 - Backend
- Signal/Slot Event System

Qt5 Overview



- Qt Modules
 - Qt Core
 - Qt GUI
 - Qt Multimedia
 - Qt Network
 - Qt SQL
 - Qt QML
 - 11 Modules in total
 - 12 Add-ons

Qt5 Overview



- Qt5 "Facts"
 - More default dependencies
 - Larger than Qt4.8 in deployment
 - High compatibility to Qt4.8

Qt5 Overview

- QML
 - New UI Technique
 - Leveraging Javascript
 - Mobile & Desktop
- Qt GUI
 - Widget based UI
 - Desktop
- Qt5 supports C++11
- Slots can be lambdas



QObject

- Baseclass to most Qt classes
- MOC Preprocessor
 - Q_OBJECT
 - SIGNAL/SLOT
 - Meta Object Model



Qt5 Multimedia Framework

- Audio
- Video
- Camera
- Radio
- MP3 playback
- Video recording

Music Playback

- QMediaPlayer
- QMediaPlaylist

Video Recording

- Meeting C++ 2012
 - Poor quality in recordings
 - Audio issues
- Video Recording Software
 - Rather complex
 - Or too simple
 - No control

Qt5 Multimedia – Video recording

- Video recording:
 - QCamera
 - QMediaRecorder
 - QCameraViewer (UI)
- Audio Recording
 - QAudioRecorder
- Video playback
 - QMediaPlayer
 - QMediaPlaylist
 - QVideoWidget

QCamera

- `camera = new QCamera(this);`
- `ui->cameraViewer->setCamera(camera);`
- ...
- `camera->`
`setCaptureMode(QCamera::CaptureVideo);`
- `camera->start();`

