

# How to Set Up QtCreator for Cross-Compilation with CMake in 5 Minutes

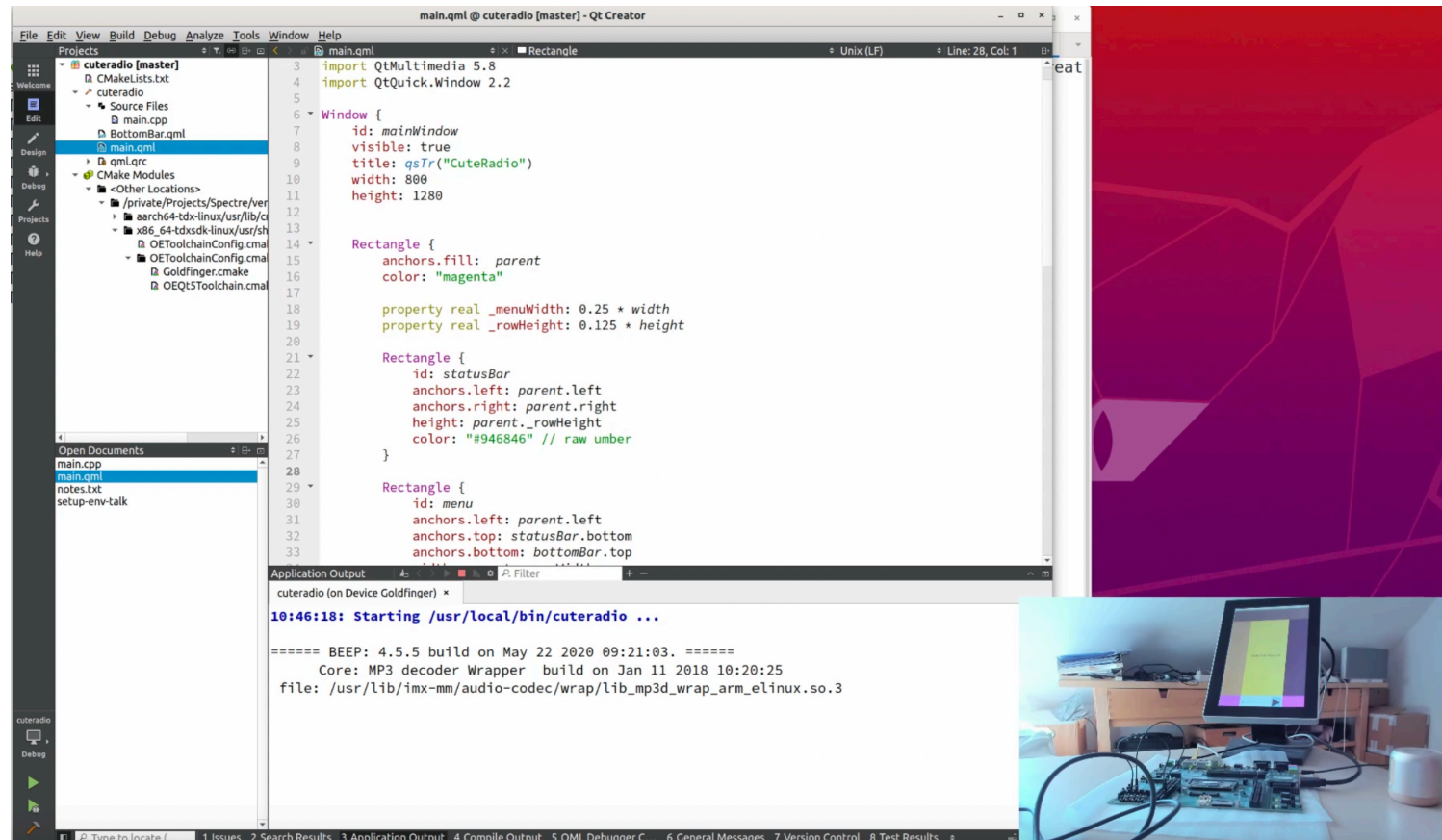
Burkhard Stubert

As a solo consultant, I help teams succeed with Qt embedded systems

# Outline – QtCreator Setup in 5 Minutes

- The 5 Minute Challenge
- CMake Toolchain Files
- QtCreator Configuration Files

# The 5 Minute Challenge

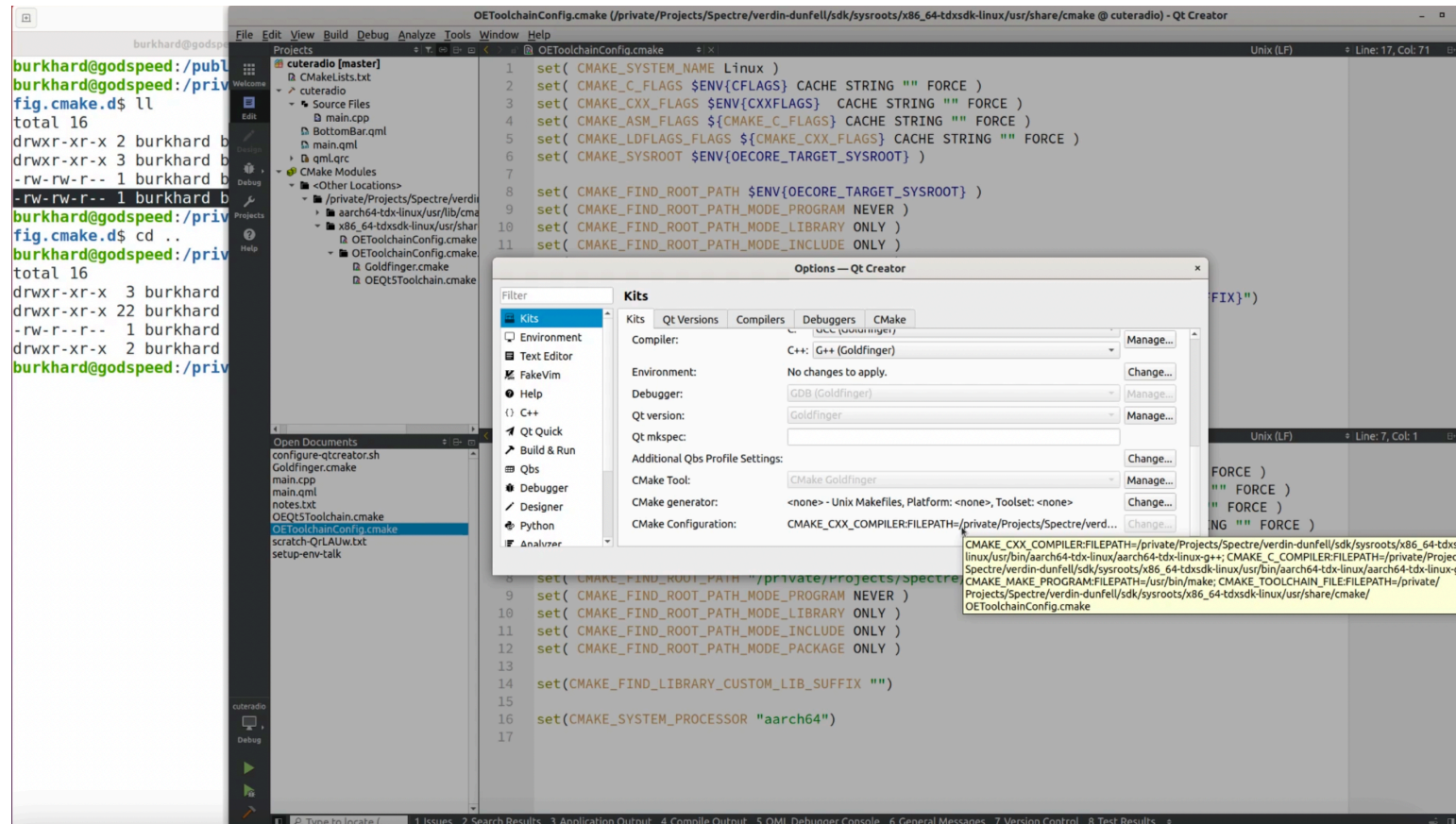


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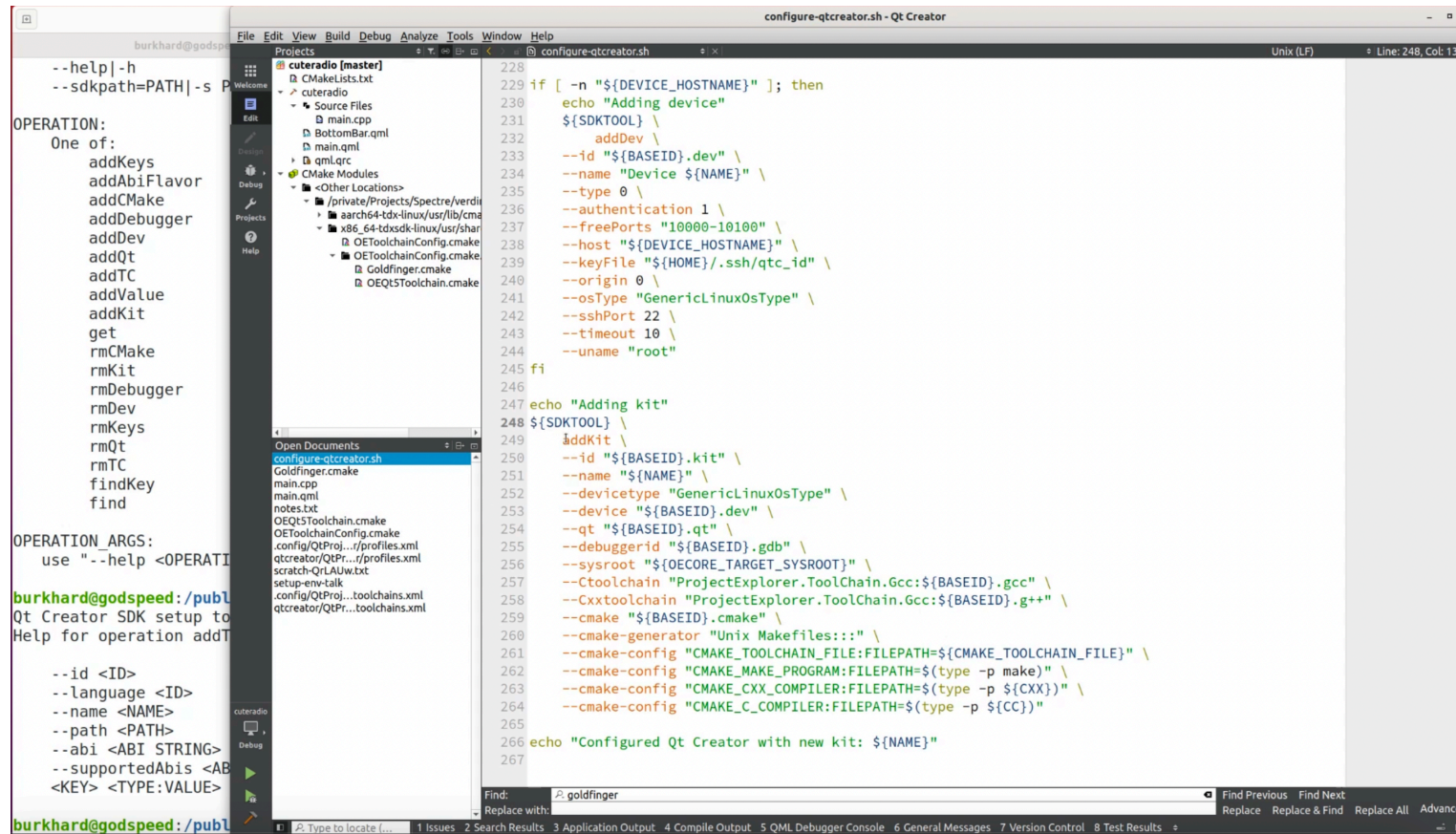
# CMake Toolchain Files



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# QtCreator Configuration Files



```
--help|-h
--sdkpath=PATH|-s PATH

OPERATION:
One of:
  addKeys
  addAbiFlavor
  addCMake
  addDebugger
  addDev
  addQt
  addTC
  addValue
  addKit
  get
  rmCMake
  rmKit
  rmDebugger
  rmDev
  rmKeys
  rmQt
  rmTC
  findKey
  find

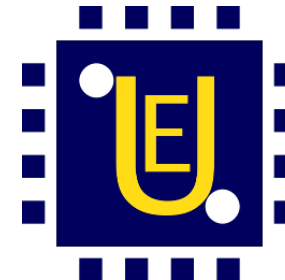
OPERATION_ARGS:
  use "--help <OPERATION>"

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Qt Creator SDK setup to
Help for operation addT

--id <ID>
--language <ID>
--name <NAME>
--path <PATH>
--abi <ABI STRING>
--supportedAbis <ABI
<KEY> <TYPE:VALUE>

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```

```
228
229 if [ -n "${DEVICE_HOSTNAME}" ]; then
230   echo "Adding device"
231   ${SDKTOOL} \
232     addDev \
233     --id "${BASEID}.dev" \
234     --name "Device ${NAME}" \
235     --type 0 \
236     --authentication 1 \
237     --freePorts "10000-10100" \
238     --host "${DEVICE_HOSTNAME}" \
239     --keyFile "${HOME}/.ssh/qtcreator_id" \
240     --origin 0 \
241     --osType "GenericLinuxOsType" \
242     --sshPort 22 \
243     --timeout 10 \
244     --uname "root"
245 fi
246
247 echo "Adding kit"
248 ${SDKTOOL} \
249   addKit \
250   --id "${BASEID}.kit" \
251   --name "${NAME}" \
252   --devicetype "GenericLinuxOsType" \
253   --device "${BASEID}.dev" \
254   --qt "${BASEID}.qt" \
255   --debuggerid "${BASEID}.gdb" \
256   --sysroot "${OECORE_TARGET_SYSROOT}" \
257   --Ctoolchain "ProjectExplorer.ToolChain.Gcc:${BASEID}.gcc" \
258   --Cxxtoolchain "ProjectExplorer.ToolChain.Gcc:${BASEID}.g++" \
259   --cmake "${BASEID}.cmake" \
260   --cmake-generator "Unix Makefiles::" \
261   --cmake-config "CMAKE_TOOLCHAIN_FILE:FILEPATH=${CMAKE_TOOLCHAIN_FILE}" \
262   --cmake-config "CMAKE_MAKE_PROGRAM:FILEPATH=$(type -p make)" \
263   --cmake-config "CMAKE_CXX_COMPILER:FILEPATH=$(type -p ${CXX})" \
264   --cmake-config "CMAKE_C_COMPILER:FILEPATH=$(type -p ${CC})"
265
266 echo "Configured Qt Creator with new kit: ${NAME}"
267
```



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Web: <http://www.embeddeduse.com>

Post: <https://embeddeduse.com/2021/03/29/how-to-set-up-qtcreator-for-cross-compilation-with-cmake-in-5-minutes/>

Code: <https://raw.githubusercontent.com/bstubert/embeddeduse/master/BlogPosts/qtcreator-setup/configure-qtcreator.sh> (GPLv3)

# Thank you 🙏



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