# Main wxMathPlot CMakeLists.txt

# Manage project

#

# Author: Davide Rondini

# Last Update: 2009-01-15

# License: wxWindows license

# Set CMake flags to enable compatibility both with 2.4 and 2.6

cmake\_minimum\_required(VERSION 2.4)

if(COMMAND cmake\_policy)

cmake\_policy(SET CMP0003 OLD)

endif(COMMAND cmake\_policy)

project(wxMathPlot)

# Create options to be chosen by the user:

if(UNIX)

SET(LINUX\_64\_32\_CROSSCOMPILE OFF CACHE BOOL "Cross compile from Linux x86\_64 to Linux x86?")

SET(GDB\_DEBUG OFF CACHE BOOL "Build with gdb debugger support?")

endif(UNIX)

# Option for any platform

SET(MATHPLOT\_SHARED OFF CACHE BOOL "Create wxMathPlot as a shared library?")

SET(MATHPLOT\_DO\_LOGGING OFF CACHE BOOL "Build with verbose debugging messages?")

if(LINUX\_64\_32\_CROSSCOMPILE)

message(STATUS "Cross compiling from Linux x86\_64 to Linux x86")

set(CMAKE\_LIBRARY\_PATH "/usr/lib")

set(CMAKE\_SYSTEM\_LIBRARY\_PATH "/usr/lib")

set(CMAKE\_SYSTEM\_PREFIX\_PATH "/usr")

else(LINUX\_64\_32\_CROSSCOMPILE)

message(STATUS "Native build")

endif(LINUX\_64\_32\_CROSSCOMPILE)

# message(STATUS "CMAKE\_LIBRARY\_PATH: " ${CMAKE\_LIBRARY\_PATH})

SET(wxWidgets\_USE\_LIBS base core)

find\_package(wxWidgets)

if(wxWidgets\_FOUND)

# message(STATUS ${wxWidgets\_LIBRARIES})

include(${wxWidgets\_USE\_FILE})

if(MATHPLOT\_SHARED)

add\_library(mathplot SHARED mathplot.cpp mathplot.h)

else(MATHPLOT\_SHARED)

add\_library(mathplot STATIC mathplot.cpp mathplot.h)

endif(MATHPLOT\_SHARED)

if(LINUX\_64\_32\_CROSSCOMPILE)

set\_source\_files\_properties(mathplot.cpp PROPERTIES COMPILE\_FLAGS "-m32 -DwxSIZE\_T\_IS\_UINT" )

set\_target\_properties(mathplot PROPERTIES LINK\_FLAGS "-m32 ") # -L${CMAKE\_LIBRARY\_PATH}

endif(LINUX\_64\_32\_CROSSCOMPILE)

if(GDB\_DEBUG)

set\_source\_files\_properties(mathplot.cpp PROPERTIES COMPILE\_FLAGS "-g -ggdb -Wall -pg -O0" )

set\_target\_properties(mathplot PROPERTIES LINK\_FLAGS "-g -ggdb -Wall -pg -O0")

if (MATHPLOT\_DO\_LOGGING)

set\_source\_files\_properties(mathplot.cpp PROPERTIES COMPILE\_FLAGS "-g -ggdb -Wall -pg -O0 -DMATHPLOT\_DO\_LOGGING" )

endif(MATHPLOT\_DO\_LOGGING)

endif(GDB\_DEBUG)

if(LINUX\_64\_32\_CROSSCOMPILE AND GDB\_DEBUG)

set\_source\_files\_properties(mathplot.cpp PROPERTIES COMPILE\_FLAGS "-m32 -g -ggdb -pg -O0 -DwxSIZE\_T\_IS\_UINT" )

set\_target\_properties(mathplot PROPERTIES LINK\_FLAGS "-m32 -g -ggdb -pg -O0")

if (MATHPLOT\_DO\_LOGGING)

set\_source\_files\_properties(mathplot.cpp PROPERTIES COMPILE\_FLAGS "-m32 -g -ggdb -Wall -pg -O0 -DMATHPLOT\_DO\_LOGGING" )

endif(MATHPLOT\_DO\_LOGGING)

endif(LINUX\_64\_32\_CROSSCOMPILE AND GDB\_DEBUG)

target\_link\_libraries(mathplot ${wxWidgets\_LIBRARIES})

# Compile samples?

SET( WXMATHPLOT\_BUILD\_EXAMPLES ON CACHE BOOL "Build examples?")

IF(WXMATHPLOT\_BUILD\_EXAMPLES)

add\_subdirectory(samples)

ENDIF(WXMATHPLOT\_BUILD\_EXAMPLES)

# library installation

if(UNIX)

if(${CMAKE\_SYSTEM\_PROCESSOR} STREQUAL "x86\_64")

set(LIBRARY\_APPEND\_PATH lib64)

else(${CMAKE\_SYSTEM\_PROCESSOR} STREQUAL "x86\_64")

set(LIBRARY\_APPEND\_PATH lib)

endif(${CMAKE\_SYSTEM\_PROCESSOR} STREQUAL "x86\_64")

install(TARGETS mathplot

RUNTIME DESTINATION bin

LIBRARY DESTINATION ${LIBRARY\_APPEND\_PATH}

ARCHIVE DESTINATION ${LIBRARY\_APPEND\_PATH}

)

set(WXMATHPLOT\_INSTALL\_DIR ${CMAKE\_INSTALL\_PREFIX}/share/wxMathPlot/)

install(FILES Doxyfile DESTINATION ${WXMATHPLOT\_INSTALL\_DIR}/)

install(FILES mathplot.h DESTINATION ${CMAKE\_INSTALL\_PREFIX}/include/)

install(FILES samples/sample1/mp1.cpp samples/sample1/CMakeLists.txt DESTINATION ${WXMATHPLOT\_INSTALL\_DIR}/samples/sample1)

install(FILES samples/sample2/mp2.cpp samples/sample2/CMakeLists.txt DESTINATION ${WXMATHPLOT\_INSTALL\_DIR}/samples/sample2)

install(FILES samples/sample3/sample3.cpp samples/sample3/CMakeLists.txt samples/sample3/gridmap.png DESTINATION ${WXMATHPLOT\_INSTALL\_DIR}/samples/sample3)

else(UNIX)

endif(UNIX)

else(wxWidgets\_FOUND)

MESSAGE("wxWidgets not found!")

endif(wxWidgets\_FOUND)