

# Advantech AE Technical Share Document

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Category	■ FAQ □ SOP	Related OS	AdvLinux/ CentOS6.6
Abstract	How to Setup QT Development Env and Run Application Under AdvLinux of WOP-3000T		
Keyword	WOP/ WebOP/ QT/ AdvLinux		
Related Product	WOP-3000T Series		

### ■ Problem Description:

## How to Setup QT Development Env and Run Application Under AdvLinux of WOP-3000T.

■ **Brief Solution - Step by Step:**

### Development Environment Example:

UNO-3084 + CentOS6.6 + adv-am3517-devkit (please contact WOP AE to get adv-am3517-devkit)

Once you un-compress the adv-am3517-devkit under Linux, please install with command `“./install.sh”`  
If the installation has done, you might check `/usr/local/bin/` if it looks same as following screenshot.

```

root@ADVANTECH adv-am3517-devkit# ls
adv-arago-linux-gnueabi  environment-setup  examples  include  lib  nkspecs  objarm  uninstall.sh
bin                      objarm             libgcc    libgccm  libgccm  README  site-config  var

root@ADVANTECH adv-am3517-devkit# ./install.sh
==Advantech Embedded Linux Development Kit For AM3517 Based Series Product==
Installing..... done

root@ADVANTECH adv-am3517-devkit#
root@ADVANTECH adv-am3517-devkit#
root@ADVANTECH adv-am3517-devkit# LS /USBIN
ls: /: cannot access not found

root@ADVANTECH adv-am3517-devkit# ls /usr/local/bin/
adv-gt-make          arm-arago-linux-gnueabi-gcov      arm-arago-linux-gnueabi-readelf
arm-arago-linux-gnueabi-addr2line  arm-arago-linux-gnueabi-gdb       arm-arago-linux-gnueabi-run
arm-arago-linux-gnueabi-ar          arm-arago-linux-gnueabi-gdbtui    arm-arago-linux-gnueabi-size
arm-arago-linux-gnueabi-as          arm-arago-linux-gnueabi-gprof     arm-arago-linux-gnueabi-strings
arm-arago-linux-gnueabi-c++filt    arm-arago-linux-gnueabi-ld        arm-arago-linux-gnueabi-strip
arm-arago-linux-gnueabi-cpp         arm-arago-linux-gnueabi-nm        kit_path
arm-arago-linux-gnueabi-g++         arm-arago-linux-gnueabi-obcopy    make2
arm-arago-linux-gnueabi-gcc         arm-arago-linux-gnueabi-obdump
arm-arago-linux-gnueabi-gccbug      arm-arago-linux-gnueabi-ranlib

root@ADVANTECH adv-am3517-devkit# uname -r
ls: cannot access not found

root@ADVANTECH adv-am3517-devkit# uname -r
2.6.32-584.el6.x86_64

```

Now we use example of tutorial on website -- **Widgets Tutorial - Creating a Window :**

<https://www.ics.com/files/qtdocs/tutorials-widgets-toplevel.html>

Create main.cpp file with following content:

```
#include <QtGui>

int main(int argc, char *argv[])
{
    QApplication app(argc, argv);
    QWidget window;
    window.resize(320, 240);
    window.show();
    window.setWindowTitle(
        QApplication::translate("toplevel", "Top-level widget"));
    return app.exec();
}
```

Create toplevel.pro with following content:

```
SOURCES = main.cpp

# install
target.path = $$[QT_INSTALL_EXAMPLES]/tutorials/widgets/toplevel
sources.files = $$SOURCES $$HEADERS $$RESOURCES $$FORMS toplevel.pro
sources.path = $$[QT_INSTALL_EXAMPLES]/tutorials/widgets/toplevel
INSTALLS += target sources
```

Under your development environment, use adv-qt-make to compile, as following screenshot, we could get binary file **toplevel**

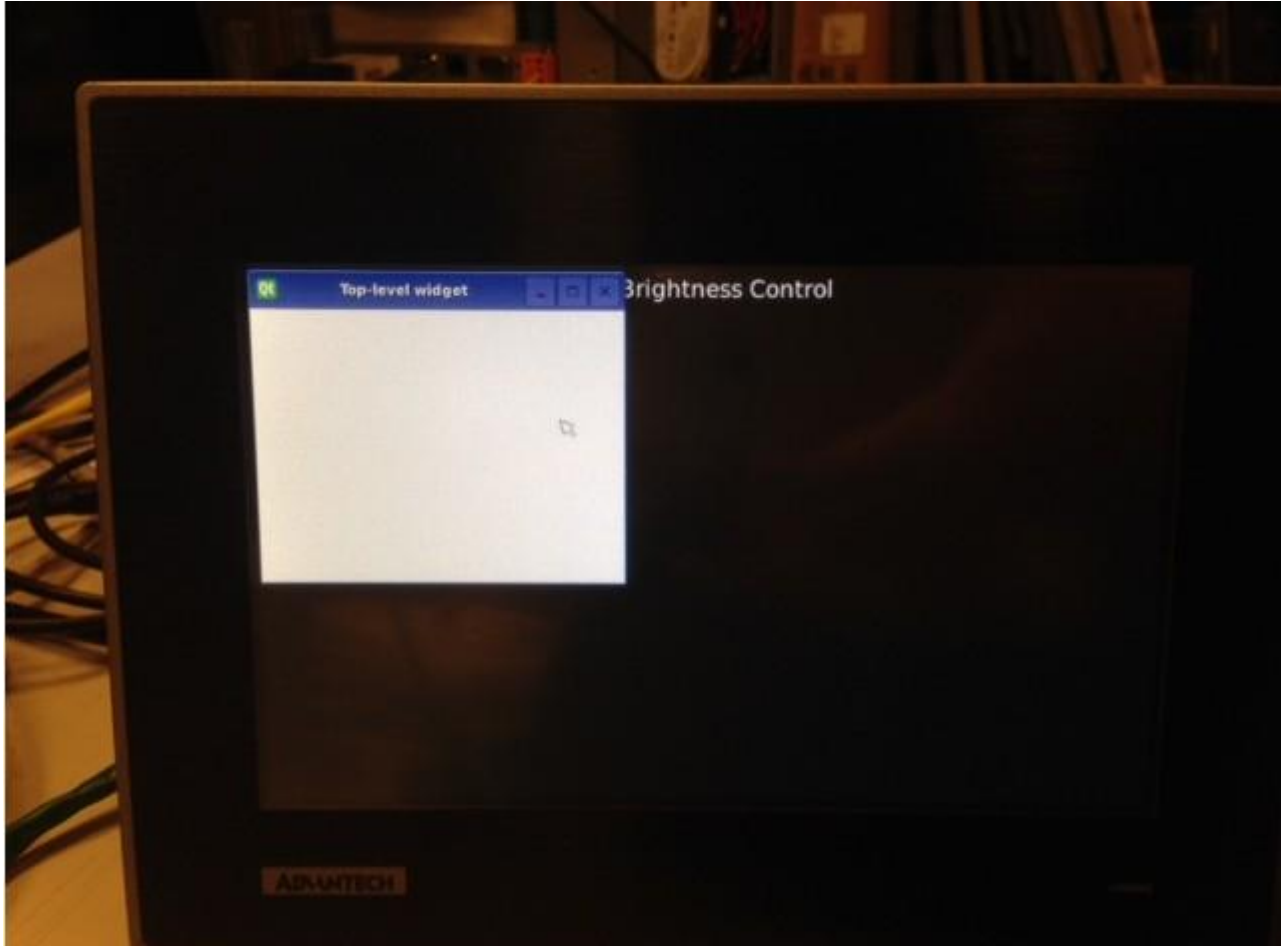
```
[root@localhost nick]# vi main.cpp
[root@localhost nick]# vi toplevel.pro
[root@localhost nick]# adv-qt-make
/home/adv-am3517-devkit
arm-arago-linux-gnueabi-g++ -c -pipe -Wall -W -D_REENTRANT -DQT_NO_DEBUG -DQT_GUI_LIB -DQT_C
go-linux-gnueabi/usr/share/qtopia/mkspecs/linux-g++ -I. -I/home/adv-am3517-devkit/arm-arago-li
am3517-devkit/arm-arago-linux-gnueabi/usr/include/qtopia/QtGui -I/home/adv-am3517-devkit/arm-a
o main.cpp
arm-arago-linux-gnueabi-g++ -L/linux-devkit/arm-arago-linux-gnueabi/usr/lib -Wl,-rpath-link,/l
1 -Wl,--hash-style=gnu -Wl,-rpath-link,/home/adv-am3517-devkit/arm-arago-linux-gnueabi/usr/lib
rm-arago-linux-gnueabi/usr/lib -lQtGuiE -lQtNetworkE -lQtCoreE -lpthread
/home/adv-am3517-devkit/bin/./lib/gcc/arm-arago-linux-gnueabi/4.5.3/././././././arm-arago-lin
/libpthread.so.0 when searching for ./././lib/libpthread.so.0
/home/adv-am3517-devkit/bin/./lib/gcc/arm-arago-linux-gnueabi/4.5.3/././././././arm-arago-lin
/libc.so.6 when searching for ./././lib/libc.so.6
[root@localhost nick]# ls
main.cpp main.o Makefile toplevel toplevel.pro
```

Then, copy **toplevel** to WOP-3000T by USB storage device.

Run it by execute binary file directly with parameter **-qws**

Ex. [root@localhost /]# ./toplevel -qws

The tutorial application will show up on your Linux.



■ **Reference:**

N/A