# Quick Guide to the Graphics Source#

#### Get the Graphics source.#

If you have an account on Foundry27 you can do this:

svn checkout --username <userid> http://community.qnx.com/svn/repos/graphics/trunk

Alternately you can browse the <u>full source</u> tree. To compile the source you will need to checkout additional source from the BSP SVN -- <u>hardware/devi</u> and OS SVN - <u>lib/compat</u>, <u>lib/login</u>, <u>lib/shutdown</u>, <u>lib/util</u>.

#### Building the source#

Make sure that you have 6.4.x QNX Development environment installed. If you don't properly create a staging area and suitable qconf-override.mk file, you risk the chance of corrupting your standard installation! Read more on how building is done in QNX -- <u>Understanding the Neutrino Build Process</u> and <u>Building the OS Source</u> as an example of staging area handling. For QNX 6.4.0, if you haven't already done so, install the <u>sreversion patch</u> from the download section of the core os project as root.

```
# cd $QNX_TARGET/../..
# tar -xpf srcversion-patch-6.4.0.tar
```

On the top level (trunk/) do:

make hinstall

NOTE: You need to copy hardware/devi headers manually into your staging area:

**NOTE**: If you're attempting to build services/display with 6.4.1 libc headers, you'll require the following updated header <u>Gfx\_source/dispatch.h</u>. It should be added to your stage directory under "/usr/include/sys/":

```
cp hardware/devi/private/sys/* <your_stage>/usr/include/sys cp hardware/devi/public/sys/* <your_stage>/usr/include/sys
```

This will put all required public and private headers into your staging area, and now you are ready to build apps, services and libs.

**NOTE**: Windows applications: apps/phindows and tools/appbuilder won't built on Nto, so you need to exclude them from the build. You can do this by using this handy script

Do the build:

```
make install
```

If you need to build for specific platforms rather than all, you can use export CPULIST="..." to restrict builds to the specified platforms only before running make.

For example: export CPULIST="x86" will build for x86 only. Please note that older PhAB applications may not obey this envar and will be build for all available platforms.

### Building apps/phindows – on Windows#

- Microsoft DirectX SDK must be installed, and these files: d3d9.h, d3d9caps.h, d3d9types.h and ddraw.h should be copied into the apps/phindows/microsoft directory (you need to create this directory yourself)
- The Cygwin Development Environment should be installed on your system.

## Sample apps#

Even though each of the posted modules could be used as a sample, we recommend using the designated sample modules. These modules are concise examples of graphics capabilities:

Component	Location
EGL	apps/egl
GF	apps/gf
GLES	apps/gles
Photon	apps/ph-samples

### Questions#

Please post questions related to the source code on **Graphics Source Code** forum.