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

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 -- Understanding the Neutrino Build Process and Building the OS Source as an example of staging area handling. For QNX 6.4.0, if you haven't already done so, install the srcversion patch 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 Gfx_source/dispatch.h. 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.