Epics and Qt Resources

EPICS

Epics version 3 downloads:

https://www.aps.anl.gov/epics/download/base/index.php

Epics version 3 build guide:

http://www.aps.anl.gov/epics/base/R3-16/1-docs/README.html

Epics version 3 build facility:

http://www.aps.anl.gov/epics/base/R3-14/12-docs/AppDevGuide/node5.html

Note that the above link pertains to the Epics version 3 build system, but is also a useful resource for the version 4 build system. They are similar but not identical.

Epics version 3 developer guide:

http://www.aps.anl.gov/epics/base/R3-16/1-docs/AppDevGuide/AppDevGuide.html

Epics version 4 downloads:

https://sourceforge.net/projects/epics-pvdata/files/

Epics version 4 build guide:

http://epics-pvdata.sourceforge.net/gettingStarted.html

Epics version 4 developer guide:

http://epics-pvdata.sourceforge.net/informative/developerGuide/developerGuide.html

Epics version 4 documentation:

http://epics-pvdata.sourceforge.net/literature.html

Epics version 3 and version 4 github repository:

https://github.com/epics-base

<u>Qt</u>

Learning Qt:

http://doc.qt.io/qt-4.8/how-to-learn-qt.html

Simple Examples:

Simple Text Editor:

http://doc.qt.io/qt-4.8/gettingstartedqt.html

Digital Clock:

http://doc.qt.io/qt-4.8/qt-widgets-digitalclock-example.html

Address Book:

http://doc.qt.io/qt-4.8/tutorials-addressbook.html

Model/View:

http://doc.qt.io/qt-4.8/modelview.html

Threads:

http://doc.qt.io/qt-4.8/thread-basics.html

Advanced Examples:

Mandelbrot Fractals:

 $\underline{http://doc.qt.io/qt\text{--}4.8/qt\text{--}threads\text{--}mandelbrot\text{--}example.html}$

Network chat:

http://doc.qt.io/qt-4.8/qt-network-network-chat-example.html

All Examples:

http://doc.qt.io/qt-4.8/all-examples.html

Unofficial Projects, Tutorials and Guides

(Created by an SNS intern at ORNL c. summer of 2017)

ntDatabase – **Code**: example pvDatabase populated with normative type records. https://github.com/es-sns121/ntDatabase

ntDatabase – **Documents**: guide detailing the above. https://github.com/es-sns121/ntDatabase-Documents

ntAddFields – **Code**: example of how to add extra fields to normative types. <u>https://github.com/es-sns121/ntAddFields</u>

ntAddFields – **Documents**: guide detailing the above. <u>https://github.com/es-sns121/ntAddFields-Documents</u>

Two-Windows – **Code**: example of how single threaded GUI applications can hitch because of computations. Show's how to move the computation to another thread and keep the GUI thread responsive.

https://github.com/es-sns121/qt-two-windows

qtEpics-Slider – **Code**: example of how to build Epics and Qt together. Implements a slider widget that controls a process variable in a pvRecord that is hosted on a pvDatabase. The client (slider widget) alters the value of the pvRecord on the server. Multiple instances of the client can be started and all will have synchronized values for their respective sliders (i.e. if one client's slider is moved, all other clients' sliders will mirror this movement).

https://github.com/es-sns121/qtEpics-Slider

github repo — Contains summer projects. None are guaranteed to work or be representative of proper coding styles or techniques. These projects are generally conservative in scale and scope so they're fair examples of simple programs to look at.

https://github.com/es-sns121