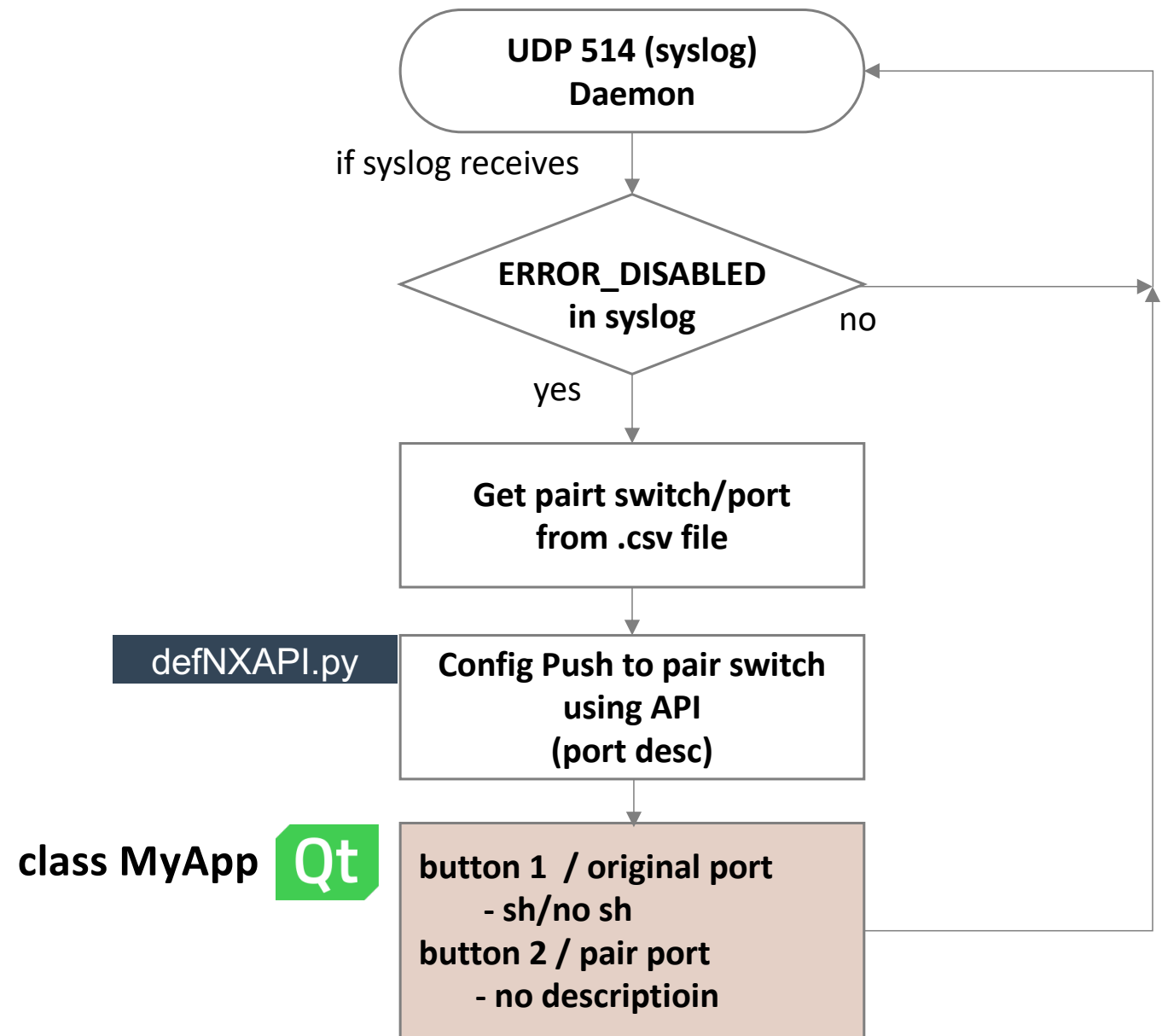




# 3. PyQt

## ERROR-DISABLE

# Flow Chart



# Qt5 and PyQt5, GUI and GUI toolkit

## Qt5

- cross-platform software for creating graphical user interfaces as well
- as cross-platform applications that run on various software and hardware platforms

## PyQt5

- Python binding of the cross-platform GUI toolkit Qt
- **free software – GPL or commercial = distribute your code as open or buy the license.**
- <PySide> is almost same with <PyQt5> and LGPL.

- from wikipedia

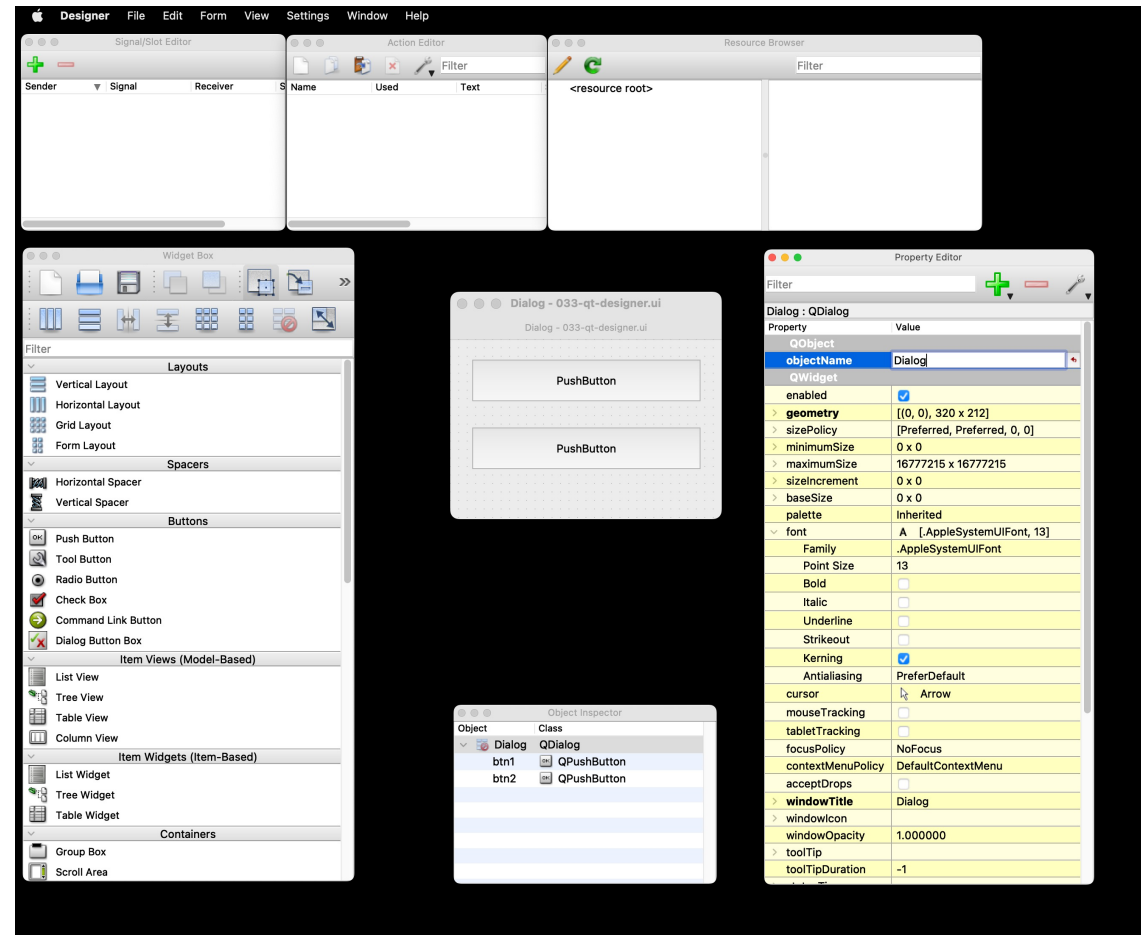
I'm using PyQt5 because there are many examples....

# Qt Designer, GUI tool

- Sub tool used to create/edit widget files (.ui).
- You can use it to create the **graphical layouts** (.ui files only).
- The most use is to design the graphical stuff in PyQt apps.

from <https://stackoverflow.com/questions/25559332/qt-designer-vs-qt-quick-designer-vs-qt-creator> yani

- **Simply, GUI design tool and .ui file can be converted into the Python Code.**

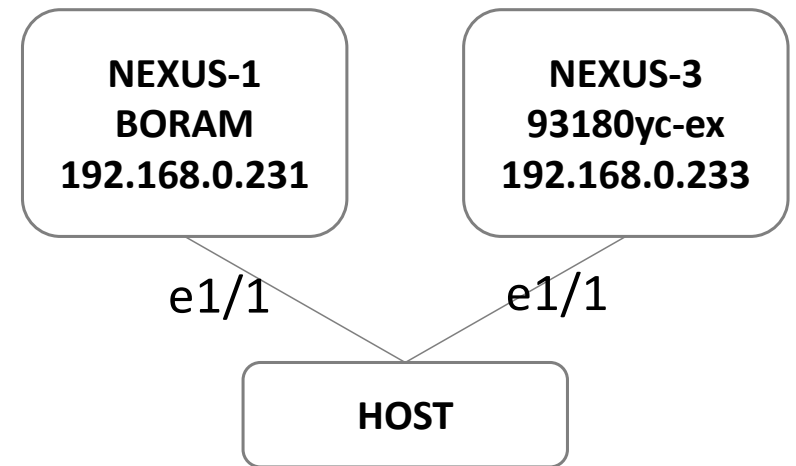


# how to use .ui

- Embed .ui in .py
- convert .ui into .py
  - `pyuic5 -x 33.ui -o 34.py`

# Flow

1. The port(source port) becomes <Error Disabled> and this is notified by the Telegram.
2. <A config> is deployed to the pair port(target port) of the pair switch. In this example, <description> is sent.
3. The notification windows is popped up using PyQt.
  - Option A (Def Action1)
    - Shut and no shut to the source port
  - Option B (Def Action2)
    - <A config> removal to the pair port(target port)



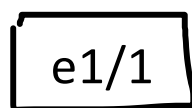
# Nexus Switch Config

- feature nxapi
- feature udd
- errdisable detect cause all
- logging server 192.168.0.4 5 use-vrf management

# How to Make ERROR DISABLED?

boram(config)# **errdisable detect cause ?**

acl-exception	Enable error detection for access-list installation failures
all	Enable error detection on all cases
link-flap	Enable error disable detection on linkstate-flapping
<b>loopback</b>	<b>Enable error disable detection on loopback detected by UDLD</b>



fiber cable looping



# Code Review : 031-nxapi+qt.py

- def lineno : to print out the line number @ print
- def action1 : to recovery the error disabled port by shut/no shut
- def action2 : to remove the config @parted port
- class MyApp(QMainWindow) : PyQt
  - def initUI
    - btn1 : shut/no shut to the source port
    - btn2 : <no description> to the target port
- \_\_main\_\_
  - UDP 514 port listen
  - detect <IF\_DOWN\_ERROR\_DISABLED>
  - get the paired port
  - Run Qt

# Code Review : defNXAPI.py

- def nxapicall
  - request.post to Nexus switch
- check response.status = 200 for the API
  - check response.status = 200 for each command