How to build a Qt & daemon Sat3coin Pi wallet

Brought to you by
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Outlined below you will find the step by step instructions on how to compile a Qt wallet and a daemon wallet for the Raspberry Pi. (I personally have tested on a Pi3 and a Pi zero w.)

1. Go and get yourself a Raspberry Pi. You can find them on ebay, amazon, just about everywhere…. I think i saw them at Walmart.
    a. https://thepihut.com/products/raspberry-pi-zero-w?src=raspberrypi
2. Download and install Raspbian-jessie. I had issues with the one that comes on Noobs pre-installed (raspbian-stretch) and raspbian jessie-lite. You will have to reformat and flash your micro sd or sd card. I like the software Etcher.
    a. Etcher: https://etcher.io/
    b. Raspbian jessie: https://downloads.raspberrypi.org/raspbian/images/raspbian-2017-07-05/2017-07-05-raspbian-jessie.zip
    c. If you are using a micro sd, then insert it into the adapter and plug into your sd card reader.
    d. Turn on Etcher and it should find the card.
    e. Press the button that says "FLASH" and it then wait……
    f. Once completed, remove from the adapter, insert into the Pi and turn on. It will automatically boot to desktop.
3. **TIME TO START THE COMPILING OF YOUR SAT3COIN WALLET**
    a. Open up the terminal on your pi. It should be up in the left hand corner of the screen. It has the text " >_ " on it.
    b. Lets update first
        - **sudo apt-get update**
    c. Next we need a swapfile
        - **sudo dphys-swapfile swapoff**
        - **CONF_SWAPSIZE=1024**
        - **sudo dphys-swapfile swapon**

d. Now install the dependencies
   - **sudo apt-get install qt4-qmake libqt4-dev build-essential libboost-dev -y**
   - **sudo apt-get install libboost-system-dev libboost-filesystem-dev libboost-program-options-dev -y**
   - **sudo apt-get install libboost-thread-dev libssl-dev libminiupnpc-dev libqrencode-dev git -y**
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     you got like 20 minutes for that to complete. Time for a break!

e. After it is done installing we need to build the Berkeley DB ourselves
   - **wget http://download.oracle.com/berkeley-db/db-4.8.30.NC.tar.gz**
   - **tar -xzvf db-4.8.30.NC.tar.gz**
   - **cd db-4.8.30.NC/build_unix/**
   - **../dist/configure --enable-cxx --disable-shared**
   - **make**
   - **sudo make install**
   - **cd ~**

f. Now let's make it so the makefile can find the Berkeley DB
   - **export CPATH="/usr/local/BerkeleyDB.4.8/include"**
   - **export LIBRARY_PATH="/usr/local/BerkeleyDB.4.8/lib"**

g. LET'S COMPILE!!!
   - **git clone https://github.com/Sat3Coin/sat3.git**
   - **cd sat3**
   - **qmake "USE_UPNP=1" (this makes your Makefile**)

h. To make the daemon (if you prefer a Qt wallet then skip this and move on to "i"
   - **cd src**
   - **make -f makefile.unix**
     (go smoke another cigarette… finish off the 6 pack. This is gonna be a minute)

After that is finished you will see a new file file in that directory called "sat3coind". That is your daemon. If you don't want a graphical interface and prefer command line wallets then there you go. Just type " ./sat3coind " (without the quotations) to start it while in that directory.

i. To make a Qt (you need to be in the sat3 directory) so, from the src directory type
   - **cd ..**

- **make**

j. Almost done, we need a folder for the Qt shortcut
   - **nano /home/pi/Desktop/sat3coin-qt.desktop**

k. In the nano screen add
   - **[Desktop Entry]**
     Name=sat3coin-QT
     Comment=sat3coin GUI
     Type=Application
     Encoding=UTF-8
     Exec=env LD_LIBRARY_PATH="$LD_LIBRARY_PATH:/usr/local/BerkeleyDB.4.8/lib:/home/pi/openssl/lib" /home/pi/trezarcoin/trezarcoin-qt
     Terminal=false
     Categories=None;

     Now save and exit.

l. Need to make a conf. File
   - **nano /home/pi/.Sat3coin/sat3coin.conf**

m. In the nano add
   - **daemon=1**
     server=1
     rpcuser=(username)
     rpcpassword=(strong password)

     Change the "username" and "strong password" to whatever you like.

Now save and exit, double click the file you made on the desktop for the Qt and look at that beautiful sat3 wallet you made. You have now compiled a Sat3 qt and a daemon on the pi!!!!

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BTC
1LRsDGKP9NjkmSo57jXGqHrpxJ5jFtqg3D

LTC
LPVWYXrr76hTvigMSigT2WVESjgGw69Kyb

Doge
DMJAe9nTwRgUUfvo3vdTCoNb59a32tvy5N