

Setting up OpenBTS on Crimson

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1 Introduction

It is required to setup OpenBTS using a combination of Per Vices forks. The following instructions are meant as a reference for copying and pasting. It should only be used only if the user has a general understanding of building OpenBTS. For further understanding on the instructions, please visit:

- UHD: http://files.ettus.com/manual/page_build_guide.html
- OpenBTS: <http://openbts.org/w/index.php/BuildInstallRun>

2 Instructions

1. Install all dependencies, get the source, build, and install UHD:

- `sudo apt-get install libboost-all-dev libusb-1.0-0-dev python-cheetah doxygen python-docutils cmake`
- `git clone https://github.com/pervices/uhd.git`
- `cd uhd/host/`
- `mkdir build`
- `cd build`
- `cmake ../`
- `make`
- `make test`
- `sudo make install`
- `sudo ldconfig`

2. Install all dependencies, get the source, build, and install OpenBTS:

- `sudo apt-get install autoconf libtool libosip2-dev libortp-dev libusb-1.0-0-dev g++ sqlite3 libsqlite3-dev erlang libreadline6-dev libncurses5-dev`
- `git clone https://github.com/RangeNetworks/dev.git`
- `cd dev/`
- `./clone.sh`
- `cd a53/trunk`
- `sudo make install`
- `cd ../../`
- Exchange openbts with Per Vices fork:
 - (a) `rm -rf openbts`
 - (b) `git clone https://github.com/pervices/openbts.git`
- `cd openbts/`
- `git submodule init; git submodule update`
- `./autogen.sh`
- `./configure --with-uhd`
- `make`
- `sudo make install`
- `cd apps`
- `ln -s ../Transceiver52/transceiver ./`
- `sudo mkdir /etc/OpenBTS`
- `sudo sqlite3 -init OpenBTS.example.sql /etc/OpenBTS/OpenBTS.db ".quit"`

3. Install and configure Smqueue, Sipauthserve, Subscriber Registry, and Asterisk. <http://openbts.org/w/index.php/BuildInstallRun>