

Live SDR Environment Getting Started

- The next major release of the Ettus Research Live SDR Environment, version 4.0, is scheduled for April 2016.

The Live SDR Environment is a bootable ISO image file that can be put onto a USB flash drive or a DVD, and runs directly from the USB or DVD, without having to install anything, and without modifying the local disk of the system. It contains a number of pre-installed applications as well as up-to-date versions of GNU Radio and UHD enabling support for the latest USRP SDR models. It is free and uses entirely open-source software, and is based on Linux Ubuntu 14.04.

The current version of the Ettus Research Live SDR Environment, version 3.0, contains older versions of UHD and GNU Radio, and does not support several recently released USRP SDR devices. Therefore, we recommend using the GNU Radio Live SDR Environment, which is maintained by the GNU Radio project. It is similarly configured to the Ettus Research Live SDR Environment and contains current versions of UHD and GNU Radio, but it is less USRP focused.

The current GNU Radio Live SDR Environment may be obtained from the GNU Radio Project at the link below:

<https://gnuradio.org/redmine/projects/gnuradio/wiki/GNURadioLiveDVD>

Both Live SDR Environments may be put onto any standard DVD, or onto a USB 3.0 flash drive with at least 16 GB capacity. A USB 2.0 drive may also be used, but the system will take longer to boot, load and run programs, and respond to user interaction.

There are TWO separate ways you can create your own LiveUSB stick:

(1) This will create a new partition table on the stick, create the file systems and copy the files over to them.

- You will have less to download using this method.

Download the follow files:

```
fat.zip
casper-rw.tar.bz2
create_live_sdr_fs.sh
```

Make the creation script executable:

```
chmod +x create_live_sdr_fs.sh
```

and run:

```
sudo ./create_live_sdr_fs.sh /dev/sdX fat.zip casper-rw.tar.bz2
```

where /dev/sdX is your USB stick.

(2) This will create a bit-for-bit copy of the 'master' LiveUSB stick.

- This option only really makes sense if you have a 16GB USB stick, or know how to expand partitions and file systems (if you have a larger capacity USB stick and wish to grow the persistent file system, for example).

- **WARNING: With this method you must have a USB stick containing *at least* as many raw bytes as the disk image (~16 GB)!**

Only download the raw disk image:

```
X.X.img.bz2
```

where X.X is the LiveUSB release number (e.g. 3.0 would be 3.0.img.bz2)

and *either* run:

```
bunzip -c X.X.img.bz2 | sudo dd of=/dev/sdX bs=1M
```

- or* if you wish to have a progress bar AND have 'pv' installed:

```
pv -p -e -t -r X.X.img.bz2 | bunzip2 -c | sudo dd of=/dev/sdX bs=1M
```

where /dev/sdX is your USB stick, and X.X.img.bz2 is the file you downloaded.

PLEASE DOUBLE-CHECK THE DEVICE YOU WRITE TO - YOU COULD PERMANENTLY DESTROY YOUR DATA!

For support, please contact <support@ettus.com>