

RT Patch

See https://wiki.linuxfoundation.org/realtime/documentation/howto/applications/preemptrt_setup and <https://stackoverflow.com/questions/51669724/install-rt-linux-patch-for-ubuntu> (or alternatively <https://medium.com/@patdhik/realtime-linux-e97628b51d5d>).

If the latter is not available (taken from the stackoverflow guide): After applying the patch, you must install some packages (`sudo apt-get install libncurses-dev libssl-dev`) (others will be asked for by `make` / error if they do not exist), then type `make menuconfig` and select the Fully Preemptible Kernel (RT) (*Processor type and features -> Preemption Model -> Fully Preemptible Kernel (RT)*), could be located under general settings depending on the kernel version). After that, install the Kernel and apply it:

```
make -j20
sudo make modules_install -j20
sudo make install -j20
```

```
cd /boot ls sudo update-grub
```

"To change default kernel in grub, edit the GRUB_DEFAULT value in `/etc/default/grub` to your desired kernel." Then reboot, `uname -a` should now indicate that the new kernel is used.

Make sure to install a kernel that fits the current kernel used by your distribution.

Known Problems

If ubuntu is unable to locate the `libncurses-dev` package, try again the ubuntu full-scale installation.