Installation Guide for Linux PREEMPT_RT Realtime Patch

The latest stable version of the realtime ptach can be found at:
https://wiki.linuxfoundation.org/realtime/start

Additional Information can be found here:

Howto Download and Patch:
https://wiki.linuxfoundation.org/realtime/documentation/howto/applications/preemptrt_setup

Howto configure Kernel:
https://www.kernel.org/doc/Documentation/kbuild/kconfig.txt

Find sources here:
http://cdn.kernel.org/pub/linux/kernel/projects/rt/
https://mirrors.edge.kernel.org/pub/linux/kernel/v4.x/

For automatic installation, please check the script **RT_install.sh** in the /radar_converter/util folder. This will install patch-4.14.103-rt55 for the respective linux kernel 4.14.103.

The script however requires manual actions during **make menuconfig**

Graphical Menu

Processor type and features ---> Preemption Model (Voluntary Kernel Preemption (Desktop))
Choose: Fully Preemptible Kernel (RT)

Kernel hacking --> Memory Debugging
Deselect: Check for stack overflows

<Save> and <Exit> (overwrite .config)

Post Installation Steps

Please boot your newly patched realtime kernel. This can be achieved by holding |SHIFT| during the boot process to load GRUB.

Verify the kernel with:

    uname -a   →   You should see something like: 4.14.103-rt55 #1 SMP PREEMPT RT

Various tests for RT Kernels can be found here: https://github.com/MarcelGehrig/rt-tests

In order to execute them, simply do:
git clone https://github.com/MarcelGehrig/rt-tests
cd rt-tests && make