Documentation of Enabling and Generating Oprof Report

**Step 1:**

Ensure that Android is built in eng mode. Oprofile does not work if Android is built in user mode.

In current 2231 configuration, Android is built in user mode for performance reasons.

Changes in the Linux Kernel’s config is required.

* Do CONFIG\_PROFILING, CONFIG\_OPROFILE and CONFIG\_HAVE\_OPROFILE are set.

CONFIG\_PROFILING=y

CONFIG\_OPROFILE=y

CONFIG\_HAVE\_OPROFILE=y

(Config file path🡺USER\_Build\_Space/linux/linux-2.6-virt/arch/arm/configs/xmm6180-trusted-full\_virt-android\_defconfig)

* Rebuild your Kernel by build\_LINUX.sh.
* Rebuild your build\_VLX.sh.
* Please double check that changes made in Kernel’s config get effected in build directory (/build/linux-2.6-virt/build-LINUXKERNEL/.config) after building build\_LINUX.sh.If not, remove build directory (/build/linux-2.6-virt/build-LINUXKERNEL) and rebuild buil\_LINUX.sh.
* Take only vmjaluna.fls to flash.

**Step 2:** Please make sure that adb is recognizing your target board .

**Step 3:** Copy the android symbols (out/target/product/android/symbols) and vmlinux into Linux machine of out/target/product/android/symbols/

Now you can see these things in symbols Directory.

init sbin system vmlinux

**Step 4:** Run these commands in Linux Machine (Use proper port in the target)

* Run oprofile.sh with some arguments like.

./oprofile.sh -v -d 10

-v => verbose, -D => target device, -d=> duration

* Now you can see Raw Oprof results. If you want to Generate Report,

1. ./prebuilt/linux-x86/oprofile/bin/opreport -l --session-dir=/tmp/oprofile.pull/ -p out/target/product/android/symbols/
2. You can generate Different type of report by passing different arg to ./prebuilt/linux-x86/oprofile/bin/opreport -help.