# PERFORMANCE TOOLS FOR THE DEVICE

Ellen, Sarah and I had a meeting with Sandeep Prabakhar a week ago, and he gave us some very valuable information about the performance measurement tools available for the device. The most useful thing he talked about was CE logs.

## What are CE Logs?

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## Incantations

mdbg cf\_celog # four variables should all be 1 when finished

mdbg EnableCompositorCelog # -> 1

mdbg EnableSLPerf # -> 1

log -buf 0x400000

log 0x800062

# get ready to run your test

log –clear

# % del %\_FRD%\celog.clg

# run your test

log –flush # output the results to a new copy of %\_FRD%\celog.clg

## Kernel Tracker and Excel

Kernel Tracker is a tool for looking at the run-time behavior of processes and threads, which appear as green lines. CE logging events appear as little white squares that are inconveniently small when you’re trying to click on one to put a cursor in the middle of it.

I find it’s handy to just dump all the events to a CSV file that can be imported to Excel, and do what I need to do there. You can filter on PID or TID or the contents of debug messages.

## Monte Carlo profiler

A Monte Carlo profiler is a gadget that interrupts the processor at regular or random intervals and asks, what process and thread are you executing, and what does your call stack look like right now? Doing this every millisecond or 10 msecs is a very minor performance drain on the processor but quickly collects reasonably good information about where the processor is spending a lot of its time.

I would like to play with this more but it appears to depend on some installation thing that seems to be broken on my desktop. So I don’t have much practical experience with it. I used one while doing some Mac development a few years back, and found it very cool.