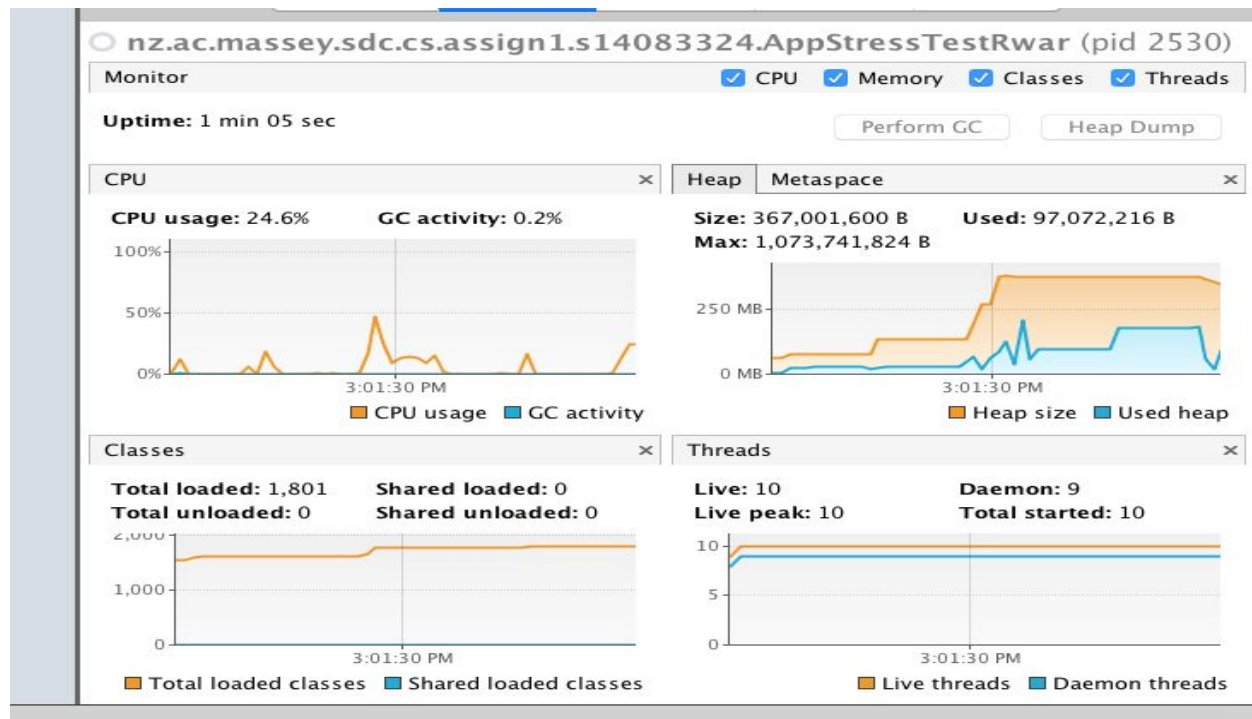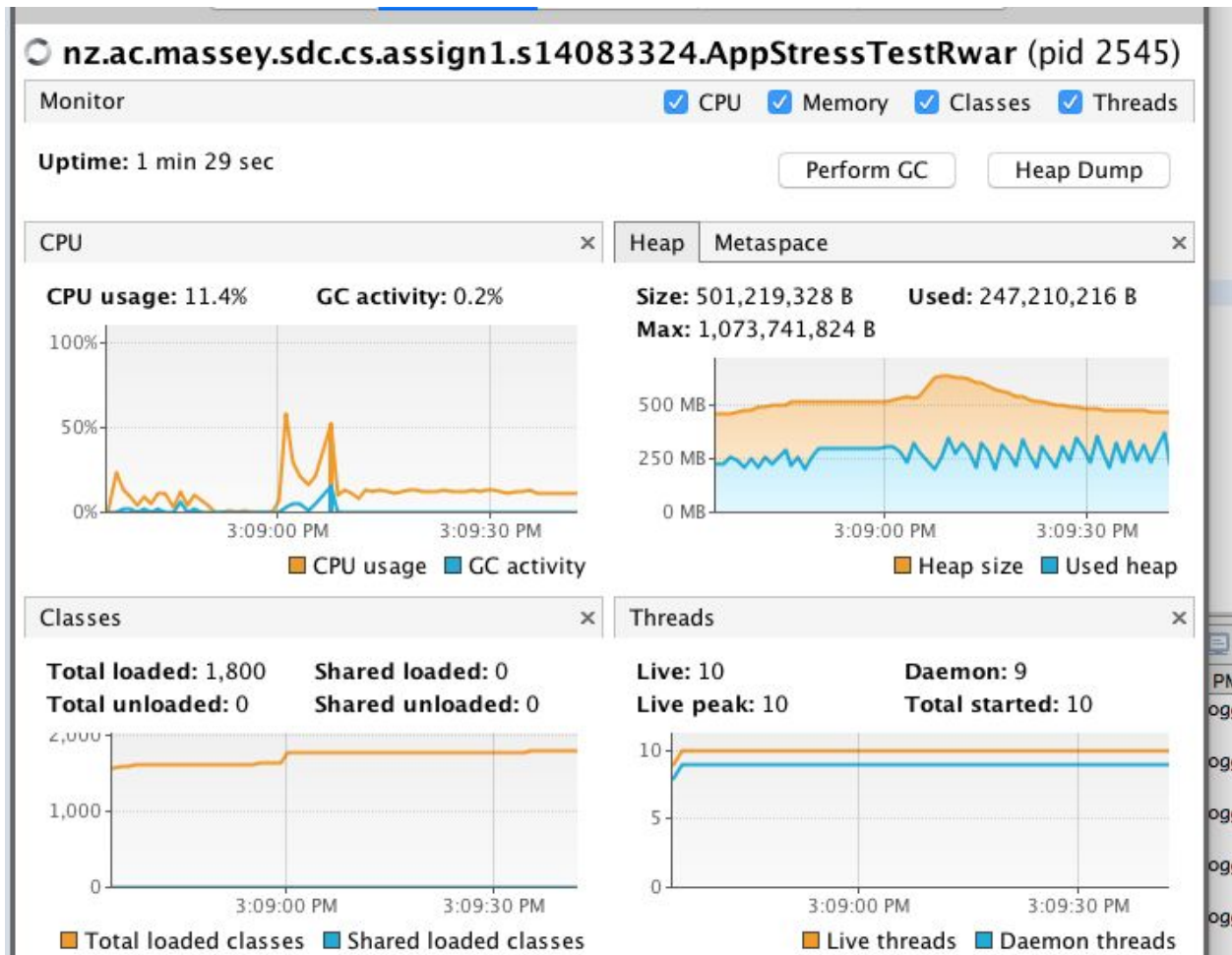Ross Bell
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# Performance Report



Image shows how much memory has been used, as the application ramps up through each stage of the stress test.

These results are with 1000,000 logs appended.

During logging to the console using the simplelayout minimal memory is used, as the memory usage increases the application stress test has moved to printing to the console using the custom MVELLayout, I attribute the increase in memory usage at this point to the extra information that is printed to the console by MVELLayout and the maintenance of the hashmap plus parsing the information to a string to then be printed to the console. The application at this stage was maintaining the use of around 120Mb of memory.

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A sharp increase in memory is noted as the MVELLayout moves to writing to the file,



A small sample size sees MVELLayout fall behind quite considerably compared to the SimpleLayout();
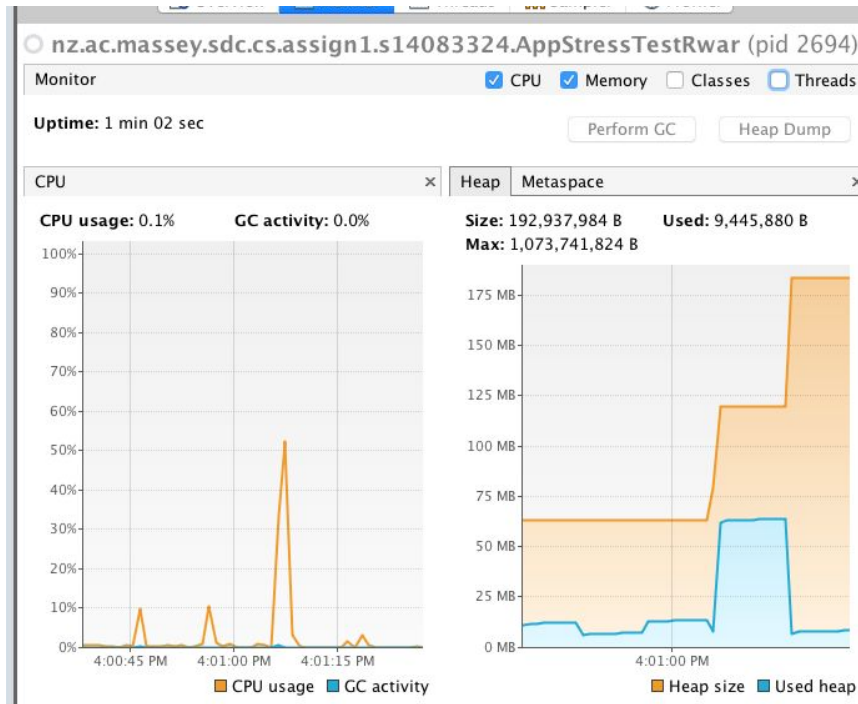
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Time to add 10 logs to memAppender LinkedList is 2 milliseconds
Time to add 10 logs is to the mem appender is 0 milliseconds
Time to add 10 logs is to the console  using MVELLAyout is 271 milliseconds
Time to add 10 logs to the file appender using simpleLayout is 0 milliseconds
Time to add 10 logs to the file appender using MVELLayout is 72 milliseconds

This I believe is caused by construction of the string that is returned from format, as well as the extra information that is provided by the custom string pattern.

Increasing the log amount and decreasing the maxSize of the List shows the following:

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The heap size through each stage increases as does the maximum used heap.

Time to add 10000 logs to memAppender LinkedList is 200 milliseconds
Time to add 10000 logs to memAppender LinkedList is 30 milliseconds (There was variation after running it again soon after that I attribute compilation and execution of the application);
Time to add 10000 logs is to the mem appender is 11 milliseconds (Default arrayList<LoggingEvent>();

----------------------log information is printed here----------------
Time to add 10000 logs to the console using MVELLAyout is 1498 milliseconds
Time to add 10000 logs to the file appender using simpleLayout is 75 milliseconds
Time to add 10000 logs to the file appender using MVELLayout is 360 milliseconds