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Enterprise Performance Architecture CA2

**Introduction**

To gather the data for this assignment located in results.dat I ran a scrip to run loadtest.C with a varying amount of users between 1 and 150 to try and saturate the CPU and this loadtest.C ran for 8 seconds before gathering the required data (see Appendix A). This script was run on a virtual machine running Fedora 27 and had access to one CPU core with 1024mb’s of RAM (Fig 1).

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| --- | --- |
| Operating System | Fedora 27 |
| CPU cores | 1 @ 4.46ghz |
| RAM | 1024mb |
| Disk | 10gb on SSD |

Fig 1: Virtual Machine setup

**Appendix A**

#!/bin/bash

echo "CO N idle" > results.dat #header of results.dat and clears file

for i in {1..150}

do

./loadtest $i& #running loadtest in background

sleep 08 #sleeping for 8 seconds = run time

#print out to results.dat containing C0 N idle time

echo "`cat synthetic.dat | wc -l` $i `mpstat -o JSON | jq '.sysstat.hosts[0].statistics[0]."cpu-load"[0].idle'`" >> results.dat

pkill loadtest #killing loadtest

rm synthetic.dat

done