

# Kata Containers metrics report

Auto generated

03 September, 2018

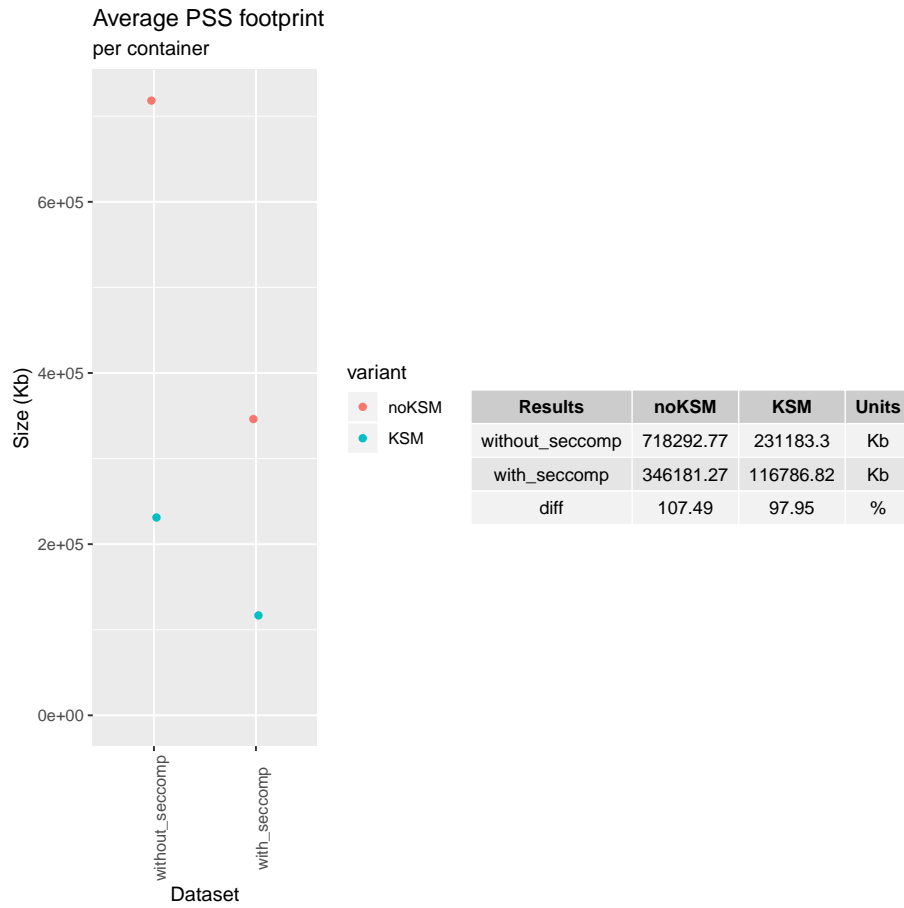
## Introduction

This report compares the metrics between multiple sets of data generated from the [Kata Containers report generation scripts](#).

This report was generated using the data from the **without\_seccomp/**, **with\_seccomp/** results directories.

## Container PSS footprint

This [test](#) measures the PSS footprint of all the container runtime components whilst running a number of parallel containers. The results are the mean footprint proportion for a single container.



## Container scaling system footprint

This test measures the system memory footprint impact whilst running an increasing number of containers. For this test, KSM is enabled. The results show how system memory is consumed for different sized containers, and their average system memory footprint cost and density (how many containers you can fit per Gb) is calculated.

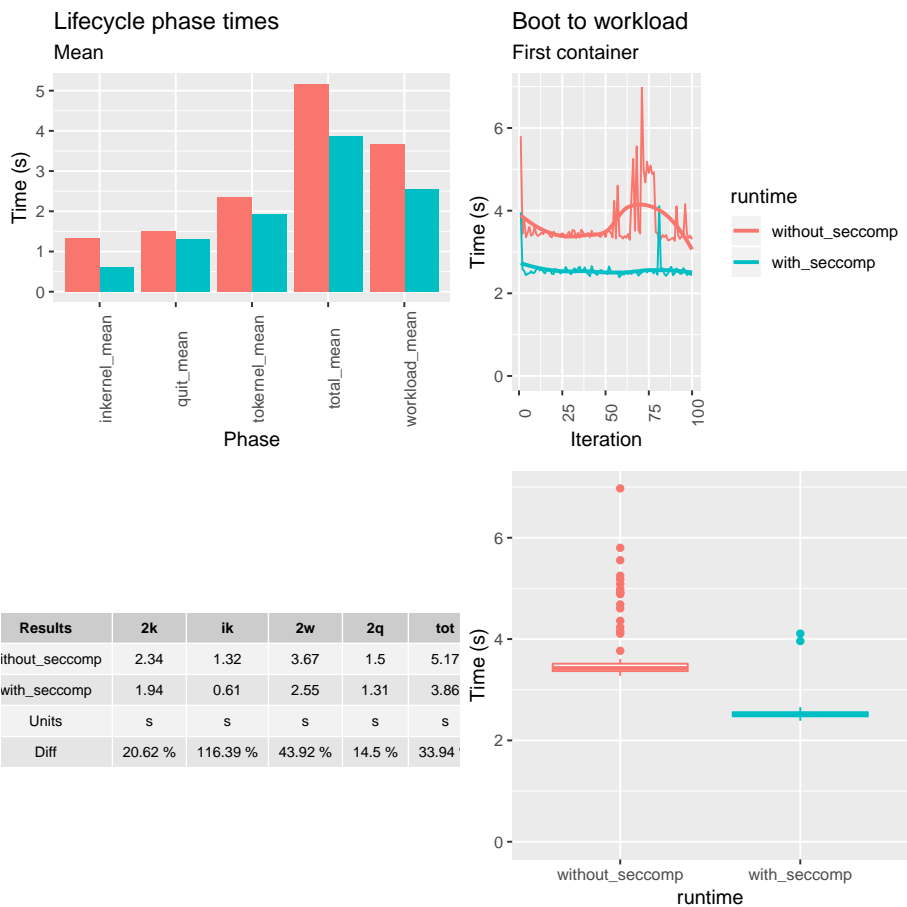


Test	n	Tot_Kb	avg_Kb	n_per_Gb
without_seccomp-busybox	11	6623608	602146.2	1.7
without_seccomp-mysql	15	6368728	424581.9	2.5
without_seccomp-elasticsearch	2	6593972	3296986	0.3
with_seccomp-busybox	20	4147668	207383.4	5.1
with_seccomp-mysql	20	4364960	218248	4.8
with_seccomp-elasticsearch	3	8524952	2841650.7	0.4

## Container Docker boot lifecycle times

This [test](#) uses the `date` command on the host and in the container, as well as data from the container kernel `dmesg`, to ascertain how long different phases of the create/boot/run/delete Docker container lifecycle take for the first launched container.

To decode the stats table, the prefixes are 'to(2)' and 'in'. The suffixes are 'kernel', 'workload' and 'quit'. 'tot' is the total time for a complete container start-to-finished cycle.



## Test setup details

This table describes the test system details, as derived from the information contained in the test results files.

What	without_seccomp	with_seccomp
Run Ver	1.2.0	1.2.0
Run SHA	a39a3f15a3c996648248de28be8719f17604fded	ba88362107fad58a0f2a4cb8ca672bc6b70e3720
Proxy Ver	1.2.0-6f209b7f3c586c5f17b52df8bd5d6edbc45ee477	1.2.0-6f209b7f3c586c5f17b52df8bd5d6edbc45ee477
Shim Ver	1.2.0-0a37760c0224167143cb3cc920c78f5147f52e70	1.2.0-0a37760c0224167143cb3cc920c78f5147f52e70
Hyper Ver	2.11.0	2.11.0
Image Ver		
Guest Krnl	4.14.49.container	4.14.49.container
Host arch	amd64	amd64
Host Distro	Ubuntu	Ubuntu
Host DistVer	16.04	16.04
Host Model	Intel(R) Core(TM) i7-6700K CPU @ 4.00GHz	Intel(R) Core(TM) i7-6700K CPU @ 4.00GHz
Host Krnl	4.15.0-33-generic	4.15.0-33-generic

Figure 1: System configuration details