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backup-server

Running pts/aio-stress-1.1.1, pts/sqlite-1.8.0, pts/fio-1.7.1, pts/fs-mark-1.0.0, pts/dbench-1.0.0, pts/iozone-1.8.0, pts/tiobench-1.2.0, pts/compilebench-1.0.1, pts/unpack-linux-1.0.0, pts/postmark-1.1.0, pts/compress-gzip-1.1.0, pts/pgbench-1.4.0, pts/apache-1.6.1 via the Phoronix Test Suite.

Automated Executive Summary

v2-big-disk-array had the most wins, coming in first place for 38% of the tests.

Based on the geometric mean of all complete results, the fastest (v2-big-disk-array) was 1.061x the speed of the slowest (v2-small-disk-array). v1-big-disk-array was 0.99x the speed of v2-big-disk-array, v1-small-disk-array was 0.957x the speed of v1-big-disk-array, v2-small-disk-array was 0.994x the speed of v1-small-disk-array.

The results with the greatest spread from best to worst included:

IOzone (8GB Write Performance) at 1.617x
Compile Bench (Test: Read Compiled Tree) at 1.067x
Dbench (12 Clients) at 1.051x
Dbench (128 Clients) at 1.045x
Apache Benchmark (Static Web Page Serving) at 1.022x
AIO-Stress (Random Write) at 1.022x
Unpacking The Linux Kernel (linux-2.6.32.tar.bz2) at 1.016x

PostMark (Disk Transaction Performance) at 1.007x
Compile Bench (Test: Initial Create) at 1.006x
Compile Bench (Test: Compile) at 1.005x.

Test Systems:

v1-big-disk-array

v2-big-disk-array

v1-small-disk-array

v2-small-disk-array

Processor: 2 x Intel Xeon E5-2630 v3 @ 2.40GHz (32 Cores), Motherboard: Supermicro X10DRi v1.02, Chipset: Intel Device 2f00, Memory: 4 x 16384 MB 2133MHz, Disk: 480GB MR9361-8i + 57001GB MR9361-8i + 27000GB MR9361-8i, Graphics: ASPEED ASPEED Family, Network: Intel 82599EB 10-Gigabit SFI/SFP+

OS: Debian 7.8, Kernel: 3.2.0-4-amd64 (x86_64), Compiler: GCC 4.7.2, File-System: xfs

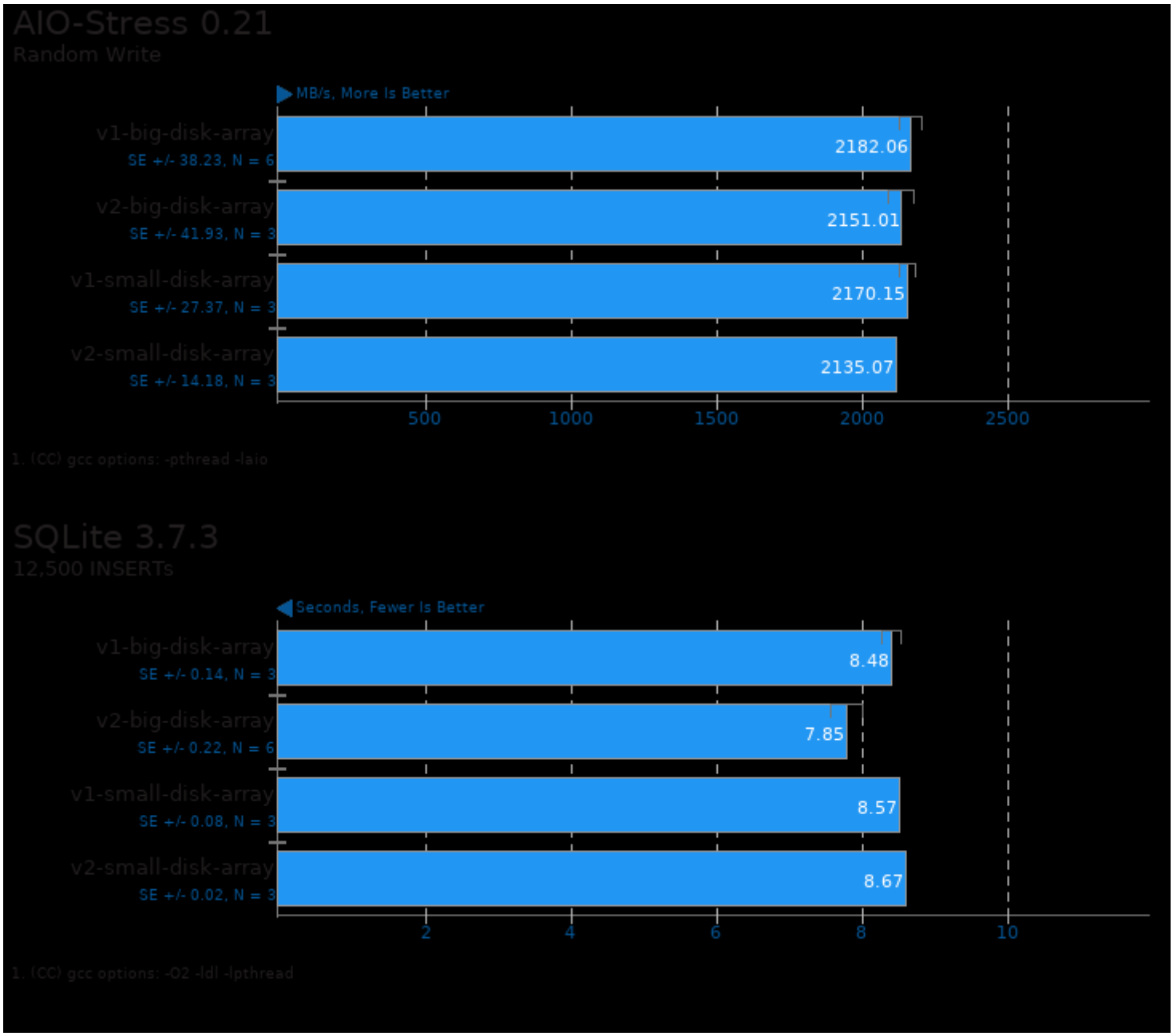
Compiler Notes: --build=x86_64-linux-gnu --enable-checking=release --enable-clocale=gnu --enable-gnu-unique-object --enable-languages=c,c++,go,fortran,objc,obj-c++ --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-nls --enable-objc-gc --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --target=x86_64-linux-gnu --with-arch-32=i586 --with-tune=generic -v
Disk Notes: CFQ / attr2,delaylog,noatime,noquota,rw
Processor Notes: Scaling Governor: acpi-cpufreq ondemand
System Notes: Disk Scheduler: CFQ. Python 2.7.3.

	v1-big-disk-array	v2-big-disk-array	v1-small-disk-arra	v2-small-disk-arra
AIO-Stress - Rand Write (MB/s)	**2182**	2151	2170	**2135**
Normalized	100%	98.58%	99.45%	97.85%
Standard Deviation	4.3%	3.4%	2.2%	1.2%
SQLite - 12,500 INSERTs (sec)	8.48	**7.85**	8.57	**8.67**
Normalized	92.57%	100%	91.6%	90.54%
Standard Deviation	2.9%	6.8%	1.7%	0.4%
FS-Mark - 1.F.1.S (Files/s)	265.93	**267.48**	173.95	**169.17**
Normalized	99.42%	100%	65.03%	63.25%
Standard Deviation	6.7%	9.3%	7.8%	6.9%
Dbench - 12 Clients (MB/s)	**1475**	1550	1478	**1551**
Normalized	95.12%	99.99%	95.32%	100%
Standard Deviation	0.4%	2%	0.1%	0.8%
Dbench - 48 Clients (MB/s)	1850	**1908**	1553	**1509**
Normalized	96.96%	100%	81.38%	79.08%
Standard Deviation	7.2%	7.2%	6.3%	6.3%
Dbench - 128 Clients (MB/s)	1649	1647	**1605**	**1677**
Normalized	98.34%	98.22%	95.71%	100%

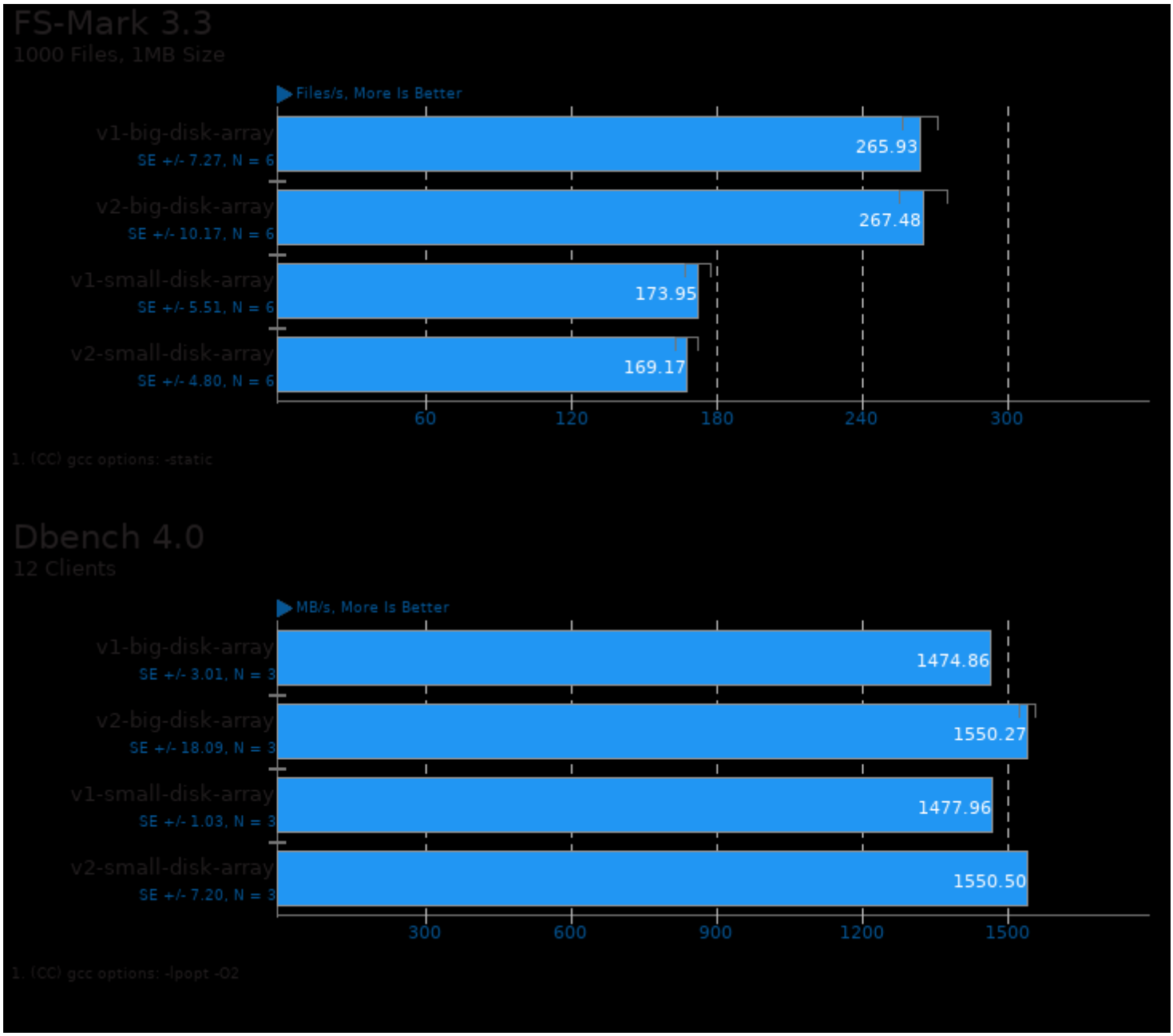
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Standard Deviation	4.1%	3.6%	2.9%	3.4%
Dbench - 1 Clients (MB/s)	496.53	**503.78**	**464.11**	493.12
Normalized	98.56%	100%	92.13%	97.88%
Standard Deviation	5.9%	6.3%	0.2%	6.8%
IOzone - 8.R.P (MB/s)	**6192**	5993	4830	**4638**
Normalized	100%	96.77%	77.99%	74.9%
Standard Deviation	0.2%	4.5%	14.6%	10.1%
IOzone - 8.W.P (MB/s)	959.88	**960.19**	**593.87**	632.79
Normalized	99.97%	100%	61.85%	65.9%
Standard Deviation	1.9%	1.4%	1.5%	1.6%
Threaded I/O Tester - 64MB Rand Read - 32 Threads (MB/s)	**11563**	11667	**12995**	11622
Normalized	88.98%	89.78%	100%	89.43%
Standard Deviation	8.6%	2.9%	25%	3.8%
Threaded I/O Tester - 64MB Rand Write - 32 Threads (MB/s)	36.44	**35.03**	**59.32**	54.79
Normalized	61.43%	59.05%	100%	92.36%
Standard Deviation	9.5%	8.6%	35%	23.4%
Compile Bench - Compile (MB/s)	**1610**	1606	1609	**1602**
Normalized	100%	99.73%	99.94%	99.49%
Standard Deviation	0.6%	0.9%	1%	0.4%
Compile Bench - Initial Create (MB/s)	243.89	244.17	**244.43**	**242.94**
Normalized	99.78%	99.89%	100%	99.39%
Standard Deviation	0.5%	0.9%	0.5%	0.7%
Compile Bench - Read Compiled Tree (MB/s)	**658.21**	**702.07**	663.70	684.34
Normalized	93.75%	100%	94.53%	97.47%
Standard Deviation	5.3%	1.3%	5.9%	1.6%
Unpacking The Linux Kernel - linux-2.6.32.tar.bz2 (sec)	**11.04**	11.02	**10.87**	11.01
Normalized	98.46%	98.64%	100%	98.73%
Standard Deviation	1.8%	1.2%	0.7%	1.7%
PostMark - D.T.P (TPS)	**5210**	**5245**	**5210**	**5210**
Normalized	99.33%	100%	99.33%	99.33%
Standard Deviation	2.1%	1.2%	2.1%	2.1%
Gzip Compression - 2.F.C (sec)	12.45	12.48	**12.44**	**12.50**
Normalized	99.92%	99.68%	100%	99.52%
Standard Deviation	0.1%	0.4%	0.2%	0.2%
Apache Benchmark - S.W.P.S (Reqs/sec)	**27471**	27840	**28082**	27816
Normalized	97.82%	99.14%	100%	99.05%
Standard Deviation	1.4%	0.7%	1.9%	1%

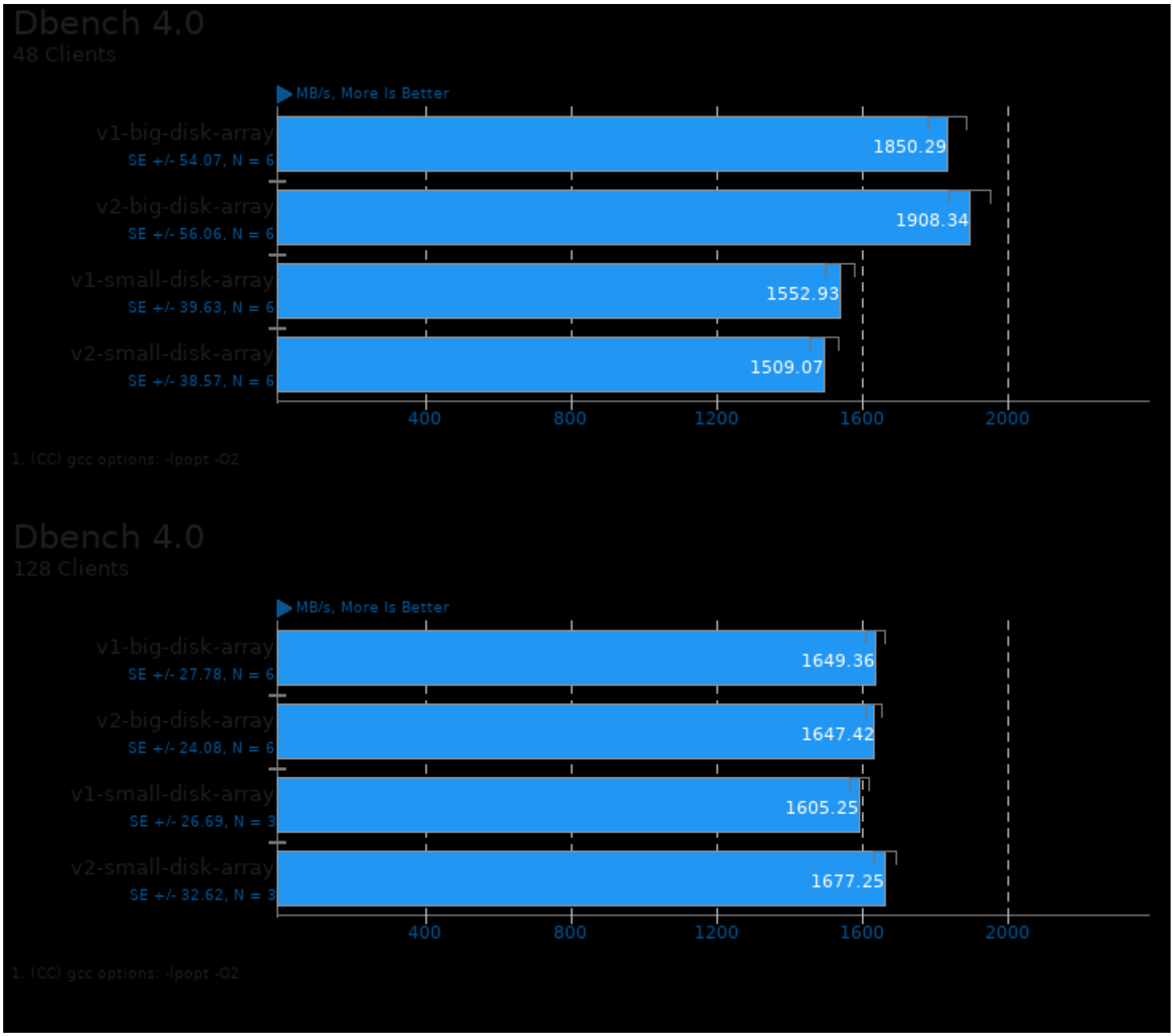
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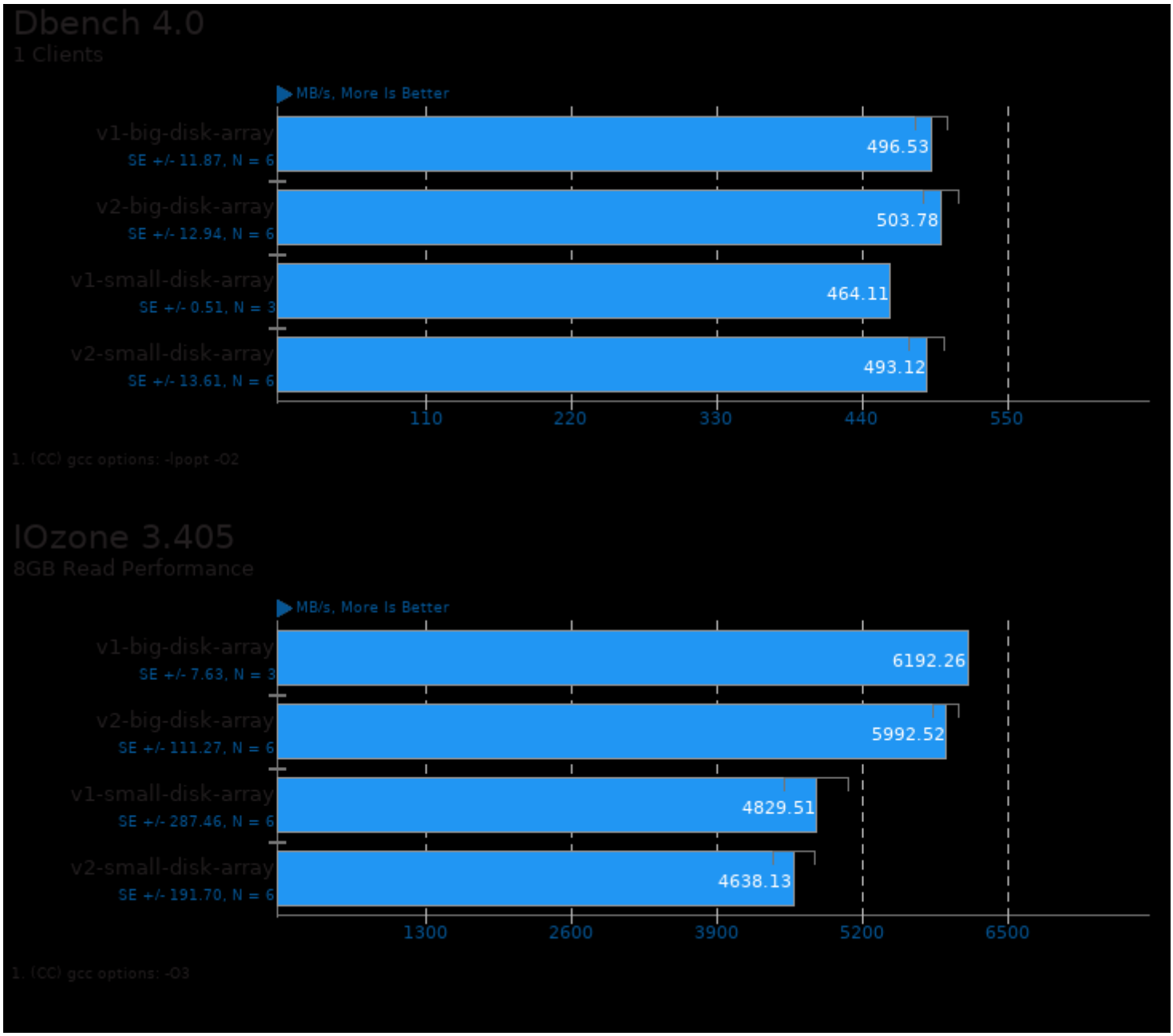
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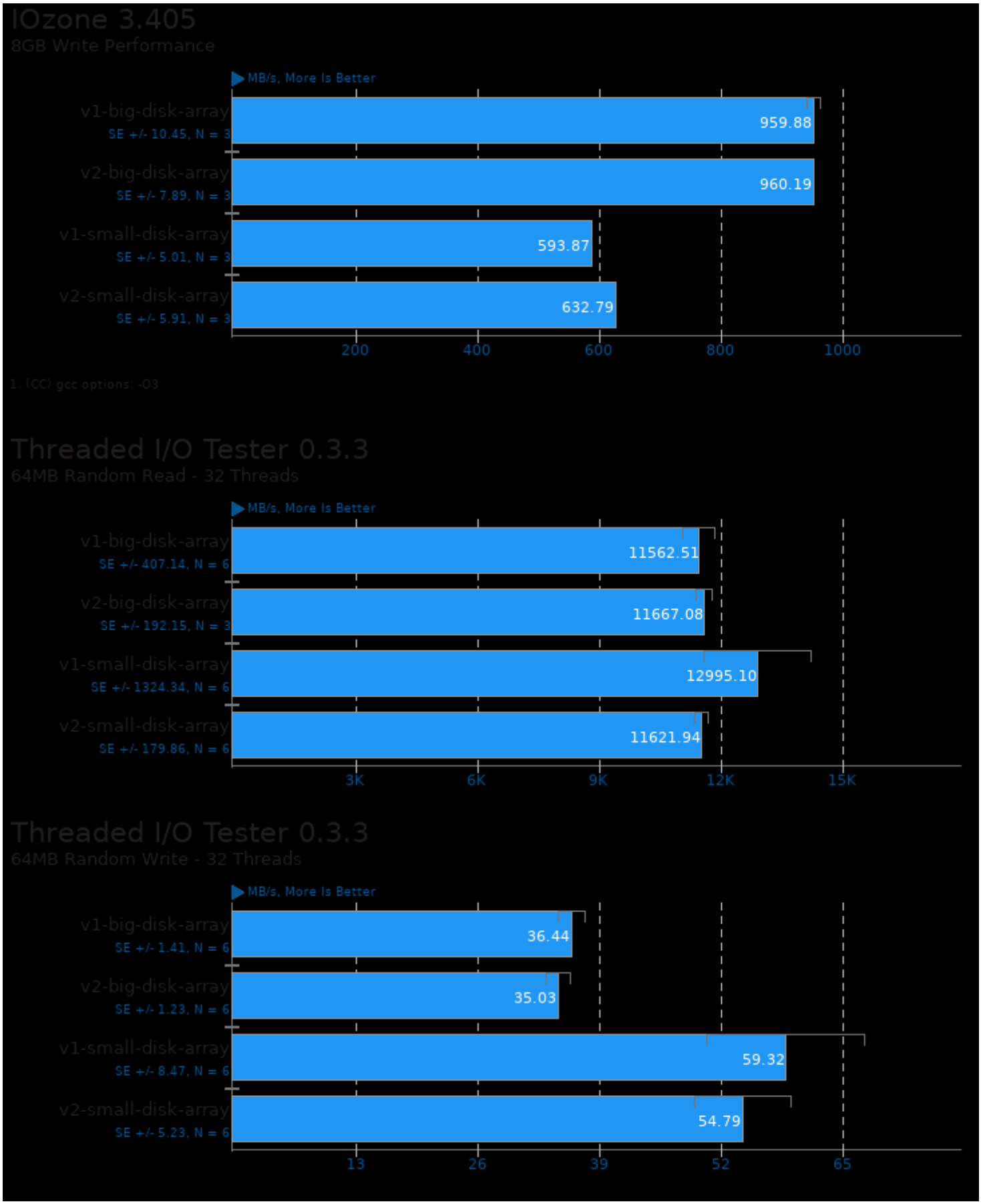


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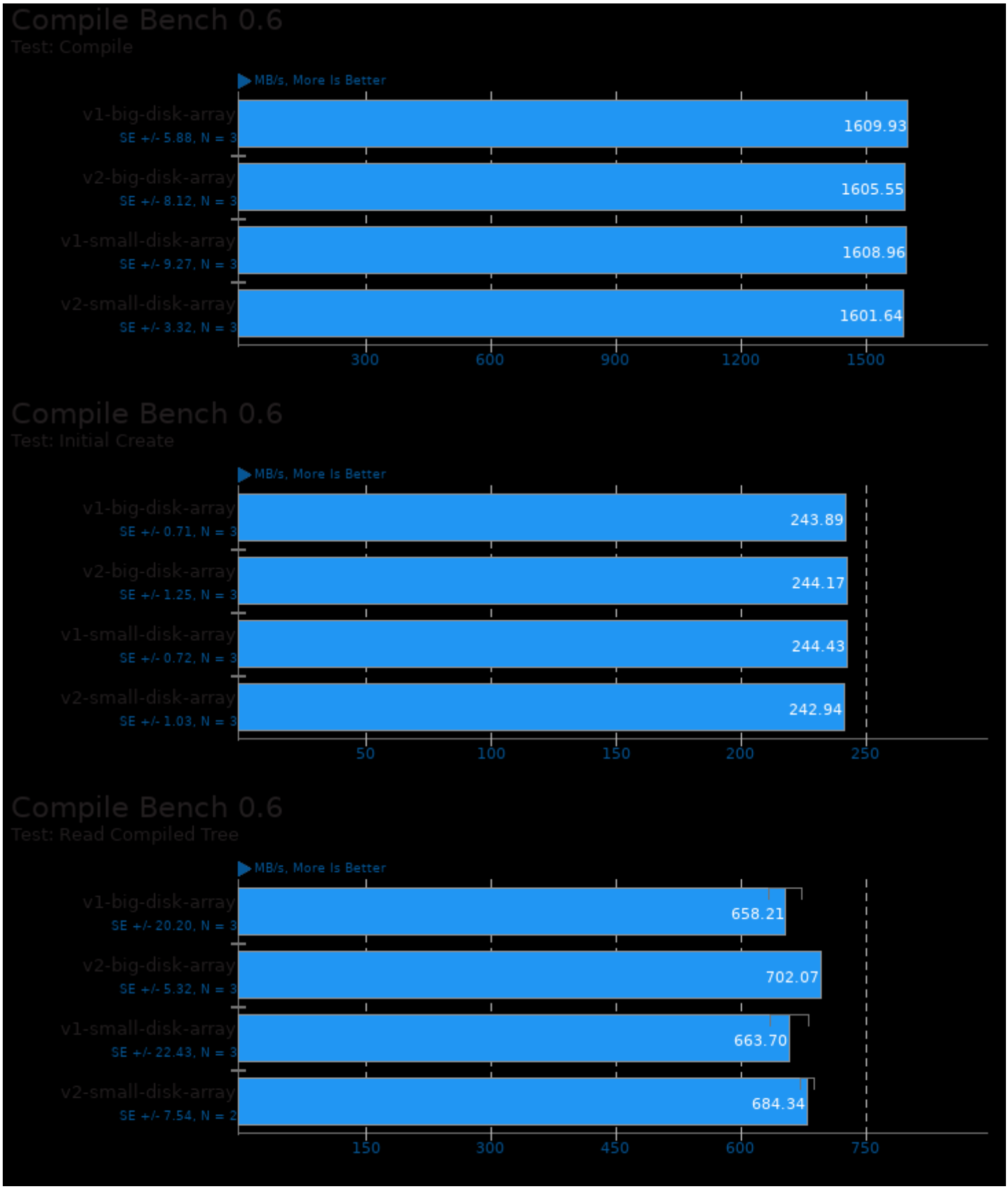


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IOzone 3.405
8GB Write Performance
MB/s, More Is Better
v1-big-disk-array
SE +/- 10.45, N = 3
959.88
v2-big-disk-array
SE +/- 7.89, N = 3
960.19
v1-small-disk-array
SE +/- 5.01, N = 3
593.87
v2-small-disk-array
SE +/- 5.91, N = 3
632.79
200
400
600
800
1000
1. (CC) gcc options: -O3
Threaded I/O Tester 0.3.3
64MB Random Read - 32 Threads
MB/s, More Is Better
v1-big-disk-array
SE +/- 407.14, N = 6
11562.51
v2-big-disk-array
SE +/- 192.15, N = 3
11667.08
v1-small-disk-array
SE +/- 1324.34, N = 6
12995.10
v2-small-disk-array
SE +/- 179.86, N = 6
11621.94
3K
6K
9K
12K
15K
Threaded I/O Tester 0.3.3
64MB Random Write - 32 Threads
MB/s, More Is Better
v1-big-disk-array
SE +/- 1.41, N = 6
36.44
v2-big-disk-array
SE +/- 1.23, N = 6
35.03
v1-small-disk-array
SE +/- 8.47, N = 6
59.32
v2-small-disk-array
SE +/- 5.23, N = 6
54.79
13
26
39
52
65

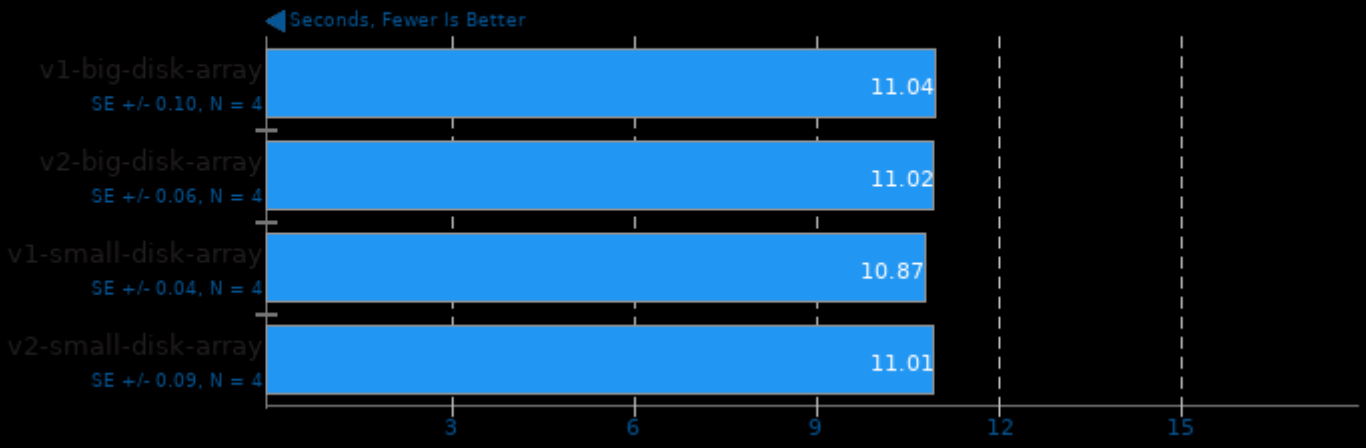
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backup-server

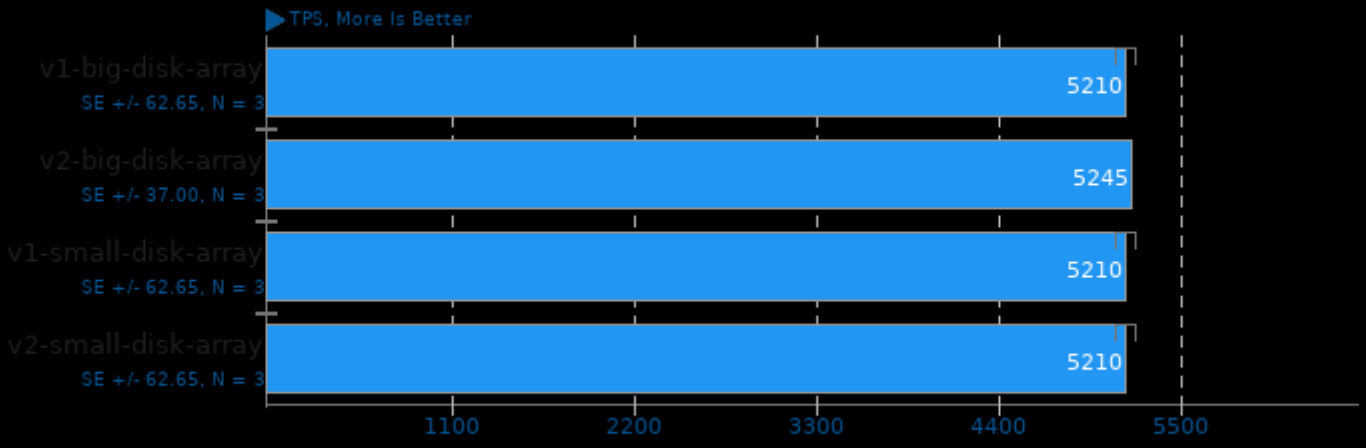
Unpacking The Linux Kernel

linux-2.6.32.tar.bz2



PostMark 1.51

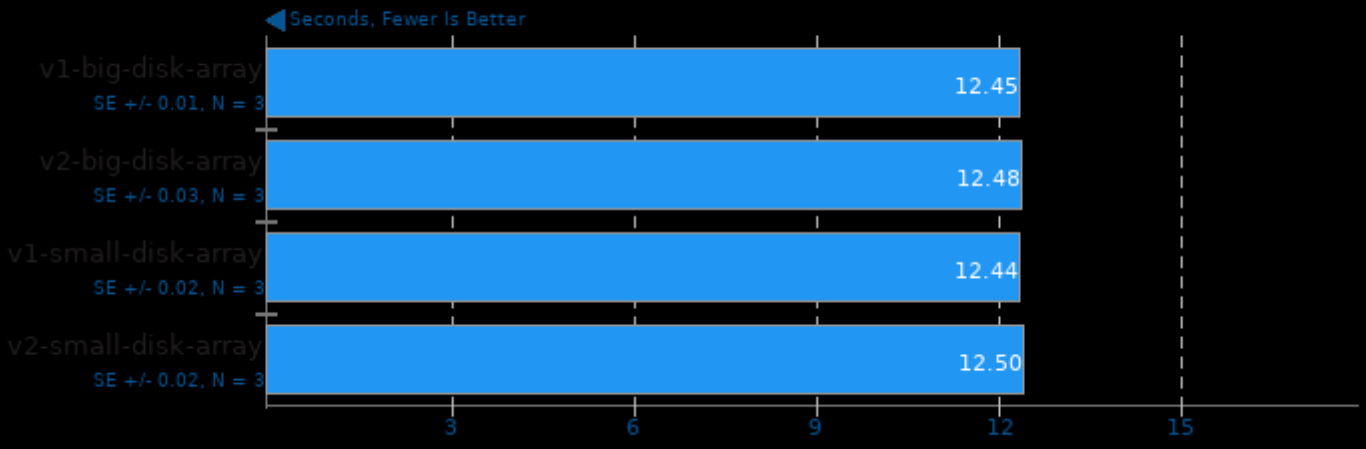
Disk Transaction Performance

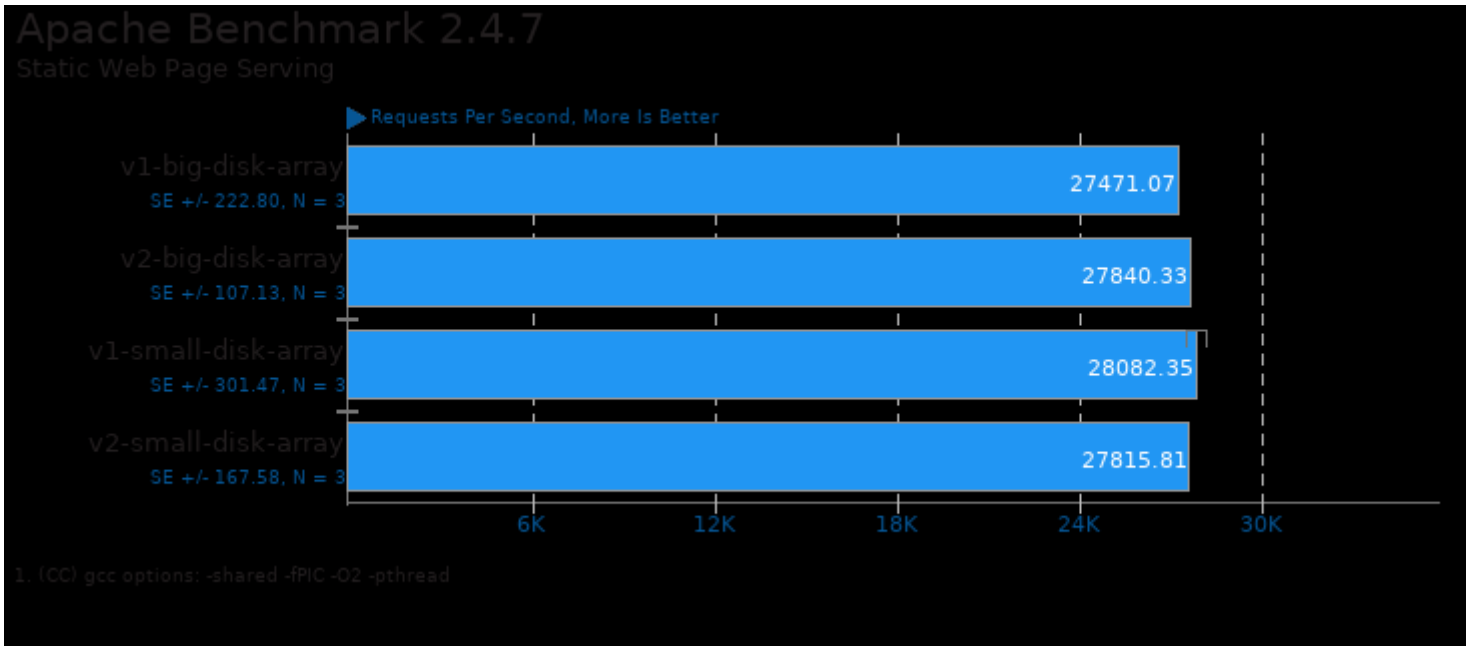


1. (CC) gcc options: -O3

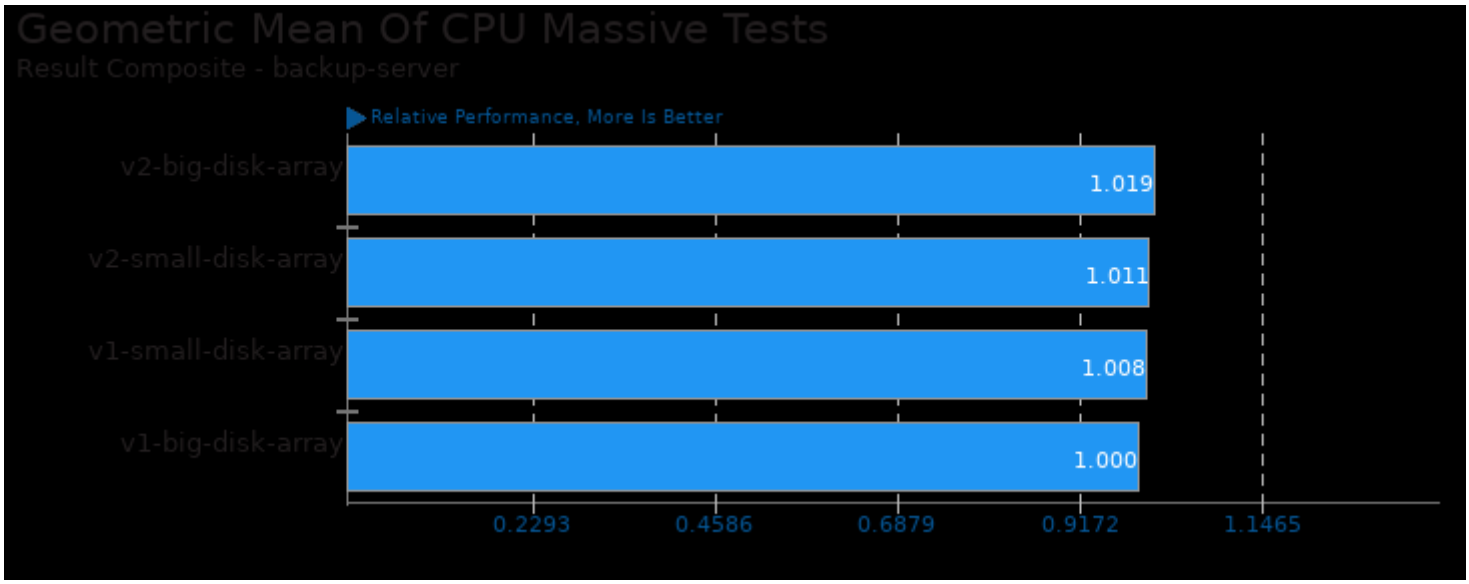
Gzip Compression

2GB File Compression

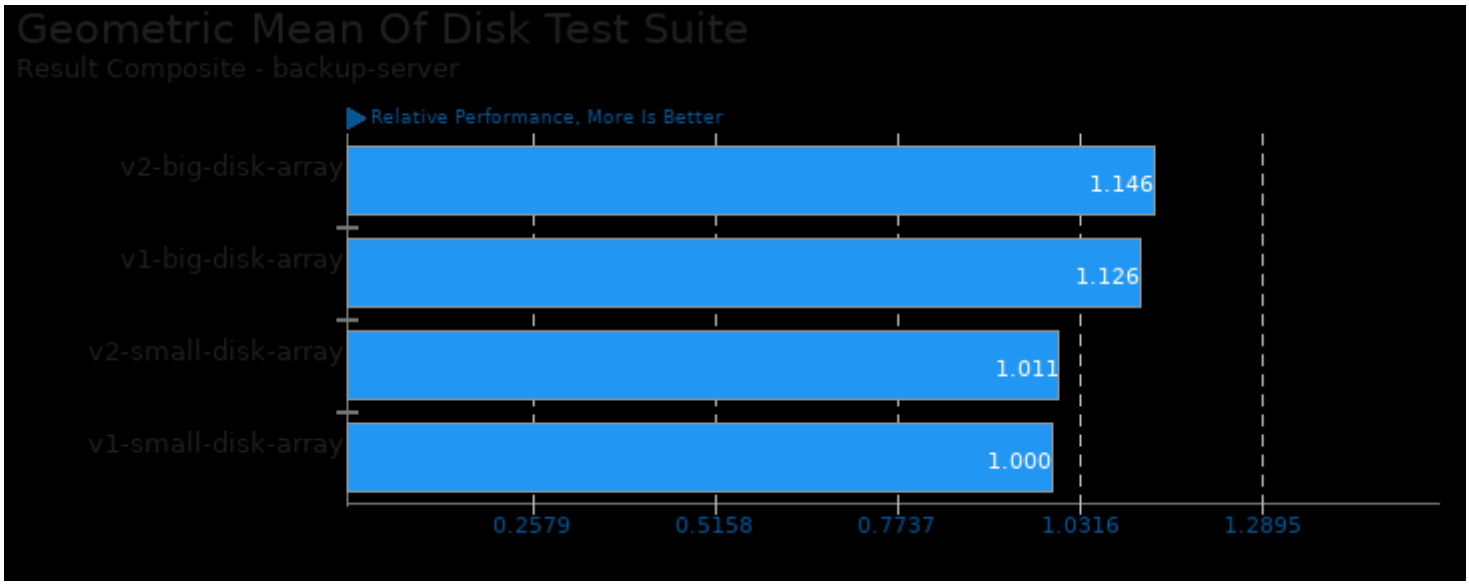



Apache Benchmark 2.4.7
Static Web Page Serving
Requests Per Second, More Is Better
v1-big-disk-array
SE +/- 222.80, N = 3
27471.07
v2-big-disk-array
SE +/- 107.13, N = 3
27840.33
v1-small-disk-array
SE +/- 301.47, N = 3
28082.35
v2-small-disk-array
SE +/- 167.58, N = 3
27815.81
6K
12K
18K
24K
30K
1. (CC) gcc options: -shared -fPIC -O2 -pthread

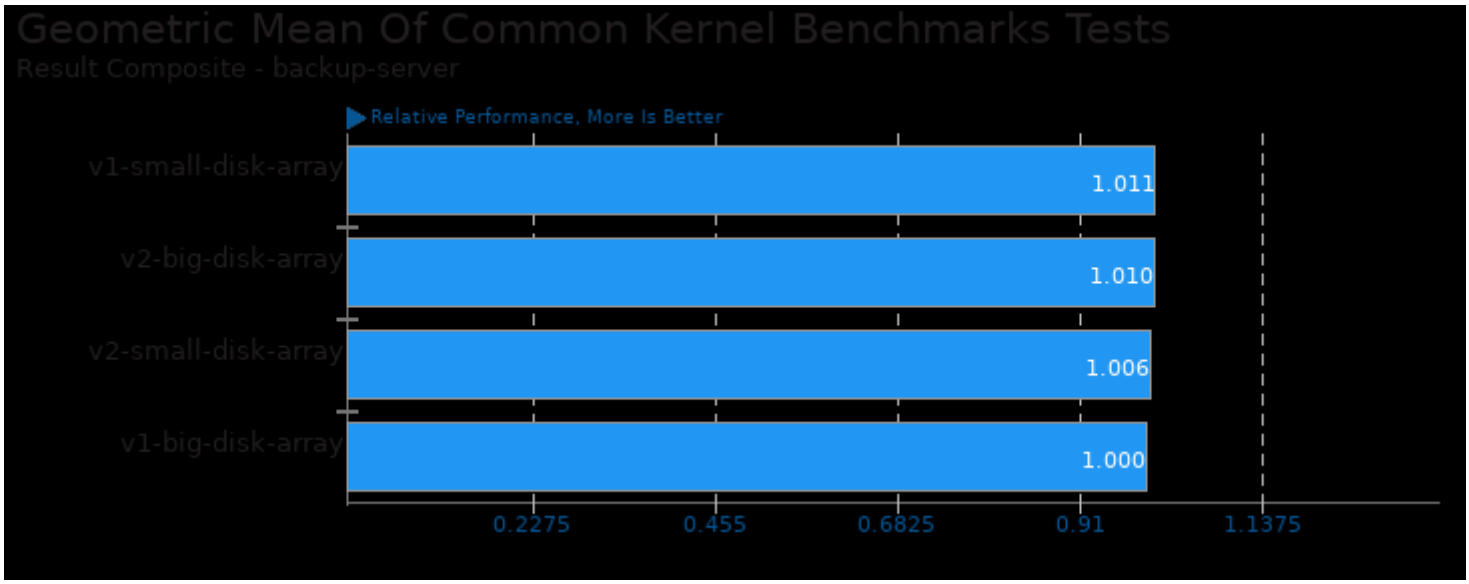
These geometric means are based upon test groupings / test suites for this result file.



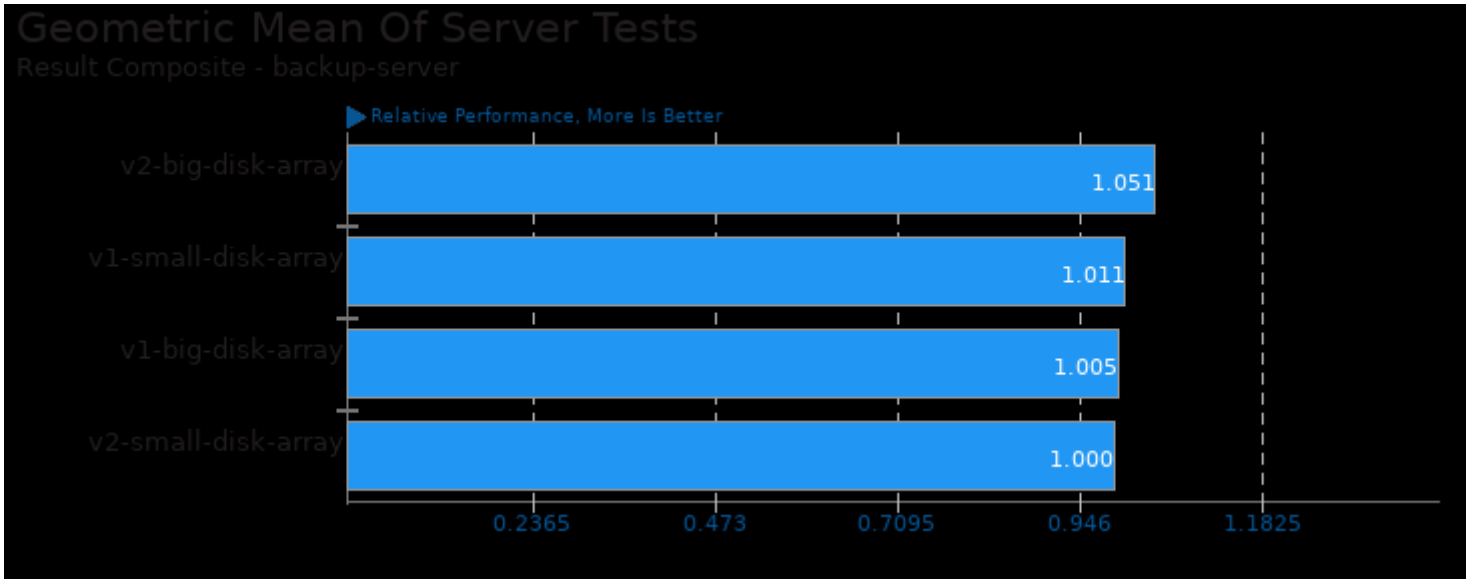
Geometric mean based upon tests: pts/apache and pts/compilebench



Geometric mean based upon tests: pts/sqlite, pts/fs-mark, pts/compilebench, pts/iozone, pts/dbench and pts/postmark



Geometric mean based upon tests: pts/apache and pts/postmark



Geometric mean based upon tests: pts/apache and pts/sqlite

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 20:26.