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CC21Assignment2

Xen HVM domU 4.2.amazon testing on Ubuntu 20.04 via the Phoronix Test Suite.

Test Systems:

t2.large

Processor: Intel Xeon E5-2686 v4 (2 Cores), Motherboard: Xen HVM domU (4.2.amazon BIOS), Chipset: Intel 440FX 82441FX PMC, Memory: 8GB, Disk: 8GB, Graphics: Cirrus Logic GD 5446

OS: Ubuntu 20.04, Kernel: 5.4.0-1038-aws (x86_64), Compiler: GCC 9.3.0, File-System: ext4, System Layer: Xen HVM domU 4.2.amazon

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-HskZEa/gcc-9-9.3.0/debian/tmp-nvptx/usr,hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: CPU Microcode: 0xb000038
Security Notes: itlb_multihit: KVM: Vulnerable + l1tf: Mitigation of PTE Inversion + mds: Vulnerable: Clear buffers attempted no microcode; SMT Host state unknown +

meltdown: Mitigation of PTI + spec_store_bypass: Vulnerable + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Full generic retpoline STIBP: disabled RSB filling + srbds: Not affected + tsx_async_abort: Not affected

m4.large

Processor: Intel Xeon E5-2686 v4 (1 Core / 2 Threads), Motherboard: Xen HVM domU (4.2.amazon BIOS), Chipset: Intel 440FX 82441FX PMC, Memory: 8GB, Disk: 8GB, Graphics: Cirrus Logic GD 5446, Network: Intel 82599 Virtual Function

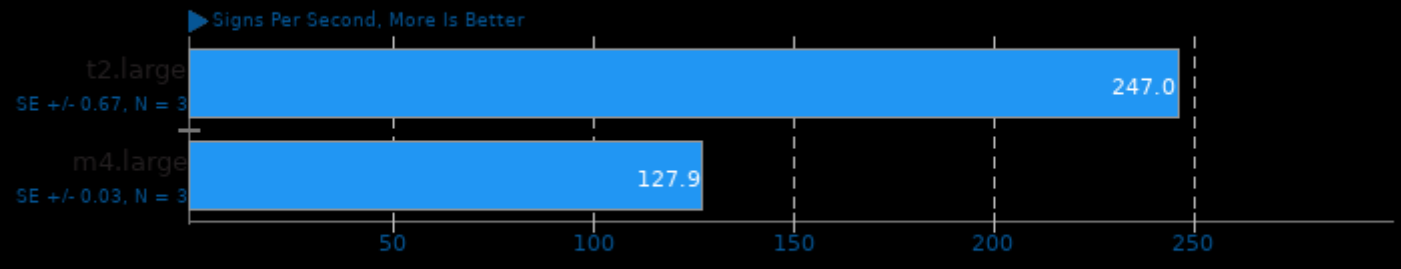
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	t2.large	m4.large
OpenSSL - R.4.b.P (Signs/sec)	**247.0**	**127.9**
Normalized	100%	51.78%
Standard Deviation	0.5%	0%
Stream - Add (MB/s)	**14783**	**7806**
Normalized	100%	52.8%
Standard Deviation	0.5%	0.2%
LAME MP3 Encoding - WAV To MP3 (sec)	**13.477**	**14.203**
Normalized	100%	94.89%
Standard Deviation	0.1%	21.4%
Apache Benchmark - S.W.P.S (Reqs/sec)	**8908**	**6462**
Normalized	100%	72.54%
Standard Deviation	1.2%	0.6%
Loopback TCP Network Performance - T.T.T.1.V.L	**16.953**	**19.519**
Normalized	100%	86.85%
Standard Deviation	2.1%	1.3%
John The Ripper - Blowfish (Real C/S)	**2107**	**1189**
Normalized	100%	56.43%

OpenSSL 1.1.1

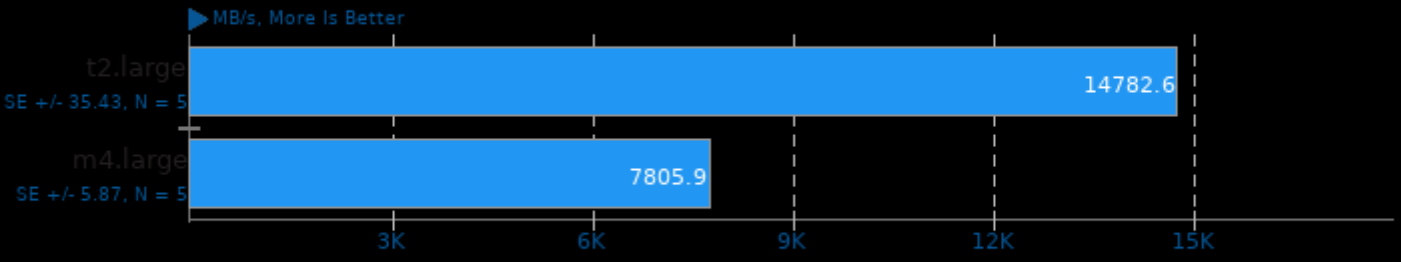
RSA 4096-bit Performance



1. (CC) gcc options: -pthread -m64 -O3 -lssl -lcrypto -ldl

Stream 2013-01-17

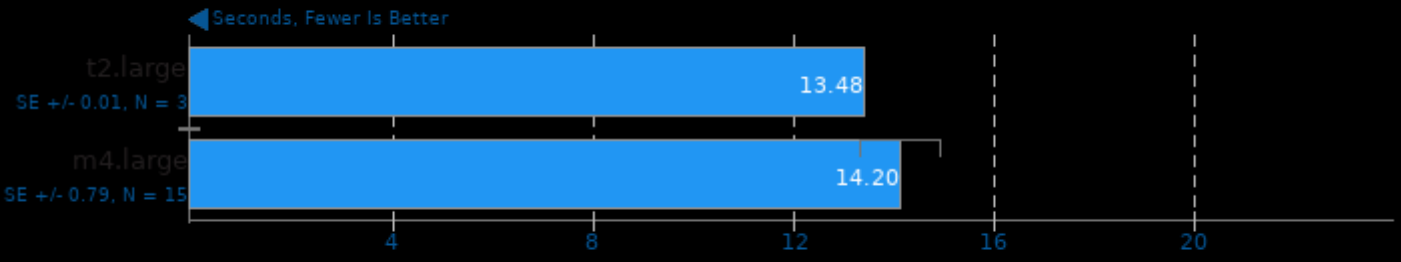
Type: Add



1. (CC) gcc options: -O3 -march=native -fopenmp

LAME MP3 Encoding 3.100

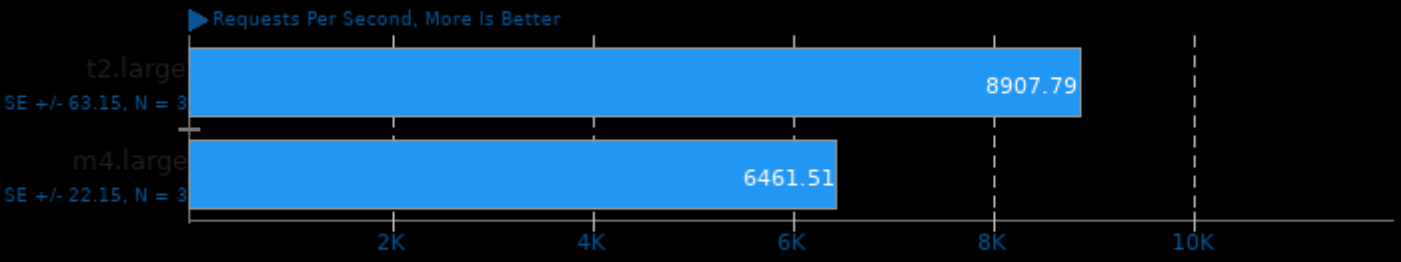
WAV To MP3



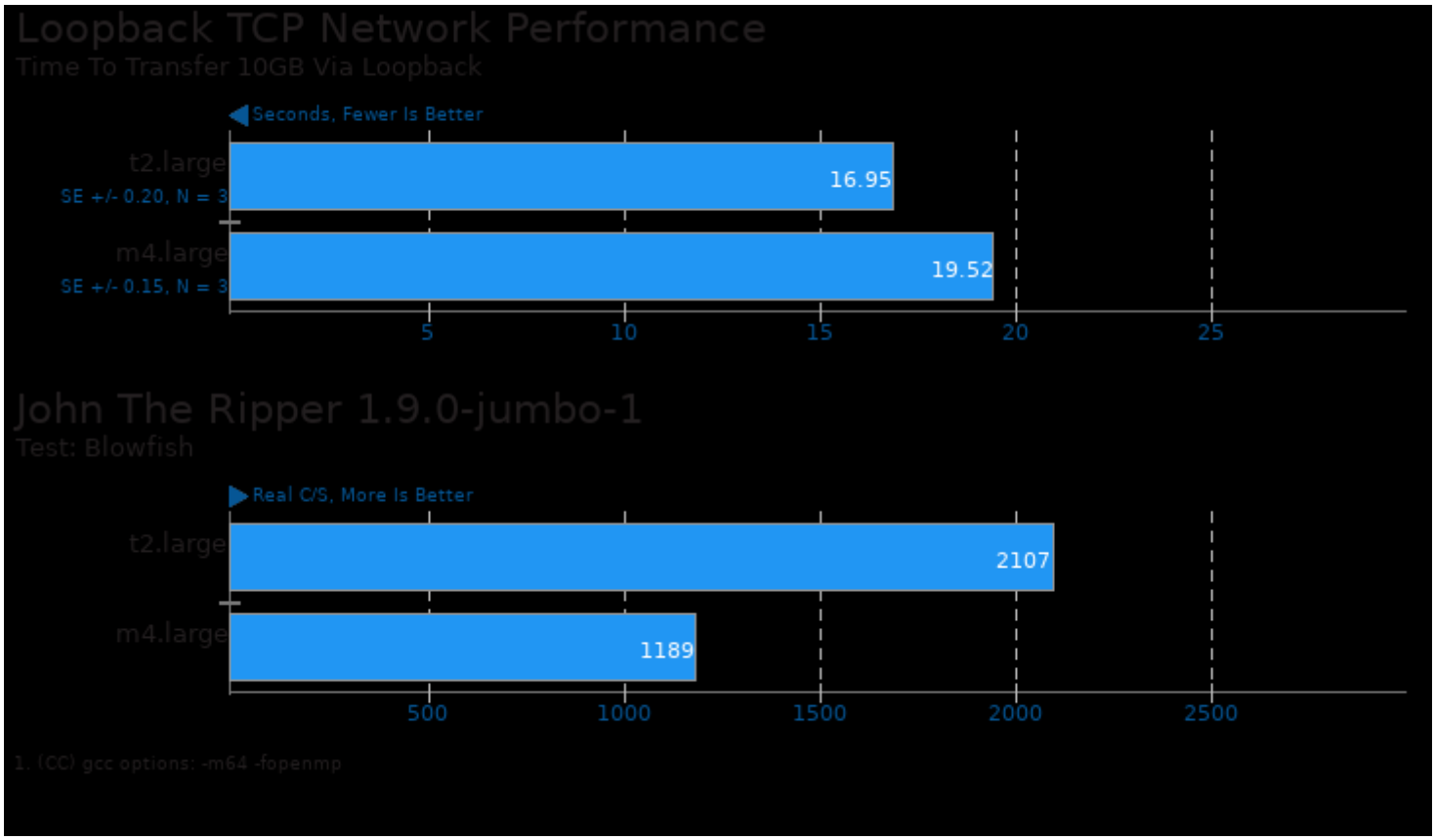
1. (CC) gcc options: -O3 -ffast-math -funroll-loops -fschedule-insns2 -fbranch-count-reg -fforce-addr -pipe -lm

Apache Benchmark 2.4.29

Static Web Page Serving

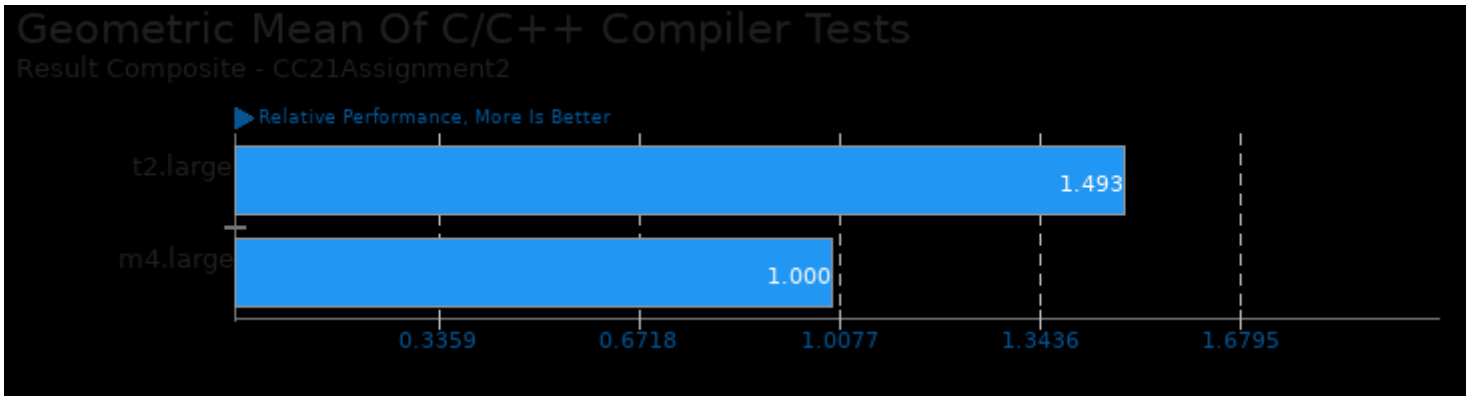


1. (CC) gcc options: -shared -fPIC -O2 -pthread

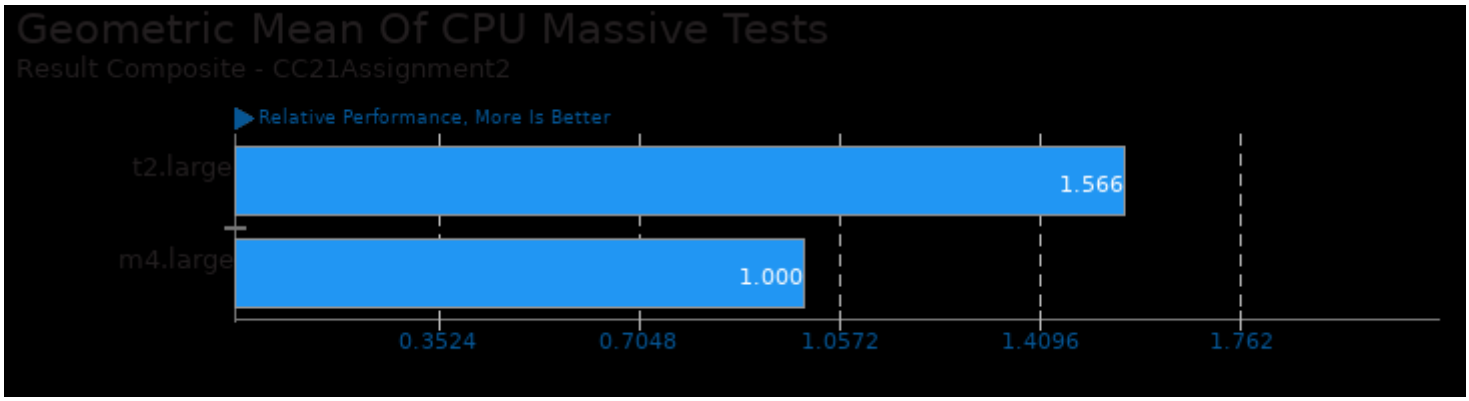

Loopback TCP Network Performance
Time To Transfer 10GB Via Loopback
Seconds, Fewer Is Better
t2.large
SE +/- 0.20, N = 3
16.95
m4.large
SE +/- 0.15, N = 3
19.52
5
10
15
20
25
John The Ripper 1.9.0-jumbo-1
Test: Blowfish
Real C/S, More Is Better
t2.large
2107
m4.large
1189
500
1000
1500
2000
2500
1. (CC) gcc options: -m64 -fopenmp

CC21Assignment2

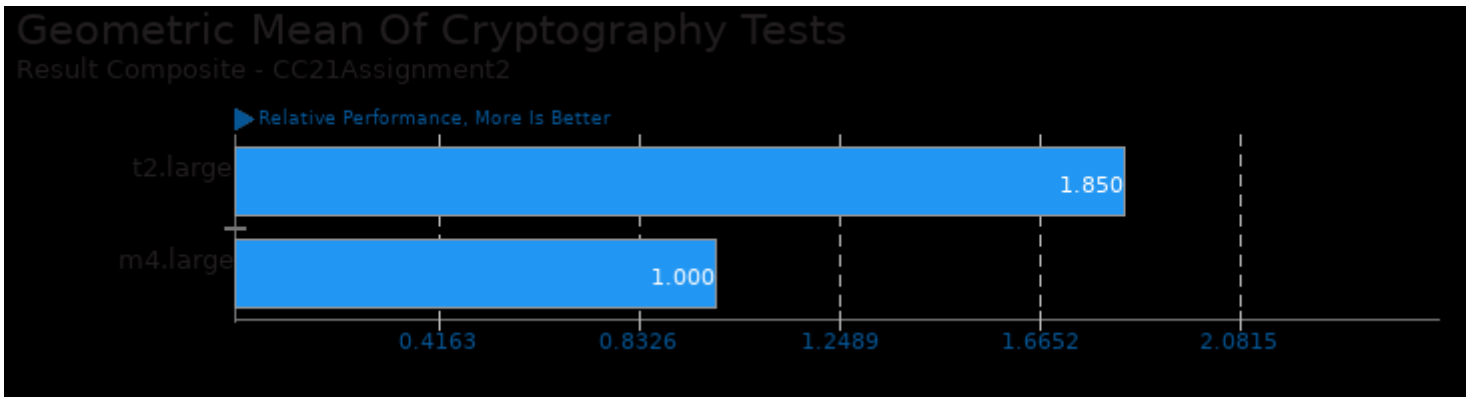
These geometric means are based upon test groupings / test suites for this result file.



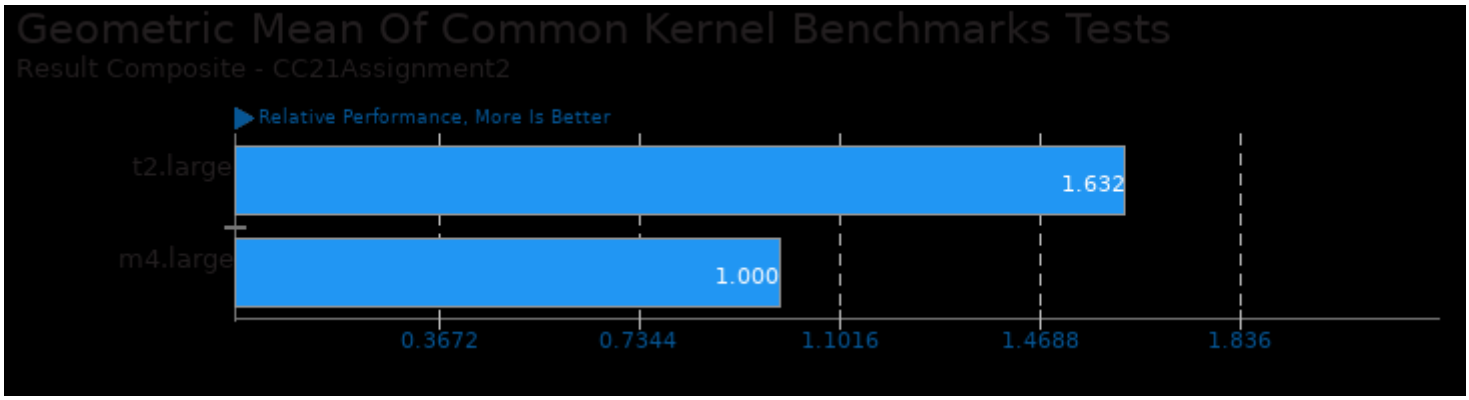
Geometric mean based upon tests: pts/encode-mp3, pts/apache, pts/john-the-ripper and pts/openssl



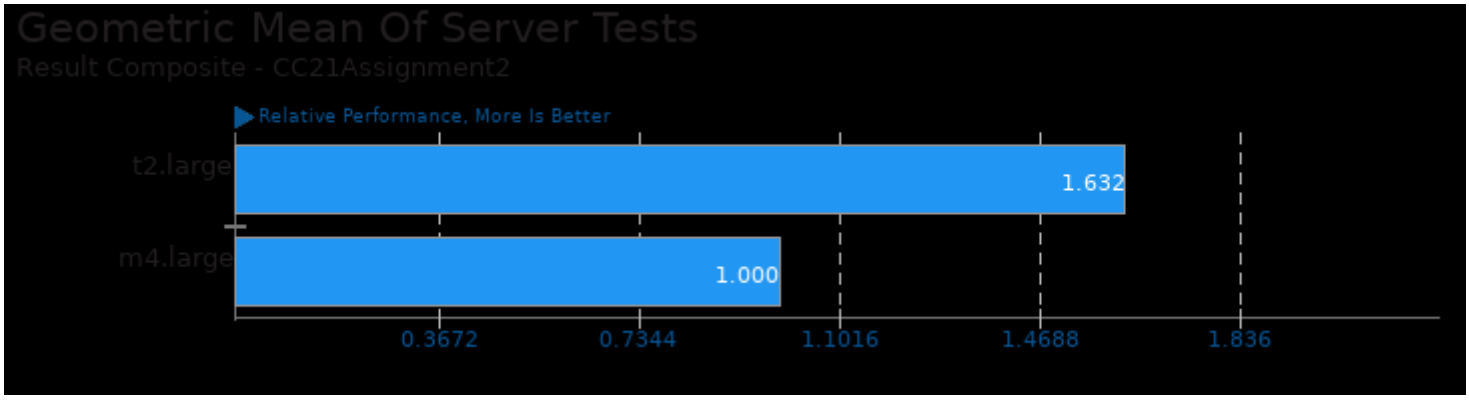
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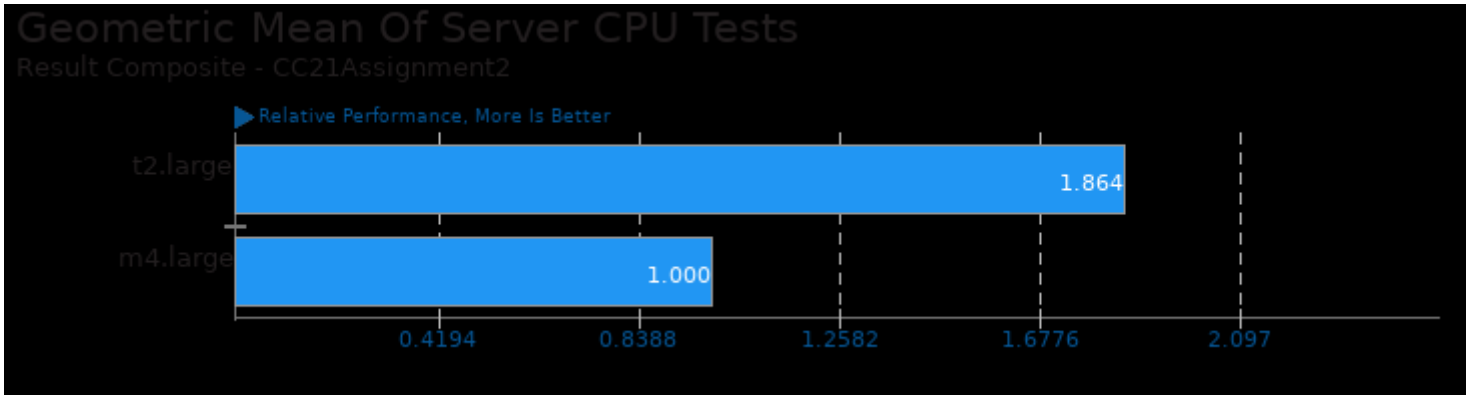
Geometric mean based upon tests: pts/openssl and pts/john-the-ripper



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



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



Geometric mean based upon tests: pts/john-the-ripper, pts/openssl and pts/stream

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 11:28.