## Benchmark Results

| *all times in µs* | | **Node.js 12.16** | | **LuaJIT 2.0** | | **LuaJIT -joff** | | **Lua 5.2.4** | | **Lua 5.3.6** | | **Lua 5.4.1** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Benchmark:** | *n* | *average* | *factor* | *average* | *factor* | *average* | *factor* | *average* | *factor* | *average* | *factor* | *average* | *factor* |
| DeltaBlue | 12000 | 65 | 0.2 | 345 | 1.0 | 428 | 1.2 | 841 | 2.4 | 807 | 2.3 | 647 | 1.9 |
| Richards | 100 | 5'746 | 0.2 | 34'879 | 1.0 | 99'423 | 2.9 | 216'537 | 6.2 | 184'903 | 5.3 | 151'299 | 4.3 |
| Json | 100 | 5'036 | 0.8 | 6'611 | 1.0 | 19'822 | 3.0 | 44'369 | 6.7 | 41'393 | 6.3 | 32'835 | 5.0 |
| Havlak | 3 | 727'663 | 0.1 | 7'975'396 | 1.0 | 9'606'268 | 1.2 | 17'742'578 | 2.2 | 16'745'192 | 2.1 | 17'119'432 | 2.1 |
| Bounce | 1500 | 142 | 0.7 | 217 | 1.0 | 1'358 | 6.3 | 4'030 | 18.6 | 3'461 | 15.9 | 2'408 | 11.1 |
| List | 1500 | 237 | 0.4 | 599 | 1.0 | 931 | 1.6 | 2'347 | 3.9 | 2'074 | 3.5 | 1'639 | 2.7 |
| Mandelbrot | 500 | 14 | 7.0 | 2 | 1.0 | 1 | 0.5 | 3 | 1.5 | 4 | 2.0 | 2 | 1.0 |
| NBody | 250000 | 3 | 0.4 | 7 | 1.0 | 16 | 2.3 | 42 | 6.0 | 36 | 5.1 | 29 | 4.1 |
| Permute | 1000 | 159 | 0.5 | 292 | 1.0 | 1'680 | 5.8 | 5'904 | 20.2 | 4'546 | 15.6 | 3'597 | 12.3 |
| Queens | 1000 | 223 | 0.8 | 265 | 1.0 | 1'091 | 4.1 | 3'363 | 12.7 | 3'015 | 11.4 | 2'100 | 7.9 |
| Sieve | 3000 | 104 | 1.0 | 103 | 1.0 | 490 | 4.8 | 1'360 | 13.2 | 1'249 | 12.1 | 850 | 8.3 |
| Storage | 1000 | 314 | 0.1 | 2'144 | 1.0 | 3'328 | 1.6 | 7'027 | 3.3 | 6'853 | 3.2 | 5'876 | 2.7 |
| Towers | 600 | 299 | 1.0 | 299 | 1.0 | 2'933 | 9.8 | 9'626 | 32.2 | 7'571 | 25.3 | 5'740 | 19.2 |
| | | | | | | | | | | | | | |
| sum of averages: | | 740'005 | 0.1 | 8'021'159 | 1.0 | 9'737'769 | 1.2 | 18'038'027 | 2.2 | 17'001'104 | 2.1 | 17'326'454 | 2.2 |
| geomean of averages: | | 335 | 0.5 | 674 | 1.0 | 1'749 | 2.6 | 4'502 | 6.7 | 4'108 | 6.1 | 3'127 | 4.6 |

Benchmarks used from https://github.com/smarr/are-we-fast-yet commit 770c664 3.4.2020
NOTE: CD didn't work on any of the Lua VMs, thus left out
NOTE: more than half of the benchmarks didn't work with Lua 5.1 because of missing bit functions, thus left out

Testmachine: HP EliteBook 2530p, Intel Core Duo L9400 1.86GHz, 4GB RAM, Linux i386
All binaries compiled with GCC 4.8.2
LuaJIT params, deviations from default values:

| | |
|---|---|
| maxtrace | 100000 |
| maxrecord | 40000 |
| maxside | 100 |
| maxsnap | 1000 |
| sizemcode | 64 |
| maxmcode | 5120 |