**Test machine: 8 GB Memory, 2 Cores CPU**

## 25 Concurrent

| Server | DB | Index | Transactions | Availability | Elapsed time | Data transferred | Response time | Transaction rate | Throughput | Concurrency | Successful transactions | Failed transactions | Longest transaction | Shortest transaction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHP-FPM | PostgreSQL | No Index | 154 hits | 100.00 % | 29.24 secs | 0.00 MB | 4.39 secs | 5.27 trans/sec | 0.00 MB/sec | 23.14 | 154 | 0 | 6.04 | 0.62 |
| | PostgreSQL | Indexed | 166 hits | 100.00 % | 29.91 secs | 0.00 MB | 4.11 secs | 5.55 trans/sec | 0.00 MB/sec | 22.81 | 166 | 0 | 6.26 | 2.91 |
| | MariaDB | No Index | 120 hits | 100.00 % | 29.70 secs | 0.00 MB | 5.60 secs | 4.04 trans/sec | 0.00 MB/sec | 22.61 | 120 | 0 | 7.39 | 1.48 |
| | MariaDB | Indexed | 170 hits | 100.00 % | 29.79 secs | 0.00 MB | 3.98 secs | 5.71 trans/sec | 0.00 MB/sec | 22.74 | 170 | 0 | 6.52 | 2.93 |
| PHP-FPM + OpCache | PostgreSQL | No Index | 762 hits | 100.00 % | 29.40 secs | 0.00 MB | 0.95 secs | 25.92 trans/sec | 0.00 MB/sec | 24.56 | 762 | 0 | 2.02 | 0.74 |
| | PostgreSQL | Indexed | 1886 hits | 100.00 % | 29.08 secs | 0.01 MB | 0.38 secs | 64.86 trans/sec | 0.00 MB/sec | 24.83 | 1886 | 0 | 1.21 | 0.27 |
| | MariaDB | No Index | 130 hits | 100.00 % | 29.85 secs | 0.00 MB | 5.12 secs | 4.36 trans/sec | 0.00 MB/sec | 22.3 | 130 | 0 | 6.66 | 1.42 |
| | MariaDB | Indexed | 206 hits | 100.00 % | 29.50 secs | 0.00 MB | 3.38 secs | 6.98 trans/sec | 0.00 MB/sec | 23.59 | 206 | 0 | 4.76 | 0.88 |
| ReactPHP | PostgreSQL | No Index | 399 hits | 100.00 % | 29.55 secs | 0.00 MB | 1.80 secs | 13.50 trans/sec | 0.00 MB/sec | 24.31 | 399 | 0 | 2.7 | 0.83 |
| | PostgreSQL | Indexed | 16405 hits | 100.00 % | 29.17 secs | 0.06 MB | 0.04 secs | 562.39 trans/sec | 0.00 MB/sec | 24.95 | 1640 | 0 | 1.05 | 0.02 |
| | MariaDB | No Index | 138 hits | 100.00 % | 29.38 secs | 0.00 MB | 4.85 secs | 4.70 trans/sec | 0.00 MB/sec | 22.78 | 138 | 0 | 6.32 | 1.31 |
| | MariaDB | Indexed | 16390 hits | 100.00 % | 29.77 secs | 0.06 MB | 0.04 secs | 550.55 trans/sec | 0.00 MB/sec | 22.65 | 1639 | 0 | 0.7 | 0.02 |
| ReactPHP + Opcache | PostgreSQL | No Index | 391 hits | 100.00 % | 29.16 secs | 0.00 MB | 1.81 secs | 13.41 trans/sec | 0.00 MB/sec | 24.27 | 391 | 0 | 2.72 | 0.84 |
| | PostgreSQL | Indexed | 16394 hits | 100.00 % | 29.10 secs | 0.06 MB | 0.04 secs | 563.37 trans/sec | 0.00 MB/sec | 23.32 | 1639 | 0 | 0.71 | 0.01 |
| | MariaDB | No Index | 141 hits | 100.00 % | 29.58 secs | 0.00 MB | 4.79 secs | 4.77 trans/sec | 0.00 MB/sec | 22.84 | 141 | 0 | 6.1 | 1.36 |
| | MariaDB | Indexed | 16401 hits | 100.00 % | 29.33 secs | 0.06 MB | 0.04 secs | 559.19 trans/sec | 0.00 MB/sec | 22.54 | 1640 | 0 | 0.94 | 0.01 |
| ReactPHP Multi Instance(3) | PostgreSQL | No Index | 991 hits | 100.00 % | 29.64 secs | 0.00 MB | 0.74 secs | 33.43 trans/sec | 0.00 MB/sec | 24.68 | 991 | 0 | 1.06 | 0.09 |
| | PostgreSQL | Indexed | 16393 hits | 100.00 % | 29.99 secs | 0.06 MB | 0.04 secs | 546.62 trans/sec | 0.00 MB/sec | 20.71 | 1639 | 0 | 1.34 | 0 |
| | MariaDB | No Index | 99 hits | 100.00 % | 29.40 secs | 0.00 MB | 6.57 secs | 3.37 trans/sec | 0.00 MB/sec | 22.11 | 99 | 0 | 9.37 | 2.52 |
| | MariaDB | Indexed | 16385 hits | 100.00 % | 29.89 secs | 0.06 MB | 0.04 secs | 548.18 trans/sec | 0.00 MB/sec | 22.23 | 1638 | 0 | 1.16 | 0 |

## 50 Concurrent

| Server | DB | Index | Transactions | Availability | Elapsed time | Data transferred | Response time | Transaction rate | Throughput | Concurrency | Successful transactions | Failed transactions | Longest transaction | Shortest transaction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHP-FPM | PostgreSQL | No Index | 149 hits | 100.00 % | 29.16 secs | 0.00 MB | 8.26 secs | 5.11 trans/sec | 0.00 MB/sec | 42.19 | 149 | 0 | 11.14 | 0.52 |
| | PostgreSQL | Indexed | 183 hits | 100.00 % | 29.57 secs | 0.00 MB | 6.97 secs | 6.19 trans/sec | 0.00 MB/sec | 43.15 | 183 | 0 | 8.41 | 0.5 |
| | MariaDB | No Index | 133 hits | 100.00 % | 30.00 secs | 0.00 MB | 9.11 secs | 4.43 trans/sec | 0.00 MB/sec | 40.4 | 133 | 0 | 11.76 | 0.67 |
| | MariaDB | Indexed | 197 hits | 100.00 % | 29.81 secs | 0.00 MB | 6.68 secs | 6.61 trans/sec | 0.00 MB/sec | 44.15 | 197 | 0 | 8.68 | 0.56 |
| PHP-FPM + OpCache | PostgreSQL | No Index | 852 hits | 100.00 % | 29.20 secs | 0.00 MB | 1.67 secs | 29.18 trans/sec | 0.00 MB/sec | 48.59 | 852 | 0 | 2.01 | 0.12 |
| | PostgreSQL | Indexed | 2035 hits | 100.00 % | 29.22 secs | 0.01 MB | 0.71 secs | 69.64 trans/sec | 0.00 MB/sec | 49.35 | 2035 | 0 | 0.9 | 0.04 |
| | MariaDB | No Index | 135 hits | 100.00 % | 29.18 secs | 0.00 MB | 8.78 secs | 4.63 trans/sec | 0.00 MB/sec | 40.62 | 135 | 0 | 11.34 | 0.77 |
| | MariaDB | Indexed | 199 hits | 100.00 % | 29.09 secs | 0.00 MB | 6.40 secs | 6.84 trans/sec | 0.00 MB/sec | 43.8 | 199 | 0 | 8.35 | 0.52 |
| ReactPHP | PostgreSQL | No Index | 461 hits | 100.00 % | 29.55 secs | 0.00 MB | 3.03 secs | 15.60 trans/sec | 0.00 MB/sec | 47.2 | 461 | 0 | 3.36 | 0.21 |
| | PostgreSQL | Indexed | 16441 hits | 100.00 % | 29.26 secs | 0.06 MB | 0.08 secs | 561.89 trans/sec | 0.00 MB/sec | 46.2 | 1644 | 0 | 0.17 | 0 |
| | MariaDB | No Index | 145 hits | 100.00 % | 29.46 secs | 0.00 MB | 8.47 secs | 4.92 trans/sec | 0.00 MB/sec | 41.67 | 145 | 0 | 10.38 | 0.22 |
| | MariaDB | Indexed | 16433 hits | 100.00 % | 29.37 secs | 0.06 MB | 0.08 secs | 559.52 trans/sec | 0.00 MB/sec | 44.24 | 1643 | 0 | 0.16 | 0.01 |
| ReactPHP + Opcache | PostgreSQL | No Index | 452 hits | 100.00 % | 29.49 secs | 0.00 MB | 3.08 secs | 15.33 trans/sec | 0.00 MB/sec | 47.26 | 452 | 0 | 3.43 | 0.21 |
| | PostgreSQL | Indexed | 16412 hits | 100.00 % | 29.25 secs | 0.06 MB | 0.08 secs | 561.09 trans/sec | 0.00 MB/sec | 46.07 | 1641 | 0 | 0.17 | 0 |
| | MariaDB | No Index | 144 hits | 100.00 % | 29.41 secs | 0.00 MB | 8.44 secs | 4.90 trans/sec | 0.00 MB/sec | 41.33 | 144 | 0 | 10.42 | 0.63 |
| | MariaDB | Indexed | 16455 hits | 100.00 % | 29.34 secs | 0.06 MB | 0.08 secs | 560.84 trans/sec | 0.00 MB/sec | 44.21 | 1645 | 0 | 1.05 | 0.01 |
| ReactPHP Multi Instance(3) | PostgreSQL | No Index | 1073 hits | 100.00 % | 29.18 secs | 0.00 MB | 1.32 secs | 36.77 trans/sec | 0.00 MB/sec | 48.7 | 1073 | 0 | 1.73 | 0.08 |
| | PostgreSQL | Indexed | 16418 hits | 100.00 % | 29.19 secs | 0.06 MB | 0.07 secs | 562.45 trans/sec | 0.00 MB/sec | 38.09 | 1641 | 0 | 0.25 | 0 |
| | MariaDB | No Index | 100 hits | 100.00 % | 29.17 secs | 0.00 MB | 10.92 secs | 3.43 trans/sec | 0.00 MB/sec | 37.44 | 100 | 0 | 15.1 | 0.83 |
| | MariaDB | Indexed | 16417 hits | 100.00 % | 29.21 secs | 0.06 MB | 0.07 secs | 562.03 trans/sec | 0.00 MB/sec | 37.71 | 1641 | 0 | 1.09 | 0 |

## 100 Concurrent

| Server | DB | Index | Transactions | Availability | Elapsed time | Data transferred | Response time | Transaction rate | Throughput | Concurrency | Successful transactions | Failed transactions | Longest transaction | Shortest transaction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHP-FPM | PostgreSQL | No Index | 164 hits | 100.00 % | 29.20 secs | 0.00 MB | 12.38 secs | 5.62 trans/sec | 0.00 MB/sec | 69.53 | 164 | 0 | 18.07 | 0.65 |
| | PostgreSQL | Indexed | 182 hits | 100.00 % | 29.74 secs | 0.00 MB | 11.98 secs | 6.12 trans/sec | 0.00 MB/sec | 73.31 | 182 | 0 | 16.55 | 0.49 |
| | MariaDB | No Index | 135 hits | 100.00 % | 29.99 secs | 0.00 MB | 14.01 secs | 4.50 trans/sec | 0.00 MB/sec | 63.05 | 135 | 0 | 22.34 | 0.67 |
| | MariaDB | Indexed | 212 hits | 100.00 % | 29.86 secs | 0.00 MB | 10.71 secs | 7.10 trans/sec | 0.00 MB/sec | 76.04 | 212 | 0 | 14.19 | 0.46 |
| PHP-FPM + OpCache | PostgreSQL | No Index | 819 hits | 100.00 % | 29.01 secs | 0.00 MB | 3.33 secs | 28.23 trans/sec | 0.00 MB/sec | 94.07 | 819 | 0 | 3.85 | 0.14 |
| | PostgreSQL | Indexed | 2084 hits | 100.00 % | 29.08 secs | 0.01 MB | 1.36 secs | 71.66 trans/sec | 0.00 MB/sec | 97.55 | 2084 | 0 | 1.6 | 0.05 |
| | MariaDB | No Index | 134 hits | 100.00 % | 29.33 secs | 0.00 MB | 13.99 secs | 4.48 trans/sec | 0.00 MB/sec | 62.64 | 134 | 0 | 22.46 | 0.84 |
| | MariaDB | Indexed | 212 hits | 100.00 % | 29.99 secs | 0.00 MB | 10.75 secs | 7.07 trans/sec | 0.00 MB/sec | 76.03 | 212 | 0 | 14.4 | 0.53 |
| ReactPHP | PostgreSQL | No Index | 453 hits | 100.00 % | 29.46 secs | 0.00 MB | 5.79 secs | 15.38 trans/sec | 0.00 MB/sec | 88.96 | 453 | 0 | 6.66 | 0.14 |
| | PostgreSQL | Indexed | 16487 hits | 100.00 % | 29.29 secs | 0.06 MB | 0.18 secs | 562.89 trans/sec | 0.00 MB/sec | 98.53 | 1648 | 0 | 0.29 | 0.01 |
| | MariaDB | No Index | 142 hits | 100.00 % | 29.41 secs | 0.00 MB | 13.47 secs | 4.83 trans/sec | 0.00 MB/sec | 65.04 | 142 | 0 | 20.64 | 1.43 |
| | MariaDB | Indexed | 16481 hits | 100.00 % | 29.27 secs | 0.06 MB | 0.17 secs | 563.07 trans/sec | 0.00 MB/sec | 93 | 1648 | 0 | 1.2 | 0.01 |
| ReactPHP + Opcache | PostgreSQL | No Index | 455 hits | 100.00 % | 29.54 secs | 0.00 MB | 5.79 secs | 15.40 trans/sec | 0.00 MB/sec | 89.13 | 455 | 0 | 6.66 | 0.27 |
| | PostgreSQL | Indexed | 16450 hits | 100.00 % | 29.25 secs | 0.06 MB | 0.17 secs | 562.39 trans/sec | 0.00 MB/sec | 94.75 | 1645 | 0 | 0.31 | 0.01 |
| | MariaDB | No Index | 143 hits | 100.00 % | 29.40 secs | 0.00 MB | 13.55 secs | 4.86 trans/sec | 0.00 MB/sec | 65.88 | 143 | 0 | 20.65 | 1.44 |
| | MariaDB | Indexed | 16475 hits | 100.00 % | 29.20 secs | 0.06 MB | 0.16 secs | 564.21 trans/sec | 0.00 MB/sec | 90.04 | 1647 | 0 | 0.31 | 0.01 |
| ReactPHP Multi Instance(3) | PostgreSQL | No Index | 1051 hits | 100.00 % | 29.18 secs | 0.00 MB | 2.64 secs | 36.02 trans/sec | 0.00 MB/sec | 95.14 | 1051 | 0 | 3.16 | 0.1 |
| | PostgreSQL | Indexed | 16450 hits | 100.00 % | 29.30 secs | 0.06 MB | 0.14 secs | 561.43 trans/sec | 0.00 MB/sec | 76.51 | 1645 | 0 | 0.42 | 0 |
| | MariaDB | No Index | 99 hits | 100.00 % | 29.20 secs | 0.00 MB | 15.20 secs | 3.39 trans/sec | 0.00 MB/sec | 51.53 | 99 | 0 | 29.16 | 0.85 |
| | MariaDB | Indexed | 16471 hits | 100.00 % | 29.21 secs | 0.06 MB | 0.14 secs | 563.88 trans/sec | 0.00 MB/sec | 76.83 | 1647 | 0 | 1.35 | 0 |

## 200 Concurrent

| Server | DB | Index | Transactions | Availability | Elapsed time | Data transferred | Response time | Transaction rate | Throughput | Concurrency | Successful transactions | Failed transactions | Longest transaction | Shortest transaction |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHP-FPM | PostgreSQL | No Index | 157 hits | 100.00 % | 29.15 secs | 0.00 MB | 14.34 secs | 5.39 trans/sec | 0.00 MB/sec | 77.22 | 157 | 0 | 28.24 | 0.66 |
| | PostgreSQL | Indexed | 184 hits | 100.00 % | 30.01 secs | 0.00 MB | 15.12 secs | 6.13 trans/sec | 0.00 MB/sec | 92.72 | 184 | 0 | 29.91 | 0.65 |
| | MariaDB | No Index | 128 hits | 100.00 % | 29.92 secs | 0.00 MB | 15.47 secs | 4.98 trans/sec | 0.00 MB/sec | 66.19 | 128 | 0 | 29.85 | 0 |
| | MariaDB | Indexed | 207 hits | 100.00 % | 29.82 secs | 0.00 MB | 14.74 secs | 6.94 trans/sec | 0.00 MB/sec | 102.32 | 207 | 0 | 28.61 | 0.57 |
| PHP-FPM + OpCache | PostgreSQL | No Index | 829 hits | 100.00 % | 29.10 secs | 0.00 MB | 6.10 secs | 28.49 trans/sec | 0.00 MB/sec | 173.88 | 829 | 0 | 7.47 | 0.15 |
| | PostgreSQL | Indexed | 2140 hits | 100.00 % | 29.94 secs | 0.01 MB | 2.66 secs | 71.48 trans/sec | 0.00 MB/sec | 189.81 | 2140 | 0 | 3.03 | 0.09 |
| | MariaDB | No Index | 130 hits | 100.00 % | 29.89 secs | 0.00 MB | 15.17 secs | 4.35 trans/sec | 0.00 MB/sec | 66 | 130 | 0 | 29.71 | 0.85 |
| | MariaDB | Indexed | 208 hits | 100.00 % | 30.00 secs | 0.00 MB | 14.64 secs | 6.93 trans/sec | 0.00 MB/sec | 101.52 | 208 | 0 | 28.92 | 0.55 |
| ReactPHP | PostgreSQL | No Index | 459 hits | 100.00 % | 29.50 secs | 0.00 MB | 10.08 secs | 15.56 trans/sec | 0.00 MB/sec | 156.91 | 459 | 0 | 12.95 | 0.22 |
| | PostgreSQL | Indexed | 16644 hits | 100.00 % | 29.30 secs | 0.06 MB | 0.34 secs | 568.05 trans/sec | 0.00 MB/sec | 192.32 | 1664 | 0 | 0.61 | 0.01 |
| | MariaDB | No Index | 147 hits | 100.00 % | 29.50 secs | 0.00 MB | 14.94 secs | 4.98 trans/sec | 0.00 MB/sec | 74.46 | 147 | 0 | 29.47 | 0.23 |
| | MariaDB | Indexed | 16577 hits | 100.00 % | 29.32 secs | 0.06 MB | 0.33 secs | 565.38 trans/sec | 0.00 MB/sec | 188.84 | 1657 | 0 | 1.39 | 0.01 |
| ReactPHP + Opcache | PostgreSQL | No Index | 453 hits | 100.00 % | 29.53 secs | 0.00 MB | 10.23 secs | 15.34 trans/sec | 0.00 MB/sec | 156.98 | 453 | 0 | 13.31 | 0.13 |
| | PostgreSQL | Indexed | 16560 hits | 100.00 % | 29.27 secs | 0.06 MB | 0.32 secs | 565.77 trans/sec | 0.00 MB/sec | 182.11 | 1656 | 0 | 0.47 | 0.01 |
| | MariaDB | No Index | 142 hits | 100.00 % | 29.32 secs | 0.00 MB | 14.89 secs | 4.98 trans/sec | 0.00 MB/sec | 72.13 | 142 | 0 | 29.29 | 0 |
| | MariaDB | Indexed | 16557 hits | 100.00 % | 29.33 secs | 0.06 MB | 0.33 secs | 564.51 trans/sec | 0.00 MB/sec | 184.21 | 1655 | 0 | 1.32 | 0.01 |
| ReactPHP Multi Instance(3) | PostgreSQL | No Index | 1087 hits | 100.00 % | 29.22 secs | 0.00 MB | 4.89 secs | 37.20 trans/sec | 0.00 MB/sec | 181.8 | 1087 | 0 | 5.76 | 0.18 |
| | PostgreSQL | Indexed | 16554 hits | 100.00 % | 29.21 secs | 0.06 MB | 0.27 secs | 566.72 trans/sec | 0.00 MB/sec | 155.13 | 1655 | 0 | 0.84 | 0 |
| | MariaDB | No Index | 100 hits | 100.00 % | 29.20 secs | 0.00 MB | 15.08 secs | 3.42 trans/sec | 0.00 MB/sec | 51.65 | 100 | 0 | 28.54 | 0.86 |
| | MariaDB | Indexed | 16531 hits | 100.00 % | 29.27 secs | 0.06 MB | 0.26 secs | 564.78 trans/sec | 0.00 MB/sec | 144.72 | 1653 | 0 | 0.72 | 0 |