

# InfluxDB

**Scale=10**  
**Use case=devops**

**Small**

**Load:**

```
user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_small.gz | gunzip | tsbs_load_influx --workers=1 --do-create-db=false --o-abort-on-exist=false --db-name="small"
time,per. metric/s,metric total,overall metric/s,per. row/s,row total,overall row/s
1705612476,280517.41,2.805310E+06,280517.41,24998.79,2.500000E+05,24998.79
1705612486,359132.41,6.396570E+06,319823.60,32000.57,5.700000E+05,28499.56
1705612496,302999.29,9.426570E+06,314215.55,26999.94,8.400000E+05,27999.69
1705612506,325441.32,1.268994E+07,317021.94,29000.38,1.130000E+06,28249.86
[worker 0] backoffs took a total of 0.000000sec of runtime

Summary:
loaded 13725900 metrics in 42.675sec with 1 workers (mean rate 321640.06 metrics/sec)
loaded 1223100 rows in 42.675sec with 1 workers (mean rate 28661.00 rows/sec)

user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_small.gz | gunzip | tsbs_load_influx --workers=2 --do-create-db=false --o-abort-on-exist=false --db-name="small"
time,per. metric/s,metric total,overall metric/s,per. row/s,row total,overall row/s
1705612365,662011.90,6.620940E+06,662011.90,58992.68,5.900000E+05,58992.68
1705612375,628434.85,1.290531E+07,645224.39,55999.81,1.150000E+06,57496.34
[worker 1] backoffs took a total of 0.000000sec of runtime
[worker 0] backoffs took a total of 0.000000sec of runtime

Summary:
loaded 13725900 metrics in 21.582sec with 2 workers (mean rate 635981.30 metrics/sec)
loaded 1223100 rows in 21.582sec with 2 workers (mean rate 56671.60 rows/sec)

user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_small.gz | gunzip | tsbs_load_influx --workers=4 --do-create-db=false --o-abort-on-exist=false --db-name="small"
time,per. metric/s,metric total,overall metric/s,per. row/s,row total,overall row/s
1705612555,785412.18,7.855310E+06,785412.18,69989.41,7.000000E+05,69989.41
[worker 2] backoffs took a total of 0.000000sec of runtime
[worker 0] backoffs took a total of 0.000000sec of runtime
[worker 3] backoffs took a total of 0.000000sec of runtime
[worker 1] backoffs took a total of 0.000000sec of runtime

Summary:
loaded 13725900 metrics in 16.292sec with 4 workers (mean rate 842514.07 metrics/sec)
loaded 1223100 rows in 16.292sec with 4 workers (mean rate 75075.51 rows/sec)

user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_small.gz | gunzip | tsbs_load_influx --workers=8 --do-create-db=false --o-abort-on-exist=false --db-name="small"
time,per. metric/s,metric total,overall metric/s,per. row/s,row total,overall row/s
1705612596,807812.56,8.080000E+06,807812.56,71983.30,7.200000E+05,71983.30
[worker 0] backoffs took a total of 0.000000sec of runtime
[worker 3] backoffs took a total of 0.000000sec of runtime
[worker 4] backoffs took a total of 0.000000sec of runtime
[worker 6] backoffs took a total of 0.000000sec of runtime
[worker 2] backoffs took a total of 0.000000sec of runtime
[worker 5] backoffs took a total of 0.000000sec of runtime
[worker 1] backoffs took a total of 0.000000sec of runtime
[worker 7] backoffs took a total of 0.000000sec of runtime

Summary:
loaded 13725900 metrics in 16.456sec with 8 workers (mean rate 834101.15 metrics/sec)
loaded 1223100 rows in 16.456sec with 8 workers (mean rate 74325.84 rows/sec)
```

## Queries:

```
user@snf-40236:~/go/src/tsbs$ sudo ./influx_small.sh
Influx 1 cpu metric(s), random 1 hosts, random 1h0m0s by 1m: 1000 points
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m: 1000 points
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m: 1000 points
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h: 1000 points
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h: 1000 points
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx CPU over threshold, all hosts: 1000 points
Influx CPU over threshold, 1 host(s): 1000 points
Influx last row per host: 1000 points
Influx max cpu over last 5 min-intervals (random end): 1000 points
```

## SGB-1-1-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 656.42 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 1.09ms, med: 1.37ms, mean: 1.51ms, max: 9.87ms, stddev: 0.64ms, sum: 1.5sec, count: 1000
all queries
min: 1.09ms, med: 1.37ms, mean: 1.51ms, max: 9.87ms, stddev: 0.64ms, sum: 1.5sec, count: 1000
wall clock time: 1.528006sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.18
        System time (seconds): 0.09
        Percent of CPU this job got: 18%
Run complete after 1000 queries with 2 workers (Overall query rate 1089.98 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 1.08ms, med: 1.50ms, mean: 1.82ms, max: 9.75ms, stddev: 1.00ms, sum: 1.8sec, count: 1000
all queries
min: 1.08ms, med: 1.50ms, mean: 1.82ms, max: 9.75ms, stddev: 1.00ms, sum: 1.8sec, count: 1000
wall clock time: 0.924476sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.22
        System time (seconds): 0.06
        Percent of CPU this job got: 30%
Run complete after 1000 queries with 4 workers (Overall query rate 1697.78 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 1.09ms, med: 1.97ms, mean: 2.31ms, max: 14.88ms, stddev: 1.30ms, sum: 2.3sec, count: 1000
all queries
min: 1.09ms, med: 1.97ms, mean: 2.31ms, max: 14.88ms, stddev: 1.30ms, sum: 2.3sec, count: 1000
wall clock time: 0.594109sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.17
        System time (seconds): 0.08
        Percent of CPU this job got: 42%
```

## SGB-1-1-12

```
Run complete after 1000 queries with 1 workers (Overall query rate 124.63 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.43ms, med: 7.09ms, mean: 7.99ms, max: 47.27ms, stddev: 4.20ms, sum: 8.0sec, count: 1000
all queries :
min: 6.43ms, med: 7.09ms, mean: 7.99ms, max: 47.27ms, stddev: 4.20ms, sum: 8.0sec, count: 1000
wall clock time: 8.035965sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
User time (seconds): 0.52
System time (seconds): 0.12
Percent of CPU this job got: 7%


Run complete after 1000 queries with 2 workers (Overall query rate 209.47 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.45ms, med: 7.42ms, mean: 9.50ms, max: 51.90ms, stddev: 5.80ms, sum: 9.5sec, count: 1000
all queries :
min: 6.45ms, med: 7.42ms, mean: 9.50ms, max: 51.90ms, stddev: 5.80ms, sum: 9.5sec, count: 1000
wall clock time: 4.789324sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
User time (seconds): 0.47
System time (seconds): 0.14
Percent of CPU this job got: 12%


Run complete after 1000 queries with 4 workers (Overall query rate 296.55 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.49ms, med: 10.27ms, mean: 13.40ms, max: 72.86ms, stddev: 8.42ms, sum: 13.4sec, count: 1000
all queries :
min: 6.49ms, med: 10.27ms, mean: 13.40ms, max: 72.86ms, stddev: 8.42ms, sum: 13.4sec, count: 1000
wall clock time: 3.387263sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
User time (seconds): 0.45
System time (seconds): 0.10
Percent of CPU this job got: 16%
```

## SGB-1-8-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 320.87 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 1.96ms, med: 2.83ms, mean: 3.10ms, max: 18.12ms, stddev: 1.47ms, sum: 3.1sec, count: 1000
all queries :
min: 1.96ms, med: 2.83ms, mean: 3.10ms, max: 18.12ms, stddev: 1.47ms, sum: 3.1sec, count: 1000
wall clock time: 3.123981sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
User time (seconds): 0.25
System time (seconds): 0.10
Percent of CPU this job got: 11%


Run complete after 1000 queries with 2 workers (Overall query rate 513.10 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 2.01ms, med: 3.22ms, mean: 3.87ms, max: 22.47ms, stddev: 2.00ms, sum: 3.9sec, count: 1000
all queries :
min: 2.01ms, med: 3.22ms, mean: 3.87ms, max: 22.47ms, stddev: 2.00ms, sum: 3.9sec, count: 1000
wall clock time: 1.958155sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
User time (seconds): 0.20
System time (seconds): 0.12
Percent of CPU this job got: 16%


Run complete after 1000 queries with 4 workers (Overall query rate 646.94 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 2.37ms, med: 4.73ms, mean: 6.12ms, max: 31.69ms, stddev: 3.72ms, sum: 6.1sec, count: 1000
all queries :
min: 2.37ms, med: 4.73ms, mean: 6.12ms, max: 31.69ms, stddev: 3.72ms, sum: 6.1sec, count: 1000
wall clock time: 1.556572sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-1-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
User time (seconds): 0.22
System time (seconds): 0.09
Percent of CPU this job got: 20%
```

## SGB-5-1-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 276.76 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.64ms, med: 3.17ms, mean: 3.59ms, max: 25.01ms, stddev: 1.99ms, sum: 3.6sec, count: 1000
all queries :
min: 2.64ms, med: 3.17ms, mean: 3.59ms, max: 25.01ms, stddev: 1.99ms, sum: 3.6sec, count: 1000
wall clock time: 3.625111sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.30
        System time (seconds): 0.15
        Percent of CPU this job got: 12%
Run complete after 1000 queries with 2 workers (Overall query rate 461.80 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.67ms, med: 3.36ms, mean: 4.30ms, max: 22.77ms, stddev: 2.43ms, sum: 4.3sec, count: 1000
all queries :
min: 2.67ms, med: 3.36ms, mean: 4.30ms, max: 22.77ms, stddev: 2.43ms, sum: 4.3sec, count: 1000
wall clock time: 2.178199sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.26
        System time (seconds): 0.11
        Percent of CPU this job got: 17%
Run complete after 1000 queries with 4 workers (Overall query rate 575.68 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.81ms, med: 5.50ms, mean: 6.88ms, max: 32.95ms, stddev: 4.23ms, sum: 6.9sec, count: 1000
all queries :
min: 2.81ms, med: 5.50ms, mean: 6.88ms, max: 32.95ms, stddev: 4.23ms, sum: 6.9sec, count: 1000
wall clock time: 1.748301sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.27
        System time (seconds): 0.10
        Percent of CPU this job got: 21%
```

## SGB-5-1-12

```
Run complete after 1000 queries with 1 workers (Overall query rate 35.96 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 22.13ms, med: 23.55ms, mean: 27.76ms, max: 119.45ms, stddev: 12.26ms, sum: 27.8sec, count: 1000
all queries :
min: 22.13ms, med: 23.55ms, mean: 27.76ms, max: 119.45ms, stddev: 12.26ms, sum: 27.8sec, count: 1000
wall clock time: 27.825876sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.87
        System time (seconds): 0.19
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 60.57 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 22.51ms, med: 25.47ms, mean: 32.94ms, max: 97.44ms, stddev: 14.65ms, sum: 32.9sec, count: 1000
all queries :
min: 22.51ms, med: 25.47ms, mean: 32.94ms, max: 97.44ms, stddev: 14.65ms, sum: 32.9sec, count: 1000
wall clock time: 16.528140sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.76
        System time (seconds): 0.20
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 4 workers (Overall query rate 82.12 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 23.89ms, med: 41.66ms, mean: 48.55ms, max: 139.14ms, stddev: 21.02ms, sum: 48.5sec, count: 1000
all queries :
min: 23.89ms, med: 41.66ms, mean: 48.55ms, max: 139.14ms, stddev: 21.02ms, sum: 48.5sec, count: 1000
wall clock time: 12.198730sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.74
        System time (seconds): 0.15
        Percent of CPU this job got: 7%
```

## SGB-5-8-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 98.73 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 5.80ms, med: 8.72ms, mean: 10.09ms, max: 43.13ms, stddev: 4.91ms, sum: 10.1sec, count: 1000
all queries :
min: 5.80ms, med: 8.72ms, mean: 10.09ms, max: 43.13ms, stddev: 4.91ms, sum: 10.1sec, count: 1000
wall clock time: 10.141860sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.43
        System time (seconds): 0.13
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 2 workers (Overall query rate 166.27 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 6.00ms, med: 9.70ms, mean: 11.98ms, max: 35.15ms, stddev: 5.52ms, sum: 12.0sec, count: 1000
all queries :
min: 6.00ms, med: 9.70ms, mean: 11.98ms, max: 35.15ms, stddev: 5.52ms, sum: 12.0sec, count: 1000
wall clock time: 6.026668sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.37
        System time (seconds): 0.12
        Percent of CPU this job got: 8%
Run complete after 1000 queries with 4 workers (Overall query rate 188.40 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 8.34ms, med: 16.70ms, mean: 21.12ms, max: 75.50ms, stddev: 10.68ms, sum: 21.1sec, count: 1000
all queries :
min: 8.34ms, med: 16.70ms, mean: 21.12ms, max: 75.50ms, stddev: 10.68ms, sum: 21.1sec, count: 1000
wall clock time: 5.323360sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_single-groupby-5-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.36
        System time (seconds): 0.12
        Percent of CPU this job got: 9%
```

## CPU-MAX-ALL-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 189.53 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.22ms, med: 5.06ms, mean: 5.25ms, max: 18.71ms, stddev: 0.98ms, sum: 5.2sec, count: 1000
all queries :
min: 4.22ms, med: 5.06ms, mean: 5.25ms, max: 18.71ms, stddev: 0.98ms, sum: 5.2sec, count: 1000
wall clock time: 5.283278sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_cpu-max-all-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.30
        System time (seconds): 0.14
        Percent of CPU this job got: 8%
Run complete after 1000 queries with 2 workers (Overall query rate 312.44 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.29ms, med: 5.53ms, mean: 6.37ms, max: 28.47ms, stddev: 2.44ms, sum: 6.4sec, count: 1000
all queries :
min: 4.29ms, med: 5.53ms, mean: 6.37ms, max: 28.47ms, stddev: 2.44ms, sum: 6.4sec, count: 1000
wall clock time: 3.211744sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_cpu-max-all-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.32
        System time (seconds): 0.10
        Percent of CPU this job got: 13%
Run complete after 1000 queries with 4 workers (Overall query rate 491.57 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.60ms, med: 6.51ms, mean: 8.03ms, max: 60.42ms, stddev: 4.22ms, sum: 8.0sec, count: 1000
all queries :
min: 4.60ms, med: 6.51ms, mean: 8.03ms, max: 60.42ms, stddev: 4.22ms, sum: 8.0sec, count: 1000
wall clock time: 2.048360sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_cpu-max-all-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.32
        System time (seconds): 0.07
        Percent of CPU this job got: 19%
```

## CPU-MAX-ALL-8

```
Run complete after 1000 queries with 1 workers (Overall query rate 70.59 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min: 9.28ms, med: 13.30ms, mean: 14.14ms, max: 34.24ms, stddev: 4.00ms, sum: 14.1sec, count: 1000
all queries :
min: 9.28ms, med: 13.30ms, mean: 14.14ms, max: 34.24ms, stddev: 4.00ms, sum: 14.1sec, count: 1000
wall clock time: 14.191258sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_cpu-max-all-8.gz | gunzip | /home/
user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.48
        System time (seconds): 0.09
        Percent of CPU this job got: 4%
Run complete after 1000 queries with 2 workers (Overall query rate 98.67 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min: 9.38ms, med: 18.33ms, mean: 20.22ms, max: 53.80ms, stddev: 6.55ms, sum: 20.2sec, count: 1000
all queries :
min: 9.38ms, med: 18.33ms, mean: 20.22ms, max: 53.80ms, stddev: 6.55ms, sum: 20.2sec, count: 1000
wall clock time: 10.149962sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_cpu-max-all-8.gz | gunzip | /home/
user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.42
        System time (seconds): 0.08
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 4 workers (Overall query rate 99.59 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min: 13.32ms, med: 36.28ms, mean: 40.06ms, max: 117.31ms, stddev: 14.32ms, sum: 40.1sec, count: 1000
all queries :
min: 13.32ms, med: 36.28ms, mean: 40.06ms, max: 117.31ms, stddev: 14.32ms, sum: 40.1sec, count: 1000
wall clock time: 10.061762sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_cpu-max-all-8.gz | gunzip | /home/
user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.47
        System time (seconds): 0.08
        Percent of CPU this job got: 5%
```

## DGB-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 126.38 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min: 6.95ms, med: 7.66ms, mean: 7.88ms, max: 32.90ms, stddev: 1.27ms, sum: 7.9sec, count: 1000
all queries :
min: 6.95ms, med: 7.66ms, mean: 7.88ms, max: 32.90ms, stddev: 1.27ms, sum: 7.9sec, count: 1000
wall clock time: 7.923889sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-1.gz | gunzip | /ho
me/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.45
        System time (seconds): 0.12
        Percent of CPU this job got: 7%
Run complete after 1000 queries with 2 workers (Overall query rate 239.61 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min: 6.85ms, med: 7.69ms, mean: 8.30ms, max: 23.48ms, stddev: 1.87ms, sum: 8.3sec, count: 1000
all queries :
min: 6.85ms, med: 7.69ms, mean: 8.30ms, max: 23.48ms, stddev: 1.87ms, sum: 8.3sec, count: 1000
wall clock time: 4.182508sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-1.gz | gunzip | /ho
me/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.32
        System time (seconds): 0.12
        Percent of CPU this job got: 10%
Run complete after 1000 queries with 4 workers (Overall query rate 374.27 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min: 6.89ms, med: 8.68ms, mean: 10.62ms, max: 33.94ms, stddev: 4.43ms, sum: 10.6sec, count: 1000
all queries :
min: 6.89ms, med: 8.68ms, mean: 10.62ms, max: 33.94ms, stddev: 4.43ms, sum: 10.6sec, count: 1000
wall clock time: 2.681887sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-1.gz | gunzip | /ho
me/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.34
        System time (seconds): 0.10
        Percent of CPU this job got: 16%
```

## DGB-5

```
Run complete after 1000 queries with 1 workers (Overall query rate 31.65 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 29.02ms, med: 31.00ms, mean: 31.55ms, max: 67.80ms, stddev: 3.12ms, sum: 31.5sec, count: 1000
all queries :
min: 29.02ms, med: 31.00ms, mean: 31.55ms, max: 67.80ms, stddev: 3.12ms, sum: 31.5sec, count: 1000
wall clock time: 31.612883sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-5.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.71
        System time (seconds): 0.16
        Percent of CPU this job got: 2%
```

```
Run complete after 1000 queries with 2 workers (Overall query rate 58.50 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 29.05ms, med: 32.21ms, mean: 34.09ms, max: 83.23ms, stddev: 6.13ms, sum: 34.1sec, count: 1000
all queries :
min: 29.05ms, med: 32.21ms, mean: 34.09ms, max: 83.23ms, stddev: 6.13ms, sum: 34.1sec, count: 1000
wall clock time: 17.109882sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-5.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.64
        System time (seconds): 0.16
        Percent of CPU this job got: 4%
```

```
Run complete after 1000 queries with 4 workers (Overall query rate 104.68 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 29.68ms, med: 33.44ms, mean: 38.06ms, max: 92.65ms, stddev: 9.89ms, sum: 38.1sec, count: 1000
all queries :
min: 29.68ms, med: 33.44ms, mean: 38.06ms, max: 92.65ms, stddev: 9.89ms, sum: 38.1sec, count: 1000
wall clock time: 9.575333sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-5.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.62
        System time (seconds): 0.10
        Percent of CPU this job got: 7%
```

## DGB-ALL

```
Run complete after 1000 queries with 1 workers (Overall query rate 16.33 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 56.38ms, med: 59.88ms, mean: 61.20ms, max: 108.61ms, stddev: 5.56ms, sum: 61.2sec, count: 1000
all queries :
min: 56.38ms, med: 59.88ms, mean: 61.20ms, max: 108.61ms, stddev: 5.56ms, sum: 61.2sec, count: 1000
wall clock time: 61.270438sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.80
        System time (seconds): 0.20
        Percent of CPU this job got: 1%
```

```
Run complete after 1000 queries with 2 workers (Overall query rate 30.14 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 57.15ms, med: 63.29ms, mean: 66.25ms, max: 122.00ms, stddev: 8.75ms, sum: 66.3sec, count: 1000
all queries :
min: 57.15ms, med: 63.29ms, mean: 66.25ms, max: 122.00ms, stddev: 8.75ms, sum: 66.3sec, count: 1000
wall clock time: 33.199708sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.87
        System time (seconds): 0.17
        Percent of CPU this job got: 3%
```

```
Run complete after 1000 queries with 4 workers (Overall query rate 53.45 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 59.24ms, med: 67.20ms, mean: 74.68ms, max: 156.10ms, stddev: 16.12ms, sum: 74.7sec, count: 1000
all queries :
min: 59.24ms, med: 67.20ms, mean: 74.68ms, max: 156.10ms, stddev: 16.12ms, sum: 74.7sec, count: 1000
wall clock time: 18.733631sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_double-groupby-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.78
        System time (seconds): 0.16
        Percent of CPU this job got: 5%
```

## HIGH-CPU-ALL

```
Run complete after 1000 queries with 1 workers (Overall query rate 11.49 queries/sec):
Influx CPU over threshold, all hosts:
min: 54.69ms, med: 90.08ms, mean: 86.95ms, max: 164.70ms, stddev: 20.10ms, sum: 87.0sec, count: 1000
all queries :
min: 54.69ms, med: 90.08ms, mean: 86.95ms, max: 164.70ms, stddev: 20.10ms, sum: 87.0sec, count: 1000
wall clock time: 87.043586sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 2.52
        System time (seconds): 0.30
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 21.09 queries/sec):
Influx CPU over threshold, all hosts:
min: 55.46ms, med: 94.92ms, mean: 94.70ms, max: 174.10ms, stddev: 24.47ms, sum: 94.7sec, count: 1000
all queries :
min: 55.46ms, med: 94.92ms, mean: 94.70ms, max: 174.10ms, stddev: 24.47ms, sum: 94.7sec, count: 1000
wall clock time: 47.431618sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 2.39
        System time (seconds): 0.36
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 4 workers (Overall query rate 34.15 queries/sec):
Influx CPU over threshold, all hosts:
min: 57.90ms, med: 109.94ms, mean: 116.78ms, max: 237.78ms, stddev: 37.54ms, sum: 116.8sec, count: 1000
all queries :
min: 57.90ms, med: 109.94ms, mean: 116.78ms, max: 237.78ms, stddev: 37.54ms, sum: 116.8sec, count: 1000
wall clock time: 29.311657sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 2.41
        System time (seconds): 0.25
        Percent of CPU this job got: 9%
```

## HIGH-CPU-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 101.40 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.54ms, med: 6.62ms, mean: 9.81ms, max: 53.45ms, stddev: 6.03ms, sum: 9.8sec, count: 1000
all queries :
min: 5.54ms, med: 6.62ms, mean: 9.81ms, max: 53.45ms, stddev: 6.03ms, sum: 9.8sec, count: 1000
wall clock time: 9.875062sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.59
        System time (seconds): 0.17
        Percent of CPU this job got: 7%
Run complete after 1000 queries with 2 workers (Overall query rate 184.13 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.53ms, med: 7.46ms, mean: 10.80ms, max: 45.80ms, stddev: 6.74ms, sum: 10.8sec, count: 1000
all queries :
min: 5.53ms, med: 7.46ms, mean: 10.80ms, max: 45.80ms, stddev: 6.74ms, sum: 10.8sec, count: 1000
wall clock time: 5.441508sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.57
        System time (seconds): 0.16
        Percent of CPU this job got: 13%
Run complete after 1000 queries with 4 workers (Overall query rate 290.13 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.52ms, med: 9.74ms, mean: 13.67ms, max: 78.93ms, stddev: 9.71ms, sum: 13.7sec, count: 1000
all queries :
min: 5.52ms, med: 9.74ms, mean: 13.67ms, max: 78.93ms, stddev: 9.71ms, sum: 13.7sec, count: 1000
wall clock time: 3.461689sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.54
        System time (seconds): 0.10
        Percent of CPU this job got: 18%
```

## LASTPOINT

```
Run complete after 1000 queries with 1 workers (Overall query rate 254.52 queries/sec):
Influx last row per host:
min: 2.96ms, med: 3.52ms, mean: 3.91ms, max: 18.25ms, stddev: 1.46ms, sum: 3.9sec, count: 1000
all queries :
min: 2.96ms, med: 3.52ms, mean: 3.91ms, max: 18.25ms, stddev: 1.46ms, sum: 3.9sec, count: 1000
wall clock time: 3.936347sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_lastpoint.gz | gunzip | /home/user
/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.33
        System time (seconds): 0.10
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 2 workers (Overall query rate 448.35 queries/sec):
Influx last row per host:
min: 3.02ms, med: 3.77ms, mean: 4.43ms, max: 27.38ms, stddev: 2.10ms, sum: 4.4sec, count: 1000
all queries :
min: 3.02ms, med: 3.77ms, mean: 4.43ms, max: 27.38ms, stddev: 2.10ms, sum: 4.4sec, count: 1000
wall clock time: 2.239323sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_lastpoint.gz | gunzip | /home/user
/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.31
        System time (seconds): 0.08
        Percent of CPU this job got: 17%
Run complete after 1000 queries with 4 workers (Overall query rate 605.36 queries/sec):
Influx last row per host:
min: 3.14ms, med: 5.54ms, mean: 6.56ms, max: 25.73ms, stddev: 3.22ms, sum: 6.6sec, count: 1000
all queries :
min: 3.14ms, med: 5.54ms, mean: 6.56ms, max: 25.73ms, stddev: 3.22ms, sum: 6.6sec, count: 1000
wall clock time: 1.660518sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_lastpoint.gz | gunzip | /home/user
/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.31
        System time (seconds): 0.06
        Percent of CPU this job got: 22%
```

## GROUPBY-ORDERBY-LIMIT

```
Run complete after 1000 queries with 1 workers (Overall query rate 31.21 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min: 2.64ms, med: 24.49ms, mean: 31.97ms, max: 213.05ms, stddev: 26.31ms, sum: 32.0sec, count: 1000
all queries :
min: 2.64ms, med: 24.49ms, mean: 31.97ms, max: 213.05ms, stddev: 26.31ms, sum: 32.0sec, count: 1000
wall clock time: 32.080073sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_groupby-orderby-limit.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=small"
        User time (seconds): 0.76
        System time (seconds): 0.38
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 54.71 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min: 2.61ms, med: 32.17ms, mean: 36.50ms, max: 121.69ms, stddev: 24.41ms, sum: 36.5sec, count: 1000
all queries :
min: 2.61ms, med: 32.17ms, mean: 36.50ms, max: 121.69ms, stddev: 24.41ms, sum: 36.5sec, count: 1000
wall clock time: 18.298787sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_groupby-orderby-limit.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=small"
        User time (seconds): 0.50
        System time (seconds): 0.15
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 4 workers (Overall query rate 58.92 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min: 3.63ms, med: 63.51ms, mean: 67.75ms, max: 176.28ms, stddev: 40.48ms, sum: 67.8sec, count: 1000
all queries :
min: 3.63ms, med: 63.51ms, mean: 67.75ms, max: 176.28ms, stddev: 40.48ms, sum: 67.8sec, count: 1000
wall clock time: 16.994294sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_small/influx_groupby-orderby-limit.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=small"
        User time (seconds): 0.52
        System time (seconds): 0.14
        Percent of CPU this job got: 3%
```

## Medium

### Load:

```
user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_medium.gz | gunzip | tsbs_load_influx --workers=1 --do-create-db=false --do-abort-on-exist=false --db-name="medium"
time,per. metric/s,metric total,overall metric/s,per. row/s,row total,overall row/s
1705612785, 359060.31, 3.590940E+06, 359060.31, 31997.00, 3.200000E+05, 31997.00
1705612795, 370356.05, 7.294390E+06, 364707.83, 33000.98, 6.500000E+05, 32498.96
1705612805, 370339.32, 1.099758E+07, 366584.89, 33001.81, 9.800000E+05, 32666.57
1705612815, 359104.18, 1.458874E+07, 364714.67, 31998.95, 1.300000E+06, 32499.66
1705612825, 347879.25, 1.806758E+07, 361347.57, 30999.58, 1.610000E+06, 32199.64
1705612835, 370339.05, 2.177094E+07, 362846.13, 33000.27, 1.940000E+06, 32333.08
1705612845, 347960.32, 2.525000E+07, 360711.00, 30999.49, 2.250000E+06, 32142.56
1705612855, 370322.25, 2.895313E+07, 361912.37, 33000.82, 2.580000E+06, 32249.84
1705612865, 347913.19, 3.243221E+07, 360356.93, 31000.46, 2.890000E+06, 32111.03
1705612875, 359093.48, 3.602313E+07, 360230.59, 32000.13, 3.210000E+06, 32099.94
1705612885, 359109.30, 3.961439E+07, 360128.65, 31998.51, 3.530000E+06, 32090.72
1705612895, 359092.74, 4.320531E+07, 360042.32, 32000.07, 3.850000E+06, 32083.16
1705612905, 336682.36, 4.657221E+07, 358245.37, 29999.32, 4.150000E+06, 31922.86
1705612915, 359098.27, 5.016313E+07, 358306.29, 32000.56, 4.470000E+06, 31928.41
1705612925, 370339.67, 5.386657E+07, 359108.52, 32999.61, 4.800000E+06, 31999.83
1705612935, 347873.71, 5.734531E+07, 358406.35, 30999.97, 5.110000E+06, 31937.34
1705612945, 359128.76, 6.093657E+07, 358448.85, 32000.25, 5.430000E+06, 31941.04
1705612955, 370327.90, 6.464000E+07, 359108.82, 32998.65, 5.760000E+06, 31999.80
1705612965, 370319.19, 6.834313E+07, 359698.82, 33000.55, 6.090000E+06, 32052.47
1705612975, 359120.13, 7.193439E+07, 359669.89, 31999.48, 6.410000E+06, 32049.82
1705612985, 359127.56, 7.552531E+07, 359644.06, 32003.17, 6.730000E+06, 32047.60
1705612995, 370327.83, 7.92874E+07, 360129.71, 32998.65, 7.060000E+06, 32090.83
[worker 0] backoffs took a total of 0.00000sec of runtime

Summary:
loaded 81446400 metrics in 226.392sec with 1 workers (mean rate 359757.69 metrics/sec)
loaded 7257600 rows in 226.392sec with 1 workers (mean rate 32057.62 rows/sec)

user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_medium.gz | gunzip | tsbs_load_influx --workers=2 --do-create-db=false --do-abort-on-exist=false --db-name="medium"
time,per. metric/s,metric total,overall metric/s,per. row/s,row total,overall row/s
1705613049, 639531.95, 6.396570E+06, 639531.95, 56988.86, 5.700000E+05, 56988.86
1705613059, 6173332.49, 1.313000E+07, 656430.70, 59999.06, 1.170000E+06, 58493.82
1705613069, 583551.90, 1.896531E+07, 632140.06, 52001.86, 1.690000E+06, 56330.04
1705613079, 549887.64, 2.446439E+07, 611577.28, 48998.19, 2.180000E+06, 54497.11
1705613089, 628475.02, 3.074874E+07, 614956.51, 56003.57, 2.740000E+06, 54798.37
1705613099, 617209.98, 3.692994E+07, 615332.09, 54999.11, 3.290000E+06, 54831.83
1705613109, 628428.31, 4.320531E+07, 617202.95, 55999.23, 3.850000E+06, 54998.60
1705613119, 605970.85, 4.926531E+07, 615798.91, 533997.40, 4.390000E+06, 54873.44
1705613129, 639747.35, 5.566221E+07, 618459.57, 57005.11, 4.960000E+06, 55110.27
1705613139, 662043.99, 6.228313E+07, 622818.24, 58995.72, 5.550000E+06, 55498.84
1705613149, 673388.20, 6.906557E+07, 627415.14, 60003.94, 6.150000E+06, 55908.36
1705613159, 639621.99, 7.541313E+07, 628432.42, 56969.97, 6.720000E+06, 55999.08
[worker 0] backoffs took a total of 0.00000sec of runtime
[worker 1] backoffs took a total of 0.00000sec of runtime

Summary:
loaded 81446400 metrics in 129.765sec with 2 workers (mean rate 627647.19 metrics/sec)
loaded 7257600 rows in 129.765sec with 2 workers (mean rate 55928.96 rows/sec)

user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_medium.gz | gunzip | tsbs_load_influx --workers=4 --do-create-db=false --do-abort-on-exist=false --db-name="medium"
time,per. metric/s,metric total,overall metric/s,per. row/s,row total,overall row/s
1705613222, 852725.53, 8.528740E+06, 852725.53, 75986.77, 7.600000E+05, 75986.77
1705613232, 819336.93, 1.672994E+07, 836033.88, 73010.42, 1.490000E+06, 74498.83
1705613242, 785571.88, 2.457657E+07, 819213.52, 70000.79, 2.190000E+06, 72999.51
1705613252, 785522.03, 3.243221E+07, 810790.36, 69996.27, 2.890000E+06, 72248.67
1705613262, 808047.76, 4.051221E+07, 818241.88, 72004.26, 3.610000E+06, 72199.79
1705613272, 684526.67, 4.735758E+07, 789289.13, 60999.08, 4.220000E+06, 70332.99
1705613282, 751867.00, 5.487657E+07, 783942.94, 66997.15, 4.890000E+06, 69856.42
1705613292, 763136.59, 6.250758E+07, 781342.27, 68003.17, 5.570000E+06, 69624.78
1705613302, 807955.68, 7.058758E+07, 784299.45, 71996.05, 6.290000E+06, 69888.27
1705613312, 807851.43, 7.866758E+07, 786655.02, 71986.76, 7.010000E+06, 70098.15
[worker 2] backoffs took a total of 0.00000sec of runtime
[worker 1] backoffs took a total of 0.00000sec of runtime
[worker 0] backoffs took a total of 0.00000sec of runtime
[worker 3] backoffs took a total of 0.00000sec of runtime

Summary:
loaded 81446400 metrics in 103.122sec with 4 workers (mean rate 789808.88 metrics/sec)
loaded 7257600 rows in 103.122sec with 4 workers (mean rate 70379.01 rows/sec)
```

```

user@snf-40236:~/go/src/tsbs$ cat ./datasets/influx_medium.gz | gunzip | tsbs_load_influx --workers=8 --do-create-db=false --do-abort-on-exist=false --db-name="medium"
time,per. metric total,overall metric/s,per. row/s,row total,overall row/s
1705613442,830364.37,8.304390E+06,830364.37,73993.35,7.400000E+05,73993.35
1705613452,920250.94,1.750657E+07,875304.83,82002.94,1.560000E+06,77997.89
1705613462,886570.22,2.637221E+07,879059.88,79000.55,2.350000E+06,78332.10
1705613472,909030.22,3.546221E+07,886552.19,81002.69,3.160000E+06,78999.73
1705613482,819162.41,4.365439E+07,873073.54,72995.05,3.890000E+06,77798.73
1705613492,852850.23,5.218313E+07,869702.95,75997.88,4.650000E+06,77498.58
1705613502,830529.78,6.048758E+07,864107.36,74007.56,5.390000E+06,76999.92
1705613512,796262.00,6.845540E+07,855621.86,70953.66,6.100000E+06,76243.70
1705613522,707415.30,7.552531E+07,839164.45,63037.81,6.730000E+06,74777.27
[worker 5] backoffs took a total of 0.000000sec of runtime
[worker 1] backoffs took a total of 0.000000sec of runtime
[worker 6] backoffs took a total of 0.000000sec of runtime
[worker 7] backoffs took a total of 0.000000sec of runtime
[worker 3] backoffs took a total of 0.000000sec of runtime
[worker 0] backoffs took a total of 0.000000sec of runtime
[worker 4] backoffs took a total of 0.000000sec of runtime
[worker 2] backoffs took a total of 0.000000sec of runtime

Summary:
loaded 81446400 metrics in 97.022sec with 8 workers (mean rate 839460.89 metrics/sec)
loaded 7257600 rows in 97.022sec with 8 workers (mean rate 74803.45 rows/sec)

```

## Queries:

```

user@snf-40236:~/go/src/tsbs$ ./influx_medium.sh
Influx 1 cpu metric(s), random    1 hosts, random 1h0m0s by 1m: 1000 points
Influx 1 cpu metric(s), random    1 hosts, random 12h0m0s by 1m: 1000 points
Influx 1 cpu metric(s), random    8 hosts, random 1h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random    1 hosts, random 1h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random    1 hosts, random 12h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random    8 hosts, random 1h0m0s by 1m: 1000 points
Influx max of all CPU metrics, random  1 hosts, random 8h0m0s by 1h: 1000 points
Influx max of all CPU metrics, random  8 hosts, random 8h0m0s by 1h: 1000 points
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx CPU over threshold, all hosts: 1000 points
Influx CPU over threshold, 1 host(s): 1000 points
Influx last row per host: 1000 points
Influx max cpu over last 5 min-intervals (random end): 1000 points

```

## SGB-1-1-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 636.13 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 1.16ms, med: 1.43ms, mean: 1.55ms, max: 16.33ms, stddev: 0.78ms, sum: 1.6sec, count: 1000
all queries :
min: 1.16ms, med: 1.43ms, mean: 1.55ms, max: 16.33ms, stddev: 0.78ms, sum: 1.6sec, count: 1000
wall clock time: 1.578139sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-1-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.24
        System time (seconds): 0.08
        Percent of CPU this job got: 20%
Run complete after 1000 queries with 2 workers (Overall query rate 1102.31 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 1.08ms, med: 1.53ms, mean: 1.79ms, max: 13.89ms, stddev: 1.08ms, sum: 1.8sec, count: 1000
all queries :
min: 1.08ms, med: 1.53ms, mean: 1.79ms, max: 13.89ms, stddev: 1.08ms, sum: 1.8sec, count: 1000
wall clock time: 0.912016sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-1-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.18
        System time (seconds): 0.08
        Percent of CPU this job got: 28%
Run complete after 1000 queries with 4 workers (Overall query rate 1515.16 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 1.14ms, med: 2.25ms, mean: 2.60ms, max: 13.16ms, stddev: 1.34ms, sum: 2.6sec, count: 1000
all queries :
min: 1.14ms, med: 2.25ms, mean: 2.60ms, max: 13.16ms, stddev: 1.34ms, sum: 2.6sec, count: 1000
wall clock time: 0.665356sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-1-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.19
        System time (seconds): 0.08
        Percent of CPU this job got: 42%
```

## SGB-1-1-12

```
Run complete after 1000 queries with 1 workers (Overall query rate 121.50 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.47ms, med: 7.16ms, mean: 8.19ms, max: 56.90ms, stddev: 5.10ms, sum: 8.2sec, count: 1000
all queries :
min: 6.47ms, med: 7.16ms, mean: 8.19ms, max: 56.90ms, stddev: 5.10ms, sum: 8.2sec, count: 1000
wall clock time: 8.242331sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.52
        System time (seconds): 0.11
        Percent of CPU this job got: 7%
Run complete after 1000 queries with 2 workers (Overall query rate 220.57 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.33ms, med: 7.16ms, mean: 9.03ms, max: 51.53ms, stddev: 4.94ms, sum: 9.0sec, count: 1000
all queries :
min: 6.33ms, med: 7.16ms, mean: 9.03ms, max: 51.53ms, stddev: 4.94ms, sum: 9.0sec, count: 1000
wall clock time: 4.546278sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.43
        System time (seconds): 0.10
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 4 workers (Overall query rate 313.71 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.61ms, med: 9.61ms, mean: 12.66ms, max: 50.06ms, stddev: 6.65ms, sum: 12.7sec, count: 1000
all queries :
min: 6.61ms, med: 9.61ms, mean: 12.66ms, max: 50.06ms, stddev: 6.65ms, sum: 12.7sec, count: 1000
wall clock time: 3.199362sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.43
        System time (seconds): 0.12
        Percent of CPU this job got: 17%
```

## SGB-1-8-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 311.05 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 2.08ms, med: 2.88ms, mean: 3.18ms, max: 54.49ms, stddev: 2.34ms, sum: 3.2sec, count: 1000
all queries :
min: 2.08ms, med: 2.88ms, mean: 3.18ms, max: 54.49ms, stddev: 2.34ms, sum: 3.2sec, count: 1000
wall clock time: 3.227702sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.30
        System time (seconds): 0.07
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 2 workers (Overall query rate 520.95 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 1.98ms, med: 3.18ms, mean: 3.81ms, max: 21.26ms, stddev: 1.92ms, sum: 3.8sec, count: 1000
all queries :
min: 1.98ms, med: 3.18ms, mean: 3.81ms, max: 21.26ms, stddev: 1.92ms, sum: 3.8sec, count: 1000
wall clock time: 1.927123sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.20
        System time (seconds): 0.10
        Percent of CPU this job got: 16%
Run complete after 1000 queries with 4 workers (Overall query rate 668.86 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 2.61ms, med: 4.78ms, mean: 5.90ms, max: 30.14ms, stddev: 3.20ms, sum: 5.9sec, count: 1000
all queries :
min: 2.61ms, med: 4.78ms, mean: 5.90ms, max: 30.14ms, stddev: 3.20ms, sum: 5.9sec, count: 1000
wall clock time: 1.504417sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-1-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.29
        System time (seconds): 0.07
        Percent of CPU this job got: 24%
```

## SGB-5-1-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 270.36 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.67ms, med: 3.14ms, mean: 3.66ms, max: 36.07ms, stddev: 2.49ms, sum: 3.7sec, count: 1000
all queries :
min: 2.67ms, med: 3.14ms, mean: 3.66ms, max: 36.07ms, stddev: 2.49ms, sum: 3.7sec, count: 1000
wall clock time: 3.715293sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-1-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.34
        System time (seconds): 0.10
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 2 workers (Overall query rate 444.36 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.62ms, med: 3.42ms, mean: 4.46ms, max: 33.74ms, stddev: 2.73ms, sum: 4.5sec, count: 1000
all queries :
min: 2.62ms, med: 3.42ms, mean: 4.46ms, max: 33.74ms, stddev: 2.73ms, sum: 4.5sec, count: 1000
wall clock time: 2.259634sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-1-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.28
        System time (seconds): 0.10
        Percent of CPU this job got: 17%
Run complete after 1000 queries with 4 workers (Overall query rate 648.64 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.86ms, med: 4.82ms, mean: 6.12ms, max: 22.28ms, stddev: 3.23ms, sum: 6.1sec, count: 1000
all queries :
min: 2.86ms, med: 4.82ms, mean: 6.12ms, max: 22.28ms, stddev: 3.23ms, sum: 6.1sec, count: 1000
wall clock time: 1.548913sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-1-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.28
        System time (seconds): 0.08
        Percent of CPU this job got: 23%
```

## SGB-5-1-12

```
Run complete after 1000 queries with 1 workers (Overall query rate 34.15 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 22.63ms, med: 24.02ms, mean: 29.23ms, max: 107.42ms, stddev: 15.01ms, sum: 29.2sec, count: 1000
all queries :
min: 22.63ms, med: 24.02ms, mean: 29.23ms, max: 107.42ms, stddev: 15.01ms, sum: 29.2sec, count: 1000
wall clock time: 29.296623sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.85
        System time (seconds): 0.16
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 59.39 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 22.64ms, med: 25.79ms, mean: 33.60ms, max: 155.88ms, stddev: 16.36ms, sum: 33.6sec, count: 1000
all queries :
min: 22.64ms, med: 25.79ms, mean: 33.60ms, max: 155.88ms, stddev: 16.36ms, sum: 33.6sec, count: 1000
wall clock time: 16.859275sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.72
        System time (seconds): 0.22
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 4 workers (Overall query rate 88.05 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 23.43ms, med: 38.49ms, mean: 45.30ms, max: 129.61ms, stddev: 18.31ms, sum: 45.3sec, count: 1000
all queries :
min: 23.43ms, med: 38.49ms, mean: 45.30ms, max: 129.61ms, stddev: 18.31ms, sum: 45.3sec, count: 1000
wall clock time: 11.382111sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-1-12.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.76
        System time (seconds): 0.13
        Percent of CPU this job got: 7%
```

## SGB-5-8-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 95.40 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 6.15ms, med: 8.94ms, mean: 10.44ms, max: 57.09ms, stddev: 5.10ms, sum: 10.4sec, count: 1000
all queries :
min: 6.15ms, med: 8.94ms, mean: 10.44ms, max: 57.09ms, stddev: 5.10ms, sum: 10.4sec, count: 1000
wall clock time: 10.495339sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.49
        System time (seconds): 0.10
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 2 workers (Overall query rate 159.82 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 6.45ms, med: 10.42ms, mean: 12.45ms, max: 39.07ms, stddev: 5.36ms, sum: 12.5sec, count: 1000
all queries :
min: 6.45ms, med: 10.42ms, mean: 12.45ms, max: 39.07ms, stddev: 5.36ms, sum: 12.5sec, count: 1000
wall clock time: 6.267511sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.40
        System time (seconds): 0.08
        Percent of CPU this job got: 7%
Run complete after 1000 queries with 4 workers (Overall query rate 182.77 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 8.69ms, med: 17.25ms, mean: 21.80ms, max: 71.41ms, stddev: 11.00ms, sum: 21.8sec, count: 1000
all queries :
min: 8.69ms, med: 17.25ms, mean: 21.80ms, max: 71.41ms, stddev: 11.00ms, sum: 21.8sec, count: 1000
wall clock time: 5.498067sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_single-groupby-5-8-1.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.41
        System time (seconds): 0.06
        Percent of CPU this job got: 8%
```

## CPU-MAX-ALL-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 183.95 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.25ms, med: 5.15ms, mean: 5.41ms, max: 27.60ms, stddev: 1.45ms, sum: 5.4sec, count: 1000
all queries :
min: 4.25ms, med: 5.15ms, mean: 5.41ms, max: 27.60ms, stddev: 1.45ms, sum: 5.4sec, count: 1000
wall clock time: 5.444363sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_cpu-max-all-1.gz | gunzip | /home
/usr/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.35
        System time (seconds): 0.11
        Percent of CPU this job got: 8%
```

```
Run complete after 1000 queries with 2 workers (Overall query rate 300.85 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.42ms, med: 5.88ms, mean: 6.61ms, max: 30.88ms, stddev: 2.28ms, sum: 6.6sec, count: 1000
all queries :
min: 4.42ms, med: 5.88ms, mean: 6.61ms, max: 30.88ms, stddev: 2.28ms, sum: 6.6sec, count: 1000
wall clock time: 3.339667sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_cpu-max-all-1.gz | gunzip | /home
/usr/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.30
        System time (seconds): 0.10
        Percent of CPU this job got: 12%
```

```
Run complete after 1000 queries with 4 workers (Overall query rate 477.37 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.78ms, med: 6.92ms, mean: 8.30ms, max: 35.69ms, stddev: 3.72ms, sum: 8.3sec, count: 1000
all queries :
min: 4.78ms, med: 6.92ms, mean: 8.30ms, max: 35.69ms, stddev: 3.72ms, sum: 8.3sec, count: 1000
wall clock time: 2.104720sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_cpu-max-all-1.gz | gunzip | /home
/usr/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.25
        System time (seconds): 0.10
        Percent of CPU this job got: 16%
```

## CPU-MAX-ALL-8

```
Run complete after 1000 queries with 1 workers (Overall query rate 67.81 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min: 9.12ms, med: 13.52ms, mean: 14.70ms, max: 54.10ms, stddev: 4.88ms, sum: 14.7sec, count: 1000
all queries :
min: 9.12ms, med: 13.52ms, mean: 14.70ms, max: 54.10ms, stddev: 4.88ms, sum: 14.7sec, count: 1000
wall clock time: 14.759914sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_cpu-max-all-8.gz | gunzip | /home
/usr/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.46
        System time (seconds): 0.12
        Percent of CPU this job got: 3%
```

```
Run complete after 1000 queries with 2 workers (Overall query rate 92.18 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min: 10.44ms, med: 19.34ms, mean: 21.64ms, max: 80.10ms, stddev: 7.51ms, sum: 21.6sec, count: 1000
all queries :
min: 10.44ms, med: 19.34ms, mean: 21.64ms, max: 80.10ms, stddev: 7.51ms, sum: 21.6sec, count: 1000
wall clock time: 10.864163sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_cpu-max-all-8.gz | gunzip | /home
/usr/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.46
        System time (seconds): 0.12
        Percent of CPU this job got: 5%
```

```
Run complete after 1000 queries with 4 workers (Overall query rate 96.61 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min: 16.83ms, med: 37.38ms, mean: 41.25ms, max: 136.88ms, stddev: 15.60ms, sum: 41.3sec, count: 1000
all queries :
min: 16.83ms, med: 37.38ms, mean: 41.25ms, max: 136.88ms, stddev: 15.60ms, sum: 41.3sec, count: 1000
wall clock time: 10.373082sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_cpu-max-all-8.gz | gunzip | /home
/usr/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.50
        System time (seconds): 0.08
        Percent of CPU this job got: 5%
```

## DGB-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 121.36 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min:    7.17ms, med:    7.96ms, mean:   8.22ms, max:  20.49ms, stddev:   1.09ms, sum:   8.2sec, count: 1000
all queries
min:    7.17ms, med:    7.96ms, mean:   8.22ms, max:  20.49ms, stddev:   1.09ms, sum:   8.2sec, count: 1000
wall clock time: 8.258463sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.40
        System time (seconds): 0.17
        Percent of CPU this job got: 6%
Run complete after 1000 queries with 2 workers (Overall query rate 223.62 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min:    6.93ms, med:   8.16ms, mean:  8.91ms, max: 26.94ms, stddev:  2.21ms, sum:  8.9sec, count: 1000
all queries
min:    6.93ms, med:   8.16ms, mean:  8.91ms, max: 26.94ms, stddev:  2.21ms, sum:  8.9sec, count: 1000
wall clock time: 4.482588sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.34
        System time (seconds): 0.14
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 4 workers (Overall query rate 372.00 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min:    6.97ms, med:   8.89ms, mean: 10.69ms, max: 41.75ms, stddev:  4.29ms, sum: 10.7sec, count: 1000
all queries
min:    6.97ms, med:   8.89ms, mean: 10.69ms, max: 41.75ms, stddev:  4.29ms, sum: 10.7sec, count: 1000
wall clock time: 2.704357sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.34
        System time (seconds): 0.12
        Percent of CPU this job got: 17%
```

## DGB-5

```
Run complete after 1000 queries with 1 workers (Overall query rate 31.07 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 29.45ms, med: 31.45ms, mean: 32.13ms, max: 68.22ms, stddev: 3.39ms, sum: 32.1sec, count: 1000
all queries
min: 29.45ms, med: 31.45ms, mean: 32.13ms, max: 68.22ms, stddev: 3.39ms, sum: 32.1sec, count: 1000
wall clock time: 32.199134sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-5.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.68
        System time (seconds): 0.14
        Percent of CPU this job got: 2%
Run complete after 1000 queries with 2 workers (Overall query rate 58.00 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 29.45ms, med: 32.70ms, mean: 34.42ms, max: 81.44ms, stddev: 5.73ms, sum: 34.4sec, count: 1000
all queries
min: 29.45ms, med: 32.70ms, mean: 34.42ms, max: 81.44ms, stddev: 5.73ms, sum: 34.4sec, count: 1000
wall clock time: 17.259987sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-5.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.64
        System time (seconds): 0.12
        Percent of CPU this job got: 4%
Run complete after 1000 queries with 4 workers (Overall query rate 103.16 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 30.29ms, med: 34.16ms, mean: 38.63ms, max: 102.14ms, stddev: 10.32ms, sum: 38.6sec, count: 1000
all queries
min: 30.29ms, med: 34.16ms, mean: 38.63ms, max: 102.14ms, stddev: 10.32ms, sum: 38.6sec, count: 1000
wall clock time: 9.716752sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-5.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.62
        System time (seconds): 0.09
        Percent of CPU this job got: 7%
```

## DGB-ALL

```
Run complete after 1000 queries with 1 workers (Overall query rate 15.88 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 56.92ms, med: 61.24ms, mean: 62.90ms, max: 120.75ms, stddev: 6.80ms, sum: 62.9sec, count: 1000
all queries :
min: 56.92ms, med: 61.24ms, mean: 62.90ms, max: 120.75ms, stddev: 6.80ms, sum: 62.9sec, count: 1000
wall clock time: 62.983312sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.86
        System time (seconds): 0.15
        Percent of CPU this job got: 1%
Run complete after 1000 queries with 2 workers (Overall query rate 30.24 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 57.27ms, med: 63.34ms, mean: 66.07ms, max: 119.85ms, stddev: 8.46ms, sum: 66.1sec, count: 1000
all queries :
min: 57.27ms, med: 63.34ms, mean: 66.07ms, max: 119.85ms, stddev: 8.46ms, sum: 66.1sec, count: 1000
wall clock time: 33.096395sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.83
        System time (seconds): 0.13
        Percent of CPU this job got: 2%
Run complete after 1000 queries with 4 workers (Overall query rate 53.00 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 59.15ms, med: 67.05ms, mean: 75.24ms, max: 160.28ms, stddev: 17.41ms, sum: 75.2sec, count: 1000
all queries :
min: 59.15ms, med: 67.05ms, mean: 75.24ms, max: 160.28ms, stddev: 17.41ms, sum: 75.2sec, count: 1000
wall clock time: 18.892413sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_double-groupby-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.80
        System time (seconds): 0.10
        Percent of CPU this job got: 4%
```

## HIGH-CPU-ALL

```
Run complete after 1000 queries with 1 workers (Overall query rate 9.22 queries/sec):
Influx CPU over threshold, all hosts:
min: 55.68ms, med: 105.93ms, mean: 108.37ms, max: 204.82ms, stddev: 25.59ms, sum: 108.4sec, count: 1000
all queries :
min: 55.68ms, med: 105.93ms, mean: 108.37ms, max: 204.82ms, stddev: 25.59ms, sum: 108.4sec, count: 1000
wall clock time: 108.455530sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 3.49
        System time (seconds): 0.36
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 17.18 queries/sec):
Influx CPU over threshold, all hosts:
min: 56.21ms, med: 112.36ms, mean: 116.33ms, max: 279.65ms, stddev: 29.98ms, sum: 116.3sec, count: 1000
all queries :
min: 56.21ms, med: 112.36ms, mean: 116.33ms, max: 279.65ms, stddev: 29.98ms, sum: 116.3sec, count: 1000
wall clock time: 58.236481sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 3.44
        System time (seconds): 0.50
        Percent of CPU this job got: 6%
Run complete after 1000 queries with 4 workers (Overall query rate 27.38 queries/sec):
Influx CPU over threshold, all hosts:
min: 58.43ms, med: 139.34ms, mean: 145.77ms, max: 315.45ms, stddev: 44.63ms, sum: 145.8sec, count: 1000
all queries :
min: 58.43ms, med: 139.34ms, mean: 145.77ms, max: 315.45ms, stddev: 44.63ms, sum: 145.8sec, count: 1000
wall clock time: 36.557227sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 3.38
        System time (seconds): 0.46
        Percent of CPU this job got: 10%
```

## HIGH-CPU-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 83.10 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.65ms, med: 8.52ms, mean: 11.99ms, max: 79.93ms, stddev: 7.51ms, sum: 12.0sec, count: 1000
all queries :
min: 5.65ms, med: 8.52ms, mean: 11.99ms, max: 79.93ms, stddev: 7.51ms, sum: 12.0sec, count: 1000
wall clock time: 12.048408sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
User time (seconds): 0.69
System time (seconds): 0.19
Percent of CPU this job got: 7%
Run complete after 1000 queries with 2 workers (Overall query rate 149.17 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.72ms, med: 10.20ms, mean: 13.35ms, max: 70.48ms, stddev: 8.59ms, sum: 13.4sec, count: 1000
all queries :
min: 5.72ms, med: 10.20ms, mean: 13.35ms, max: 70.48ms, stddev: 8.59ms, sum: 13.4sec, count: 1000
wall clock time: 6.719715sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
User time (seconds): 0.76
System time (seconds): 0.11
Percent of CPU this job got: 13%
Run complete after 1000 queries with 4 workers (Overall query rate 231.67 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.56ms, med: 13.47ms, mean: 17.13ms, max: 100.29ms, stddev: 12.52ms, sum: 17.1sec, count: 1000
all queries :
min: 5.56ms, med: 13.47ms, mean: 17.13ms, max: 100.29ms, stddev: 12.52ms, sum: 17.1sec, count: 1000
wall clock time: 4.336116sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
User time (seconds): 0.68
System time (seconds): 0.13
Percent of CPU this job got: 18%
```

## LASTPOINT

```
Run complete after 1000 queries with 1 workers (Overall query rate 104.93 queries/sec):
Influx last row per host:
min: 7.38ms, med: 8.74ms, mean: 9.50ms, max: 38.57ms, stddev: 2.75ms, sum: 9.5sec, count: 1000
all queries :
min: 7.38ms, med: 8.74ms, mean: 9.50ms, max: 38.57ms, stddev: 2.75ms, sum: 9.5sec, count: 1000
wall clock time: 9.542259sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_lastpoint.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
User time (seconds): 0.44
System time (seconds): 0.12
Percent of CPU this job got: 5%
Run complete after 1000 queries with 2 workers (Overall query rate 175.51 queries/sec):
Influx last row per host:
min: 7.72ms, med: 10.05ms, mean: 11.35ms, max: 36.10ms, stddev: 3.75ms, sum: 11.4sec, count: 1000
all queries :
min: 7.72ms, med: 10.05ms, mean: 11.35ms, max: 36.10ms, stddev: 3.75ms, sum: 11.4sec, count: 1000
wall clock time: 5.710743sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_lastpoint.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
User time (seconds): 0.40
System time (seconds): 0.10
Percent of CPU this job got: 8%
Run complete after 1000 queries with 4 workers (Overall query rate 260.57 queries/sec):
Influx last row per host:
min: 8.41ms, med: 13.43ms, mean: 15.25ms, max: 73.33ms, stddev: 5.94ms, sum: 15.3sec, count: 1000
all queries :
min: 8.41ms, med: 13.43ms, mean: 15.25ms, max: 73.33ms, stddev: 5.94ms, sum: 15.3sec, count: 1000
wall clock time: 3.853164sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_lastpoint.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
User time (seconds): 0.42
System time (seconds): 0.08
Percent of CPU this job got: 13%
```

## GROUPBY-ORDERBY-LIMIT

```
Run complete after 1000 queries with 1 workers (Overall query rate 8.67 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min:    2.97ms, med:  115.82ms, mean:  115.33ms, max: 324.27ms, stddev:   66.29ms, sum: 115.3sec, count: 1000
all queries
min:    2.97ms, med:  115.82ms, mean:  115.33ms, max: 324.27ms, stddev:   66.29ms, sum: 115.3sec, count: 1000
wall clock time: 115.417443sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_groupby-orderby-limit.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=medium"
        User time (seconds): 0.61
        System time (seconds): 0.11
        Percent of CPU this job got: 0%
Run complete after 1000 queries with 2 workers (Overall query rate 10.41 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min:    3.15ms, med:  190.67ms, mean:  192.01ms, max: 466.94ms, stddev:  111.46ms, sum: 192.0sec, count: 1000
all queries
min:    3.15ms, med:  190.67ms, mean:  192.01ms, max: 466.94ms, stddev:  111.46ms, sum: 192.0sec, count: 1000
wall clock time: 96.081440sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_groupby-orderby-limit.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=medium"
        User time (seconds): 0.58
        System time (seconds): 0.12
        Percent of CPU this job got: 0%
Run complete after 1000 queries with 4 workers (Overall query rate 10.59 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min:    4.20ms, med:  374.86ms, mean:  377.53ms, max: 896.38ms, stddev:  215.46ms, sum: 377.5sec, count: 1000
all queries
min:    4.20ms, med:  374.86ms, mean:  377.53ms, max: 896.38ms, stddev:  215.46ms, sum: 377.5sec, count: 1000
wall clock time: 94.477797sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_medium/influx_groupby-orderby-limit.gz | gunzip
| /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=medium"
        User time (seconds): 0.64
        System time (seconds): 0.13
        Percent of CPU this job got: 0%
```

## *Big*

## Load:

```
Summary:
loaded 366508800 metrics in 1024.192sec with 1 workers (mean rate 357851.72 metrics/sec)
loaded 32659200 rows in 1024.192sec with 1 workers (mean rate 31887.78 rows/sec)

Summary:
loaded 366508800 metrics in 597.803sec with 2 workers (mean rate 613093.03 metrics/sec)
loaded 32659200 rows in 597.803sec with 2 workers (mean rate 54632.05 rows/sec)

Summary:
loaded 366508800 metrics in 458.298sec with 4 workers (mean rate 799716.75 metrics/sec)
loaded 32659200 rows in 458.298sec with 4 workers (mean rate 71261.89 rows/sec)

Summary:
loaded 366508800 metrics in 478.173sec with 8 workers (mean rate 766476.66 metrics/sec)
loaded 32659200 rows in 478.173sec with 8 workers (mean rate 68299.90 rows/sec)
```

## Queries:

```
user@snf-40236:~/go/src/tsbs$ ./influx_big.sh
Influx 1 cpu metric(s), random    1 hosts, random 1h0m0s by 1m: 1000 points
Influx 1 cpu metric(s), random    1 hosts, random 12h0m0s by 1m: 1000 points
Influx 1 cpu metric(s), random    8 hosts, random 1h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random    1 hosts, random 1h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random    1 hosts, random 12h0m0s by 1m: 1000 points
Influx 5 cpu metric(s), random    8 hosts, random 1h0m0s by 1m: 1000 points
Influx max of all CPU metrics, random    1 hosts, random 8h0m0s by 1h: 1000 points
Influx max of all CPU metrics, random    8 hosts, random 8h0m0s by 1h: 1000 points
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h: 1000 points
Influx CPU over threshold, all hosts: 1000 points
Influx CPU over threshold, 1 host(s): 1000 points
Influx last row per host: 1000 points
Influx max cpu over last 5 min-intervals (random end): 1000 points
```

### SGB-1-1-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 615.98 queries/sec):
Influx 1 cpu metric(s), random    1 hosts, random 1h0m0s by 1m:
min:   1.17ms, med:   1.44ms, mean:   1.60ms, max:   15.38ms, stddev:   0.92ms, sum:   1.6sec, count: 1000
all queries
min:   1.17ms, med:   1.44ms, mean:   1.60ms, max:   15.38ms, stddev:   0.92ms, sum:   1.6sec, count: 1000
wall clock time: 1.629046sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
User time (seconds): 0.20
System time (seconds): 0.10
Percent of CPU this job got: 19%
Run complete after 1000 queries with 2 workers (Overall query rate 1053.58 queries/sec):
Influx 1 cpu metric(s), random    1 hosts, random 1h0m0s by 1m:
min:   1.12ms, med:   1.58ms, mean:   1.87ms, max:   14.72ms, stddev:   1.15ms, sum:   1.9sec, count: 1000
all queries
min:   1.12ms, med:   1.58ms, mean:   1.87ms, max:   14.72ms, stddev:   1.15ms, sum:   1.9sec, count: 1000
wall clock time: 0.955983sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
User time (seconds): 0.22
System time (seconds): 0.08
Percent of CPU this job got: 32%
Run complete after 1000 queries with 4 workers (Overall query rate 1456.37 queries/sec):
Influx 1 cpu metric(s), random    1 hosts, random 1h0m0s by 1m:
min:   1.09ms, med:   2.09ms, mean:   2.69ms, max:   17.04ms, stddev:   1.82ms, sum:   2.7sec, count: 1000
all queries
min:   1.09ms, med:   2.09ms, mean:   2.69ms, max:   17.04ms, stddev:   1.82ms, sum:   2.7sec, count: 1000
wall clock time: 0.692444sec
Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
User time (seconds): 0.21
System time (seconds): 0.06
Percent of CPU this job got: 40%
```

## SGB-1-1-12

```
Run complete after 1000 queries with 1 workers (Overall query rate 118.47 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.41ms, med: 7.27ms, mean: 8.38ms, max: 147.26ms, stddev: 6.37ms, sum: 8.4sec, count: 1000
all queries :
min: 6.41ms, med: 7.27ms, mean: 8.38ms, max: 147.26ms, stddev: 6.37ms, sum: 8.4sec, count: 1000
wall clock time: 8.460018sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.57
        System time (seconds): 0.15
        Percent of CPU this job got: 8%
```

```
Run complete after 1000 queries with 2 workers (Overall query rate 209.07 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.54ms, med: 7.54ms, mean: 9.53ms, max: 45.73ms, stddev: 5.12ms, sum: 9.5sec, count: 1000
all queries :
min: 6.54ms, med: 7.54ms, mean: 9.53ms, max: 45.73ms, stddev: 5.12ms, sum: 9.5sec, count: 1000
wall clock time: 4.797883sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.45
        System time (seconds): 0.13
        Percent of CPU this job got: 12%
```

```
Run complete after 1000 queries with 4 workers (Overall query rate 315.61 queries/sec):
Influx 1 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 6.36ms, med: 9.97ms, mean: 12.59ms, max: 69.49ms, stddev: 6.76ms, sum: 12.6sec, count: 1000
all queries :
min: 6.36ms, med: 9.97ms, mean: 12.59ms, max: 69.49ms, stddev: 6.76ms, sum: 12.6sec, count: 1000
wall clock time: 3.182410sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.42
        System time (seconds): 0.10
        Percent of CPU this job got: 16%
```

## SGB-1-8-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 304.41 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 1.95ms, med: 2.96ms, mean: 3.26ms, max: 15.01ms, stddev: 1.63ms, sum: 3.3sec, count: 1000
all queries :
min: 1.95ms, med: 2.96ms, mean: 3.26ms, max: 15.01ms, stddev: 1.63ms, sum: 3.3sec, count: 1000
wall clock time: 3.290913sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.27
        System time (seconds): 0.08
        Percent of CPU this job got: 10%
```

```
Run complete after 1000 queries with 2 workers (Overall query rate 504.58 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 1.97ms, med: 3.26ms, mean: 3.95ms, max: 34.16ms, stddev: 2.18ms, sum: 4.0sec, count: 1000
all queries :
min: 1.97ms, med: 3.26ms, mean: 3.95ms, max: 34.16ms, stddev: 2.18ms, sum: 4.0sec, count: 1000
wall clock time: 2.013798sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.29
        System time (seconds): 0.08
        Percent of CPU this job got: 18%
```

```
Run complete after 1000 queries with 4 workers (Overall query rate 659.46 queries/sec):
Influx 1 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 2.73ms, med: 4.61ms, mean: 6.01ms, max: 27.27ms, stddev: 3.34ms, sum: 6.0sec, count: 1000
all queries :
min: 2.73ms, med: 4.61ms, mean: 6.01ms, max: 27.27ms, stddev: 3.34ms, sum: 6.0sec, count: 1000
wall clock time: 1.528322sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-1-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.25
        System time (seconds): 0.08
        Percent of CPU this job got: 21%
```

## SGB-5-1-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 266.08 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.68ms, med: 3.23ms, mean: 3.73ms, max: 20.58ms, stddev: 2.05ms, sum: 3.7sec, count: 1000
all queries :
min: 2.68ms, med: 3.23ms, mean: 3.73ms, max: 20.58ms, stddev: 2.05ms, sum: 3.7sec, count: 1000
wall clock time: 3.765871sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.29
        System time (seconds): 0.15
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 2 workers (Overall query rate 465.63 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.64ms, med: 3.37ms, mean: 4.27ms, max: 20.36ms, stddev: 2.14ms, sum: 4.3sec, count: 1000
all queries :
min: 2.64ms, med: 3.37ms, mean: 4.27ms, max: 20.36ms, stddev: 2.14ms, sum: 4.3sec, count: 1000
wall clock time: 2.154976sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.21
        System time (seconds): 0.13
        Percent of CPU this job got: 16%
Run complete after 1000 queries with 4 workers (Overall query rate 611.51 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 1h0m0s by 1m:
min: 2.83ms, med: 5.05ms, mean: 6.47ms, max: 39.91ms, stddev: 3.98ms, sum: 6.5sec, count: 1000
all queries :
min: 2.83ms, med: 5.05ms, mean: 6.47ms, max: 39.91ms, stddev: 3.98ms, sum: 6.5sec, count: 1000
wall clock time: 1.658094sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-1-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.28
        System time (seconds): 0.07
        Percent of CPU this job got: 21%
```

## SGB-5-1-12

```
Run complete after 1000 queries with 1 workers (Overall query rate 34.00 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 22.53ms, med: 24.02ms, mean: 29.37ms, max: 165.93ms, stddev: 16.73ms, sum: 29.4sec, count: 1000
all queries :
min: 22.53ms, med: 24.02ms, mean: 29.37ms, max: 165.93ms, stddev: 16.73ms, sum: 29.4sec, count: 1000
wall clock time: 29.436352sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.88
        System time (seconds): 0.14
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 59.51 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 22.51ms, med: 25.60ms, mean: 33.54ms, max: 118.89ms, stddev: 16.11ms, sum: 33.5sec, count: 1000
all queries :
min: 22.51ms, med: 25.60ms, mean: 33.54ms, max: 118.89ms, stddev: 16.11ms, sum: 33.5sec, count: 1000
wall clock time: 16.823275sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.72
        System time (seconds): 0.18
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 4 workers (Overall query rate 86.57 queries/sec):
Influx 5 cpu metric(s), random 1 hosts, random 12h0m0s by 1m:
min: 23.92ms, med: 39.37ms, mean: 46.07ms, max: 127.27ms, stddev: 19.56ms, sum: 46.1sec, count: 1000
all queries :
min: 23.92ms, med: 39.37ms, mean: 46.07ms, max: 127.27ms, stddev: 19.56ms, sum: 46.1sec, count: 1000
wall clock time: 11.574857sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-1-12.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.73
        System time (seconds): 0.14
        Percent of CPU this job got: 7%
```

## SGB-5-8-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 95.55 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 5.82ms, med: 8.97ms, mean: 10.42ms, max: 64.41ms, stddev: 5.30ms, sum: 10.4sec, count: 1000
all queries :
min: 5.82ms, med: 8.97ms, mean: 10.42ms, max: 64.41ms, stddev: 5.30ms, sum: 10.4sec, count: 1000
wall clock time: 10.480372sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.45
        System time (seconds): 0.12
        Percent of CPU this job got: 5%
Run complete after 1000 queries with 2 workers (Overall query rate 162.57 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 6.10ms, med: 10.03ms, mean: 12.26ms, max: 49.38ms, stddev: 5.61ms, sum: 12.3sec, count: 1000
all queries :
min: 6.10ms, med: 10.03ms, mean: 12.26ms, max: 49.38ms, stddev: 5.61ms, sum: 12.3sec, count: 1000
wall clock time: 6.165037sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.34
        System time (seconds): 0.10
        Percent of CPU this job got: 7%
Run complete after 1000 queries with 4 workers (Overall query rate 185.04 queries/sec):
Influx 5 cpu metric(s), random 8 hosts, random 1h0m0s by 1m:
min: 8.66ms, med: 17.11ms, mean: 21.52ms, max: 82.59ms, stddev: 11.06ms, sum: 21.5sec, count: 1000
all queries :
min: 8.66ms, med: 17.11ms, mean: 21.52ms, max: 82.59ms, stddev: 11.06ms, sum: 21.5sec, count: 1000
wall clock time: 5.419558sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_single-groupby-5-8-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.33
        System time (seconds): 0.12
        Percent of CPU this job got: 8%
```

## CPU-MAX-ALL-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 187.95 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.31ms, med: 5.04ms, mean: 5.29ms, max: 27.30ms, stddev: 1.20ms, sum: 5.3sec, count: 1000
all queries :
min: 4.31ms, med: 5.04ms, mean: 5.29ms, max: 27.30ms, stddev: 1.20ms, sum: 5.3sec, count: 1000
wall clock time: 5.328480sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_cpu-max-all-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.32
        System time (seconds): 0.10
        Percent of CPU this job got: 7%
Run complete after 1000 queries with 2 workers (Overall query rate 322.42 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.37ms, med: 5.51ms, mean: 6.16ms, max: 23.36ms, stddev: 1.84ms, sum: 6.2sec, count: 1000
all queries :
min: 4.37ms, med: 5.51ms, mean: 6.16ms, max: 23.36ms, stddev: 1.84ms, sum: 6.2sec, count: 1000
wall clock time: 3.110921sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_cpu-max-all-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.24
        System time (seconds): 0.10
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 4 workers (Overall query rate 491.98 queries/sec):
Influx max of all CPU metrics, random 1 hosts, random 8h0m0s by 1h:
min: 4.60ms, med: 6.65ms, mean: 8.06ms, max: 30.71ms, stddev: 3.48ms, sum: 8.1sec, count: 1000
all queries :
min: 4.60ms, med: 6.65ms, mean: 8.06ms, max: 30.71ms, stddev: 3.48ms, sum: 8.1sec, count: 1000
wall clock time: 2.042968sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_cpu-max-all-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.27
        System time (seconds): 0.06
        Percent of CPU this job got: 16%
```

## CPU-MAX-ALL-8

```
Run complete after 1000 queries with 1 workers (Overall query rate 67.34 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min:    9.41ms, med:   13.63ms, mean:   14.81ms, max:  58.30ms, stddev:   4.86ms, sum:  14.8sec, count: 1000
all queries
min:    9.41ms, med:   13.63ms, mean:   14.81ms, max:  58.30ms, stddev:   4.86ms, sum:  14.8sec, count: 1000
wall clock time: 14.864446sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_cpu-max-all-8.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.45
        System time (seconds): 0.11
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 94.67 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min:  10.20ms, med:  18.78ms, mean:  21.05ms, max: 74.80ms, stddev:  7.20ms, sum: 21.0sec, count: 1000
all queries
min:  10.20ms, med:  18.78ms, mean:  21.05ms, max: 74.80ms, stddev:  7.20ms, sum: 21.0sec, count: 1000
wall clock time: 10.588906sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_cpu-max-all-8.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.34
        System time (seconds): 0.09
        Percent of CPU this job got: 4%
Run complete after 1000 queries with 4 workers (Overall query rate 94.80 queries/sec):
Influx max of all CPU metrics, random 8 hosts, random 8h0m0s by 1h:
min:  17.50ms, med: 37.44ms, mean: 42.06ms, max: 159.66ms, stddev: 16.04ms, sum: 42.1sec, count: 1000
all queries
min:  17.50ms, med: 37.44ms, mean: 42.06ms, max: 159.66ms, stddev: 16.04ms, sum: 42.1sec, count: 1000
wall clock time: 10.575267sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_cpu-max-all-8.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.44
        System time (seconds): 0.12
        Percent of CPU this job got: 5%
```

## DGB-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 124.48 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min:    7.03ms, med:   7.78ms, mean:   8.00ms, max: 27.87ms, stddev:   1.07ms, sum:  8.0sec, count: 1000
all queries
min:    7.03ms, med:   7.78ms, mean:   8.00ms, max: 27.87ms, stddev:   1.07ms, sum:  8.0sec, count: 1000
wall clock time: 8.043431sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.38
        System time (seconds): 0.13
        Percent of CPU this job got: 6%
Run complete after 1000 queries with 2 workers (Overall query rate 230.11 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min:    6.84ms, med:   7.78ms, mean:   8.65ms, max: 36.81ms, stddev:   2.51ms, sum:  8.7sec, count: 1000
all queries
min:    6.84ms, med:   7.78ms, mean:   8.65ms, max: 36.81ms, stddev:   2.51ms, sum:  8.7sec, count: 1000
wall clock time: 4.361870sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.30
        System time (seconds): 0.11
        Percent of CPU this job got: 9%
Run complete after 1000 queries with 4 workers (Overall query rate 389.30 queries/sec):
Influx mean of 1 metrics, all hosts, random 12h0m0s by 1h:
min:    6.85ms, med:   8.51ms, mean: 10.20ms, max: 35.95ms, stddev:   3.99ms, sum: 10.2sec, count: 1000
all queries
min:    6.85ms, med:   8.51ms, mean: 10.20ms, max: 35.95ms, stddev:   3.99ms, sum: 10.2sec, count: 1000
wall clock time: 2.580271sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.32
        System time (seconds): 0.11
        Percent of CPU this job got: 16%
```

## DGB-5

```
Run complete after 1000 queries with 1 workers (Overall query rate 30.60 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 29.69ms, med: 31.77ms, mean: 32.63ms, max: 79.97ms, stddev: 4.33ms, sum: 32.6sec, count: 1000
all queries :
min: 29.69ms, med: 31.77ms, mean: 32.63ms, max: 79.97ms, stddev: 4.33ms, sum: 32.6sec, count: 1000
wall clock time: 32.697899sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-5.gz | gunzip | /home
/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.67
        System time (seconds): 0.16
        Percent of CPU this job got: 2%
Run complete after 1000 queries with 2 workers (Overall query rate 57.45 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 29.56ms, med: 32.91ms, mean: 34.73ms, max: 79.96ms, stddev: 5.71ms, sum: 34.7sec, count: 1000
all queries :
min: 29.56ms, med: 32.91ms, mean: 34.73ms, max: 79.96ms, stddev: 5.71ms, sum: 34.7sec, count: 1000
wall clock time: 17.423163sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-5.gz | gunzip | /home
/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.64
        System time (seconds): 0.12
        Percent of CPU this job got: 4%
Run complete after 1000 queries with 4 workers (Overall query rate 101.57 queries/sec):
Influx mean of 5 metrics, all hosts, random 12h0m0s by 1h:
min: 30.33ms, med: 34.24ms, mean: 39.22ms, max: 109.13ms, stddev: 11.37ms, sum: 39.2sec, count: 1000
all queries :
min: 30.33ms, med: 34.24ms, mean: 39.22ms, max: 109.13ms, stddev: 11.37ms, sum: 39.2sec, count: 1000
wall clock time: 9.867270sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-5.gz | gunzip | /home
/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.60
        System time (seconds): 0.11
        Percent of CPU this job got: 7%
```

## DGB-ALL

```
Run complete after 1000 queries with 1 workers (Overall query rate 15.67 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 57.02ms, med: 61.83ms, mean: 63.75ms, max: 133.35ms, stddev: 7.60ms, sum: 63.7sec, count: 1000
all queries :
min: 57.02ms, med: 61.83ms, mean: 63.75ms, max: 133.35ms, stddev: 7.60ms, sum: 63.7sec, count: 1000
wall clock time: 63.826838sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-all.gz | gunzip | /ho
me/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.87
        System time (seconds): 0.20
        Percent of CPU this job got: 1%
Run complete after 1000 queries with 2 workers (Overall query rate 29.94 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 57.78ms, med: 64.14ms, mean: 66.70ms, max: 129.75ms, stddev: 8.60ms, sum: 66.7sec, count: 1000
all queries :
min: 57.78ms, med: 64.14ms, mean: 66.70ms, max: 129.75ms, stddev: 8.60ms, sum: 66.7sec, count: 1000
wall clock time: 33.429230sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-all.gz | gunzip | /ho
me/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.79
        System time (seconds): 0.18
        Percent of CPU this job got: 2%
Run complete after 1000 queries with 4 workers (Overall query rate 51.89 queries/sec):
Influx mean of 10 metrics, all hosts, random 12h0m0s by 1h:
min: 59.74ms, med: 68.28ms, mean: 76.84ms, max: 164.20ms, stddev: 17.97ms, sum: 76.8sec, count: 1000
all queries :
min: 59.74ms, med: 68.28ms, mean: 76.84ms, max: 164.20ms, stddev: 17.97ms, sum: 76.8sec, count: 1000
wall clock time: 19.295399sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_double-groupby-all.gz | gunzip | /ho
me/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.77
        System time (seconds): 0.15
        Percent of CPU this job got: 4%
```

## HIGH-CPU-ALL

```
Run complete after 1000 queries with 1 workers (Overall query rate 8.98 queries/sec):
Influx CPU over threshold, all hosts:
min: 56.39ms, med: 104.58ms, mean: 111.31ms, max: 247.81ms, stddev: 28.39ms, sum: 111.3sec, count: 1000
all queries
min: 56.39ms, med: 104.58ms, mean: 111.31ms, max: 247.81ms, stddev: 28.39ms, sum: 111.3sec, count: 1000
wall clock time: 111.395046sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 3.57
        System time (seconds): 0.56
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 2 workers (Overall query rate 16.68 queries/sec):
Influx CPU over threshold, all hosts:
min: 58.19ms, med: 113.13ms, mean: 119.78ms, max: 243.86ms, stddev: 32.74ms, sum: 119.8sec, count: 1000
all queries
min: 58.19ms, med: 113.13ms, mean: 119.78ms, max: 243.86ms, stddev: 32.74ms, sum: 119.8sec, count: 1000
wall clock time: 59.975007sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 3.39
        System time (seconds): 0.51
        Percent of CPU this job got: 6%
Run complete after 1000 queries with 4 workers (Overall query rate 26.76 queries/sec):
Influx CPU over threshold, all hosts:
min: 58.66ms, med: 141.56ms, mean: 149.18ms, max: 295.84ms, stddev: 47.80ms, sum: 149.2sec, count: 1000
all queries
min: 58.66ms, med: 141.56ms, mean: 149.18ms, max: 295.84ms, stddev: 47.80ms, sum: 149.2sec, count: 1000
wall clock time: 37.394698sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_high-cpu-all.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 3.42
        System time (seconds): 0.39
        Percent of CPU this job got: 10%
```

## HIGH-CPU-1

```
Run complete after 1000 queries with 1 workers (Overall query rate 83.22 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.73ms, med: 8.33ms, mean: 11.98ms, max: 45.25ms, stddev: 7.48ms, sum: 12.0sec, count: 1000
all queries
min: 5.73ms, med: 8.33ms, mean: 11.98ms, max: 45.25ms, stddev: 7.48ms, sum: 12.0sec, count: 1000
wall clock time: 12.029554sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.68
        System time (seconds): 0.16
        Percent of CPU this job got: 7%
Run complete after 1000 queries with 2 workers (Overall query rate 152.35 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.68ms, med: 9.70ms, mean: 13.08ms, max: 74.06ms, stddev: 8.70ms, sum: 13.1sec, count: 1000
all queries
min: 5.68ms, med: 9.70ms, mean: 13.08ms, max: 74.06ms, stddev: 8.70ms, sum: 13.1sec, count: 1000
wall clock time: 6.581040sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.64
        System time (seconds): 0.12
        Percent of CPU this job got: 11%
Run complete after 1000 queries with 4 workers (Overall query rate 248.06 queries/sec):
Influx CPU over threshold, 1 host(s):
min: 5.51ms, med: 12.67ms, mean: 16.01ms, max: 66.99ms, stddev: 11.11ms, sum: 16.0sec, count: 1000
all queries
min: 5.51ms, med: 12.67ms, mean: 16.01ms, max: 66.99ms, stddev: 11.11ms, sum: 16.0sec, count: 1000
wall clock time: 4.045964sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_high-cpu-1.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.57
        System time (seconds): 0.13
        Percent of CPU this job got: 17%
```

## LASTPOINT

```
Run complete after 1000 queries with 1 workers (Overall query rate 33.84 queries/sec):
Influx last row per host:
min: 23.21ms, med: 26.22ms, mean: 29.50ms, max: 73.40ms, stddev: 7.99ms, sum: 29.5sec, count: 1000
all queries :
min: 23.21ms, med: 26.22ms, mean: 29.50ms, max: 73.40ms, stddev: 7.99ms, sum: 29.5sec, count: 1000
wall clock time: 29.565359sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_lastpoint.gz | gunzip | /home/user/g
o/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.57
        System time (seconds): 0.12
        Percent of CPU this job got: 2%
Run complete after 1000 queries with 2 workers (Overall query rate 58.63 queries/sec):
Influx last row per host:
min: 23.84ms, med: 30.53ms, mean: 34.02ms, max: 87.41ms, stddev: 9.63ms, sum: 34.0sec, count: 1000
all queries :
min: 23.84ms, med: 30.53ms, mean: 34.02ms, max: 87.41ms, stddev: 9.63ms, sum: 34.0sec, count: 1000
wall clock time: 17.074058sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_lastpoint.gz | gunzip | /home/user/g
o/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.52
        System time (seconds): 0.12
        Percent of CPU this job got: 3%
Run complete after 1000 queries with 4 workers (Overall query rate 83.31 queries/sec):
Influx last row per host:
min: 25.98ms, med: 46.83ms, mean: 47.85ms, max: 111.02ms, stddev: 13.60ms, sum: 47.9sec, count: 1000
all queries :
min: 25.98ms, med: 46.83ms, mean: 47.85ms, max: 111.02ms, stddev: 13.60ms, sum: 47.9sec, count: 1000
wall clock time: 12.025543sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_lastpoint.gz | gunzip | /home/user/g
o/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.50
        System time (seconds): 0.11
        Percent of CPU this job got: 5%
```

## GROUPBY-ORDERBY-LIMIT

```
Run complete after 1000 queries with 1 workers (Overall query rate 1.96 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min: 5.00ms, med: 492.53ms, mean: 510.11ms, max: 2397.31ms, stddev: 304.84ms, sum: 510.1sec, count: 1000
all queries :
min: 5.00ms, med: 492.53ms, mean: 510.11ms, max: 2397.31ms, stddev: 304.84ms, sum: 510.1sec, count: 1000
wall clock time: 510.223065sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_groupby-orderby-limit.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=1 --db-name=big"
        User time (seconds): 0.78
        System time (seconds): 0.13
        Percent of CPU this job got: 0%
Run complete after 1000 queries with 2 workers (Overall query rate 2.34 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min: 4.11ms, med: 826.78ms, mean: 853.07ms, max: 2174.72ms, stddev: 486.71ms, sum: 853.1sec, count: 1000
all queries :
min: 4.11ms, med: 826.78ms, mean: 853.07ms, max: 2174.72ms, stddev: 486.71ms, sum: 853.1sec, count: 1000
wall clock time: 426.639103sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_groupby-orderby-limit.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=2 --db-name=big"
        User time (seconds): 0.74
        System time (seconds): 0.11
        Percent of CPU this job got: 0%
Run complete after 1000 queries with 4 workers (Overall query rate 2.36 queries/sec):
Influx max cpu over last 5 min-intervals (random end):
min: 10.65ms, med: 1659.07ms, mean: 1690.83ms, max: 3694.97ms, stddev: 959.67ms, sum: 1690.8sec, count: 1000
all queries :
min: 10.65ms, med: 1659.07ms, mean: 1690.83ms, max: 3694.97ms, stddev: 959.67ms, sum: 1690.8sec, count: 1000
wall clock time: 423.356299sec
    Command being timed: "sh -c cat /home/user/go/src/tsbs/queries/influx_big/influx_groupby-orderby-limit.gz | gunzip | /home/user/go/bin/tsbs_run_queries_influx --workers=4 --db-name=big"
        User time (seconds): 0.79
        System time (seconds): 0.12
        Percent of CPU this job got: 0%
```