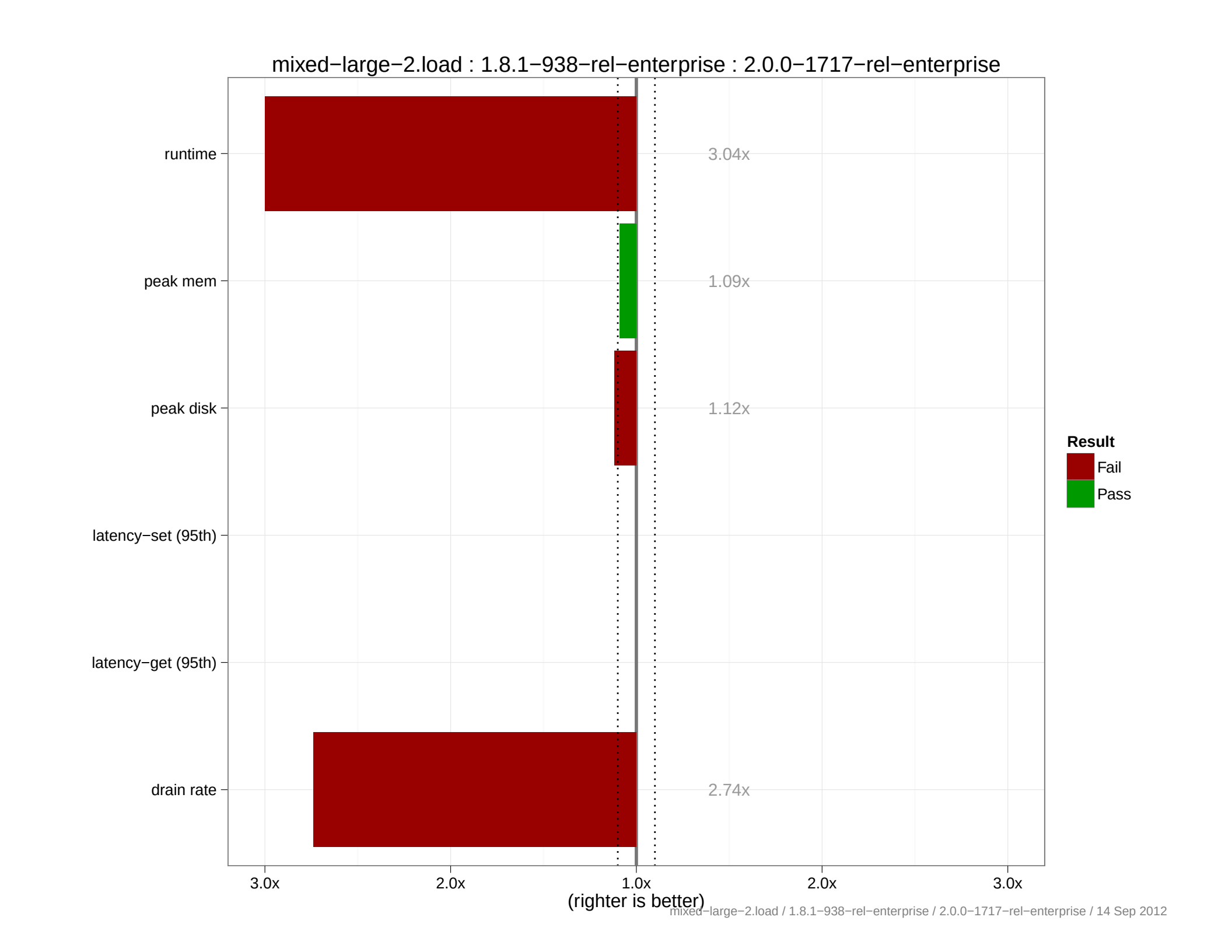
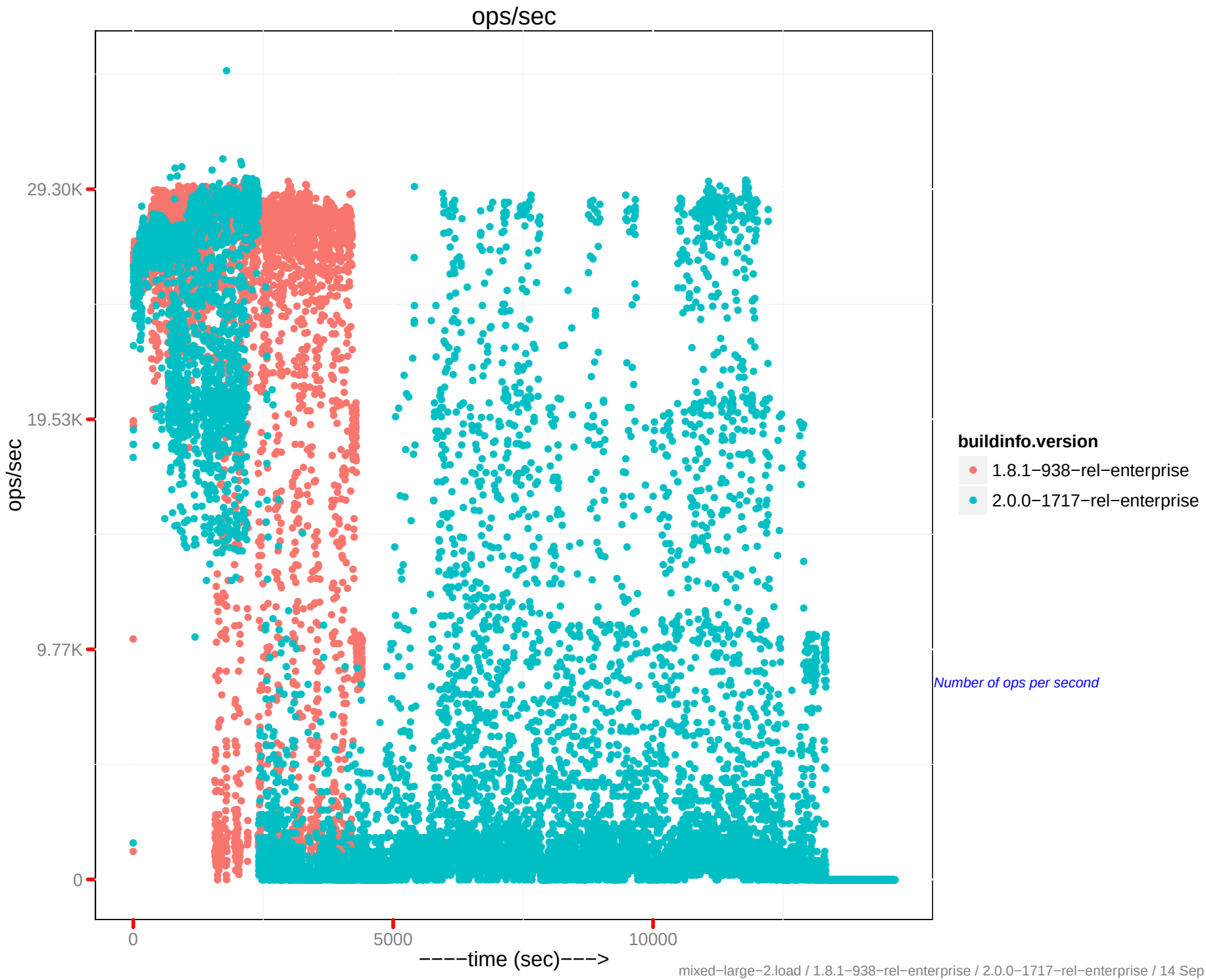
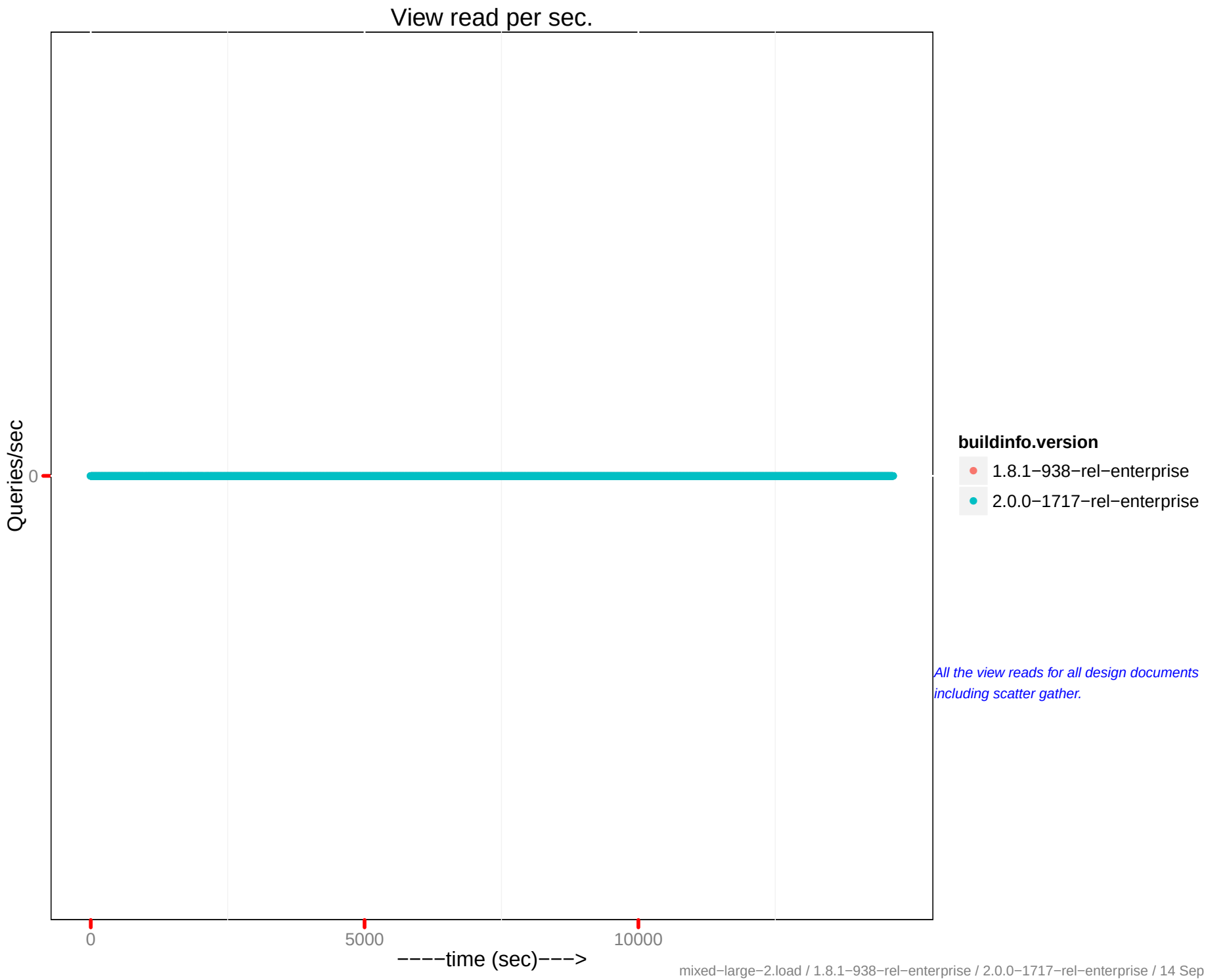
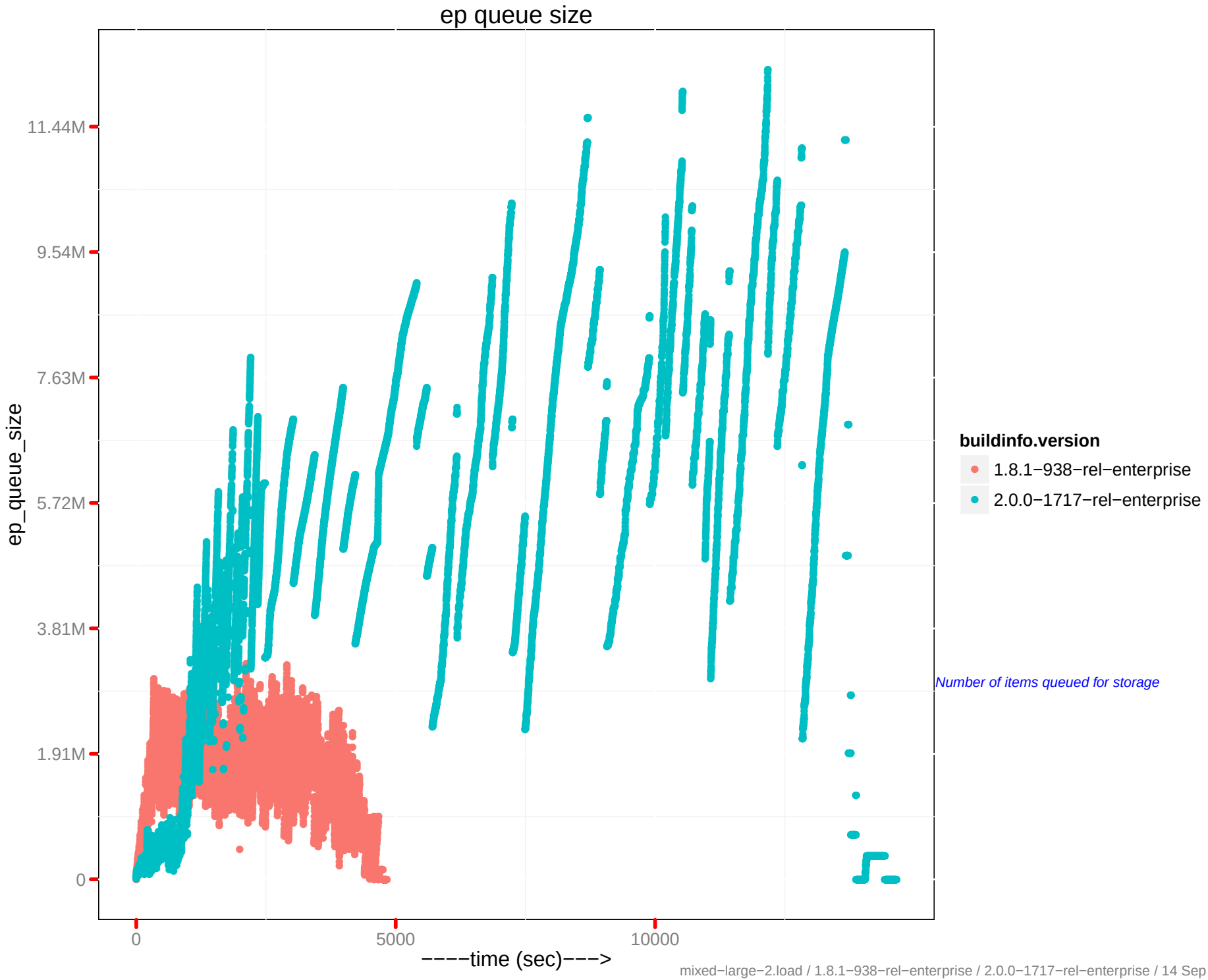

mixed−large−2.load : 1.8.1−938−rel−enterprise : 2.0.0−1717−rel−enterprise
runtime
peak mem
peak disk
latency−set (95th)
latency−get (95th)
drain rate
3.04x
1.09x
1.12x
2.74x
Result
Fail
Pass
3.0x
2.0x
1.0x
2.0x
3.0x
(righter is better)
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

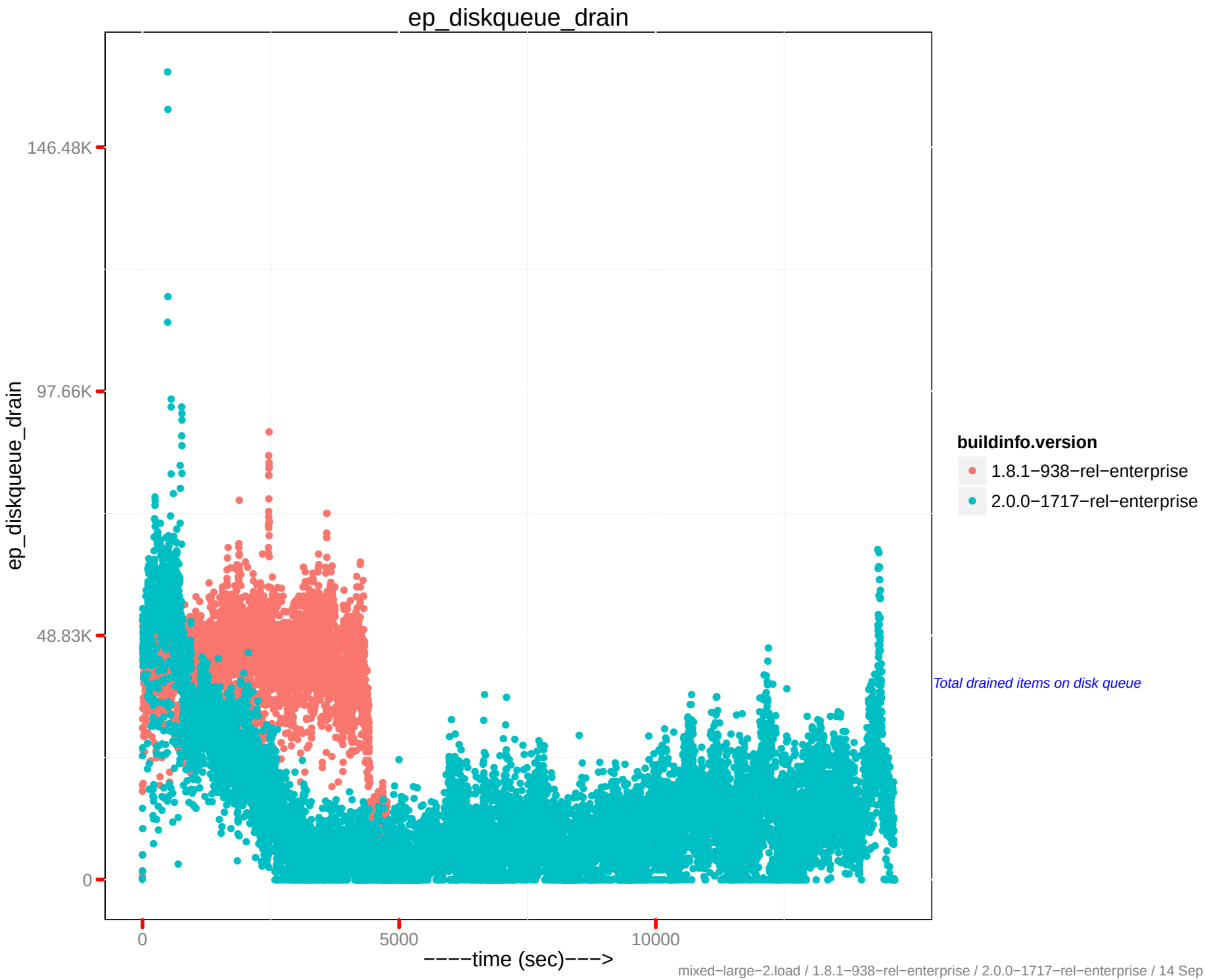
	1.8.1 − 938	2.0.0 − 1717
Runtime (in hr)	1.34	4.07
Avg. Drain Rate	41.53K	15.16K
Peak Disk (GB)	459.9	514.37
Peak Memory (GB)	17.79	19.36
Avg. OPS	22.18K	7.98K
Avg. mem memcached (GB)	16.4	18.22
Avg. mem beam.smp (MB)	80.57	218.03
Avg. CPU rate (%)	30.12	24.57
Latency−get (90th) (ms)	NA	NA
Latency−get (95th) (ms)	NA	NA
Latency−get (99th) (ms)	NA	NA
Latency−set (90th) (ms)	NA	NA
Latency−set (95th) (ms)	NA	NA
Latency−set (99th) (ms)	NA	NA
Latency−query (80th) (ms)	NA	NA
Latency−query (90th) (ms)	NA	NA
Latency−query (95th) (ms)	NA	NA
Latency−query (99th) (ms)	NA	NA
Latency−query (99.9th) (ms)	NA	NA
Avg. QPS	0	0
XDC ops/sec	NA	NaN
Rebalance Time (sec)	0	0
Testrunner Version	78bf448	0191af8

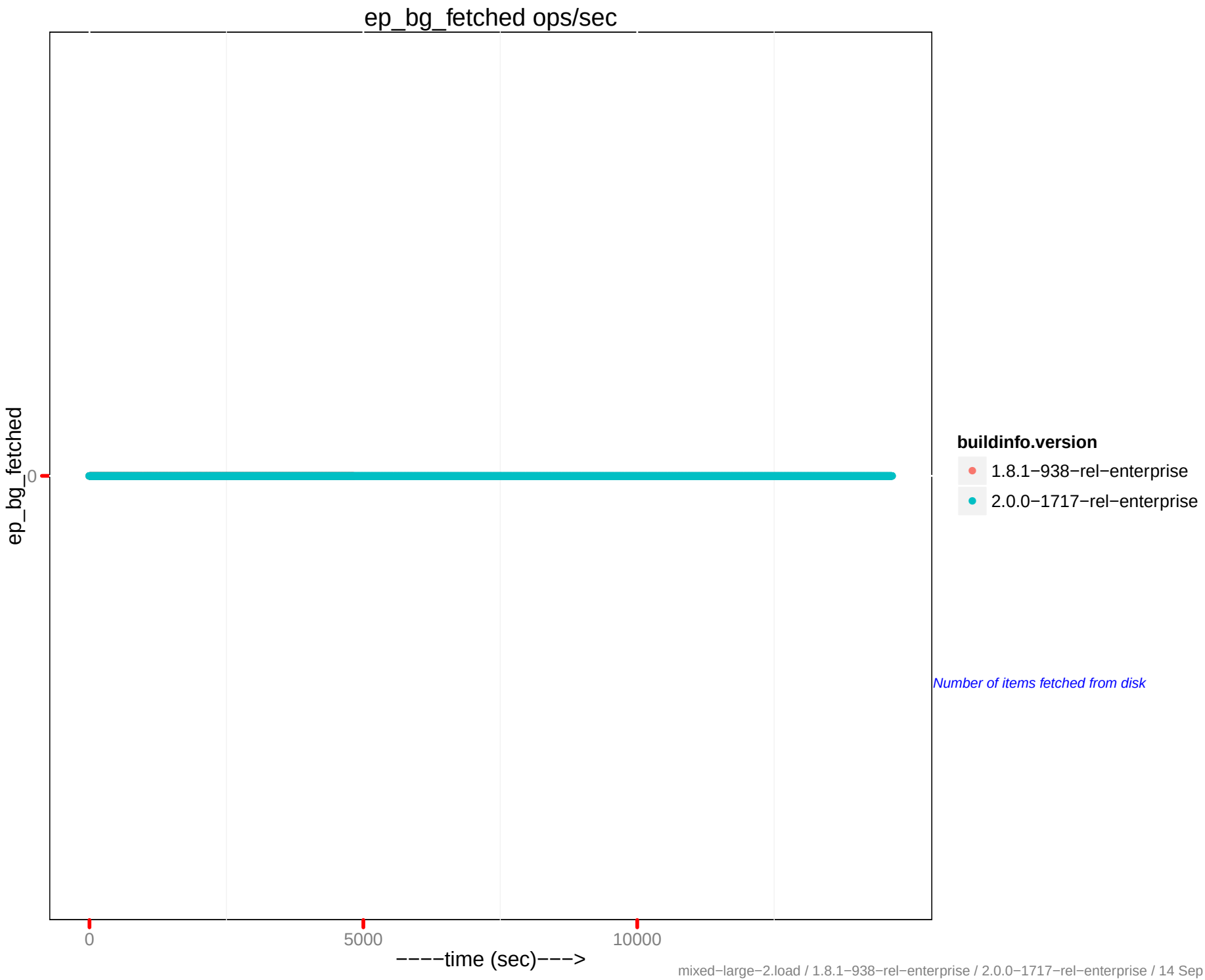


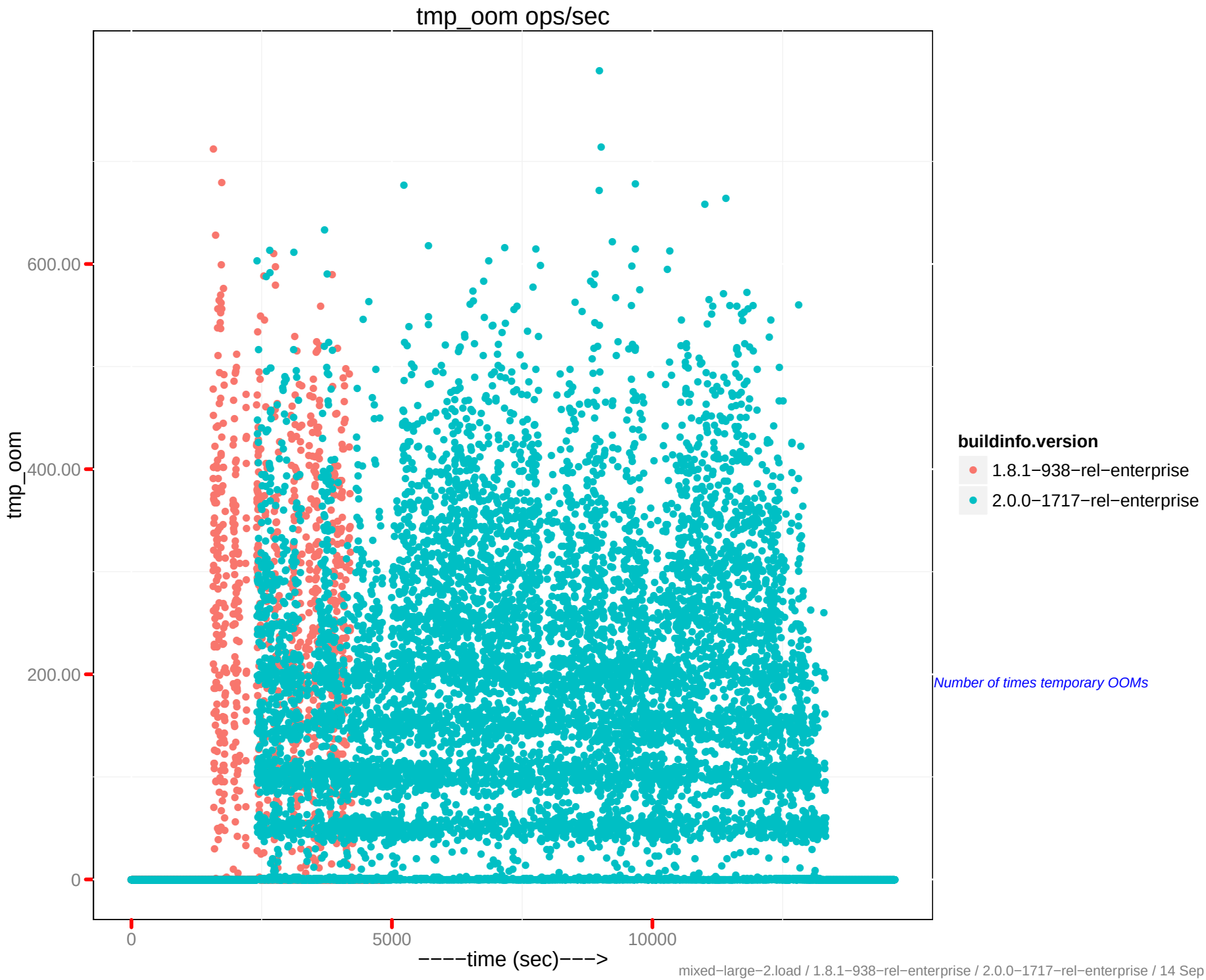
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

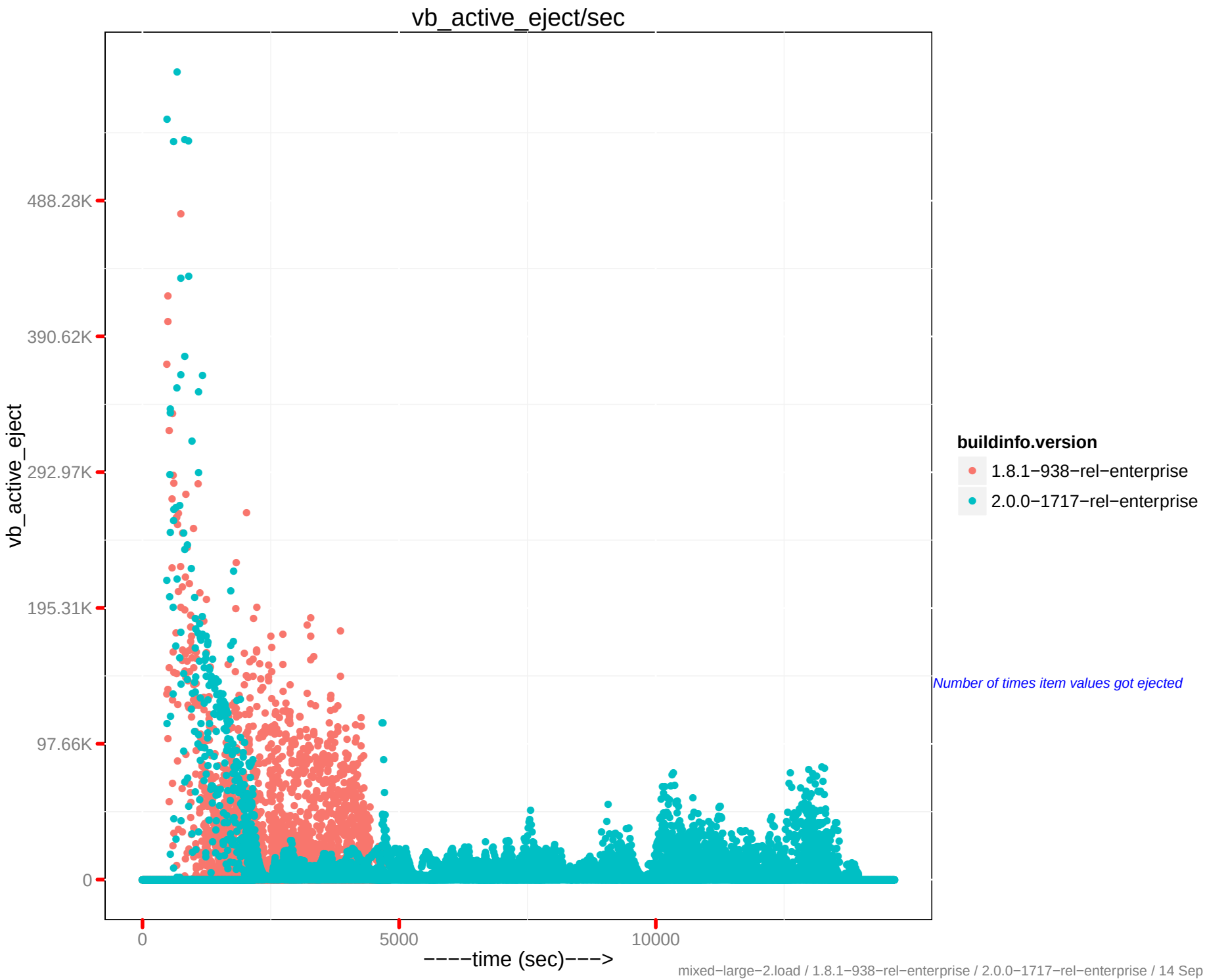

View read per sec.
Queries/sec
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
All the view reads for all design documents including scatter gather.
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

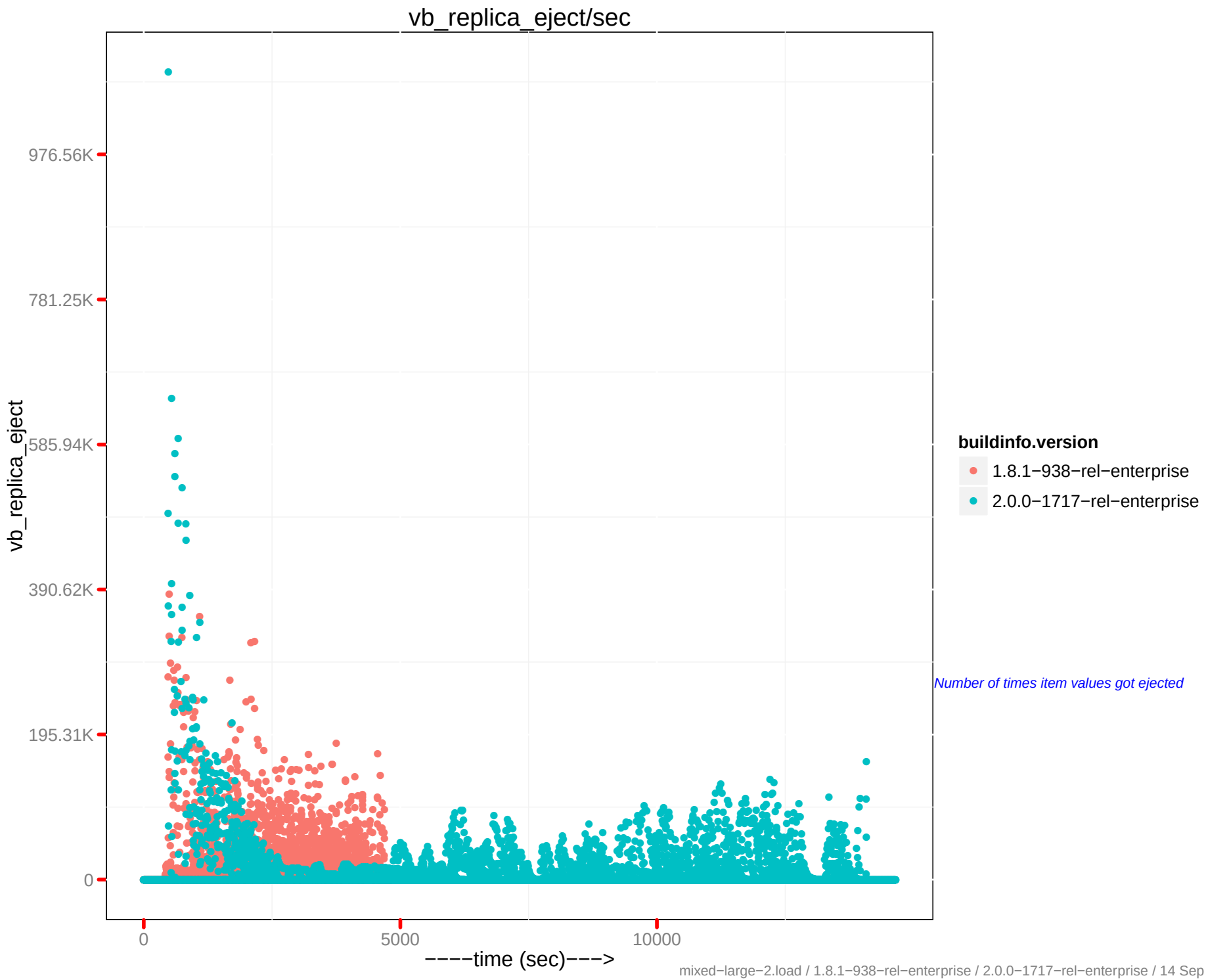

ep queue size
11.44M
9.54M
7.63M
5.72M
3.81M
1.91M
0
ep_queue_size
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of items queued for storage
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

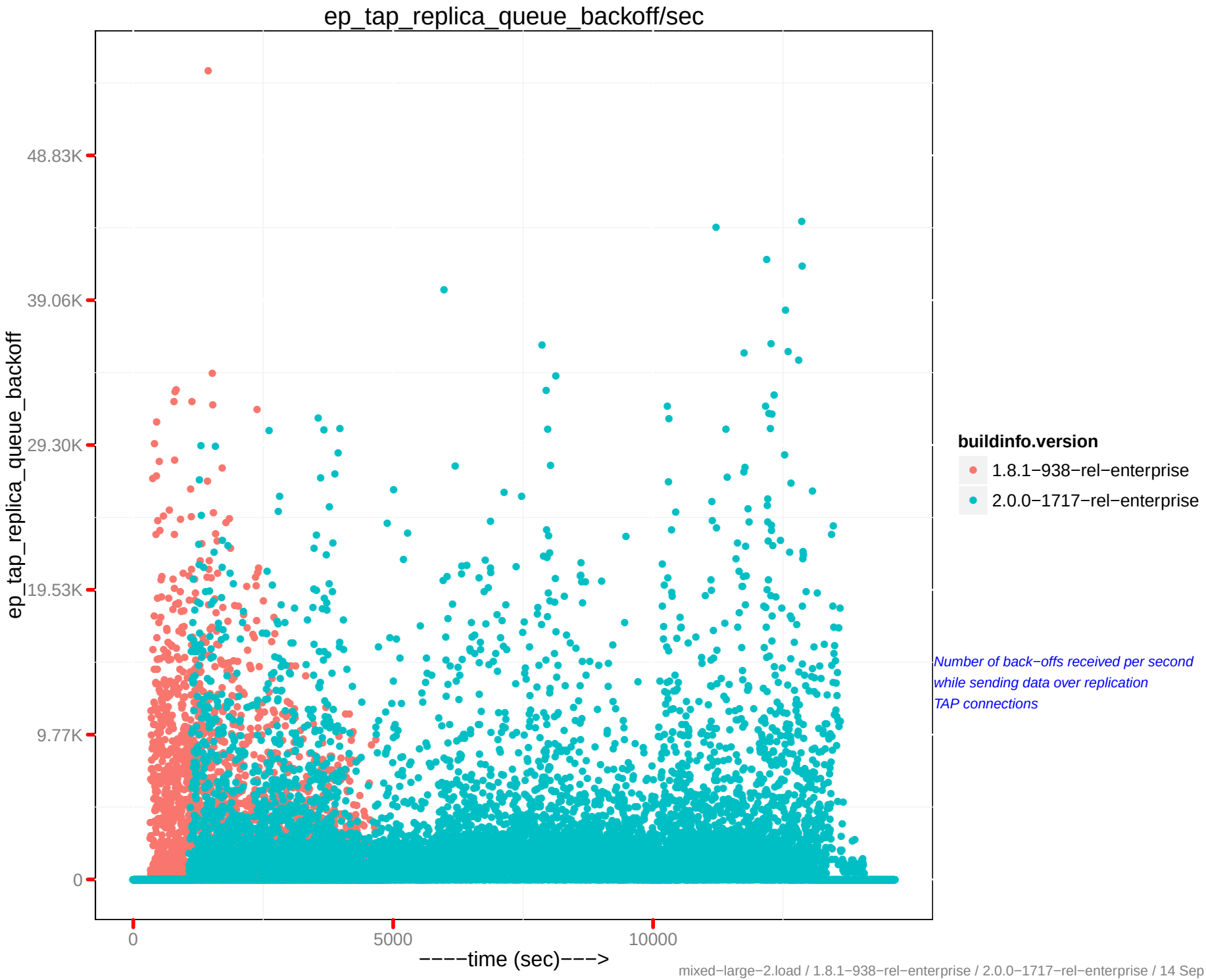

ep_diskqueue_drain
146.48K
97.66K
48.83K
0
ep_diskqueue_drain
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Total drained items on disk queue
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

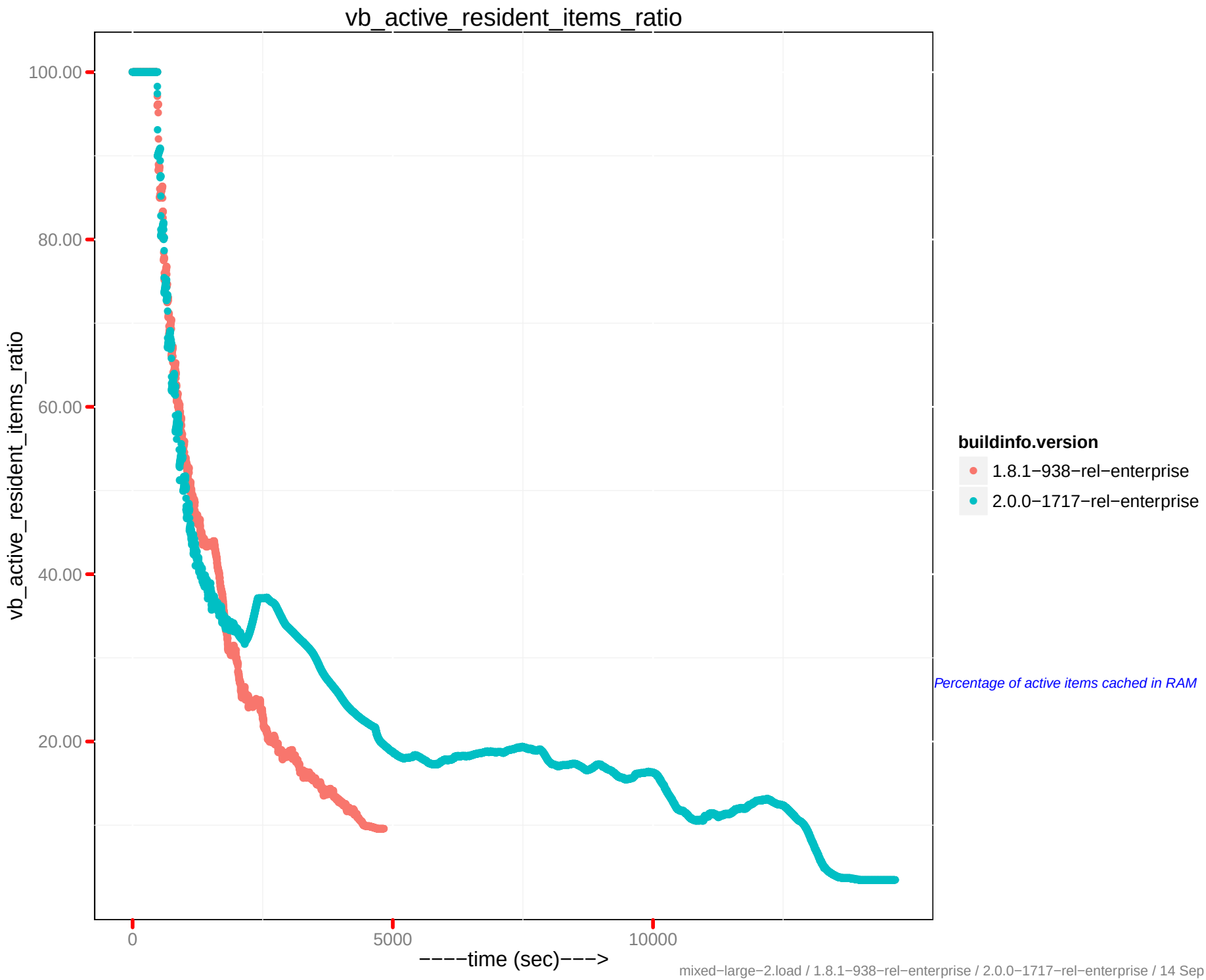

ep_bg_fetched ops/sec
ep_bg_fetched
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of items fetched from disk
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

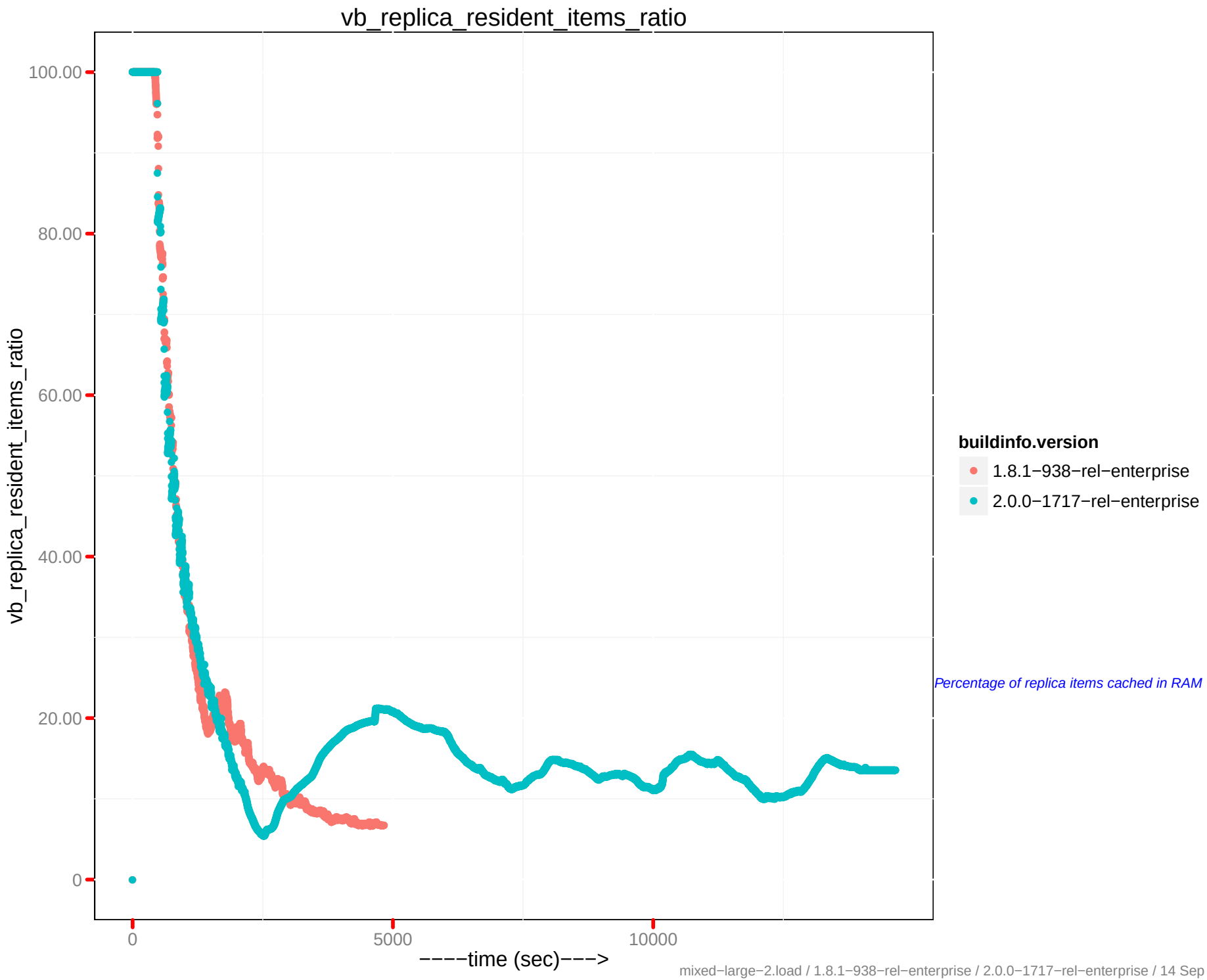

tmp_oom ops/sec
600.00
400.00
200.00
0
tmp_oom
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of times temporary OOMs
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

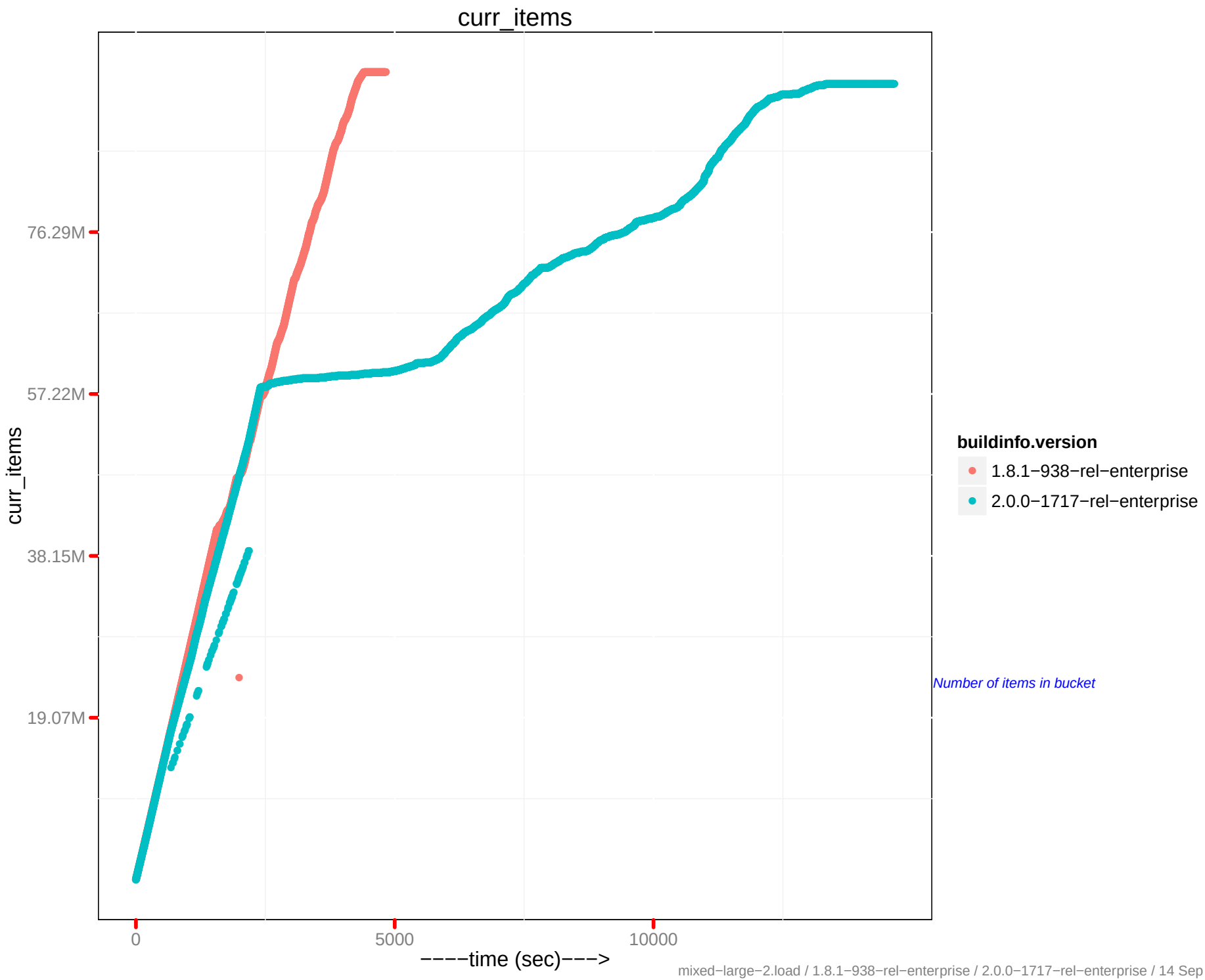

vb_active_eject/sec
vb_active_eject
488.28K
390.62K
292.97K
195.31K
97.66K
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of times item values got ejected
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012


vb_replica_eject/sec
976.56K
781.25K
585.94K
390.62K
195.31K
0
vb_replica_eject
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of times item values got ejected
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

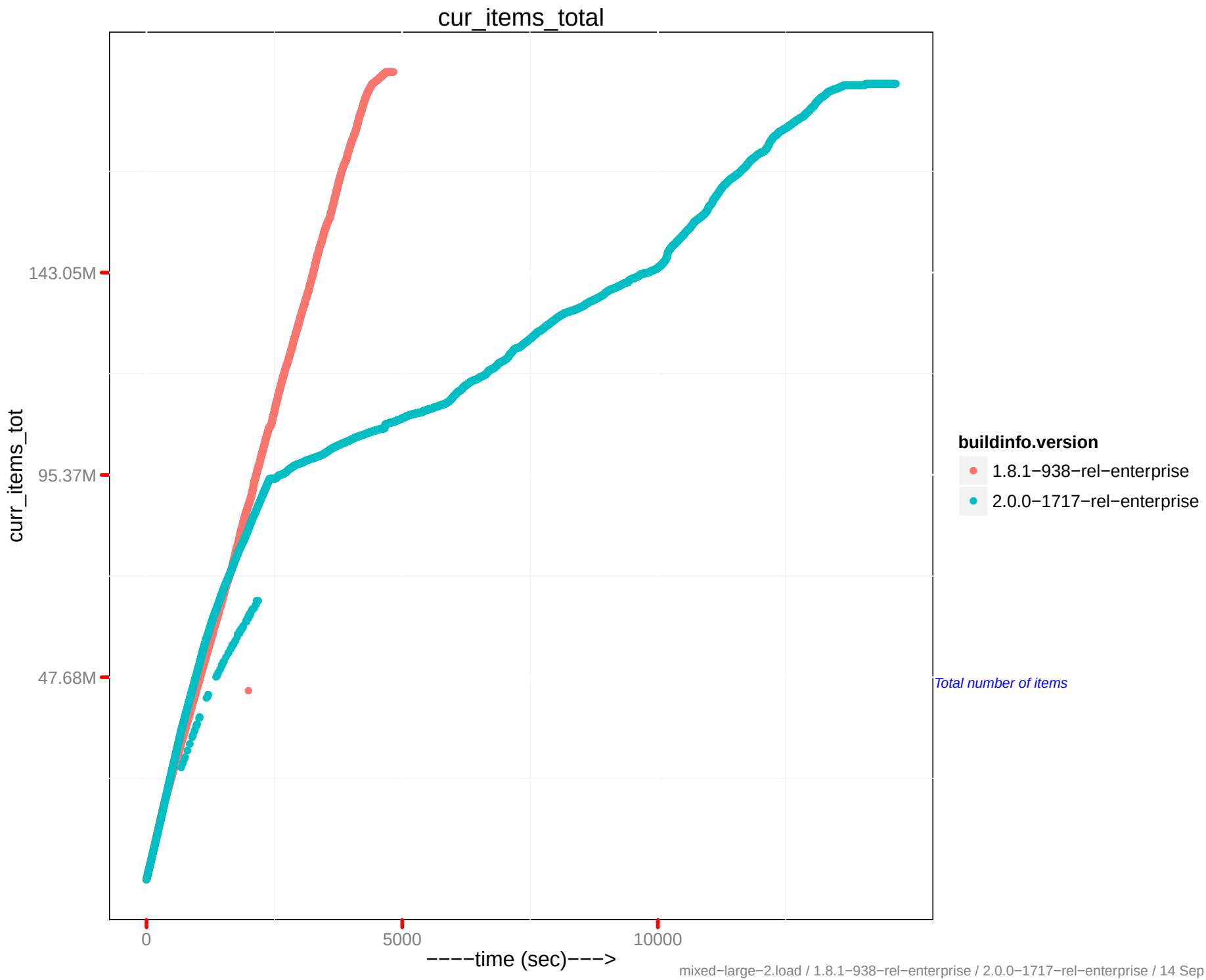

ep_tap_replica_queue_backoff/sec
48.83K
39.06K
29.30K
19.53K
9.77K
0
ep_tap_replica_queue_backoff
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of back-offs received per second
while sending data over replication
TAP connections
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

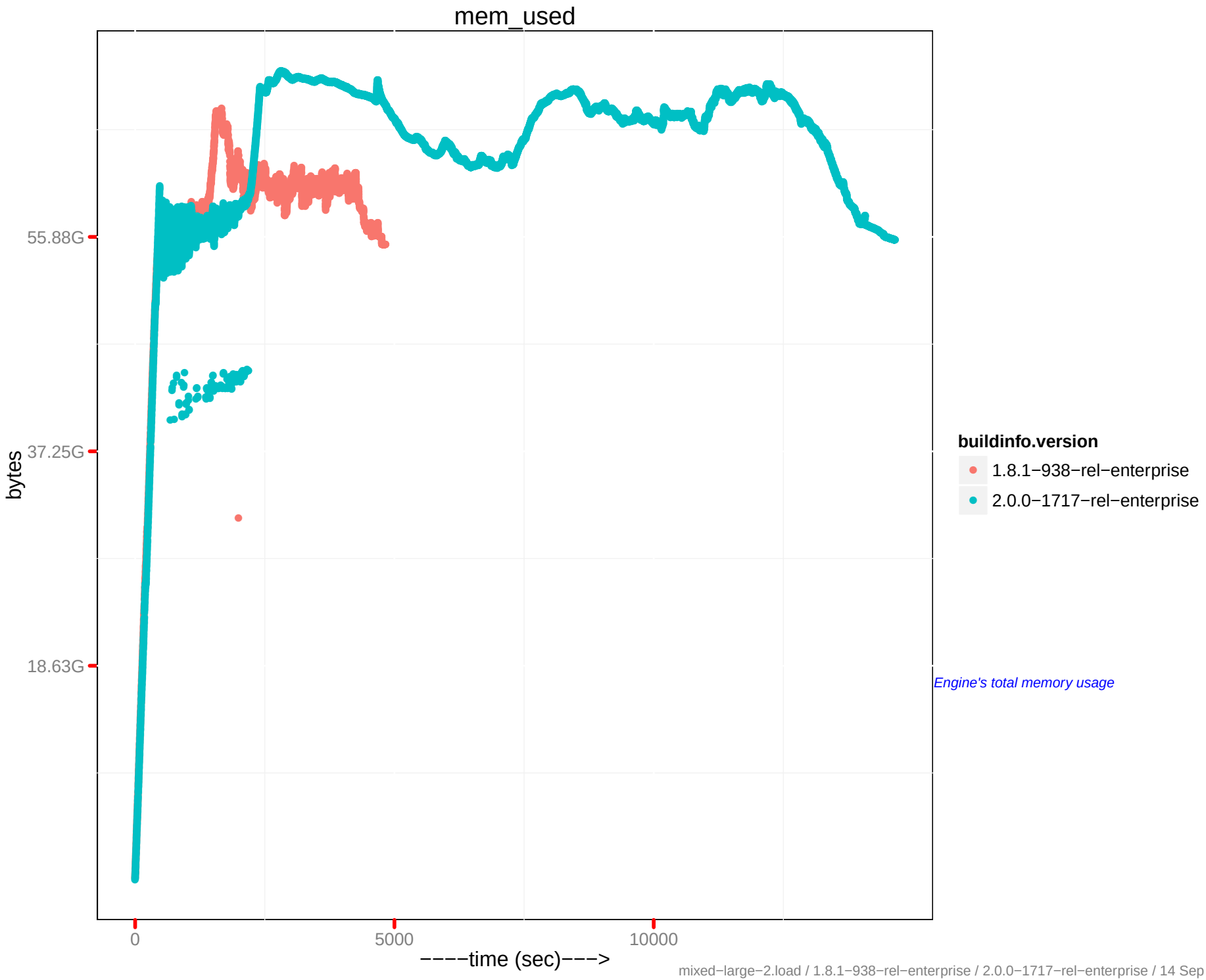

vb_active_resident_items_ratio
100.00
80.00
60.00
40.00
20.00
vb_active_resident_items_ratio
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Percentage of active items cached in RAM
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

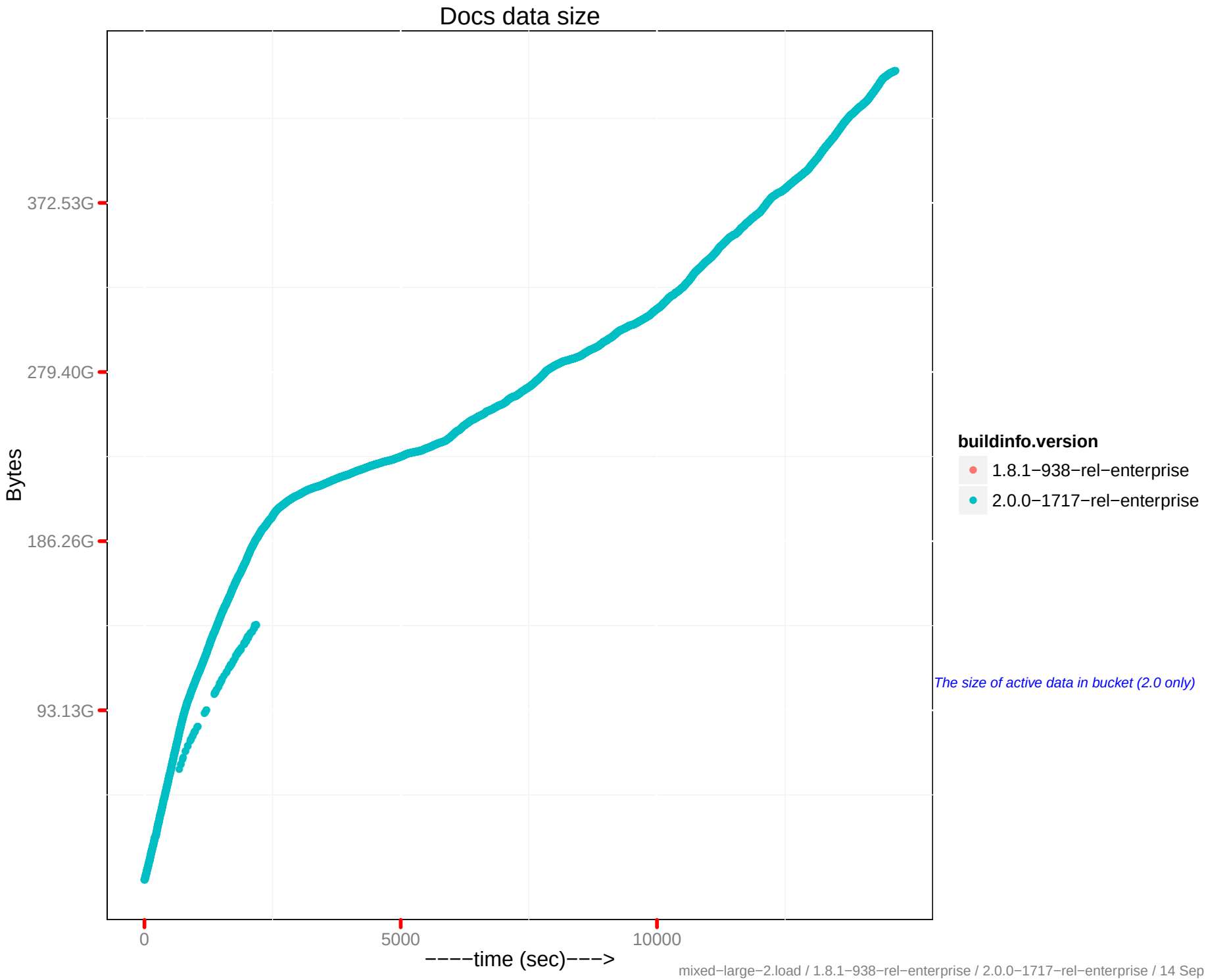

vb_replica_resident_items_ratio
100.00
80.00
60.00
40.00
20.00
0
vb_replica_resident_items_ratio
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Percentage of replica items cached in RAM
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

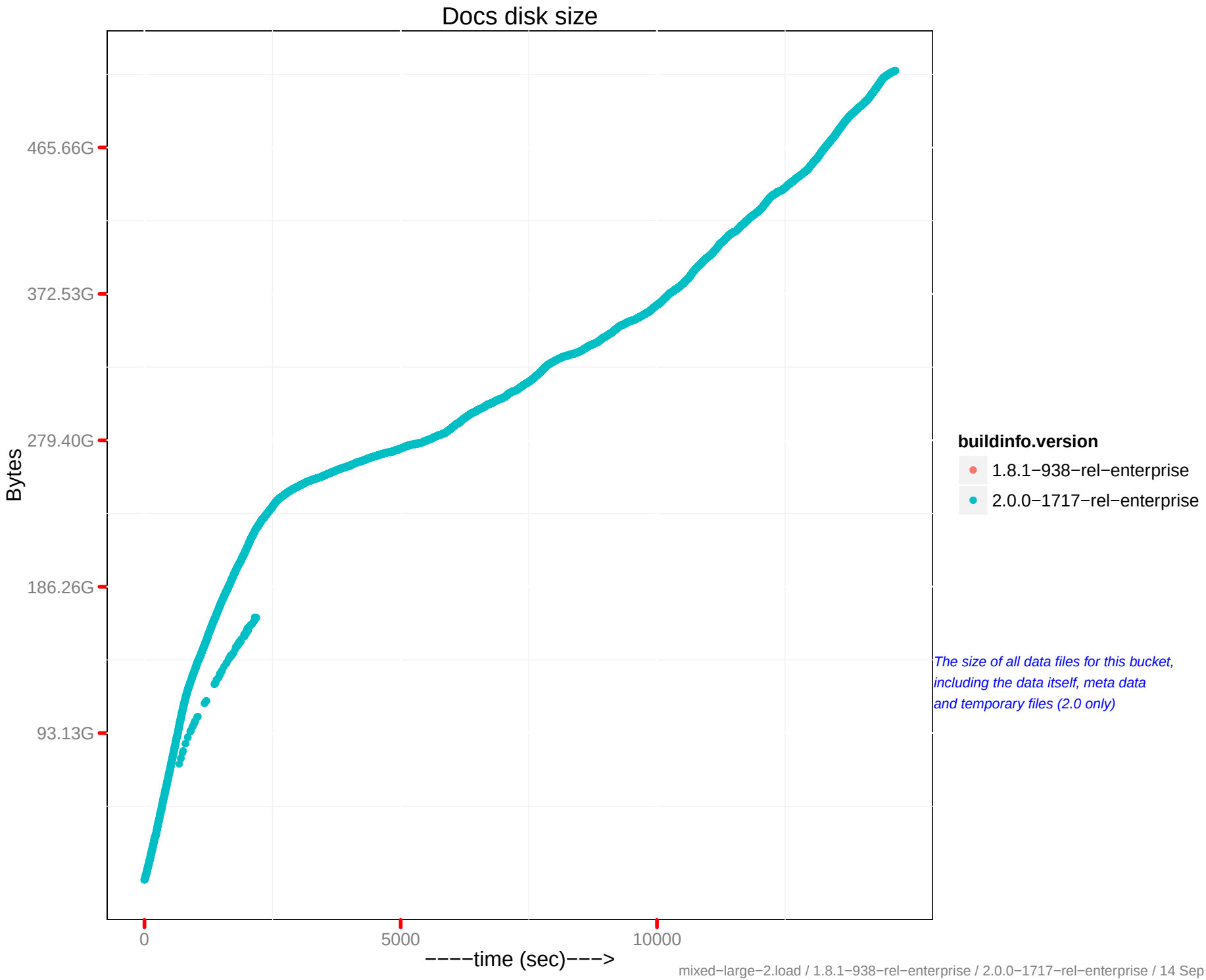


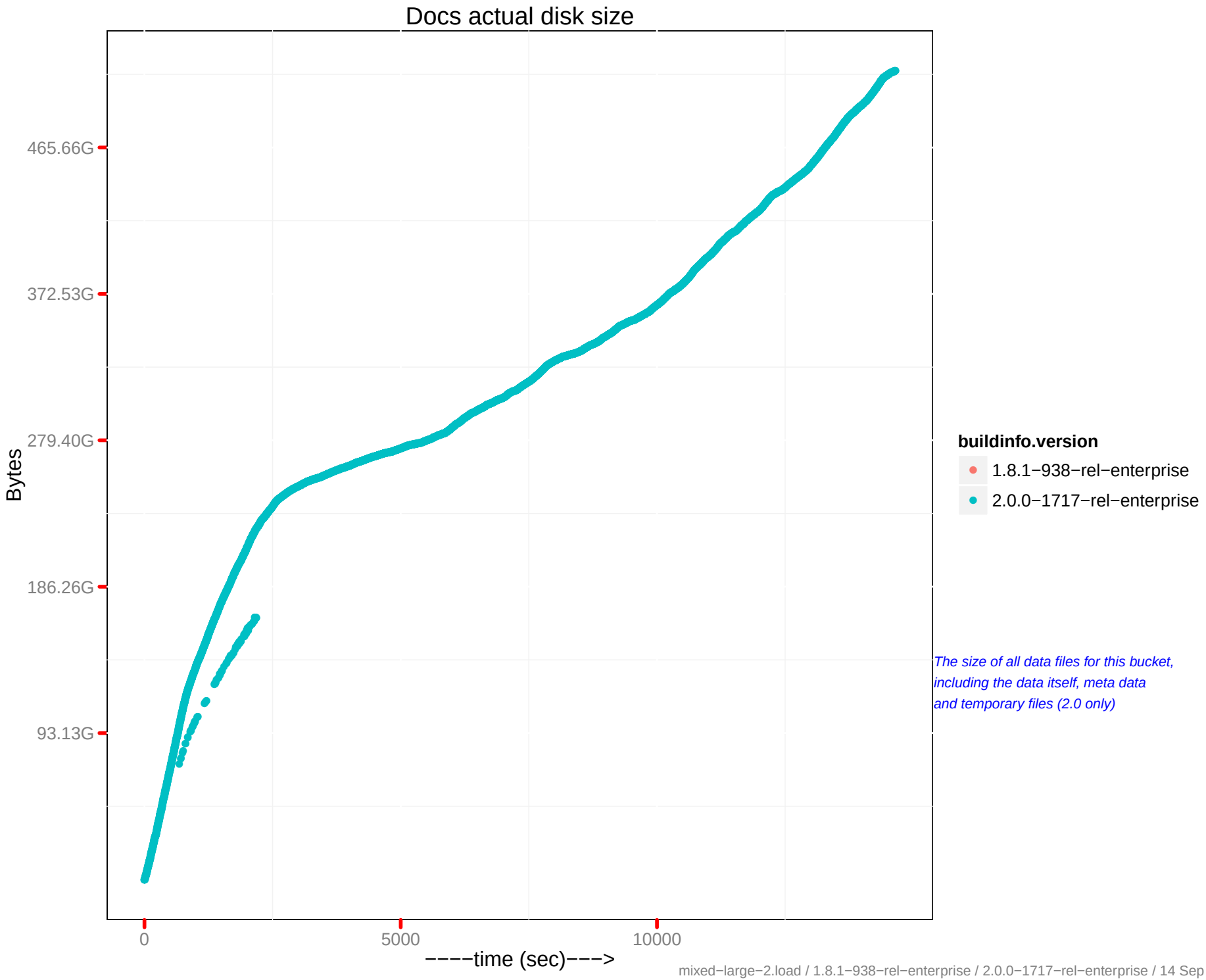
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

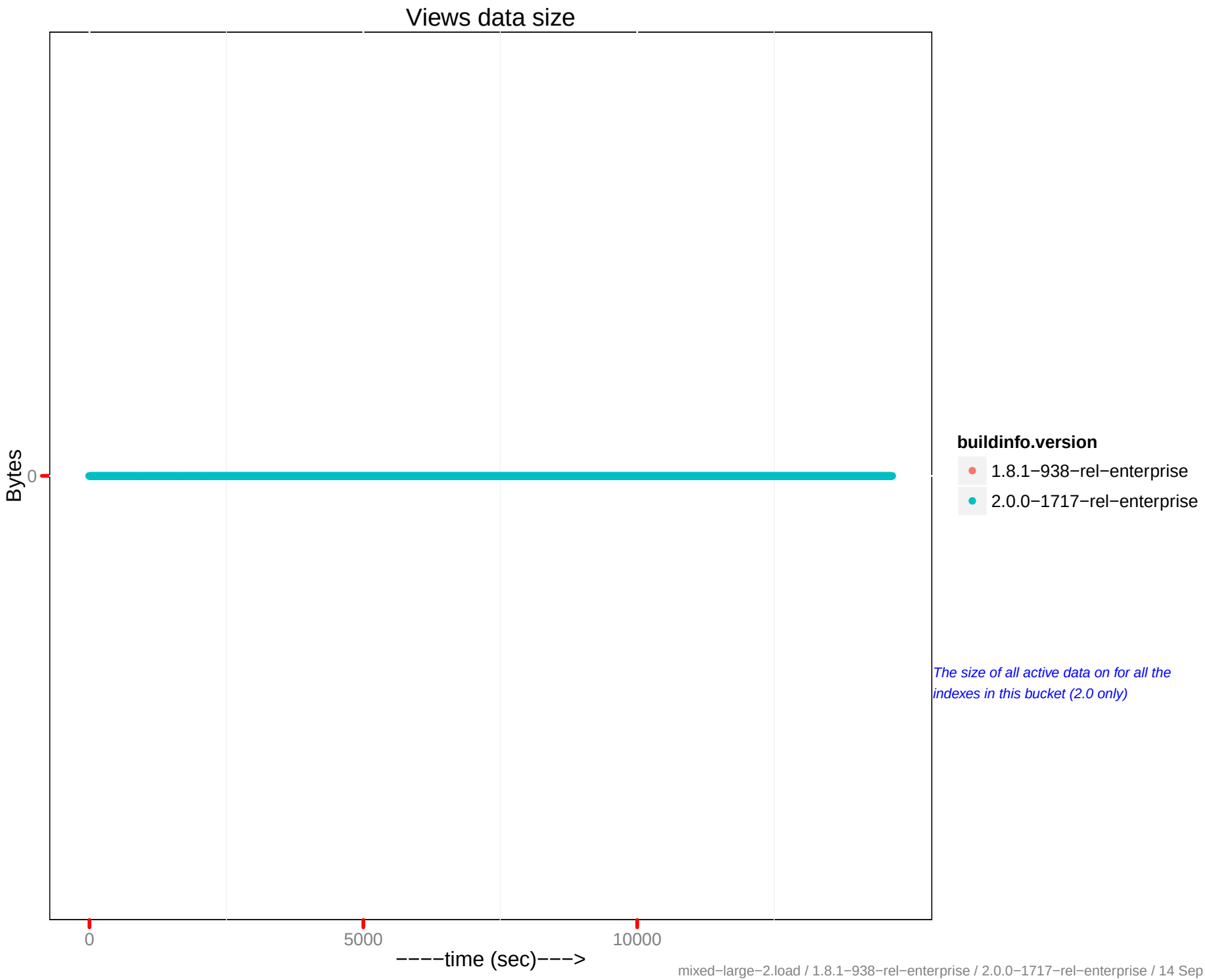

cur_items_total
curr_items_tot
143.05M
95.37M
47.68M
0
5000
10000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
Total number of items
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

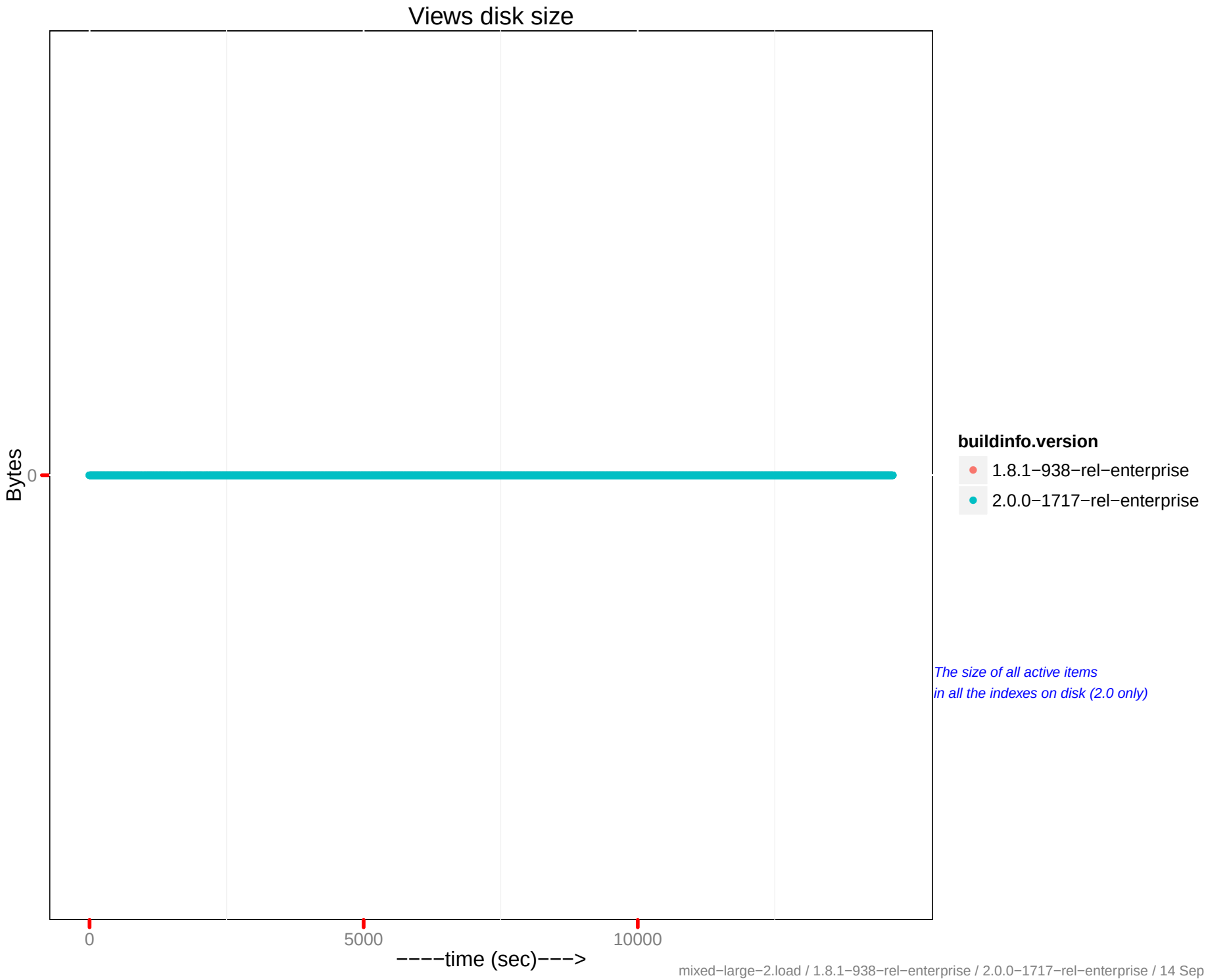

mem_used
55.88G
37.25G
18.63G
bytes
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Engine's total memory usage
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

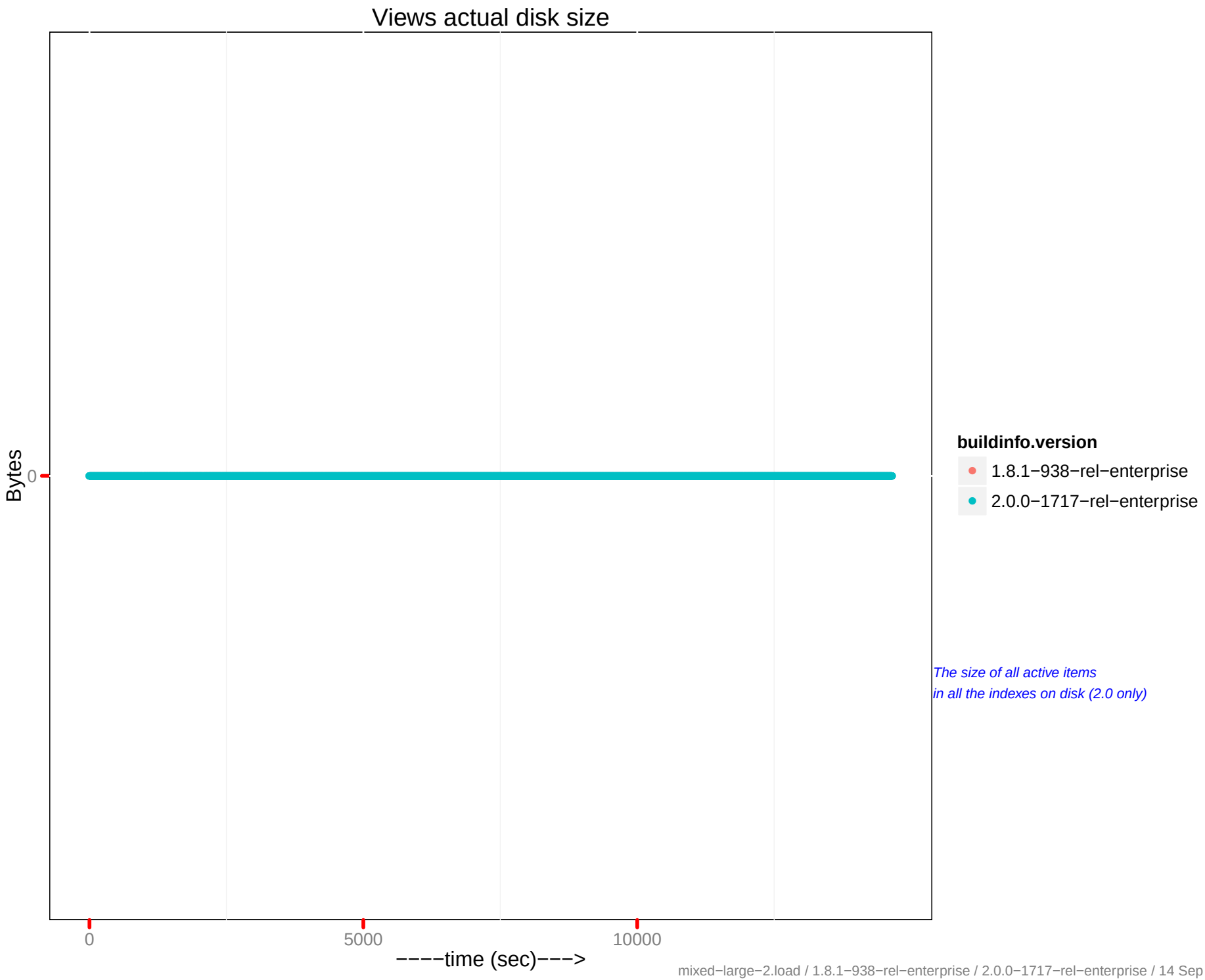

Docs data size
372.53G
279.40G
186.26G
93.13G
Bytes
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
The size of active data in bucket (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

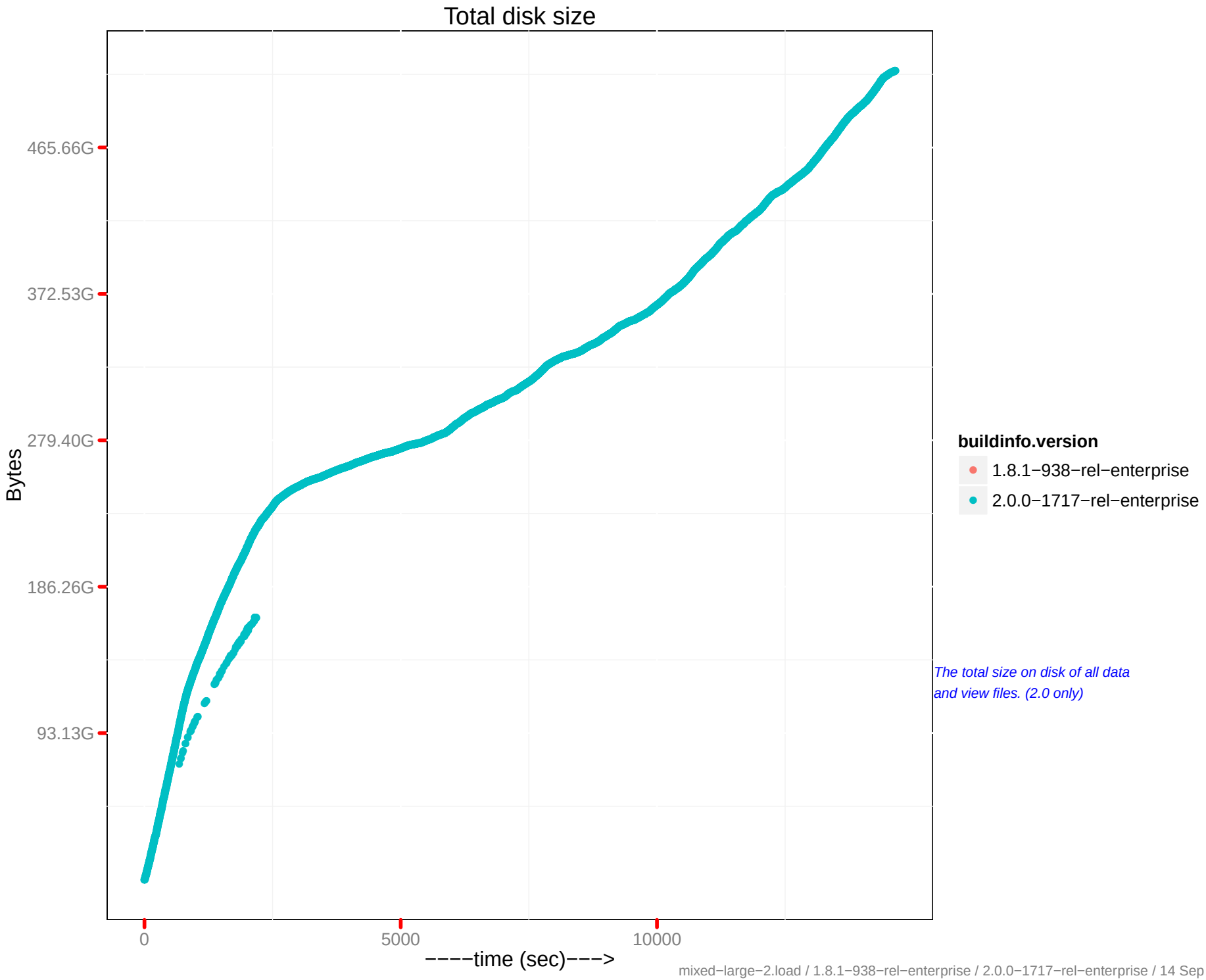

Docs disk size
465.66G
372.53G
279.40G
186.26G
93.13G
Bytes
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
The size of all data files for this bucket, including the data itself, meta data and temporary files (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

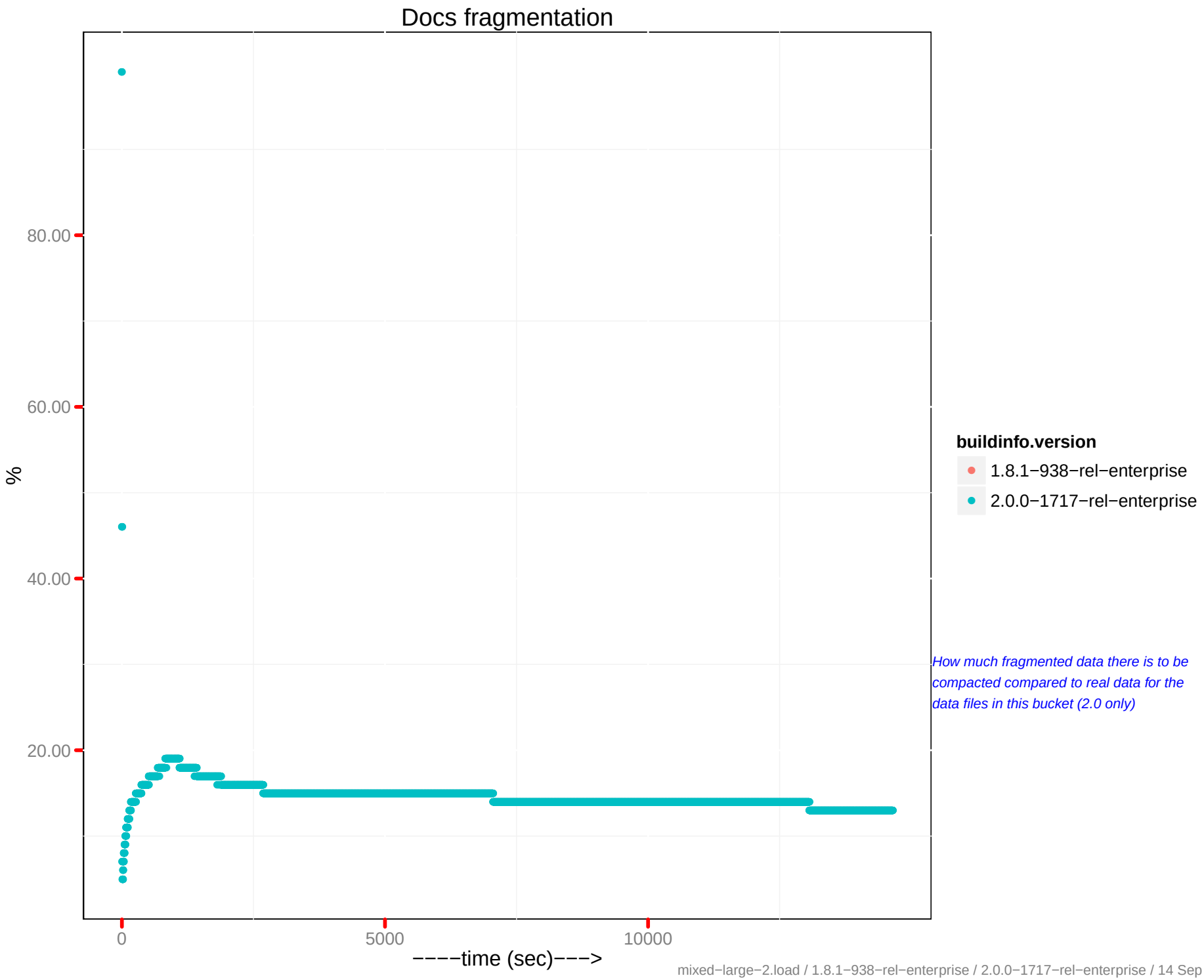

Docs actual disk size
465.66G
372.53G
279.40G
186.26G
93.13G
Bytes
0
5000
10000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
The size of all data files for this bucket, including the data itself, meta data and temporary files (2.0 only)
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

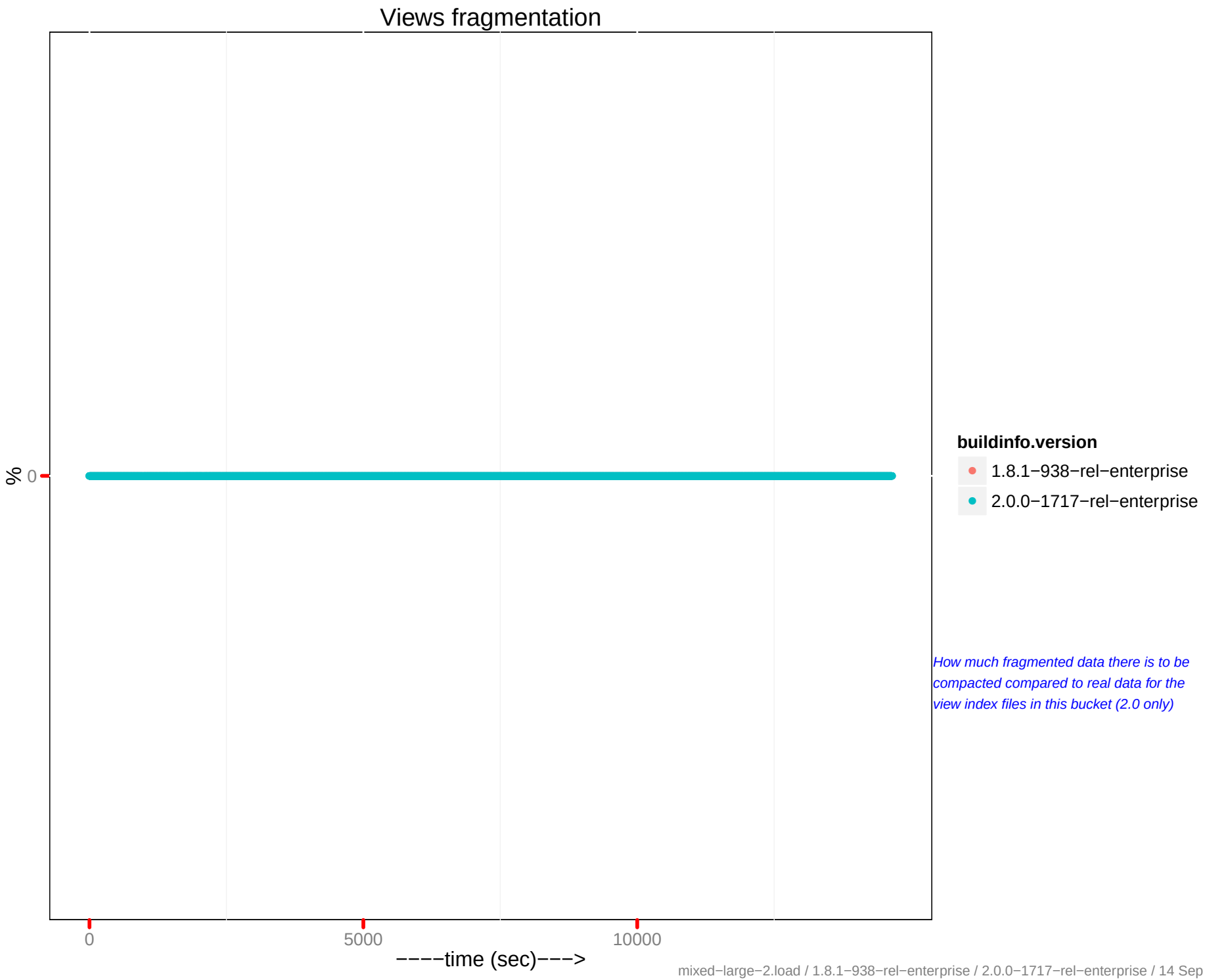

Views data size
Bytes
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
The size of all active data on for all the indexes in this bucket (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

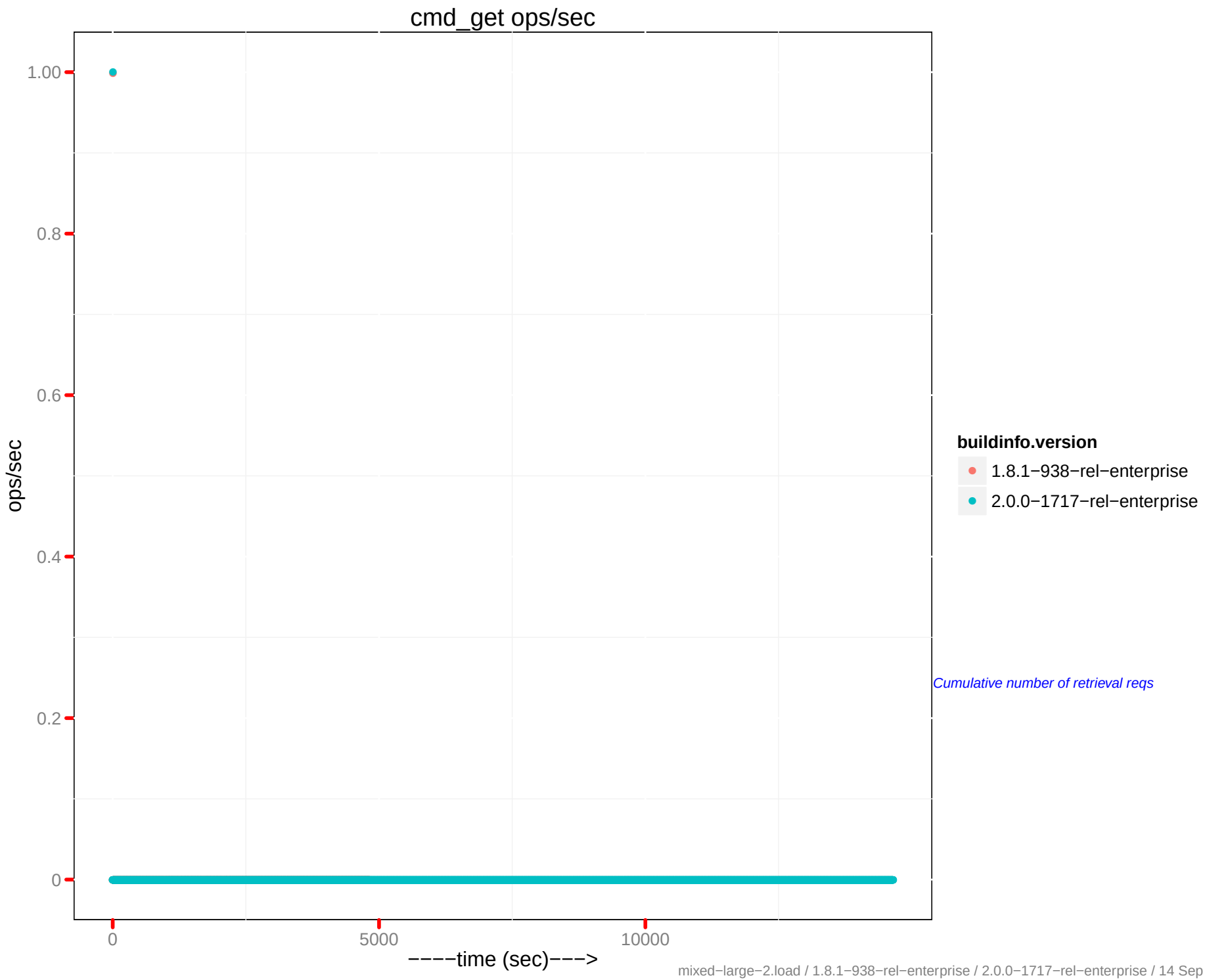

Views disk size
Bytes
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
The size of all active items
in all the indexes on disk (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

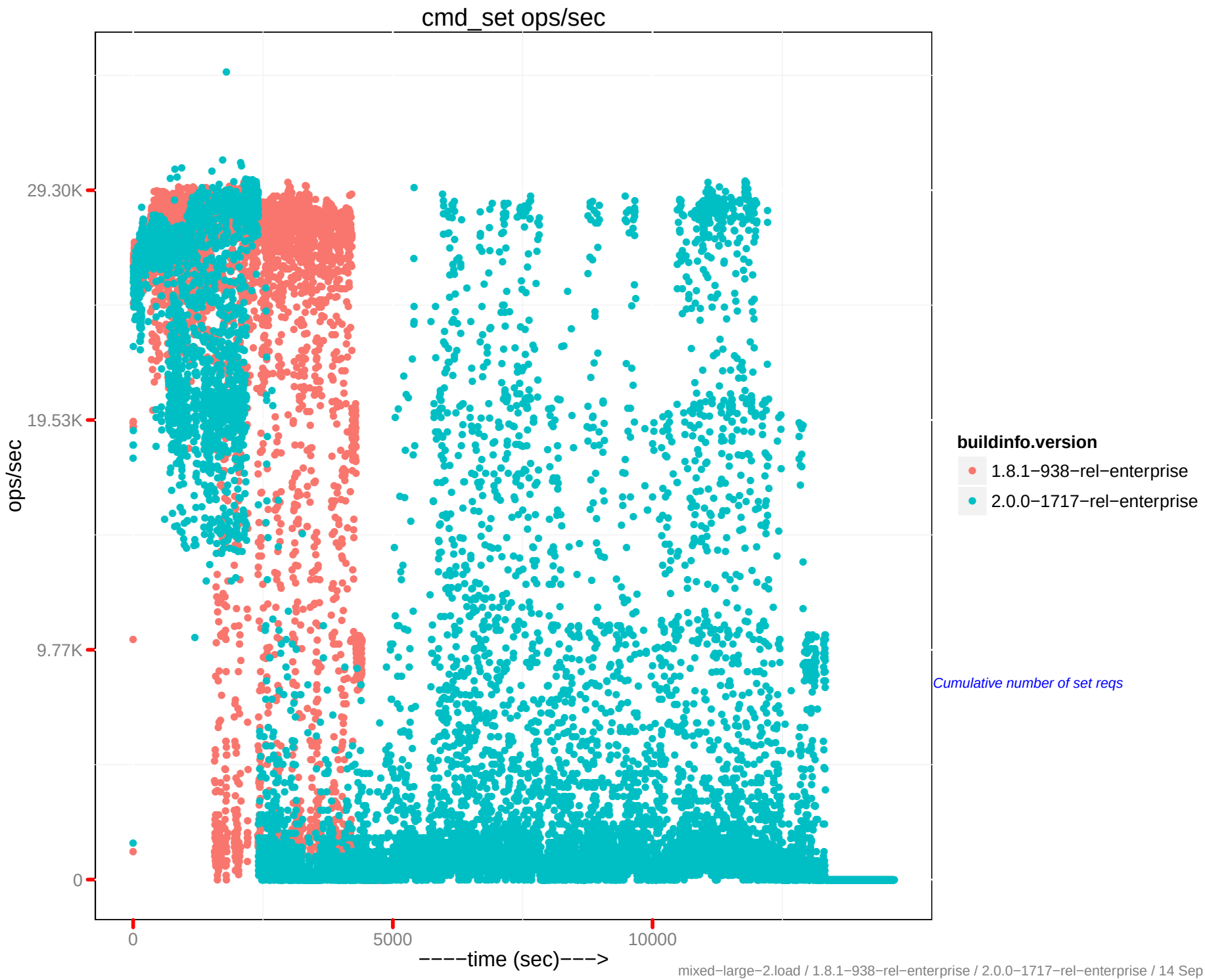

Views actual disk size
Bytes
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
The size of all active items
in all the indexes on disk (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

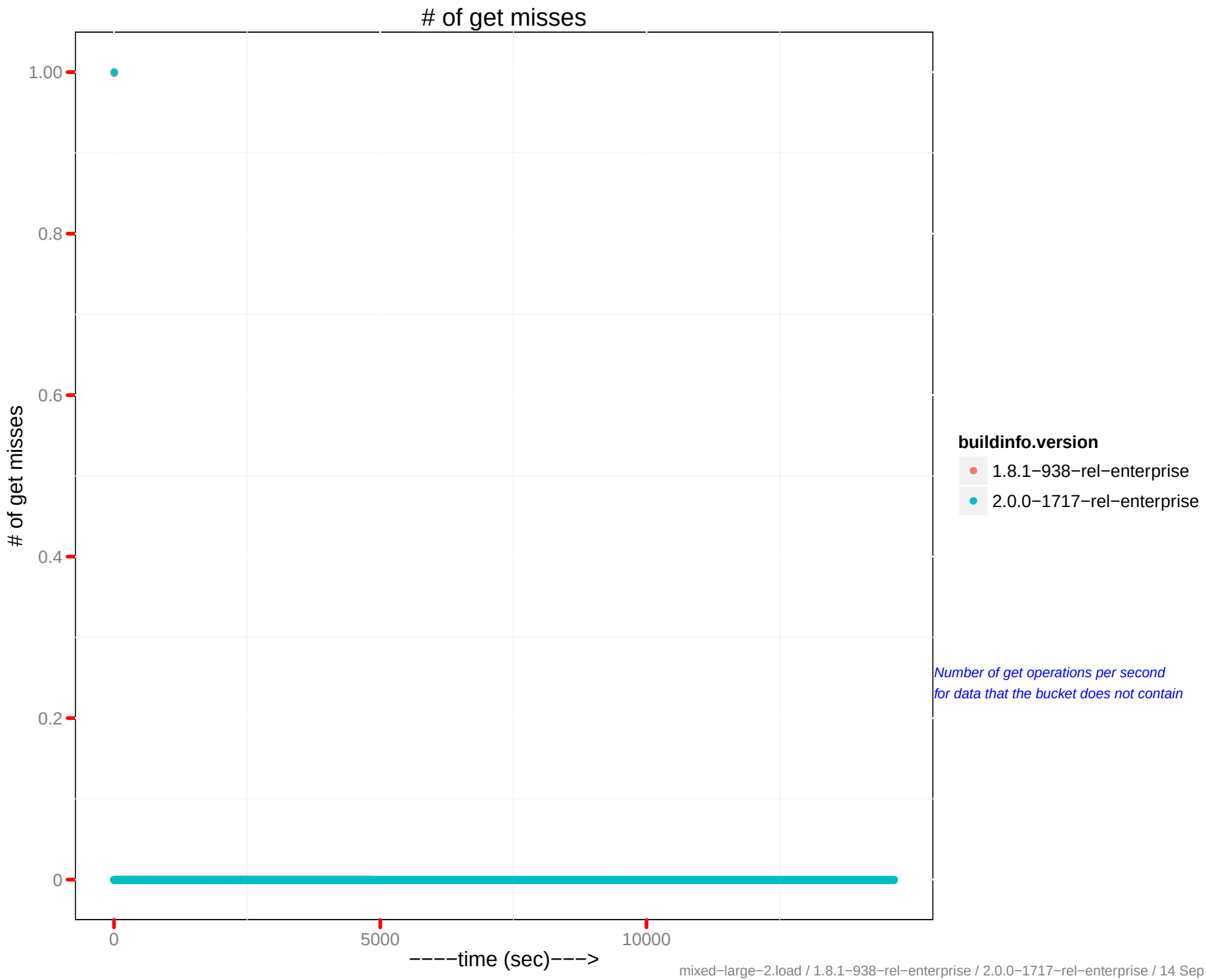

Total disk size
465.66G
372.53G
279.40G
186.26G
93.13G
Bytes
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
The total size on disk of all data and view files. (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

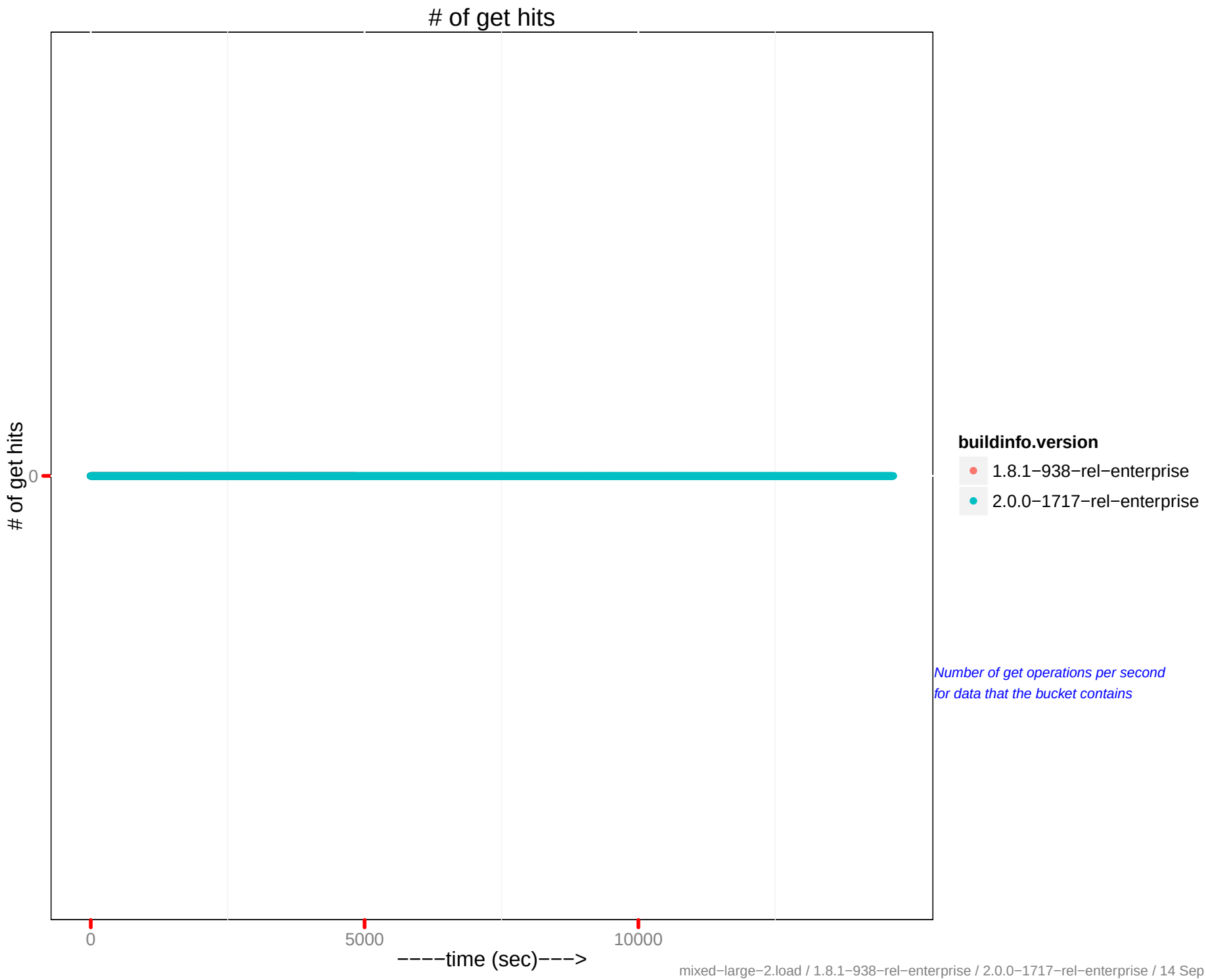

Docs fragmentation
80.00
60.00
40.00
20.00
%
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
How much fragmented data there is to be compacted compared to real data for the data files in this bucket (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

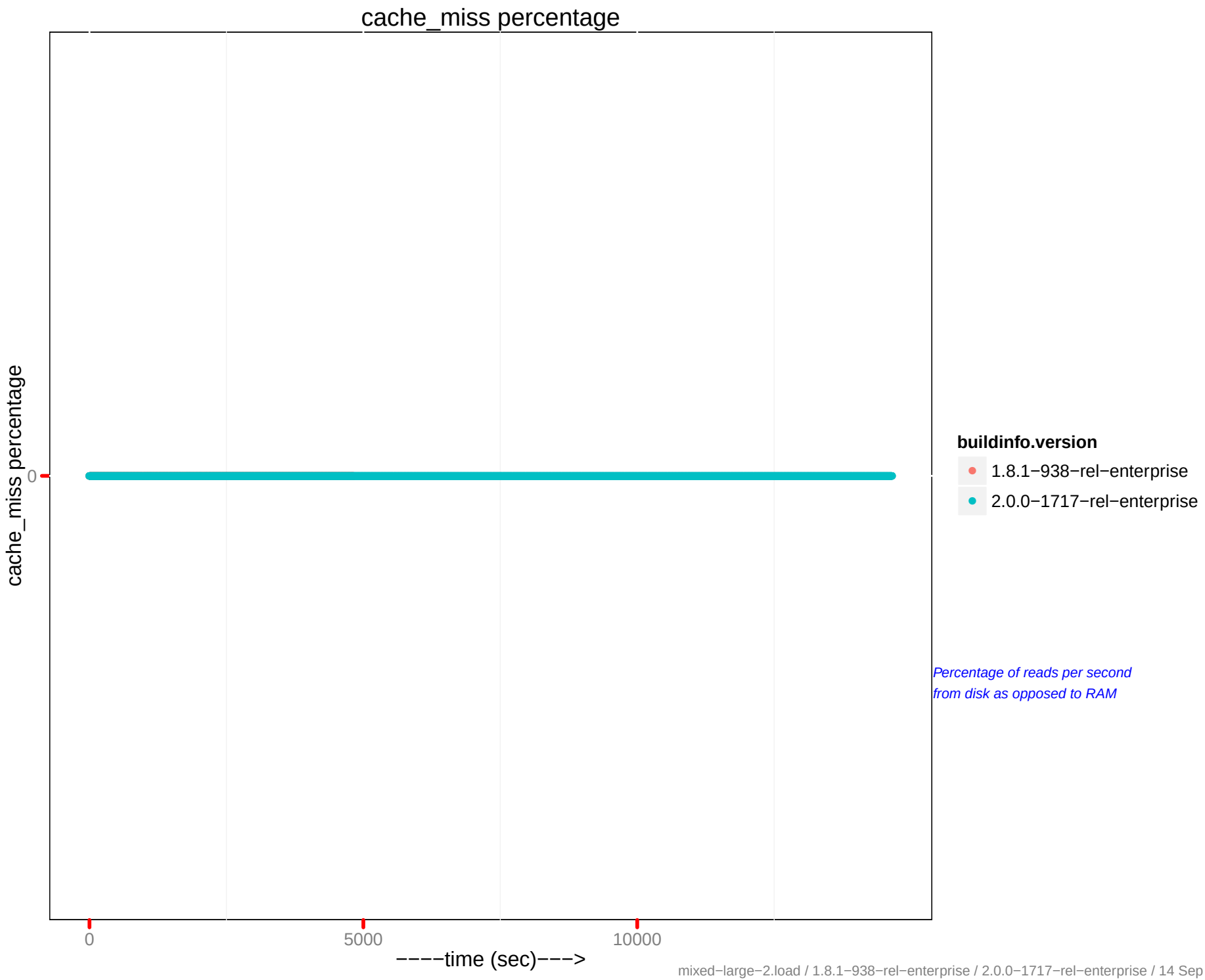

Views fragmentation
% 0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
How much fragmented data there is to be compacted compared to real data for the view index files in this bucket (2.0 only)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

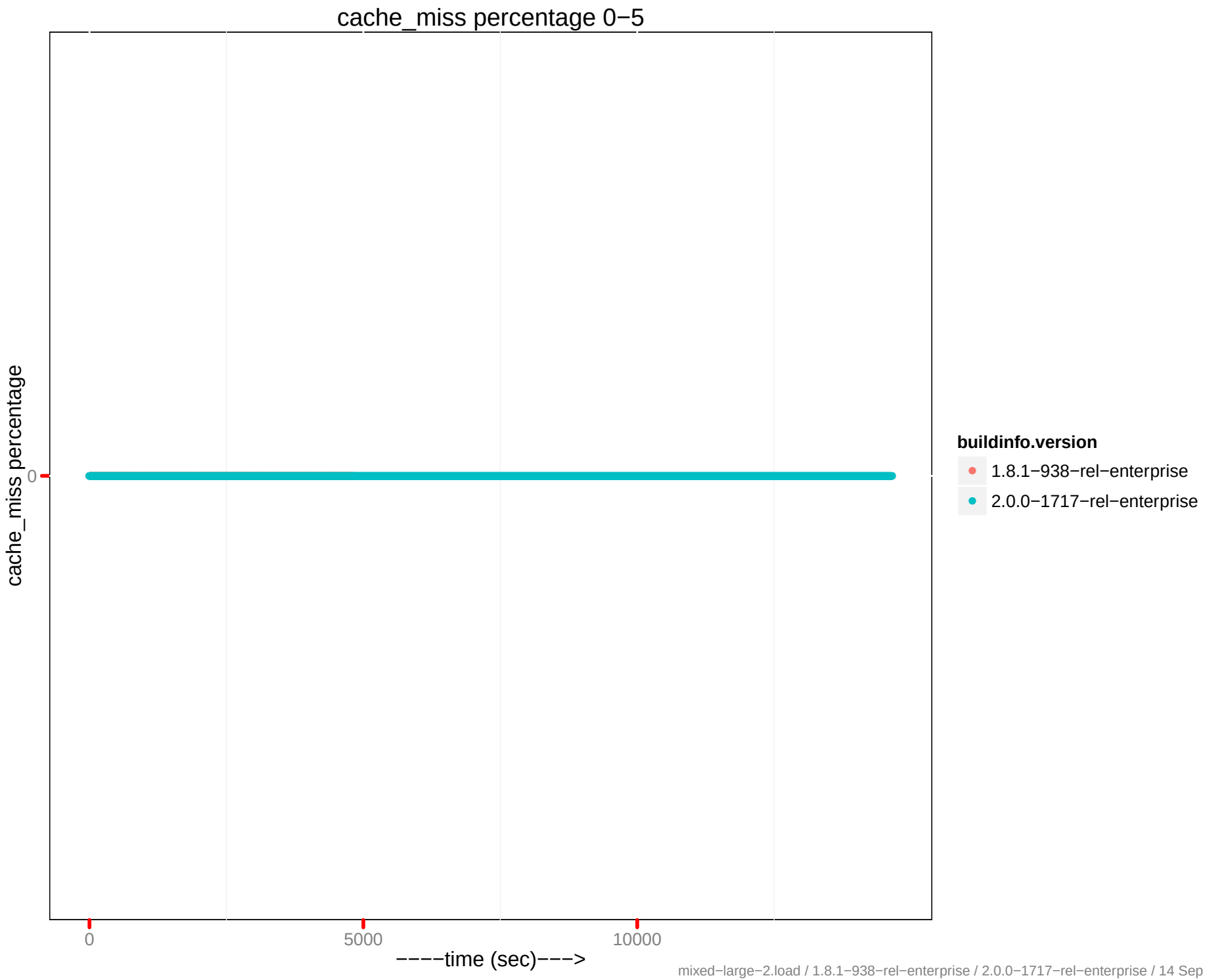

cmd_get ops/sec
1.00
0.8
0.6
0.4
0.2
0
ops/sec
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Cumulative number of retrieval reqs
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

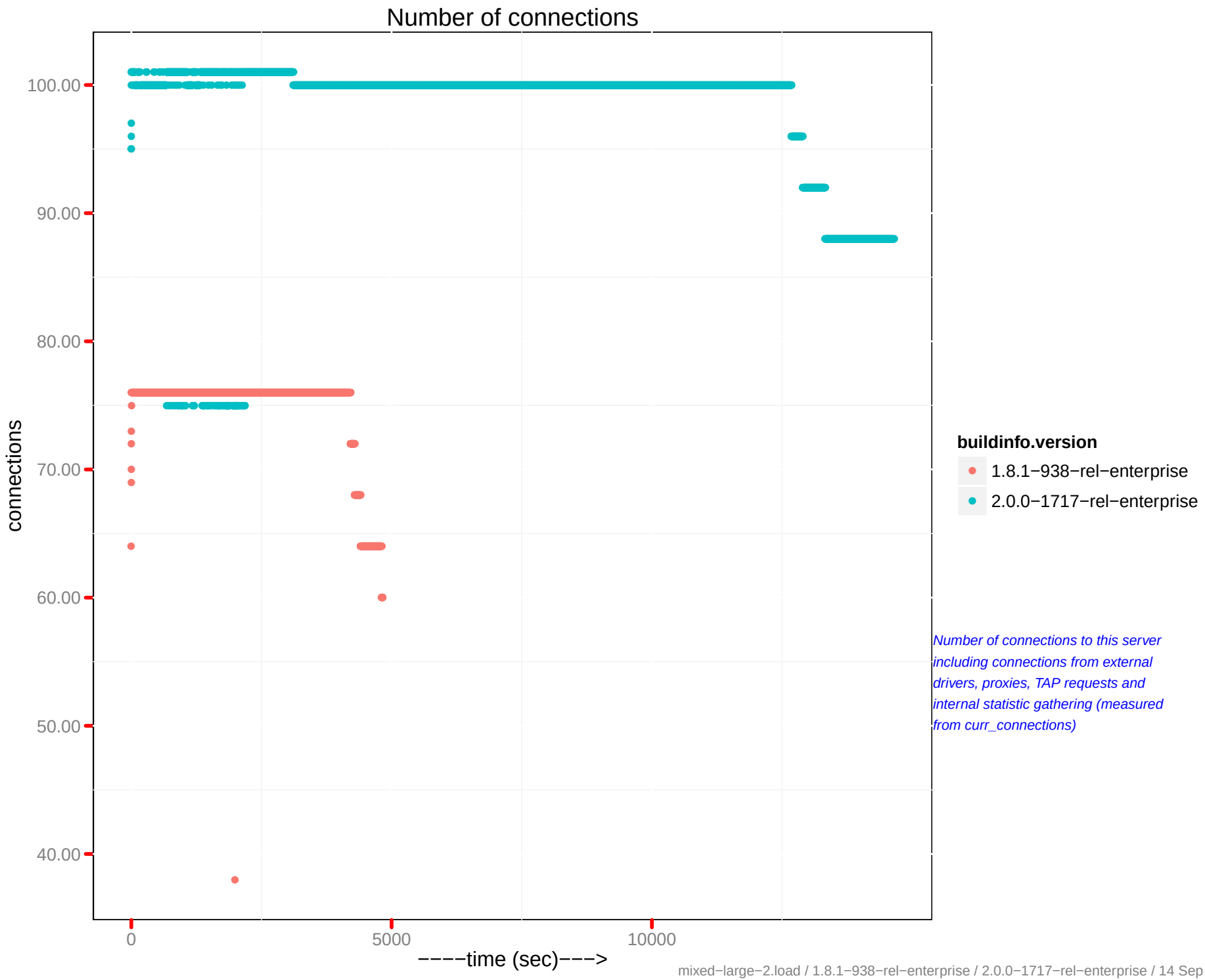

cmd_set ops/sec
29.30K
19.53K
9.77K
0
ops/sec
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Cumulative number of set reqs
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

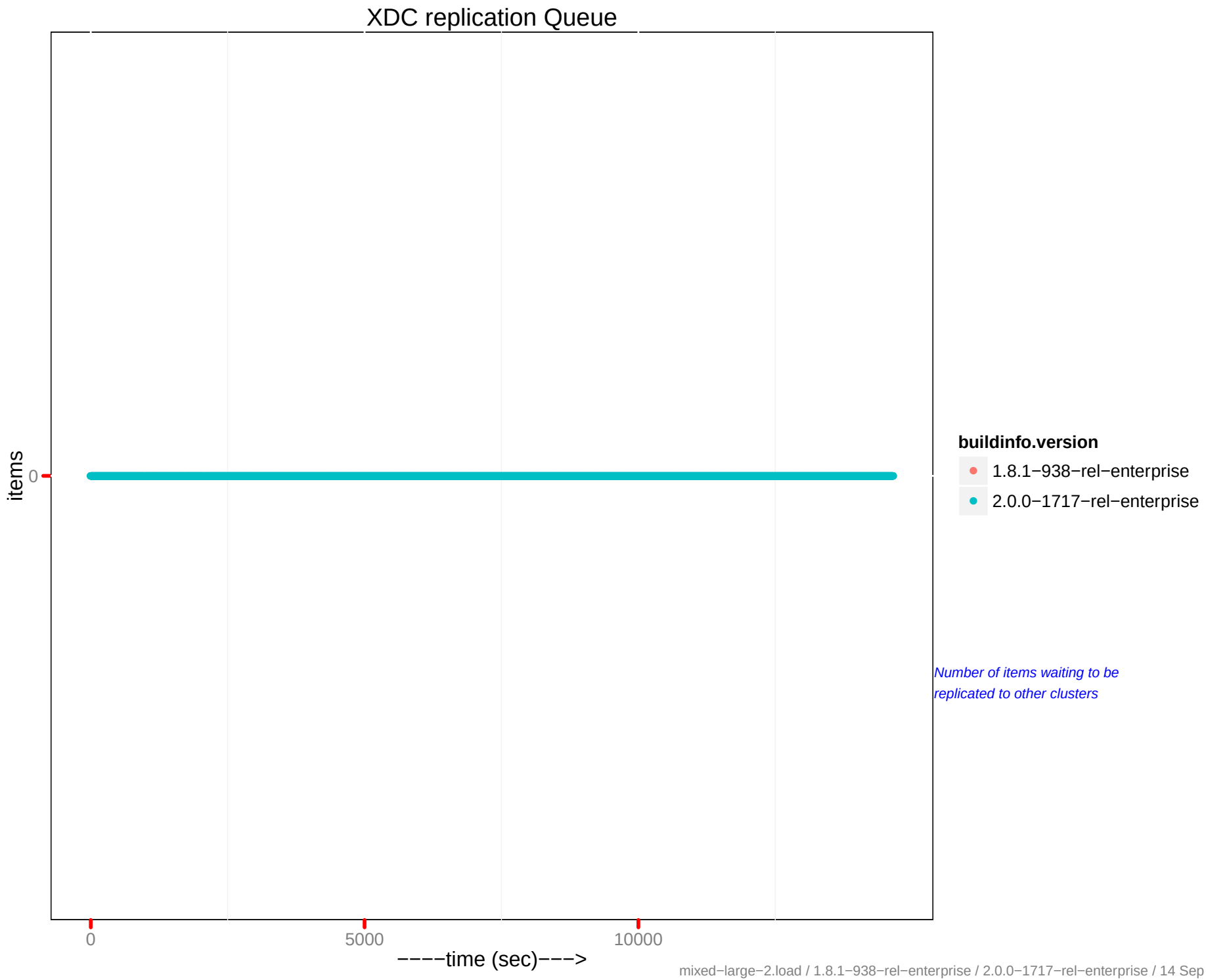

# of get misses
1.00
0.8
0.6
0.4
0.2
0
# of get misses
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of get operations per second
for data that the bucket does not contain
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

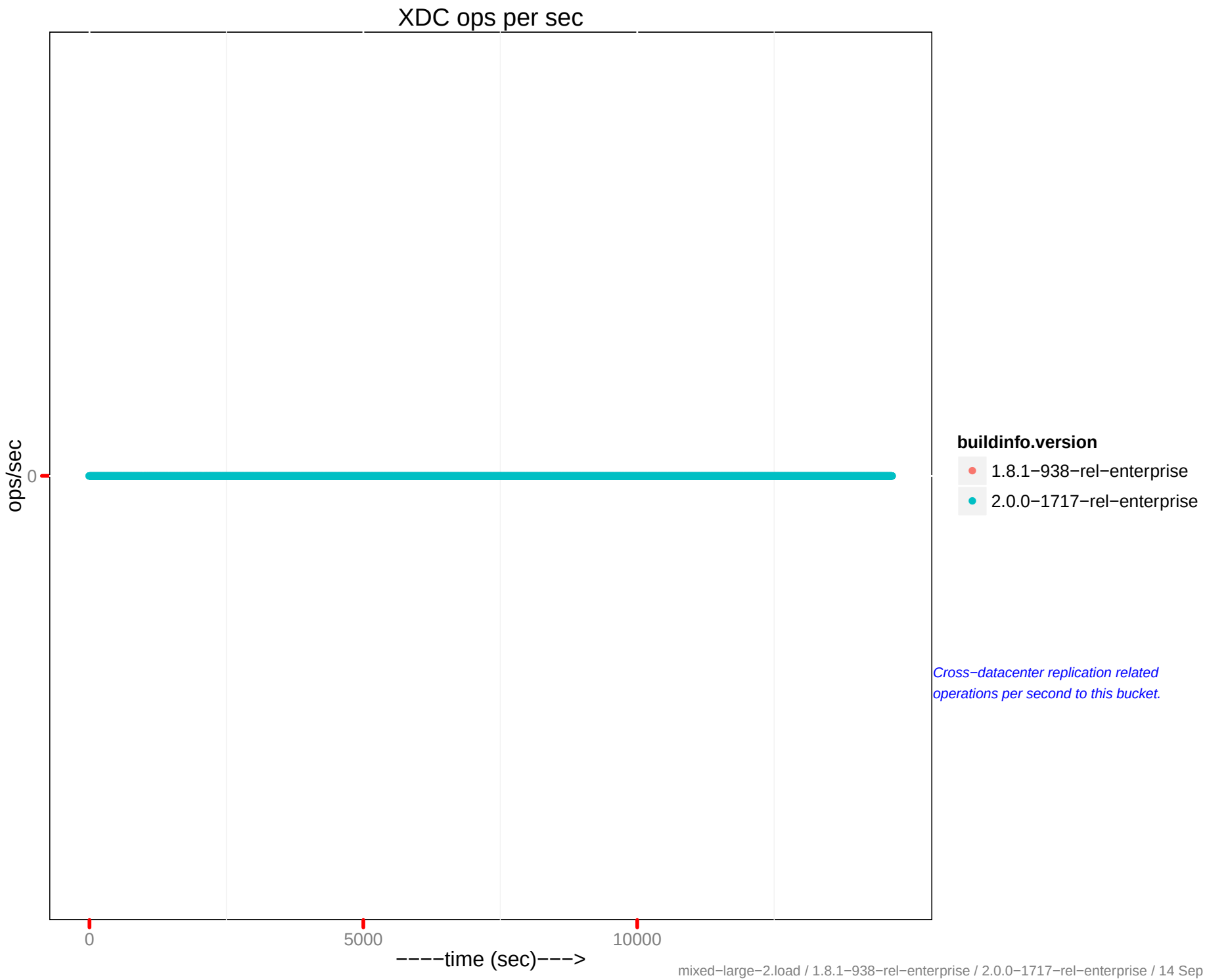

# of get hits
# of get hits
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of get operations per second
for data that the bucket contains
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

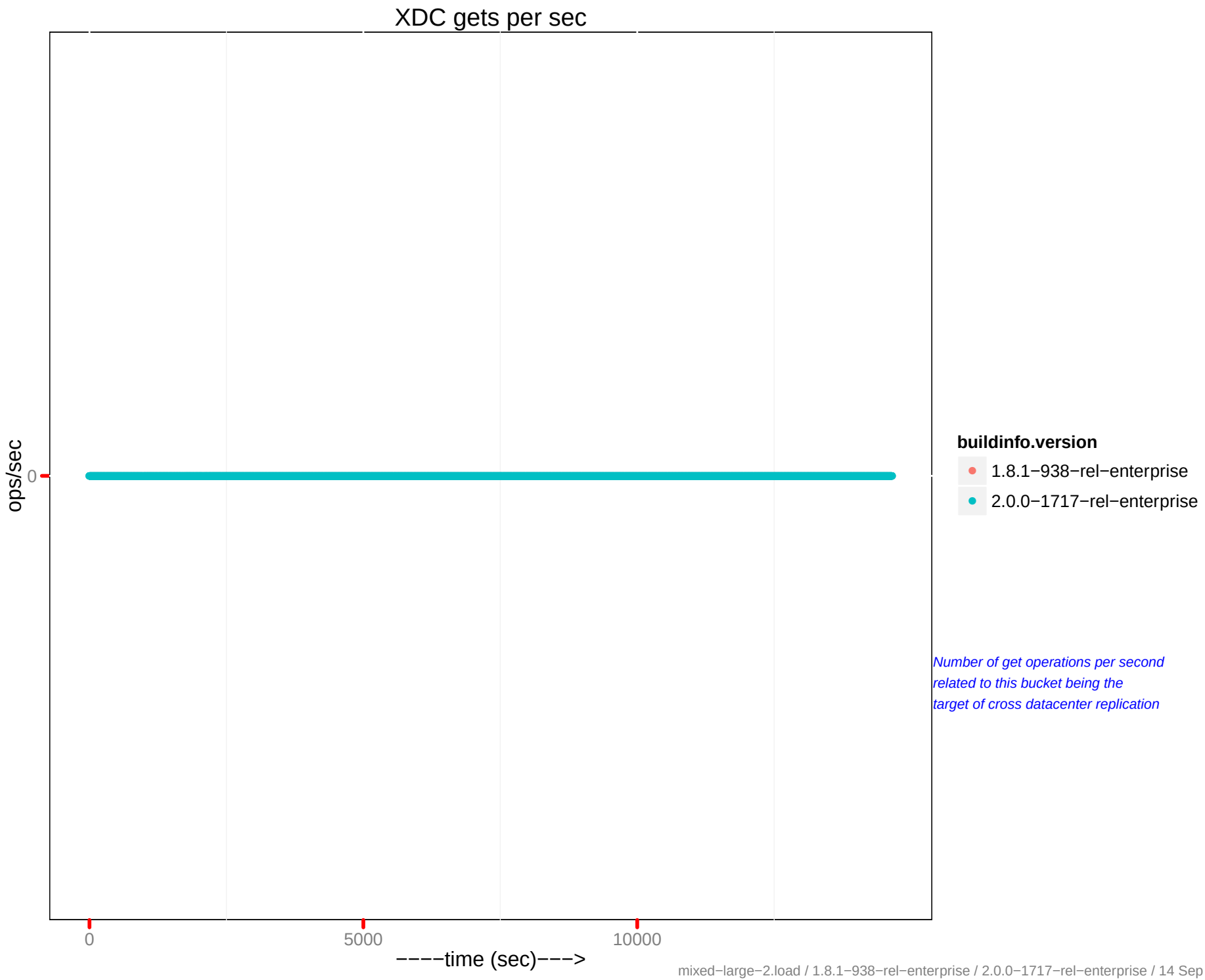

cache_miss percentage
cache_miss percentage
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Percentage of reads per second
from disk as opposed to RAM
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

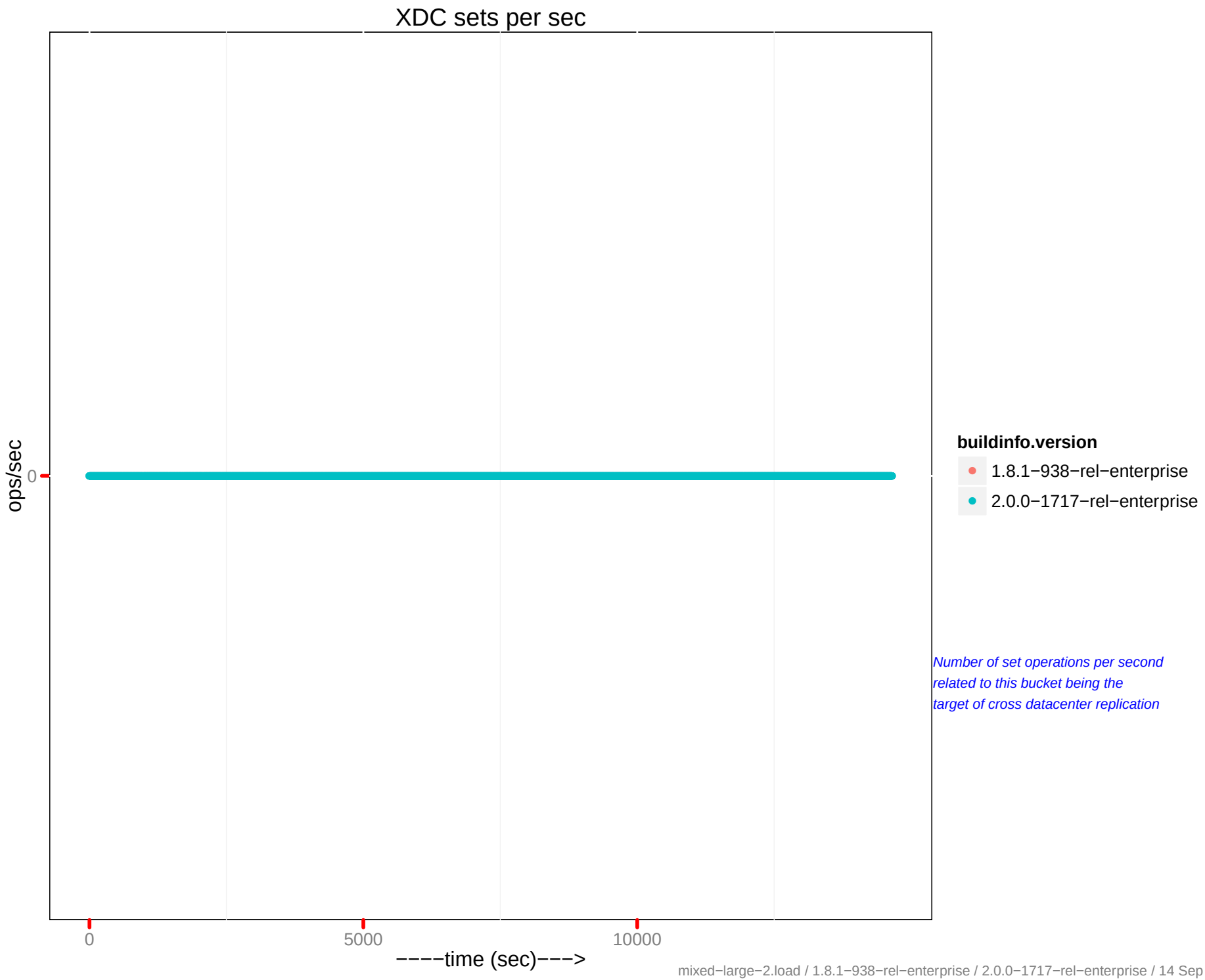

cache_miss percentage 0−5
cache_miss percentage
0
0
5000
10000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

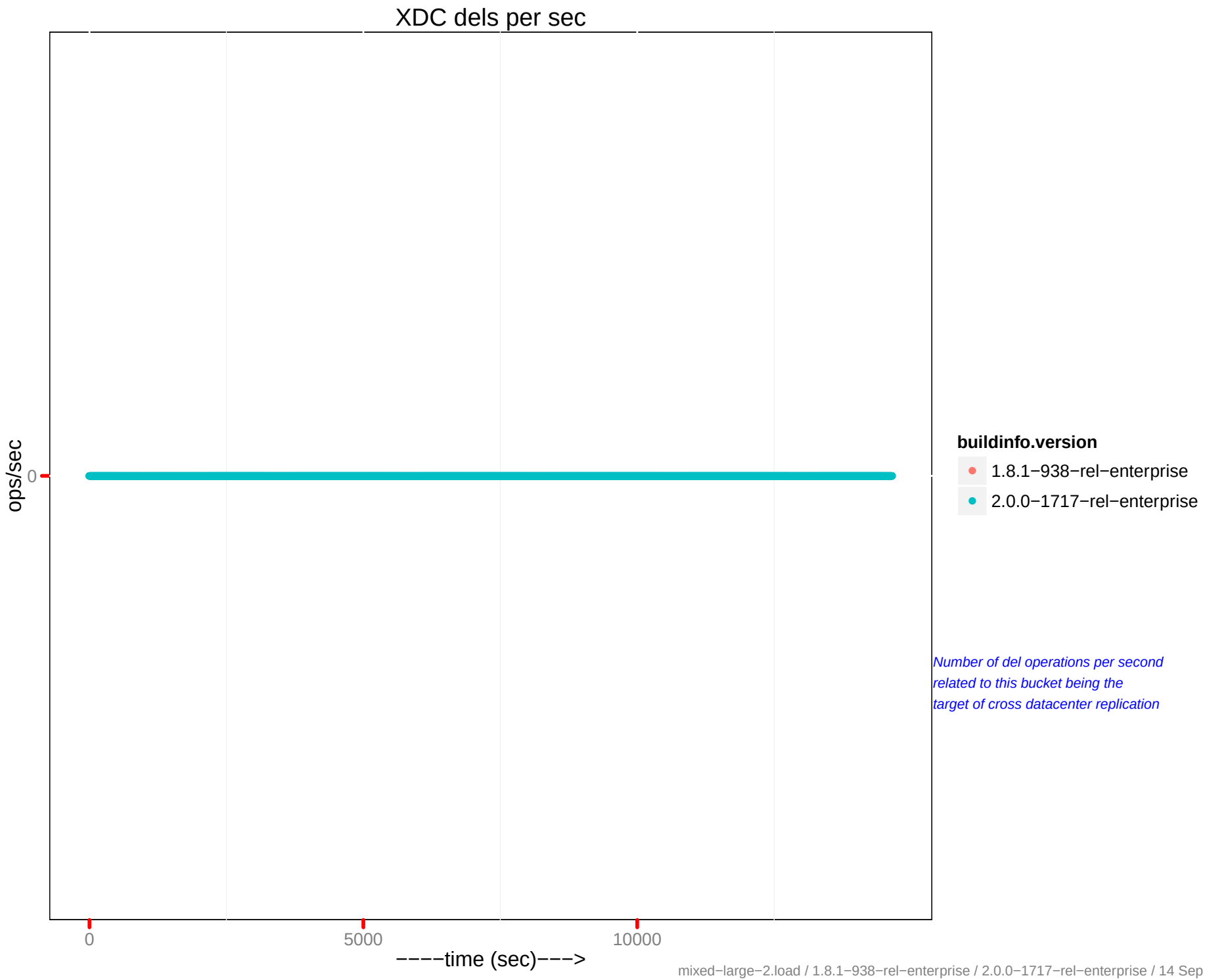

Number of connections
100.00
90.00
80.00
70.00
60.00
50.00
40.00
connections
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of connections to this server including connections from external drivers, proxies, TAP requests and internal statistic gathering (measured from curr_connections)
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

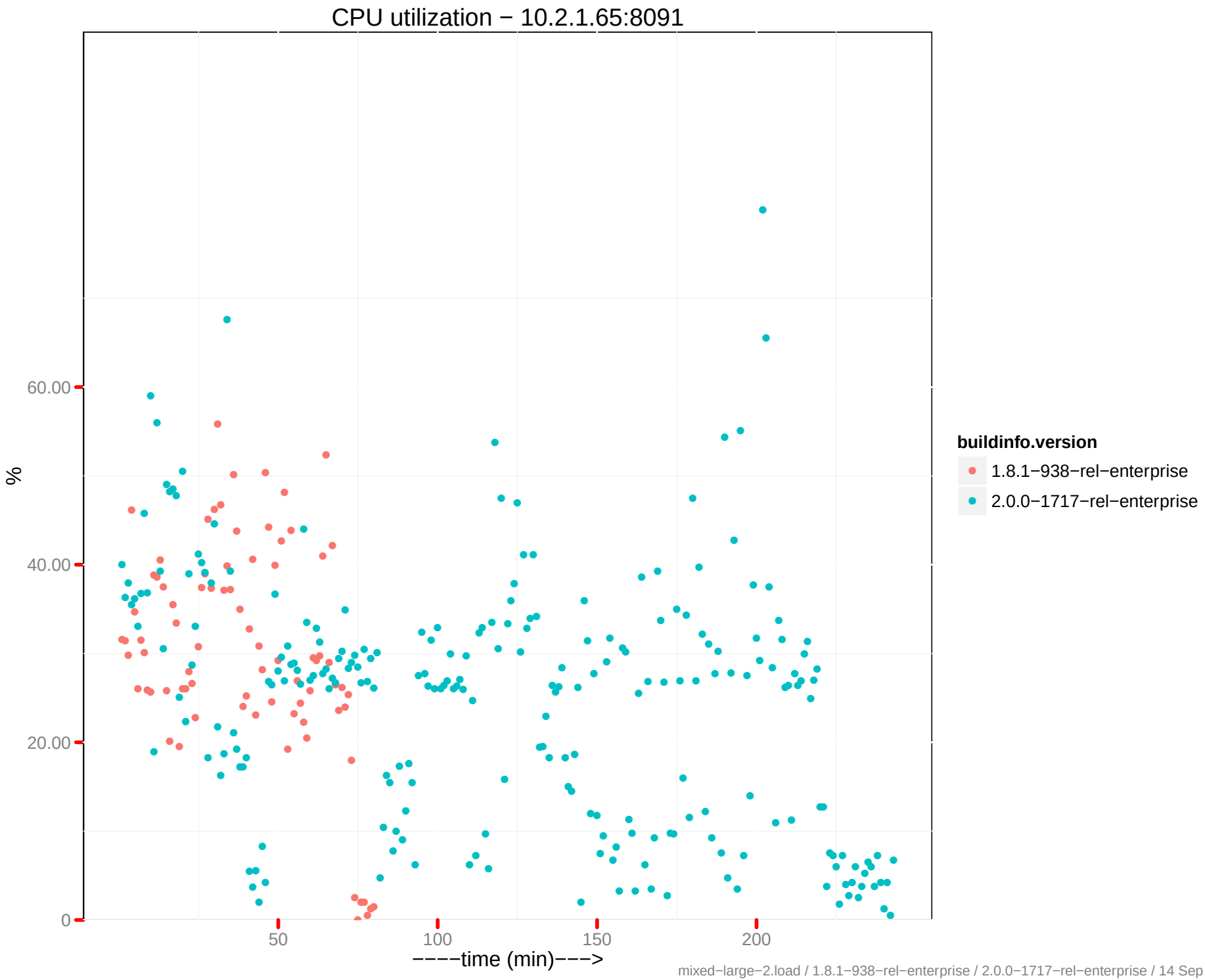

XDC replication Queue
items
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of items waiting to be replicated to other clusters
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

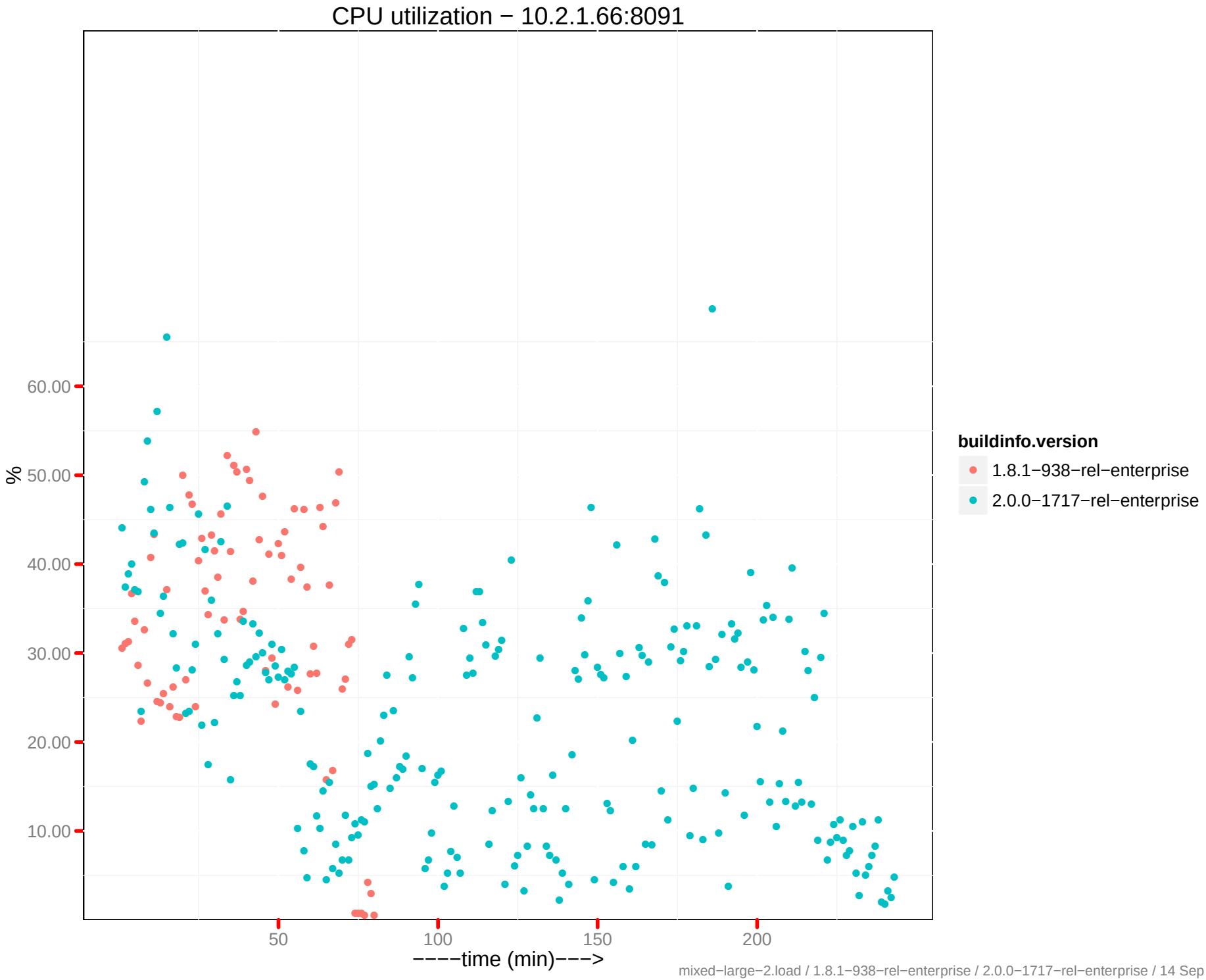

XDC ops per sec
ops/sec
0
0
5000
10000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
Cross−datacenter replication related
operations per second to this bucket.
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

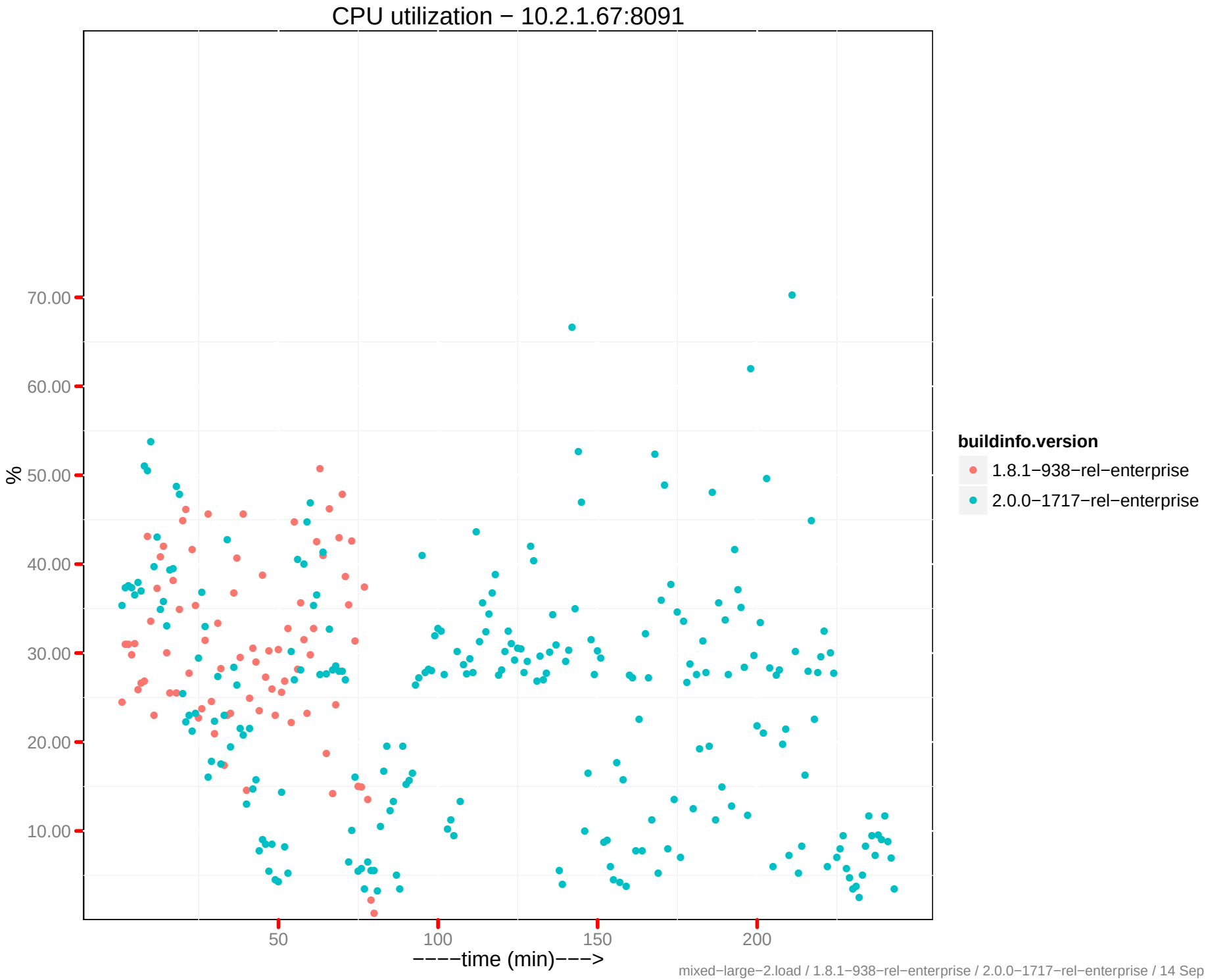

XDC gets per sec
ops/sec
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of get operations per second
related to this bucket being the
target of cross datacenter replication
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

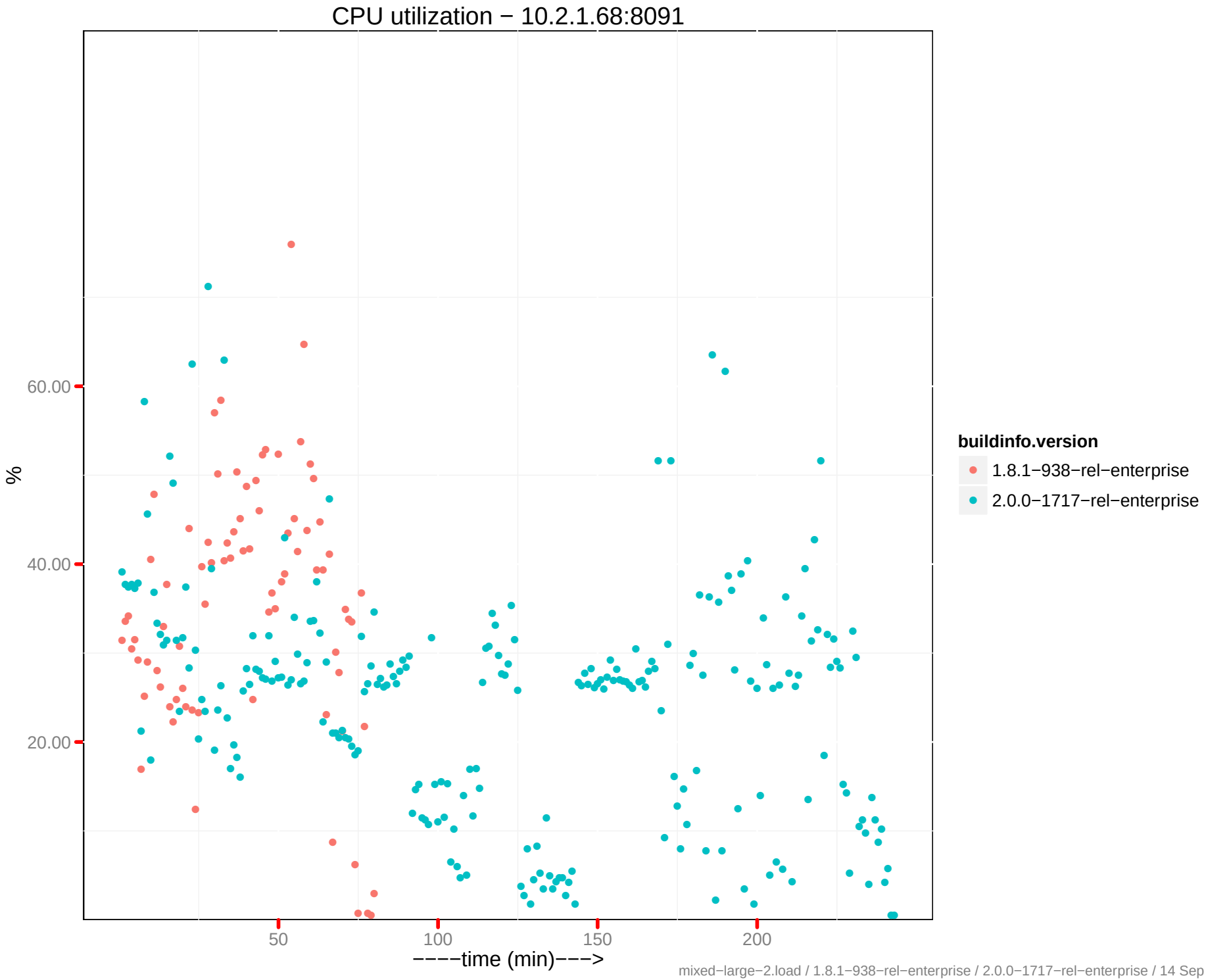

XDC sets per sec
ops/sec
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of set operations per second
related to this bucket being the
target of cross datacenter replication
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

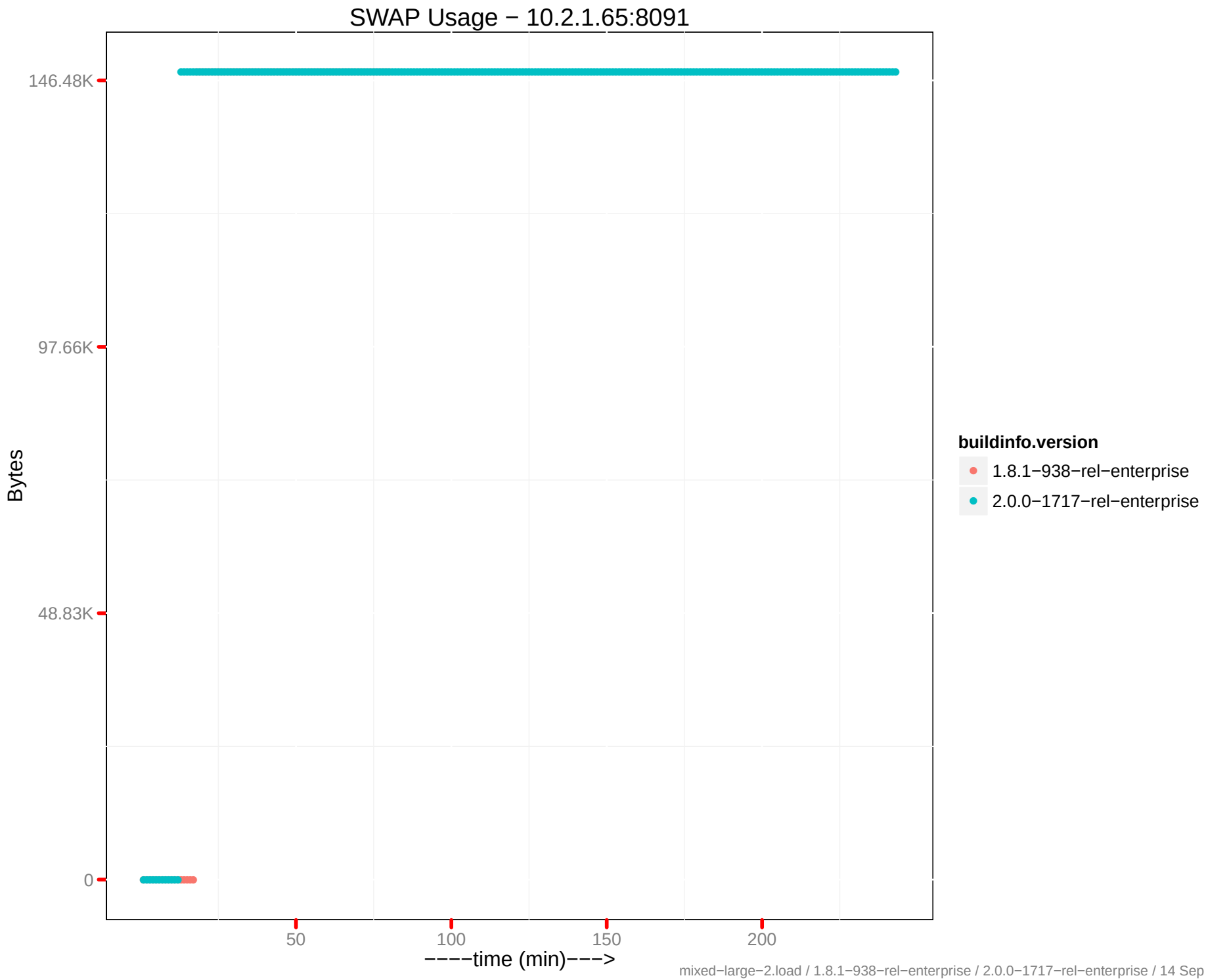

XDC dels per sec
ops/sec
0
0
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
Number of del operations per second
related to this bucket being the
target of cross datacenter replication
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

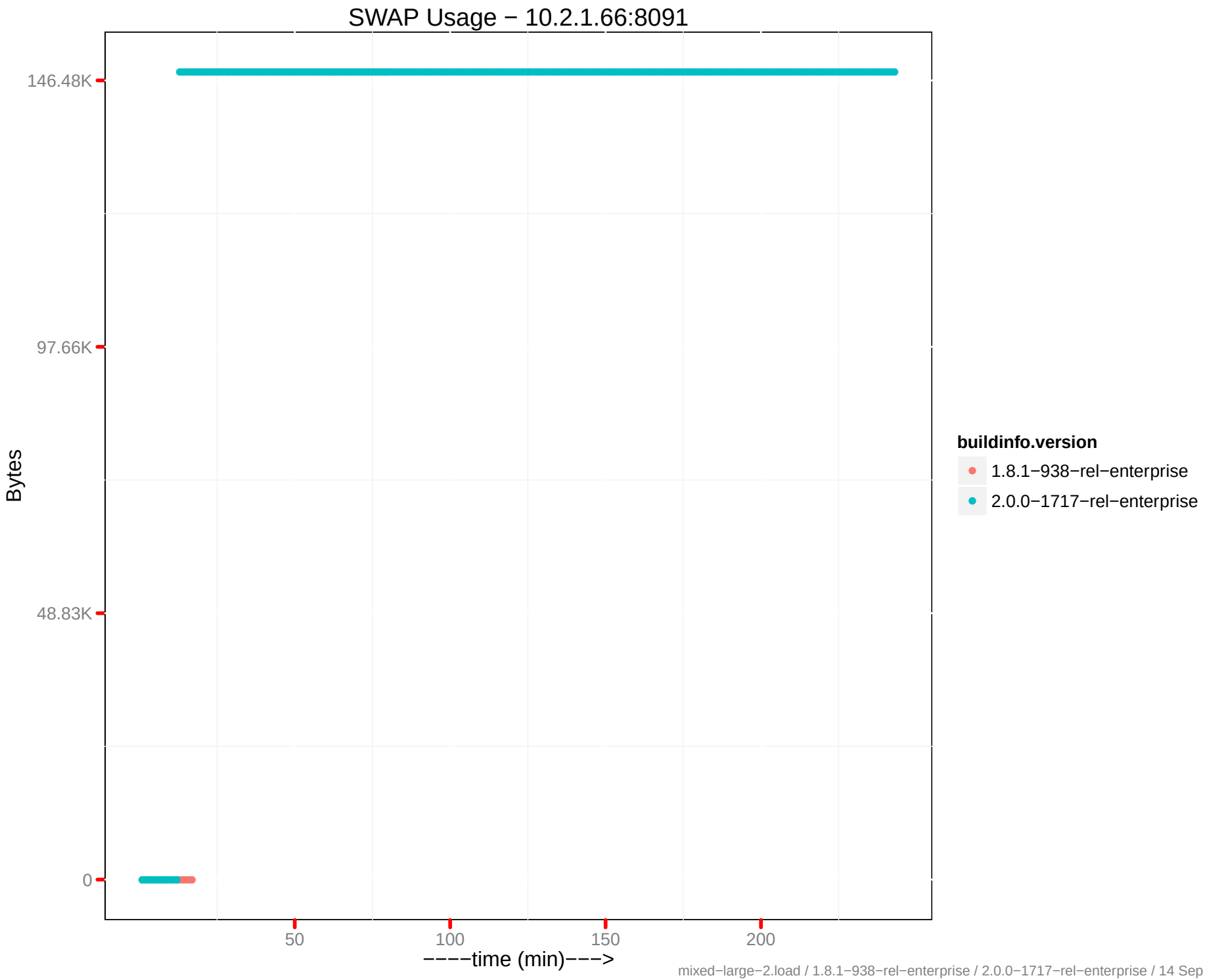

CPU utilization − 10.2.1.65:8091
60.00
40.00
20.00
0
%
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

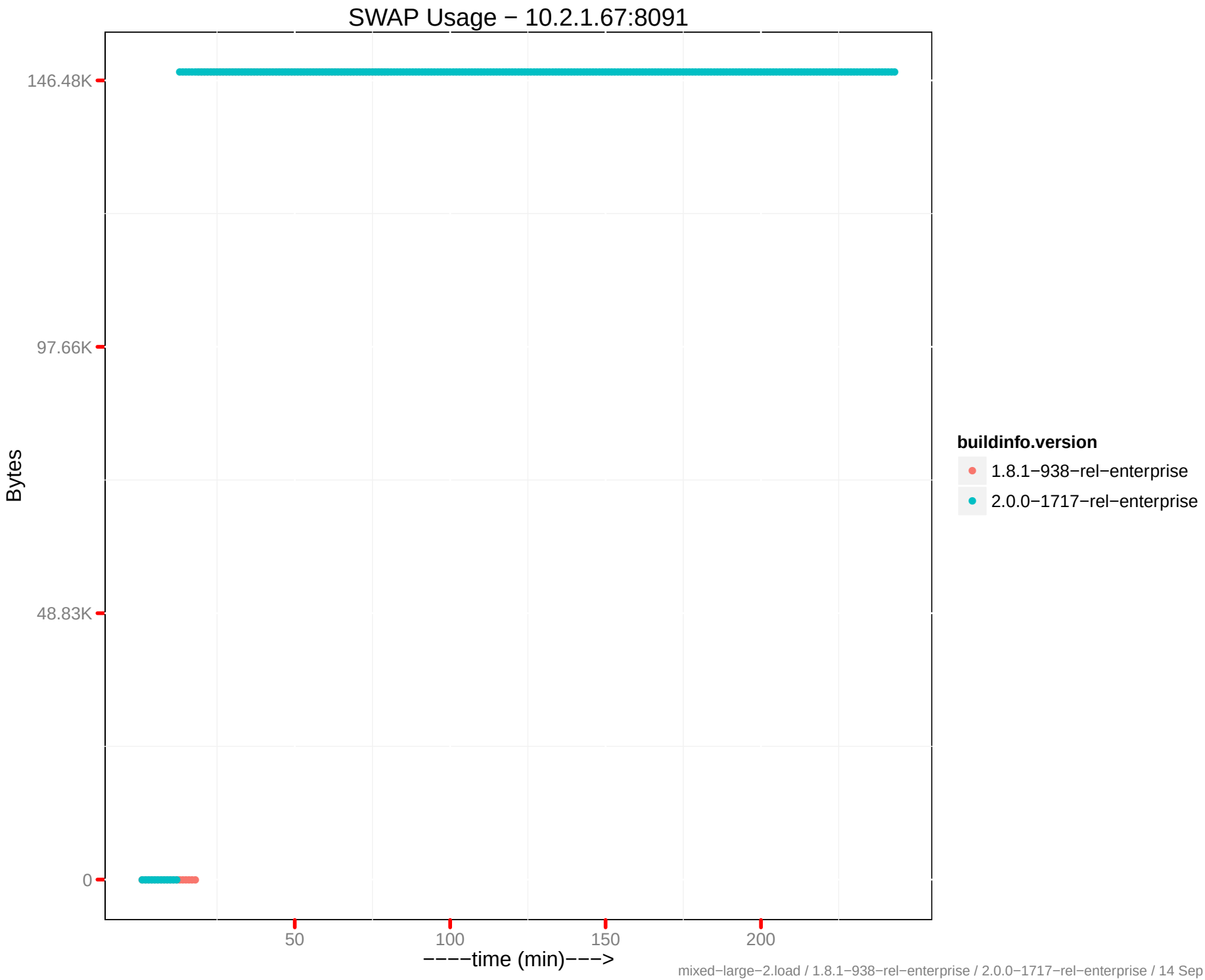

CPU utilization − 10.2.1.66:8091
60.00
50.00
40.00
30.00
20.00
10.00
%
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

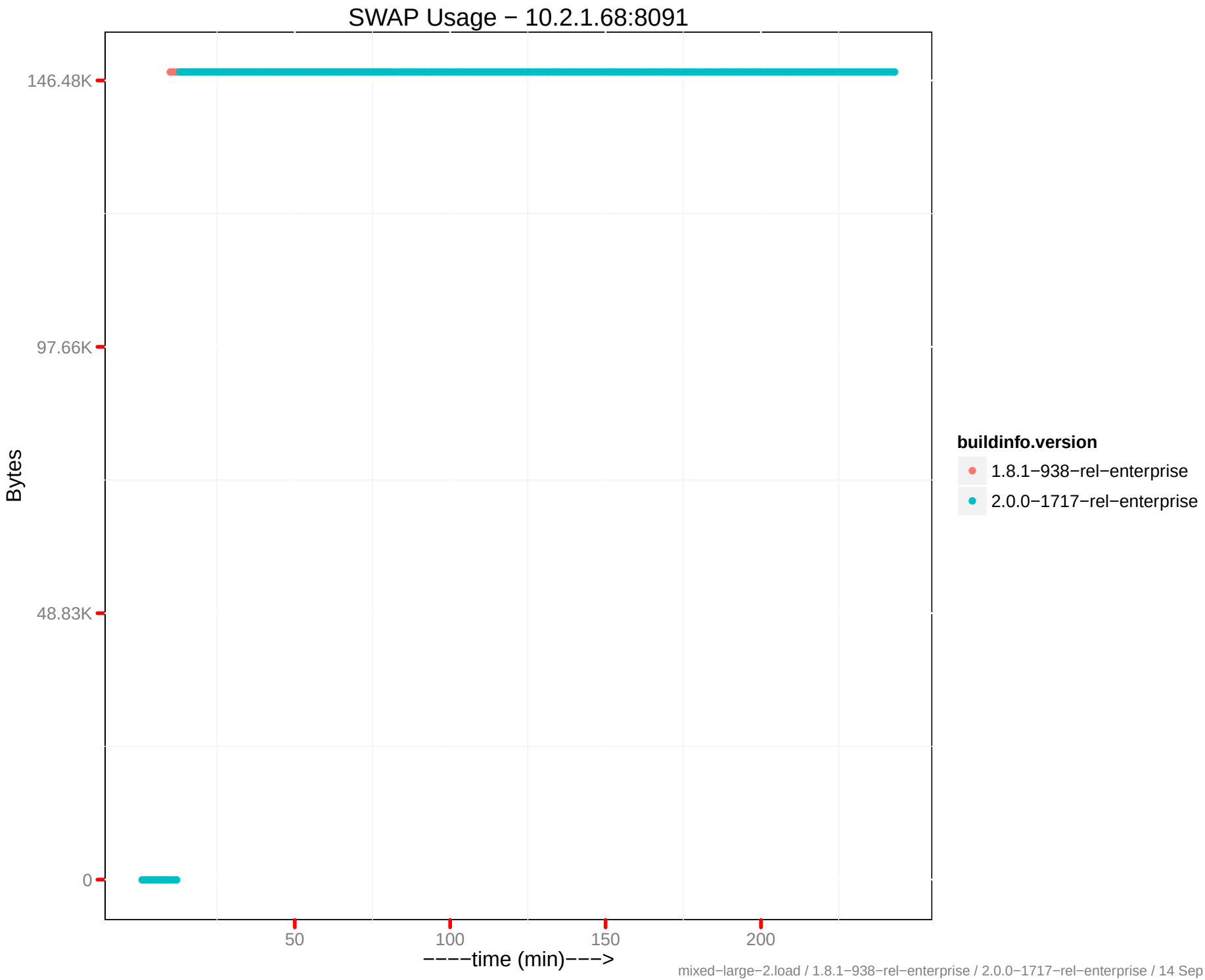

CPU utilization − 10.2.1.67:8091
70.00
60.00
50.00
40.00
30.00
20.00
10.00
%
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

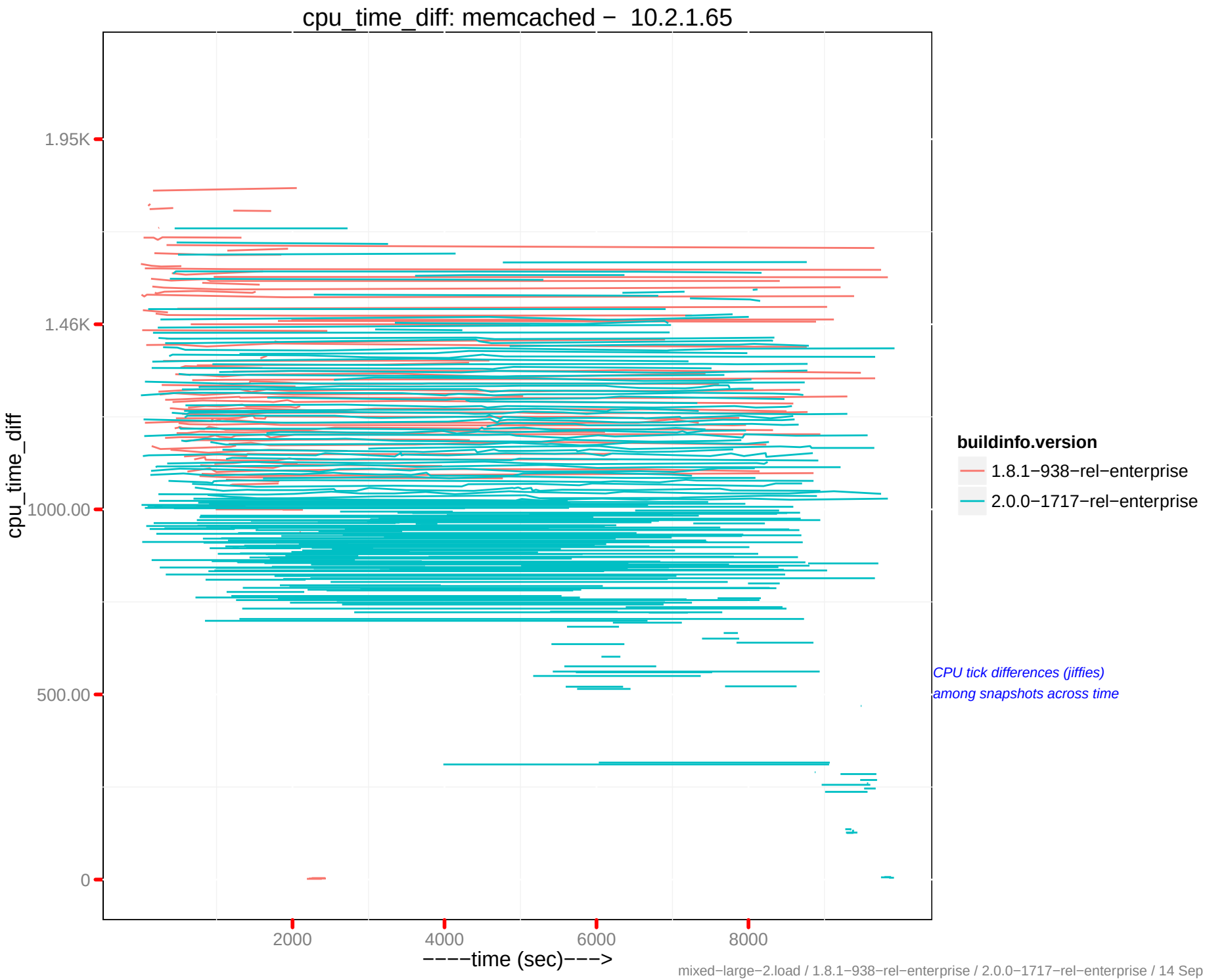

CPU utilization − 10.2.1.68:8091
60.00
40.00
20.00
%
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

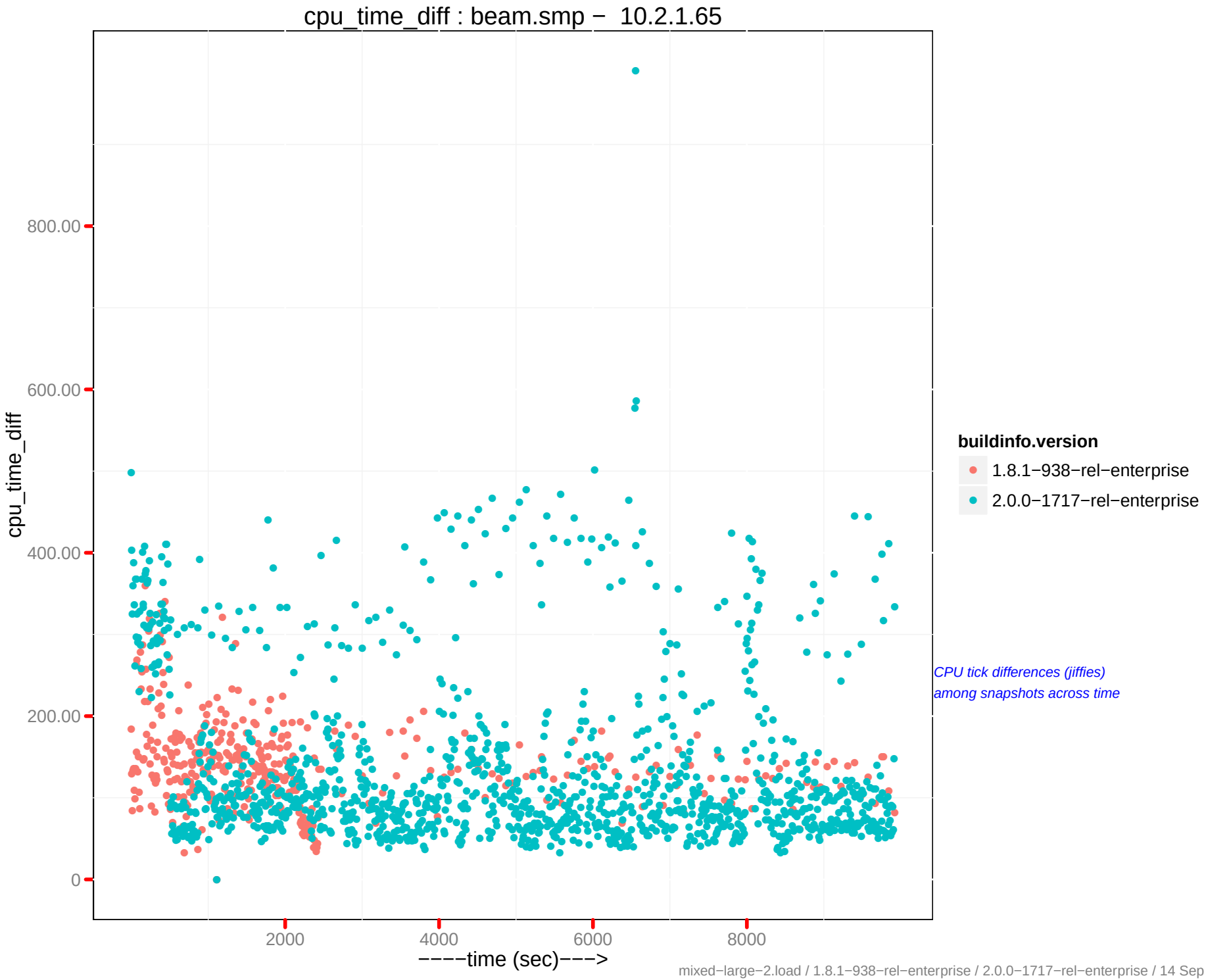

SWAP Usage − 10.2.1.65:8091
146.48K
97.66K
48.83K
0
Bytes
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

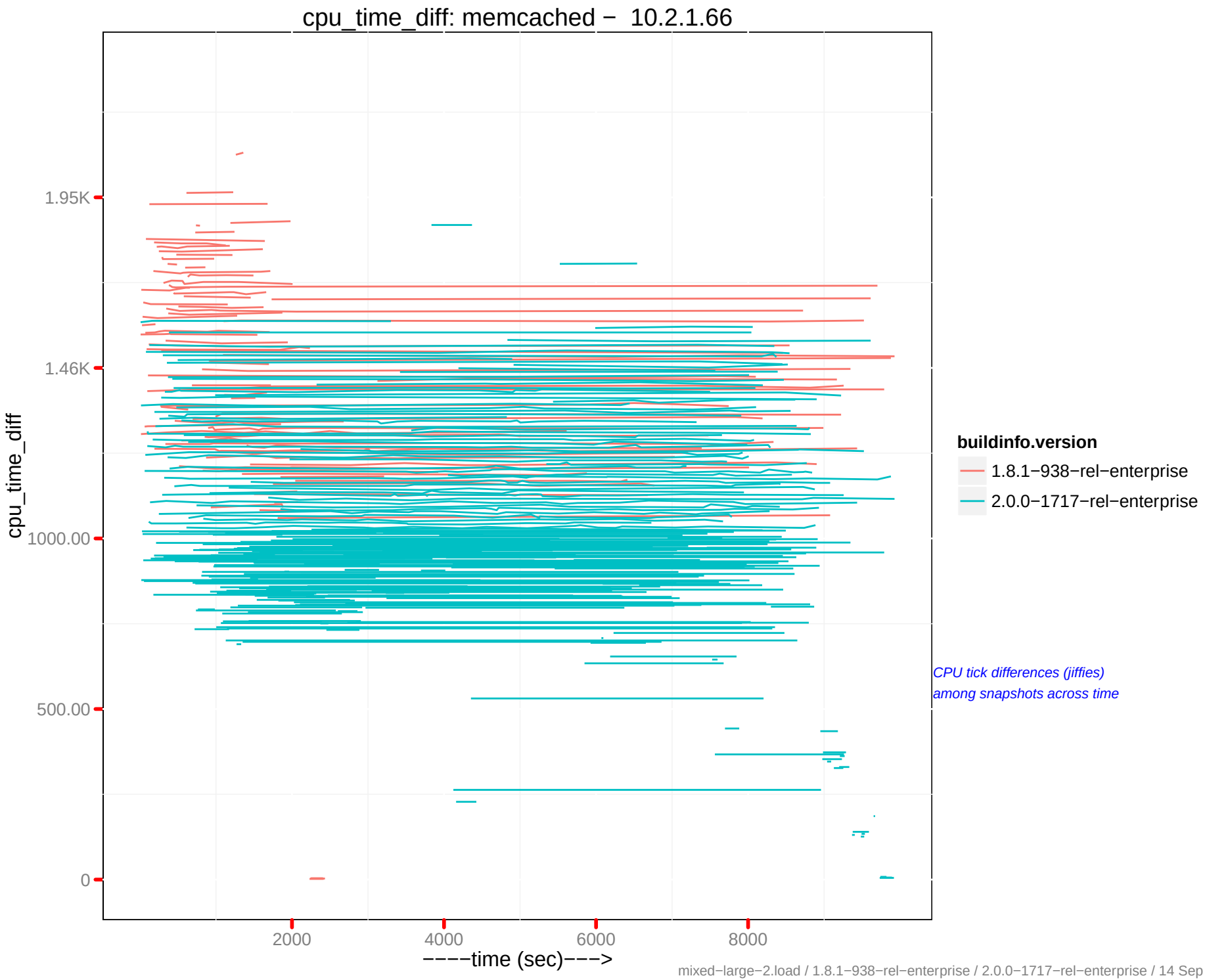

SWAP Usage − 10.2.1.66:8091
146.48K
97.66K
48.83K
0
Bytes
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

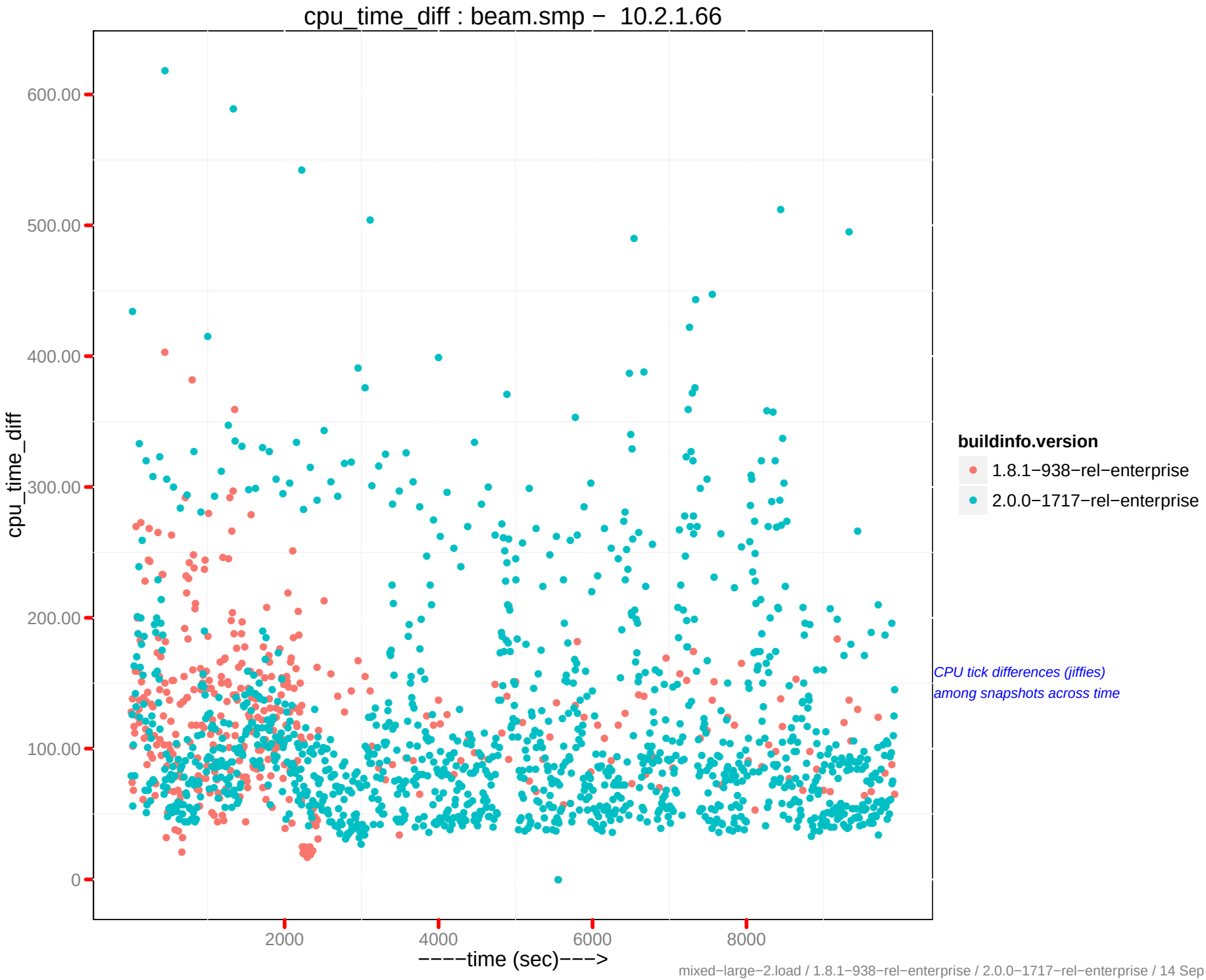

SWAP Usage − 10.2.1.67:8091
146.48K
97.66K
48.83K
0
Bytes
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

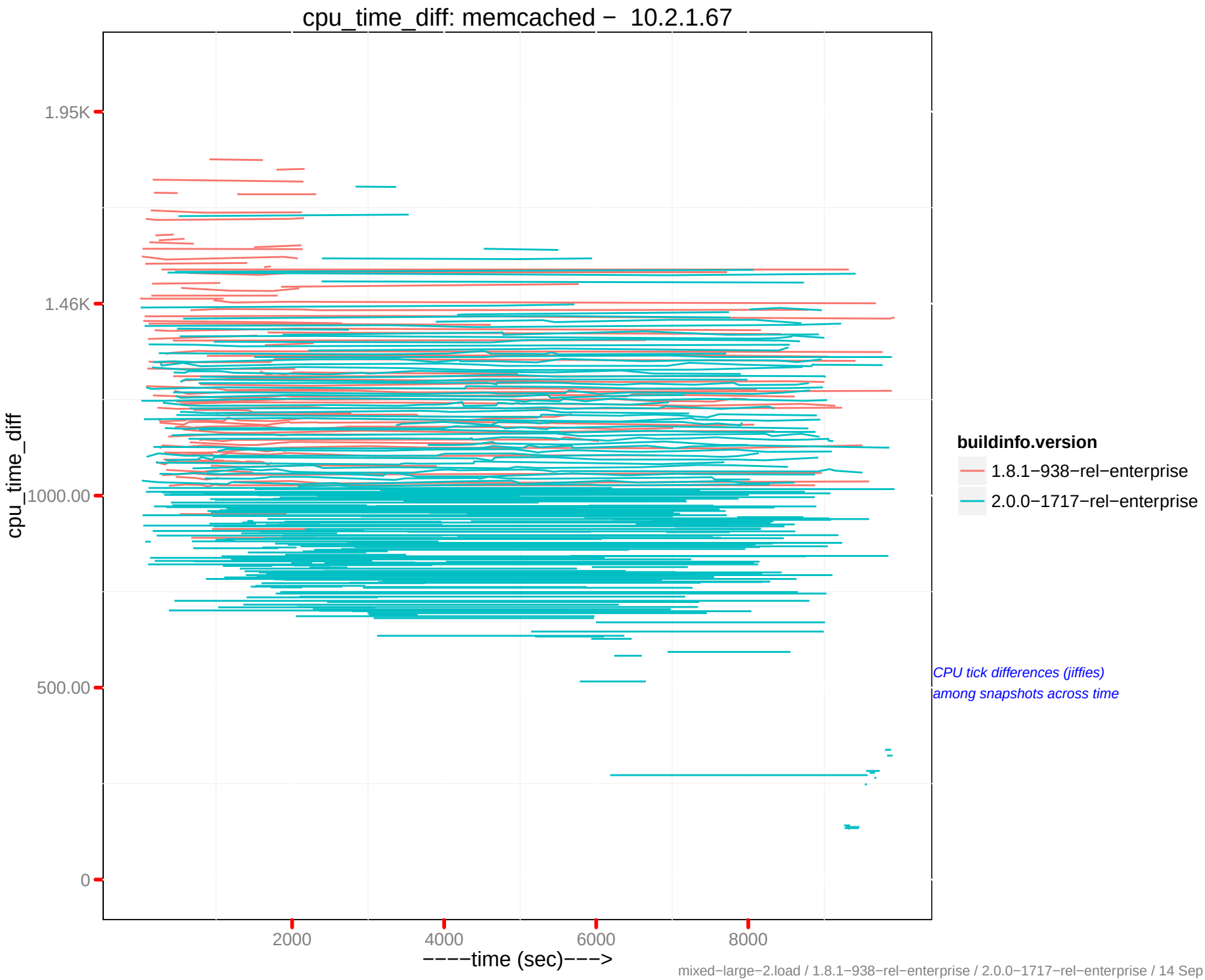

SWAP Usage − 10.2.1.68:8091
146.48K
97.66K
48.83K
0
Bytes
50
100
150
200
−−−−time (min)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

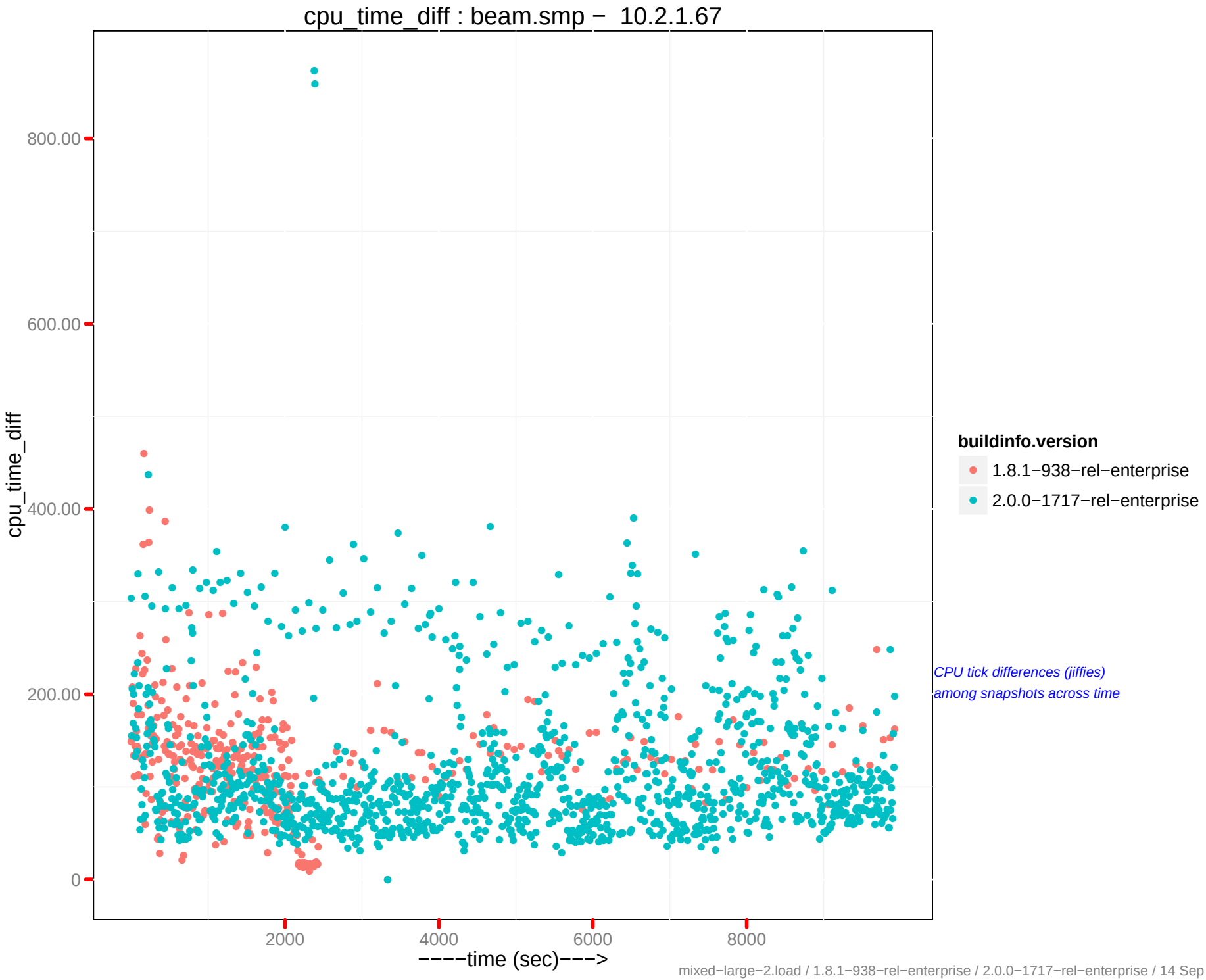

cpu_time_diff: memcached − 10.2.1.65
1.95K
1.46K
1000.00
500.00
0
cpu_time_diff
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

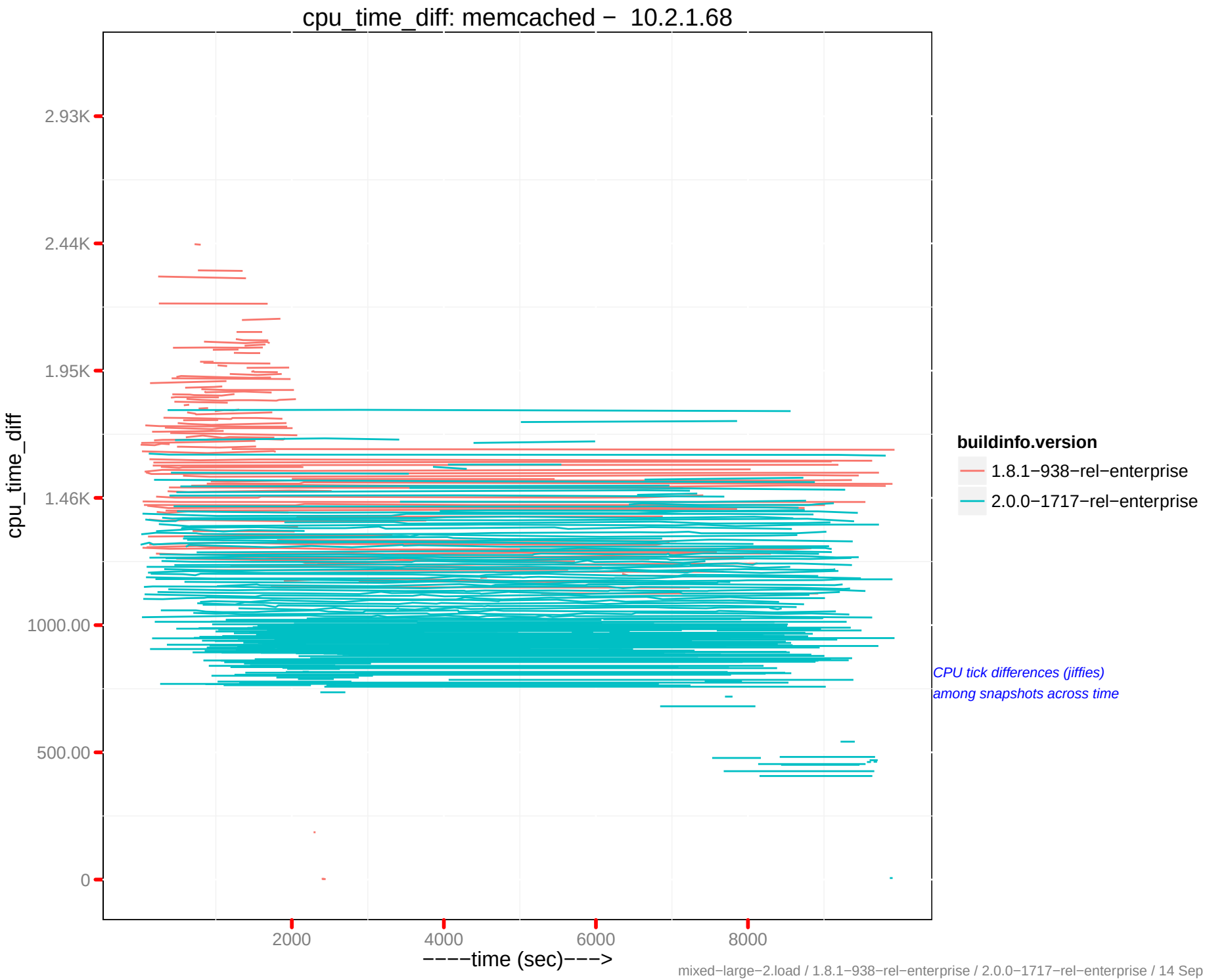

cpu_time_diff : beam.smp − 10.2.1.65
cpu_time_diff
800.00
600.00
400.00
200.00
0
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

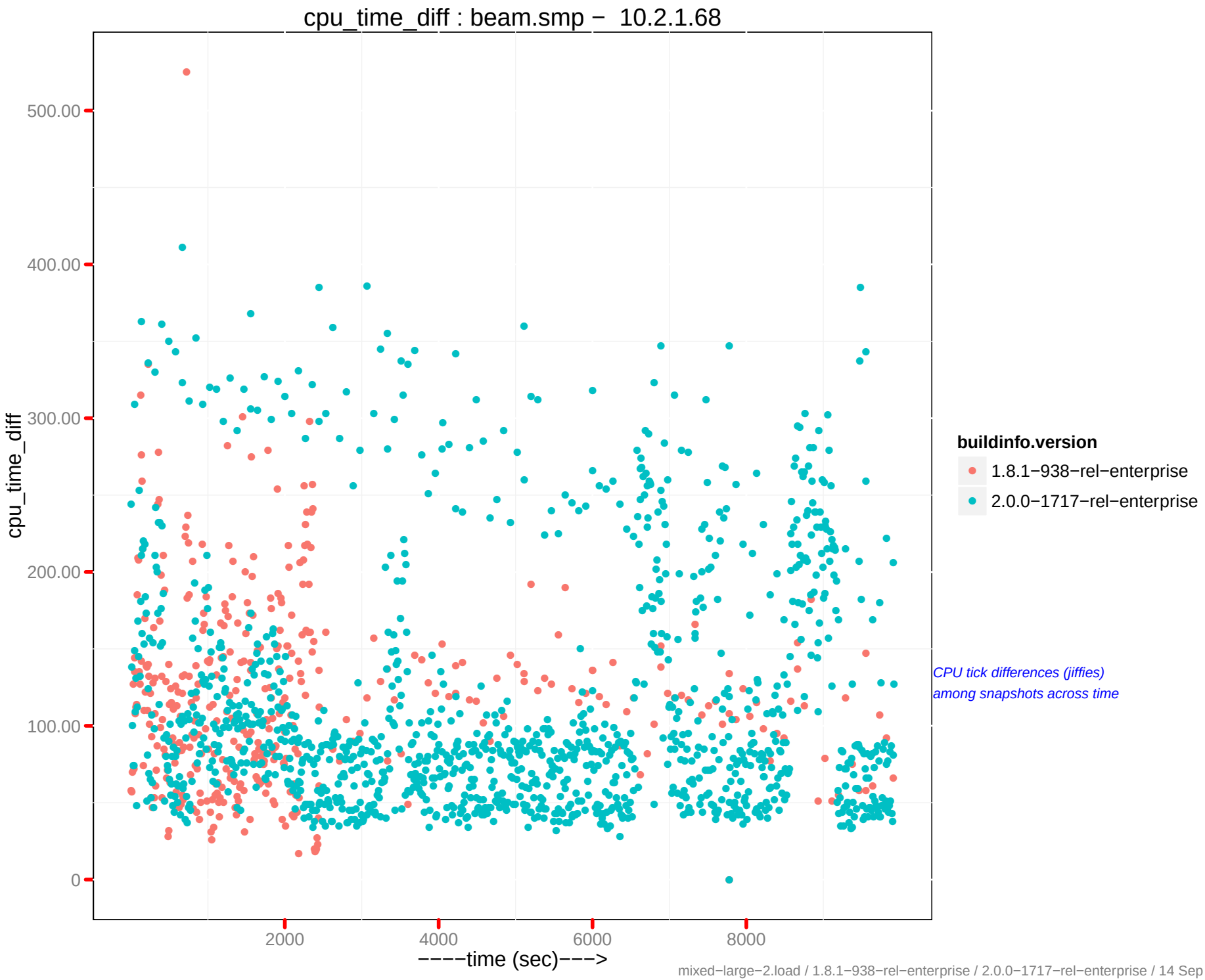

cpu_time_diff: memcached − 10.2.1.66
cpu_time_diff
1.95K
1.46K
1000.00
500.00
0
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

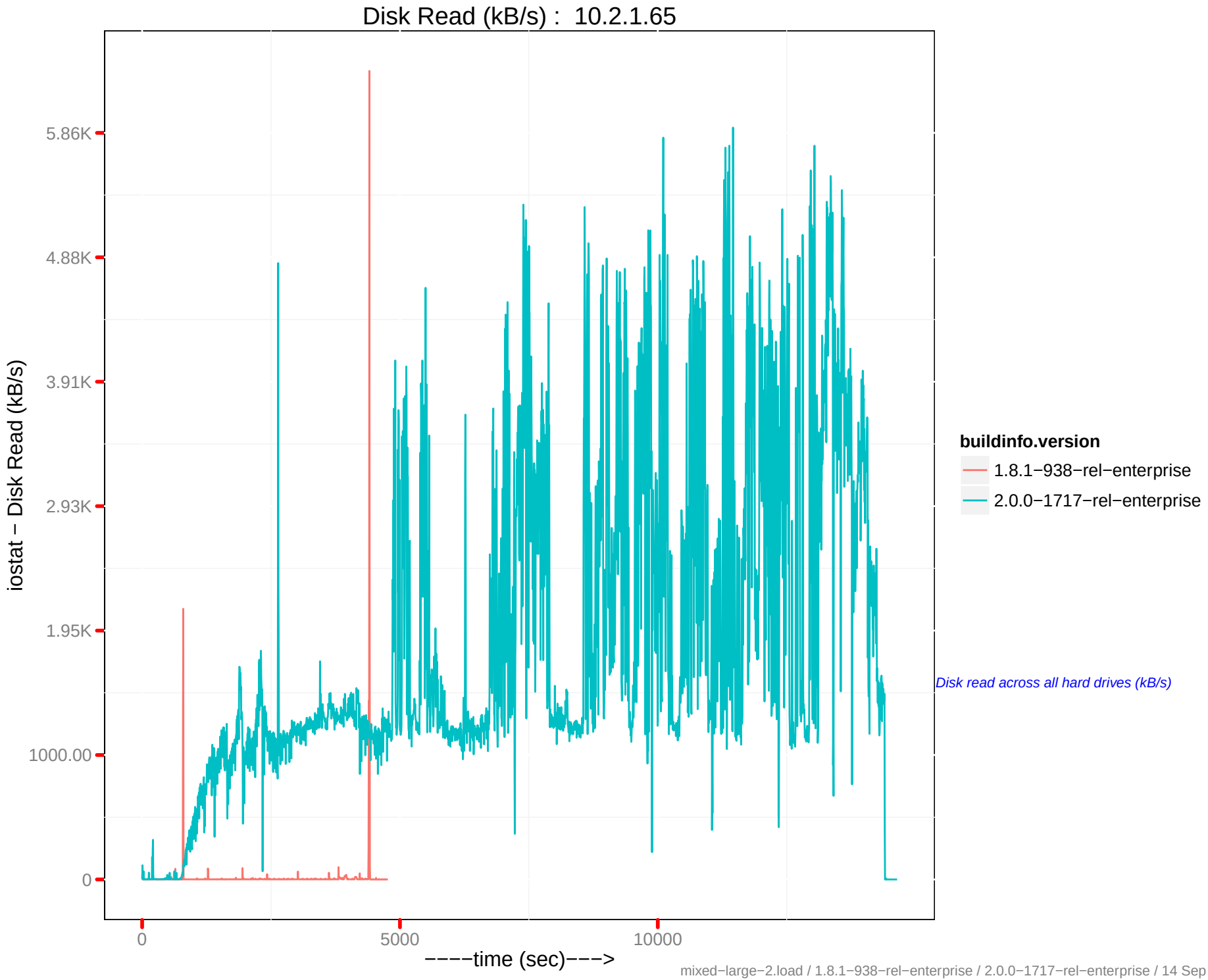

cpu_time_diff : beam.smp − 10.2.1.66
cpu_time_diff
600.00
500.00
400.00
300.00
200.00
100.00
0
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

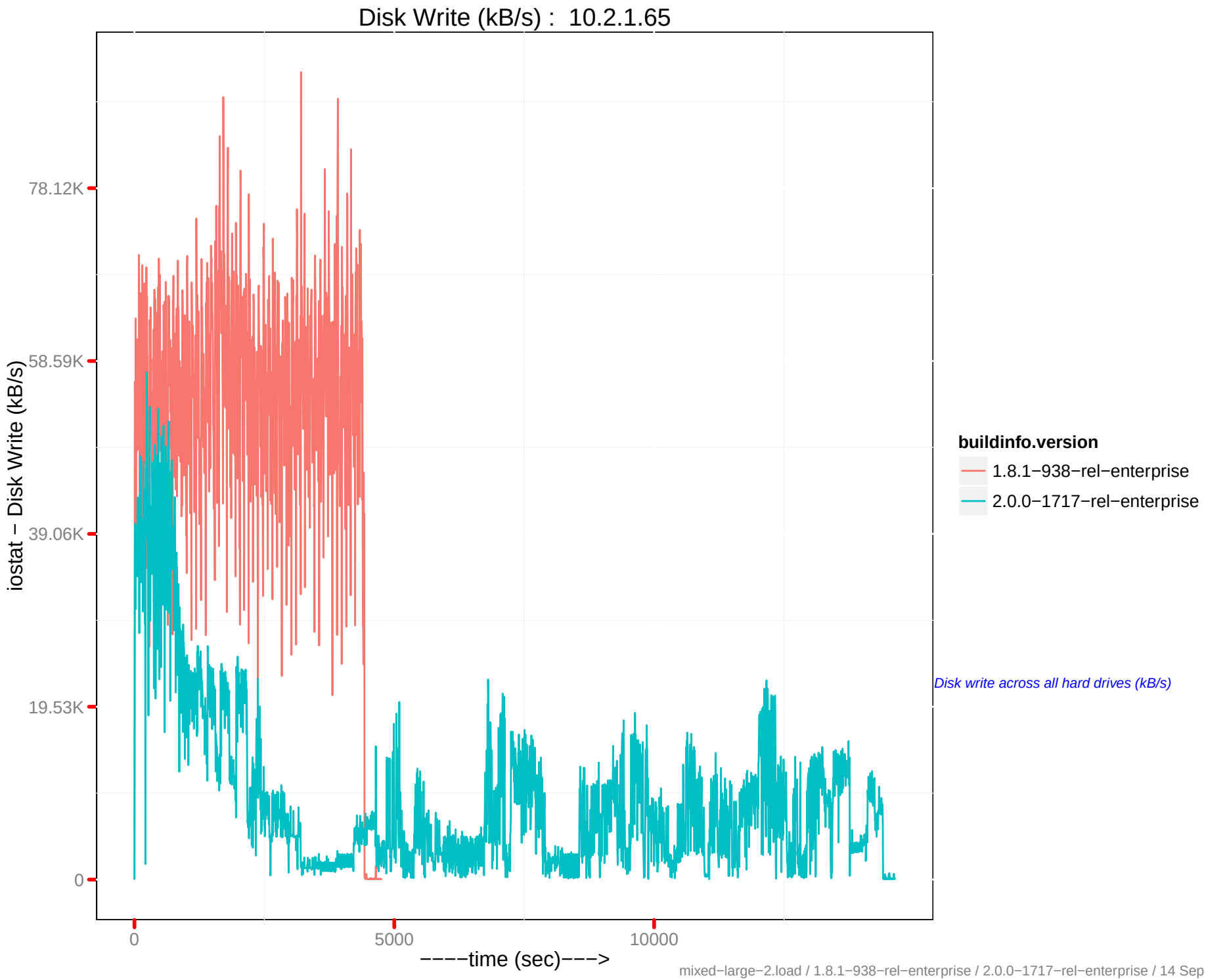

cpu_time_diff: memcached − 10.2.1.67
1.95K
1.46K
1000.00
500.00
0
cpu_time_diff
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012

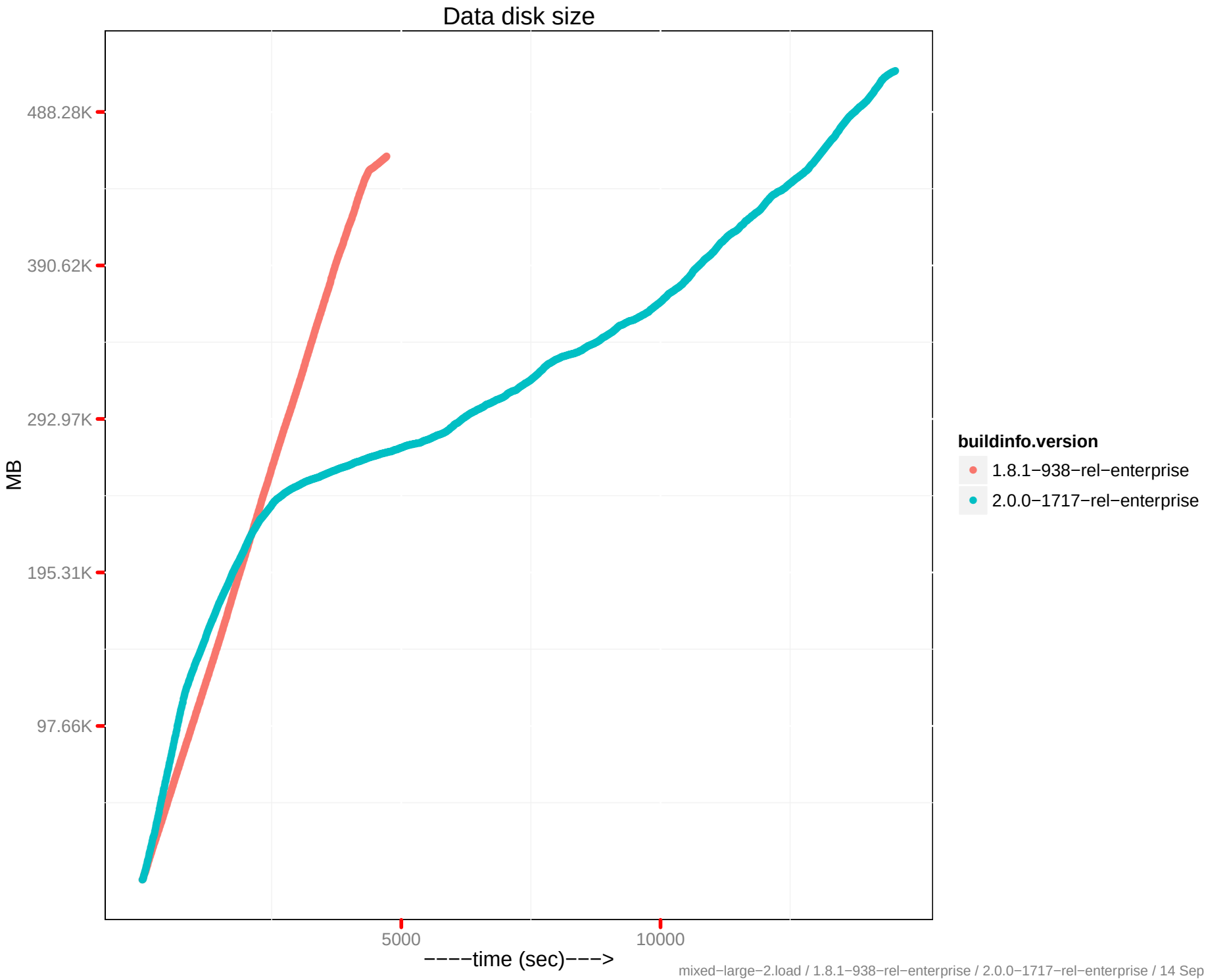

cpu_time_diff : beam.smp − 10.2.1.67
800.00
600.00
400.00
200.00
0
cpu_time_diff
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012


cpu_time_diff: memcached − 10.2.1.68
cpu_time_diff
2.93K
2.44K
1.95K
1.46K
1000.00
500.00
0
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012


cpu_time_diff : beam.smp − 10.2.1.68
cpu_time_diff
500.00
400.00
300.00
200.00
100.00
0
2000
4000
6000
8000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
CPU tick differences (jiffies)
among snapshots across time
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012


Disk Read (kB/s) : 10.2.1.65
iostat – Disk Read (kB/s)
5.86K
4.88K
3.91K
2.93K
1.95K
1000.00
0
0
5000
10000
––––time (sec)––––>
buildinfo.version
1.8.1–938–rel–enterprise
2.0.0–1717–rel–enterprise
Disk read across all hard drives (kB/s)


Disk Write (kB/s) : 10.2.1.65
78.12K
58.59K
39.06K
19.53K
0
iostat − Disk Write (kB/s)
0
5000
10000
−−−−time (sec)−−−>
buildinfo.version
1.8.1−938−rel−enterprise
2.0.0−1717−rel−enterprise
Disk write across all hard drives (kB/s)
mixed−large−2.load / 1.8.1−938−rel−enterprise / 2.0.0−1717−rel−enterprise / 14 Sep 2012


Data disk size
488.28K
390.62K
292.97K
195.31K
97.66K
MB
5000
10000
----time (sec)--->
buildinfo.version
1.8.1-938-rel-enterprise
2.0.0-1717-rel-enterprise
mixed-large-2.load / 1.8.1-938-rel-enterprise / 2.0.0-1717-rel-enterprise / 14 Sep 2012

```
mixed-large-2.conf
# mixed suv 100M load, 2M hot reload, 3M access creates
# speed limit = 0.5k per client
# num clients = 30
# DGM
#
performance.eperf.EPerfClient.test_eperf_mixed

params:

# general
batch=50
kind=nonjson
mem_quota=20000

# load phase
hot_init_items=6000000
items=100000000

# cbstats collector
cb_stats=1

# access phase
# Read:Insert:Update:Delete Ratio = 50:4:40:6.
ratio_sets=0.5
ratio_misses=0.05
ratio_creates=0.08
ratio_deletes=0.13
ratio_hot=0.02
ratio_hot_gets=0.99
ratio_hot_sets=0.99
ratio_expirations=0
max_creates=1000000

# control (defaults: pytests/performance/perf_defaults.py)
mcsoda_heartbeat=3
mcsoda_max_ops_sec=500
tear_down=1
tear_down_proxy=1
tear_down_bucket=0
tear_down_cluster=1
tear_down_on_setup=0
```

vesta.ini

```
[global]
username:root
password:couchbase
port:8091
data_path:/data

[servers]
1:10.2.1.65
2:10.2.1.66
3:10.2.1.67
4:10.2.1.68

[clients]
1:10.2.1.60

[membase]
rest_username:Administrator
rest_password:password

[dashboard]
1:dashboard.hq.couchbase.com:80
```