

1st Test:

Task: Run memstat before running any services just to show that the cache is at 0 bytes

Highlight: cache is at 0 bytes

Server: localhost (11211)

pid: 760
uptime: 67948
time: 1576319329
version: 1.5.10
libevent: 2.1.8-stable
pointer_size: 64
rusage_user: 3.839070
rusage_system: 3.490064
max_connections: 1024
curr_connections: 1
total_connections: 23
rejected_connections: 0
connection_structures: 7
reserved_fds: 20
cmd_get: 27
cmd_set: 21
cmd_flush: 1
cmd_touch: 0
get_hits: 6
get_misses: 21
get_expired: 0
get_flushed: 0
delete_misses: 0
delete_hits: 0
incr_misses: 0
incr_hits: 0
decr_misses: 0
decr_hits: 0
cas_misses: 0
cas_hits: 0
cas_badval: 0
touch_hits: 0
touch_misses: 0
auth_cmds: 0
auth_errors: 0
bytes_read: 4570
bytes_written: 16054
limit_maxbytes: 67108864
accepting_conns: 1
listen_disabled_num: 0
time_in_listen_disabled_us: 0
threads: 4
conn_yields: 0
hash_power_level: 16
hash_bytes: 524288
hash_is_expanding: 0
slab_reassign_rescues: 0

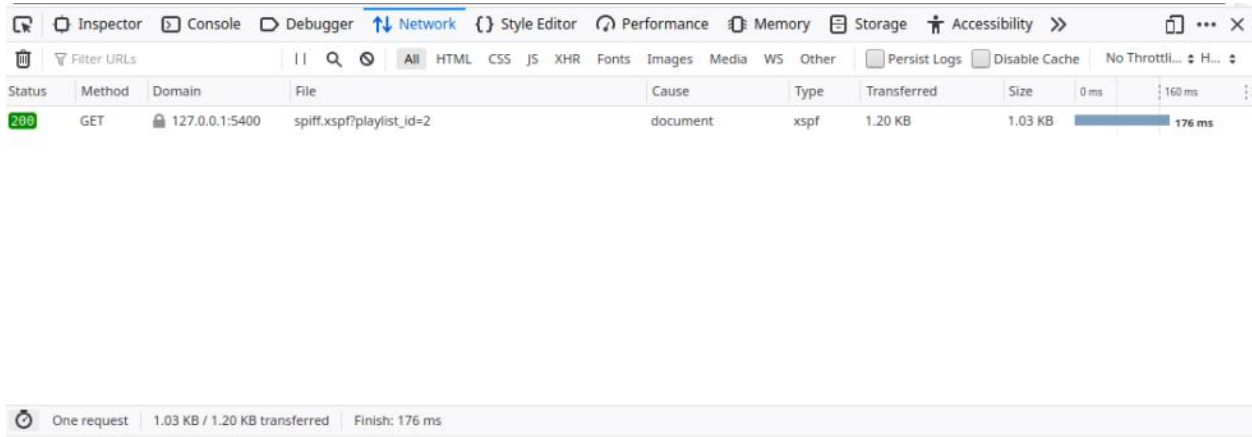
slab_reassign_chunk_rescues: 0
slab_reassign_evictions_nomem: 0
slab_reassign_inline_reclaim: 0
slab_reassign_busy_items: 0
slab_reassign_busy_deletes: 0
slab_reassign_running: 0
slabs_moved: 0
lru_crawler_running: 0
lru_crawler_starts: 11985
lru_maintainer_juggles: 191790
malloc_fails: 0
log_worker_dropped: 0
log_worker_written: 0
log_watcher_skipped: 0
log_watcher_sent: 0
bytes: 0
curr_items: 0
total_items: 21
slab_global_page_pool: 0
expired_unfetched: 17
evicted_unfetched: 0
evicted_active: 0
evictions: 0
reclaimed: 21
crawler_reclaimed: 0
crawler_items_checked: 0
lrutail_reflocked: 8
moves_to_cold: 23
moves_to_warm: 2
moves_within_lru: 0
direct_reclaims: 0
lru_bumps_dropped: 0

2nd Test:

Task: Run memcstat after first request. Assuming something should be stored in cache now

Highlight: cache is at 1256 bytes

Conclusion: Similar to 1st run the timing here has not yet been improved since the cache has just been filled for the first time on this test



Server: localhost (11211)

```
pid: 760
uptime: 68140
time: 1576319521
version: 1.5.10
libevent: 2.1.8-stable
pointer_size: 64
rusage_user: 3.865314
rusage_system: 3.490064
max_connections: 1024
curr_connections: 1
total_connections: 25
rejected_connections: 0
connection_structures: 7
reserved_fds: 20
cmd_get: 31
cmd_set: 25
cmd_flush: 1
cmd_touch: 0
get_hits: 6
get_misses: 25
get_expired: 0
get_flushed: 0
delete_misses: 0
delete_hits: 0
incr_misses: 0
incr_hits: 0
decr_misses: 0
decr_hits: 0
cas_misses: 0
cas_hits: 0
cas_badval: 0
touch_hits: 0
```

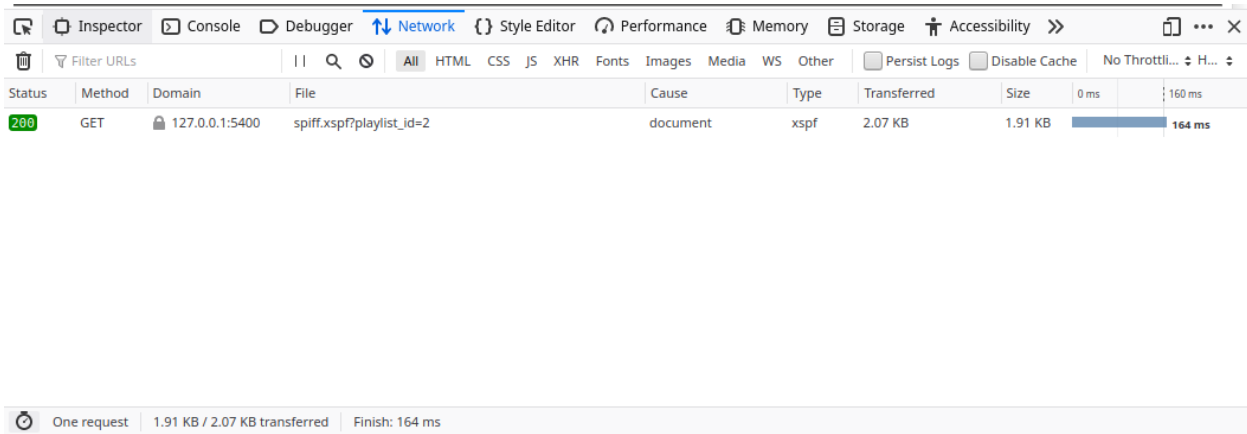
touch_misses: 0
auth_cmds: 0
auth_errors: 0
bytes_read: 5850
bytes_written: 17993
limit_maxbytes: 67108864
accepting_conns: 1
listen_disabled_num: 0
time_in_listen_disabled_us: 0
threads: 4
conn_yields: 0
hash_power_level: 16
hash_bytes: 524288
hash_is_expanding: 0
slab_reassign_rescues: 0
slab_reassign_chunk_rescues: 0
slab_reassign_evictions_nomem: 0
slab_reassign_inline_reclaim: 0
slab_reassign_busy_items: 0
slab_reassign_busy_deletes: 0
slab_reassign_running: 0
slabs_moved: 0
lru_crawler_running: 0
lru_crawler_starts: 12240
lru_maintainer_juggles: 192560
malloc_fails: 0
log_worker_dropped: 0
log_worker_written: 0
log_watcher_skipped: 0
log_watcher_sent: 0
bytes: 1256
curr_items: 4
total_items: 25
slab_global_page_pool: 0
expired_unfetched: 17
evicted_unfetched: 0
evicted_active: 0
evictions: 0
reclaimed: 21
crawler_reclaimed: 0
crawler_items_checked: 0
lrutail_reflocked: 8
moves_to_cold: 27
moves_to_warm: 2
moves_within_lru: 0
direct_reclaims: 0
lru_bumps_dropped: 0

3rd Test:

Task: Assuming that cache is being utilized. Running memcstat and taking pic of timings, check if time is shorter because its fetching from the cache now

Highlight: cache is at 1256 bytes

Conclusion: Timing was less need to do more tests to verify if cache is being utilized by flushing the cache first on the next test



Server: localhost (11211)

```
pid: 760
uptime: 68282
time: 1576319663
version: 1.5.10
libevent: 2.1.8-stable
pointer_size: 64
rusage_user: 3.885229
rusage_system: 3.490064
max_connections: 1024
curr_connections: 1
total_connections: 27
rejected_connections: 0
connection_structures: 7
reserved_fds: 20
cmd_get: 35
cmd_set: 29
cmd_flush: 1
cmd_touch: 0
get_hits: 6
get_misses: 29
get_expired: 0
get_flushed: 0
delete_misses: 0
delete_hits: 0
incr_misses: 0
incr_hits: 0
decr_misses: 0
decr_hits: 0
cas_misses: 0
cas_hits: 0
cas_badval: 0
```

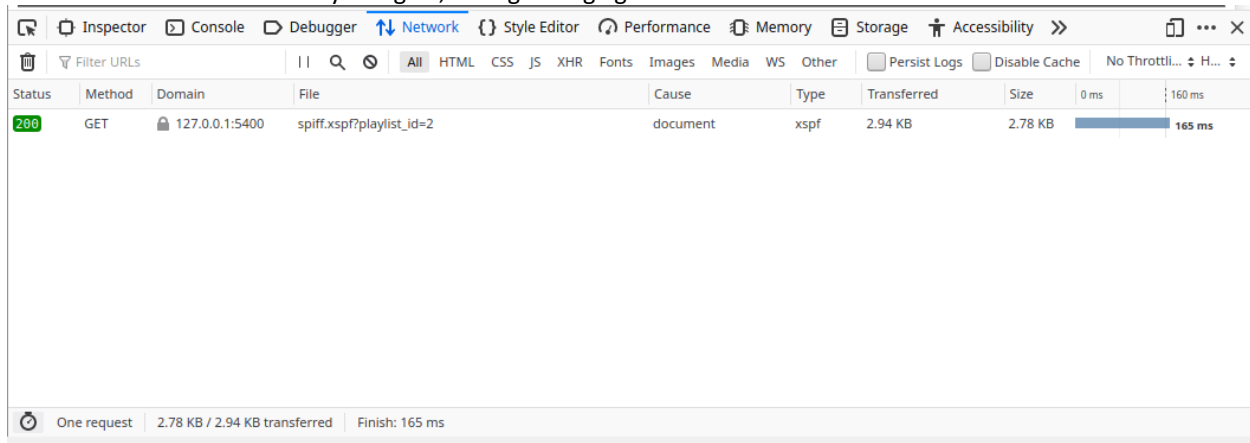
touch_hits: 0
touch_misses: 0
auth_cmds: 0
auth_errors: 0
bytes_read: 7130
bytes_written: 19935
limit_maxbytes: 67108864
accepting_conns: 1
listen_disabled_num: 0
time_in_listen_disabled_us: 0
threads: 4
conn_yields: 0
hash_power_level: 16
hash_bytes: 524288
hash_is_expanding: 0
slab_reassign_rescues: 0
slab_reassign_chunk_rescues: 0
slab_reassign_evictions_nomem: 0
slab_reassign_inline_reclaim: 0
slab_reassign_busy_items: 0
slab_reassign_busy_deletes: 0
slab_reassign_running: 0
slabs_moved: 0
lru_crawler_running: 0
lru_crawler_starts: 12240
lru_maintainer_juggles: 193144
malloc_fails: 0
log_worker_dropped: 0
log_worker_written: 0
log_watcher_skipped: 0
log_watcher_sent: 0
bytes: 1256
curr_items: 4
total_items: 29
slab_global_page_pool: 0
expired_unfetched: 21
evicted_unfetched: 0
evicted_active: 0
evictions: 0
reclaimed: 25
crawler_reclaimed: 0
crawler_items_checked: 0
lrutail_reflocked: 8
moves_to_cold: 31
moves_to_warm: 2
moves_within_lru: 0
direct_reclaims: 0
lru_bumps_dropped: 0

4th Test:

Task: Flush the cache first and check cache to be 0 bytes, do request, check (snap) timings again since it should be similar to the timing from 2nd run

Highlight: cache is at 0 bytes

Conclusion: The cache has 0 bytes again, timing is long again



The screenshot shows the Chrome DevTools Network tab. The top toolbar includes icons for Inspector, Console, Debugger, Network, Style Editor, Performance, Memory, Storage, Accessibility, and a menu. Below the toolbar is a search bar and tabs for All, HTML, CSS, JS, XHR, Fonts, Images, Media, WS, and Other. The main table lists network requests. The first request is a GET to 127.0.0.1:5400 for spiff.xspf?playlist_id=2, with a status of 200, a document cause, xspf type, 2.94 KB transferred, 2.78 KB size, and a 165 ms duration. A progress bar at the bottom shows 'One request', '2.78 KB / 2.94 KB transferred', and 'Finish: 165 ms'.

| Status | Method | Domain | File | Cause | Type | Transferred | Size | 0 ms | 160 ms |
|--------|--------|----------------|--------------------------|----------|------|-------------|---------|------|--------|
| 200 | GET | 127.0.0.1:5400 | spiff.xspf?playlist_id=2 | document | xspf | 2.94 KB | 2.78 KB | | 165 ms |

One request 2.78 KB / 2.94 KB transferred Finish: 165 ms

Server: localhost (11211)

pid: 760

uptime: 68338

time: 1576319719

version: 1.5.10

libevent: 2.1.8-stable

pointer_size: 64

rusage_user: 3.892616

rusage_system: 3.490064

max_connections: 1024

curr_connections: 1

total_connections: 29

rejected_connections: 0

connection_structures: 7

reserved_fds: 20

cmd_get: 35

cmd_set: 29

cmd_flush: 2

cmd_touch: 0

get_hits: 6

get_misses: 29

get_expired: 0

get_flushed: 0

delete_misses: 0

delete_hits: 0

incr_misses: 0

incr_hits: 0

decr_misses: 0

decr_hits: 0

cas_misses: 0

cas_hits: 0

cas_badval: 0

touch_hits: 0

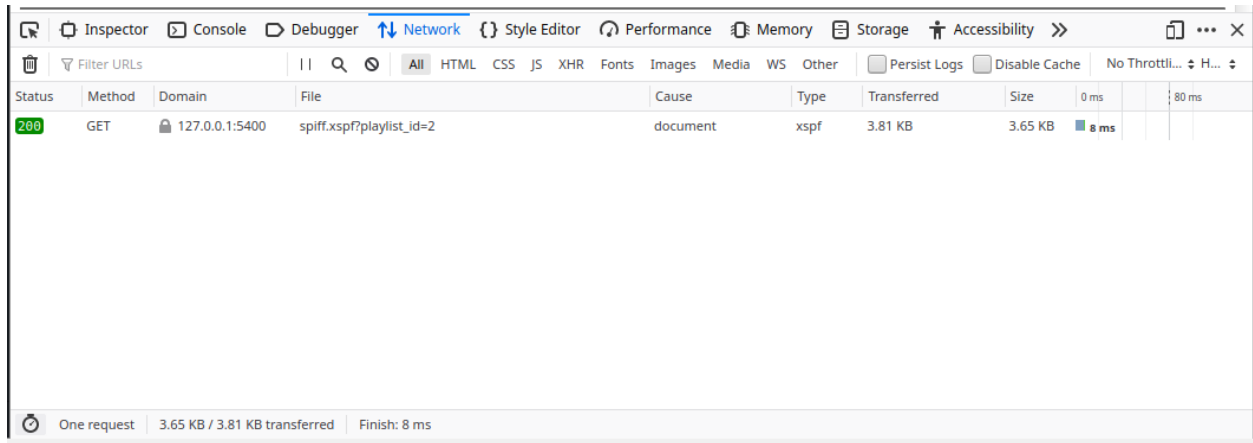
touch_misses: 0
auth_cmds: 0
auth_errors: 0
bytes_read: 7171
bytes_written: 21861
limit_maxbytes: 67108864
accepting_conns: 1
listen_disabled_num: 0
time_in_listen_disabled_us: 0
threads: 4
conn_yields: 0
hash_power_level: 16
hash_bytes: 524288
hash_is_expanding: 0
slab_reassign_rescues: 0
slab_reassign_chunk_rescues: 0
slab_reassign_evictions_nomem: 0
slab_reassign_inline_reclaim: 0
slab_reassign_busy_items: 0
slab_reassign_busy_deletes: 0
slab_reassign_running: 0
slabs_moved: 0
lru_crawler_running: 0
lru_crawler_starts: 12240
lru_maintainer_juggles: 193370
malloc_fails: 0
log_worker_dropped: 0
log_worker_written: 0
log_watcher_skipped: 0
log_watcher_sent: 0
bytes: 0
curr_items: 0
total_items: 29
slab_global_page_pool: 0
expired_unfetched: 25
evicted_unfetched: 0
evicted_active: 0
evictions: 0
reclaimed: 29
crawler_reclaimed: 0
crawler_items_checked: 0
lrutail_reflocked: 8
moves_to_cold: 31
moves_to_warm: 2
moves_within_lru: 0
direct_reclaims: 0
lru_bumps_dropped: 0

5th Test:

Task: Similar to 3rd test, this is to show that the cache is being used

Highlight: cache is at 1256 bytes

Conclusion: Timing has improved significantly



Server: localhost (11211)

pid: 760
uptime: 68512
time: 1576319893
version: 1.5.10
libevent: 2.1.8-stable
pointer_size: 64
rusage_user: 3.915687
rusage_system: 3.490064
max_connections: 1024
curr_connections: 1
total_connections: 31
rejected_connections: 0
connection_structures: 7
reserved_fds: 20
cmd_get: 39
cmd_set: 33
cmd_flush: 2
cmd_touch: 0
get_hits: 6
get_misses: 33
get_expired: 0
get_flushed: 0
delete_misses: 0
delete_hits: 0
incr_misses: 0
incr_hits: 0
decr_misses: 0
decr_hits: 0
cas_misses: 0
cas_hits: 0
cas_badval: 0
touch_hits: 0
touch_misses: 0

auth_cmds: 0
auth_errors: 0
bytes_read: 8451
bytes_written: 23800
limit_maxbytes: 67108864
accepting_conns: 1
listen_disabled_num: 0
time_in_listen_disabled_us: 0
threads: 4
conn_yields: 0
hash_power_level: 16
hash_bytes: 524288
hash_is_expanding: 0
slab_reassign_rescues: 0
slab_reassign_chunk_rescues: 0
slab_reassign_evictions_nomem: 0
slab_reassign_inline_reclaim: 0
slab_reassign_busy_items: 0
slab_reassign_busy_deletes: 0
slab_reassign_running: 0
slabs_moved: 0
lru_crawler_running: 0
lru_crawler_starts: 12240
lru_maintainer_juggles: 194070
malloc_fails: 0
log_worker_dropped: 0
log_worker_written: 0
log_watcher_skipped: 0
log_watcher_sent: 0
bytes: 1256
curr_items: 4
total_items: 33
slab_global_page_pool: 0
expired_unfetched: 25
evicted_unfetched: 0
evicted_active: 0
evictions: 0
reclaimed: 29
crawler_reclaimed: 0
crawler_items_checked: 0
lrutail_reflocked: 8
moves_to_cold: 35
moves_to_warm: 2
moves_within_lru: 0
direct_reclaims: 0
lru_bumps_dropped: 0