Memcache Processing Pipeline

Python Async Socket
Handling provides accept/
read/close handling on
asynchronous threads (by
polling the open socket
descriptors)

Simple
RoundRobin
LoadBalancer to
spread across
worker threads

Multiple Worker
Queues

Task QueueItems
[Each client is assigned to
a single queue, which
ensures load balancing as
well as correct ordering in
DB operations]

Memcache protocl and
DB handling pipeline

Clients

Clients

Clients

Clients

Clients

Clients

Clients

Memcached
server

DB
Queue
Load
Balancer

Protocol
Parser

DB
Operation

DB Get/Set
Operation

Response