# **Couch Base**

# **Couchbase API Operations**

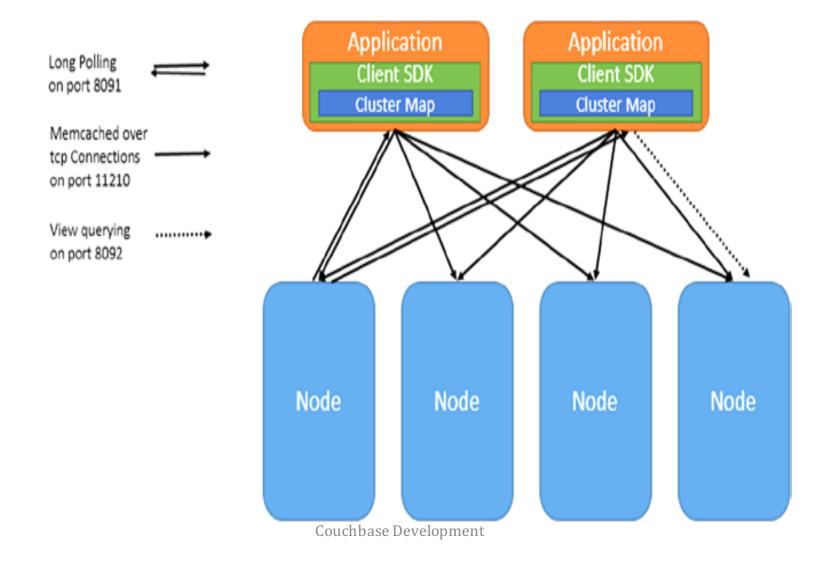


### **Client Interface**

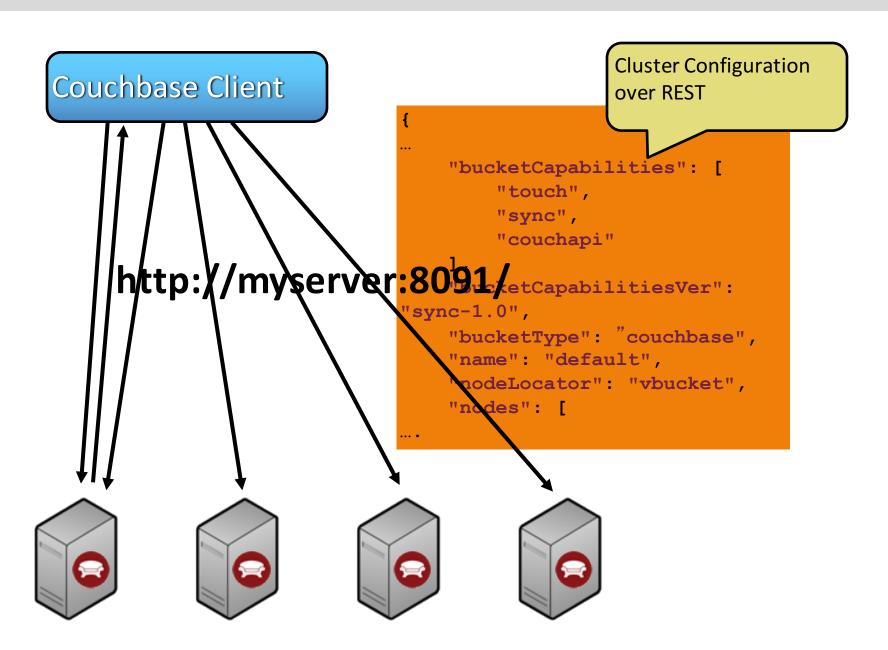
- two major categories
  - smart clients
  - memcached-compatible

### **Connections**

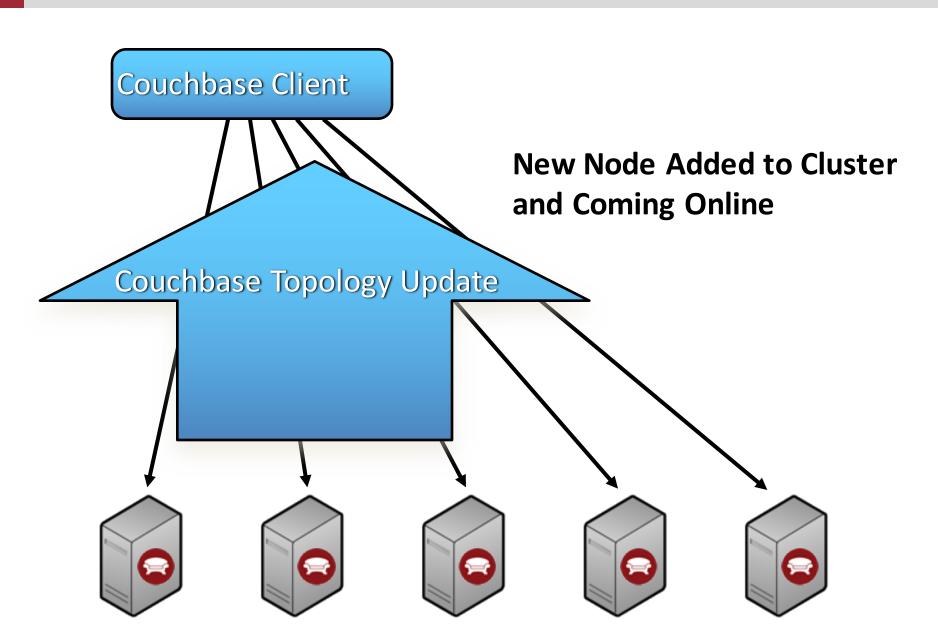
#### Between Clients and Couchbase



### **Client Setup: Cluster Configuration**



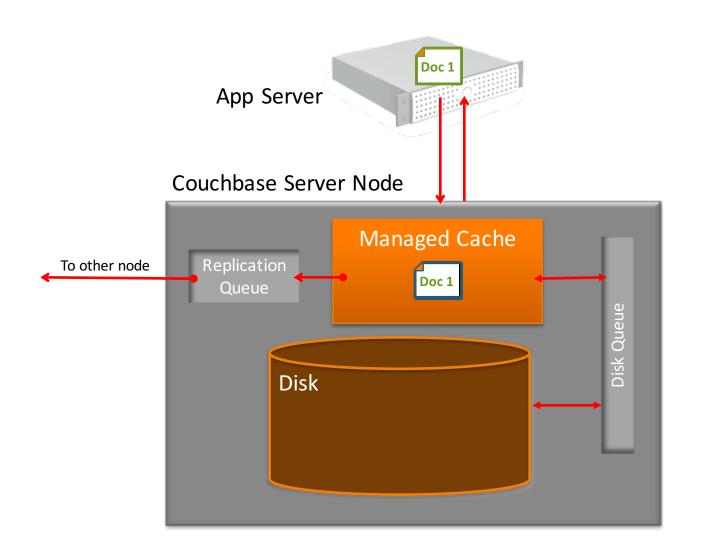
# Client Setup: Cluster Configuration





# **COUCHBASE OPERATIONS**

### **Single node - Couchbase Write Operation**



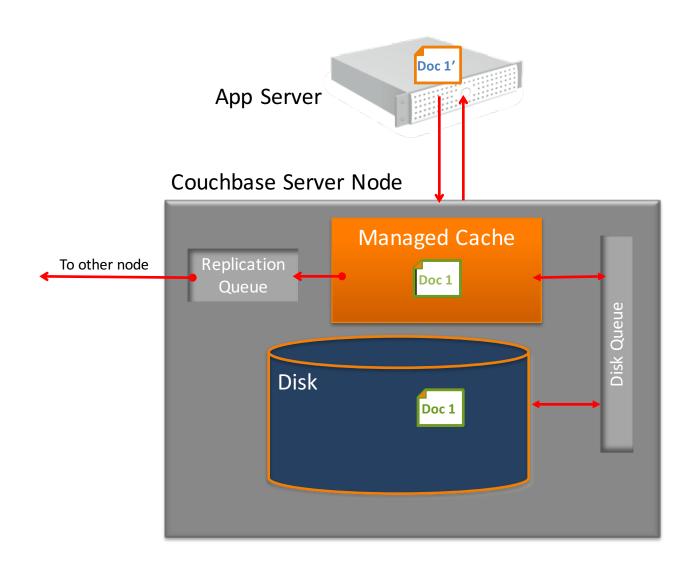


### **Single node - Couchbase Write Operation**

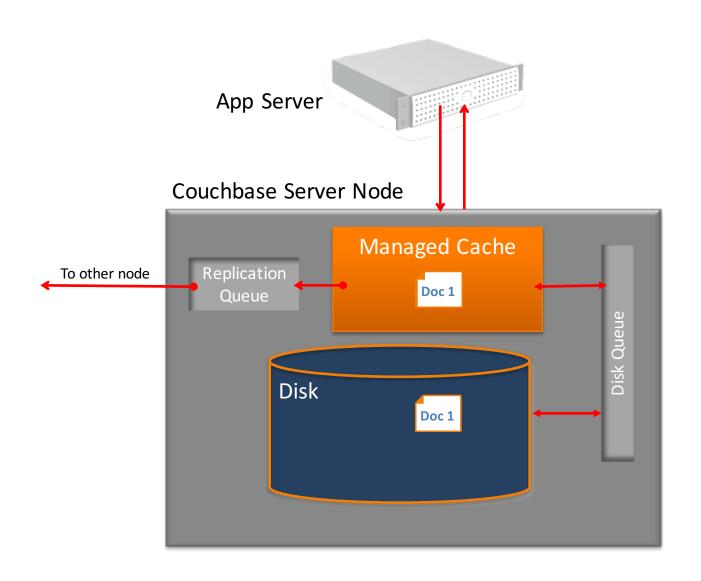
- 1. A set request comes in from the application.
- 2. Couchbase Server responses back that they key is written
- 3. Couchbase Server then Replicates the data out to memory in the other nodes
- 4. At the same time it is put the data into a write que to be persisted to disk

Notes

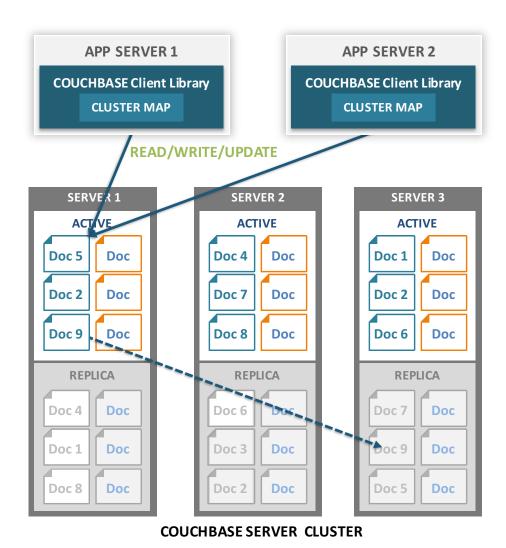
### **Single node - Couchbase Update Operation**



### **Single node - Couchbase Read Operation**



### **Basic Operation**



- Docs distributed evenly across servers
- Each server stores both active and replica docs Only one server active at a time
- Client library provides app with simple interface to database
- Cluster map provides map to which server doc is on App never needs to know
- App reads, writes, updates docs
- Multiple app servers can access same document at same time