13 Indexación: Planes de consulta

For a query, the MongoDB query optimizer chooses and caches the most efficient query plan given the available indexes. The evaluation of the most efficient query plan is based on the number of "work units" (works) performed by the query execution plan when the query planner evaluates candidate plans.

The associated plan cache entry is used for subsequent queries with the same query shape.

A query shape consists of a combination of query, sort, and projection specifications.

Plan Cache Flushes

The query plan cache does not persist if a mongod restarts or shuts down. In addition:

Catalog operations like index or collection drops clear the plan cache.
Least recently used (LRU) cache replacement mechanism clears the least recently accessed cache entry, regardless of state.
Users can also:

Manually clear the entire plan cache using the PlanCache.clear() method.
Manually clear specific plan cache entries using the PlanCache.clearPlansByQuery() method.

queryHash and planCacheKey

queryHash
To help identify slow queries with the same query shape, starting in MongoDB 4.2, each query shape is associated with a queryHash. The queryHash is a hexadecimal string that represents a hash of the query shape and is dependent only on the query shape.

planCacheKey
planCacheKey is a hash of the key for the plan cache entry associated with the query.