## 05 CRUD Operaciones bulk write

MongoDB provides clients the ability to perform write operations in bulk. Bulk write operations affect a single collection. MongoDB allows applications to determine the acceptable level of acknowledgement required for bulk write operations.

The db.collection.bulkWrite() method provides the ability to perform bulk insert, update, and remove operations. MongoDB also supports bulk insert through the db.collection.insertMany().

Ordered vs Unordered Operations Bulk write operations can be either ordered or unordered.

With an ordered list of operations, MongoDB executes the operations serially. If an error occurs during the processing of one of the write operations, MongoDB will return without processing any remaining write operations in the list. See ordered Bulk Write

With an unordered list of operations, MongoDB can execute the operations in parallel, but this behavior is not guaranteed. If an error occurs during the processing of one of the write operations, MongoDB will continue to process remaining write operations in the list. See Unordered Bulk Write.

Executing an ordered list of operations on a sharded collection will generally be slower than executing an unordered list since with an ordered list, each operation must wait for the previous operation to finish.

By default, bulkWrite() performs ordered operations. To specify unordered write operations, set ordered: false in the options document.

bulkWrite() supports the following write operations:

- insertOne
- updateOne
- updateMany
- replaceOne
- deleteOne
- deleteMany

Each write operation is passed to bulkWrite() as a document in an array.

## Método bulkWrite()

Performs multiple write operations with controls for order of execution.

## Sintaxis

```
db.collection.bulkWrite(
  [ <operation 1>, <operation 2>, ... ],
  {
    writeConcern : <document>,
    ordered : <boolean>
  }
)
```

The ordered parameter specifies whether bulkWrite() will execute operations in order or not. By default, operations are executed in order.

## Práctica

```
> db.titulos.bulkWrite([
{
   insertOne: { "document": {
        titulo: "El Señor de los Anillos",
        autor: "J.R.R. Tolkien" }
   }
},
{
   updateOne: {
        filter: { autor: "Mario Vargas LLosa" },
        update: { $set: { nacionalidad: "Peru" } }
   }
},
{ deleteOne: { "filter": { autor: /Miguel/} } }
])
```