# Upserting Documents in MongoDB



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# Upserting Documents



## What is an 'upsert'?

- Portmanteau of 'update' and 'insert'
- Insert a new document, if an update can't be performed

### No upsert methods

- Update and replace methods accept an upsert field

#### Return document

upsertedId field



## Upserts with replaceOne()

```
> db.sessions.replaceOne(
  {"topic": "mongodb"},
  {"title": "MongoDB 101", "session_type": "workshop"},
  {"upsert": true}
  "matchedCount": 0,
  "modifiedCount": 0,
  "upsertedId": ObjectId("123xyz")
```

#### Sessions

```
"_id": ObjectId("123xyz"),
"title": "MongoDB 101",
"session_type": "workshop"
```



## Upserts with updateOne() and updateMany()

```
> db.sessions.updateOne(
  {"topic": "mongodb"},
  {$set: {"room": "Carp"}},
  {"upsert": true}
  "matchedCount": 0,
  "modifiedCount": 0,
  "upsertedId": ObjectID("123xyz")
```

#### Sessions

```
{
    "_id": ObjectId("123xyz"),
    "topic": "mongodb",
}    "room": "Carp"
}
```



## \$setOnInsert operator

```
> db.sessions.updateOne(
  {"topic": "mongodb"},
  {$set: {"room": "Carp"},
   $setOnInsert: {"seats": 40, "session_type": "workshop", "registered": 0}},
  {"upsert": true}
  "matchedCount": 0,
  "modifiedCount": 0,
  "upsertedId": ObjectID("123xyz")
```

```
Sessions
     "_id": ObjectId("123xyz"),
     "topic": "mongodb",
   } "room": "Carp",
   } "seats": 40,
      "session_type": "workshop",
      "registered": 0
```



## Demo



**Upserting documents** 



## Summary



An upsert will insert a new document if an update is not possible

upsert field

replaceOne() inserts the replacement document

updateOne() and updateMany()
construct a new document from the filter
and update

\$setOnInsert operator

**Default values** 

