MONGODB - OBJECTID

We have been using MongoDB Object Id in all the previous chapters. In this chapter we will understand the structure of ObjectId.

An **ObjectId** is a 12-byte BSON type having the following structure:

- The first 4 bytes representing the **seconds** since the unix epoch
- The next 3 bytes are the **machine identifier**
- The next 2 bytes consists of **process id**
- The last 3 bytes are a **random counter value**

MongoDB uses ObjectIds as the default value of **_id** field of each document which is generated while creation of any document. The complex combination of ObjectId makes all the _id fields unique.

Creating New ObjectId

To generate a new ObjectId use the following code:

```
>newObjectId = ObjectId()
```

The above statement returned the following uniquely generated id:

```
ObjectId("5349b4ddd2781d08c09890f3")
```

Instead of MongoDB generating the ObjectId, you can also provide a 12-byte id:

```
>myObjectId = ObjectId("5349b4ddd2781d08c09890f4")
```

Creation Timestamp of a Document

Since the _id ObjectId by default stores the 4 byte timestamp, in most cases you do not need to store the creation time of any document. You can fetch the creation time of a document using getTimestamp method:

```
>ObjectId("5349b4ddd2781d08c09890f4").getTimestamp()
```

This will return the creation time of this document in ISO Date format:

```
ISODate("2014-04-12T21:49:17Z")
```

Convert ObjectId to String

In some cases you may need the value of ObjectId in string format. To convert the ObjectId in string use the following code:

```
>newObjectId.str
```

The above code will return the string format of the Guid:

```
5349b4ddd2781d08c09890f3
```