

Is it better to save id of a document in another document as ObjectId or String

Lets take a simple "bad" example : lets assume I have 2 collections 'person' and 'address'. And lets assume in 'address' I want to store '_id' of the person the address is associated with. Is there any benefit to store this "referential key" item as ObjectId vs string in 'address' collection?

I feel like storing them as string should not hurt but I have not worked in mongo for very long and do not know if it will hurt down the road if I follow this pattern.

I read the post here : [Store _id as object or string in MongoDB?](#) And its said that ObjectId is faster, and I assume its true if you are fetching/updating using the ObjectId in parent collection(for eg. fetching/updating 'person' collection using person._id as ObjectId), but I couldn't find anything that suggests that same could be true if searching by string id representation in other collection(in our example search in address collection by person._id as string)

Your feedback is much appreciated.

mongodb

edited May 23 '17 at 12:31



Community ♦

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asked Mar 17 '16 at 4:31



Deewendra Shrestha

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- How is this a different question? An ObjectId is stored in 12-bytes. A string with the hexadecimal characters of an ObjectId is 24-bytes (just for characters, the plus trailing then plus size reference). More space, more time. Slower! That should not be difficult to work out. – [Blakes Seven](#) Mar 17 '16 at 4:38

You are right, was trying to work things out with ember data and didnt see much point in converting objectId to string and back to objectId and i was searching for convenience more than performance. This morning i did a search and this question has been asked in other form too. – [Deewendra Shrestha](#) Mar 17 '16 at 12:02

- For the record the answer you accepted here makes the other important point. You cannot match things together on different "types" without manually re-casting to either string or ObjectId values. Personally I really prefer all external API to use the extended JSON form { "_id": { "\$oid": "56ea9e8bb1e015d13b376db5" } } since if my client can actually deserialize back to an ObjectId then I let it know that is what the data actually is. – [Blakes Seven](#) Mar 17 '16 at 12:10

3 Answers

Regardless of performance, you should store the "referential key" in the same format as the _id field that you are referring too. That means that if your referred document is:

```
{ _id: ObjectId("68746287..."), value: 'foo' }
```

then you'd refer to it as:

```
{ _id: ObjectId(...parent document id...), subDoc: ObjectId("68746287...") }
```

If the document that you're pointing to has a string as an ID, then it'd look like:

```
{ _id: "derick-address-1", value: 'foo' }
```

then you'd refer to it as:

```
{ _id: ObjectId(...parent document id...), subDoc: "derick-address-1" }
```

Besides that, because you're talking about persons and addresses, it might make more sense to *not* have them in two documents altogether, but instead embed the document:

```
{ _id: ObjectId(...parent document id...),
  'name' : 'Derick',
  'addresses' : [
    { 'type' : 'Home', 'street' : 'Victoria Road' },
    { 'type' : 'Work', 'street' : 'King William Street' },
  ]
}
```

answered Mar 17 '16 at 9:36



Derick

23.5k 5 45 67

As for use string as id of document, in [meteor collection](#), you could generate the document id either `Random.id()` as string or `Meteor.Collection.ObjectId()` as `ObjectId`.

In this discussion loop, [Mongodb string id vs ObjectId](#), here is one good summary,

ObjectId Pros

- it has an embedded timestamp in it.

- it's an object, and a little more difficult to manipulate in practice.
- there will be times when you forget to wrap your string in `new ObjectId()`
- it requires server side object creation to maintain `_id` uniqueness
- which makes generating them client-side by minimongo problematic

String Pros

- developers can create domain specific `_id` topologies

String Cons

- developer has to ensure uniqueness of `_ids`
- `findAndModify()` and `getNextSequence()` queries may be invalidated

All those information above is based on the `meteor` framework. For MongoDB, it is better to use `ObjectId`, reasons are in the question linked in your question.

answered Mar 17 '16 at 6:07



[zangw](#)

19.2k 7 69 98

Storing it as `ObjectId` is beneficial. It is faster as `ObjectId` size is 12 bytes compared to string which takes 24 bytes.

Also, You should try to de-normalize your collections so that you don't need to make 2 collections (Opposite to RDBMS).

Something like this might be better in general:

```
{ _id : "1",
  person : {
    Name : "abc",
    age: 20
  },
  address : {
    street : "1st main",
    city: "Bangalore",
    country: "India"
  }
}
```

But again, it depends on your use case. This might be not suitable sometimes.

Hope that helps! :)

answered Mar 17 '16 at 6:08



[Kaushal](#)

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