MongoDB Data types

Date

Date

The mongo shell provides various methods to return the date, either as a string or as a Date object:

- · Date() method which returns the current date as a string.
- new Date() constructor which returns a Date object using the ISODate() wrapper.
- ISODate() constructor which returns a Date object using the ISODate() wrapper.

ObjectId

ObjectId

The mongo shell provides the ObjectId() wrapper class around the ObjectId data type. To generate a new ObjectId, use the following operation in the mongo shell:

new ObjectId

NumberInt & NumberDecimal

NumberInt

The mongo shell treats all numbers as floating-point values by default. The mongo shell provides the NumberInt() constructor to explicitly specify 32-bit integers.

NumberDecimal

New in version 3.4.

The mongo shell treats all numbers as 64-bit floating-point double values by default. The mongo shell provides the NumberDecimal() constructor to explicitly specify 128-bit decimal-based floating-point values capable of emulating decimal rounding with exact precision. This functionality is intended for applications that handle monetary data, such as financial, tax, and scientific computations.

The decimal BSON type uses the IEEE 754 decimal 128 floating-point numbering format which supports 34 decimal digits (i.e. significant digits) and an exponent range of -6143 to +6144.

The NumberDecimal() constructor accepts the decimal value as a string:

NumberLong

NumberLong

The mongo shell treats all numbers as floating-point values by default. The mongo shell provides the NumberLong() wrapper to handle 64-bit integers.

The Number Long() wrapper accepts the long as a string:

NumberLong("2090845886852")

Instanceof & typeof

Check Types in the mongo Shell

To determine the type of fields, the mongo shell provides the instanceof and typeof operators.

instanceof

instance of returns a boolean to test if a value is an instance of some type.

For example, the following operation tests whether the _id field is an instance of type ObjectId:

mydoc._id instanceof ObjectId

The operation returns true.

typeof

typeof returns the type of a field.

For example, the following operation returns the type of the _id field:

typeof mydoc._id

In this case typeof will return the more generic object type rather than ObjectId type.