

Export and Import in MongoDB

We may export the full collection or specific field of collection as a CSV or JSON file. And vice versa may import a CSV or JSON file into a collection.

mongoexport command to Export Data from a Collection

mongoexport command is used to export MongoDB Collection data to a CSV or JSON file. By default, the mongoexport command connects to mongod instance running on the localhost port number 27017.

Syntax

```
mongoexport --db DB_NAME --collection COLLECTION_name --fields  
Field_name(s) --type=[csv or JSON] --out=Name-Path-Output-File
```

where,

DB_NAME – Name of the Database of the Collection to be exported

COLLECTION_name - Name of Collection of DB_NAME to be exported

Field_name(s) - Name of the Field (or multiple fields separated by comma (,)) to be exported. It is optional in case of CSV file. If not specified, all the fields of the collection will be exported to JSON file.

Type – CSV or JSON format

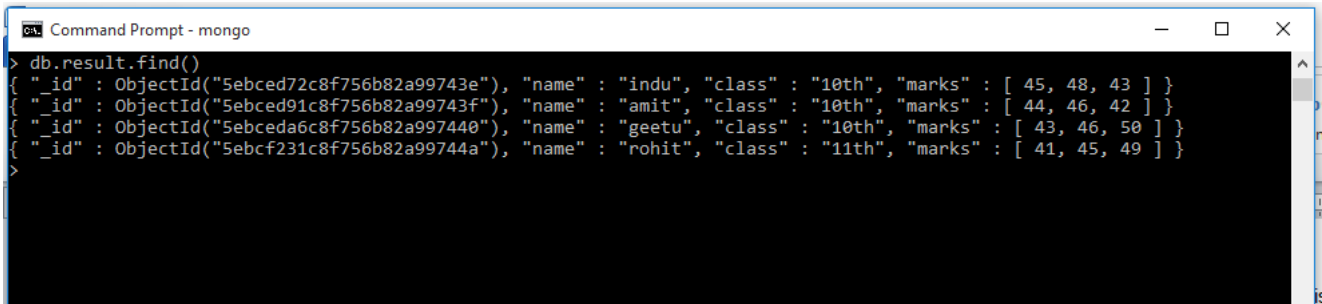
Name-Path-Output-File – Name and path of the output (exported) file. It is also optional. But it is suggested to properly specify the name and path of the exported file.

When exporting to CSV format, must specify the fields in the documents to be exported otherwise it will display error.

When exporting to JSON format, `_id` field will also be exported by default. While the same will not be exported if exporting as CSV file until not specified in field list.

Example

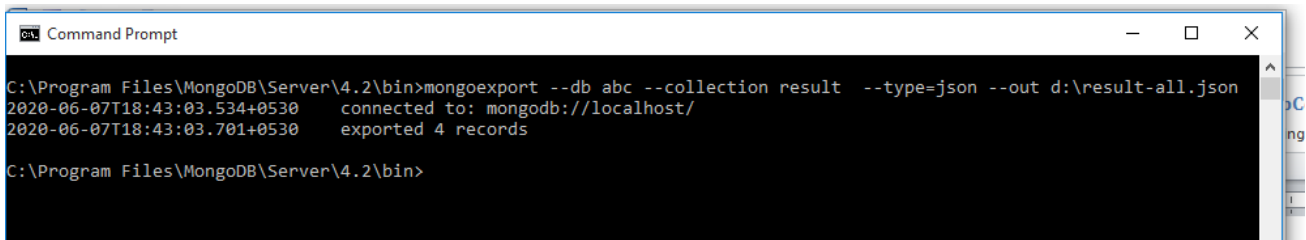
We have a result collection in abc database having multiple fields as displayed here:



```
Command Prompt - mongo
> db.result.find()
{ "_id" : ObjectId("5ebced72c8f756b82a99743e"), "name" : "indu", "class" : "10th", "marks" : [ 45, 48, 43 ] }
{ "_id" : ObjectId("5ebced91c8f756b82a99743f"), "name" : "amit", "class" : "10th", "marks" : [ 44, 46, 42 ] }
{ "_id" : ObjectId("5ebceda6c8f756b82a997440"), "name" : "geetu", "class" : "10th", "marks" : [ 43, 46, 50 ] }
{ "_id" : ObjectId("5ebcf231c8f756b82a99744a"), "name" : "rohit", "class" : "11th", "marks" : [ 41, 45, 49 ] }
```

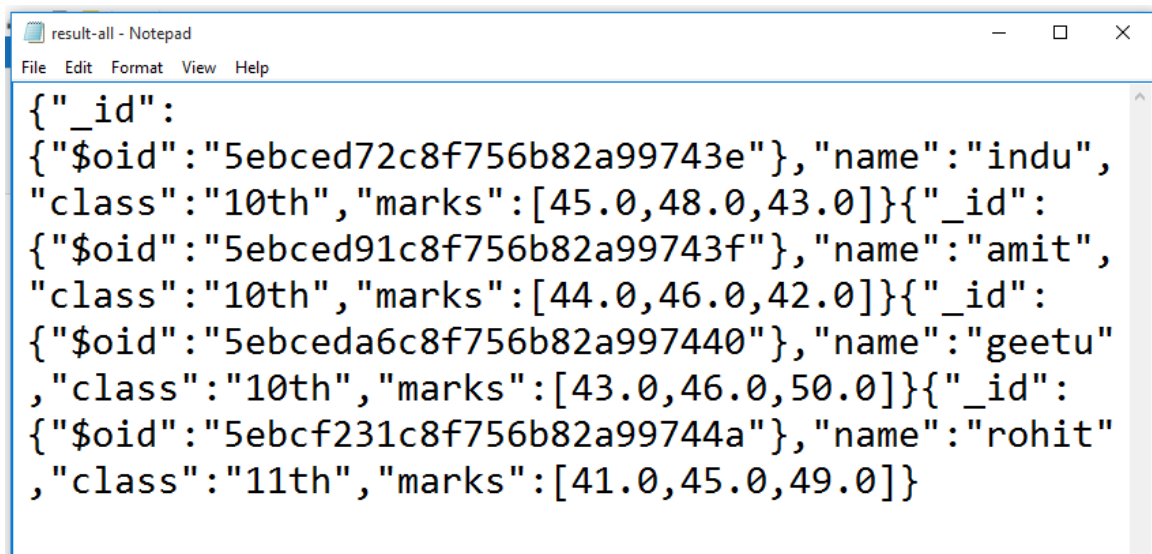
1. Lets export the result collection as JSON file result-all.json, means all the fields

mongoexport --db abc --collection result --type=json --out d:\result-all.json



```
Command Prompt
C:\Program Files\MongoDB\Server\4.2\bin>mongoexport --db abc --collection result --type=json --out d:\result-all.json
2020-06-07T18:43:03.534+0530    connected to: mongodb://localhost/
2020-06-07T18:43:03.701+0530    exported 4 records
C:\Program Files\MongoDB\Server\4.2\bin>
```

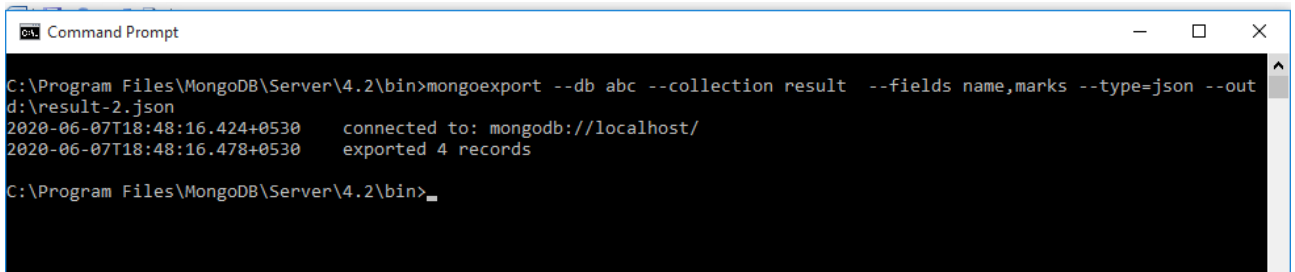
Shows that 4 records have been exported. And if we open, the created json file result-all.json, it will show like



```
result-all - Notepad
File Edit Format View Help
{"_id":
{"$oid":"5ebced72c8f756b82a99743e"},"name":"indu",
"class":"10th","marks":[45.0,48.0,43.0]}{"_id":
{"$oid":"5ebced91c8f756b82a99743f"},"name":"amit",
"class":"10th","marks":[44.0,46.0,42.0]}{"_id":
{"$oid":"5ebceda6c8f756b82a997440"},"name":"geetu",
"class":"10th","marks":[43.0,46.0,50.0]}{"_id":
{"$oid":"5ebcf231c8f756b82a99744a"},"name":"rohit",
"class":"11th","marks":[41.0,45.0,49.0]}
```

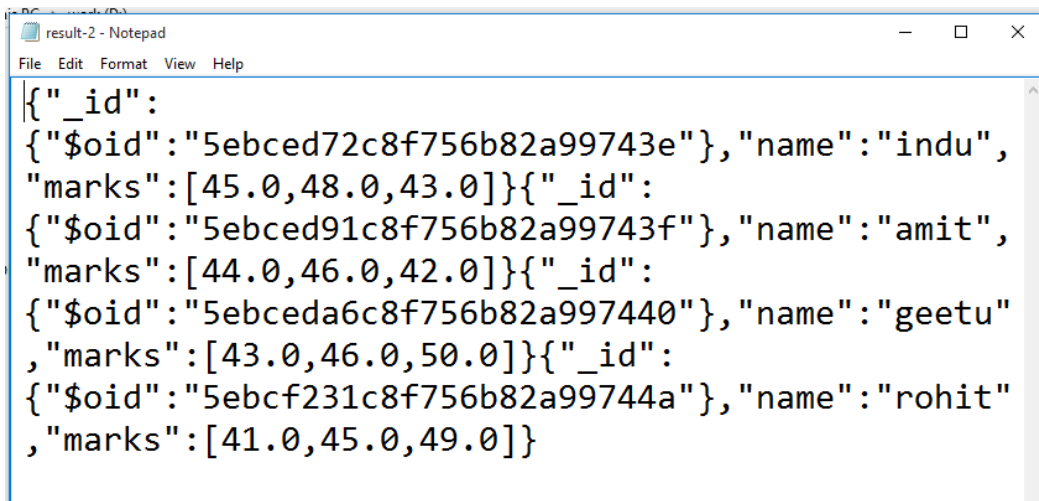
2. Lets export the only two fields, name and marks of result collection as JSON file result-2.json:

```
mongoexport --db abc --collection result --fields name,marks --type=json --out  
d:\result-2.json
```



```
Command Prompt
C:\Program Files\MongoDB\Server\4.2\bin>mongoexport --db abc --collection result --fields name,marks --type=json --out  
d:\result-2.json
2020-06-07T18:48:16.424+0530    connected to: mongodb://localhost/
2020-06-07T18:48:16.478+0530    exported 4 records
C:\Program Files\MongoDB\Server\4.2\bin>
```

Shows that 4 records have been exported but here only 2 fields name and marks, will be exported which may be seen in result-2.json:



```
result-2 - Notepad
File Edit Format View Help
{"_id":
{"$oid":"5ebced72c8f756b82a99743e"},"name":"indu",
"marks":[45.0,48.0,43.0]}{"_id":
{"$oid":"5ebced91c8f756b82a99743f"},"name":"amit",
"marks":[44.0,46.0,42.0]}{"_id":
{"$oid":"5ebceda6c8f756b82a997440"},"name":"geetu"
,"marks":[43.0,46.0,50.0]}{"_id":
{"$oid":"5ebcf231c8f756b82a99744a"},"name":"rohit"
,"marks":[41.0,45.0,49.0]}
```

_id field will be exported by default irrespective of the number of fields of collection specified for export.

3. Lets export the two fields, name and marks of result collection as CSV file result-2.csv :

```
mongoexport --db abc --collection result --fields name,marks --type=csv --out  
d:\result-2.csv
```

```
Command Prompt
C:\Program Files\MongoDB\Server\4.2\bin>mongoexport --db abc --collection result --fields name,marks --type=csv --out d:\result-2.csv
2020-06-07T18:55:05.499+0530   connected to: mongodb://localhost/
2020-06-07T18:55:05.518+0530   exported 4 records
C:\Program Files\MongoDB\Server\4.2\bin>
```

Shows that 4 records have been exported which may be seen in result-2.csv:

(i) If opened in notepad

```
result-2 - Notepad
File Edit Format View Help
name,marksindu,"[45.0,48.0,43.0]"
amit,"[44.0,46.0,42.0]"geetu,"[43.0,46.0,50.0]"
rohit,"[41.0,45.0,49.0]"
```

(ii) If opened in excel

	A	B	C	D	E	F	G	H	I	J
1	name	marks								
2	indu	[45.0,48.0,43.0]								
3	amit	[44.0,46.0,42.0]								
4	geetu	[43.0,46.0,50.0]								
5	rohit	[41.0,45.0,49.0]								
6										
7										
8										
9										
10										

Note : _id field will not be exported by default until not specified.

```
Command Prompt
C:\Program Files\MongoDB\Server\4.2\bin>mongoexport --db abc --collection result --fields _id,name,marks --type=csv --out d:\result-id.csv
2020-06-07T19:00:05.607+0530   connected to: mongodb://localhost/
2020-06-07T19:00:05.626+0530   exported 4 records
C:\Program Files\MongoDB\Server\4.2\bin>
```

The screenshot shows the Microsoft Excel interface with the following table data:

	A	B	C	D	E	F
1	_id	name	marks			
2	ObjectId(5ebced72c8f756b82a99743e)	indu	[45.0,48.0,43.0]			
3	ObjectId(5ebced91c8f756b82a99743f)	amit	[44.0,46.0,42.0]			
4	ObjectId(5ebceda6c8f756b82a997440)	geetu	[43.0,46.0,50.0]			
5	ObjectId(5ebcf231c8f756b82a99744a)	rohit	[41.0,45.0,49.0]			
6						
7						

Assignment

1. How a collection is exported as JSON File?
2. How a collection is exported to CSV file? Can we omit the fields while exporting as CSV? Explain ?
3. What will happen to _id field while exporting as CSV and JSON file?