

MongoDB Physical Model

Schema for:

Model name: Parts_Project_Mongo_DB

Author: Jawid Version:

File name: MongoDB model Parts Project Mongo DB.json

File path: /Users/sayedjawidmortazawi/Desktop/Mongo Teamwork/MongoDB model

Parts_Project_Mongo_DB.json

Printed On: Tue Dec 01 2020 10:56:19 GMT+0100 (centraleuropeisk normaltid)

Created with: Hackolade - Visual data modeling for NoSQL and multimodel databases

1. Model

2. Databases

2.1 Undefined Database

2.1.2. Collections

- 2.1.2.1 customers
- 2.1.2.2 manufacturers
- 2.1.2.3 orders
- 2.1.2.4 products
- 2.1.2.5 retailers
- 2.1.2.6 stores

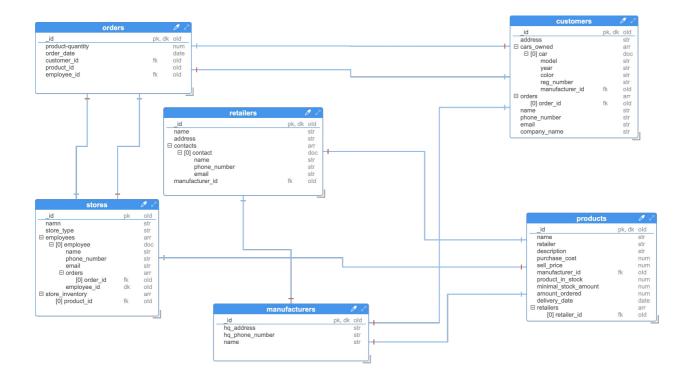
3. Relationships

- 3.1 fk customer. id to customer.cars owned.[0]
- 3.2 fk customer. id to orders.customer id
- 3.3 fk manufacturers. id to customers.cars owned.[0].manufacturer id
- 3.4 fk manufacturers. id to products.manufacturer id
- 3.5 fk manufacturers. id to retailers.manufacturer id
- 3.6 fk orders. id to customer.orders.[0]
- 3.7 fk orders. id to store.employees.[0].orders.[0]
- 3.8 fk products. id to store.product in stock.[0]
- 3.9 fk retailers. id to products.retailers.[0]
- 3.10 fk store.employees.[0].employee id to orders.employee id

1. MODEL

1.1 Model Parts Project Mongo DB

1.1.1 Parts Project Mongo DB Entity Relationship Diagram



1.1.2 Parts_Project_Mongo_DB Properties

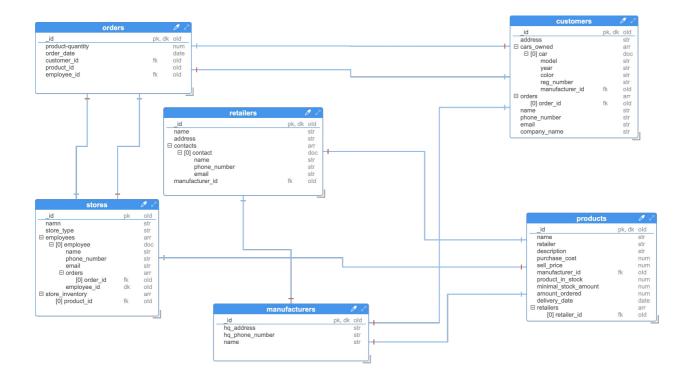
1.1.2.1 Details tab

PROPERTY	VALUE
Model name	Parts_Project_Mongo_DB
Technical name	
Description	
Author	Jawid
Version	
DB vendor	MongoDB
DB version	v4.4
Comments	

1.1.3 Parts_Project_Mongo_DB DB Definitions

2. DATABASES

2.1 Database Undefined Database



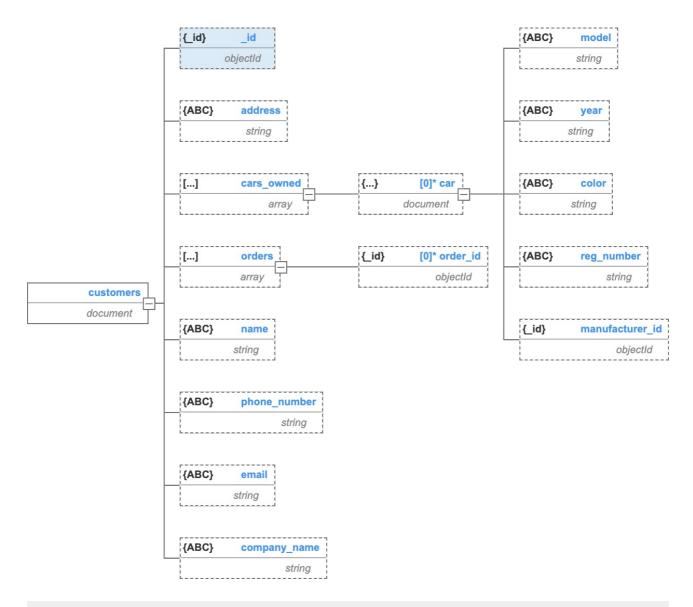
2.1.1 Undefined Database Properties

PROPERTY	VALUE
Database name	Undefined Database
Technical name	
Activated	
Enable sharding	
Description	
Comments	

2.1.2 Undefined Database Collections

2.1.2.1 Collection customers

2.1.2.1.1 customers Tree Diagram



2.1.2.1.2 customers Properties

PROPERTY	VALUE
Collection name	customers
Technical name	
Activated	true
Id	
Description	
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.1.3 customers Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectId	false			
address	string	false			
cars_owned	array	false			
[0] car	document	false			
model	string	false			
year	string	false			
color	string	false			
reg_number	string	false			
manufacturer_id	objectId	false			
orders	array	false			
[0] order_id	objectId	false			
name	string	false			
phone_number	string	false			
email	string	false			
company_name	string	false			

2.1.2.1.3.1 Field _id

2.1.2.1.3.1.1 _id Tree Diagram



2.1.2.1.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.1.3.2 Field address

2.1.2.1.3.2.1 address Tree Diagram

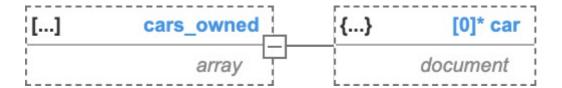


2.1.2.1.3.2.2 address properties

PROPERTY	VALUE
Name	address
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.3 Field cars_owned

2.1.2.1.3.3.1 cars_owned Tree Diagram



2.1.2.1.3.3.2 cars_owned Hierarchy

Parent field: customers

Child field(s):

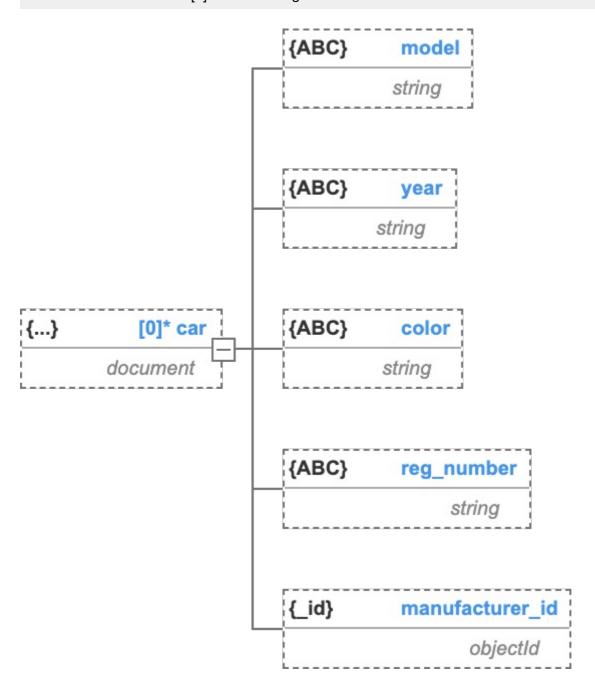
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] car	document	false			

2.1.2.1.3.3.3 cars_owned properties

PROPERTY	VALUE
Name	cars_owned
Technical name	
Activated	true
Id	
Туре	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.1.3.4 Field [0] car

2.1.2.1.3.4.1 [0] car Tree Diagram



2.1.2.1.3.4.2 [0] car Hierarchy

Parent field: cars_owned

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
model	string	false			
year	string	false			
color	string	false			
reg_number	string	false			
manufacturer_id	objectId	false	fk		

2.1.2.1.3.4.3 [0] car properties

PROPERTY	VALUE
Display name	car
Activated	true
Id	
Туре	document
Description	
Dependencies	
Primary key	false
Foreign collection	
Foreign field	_id
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.1.3.5 Field model

2.1.2.1.3.5.1 model Tree Diagram



2.1.2.1.3.5.2 model properties

PROPERTY	VALUE
Name	model
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.6 Field year

2.1.2.1.3.6.1 year Tree Diagram



2.1.2.1.3.6.2 year properties

PROPERTY	VALUE
Name	year
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.7 Field color

2.1.2.1.3.7.1 color Tree Diagram



2.1.2.1.3.7.2 color properties

PROPERTY	VALUE
Name	color
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.8 Field reg_number

2.1.2.1.3.8.1 reg_number Tree Diagram



2.1.2.1.3.8.2 reg_number properties

PROPERTY	VALUE
Name	reg_number
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.9 Field manufacturer_id

2.1.2.1.3.9.1 manufacturer_id Tree Diagram

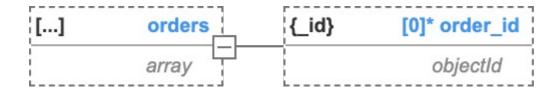


2.1.2.1.3.9.2 manufacturer_id properties

PROPERTY	VALUE
Name	manufacturer_id
Technical name	
Activated	true
ld	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	manufacturers
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.1.3.10 Field orders

2.1.2.1.3.10.1 orders Tree Diagram



2.1.2.1.3.10.2 orders Hierarchy

Parent field: customers

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] order_id	objectId	false	fk		

2.1.2.1.3.10.3 orders properties

PROPERTY	VALUE
Name	orders
Technical name	
Activated	true
ld	
Туре	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.1.3.11 Field [0] order_id

2.1.2.1.3.11.1 [0] order_id Tree Diagram



2.1.2.1.3.11.2 [0] order_id properties

PROPERTY	VALUE
Display name	order_id
Activated	true
ld	
Туре	objectId
Description	
Dependencies	
Primary key	false
Foreign collection	orders
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.1.3.12 Field name

2.1.2.1.3.12.1 name Tree Diagram



2.1.2.1.3.12.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.13 Field phone_number

2.1.2.1.3.13.1 phone_number Tree Diagram



2.1.2.1.3.13.2 phone_number properties

PROPERTY	VALUE
Name	phone_number
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.14 Field email

2.1.2.1.3.14.1 email Tree Diagram



2.1.2.1.3.14.2 email properties

PROPERTY	VALUE
Name	email
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.3.15 Field company_name

2.1.2.1.3.15.1 company_name Tree Diagram



2.1.2.1.3.15.2 company_name properties

PROPERTY	VALUE
Name	company_name
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.1.4 customers JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
"type": "object",
"title": "customers",
"additionalProperties": false,
"properties": {
  "_id": {
     "type": "string",
     "pattern": "^[a-fA-F0-9]{24}$"
  },
  "address": {
     "type": "string"
  "cars_owned": {
     "type": "array",
     "additionalItems": true,
     "uniqueItems": false,
     "items": {
        "type": "object",
        "properties": {
           "model": {
             "type": "string"
          },
           "year": {
```

```
"type": "string"
             },
             "color": {
                "type": "string"
             "reg_number": {
                "type": "string"
             "manufacturer_id": {
                "type": "string",
                "pattern": "^[a-fA-F0-9]{24}$"
             }
          },
           "additionalProperties": false
     },
     "orders": {
        "type": "array",
        "additionalItems": true,
        "uniqueltems": false,
        "items": {
           "type": "string",
           "pattern": "^[a-fA-F0-9]{24}$"
     },
     "name": {
        "type": "string"
     "phone_number": {
        "type": "string"
     },
     "email": {
        "type": "string"
     "company_name": {
        "type": "string"
}
```

2.1.2.1.5 customers JSON data

```
" id": ObjectId("507f1f77bcf86cd799439011"),
  "address": "Lorem",
  "cars_owned": [
       "model": "Lorem",
       "year": "Lorem",
       "color": "Lorem",
       "reg_number": "Lorem",
       "manufacturer id": ObjectId("507f1f77bcf86cd799439011")
    }
  ],
  "orders": [
     ObjectId("507f1f77bcf86cd799439011")
  ],
  "name": "Lorem",
  "phone_number": "Lorem",
  "email": "Lorem",
  "company_name": "Lorem"
}
```

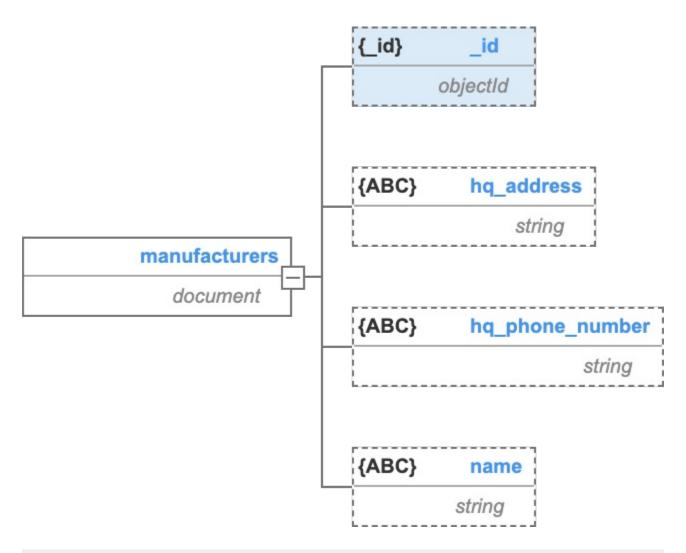
2.1.2.1.6 customers Target Script

```
db.createCollection( "customers",{
  "storageEngine": {
     "wiredTiger": {}
  },
  "capped": false,
  "validator": {
     "$jsonSchema": {
       "bsonType": "object",
       "title": "customers",
       "additionalProperties": false,
       "properties": {
          "_id": {
             "bsonType": "objectId"
          "address": {
             "bsonType": "string"
          "cars_owned": {
             "bsonType": "array",
             "additionalItems": true,
             "uniqueltems": false,
             "items": {
               "bsonType": "object",
               "properties": {
                  "model": {
                    "bsonType": "string"
                  "year": {
                    "bsonType": "string"
```

```
"color": {
                    "bsonType": "string"
                  "reg_number": {
                    "bsonType": "string"
                  "manufacturer id": {
                    "bsonType": "objectId"
                "additionalProperties": false
             }
          },
          "orders": {
             "bsonType": "array",
             "additionalItems": true,
             "uniqueltems": false,
             "items": {
               "bsonType": "objectId"
             }
          },
          "name": {
             "bsonType": "string"
          "phone_number": {
             "bsonType": "string"
          "email": {
             "bsonType": "string"
          "company_name": {
             "bsonType": "string"
     }
  "validationLevel": "off",
  "validationAction": "warn"
});
```

2.1.2.2 Collection manufacturers

2.1.2.2.1 manufacturers Tree Diagram



2.1.2.2.2 manufacturers Properties

PROPERTY	VALUE
Collection name	manufacturers
Technical name	
Activated	true
Id	
Description	
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.2.3 manufacturers Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectId	false			
hq_address	string	false			
hq_phone_number	string	false			
name	string	false			

2.1.2.2.3.1 Field _id

2.1.2.2.3.1.1 _id Tree Diagram



2.1.2.2.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.2.3.2 Field hq_address

2.1.2.2.3.2.1 hq_address Tree Diagram



2.1.2.2.3.2.2 hq_address properties

PROPERTY	VALUE
Name	hq_address
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.3.3 Field hq_phone_number

2.1.2.2.3.3.1 hq_phone_number Tree Diagram



2.1.2.2.3.3.2 hq_phone_number properties

PROPERTY	VALUE
Name	hq_phone_number
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.3.4 Field name

2.1.2.2.3.4.1 name Tree Diagram



2.1.2.2.3.4.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.2.4 manufacturers JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "manufacturers",
  "additionalProperties": false,
  "properties": {
     "_id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     "hq_address": {
        "type": "string"
     "hq_phone_number": {
        "type": "string"
     },
     "name": {
        "type": "string"
  }
}
```

2.1.2.2.5 manufacturers JSON data

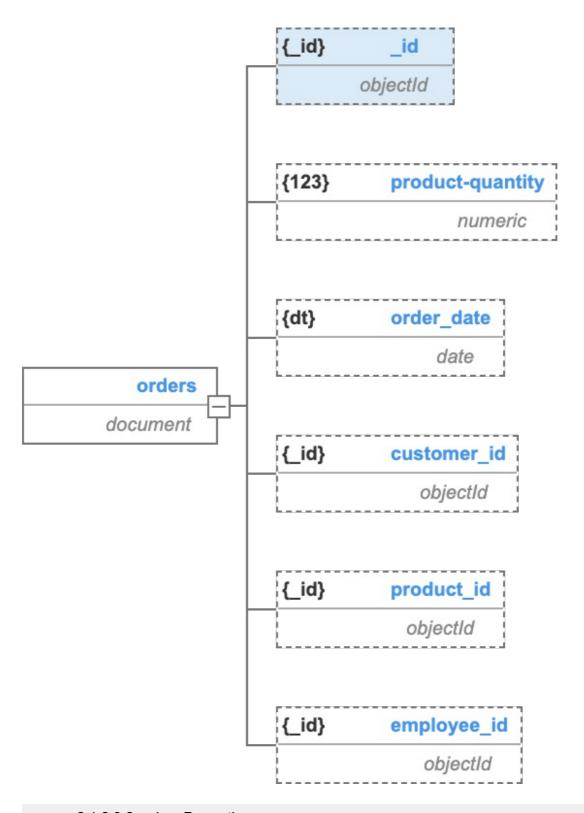
```
{
    "_id": ObjectId("507f1f77bcf86cd799439011"),
    "hq_address": "Lorem",
    "hq_phone_number": "Lorem",
    "name": "Lorem"
}
```

2.1.2.2.6 manufacturers Target Script

```
db.createCollection( "manufacturers",{
  "storageEngine": {
     "wiredTiger": {}
  },
  "capped": false,
  "validator": {
     "$jsonSchema": {
       "bsonType": "object",
       "title": "manufacturers",
       "additionalProperties": false,
       "properties": {
          "_id": {
             "bsonType": "objectId"
          "hq_address": {
             "bsonType": "string"
          "hq_phone_number": {
            "bsonType": "string"
          "name": {
             "bsonType": "string"
  "validationLevel": "off",
  "validationAction": "warn"
});
```

2.1.2.3 Collection orders

2.1.2.3.1 orders Tree Diagram



2.1.2.3.2 orders Properties

PROPERTY	VALUE
Collection name	orders
Technical name	
Activated	true
Id	
Description	
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.3.3 orders Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectId	false			
product-quantity	numeric	false			
order_date	date	false			
customer_id	objectId	false			
product_id	objectId	false			
employee_id	objectId	false			

2.1.2.3.3.1 Field _id

2.1.2.3.3.1.1 _id Tree Diagram



2.1.2.3.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Required Primary key	false true
· .	
Primary key	
Primary key Foreign collection	
Primary key Foreign collection Foreign field	
Primary key Foreign collection Foreign field Relationship type	

2.1.2.3.3.2 Field product-quantity

2.1.2.3.3.2.1 product-quantity Tree Diagram



2.1.2.3.3.2.2 product-quantity properties

PROPERTY	VALUE
Name	product-quantity
Technical name	
Activated	true
ld	
Туре	numeric
Subtype	
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.3.3.3 Field order_date

2.1.2.3.3.3.1 order_date Tree Diagram



2.1.2.3.3.3.2 order_date properties

PROPERTY	VALUE
Name	order_date
Technical name	
Activated	true
Id	
Туре	date
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.3.3.4 Field customer_id

2.1.2.3.3.4.1 customer_id Tree Diagram



2.1.2.3.3.4.2 customer_id properties

PROPERTY	VALUE
Name	customer_id
Technical name	
Activated	true
ld	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.3.3.5 Field product_id

2.1.2.3.3.5.1 product_id Tree Diagram



2.1.2.3.3.5.2 product_id properties

PROPERTY	VALUE
Name	product_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.3.3.6 Field employee_id

2.1.2.3.3.6.1 employee_id Tree Diagram



2.1.2.3.3.6.2 employee_id properties

PROPERTY	VALUE
Name	employee_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	stores
Foreign field	employee_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.3.4 orders JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
   "type": "object",
   "title": "orders",
   "additionalProperties": false,
   "properties": {
     "_id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     "product-quantity": {
        "type": "number"
     "order date": {
        "type": "string",
        "format": "date-time"
     },
     "customer_id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     "product id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     "employee_id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     }
  }
}
```

2.1.2.3.5 orders JSON data

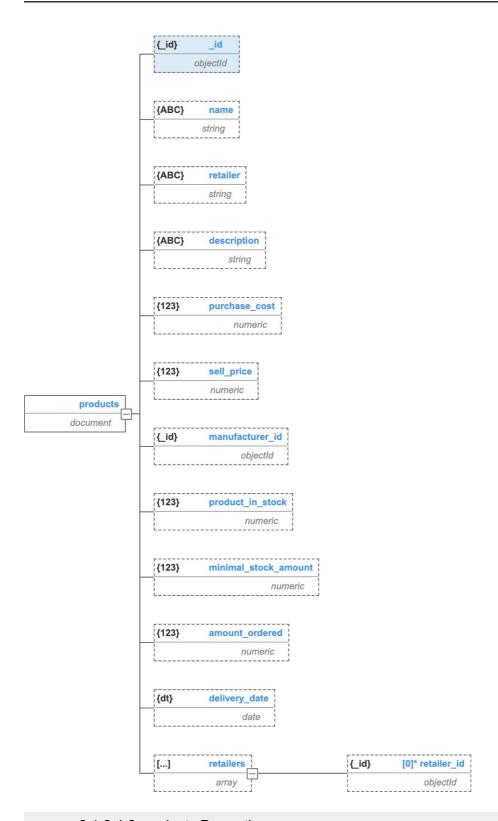
```
{
    "_id": ObjectId("507f1f77bcf86cd799439011"),
    "product-quantity": 87,
    "order_date": ISODate("2016-04-08T15:06:21.595Z"),
    "customer_id": ObjectId("507f1f77bcf86cd799439011"),
    "product_id": ObjectId("507f1f77bcf86cd799439011"),
    "employee_id": ObjectId("507f1f77bcf86cd799439011")
}
```

2.1.2.3.6 orders Target Script

```
db.createCollection( "orders",{
  "storageEngine": {
     "wiredTiger": {}
  },
  "capped": false,
  "validator": {
     "$jsonSchema": {
        "bsonType": "object",
        "title": "orders",
        "additionalProperties": false,
        "properties": {
          "_id": {
             "bsonType": "objectId"
          "product-quantity": {
             "bsonType": "number"
          "order_date": {
             "bsonType": "date"
          "customer id": {
             "bsonType": "objectId"
          "product_id": {
             "bsonType": "objectId"
          "employee_id": {
             "bsonType": "objectId"
       }
  },
  "validationLevel": "off",
  "validationAction": "warn"
});
```

2.1.2.4 Collection products

2.1.2.4.1 products Tree Diagram



2.1.2.4.2 products Properties

PROPERTY	VALUE
Collection name	products
Technical name	
Activated	true
Id	
Description	
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.4.3 products Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectId	false			
name	string	false			
retailer	string	false			
description	string	false			
purchase_cost	numeric	false			
sell_price	numeric	false			
manufacturer_id	objectId	false			
product_in_stock	numeric	false			
minimal_stock_amount	numeric	false			
amount_ordered	numeric	false			
delivery_date	date	false			
retailers	array	false			
[0] retailer_id	objectId	false			

2.1.2.4.3.1 Field _id

2.1.2.4.3.1.1 _id Tree Diagram



2.1.2.4.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Required Primary key	false true
· .	
Primary key	
Primary key Foreign collection	
Primary key Foreign collection Foreign field	
Primary key Foreign collection Foreign field Relationship type	

2.1.2.4.3.2 Field name

2.1.2.4.3.2.1 name Tree Diagram



2.1.2.4.3.2.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.3 Field retailer

2.1.2.4.3.3.1 retailer Tree Diagram



2.1.2.4.3.3.2 retailer properties

PROPERTY	VALUE
Name	retailer
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.4 Field description

2.1.2.4.3.4.1 description Tree Diagram



2.1.2.4.3.4.2 description properties

PROPERTY	VALUE
Name	description
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.4.3.5 Field purchase_cost

2.1.2.4.3.5.1 purchase_cost Tree Diagram



2.1.2.4.3.5.2 purchase_cost properties

PROPERTY	VALUE
Name	purchase_cost
Technical name	
Activated	true
ld	
Туре	numeric
Subtype	
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.4.3.6 Field sell_price

2.1.2.4.3.6.1 sell_price Tree Diagram



2.1.2.4.3.6.2 sell_price properties

PROPERTY	VALUE
Name	sell_price
Technical name	
Activated	true
Id	
Туре	numeric
Subtype	
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.4.3.7 Field manufacturer_id

2.1.2.4.3.7.1 manufacturer_id Tree Diagram



2.1.2.4.3.7.2 manufacturer_id properties

PROPERTY	VALUE
Name	manufacturer_id
Technical name	
Activated	true
ld	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	manufacturers
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.4.3.8 Field product_in_stock

2.1.2.4.3.8.1 product in stock Tree Diagram



2.1.2.4.3.8.2 product_in_stock properties

PROPERTY	VALUE
Name	product_in_stock
Technical name	
Activated	true
Id	
Туре	numeric
Subtype	
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.4.3.9 Field minimal stock amount

2.1.2.4.3.9.1 minimal_stock_amount Tree Diagram



2.1.2.4.3.9.2 minimal_stock_amount properties

PROPERTY	VALUE
Name	minimal_stock_amount
Technical name	
Activated	true
Id	
Туре	numeric
Subtype	
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.4.3.10 Field amount_ordered

2.1.2.4.3.10.1 amount_ordered Tree Diagram



2.1.2.4.3.10.2 amount_ordered properties

PROPERTY	VALUE
Name	amount_ordered
Technical name	
Activated	true
Id	
Туре	numeric
Subtype	
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Unit	
Min value	
Excl min	false
Max value	
Excl max	false
Multiple of	
Divisible by	
Enum	
Sample	
Comments	

2.1.2.4.3.11 Field delivery_date

2.1.2.4.3.11.1 delivery_date Tree Diagram

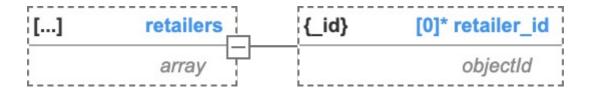


2.1.2.4.3.11.2 delivery_date properties

PROPERTY	VALUE
Name	delivery_date
Technical name	
Activated	true
Id	
Туре	date
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.4.3.12 Field retailers

2.1.2.4.3.12.1 retailers Tree Diagram



2.1.2.4.3.12.2 retailers Hierarchy

Parent field: products

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] retailer_id	objectId	false	fk		

2.1.2.4.3.12.3 retailers properties

PROPERTY	VALUE
Name	retailers
Technical name	
Activated	true
Id	
Туре	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.4.3.13 Field [0] retailer_id

2.1.2.4.3.13.1 [0] retailer_id Tree Diagram



2.1.2.4.3.13.2 [0] retailer_id properties

PROPERTY	VALUE
Display name	retailer_id
Activated	true
ld	
Туре	objectId
Description	
Dependencies	
Primary key	false
Foreign collection	retailers
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.4.4 products JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "products",
   "additionalProperties": false,
   "properties": {
     "_id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     },
     "name": {
        "type": "string"
     "retailer": {
        "type": "string"
     "description": {
        "type": "string"
      "purchase_cost": {
        "type": "number"
     },
     "sell price": {
        "type": "number"
     "manufacturer_id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     },
     "product_in_stock": {
        "type": "number"
     "minimal_stock_amount": {
        "type": "number"
     "amount ordered": {
        "type": "number"
     "delivery_date": {
        "type": "string",
        "format": "date-time"
     },
     "retailers": {
        "type": "array",
        "additionalItems": true,
        "uniqueltems": false,
        "items": {
           "type": "string",
           "pattern": "^[a-fA-F0-9]{24}$"
     }
  }
}
```

2.1.2.4.5 products JSON data

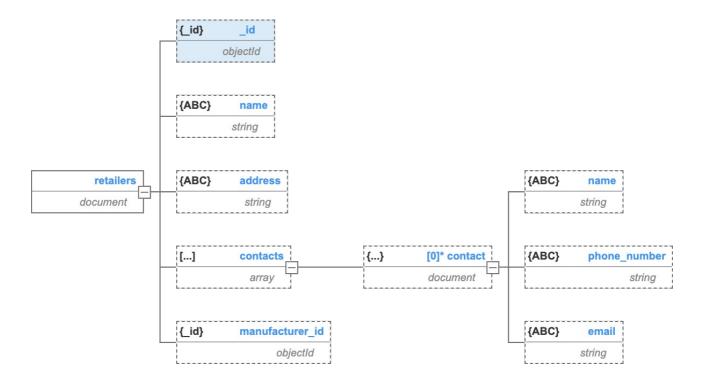
2.1.2.4.6 products Target Script

```
db.createCollection( "products",{
  "storageEngine": {
     "wiredTiger": {}
  },
  "capped": false,
  "validator": {
     "$jsonSchema": {
       "bsonType": "object",
       "title": "products",
       "additionalProperties": false,
       "properties": {
          "_id": {
            "bsonType": "objectId"
         },
          "name": {
             "bsonType": "string"
          "retailer": {
             "bsonType": "string"
          },
          "description": {
            "bsonType": "string"
          "purchase_cost": {
             "bsonType": "number"
          "sell_price": {
             "bsonType": "number"
          "manufacturer id": {
```

```
"bsonType": "objectId"
          "product_in_stock": {
             "bsonType": "number"
          "minimal_stock_amount": {
             "bsonType": "number"
          "amount_ordered": {
             "bsonType": "number"
          "delivery_date": {
             "bsonType": "date"
          "retailers": {
             "bsonType": "array",
             "additionalItems": true,
             "uniqueItems": false,
             "items": {
               "bsonType": "objectId"
   "validationLevel": "off",
  "validationAction": "warn"
});
```

2.1.2.5 Collection retailers

2.1.2.5.1 retailers Tree Diagram



2.1.2.5.2 retailers Properties

PROPERTY	VALUE
Collection name	retailers
Technical name	
Activated	true
Id	
Description	
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.5.3 retailers Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectId	false			
name	string	false			
address	string	false			
contacts	array	false			
[0] contact	document	false			
name	string	false			
phone_number	string	false			
email	string	false			
manufacturer_id	objectId	false			

2.1.2.5.3.1 Field _id

2.1.2.5.3.1.1 _id Tree Diagram



2.1.2.5.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.5.3.2 Field name

2.1.2.5.3.2.1 name Tree Diagram



2.1.2.5.3.2.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.5.3.3 Field address

2.1.2.5.3.3.1 address Tree Diagram

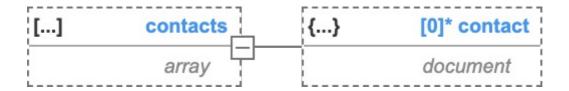


2.1.2.5.3.3.2 address properties

PROPERTY	VALUE
Name	address
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.5.3.4 Field contacts

2.1.2.5.3.4.1 contacts Tree Diagram



2.1.2.5.3.4.2 contacts Hierarchy

Parent field: retailers

Child field(s):

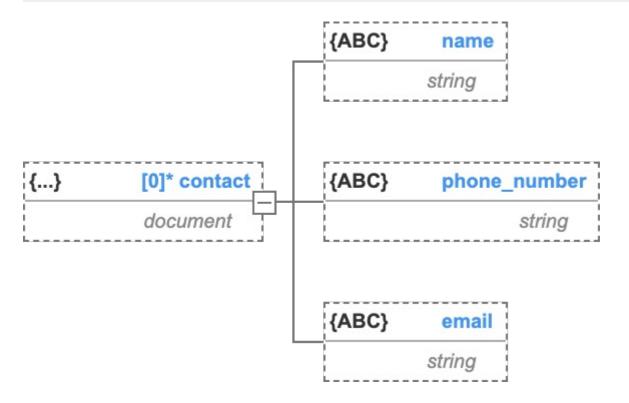
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] contact	document	false			

2.1.2.5.3.4.3 contacts properties

PROPERTY	VALUE
Name	contacts
Technical name	
Activated	true
ld	
Туре	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.5.3.5 Field [0] contact

2.1.2.5.3.5.1 [0] contact Tree Diagram



2.1.2.5.3.5.2 [0] contact Hierarchy

Parent field: contacts

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
name	string	false			
phone_number	string	false			
email	string	false			

2.1.2.5.3.5.3 [0] contact properties

PROPERTY	VALUE
Display name	contact
Activated	true
ld	
Туре	document
Description	
Dependencies	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.5.3.6 Field name

2.1.2.5.3.6.1 name Tree Diagram



2.1.2.5.3.6.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.5.3.7 Field phone_number

2.1.2.5.3.7.1 phone_number Tree Diagram



2.1.2.5.3.7.2 phone_number properties

PROPERTY	VALUE
Name	phone_number
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.5.3.8 Field email

2.1.2.5.3.8.1 email Tree Diagram



2.1.2.5.3.8.2 email properties

PROPERTY	VALUE
Name	email
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	name
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.5.3.9 Field manufacturer_id

2.1.2.5.3.9.1 manufacturer_id Tree Diagram



2.1.2.5.3.9.2 manufacturer_id properties

PROPERTY	VALUE
Name	manufacturer_id
Technical name	
Activated	true
ld	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	manufacturers
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.5.4 retailers JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
  "type": "object",
  "title": "retailers",
   "additionalProperties": false,
   "properties": {
     "_id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
     "name": {
        "type": "string"
     "address": {
        "type": "string"
     },
     "contacts": {
        "type": "array",
        "additionalItems": true,
        "uniqueltems": false,
        "items": {
           "type": "object",
           "properties": {
             "name": {
                "type": "string"
             "phone_number": {
                "type": "string"
             },
             "email": {
                "type": "string"
           "additionalProperties": false,
           "dependencies": {
             "email": [
                "name"
             ]
          }
        }
     "manufacturer id": {
        "type": "string",
        "pattern": "^[a-fA-F0-9]{24}$"
  }
}
```

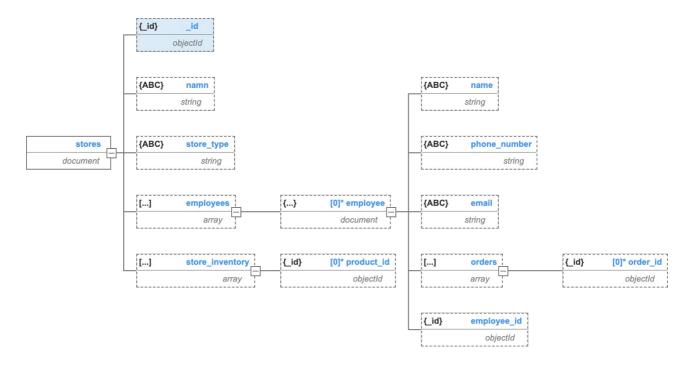
2.1.2.5.5 retailers JSON data

2.1.2.5.6 retailers Target Script

```
db.createCollection( "retailers",{
  "storageEngine": {
     "wiredTiger": {}
  },
  "capped": false,
  "validator": {
     "$jsonSchema": {
        "bsonType": "object",
        "title": "retailers",
        "additionalProperties": false,
        "properties": {
           "_id": {
             "bsonType": "objectId"
          },
           "name": {
             "bsonType": "string"
          "address": {
             "bsonType": "string"
           "contacts": {
             "bsonType": "array",
             "additionalItems": true,
             "uniqueItems": false,
             "items": {
                "bsonType": "object",
                "properties": {
                   "name": {
                     "bsonType": "string"
                  },
                   "phone_number": {
                     "bsonType": "string"
                  },
                   "email": {
                     "bsonType": "string"
                "additionalProperties": false,
                "dependencies": {
                  "email": [
                     "name"
             }
          },
          "manufacturer_id": {
             "bsonType": "objectId"
     }
  },
  "validationLevel": "off",
  "validationAction": "warn"
});
```

2.1.2.6 Collection stores

2.1.2.6.1 stores Tree Diagram



2.1.2.6.2 stores Properties

PROPERTY	VALUE
Collection name	stores
Technical name	
Activated	true
Id	
Description	
Database	
Capped	false
Size	
Max	
Storage engine	WiredTiger
Config String	
Validation level	Off
Validation action	Warn
Additional properties	false
Comments	

2.1.2.6.3 stores Fields

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
_id	objectId	false			
namn	string	false			
store_type	string	false			
employees	array	false			
[0] employee	document	false			
name	string	false			
phone_number	string	false			
email	string	false			
orders	array	false			
[0] order_id	objectId	false			
employee_id	objectId	false			
store_inventory	array	false			
[0] product_id	objectId	false			

2.1.2.6.3.1 Field _id

2.1.2.6.3.1.1 _id Tree Diagram



2.1.2.6.3.1.2 _id properties

PROPERTY	VALUE
Name	_id
Technical name	
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	true
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.6.3.2 Field namn

2.1.2.6.3.2.1 namn Tree Diagram



2.1.2.6.3.2.2 namn properties

PROPERTY	VALUE
Name	namn
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.6.3.3 Field store_type

2.1.2.6.3.3.1 store_type Tree Diagram

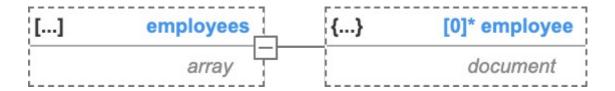


2.1.2.6.3.3.2 store_type properties

PROPERTY	VALUE
Name	store_type
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.6.3.4 Field employees

2.1.2.6.3.4.1 employees Tree Diagram



2.1.2.6.3.4.2 employees Hierarchy

Parent field: stores Child field(s):

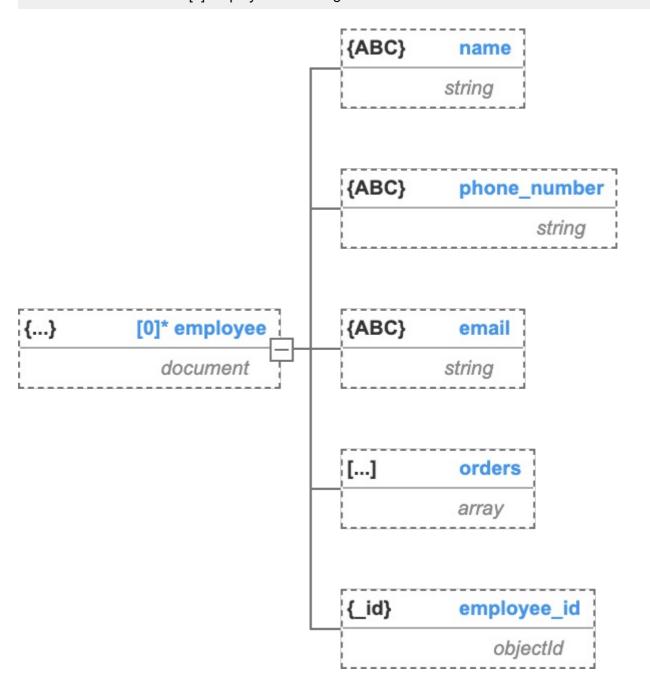
FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] employee	document	false			

2.1.2.6.3.4.3 employees properties

PROPERTY	VALUE
Name	employees
Technical name	
Activated	true
Id	
Туре	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.6.3.5 Field [0] employee

2.1.2.6.3.5.1 [0] employee Tree Diagram



2.1.2.6.3.5.2 [0] employee Hierarchy

Parent field: employees

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
name	string	false			
phone_number	string	false			
email	string	false			
orders	array	false			
employee_id	objectId	false	dk		

2.1.2.6.3.5.3 [0] employee properties

PROPERTY	VALUE
Display name	employee
Activated	true
Id	
Туре	document
Description	
Dependencies	
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
DBRef	
Min Properties	
Max Properties	
Additional properties	false
Comments	

2.1.2.6.3.6 Field name

2.1.2.6.3.6.1 name Tree Diagram



2.1.2.6.3.6.2 name properties

PROPERTY	VALUE
Name	name
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.6.3.7 Field phone_number

2.1.2.6.3.7.1 phone_number Tree Diagram



2.1.2.6.3.7.2 phone_number properties

PROPERTY	VALUE
Name	phone_number
Technical name	
Activated	true
ld	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.6.3.8 Field email

2.1.2.6.3.8.1 email Tree Diagram

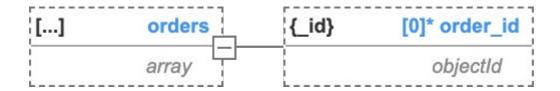


2.1.2.6.3.8.2 email properties

PROPERTY	VALUE
Name	email
Technical name	
Activated	true
Id	
Туре	string
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Min length	
Max length	
Pattern	
Format	
Enum	
Sample	
Comments	

2.1.2.6.3.9 Field orders

2.1.2.6.3.9.1 orders Tree Diagram



2.1.2.6.3.9.2 orders Hierarchy

Parent field: [0] employee

Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] order id	objectId	false	fk		

2.1.2.6.3.9.3 orders properties

PROPERTY	VALUE
Name	orders
Technical name	
Activated	true
ld	
Type	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.6.3.10 Field [0] order_id

2.1.2.6.3.10.1 [0] order_id Tree Diagram



2.1.2.6.3.10.2 [0] order_id properties

PROPERTY	VALUE
Display name	order_id
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Primary key	false
Foreign collection	orders
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.6.3.11 Field employee_id

2.1.2.6.3.11.1 employee_id Tree Diagram

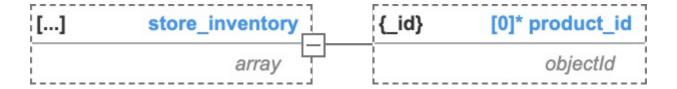


2.1.2.6.3.11.2 employee_id properties

PROPERTY	VALUE
Name	employee_id
Technical name	
Activated	true
ld	
Туре	objectId
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Default	
Sample	
Comments	

2.1.2.6.3.12 Field store_inventory

2.1.2.6.3.12.1 store inventory Tree Diagram



2.1.2.6.3.12.2 store_inventory Hierarchy

Parent field: stores Child field(s):

FIELD	TYPE	REQ	KEY	DESCRIPTION	COMMENTS
[0] product_id	objectId	false	fk		

2.1.2.6.3.12.3 store_inventory properties

PROPERTY	VALUE
Name	store_inventory
Technical name	
Activated	true
ld	
Type	array
Description	
Dependencies	
Required	false
Primary key	false
Foreign collection	
Foreign field	
Relationship type	
Min items	
Max items	
Unique items	false
Additional items	true
Comments	

2.1.2.6.3.13 Field [0] product_id

2.1.2.6.3.13.1 [0] product_id Tree Diagram



2.1.2.6.3.13.2 [0] product_id properties

PROPERTY	VALUE
Display name	product_id
Activated	true
Id	
Туре	objectId
Description	
Dependencies	
Primary key	false
Foreign collection	products
Foreign field	_id
Relationship type	Foreign Key
Default	
Sample	
Comments	

2.1.2.6.4 stores JSON Schema

```
"$schema": "http://json-schema.org/draft-04/schema#",
"type": "object",
"title": "stores",
"additionalProperties": false,
"properties": {
  "_id": {
     "type": "string",
     "pattern": "^[a-fA-F0-9]{24}$"
  },
  "namn": {
     "type": "string"
   "store type": {
     "type": "string"
  "employees": {
     "type": "array",
     "additionalItems": true,
     "uniqueItems": false,
     "items": {
        "type": "object",
        "properties": {
           "name": {
             "type": "string"
           "phone_number": {
             "type": "string"
          },
           "email": {
             "type": "string"
          },
           "orders": {
             "type": "array",
             "additionalItems": true,
             "uniqueltems": false,
             "items": {
                "type": "string",
                "pattern": "^[a-fA-F0-9]{24}$"
             }
          },
           "employee_id": {
             "type": "string",
             "pattern": "^[a-fA-F0-9]{24}$"
          }
        },
        "additionalProperties": false
     }
   "store_inventory": {
     "type": "array",
     "additionalItems": true,
     "uniqueltems": false,
     "items": {
```

2.1.2.6.5 stores JSON data

2.1.2.6.6 stores Target Script

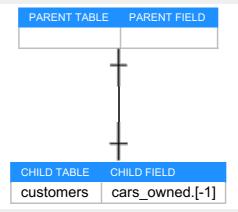
```
db.createCollection( "stores",{
  "storageEngine": {
    "wiredTiger": {}
  },
  "capped": false,
  "validator": {
    "$jsonSchema": {
       "bsonType": "object",
       "title": "stores",
       "additionalProperties": false,
       "properties": {
          "_id": {
            "bsonType": "objectId"
          "namn": {
             "bsonType": "string"
          "store_type": {
```

```
"bsonType": "string"
          },
          "employees": {
             "bsonType": "array",
             "additionalItems": true,
             "uniqueltems": false,
             "items": {
               "bsonType": "object",
                "properties": {
                  "name": {
                     "bsonType": "string"
                  "phone_number": {
                     "bsonType": "string"
                  "email": {
                     "bsonType": "string"
                  "orders": {
                     "bsonType": "array",
                     "additionalItems": true,
                     "uniqueltems": false,
                     "items": {
                       "bsonType": "objectId"
                  "employee_id": {
                     "bsonType": "objectId"
                "additionalProperties": false
            }
          "store_inventory": {
             "bsonType": "array",
             "additionalItems": true,
             "uniqueltems": false,
             "items": {
               "bsonType": "objectId"
    }
  "validationLevel": "off",
  "validationAction": "warn"
});
```

3. RELATIONSHIPS

3.1 Relationship fk customer._id to customer.cars_owned.[0]

3.1.1 fk customer._id to customer.cars_owned.[0] Diagram

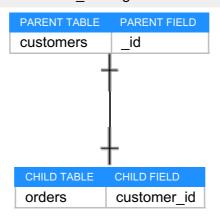


3.1.2 fk customer._id to customer.cars_owned.[0] Properties

PROPERTY	VALUE
Name	fk customerid to customer.cars_owned.[0]
Description	
Parent Collection	
Parent field	
Parent Cardinality	1
Child Collection	customers
Child field	
Child Cardinality	1
Comments	

3.2 Relationship fk customer_id to orders.customer_id

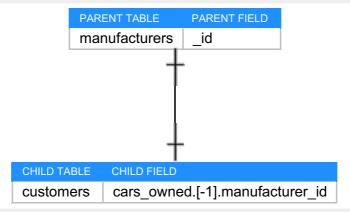
3.2.1 fk customer_id to orders.customer_id Diagram



3.2.2 fk customer_id to orders.customer_id Properties

PROPERTY	VALUE
Name	fk customer_id to orders.customer_id
Description	
Parent Collection	customers
Parent field	_id
Parent Cardinality	1
Child Collection	orders
Child field	customer_id
Child Cardinality	1
Comments	

- 3.3 Relationship fk manufacturers. id to customers.cars owned.[0].manufacturer id
 - 3.3.1 fk manufacturers._id to customers.cars_owned.[0].manufacturer_id Diagram

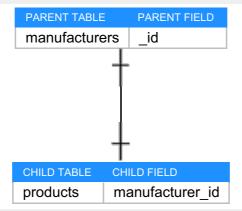


3.3.2 fk manufacturers. id to customers.cars owned.[0].manufacturer id Properties

PROPERTY	VALUE
Name	fk manufacturersid to customers.cars_owned.[0].manufacturer_id
Description	
Parent Collection	manufacturers
Parent field	_id
Parent Cardinality	1
Child Collection	customers
Child field	manufacturer_id
Child Cardinality	1
Comments	

3.4 Relationship fk manufacturers._id to products.manufacturer_id

3.4.1 fk manufacturers._id to products.manufacturer_id Diagram

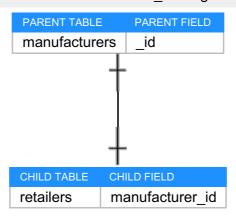


3.4.2 fk manufacturers._id to products.manufacturer_id Properties

PROPERTY	VALUE
Name	fk manufacturersid to products.manufacturer_id
Description	
Parent Collection	manufacturers
Parent field	_id
Parent Cardinality	1
Child Collection	products
Child field	manufacturer_id
Child Cardinality	1
Comments	

3.5 Relationship fk manufacturers._id to retailers.manufacturer_id

3.5.1 fk manufacturers._id to retailers.manufacturer_id Diagram

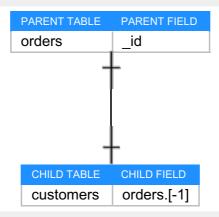


3.5.2 fk manufacturers._id to retailers.manufacturer_id Properties

PROPERTY	VALUE
Name	fk manufacturersid to retailers.manufacturer_id
Description	
Parent Collection	manufacturers
Parent field	_id
Parent Cardinality	1
Child Collection	retailers
Child field	manufacturer_id
Child Cardinality	1
Comments	

3.6 Relationship fk orders. id to customer.orders.[0]

3.6.1 fk orders._id to customer.orders.[0] Diagram

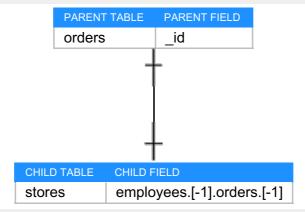


3.6.2 fk orders. id to customer.orders.[0] Properties

PROPERTY	VALUE
Name	fk ordersid to customer.orders.[0]
Description	
Parent Collection	orders
Parent field	_id
Parent Cardinality	1
Child Collection	customers
Child field	
Child Cardinality	1
Comments	

3.7 Relationship fk orders._id to store.employees.[0].orders.[0]

3.7.1 fk orders._id to store.employees.[0].orders.[0] Diagram

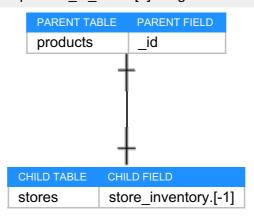


3.7.2 fk orders._id to store.employees.[0].orders.[0] Properties

PROPERTY	VALUE
Name	fk ordersid to store.employees.[0].orders.[0]
Description	
Parent Collection	orders
Parent field	_id
Parent Cardinality	1
Child Collection	stores
Child field	
Child Cardinality	1
Comments	

3.8 Relationship fk products._id to store.product_in_stock.[0]

3.8.1 fk products._id to store.product_in_stock.[0] Diagram

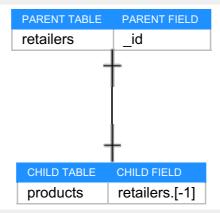


3.8.2 fk products._id to store.product_in_stock.[0] Properties

PROPERTY	VALUE
Name	fk productsid to store.product_in_stock.[0]
Description	
Parent Collection	products
Parent field	_id
Parent Cardinality	1
Child Collection	stores
Child field	
Child Cardinality	1
Comments	

3.9 Relationship fk retailers. id to products.retailers.[0]

3.9.1 fk retailers._id to products.retailers.[0] Diagram

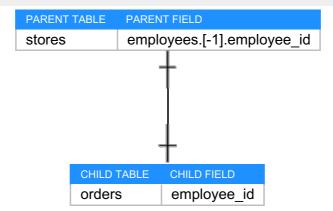


3.9.2 fk retailers. id to products.retailers.[0] Properties

PROPERTY	VALUE
Name	fk retailersid to products.retailers.[0]
Description	
Parent Collection	retailers
Parent field	_id
Parent Cardinality	1
Child Collection	products
Child field	
Child Cardinality	1
Comments	

3.10 Relationship fk store.employees.[0].employee_id to orders.employee_id

3.10.1 fk store.employees.[0].employee_id to orders.employee_id Diagram



3.10.2 fk store.employees.[0].employee_id to orders.employee_id Properties

PROPERTY	VALUE
Name	fk store.employees.[0].employee_id to orders.employee_id
Description	
Parent Collection	stores
Parent field	employee_id
Parent Cardinality	1
Child Collection	orders
Child field	employee_id
Child Cardinality	1
Comments	