

2025년 상반기 K-디지털 트레이닝

MongoDB 개요

[KB] IT's Your Life

1 MongoDB 설치

✓ MongoDB 다운로드

○ <https://www.mongodb.com/> ✓

깔려있는 수동 운영버전이 아닌 직접 다운받는
서비스로 등록해서 사용하는 버전으로 다운받아 설치해라

The screenshot shows the MongoDB website with the 'Products' menu highlighted. The 'Community Edition' is selected, and the 'Download' button is visible at the bottom left. The 'Enterprise Advanced' option is also visible, but the 'Community Edition' is the focus.

Products

- Atlas: 개발자 데이터 플랫폼을 기반으로 구축
- 플랫폼 서비스
- 데이터베이스

Tools

- Compass: GUI에서 MongoDB 데이터로 작업하기
- Integrations: 타사 서비스에 연결
- Relational Migrator: MongoDB로 안전하게 마이그레이션하세요
- Enterprise Advanced: MongoDB 직접 실행 및 관리하기
- 커뮤니티 에디션: MongoDB로 로컬 개발하기

Download

1 MongoDB 설치

✓ MongoDB 다운로드

MongoDB Community Edition

MongoDB is a general-purpose document database. With the Community Edition you can self-manage and host it locally or in the cloud. You can also develop with MongoDB Atlas for free in your local environment, including local experiences for full-text and vector search, as well as in the cloud.

[Download Community](#)[Try Atlas](#) →

Version

7.0.8 (current) ▼

Platform

Windows x64 ▼

Package

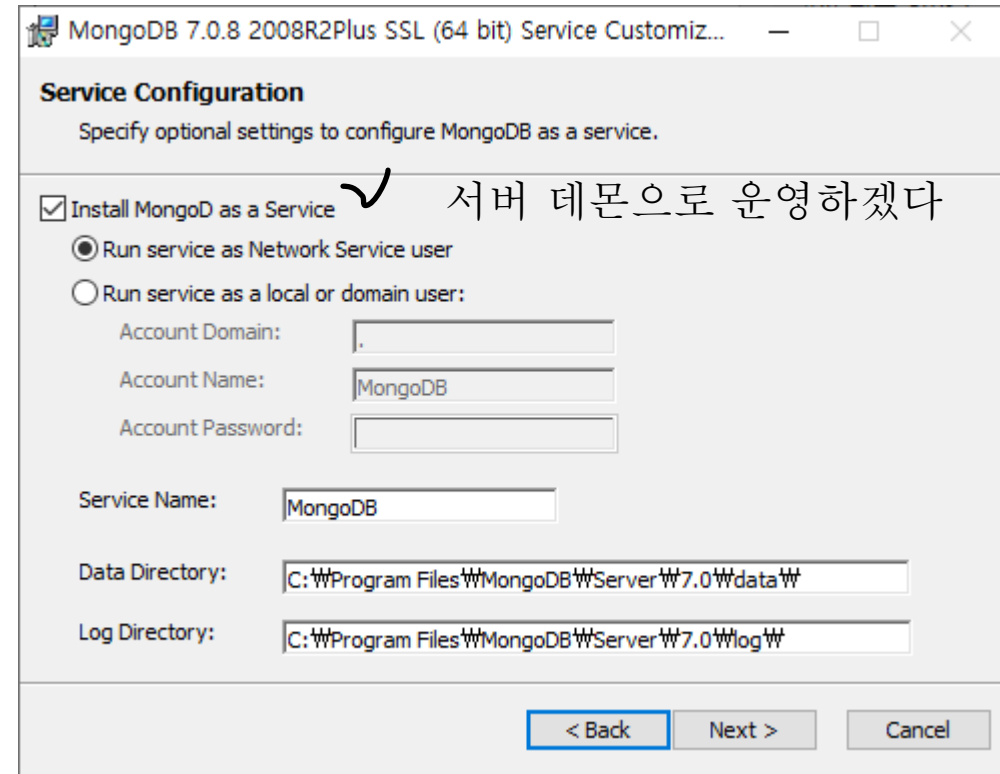
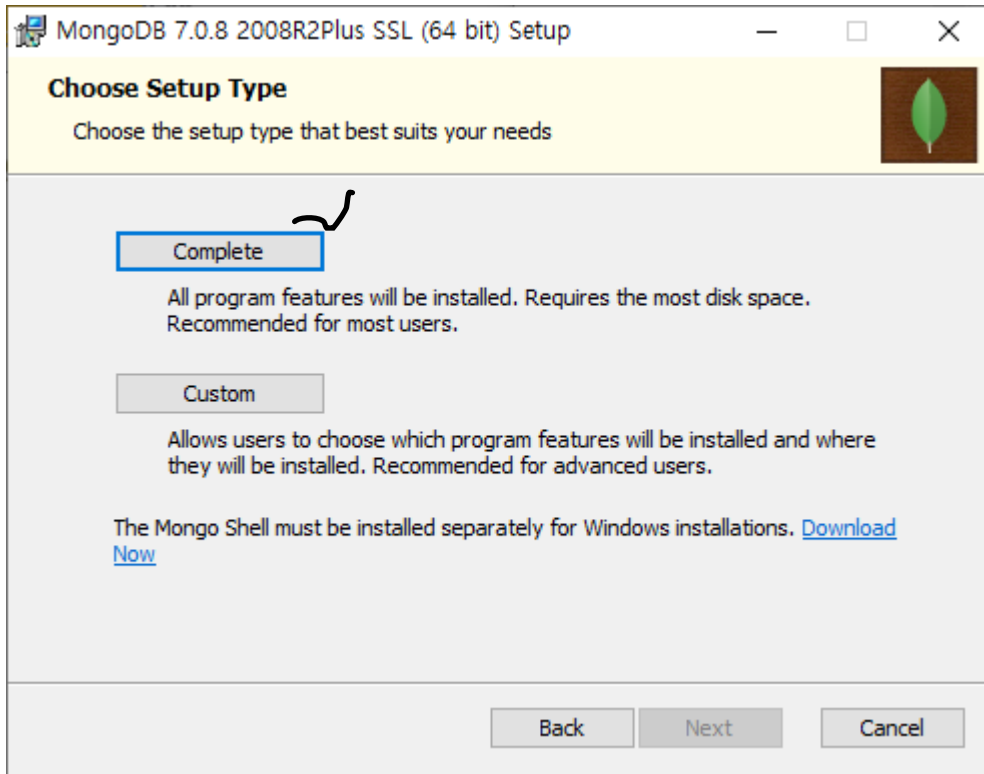
msi ▼

[Download](#) ↓[Copy link](#)[More Options](#) ...

1 MongoDB 설치

✓ MongoDB 설치

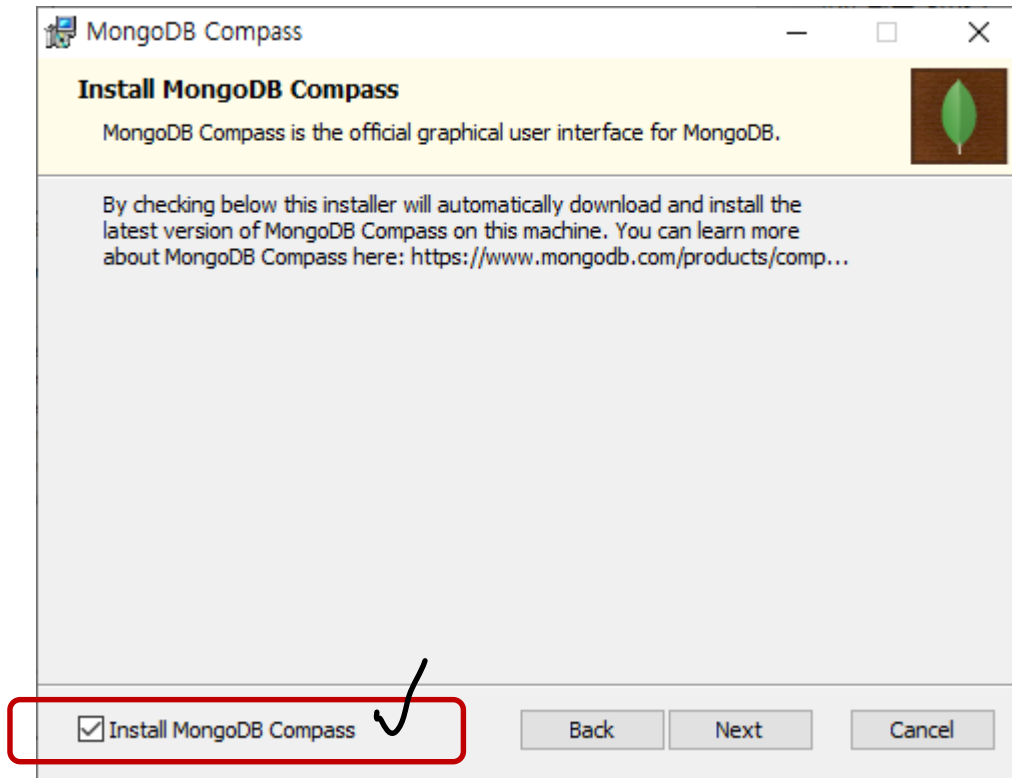
- mongodb-windows-x86_64-7.0.8-signed.msi 실행 ✓



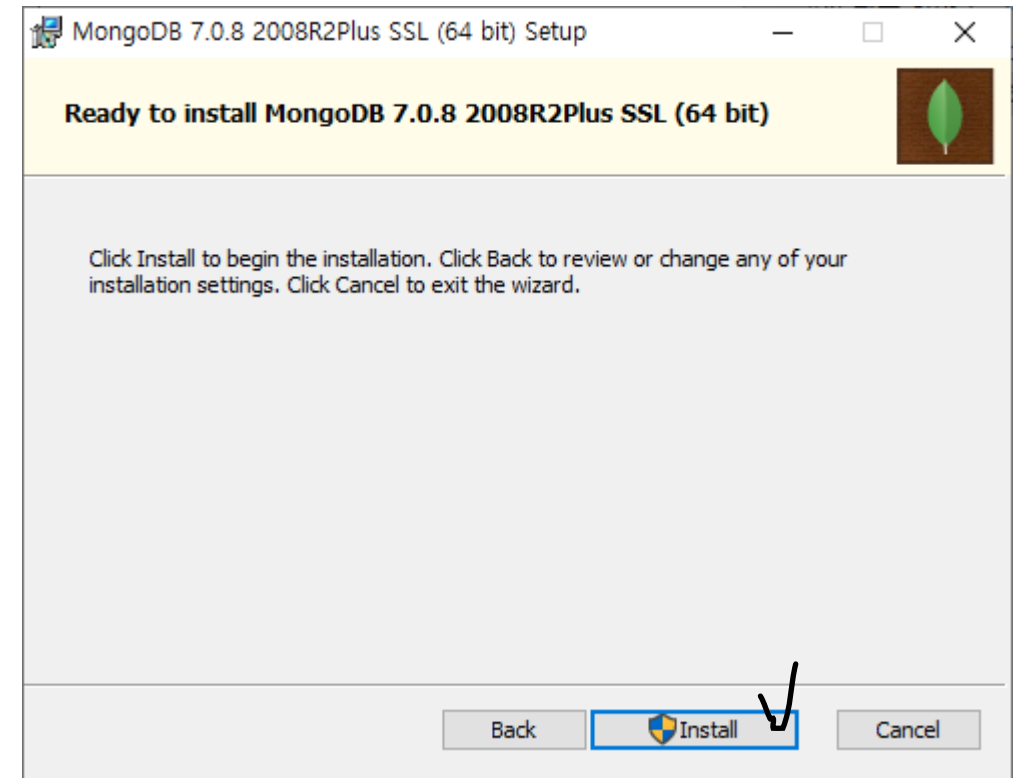
1 MongoDB 설치

✓ MongoDB 설치

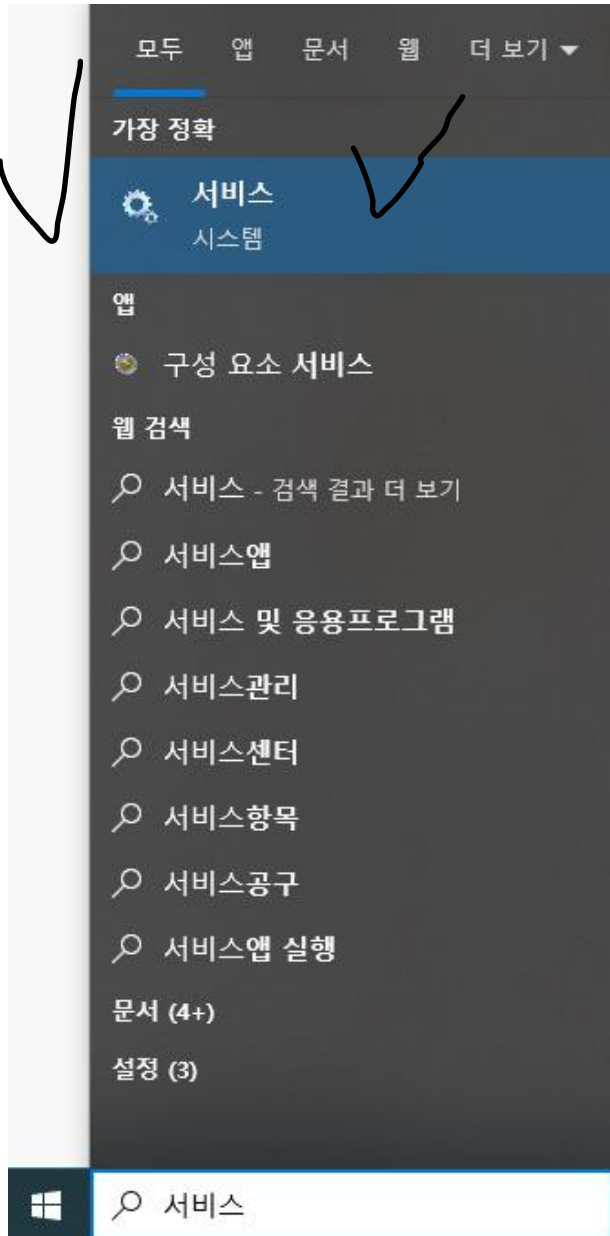
- mongodb-windows-x86_64-7.0.8-signed.msi 실행



워크벤치에 해당하는 것.

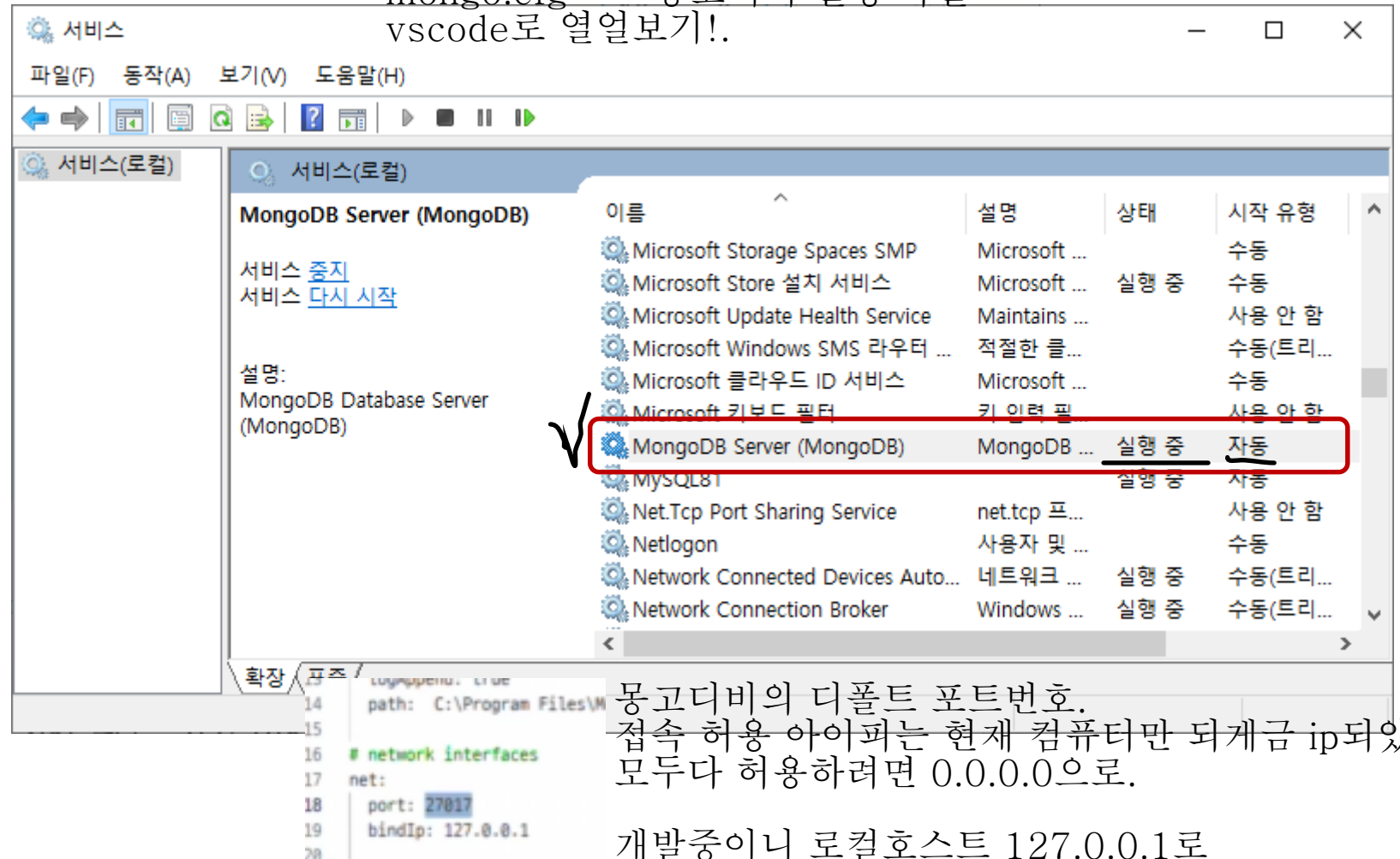


1 MongoDB 설치



설치된 디렉토리들어가서 확인해보자.

mongod.exe 서버 프로그램임. 데몬임.
mongo.cfg == 몽고디비 설정 파일
vscode로 열얼보기!.



2 MongoDB Client

✓ MongoDB Shell 설치

```

23
24 #security:
25
26 #operationProfiling:
27
28 #replication:
29
30 #sharding:
31

```

로그인 할때 관련

복제 기법

샤딩 기법 관련 설정들

명령어 기반
클라이언트도
설치해라

MongoDB Shell

CLI

MongoDB

Compass (GUI)

컴파스는
아까 설치됨

Atlas CLI

MongoDB. Products ▾ Resources ▾ Solutions ▾ Company ▾ Pricing

MongoDB Atlas

MongoDB Enterprise Advanced

MongoDB Community Edition

Tools

MongoDB Shell CLI

MongoDB Compass (GUI)

Atlas CLI

Learn more

Version 2.2.2 ▾

Platform Windows x64 (10+) ▾

Package zip ▾

Download ▾

Copy link More Options ...

형태는 ZIP

2 MongoDB Client

✓ MongoDB Shell 설치

○ mongosh-2.2.2-win32-x64.zip

- bin 폴더의 내용을 C:\Program Files\MongoDB\Server\7.0\bin에 복사

○ PATH 환경변수 수정

- C:\Program Files\MongoDB\Server\7.0\bin을 추가

압축 폴더 도구

다운로드 > mongosh-2.5.1-win32-x64.zip > mongosh-2.5.1-win32-x64 > bin

이름

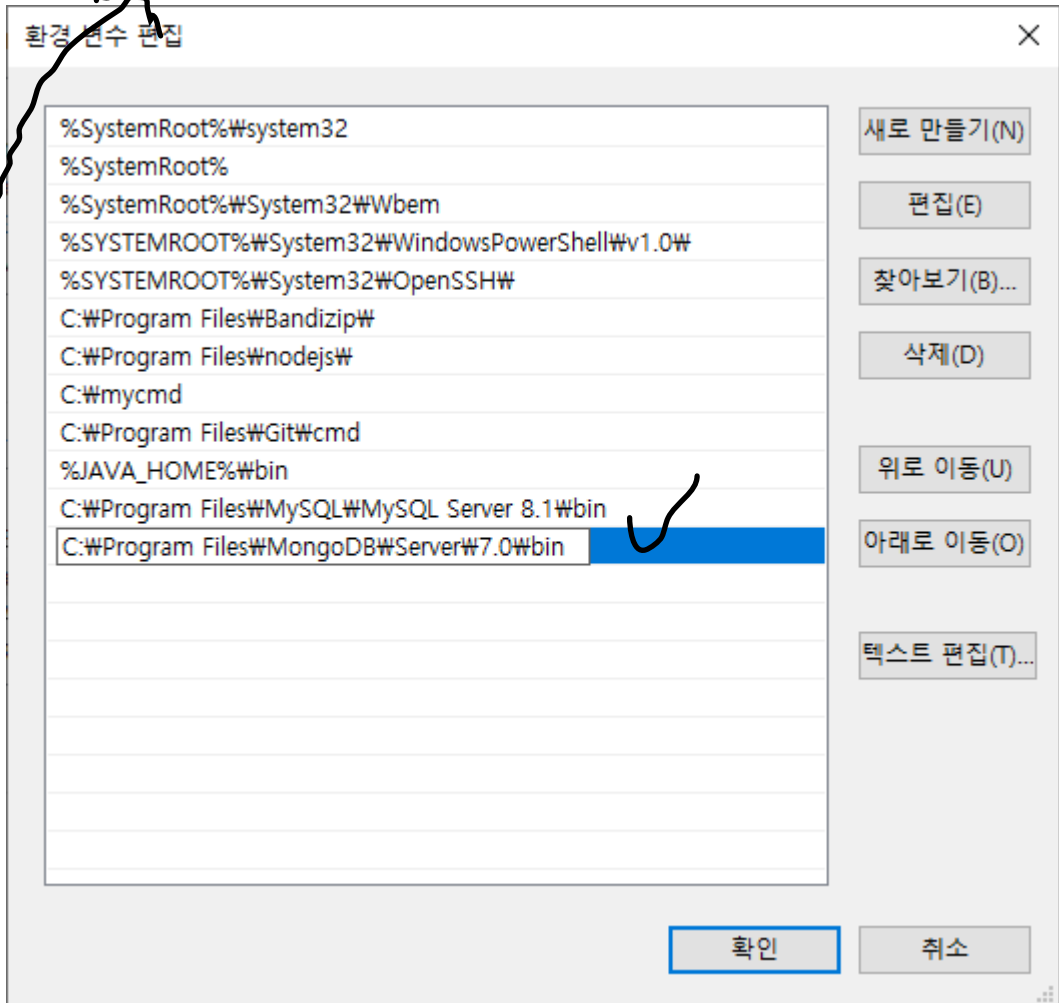
유형

mongosh.exe

응용 프로그램

mongosh_crypt_v1.dll

응용 프로그램 확장



2 MongoDB Client

✓ 몽고 shell 실행 확인 아까 패스 추가했으니까 어디서든 실행시킬수있죠

```
> mongosh      컨피그에서 별도의 로그인 설정 안했으니 바로 접속됨
Please enter a MongoDB connection string (Default: mongodb://localhost/):

Current Mongosh Log ID: 660df366b9d4eae6259f9909
Connecting to:
mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mon
gosh+2.2.2
Using MongoDB:      7.0.8
Using Mongosh:      2.2.2

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

To help improve our products, anonymous usage data is collected and sent to MongoDB periodically
(https://www.mongodb.com/legal/privacy-policy).
You can opt-out by running the disableTelemetry() command.

끝
-----
The server generated these startup warnings when booting
2024-04-04T09:16:00.291+09:00: Access control is not enabled for the database. Read and write
access to data and configuration is unrestricted
-----

test>
```

2 MongoDB Client

몽고디비는 특징 : 생성할 필요 없다. 그냥 사용하는 순간 만들어짐

test> use my_database
switched to db my_database

create database 필요X

db라는 전역변수가 있다
use한 데이터베이스를 참조하고있다.

my_database> **db.users.insert({name: "Kyle"})** users라는 컬렉션. 컬렉션 이름은 복수형이 관례

DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.

```
{
  acknowledged: true,
  insertedIds: { '0': ObjectId('660df5956bc6400e4f9f990a') }
}
```

my_database> **db.users.find()**

```
[ { _id: ObjectId('660df5956bc6400e4f9f990a'), name: 'Kyle' } ]
```

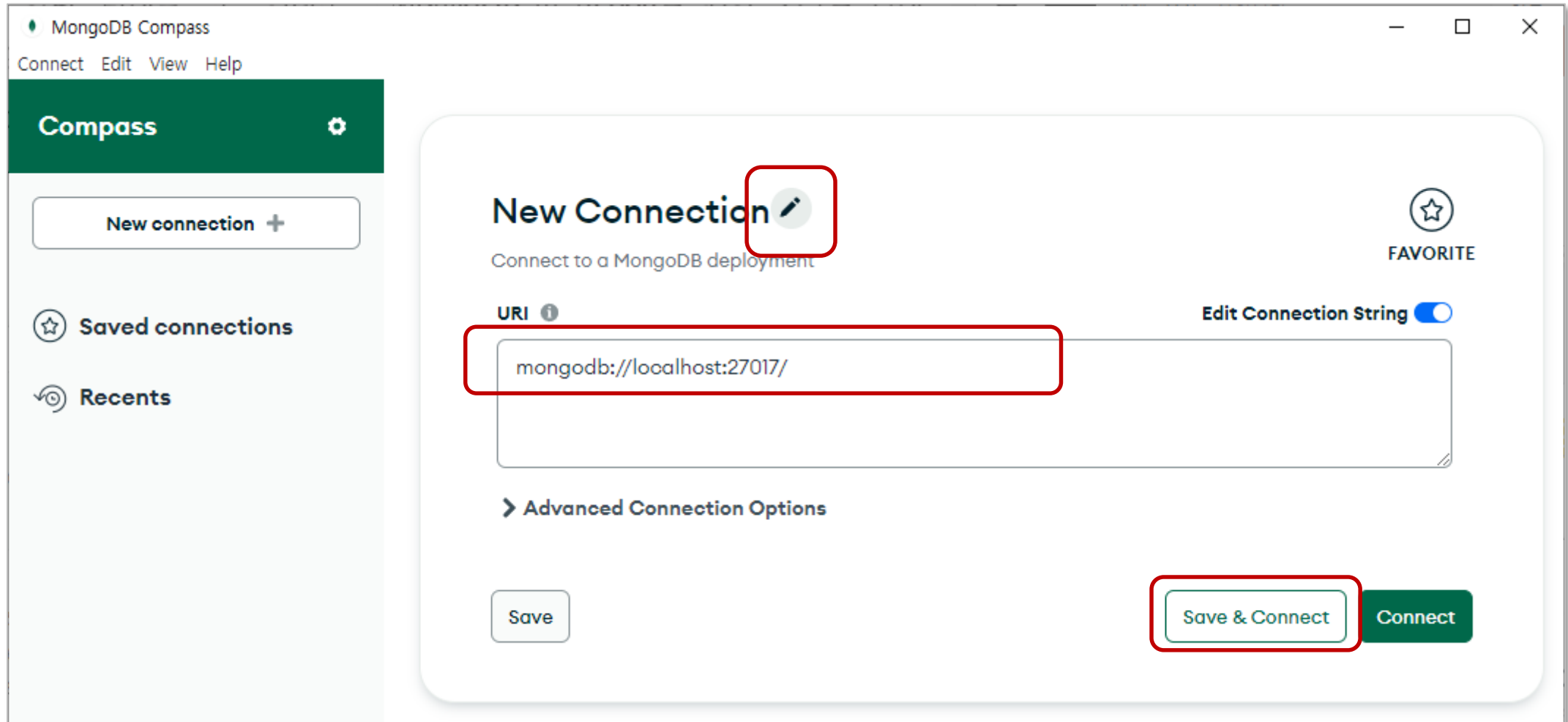
이제보니 자바스크립트 문법이네

기본키 == 값이 오브젝트아이디라는 객체
내용은 UUID 전세계적으로 고유한

2 MongoDB Client

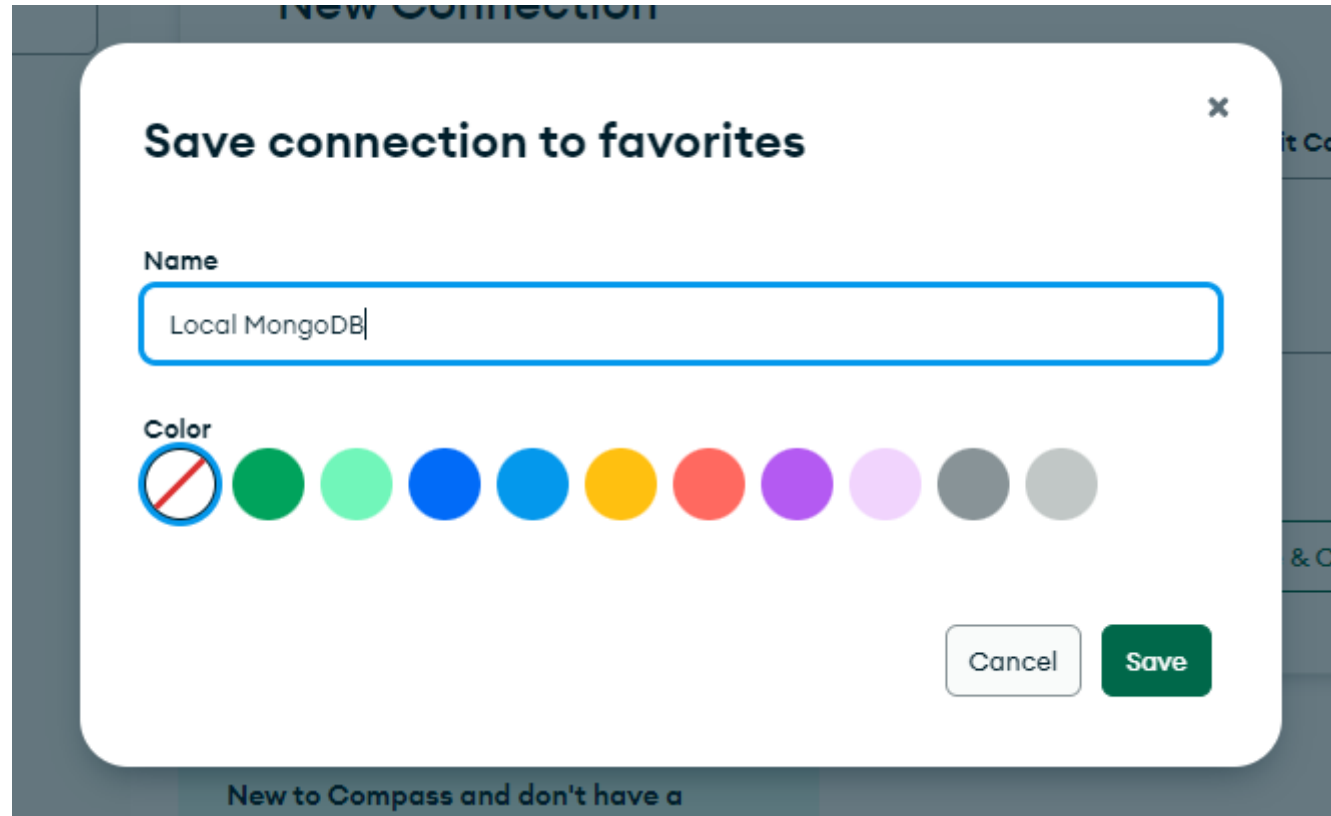
✓ MongoDB Compass ✓

기능이 빈약함

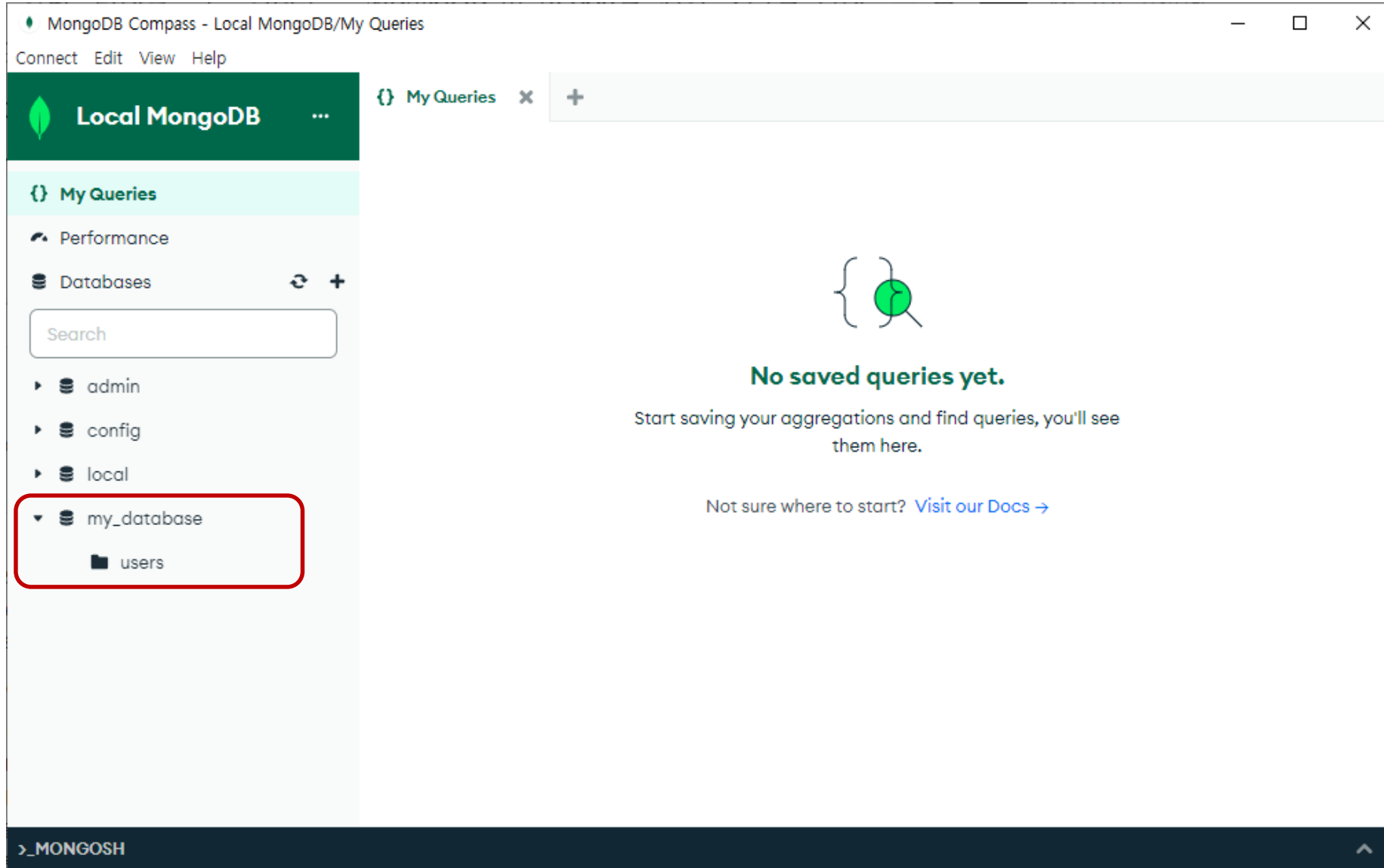


2 MongoDB Client

✓ MongoDB Compass



2 MongoDB Client



2 MongoDB Client

The screenshot shows the MongoDB Compass application window titled "MongoDB Compass - Local MongoDB/my_database". The interface includes a sidebar on the left with a search bar and a list of databases: admin, config, local, and my_database (selected). The main panel displays the "users" collection in the "my_database" database. The collection's metadata is shown in a table:

Storage size:	Documents:	Avg. document size:	Indexes:	Total index size:
20.48 kB	1	37.00 B	1	20.48 kB

The bottom status bar shows the command prompt prompt ">_MONGOSH".

2 MongoDB Client

The screenshot displays the MongoDB Compass application window titled "MongoDB Compass - Local MongoDB/my_database.users". The interface includes a sidebar on the left with a search bar and a list of databases: admin, config, local, and my_database. The 'my_database' database is expanded, showing the 'users' collection. The main panel shows the 'users' collection with a single document displayed in the 'Documents' tab. The document has the following fields: `_id: ObjectId('660df5956bc6400e4f9f990a')` and `name: "Kyle"`. A red box highlights the 'ADD DATA' button in the toolbar. A callout menu is shown, with a red box highlighting the 'Insert document' option.

Local MongoDB

my_database > users

Documents 1 Aggregations Schema Indexes 1 Validation

Type a query: { field: 'value' } or [Get](#) Explain Reset Find </> Options

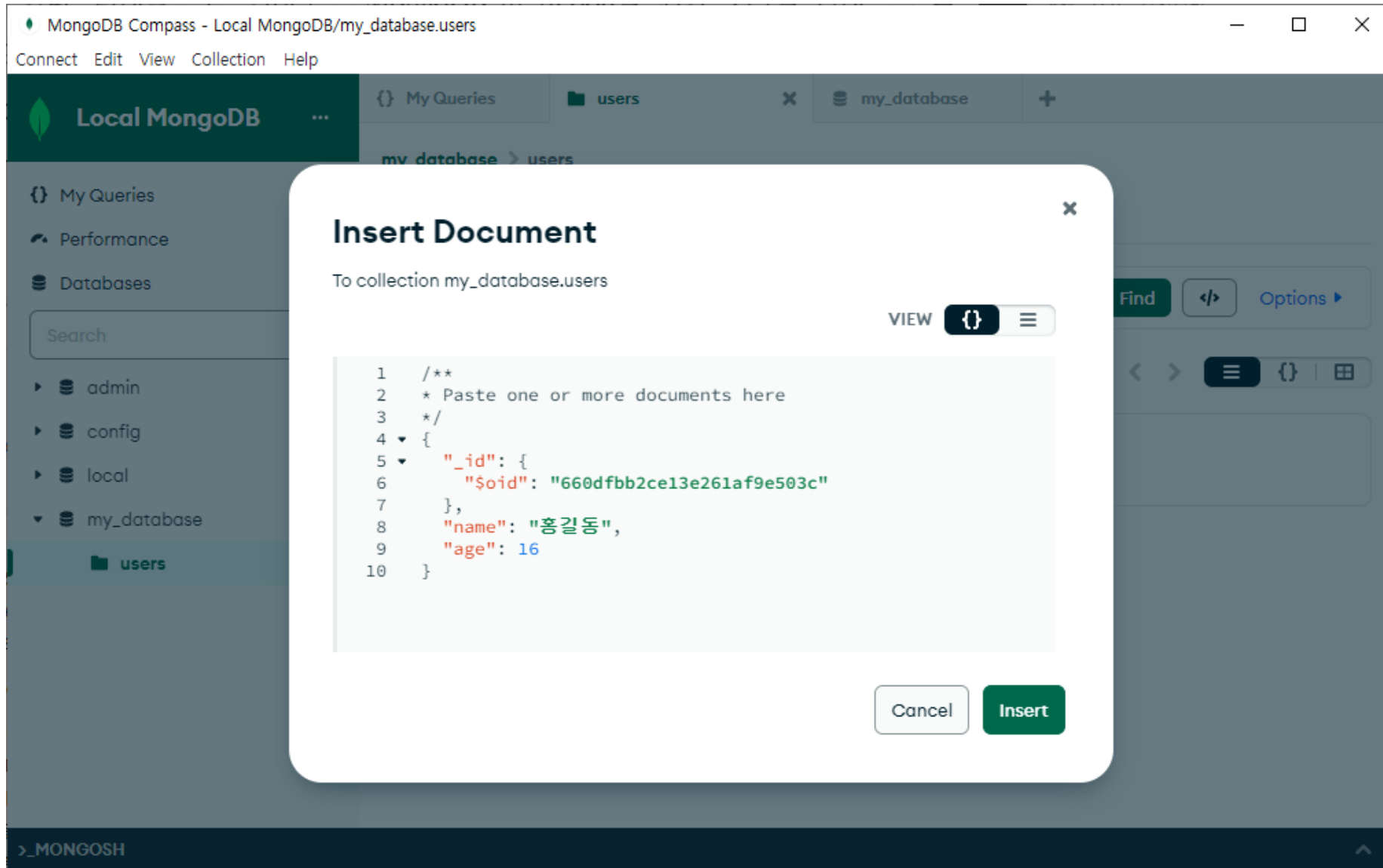
+ ADD DATA EXPORT DATA 1-1 of 1

`_id: ObjectId('660df5956bc6400e4f9f990a')`
`name: "Kyle"`

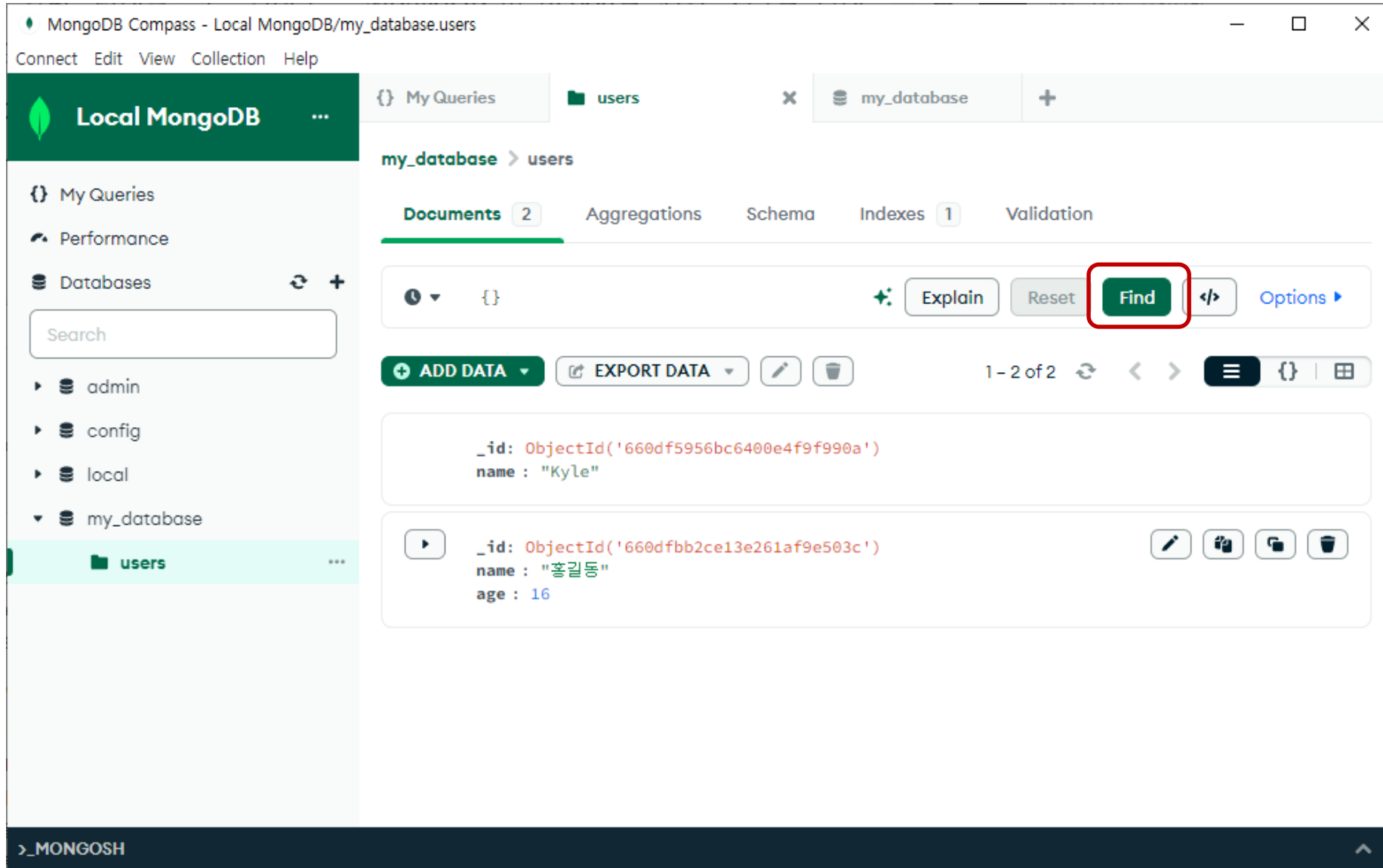
Import JSON or CSV file

Insert document

2 MongoDB Client



2 MongoDB Client



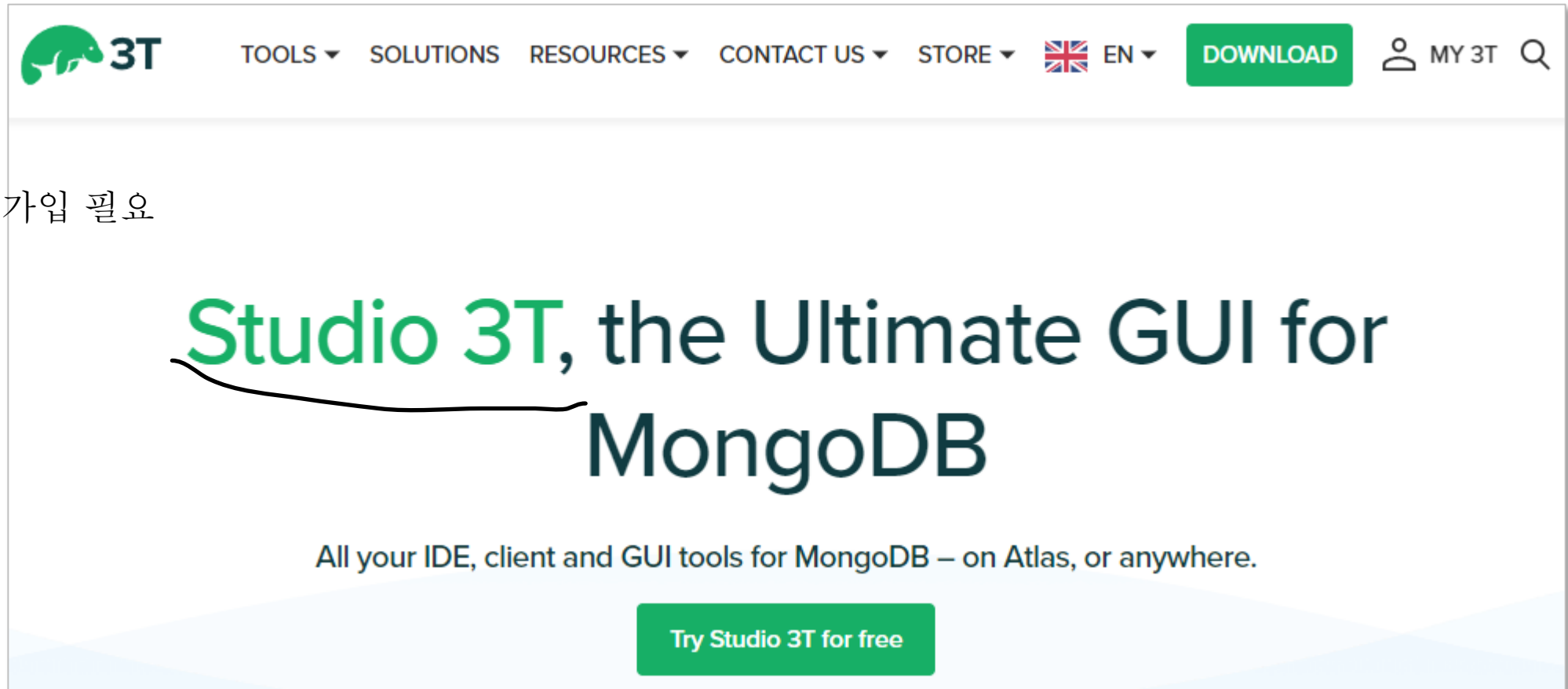
2 MongoDB Client

✓ Studio 3T

○ <https://studio3t.com/> ✓

우리가쓸꺼는 이거
몽고디비에서 제일 많이 사용하는 GUI 클라이언트

회원가입 필요



2 MongoDB Client

✓ Studio 3T

Download Studio 3T

Delivering the ultimate GUI experience since 2014



Download for Windows (64-Bit)



Other platforms

2 MongoDB Client

✓ Studio 3T

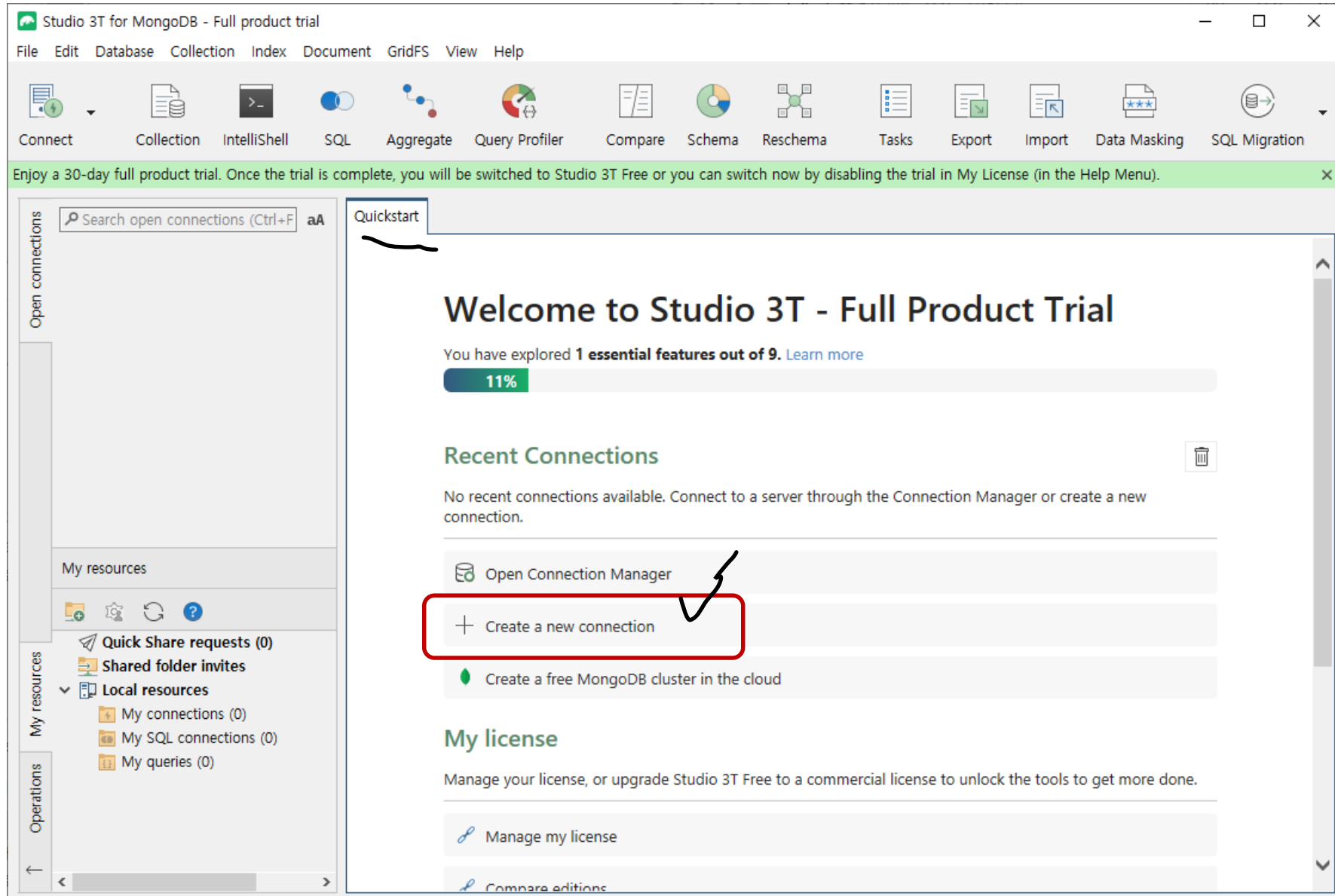
- studio-3t-x64.zip의 studio-3t-x64.exe 실행 ✓

- 디폴트로 설치 ✓

○ 첫 실행

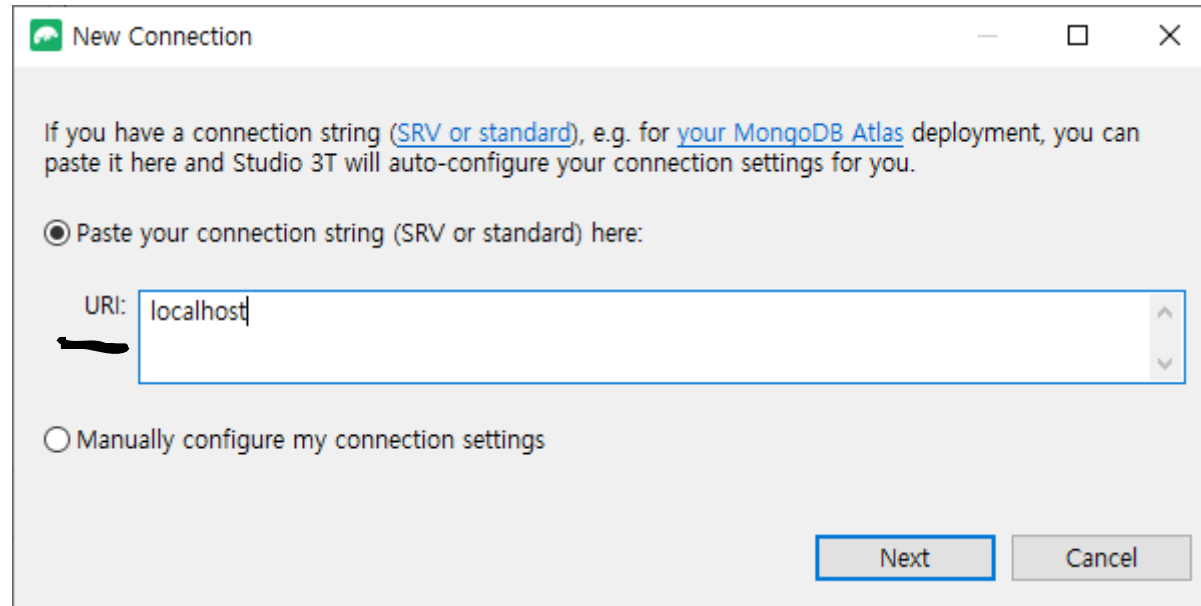
- 계정 로그인 필요
 - 필요한 경우 회원 가입

2 MongoDB Client



2 MongoDB Client

접속 URL
지정



New Connection

If you have a connection string (SRV or standard), e.g. for your MongoDB Atlas deployment, you can paste it here and Studio 3T will auto-configure your connection settings for you.

☒ Paste your connection string (SRV or standard) here:

URI: localhost

☐ Manually configure my connection settings

Next Cancel

✓ 서버 아이피 주소만
포트번호 모르니께

2 MongoDB Client

New Connection

Connection name: local MongoDB

Connection folder: Local resources

Server Authentication SSL SSH Proxy IntelliShell MongoDB Tools Advanced Collection History

Connection Type: Standalone

Server: localhost Port: 27017

☐ Read-Only Lock ⓘ

From URI... Use this option to import connection details from a connection string / URI

To URI... Use this option to export complete connection details to a connection string / URI

Test Connection Save Cancel

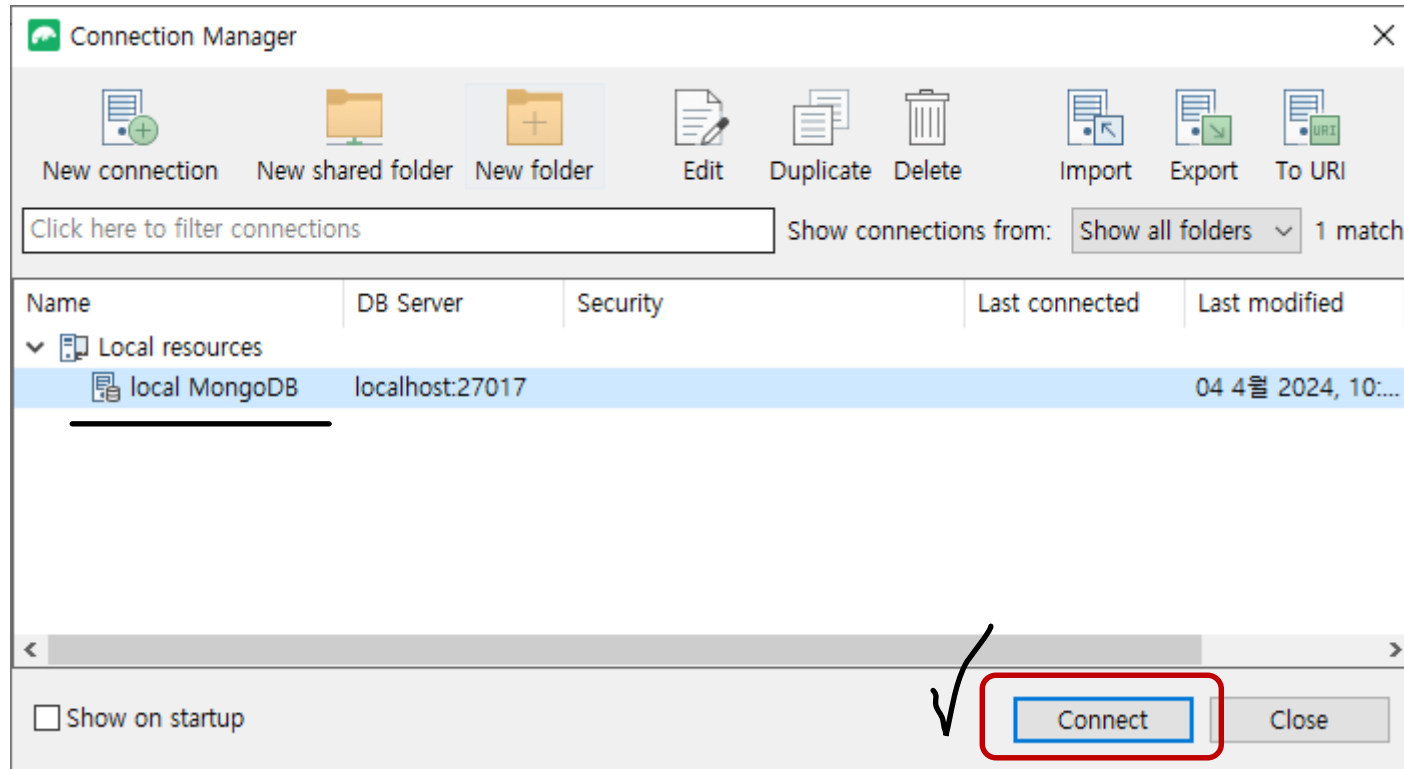
Connecting

Testing connection

Operation	Status
Initializing connection	OK
Connecting to server	OK
Reading server status from connection	OK
Detecting accessible databases	OK
Detecting MongoDB server version	OK
Detecting MongoDB server feature compatibility version	OK
Connected	OK

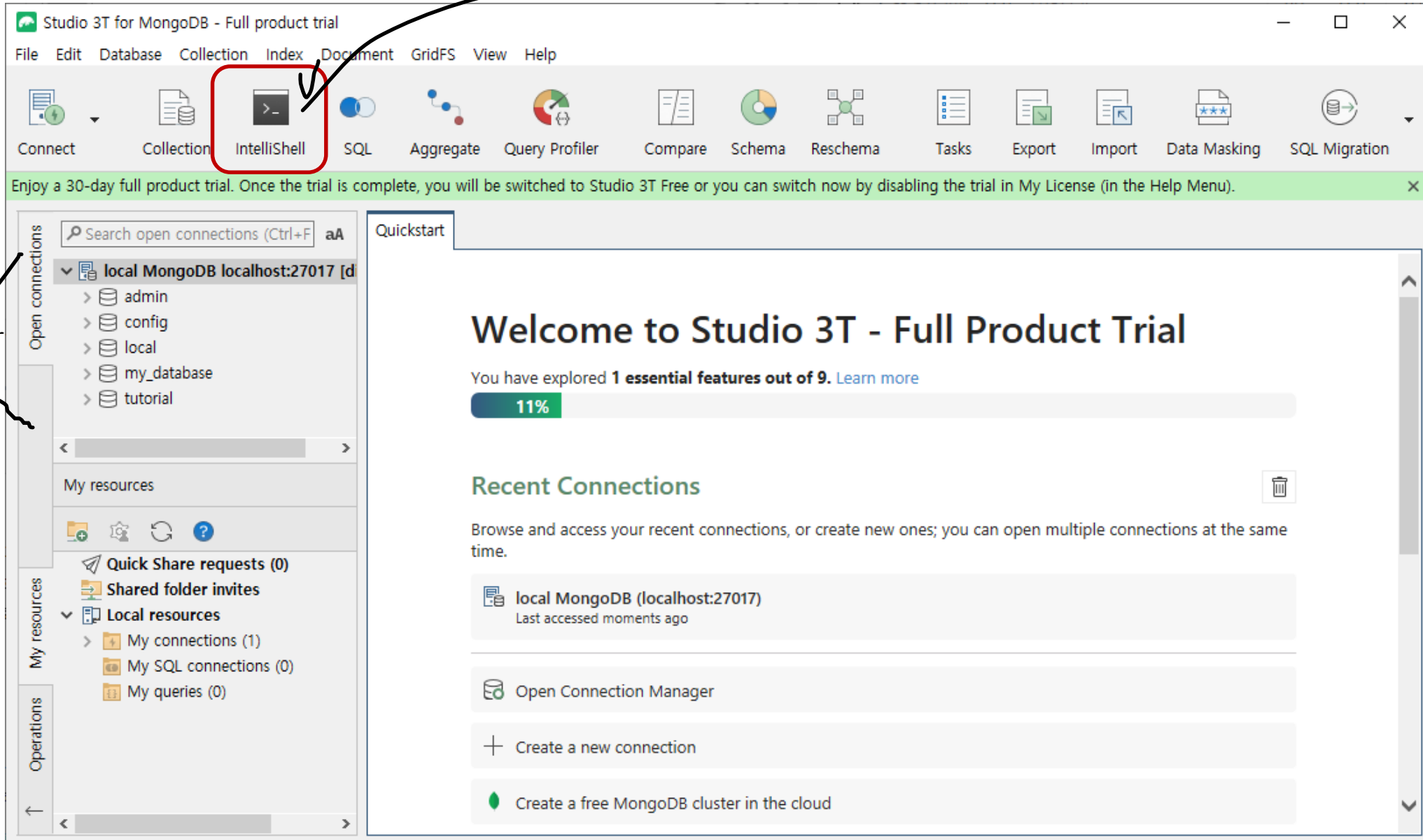
Hide details OK Cancel

2 MongoDB Client



2 MongoDB Client

몽고셸 아까쓴거



The screenshot shows the MongoDB Client interface. On the left, there are panels for 'Open connections' (showing 'local MongoDB localhost:27017'), 'My resources' (showing 'Local resources' like 'My connections (1)', 'My SQL connections (0)', and 'My queries (0)'), and 'Operations'. The main area is titled 'IntelliShell: local MongoDB*' and shows a query in the 'Raw shell output' tab:

```
1 use tutorial;
2
3
4 db.users.find()
5
```

The query is labeled '쿼리창' (Query window). Below the query, the results are displayed in 'Table View' (labeled 'json view' with a handwritten note '로 쿼리 결과도 조회 가능' - can also view query results in table view). The results show two documents from the 'users' collection:

_id	username
id 660dfd196bc6...	smith
id 660dfd866bc6...	jones

The results are labeled '결과창' (Result window). At the bottom, it indicates '1 document selected' and 'Count Documents' with a timer '00:00:00.002'.