

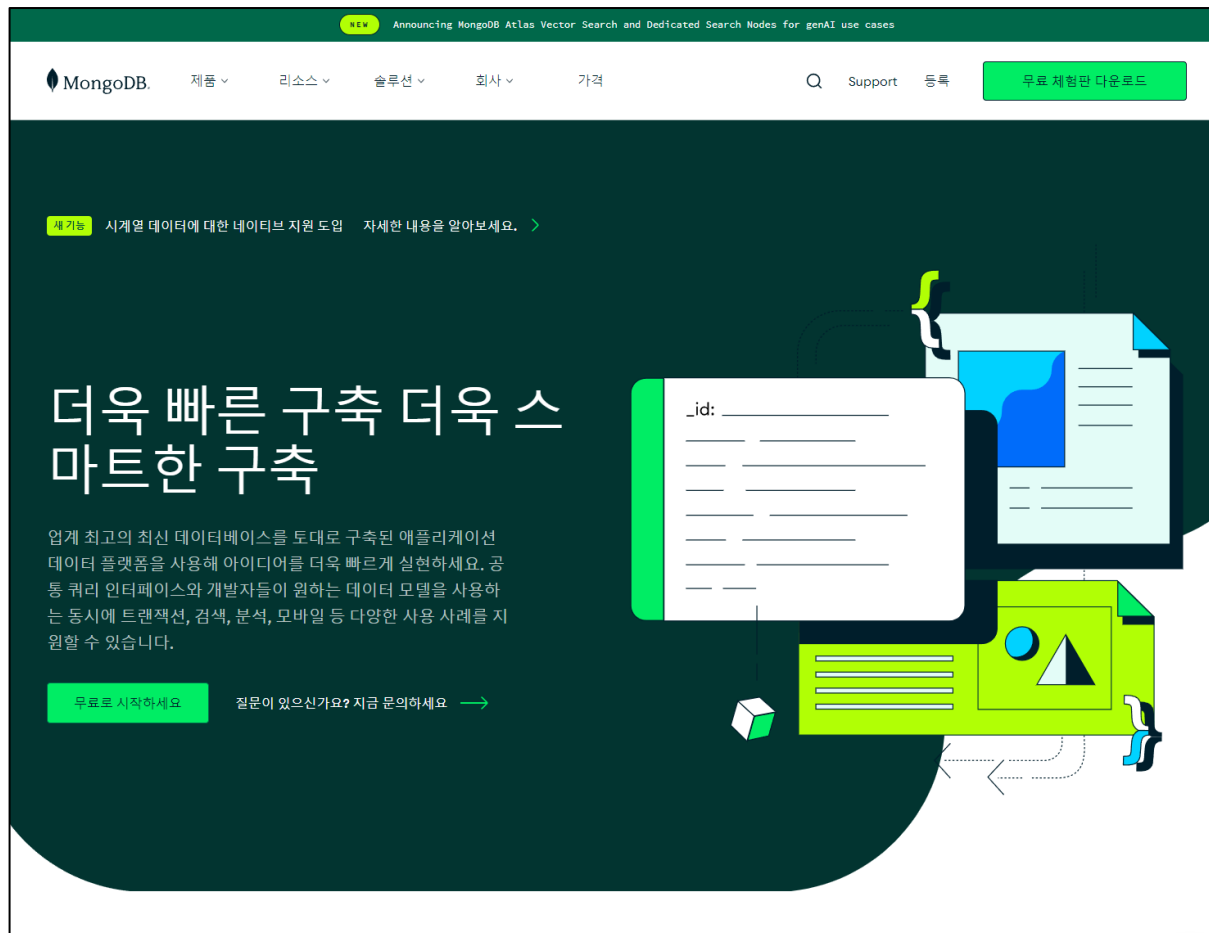
# Practice 1: Practice Environment

Big Data Systems Design

# MongoDB Installation

❖ Visit MongoDB website

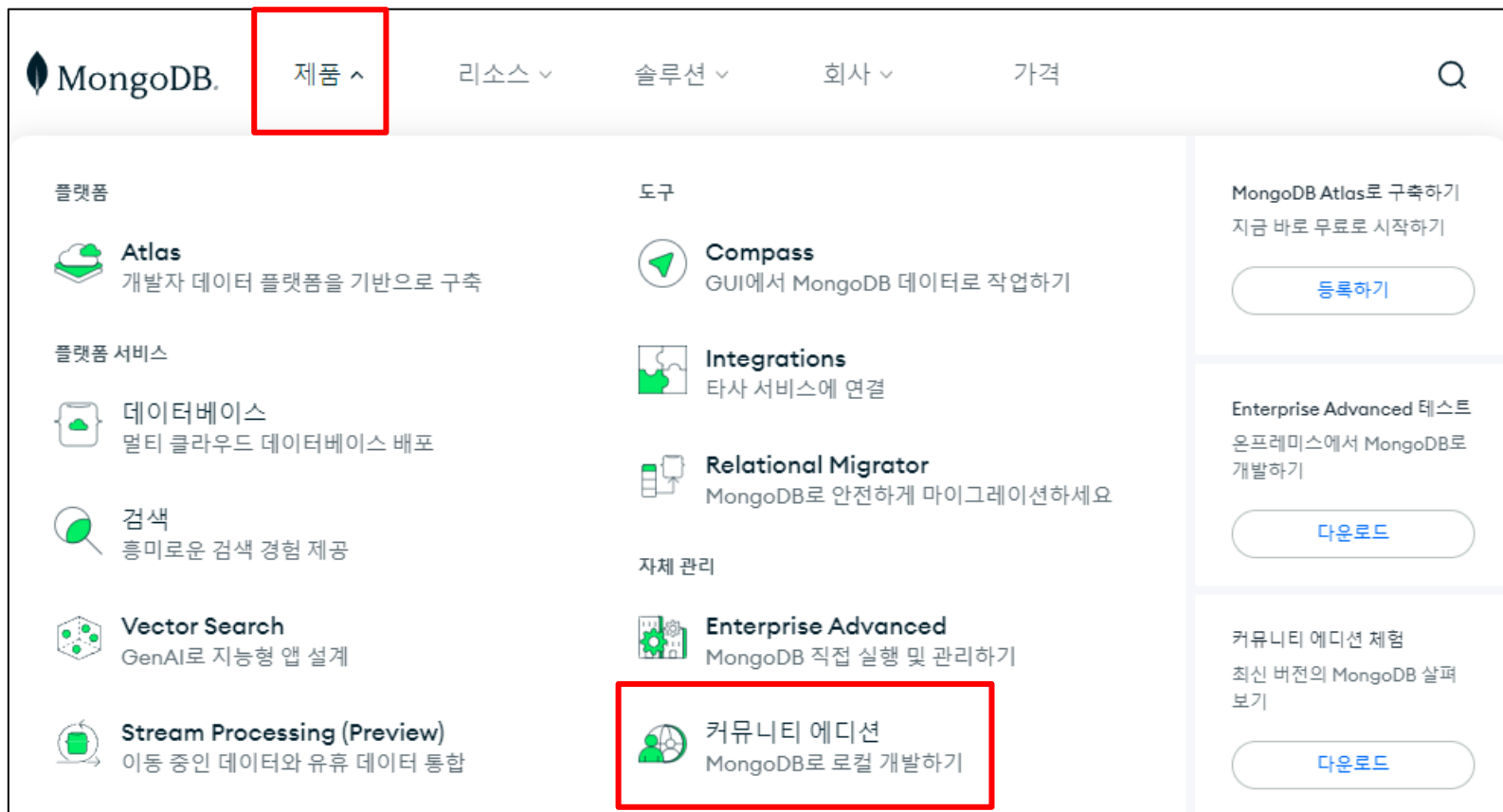
- <https://www.mongodb.com/ko-kr>



# MongoDB Installation

## ❖ Download installation file (1)

- Products → Community edition → MongoDB Community Server Download



# MongoDB Installation

## ❖ Download installation file (2)

- Products → Community edition → MongoDB Community Server Download

MongoDB Enterprise Advanced

MongoDB Community Edition

**MongoDB Community Server**

MongoDB Community Kubernetes Operator

Tools

Atlas SQL Interface

Mobile & Edge

MONGODB COMMUNITY SERVER

## MongoDB Community Server Download

### Community Server

The Community version of our distributed database offers a flexible document data model along with support for:

- Ad-hoc queries
- Secondary indexing
- Real-time aggregations to provide powerful ways to access and analyze your data

Select package

### Try MongoDB Atlas Locally or in the Cloud

Work with your MongoDB Atlas database, including using Atlas Search and Vector Search, by downloading the Atlas CLI. This allows you to build with the Atlas developer data platform locally (for development and testing only) or with a fully managed service in the cloud.

**Get started locally**

Homebrew More

```
$ brew install mongodb-atlas
$ atlas deployments setup
```

OR

**Get started in the cloud**

Try Atlas

# MongoDB Installation

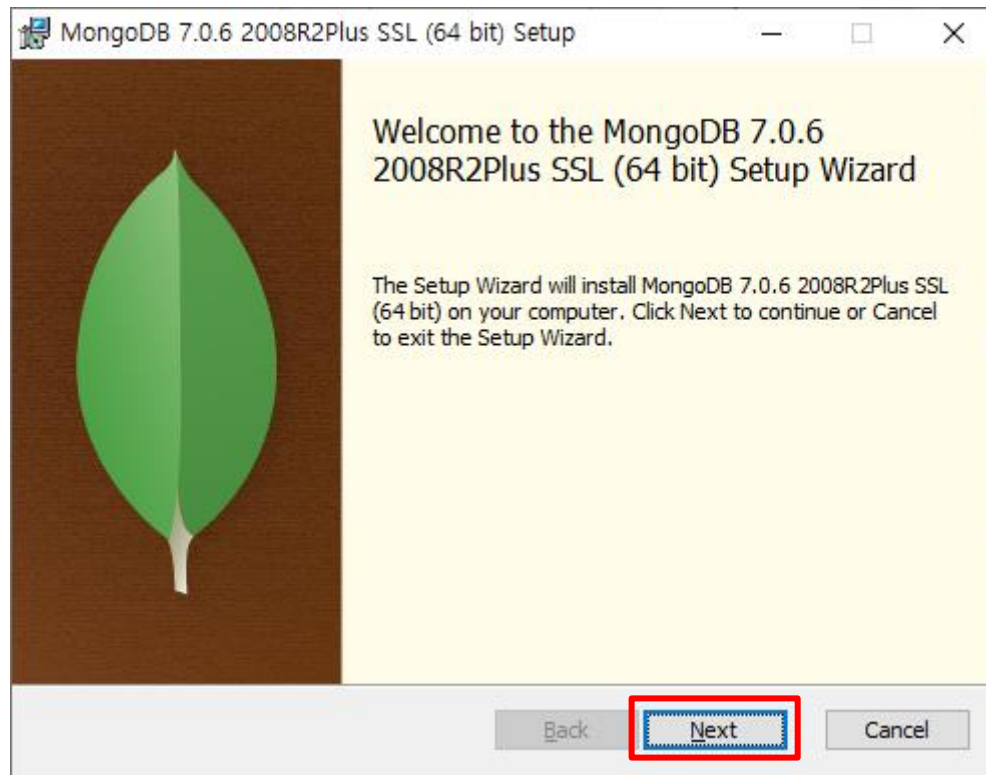
## ❖ Download installation file (3)

- Products → Community edition → MongoDB Community Server Download
- Around 588 MByte

The screenshot shows the MongoDB download interface. On the left, there are three dropdown menus: 'Version' set to '7.0.6 (current)', 'Platform' set to 'Windows x64', and 'Package' set to 'msi'. Below these is a green 'Download' button with a download icon, which is highlighted with a red rectangular box. To the right of the download button is a 'Copy link' button with a copy icon. Further right is a 'More Options' link with a dropdown arrow. On the right side, a dropdown menu for 'Platform' is open, showing a list of operating systems: 'Windows x64' (selected), 'Amazon Linux 2023 x64', 'Debian 11.0 x64', 'macOS ARM 64', 'macOS x64', and 'RedHat / CentOS 7.0 x64'.

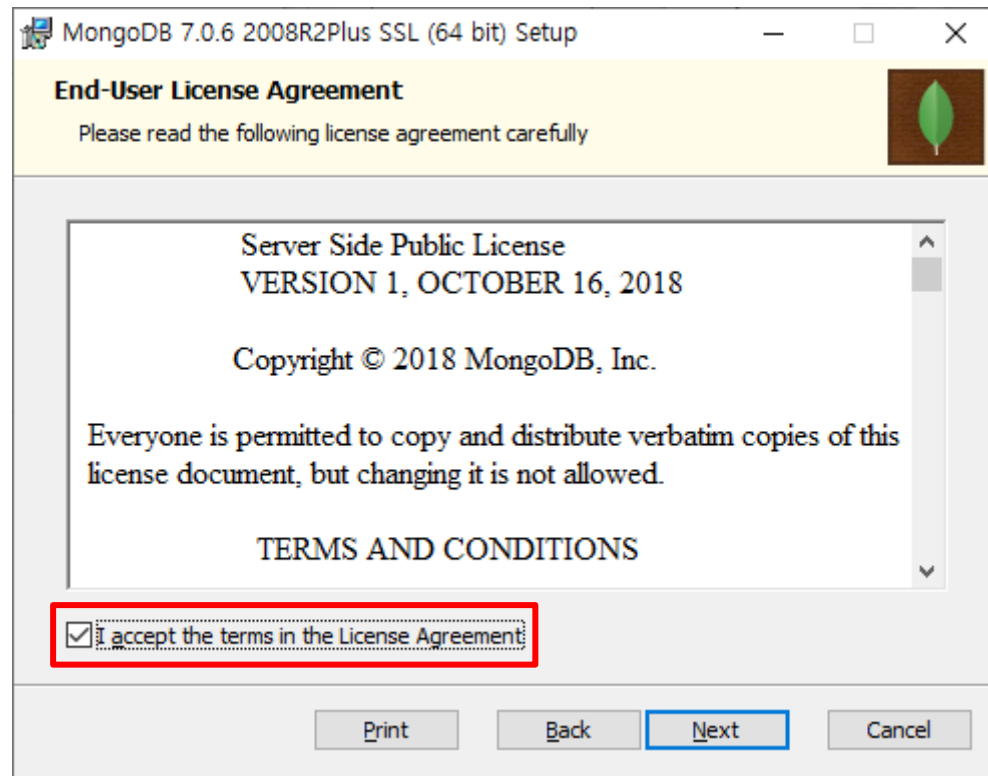
# MongoDB Installation

- ❖ Install MongoDB (1)
  - Run downloaded installation file



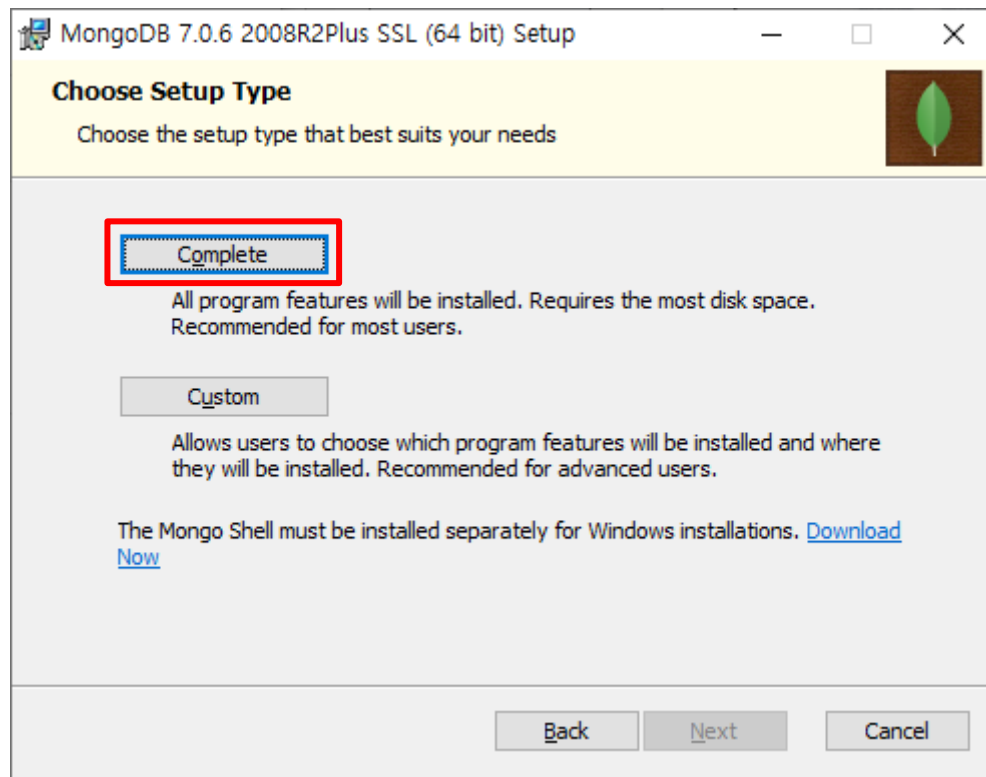
# MongoDB Installation

- ❖ Install MongoDB (2)
  - Run downloaded installation file



# MongoDB Installation

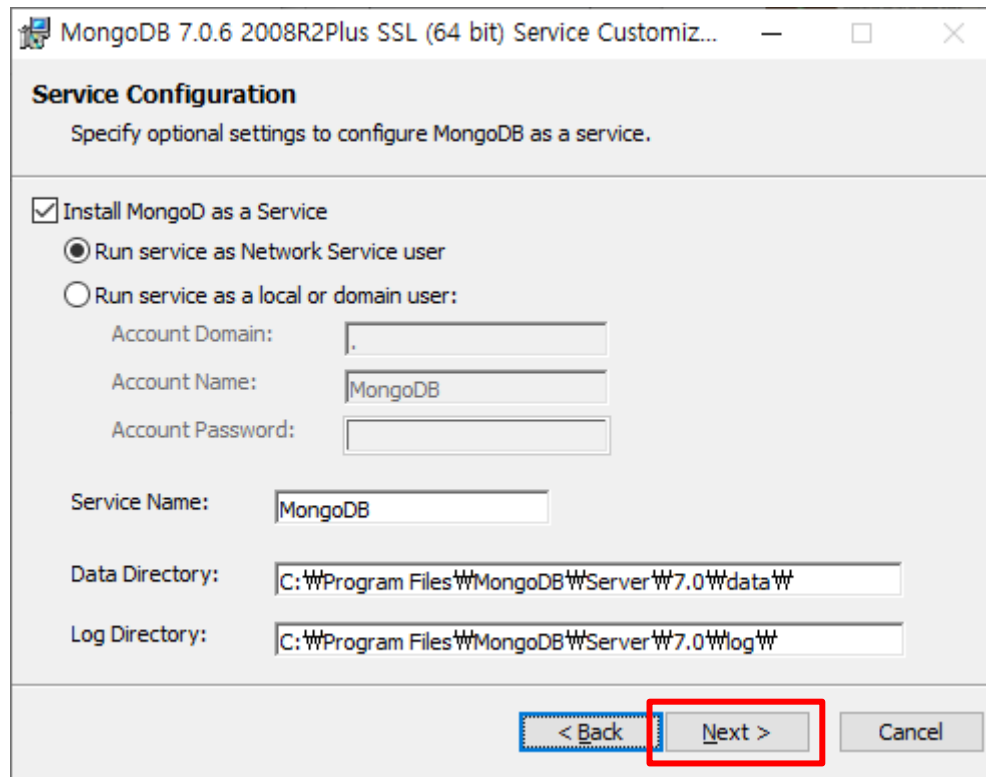
- ❖ Install MongoDB (3)
  - Run downloaded installation file





# MongoDB Installation

- ❖ Install MongoDB (4)
  - Run downloaded installation file



The screenshot shows the 'Service Configuration' window for MongoDB 7.0.6 2008R2Plus SSL (64 bit). The window title is 'MongoDB 7.0.6 2008R2Plus SSL (64 bit) Service Customiz...'. The main heading is 'Service Configuration' with the subtitle 'Specify optional settings to configure MongoDB as a service.'.

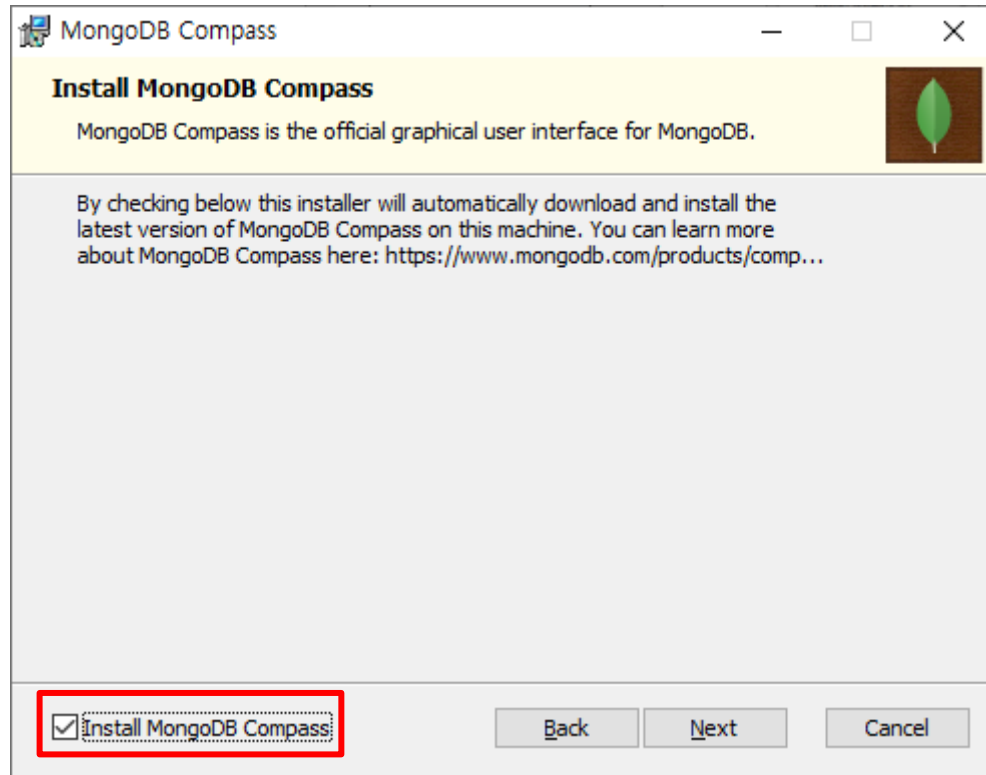
The 'Install MongoDB as a Service' checkbox is checked. Below it, the 'Run service as Network Service user' radio button is selected. The 'Run service as a local or domain user:' option is unselected, with its associated fields (Account Domain, Account Name, Account Password) empty.

The 'Service Name' field contains 'MongoDB'. The 'Data Directory' field contains 'C:\Program Files\MongoDB\Server\7.0\data'. The 'Log Directory' field contains 'C:\Program Files\MongoDB\Server\7.0\log'.

At the bottom, there are three buttons: '< Back' (disabled), 'Next >' (highlighted with a red rectangle), and 'Cancel'.

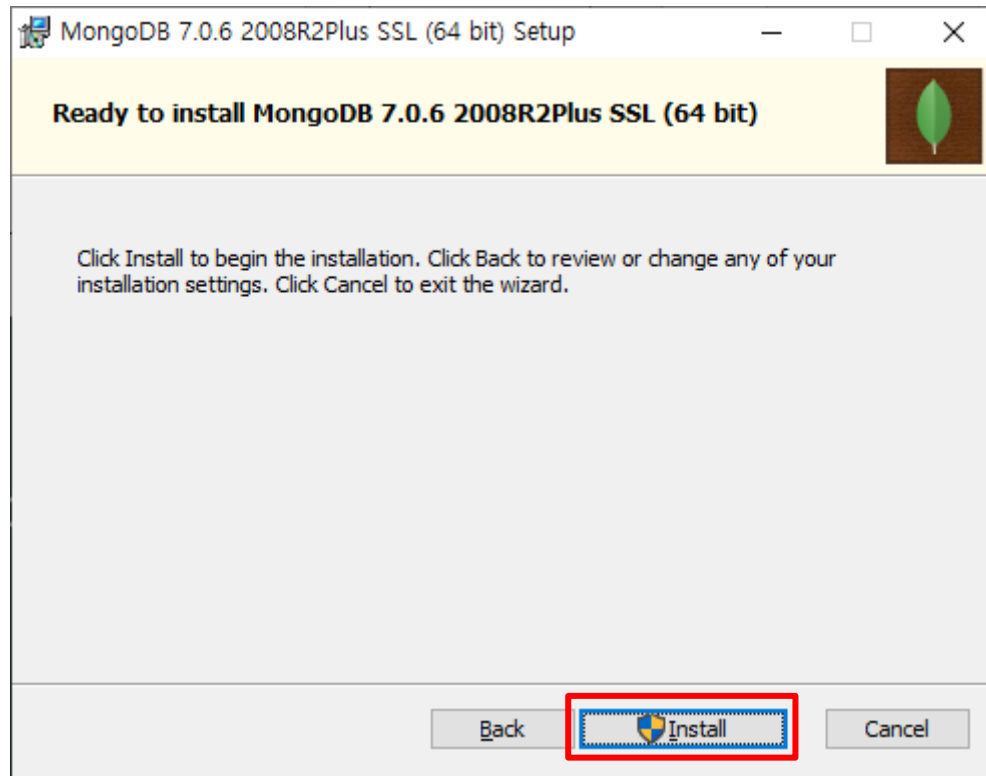
# MongoDB Installation

- ❖ Install MongoDB (5)
  - Run downloaded installation file



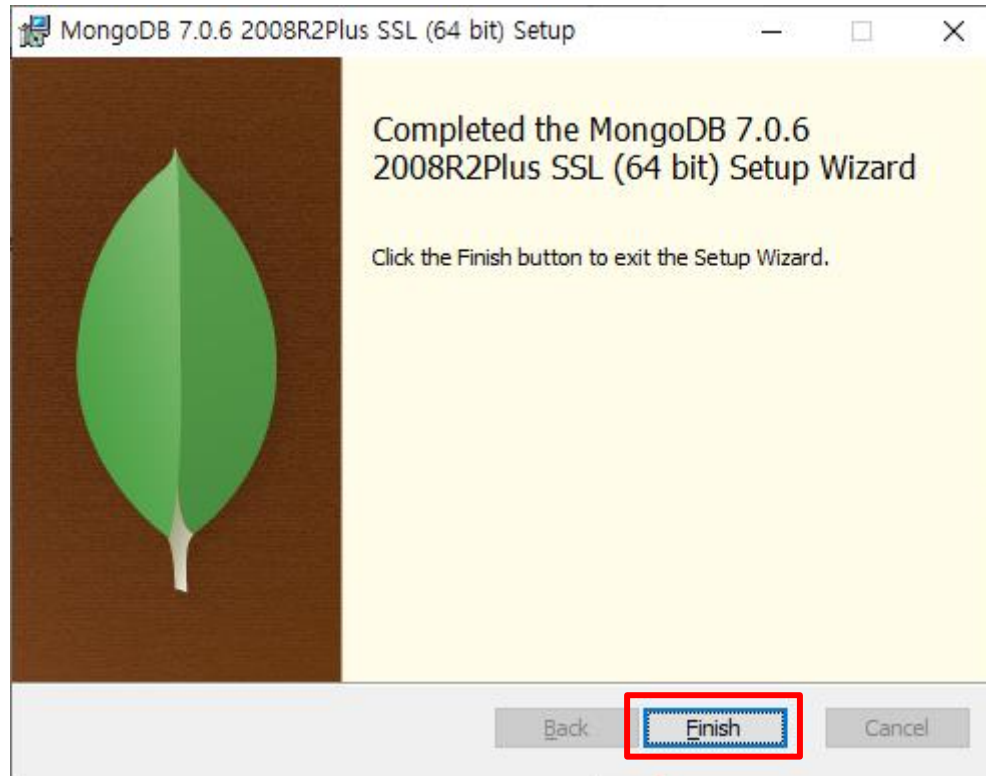
# MongoDB Installation

- ❖ Install MongoDB (6)
  - Run downloaded installation file



# MongoDB Installation

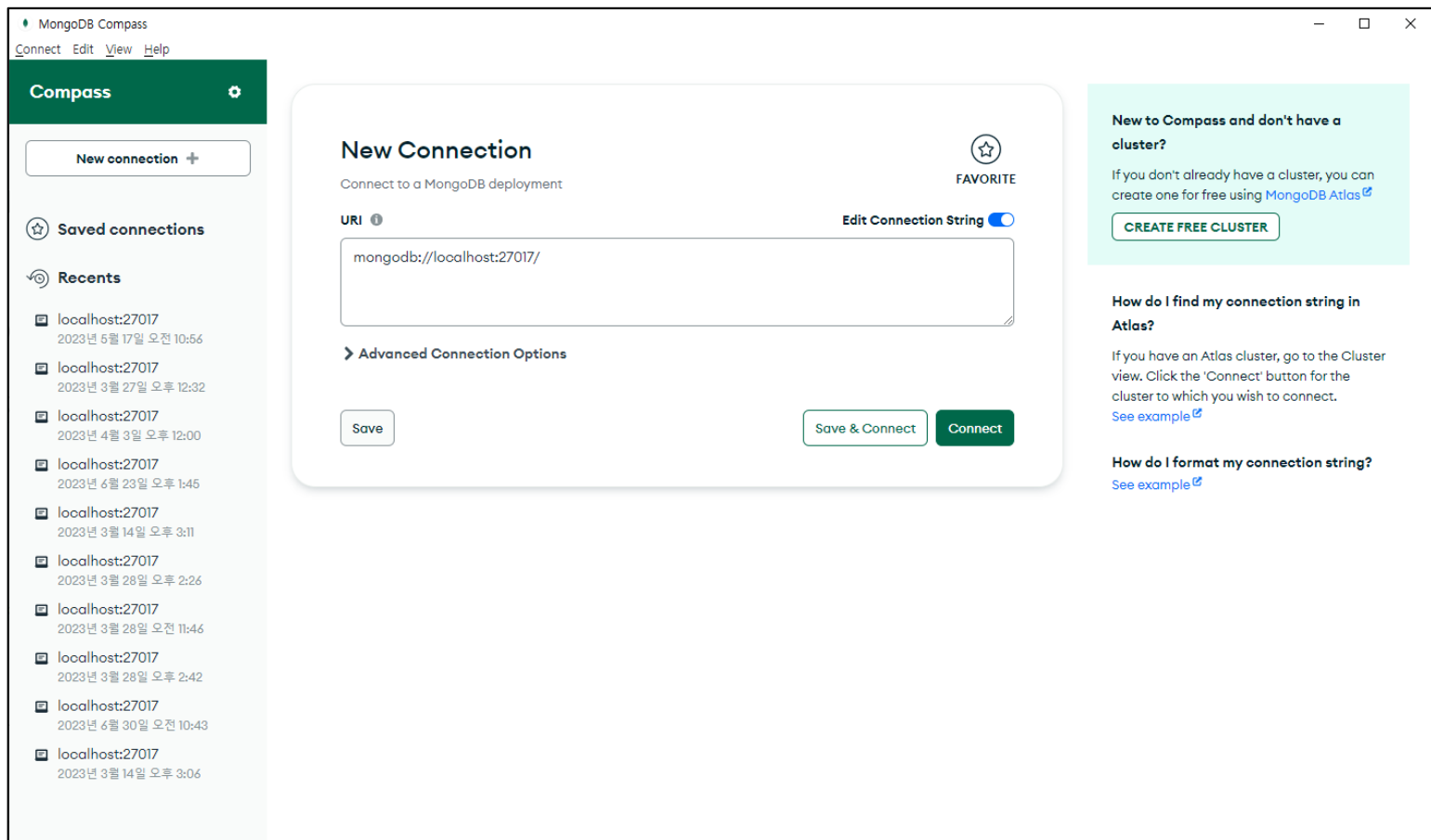
- ❖ Install MongoDB (7)
  - Run downloaded installation file



# MongoDB Installation

## ❖ Install MongoDB (8)

- Run downloaded installation file



# MongoDB Compass

## ❖ What is MongoDB Compass?

- GUI interactive tool for querying, optimizing, and analyzing a database



### Interact with data using our versatile GUI

Implement updates, find data, and complete other key operations – all from a single user interface.



### Get the data you need – fast

Search your documents and collections directly from the Compass query bar.



### Drag and drop aggregation pipeline builder

Create pipelines from 200+ operators – and export in your preferred language to use within your app.



### Import and export data as needed

Compass enables you to easily import and export JSON and CSV files to and from your collections.



### Visualize, validate, and analyze schema

Understand the structure of your documents. Create, update, and enforce schema across collections.

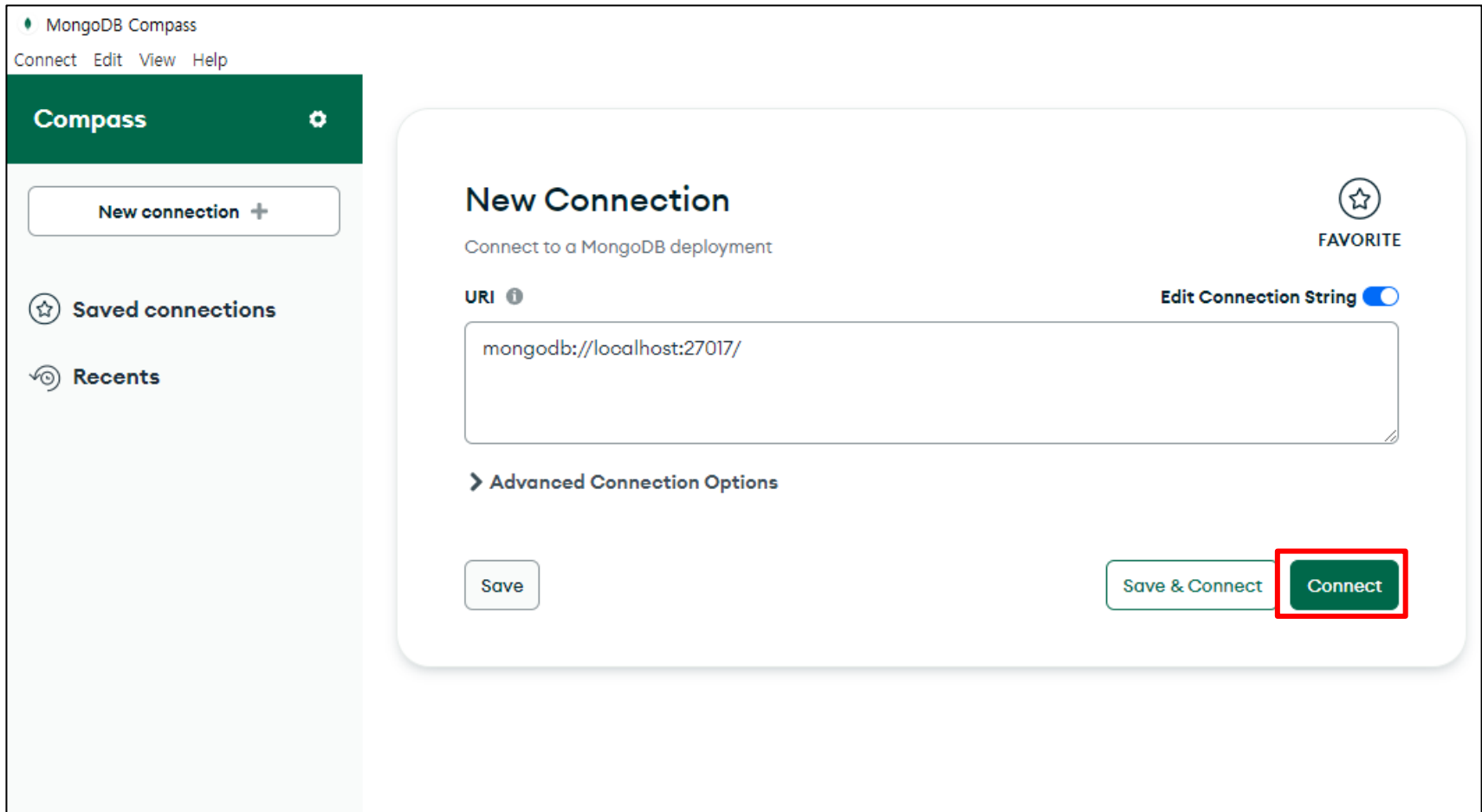


### Assess query performance in granular detail

Inspect individual queries – and break down multi-stage ones – with the Visual Explain Plan.

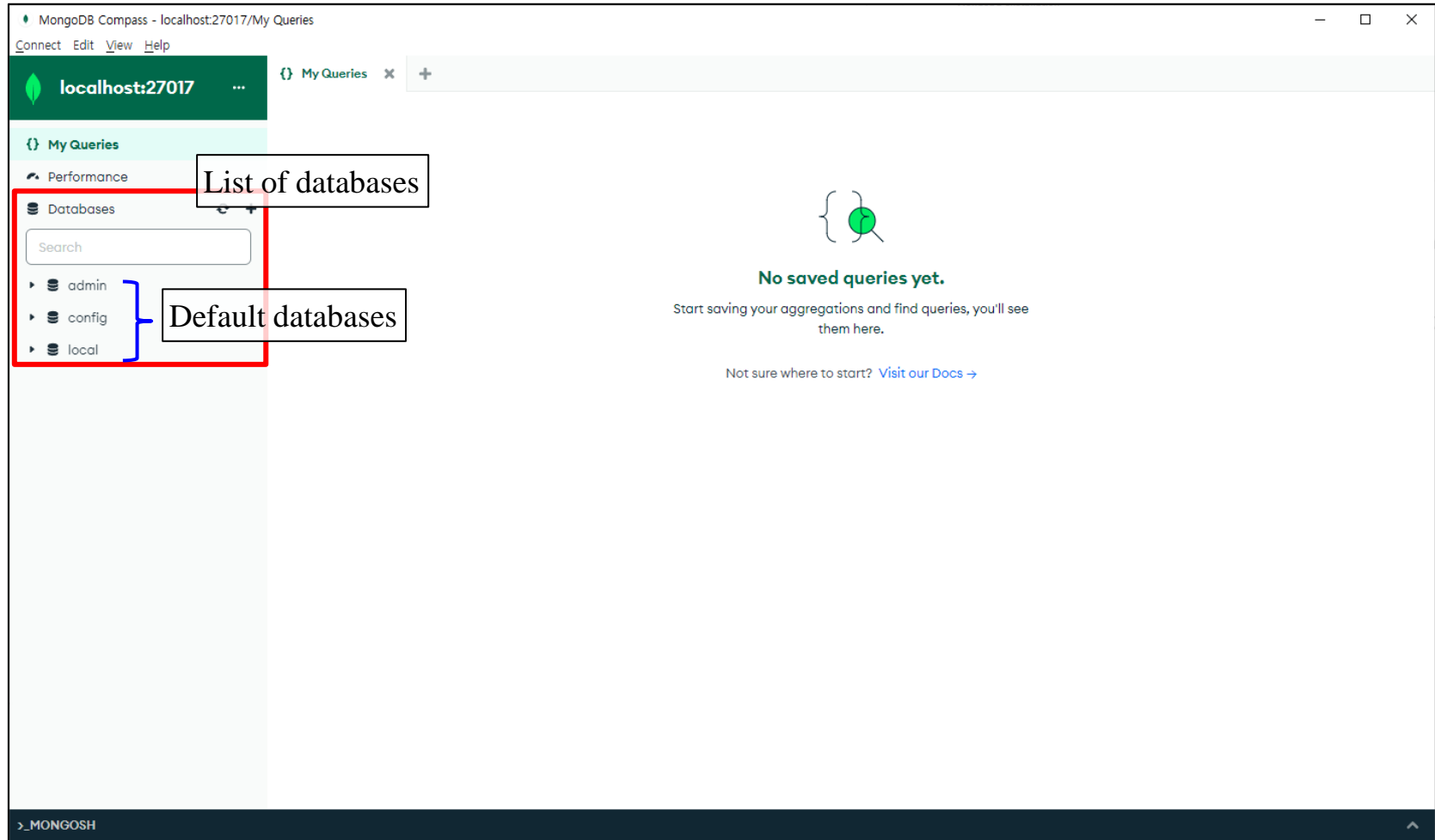
# MongoDB Compass

## ❖ First connection to MongoDB (1)



# MongoDB Compass

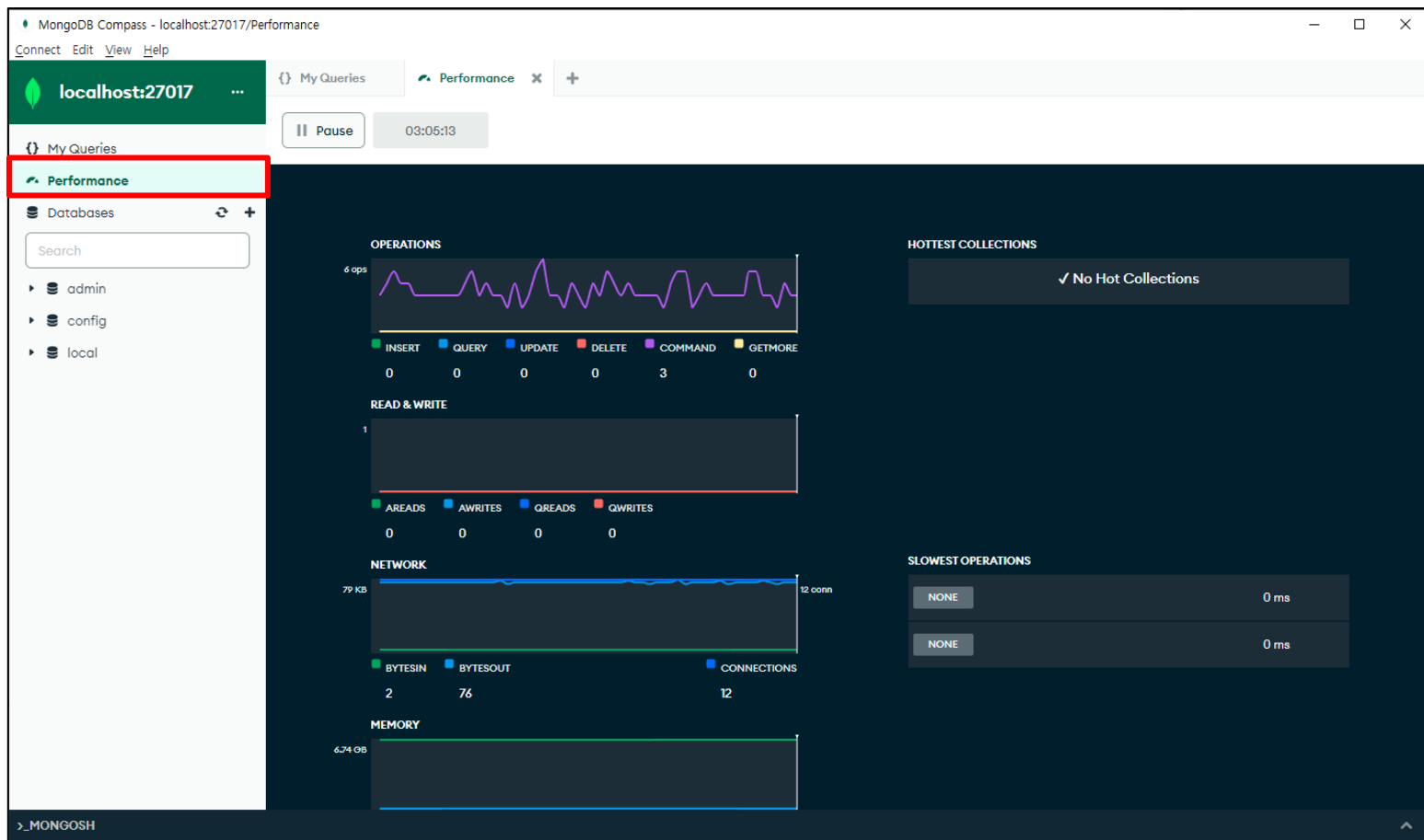
## ❖ First connection to MongoDB (2)





# MongoDB Compass

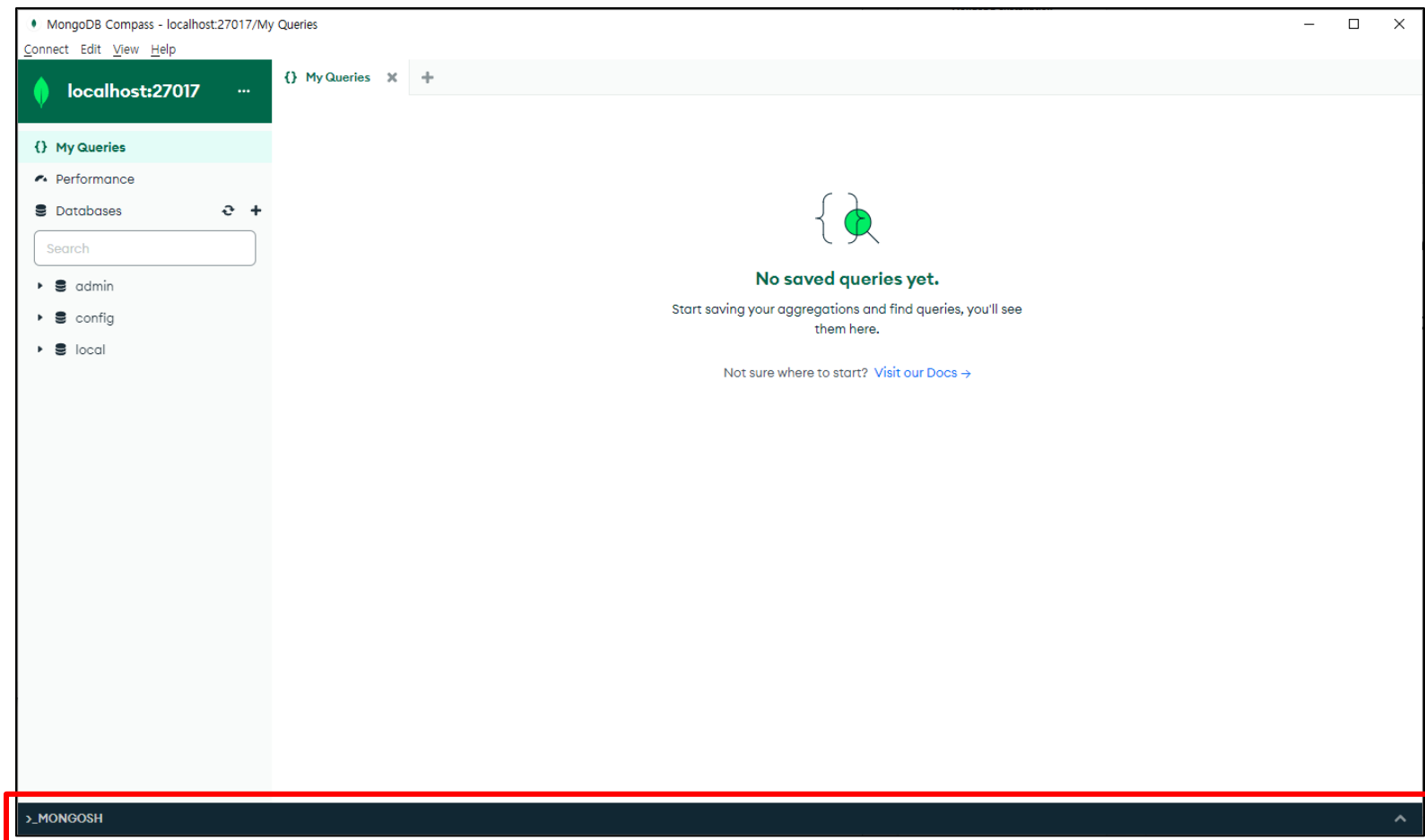
- ❖ First connection to MongoDB (3)
  - The real-time server performance view



# MongoDB Compass

## ❖ First connection to MongoDB (4)

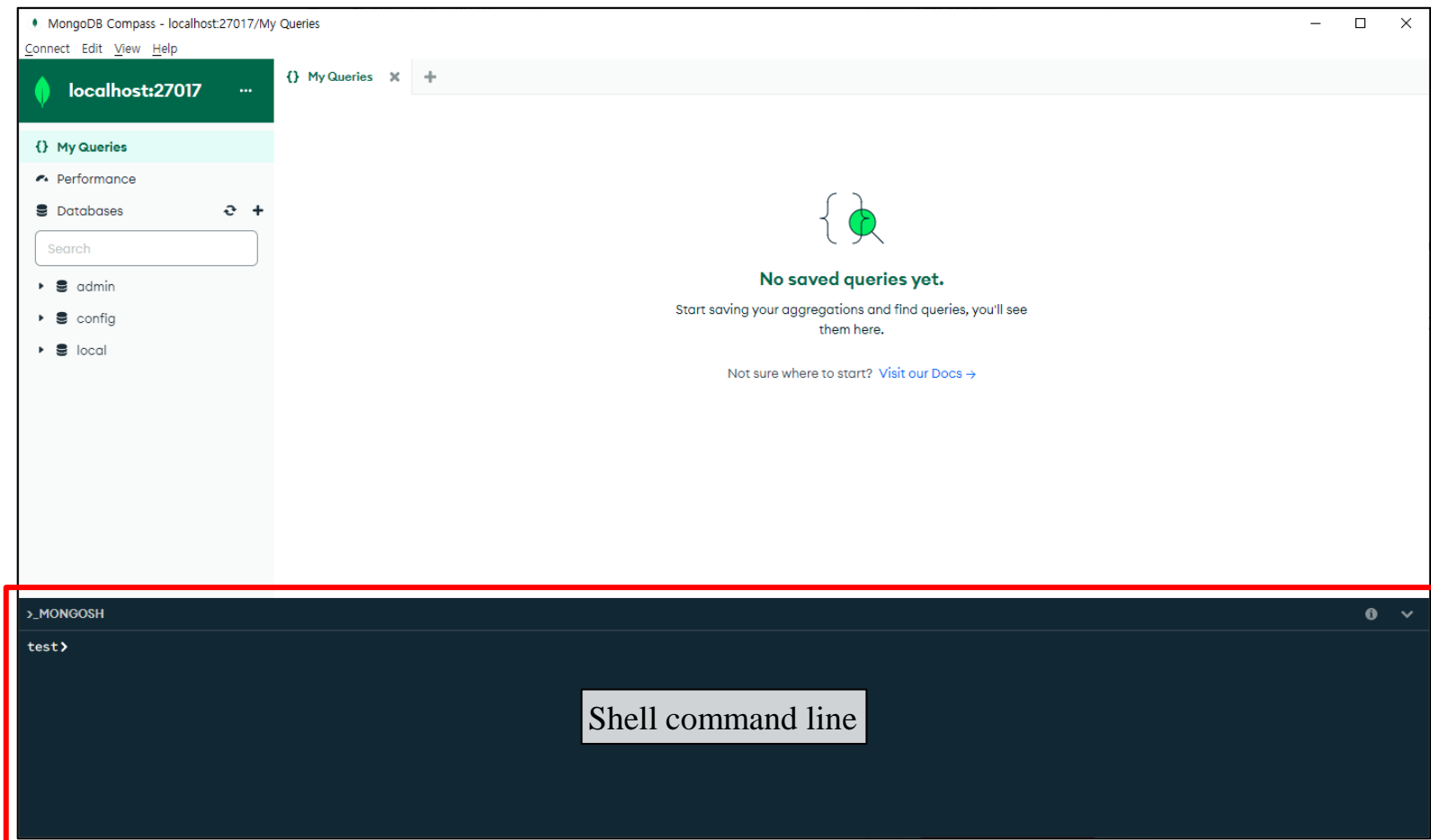
### ▪ Mongo shell



# MongoDB Compass

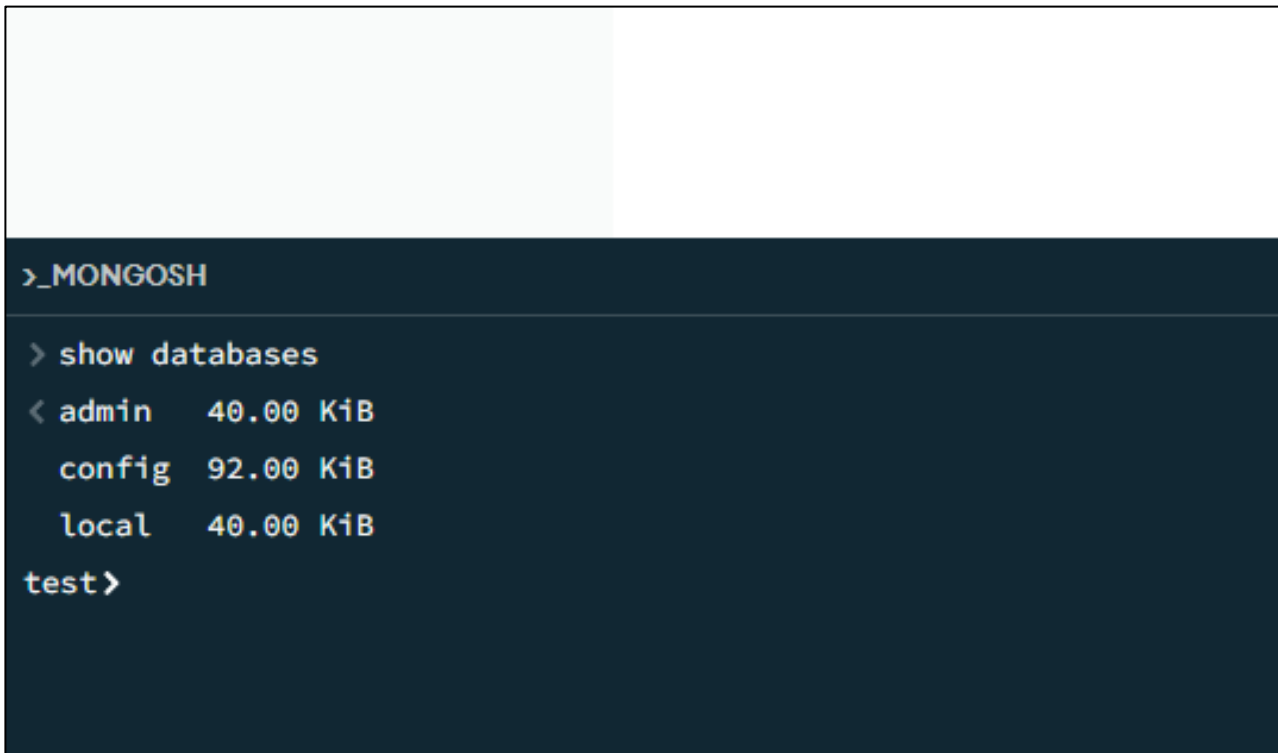
## ❖ First connection to MongoDB (5)

### ▪ Mongo shell



# MongoDB Compass

- ❖ First connection to MongoDB (6)
  - Mongo shell
    - Input command: 'show databases'

A screenshot of the MongoDB shell interface. The top bar is light gray. The main area has a dark blue background. The prompt is '>\_MONGOSH'. The command '> show databases' has been entered. The output shows three databases: 'admin' (40.00 KiB), 'config' (92.00 KiB), and 'local' (40.00 KiB). The prompt 'test>' is visible at the bottom.

```
>_MONGOSH
> show databases
< admin   40.00 KiB
  config  92.00 KiB
  local   40.00 KiB
test>
```

Questions?

**SEE YOU NEXT TIME!**