

데이터베이스와 SQL

1장

MySQL 설치 및 설정(MacOS)

빅데이터 분석가 과정

목차

- MySQL
 - MacOS에 MySQL 설치
 - 기본 명령어

MySQL 다운로드 #1

■ 다운받기

- <https://www.mysql.com/downloads/>
- MySQL Community (GPL) Downloads 선택

MySQL HeatWave

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- 1/2 the cost of Amazon Redshift AQUA
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Sunday, July 03, 2022

Machine Learning with MySQL HeatWave
Tuesday, July 05, 2022

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[Trial Download »](#)

[MySQL Community \(GPL\) Downloads »](#)

MySQL 다운로드 #2

■ MySQL Community Server 선택

 MySQL Community Downloads

- MySQL Yum Repository
- MySQL APT Repository
- MySQL SUSE Repository
- MySQL Community Server
- MySQL Cluster
- MySQL Router
- MySQL Shell
- MySQL Operator
- MySQL Workbench
- MySQL Installer for Windows
- MySQL for Visual Studio

- C API (libmysqlclient)
- Connector/C++
- Connector/J
- Connector/NET
- Connector/Node.js
- Connector/ODBC
- Connector/Python
- MySQL Native Driver for PHP
- MySQL Benchmark Tool
- Time zone description tables
- Download Archives

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MacOS용 MySQL 다운로드

- 사용하고 있는 프로세스 종류에 맞게 다운로드

The screenshot shows the MySQL Community Downloads page for macOS 8.0.31. The page is titled "MySQL Community Downloads" and "MySQL Community Server". It has tabs for "General Availability (GA) Releases", "Archives", and a download icon. The "General Availability (GA) Releases" tab is selected.

MySQL Community Server 8.0.31

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Select OS Version:

macOS 12 (ARM, 64-bit), DMG Archive 8.0.31 454.9M [Download](#)
(mysql-8.0.31-macos12-arm64.dmg) MDS: 1beba0f368a30dd7cf9eb0ef4a816a4e | [Signature](#)

macOS 12 (x86, 64-bit), DMG Archive 8.0.31 461.8M [Download](#)
(mysql-8.0.31-macos12-x86_64.dmg) MDS: 4a6f2c7447f9b2895a2f5710f0178904 | [Signature](#)

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(mysql-8.0.31-macos12-arm64.tar.gz) MDS: 63aa98fa02e84d2d0520af0fabb0435a | [Signature](#)

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(mysql-8.0.31-macos12-x86_64.tar.gz) MDS: b310ac68c8dfc767f0850c314bc488ec | [Signature](#)

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(mysql-test-8.0.31-macos12-arm64.tar.gz) MDS: 802806dff9158fd24a7f204a26668fb | [Signature](#)

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(mysql-test-8.0.31-macos12-x86_64.tar.gz) MDS: 668052593b96dc1859542bba61049a5c | [Signature](#)

macOS 12 (ARM, 64-bit), TAR 8.0.31 470.6M [Download](#)
(mysql-8.0.31-macos12-arm64.tar) MDS: 60c8ed23fc7c74f48222e1fb08aeb6a6 | [Signature](#)

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MySQL Community Downloads

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MySQL.com is using Oracle SSO for authentication. If you already have an Oracle Web account, click the Login link. Otherwise, you can signup for a free account by clicking the Sign Up link and following the instructions.

No thanks, just start my download.

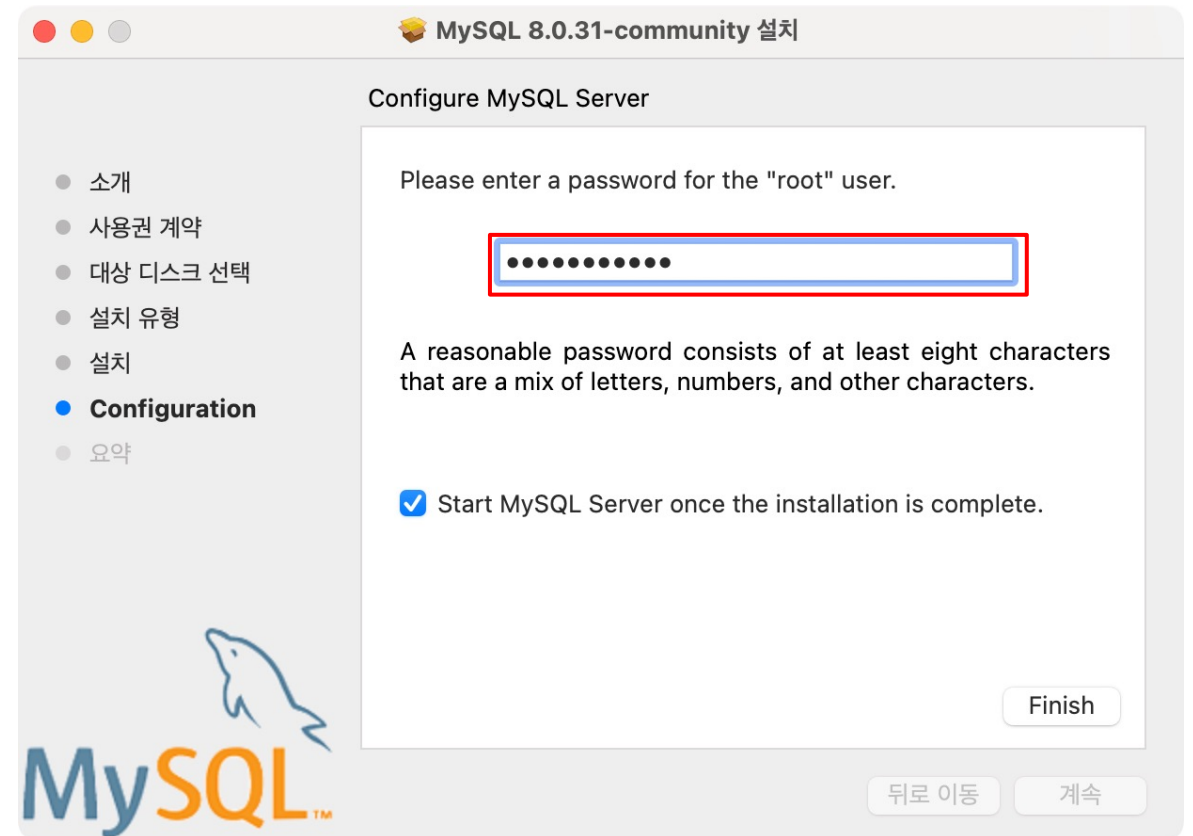
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- App Store 및 확인된 개발자 허용



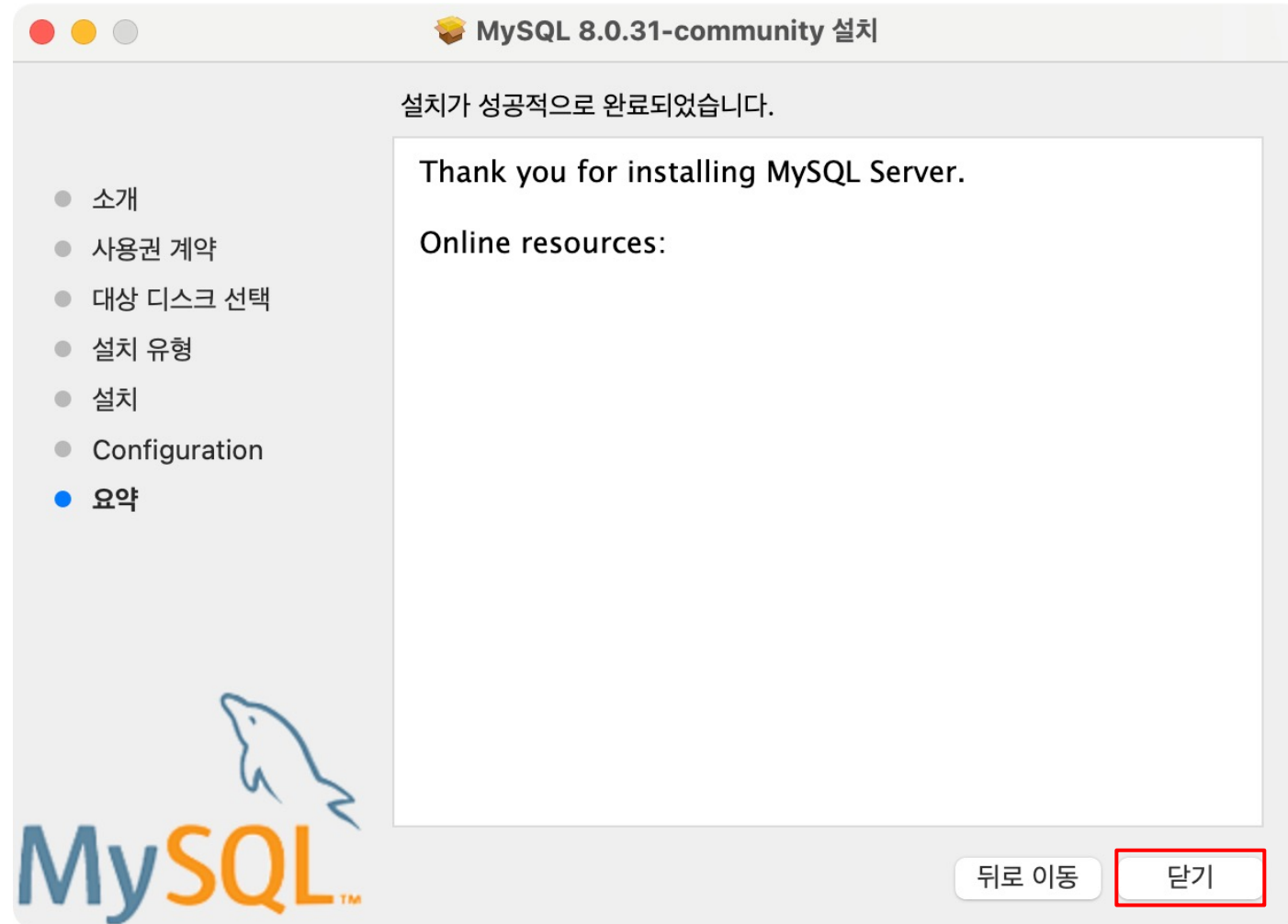
MySQL. 설치



패스워드는 8글자 이상

MySQL. 설치

■ 설치 완료



MacOS 사용자 MySQL 설치 확인

- 터미널에서 아래 경로로 이동

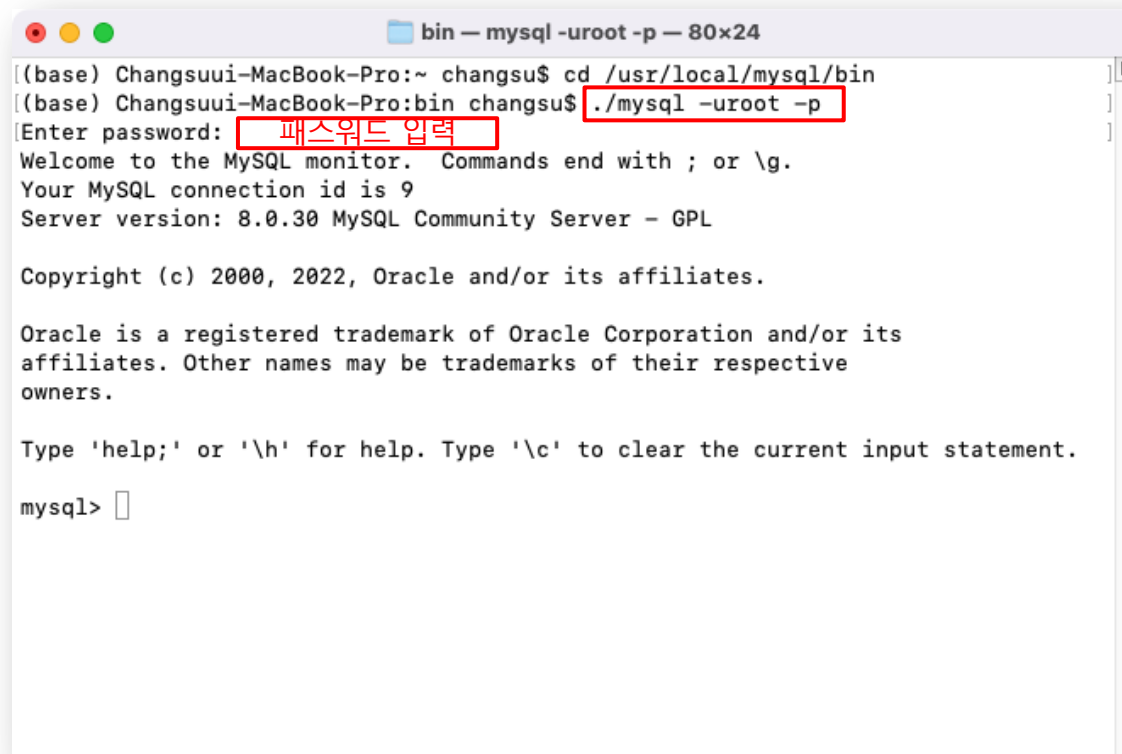
```
$ cd /usr/local/mysql/bin
```

- 아래 명령어 입력 후 MySQL 설치 과정에서 입력한 패스워드 입력

```
$ ./mysql -uroot -p
```

- MySQL 종료

```
mysql> quit
```



```
bin — mysql -uroot -p — 80x24
[(base) Changsuui-MacBook-Pro:~ changsu$ cd /usr/local/mysql/bin
[(base) Changsuui-MacBook-Pro:bin changsu$ ./mysql -uroot -p
[Enter password: 패스워드 입력
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.30 MySQL Community Server - GPL

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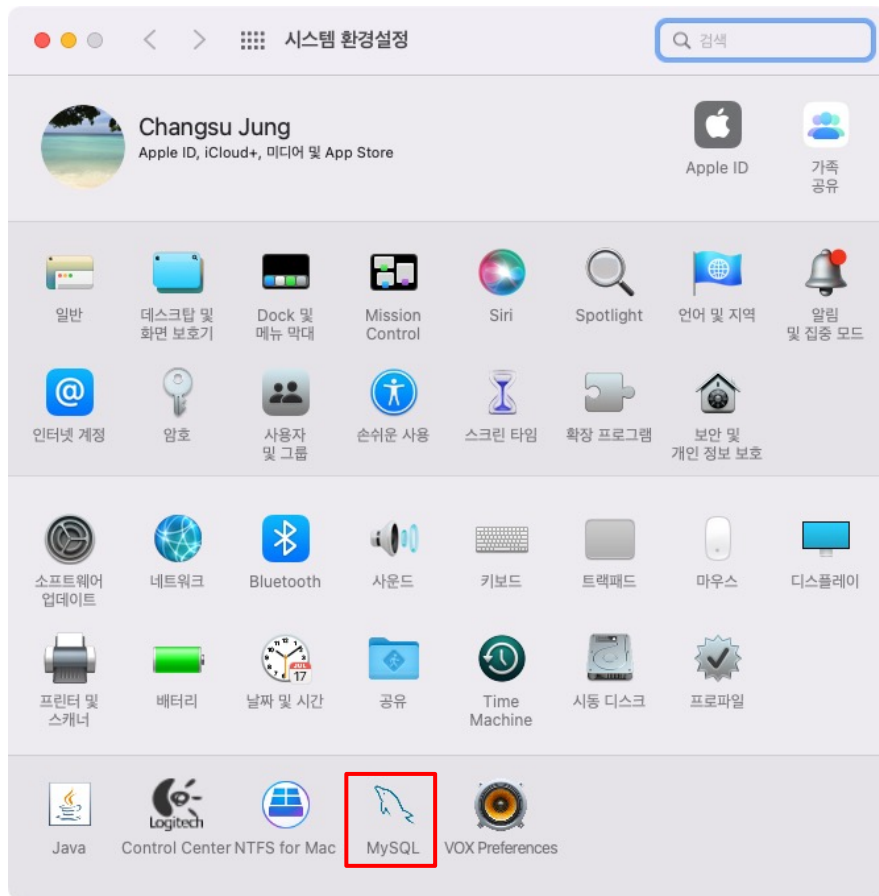
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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> ]
```

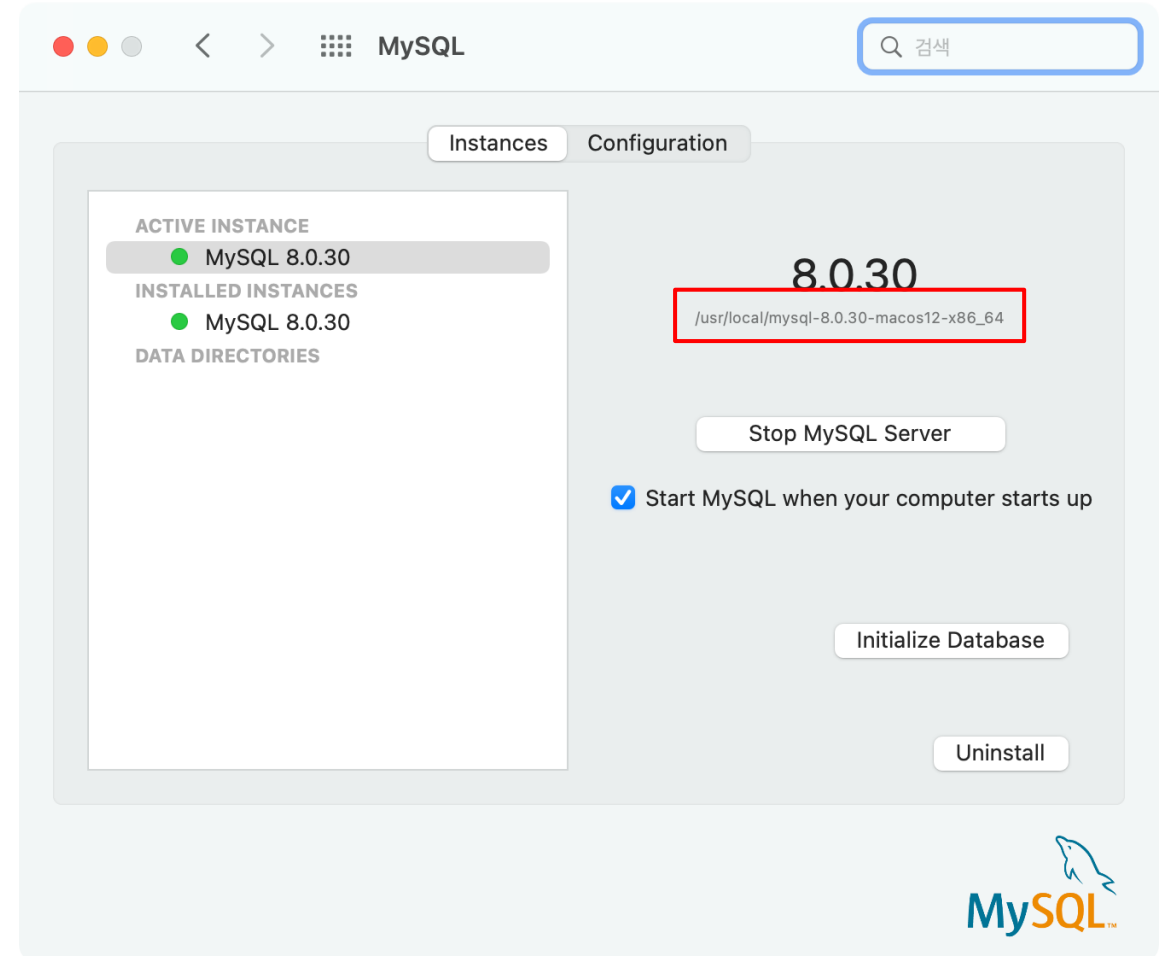
MySQL 경로 설정 #1

- 시스템 환경 설정 메뉴 (Monterey 버전)
 - MySQL 더블 클릭



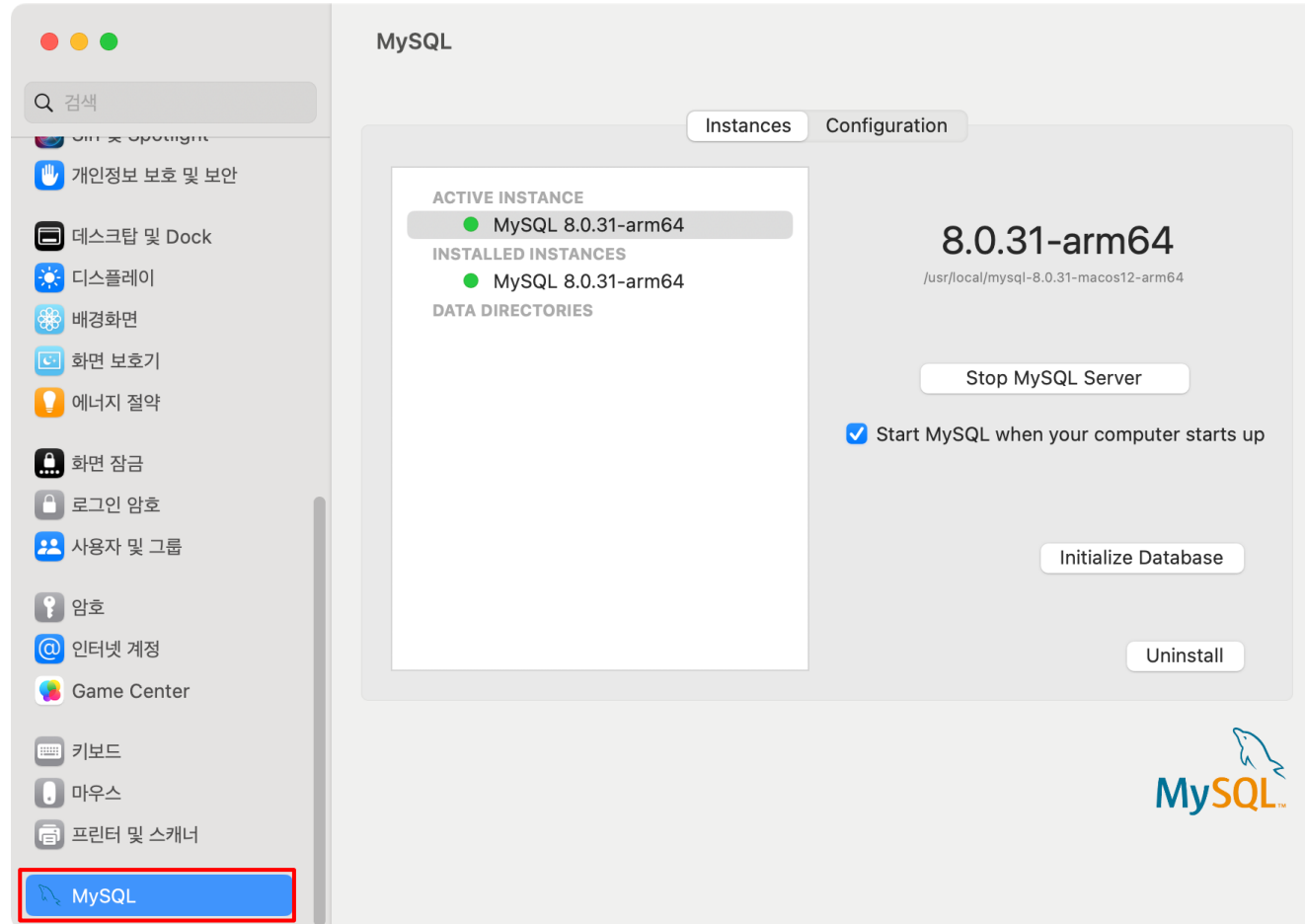
설치 경로 확인

`/usr/local/mysql-8.0.30-macos12-x86_64`



MySQL 경로 설정 #2

- 시스템 설정 메뉴 (Ventura 버전)
 - 경로 확인: `/usr/local/mysql-8.0.31-macos12-arm64`



MySQL 경로 설정 #3

- 경로 환경 변수 설정
 - .zshrc 파일에 아래 경로 추가

```
export MYSQL_PATH= /usr/local/mysql-8.0.31-macos12-arm64  
export PATH=${PATH}:${MYSQL_PATH}/bin:
```

- 변경된 파일 적용

```
$ source ~/.zshrc
```

MySQL 설정 #1

■ MySQL 설정

- 터미널에서 mysql_secure_installation 입력

```
$ mysql_secure_installation
```

- 비밀번호 복잡성 유무: No

```
Securing the MySQL server deployment.
```

```
Enter password for user root: root패스워드입력
```

```
VALIDATE PASSWORD COMPONENT can be used to test passwords  
and improve security. It checks the strength of password  
and allows the users to set only those passwords which are  
secure enough. Would you like to setup VALIDATE PASSWORD component?
```

```
Press y|Y for Yes, any other key for No: No
```

- 비밀번호 변경 여부

```
Using existing password for root.
```

```
Change the password for root ? ((Press y|Y for Yes, any other key for No) : No
```

MySQL 설정 #2

■ 사용자 설정

- Yes: -u(user) 옵션 필요
- No: -u 옵션 필요 없음

Remove anonymous users? (Press y|Y for Yes, any other key for No) : **yes**

■ root 사용자의 원격 접속 설정

- Yes: 원격 접속 불가능
- No: 원격 접속 가능

Normally, root should only be allowed to connect from 'localhost'. This ensures that someone cannot guess at the root password from the network.

Disallow root login remotely? (Press y|Y for Yes, any other key for No) : **No**

MySQL 설정 #3

- Test 데이터베이스 설정 여부
 - Yes: 테스트용 데이터베이스 제거
 - No: 테스트용 데이터베이스 유지

Remove test database and access to it? (Press y|Y for Yes, any other key for No) : **No**

- 변경된 권한을 테이블에 적용 여부 설정
 - Yes: 적용
 - No: 미적용

Reload privilege tables now? (Press y|Y for Yes, any other key for No) : **Yes**

MySQL 접속하기

- MySQL 접속 및 서버 설정 확인
 - root 계정으로 접속

```
$ mysql -uroot -p
```

```
$ mysql -uroot -p
```

Enter password:

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 17

Server version: 8.0.30 MySQL Community Server - GPL

```
mysql> status
```

```
mysql Ver 8.0.30 for macos12 on x86_64 (MySQL Community Server - GPL)
```

Connection id: 17

Current database:

Current user: root@localhost

SSL: Not in use

Current pager: stdout

Using outfile: ''

Using delimiter: ;

Server version: 8.0.30 MySQL Community Server - GPL

Protocol version: 10

Connection: Localhost via UNIX socket

Server characterset: utf8mb4

Db characterset: utf8mb4

Client characterset: utf8mb4

Conn. characterset: utf8mb4

UNIX socket: /tmp/mysql.sock

Binary data as: Hexadecimal

Uptime: 1 hour 32 min 8 sec

MySQL 접속 및 데이터베이스 확인 #1

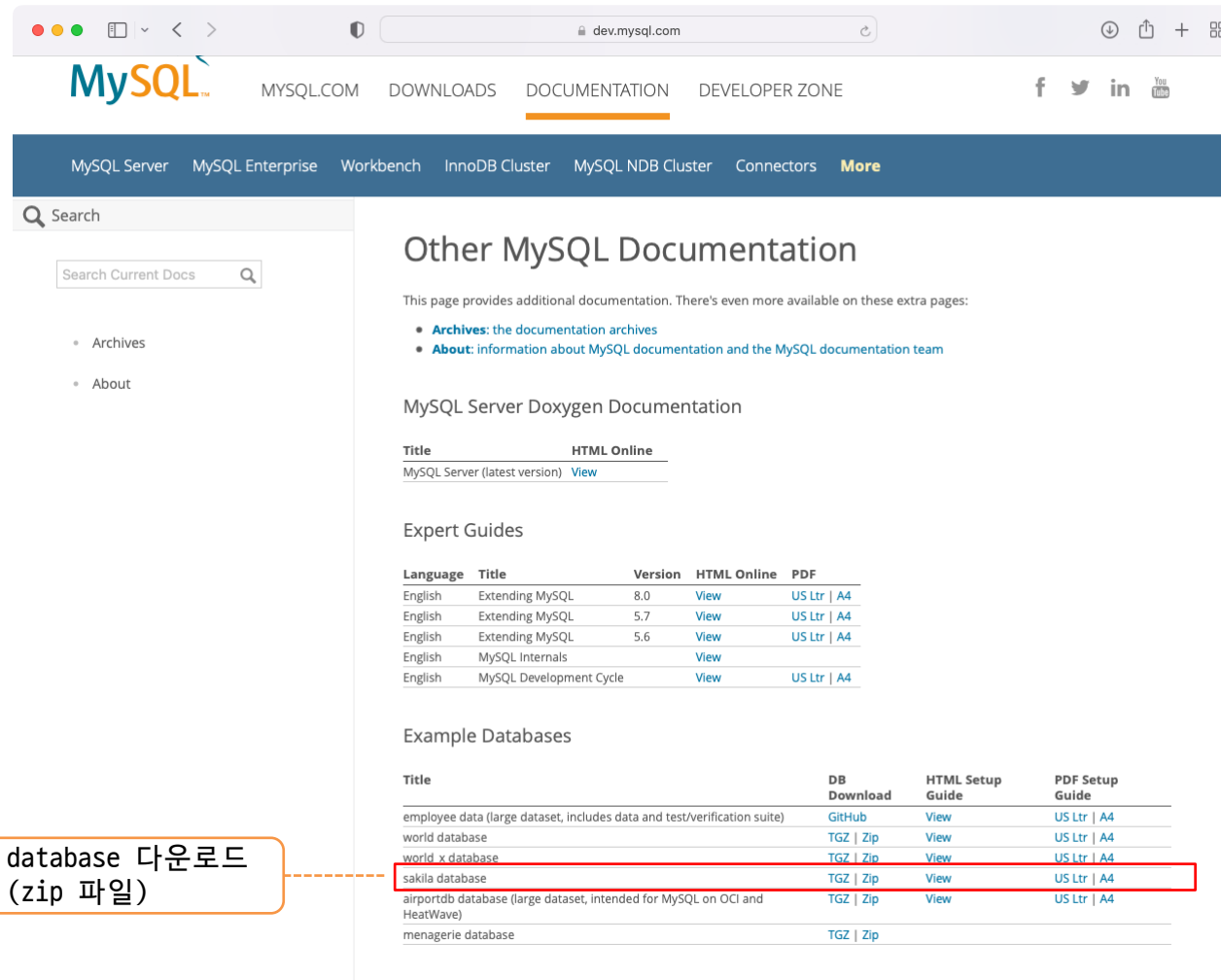
■ 샘플 데이터베이스 확인

```
mysql> show databases;
```

```
+-----+  
| Database |  
+-----+  
| information_schema |  
| mysql |  
| performance_schema |  
| sys |  
+-----+  
4 rows in set (0.02 sec)
```

추가 데이터베이스 설치 #1

- sakila database 다운로드 및 압축 해제
- <https://dev.mysql.com/doc/index-other.html>



sakila database 다운로드
(zip 파일)

추가 데이터베이스 설치 #2

■ 2개의 sakila-db 파일 설치

- sakila-schema.sql 설치(source 명령어 사용)

```
mysql> source /Users/사용자id/Downloads/sakila-db/sakila-schema.sql;
```

```
Query OK, 0 rows affected (0.00 sec)
```

■ sakila-data.sql 설치

```
mysql> source /Users/사용자id/Downloads/sakila-db/sakila-data.sql;
```

```
Query OK, 0 rows affected (0.00 sec)
```

■ 설치 확인

```
mysql> show databases;
```

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql      |
| performance_schema |
| sakila    |
| sys        |
+-----+
5 rows in set (0.00 sec)
```

MySQL UTF-8 설정 확인

■ 전역 변수 내용 확인

```
mysql> show global variables like 'c%';
```

Variable_name	Value
caching_sha2_password_auto_generate_rsa_keys	ON
caching_sha2_password_digest_rounds	5000
caching_sha2_password_private_key_path	private_key.pem
caching_sha2_password_public_key_path	public_key.pem
character_set_client	utf8mb4
character_set_connection	utf8mb4
character_set_database	utf8mb4
character_set_filesystem	binary
character_set_results	utf8mb4
character_set_server	utf8mb4
character_set_system	utf8mb3
character_sets_dir	C:\Program Files\MySQL\MySQL Server 8.0\
check_proxy_users	OFF
collation_connection	utf8mb4_unicode_ci
collation_database	utf8mb4_unicode_ci
collation_server	utf8mb4_unicode_ci
completion_type	NO_CHAIN
concurrent_insert	AUTO
connect_timeout	10
connection_memory_chunk_size	8912
connection_memory_limit	18446744073709551615
core_file	OFF
create_admin_listener_thread	OFF
cte_max_recursion_depth	1000



Questions?