MariaDB

- 오픈 소스의 관계형 데이터베이스 관리 시스템(RDBMS)

- 오라클 소유의 불확실한 MySQL의 라이선스 상태에 반발하여 만들어졌으며 GPL v2 라이선스를 따르는 순수한 오픈 소스 데이터베이스 관리 시스템

- MySQL과 동일한 소스 코드 기반으로 사용 방법과 구조가 MySQL과 동일
  - » 명령어나 사용방법 (5.5까지) 모두 MySQL과 동일
  - » 편의를 위해 마리아DB는 동일한 MySQL 버전과 바이너리 드롭인 교체 지원
    - › MySQL 5.1은 마리아DB 5.1과 호환, MySQL 5.5는 마리아DB 5.5와 호환

MariaDB 설치

- 저장소 설정

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ wget https://downloads.mariadb.com/MariaDB/mariadb_repo_setup
--2021-02-17 00:14:29--  https://downloads.mariadb.com/MariaDB/mariadb_repo_setup
Resolving downloads.mariadb.com (downloads.mariadb.com)... 104.20.67.208, 104.20.68.208, 172.67.32.229, ...
Connecting to downloads.mariadb.com (downloads.mariadb.com)|104.20.67.208|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 24101 (24K) [application/octet-stream]
Saving to: 'mariadb_repo_setup'

100%[======================================>] 24,101      --.-K/s    in 0.05s

2021-02-17 00:14:31 (459 KB/s) - 'mariadb_repo_setup' saved [24101/24101]
```

```
(ssac) [ssac@centos-server ~]$ chmod +x mariadb_repo_setup
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo ./mariadb_repo_setup
[sudo] ssac의 암호 :
[info] Repository file successfully written to /etc/yum.repos.d/mariadb.repo
[info] Adding trusted package signing keys...
[info] Successfully added trusted package signing keys
(ssac) [ssac@centos-server ~]$
```

MariaDB 설치

- 설치

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo yum install -y MariaDB-server
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: mirror.kakao.com
 * extras: mirror.kakao.com
 * updates: mirror.kakao.com
Resolving Dependencies
```

생략…

```
  socat.x86_64 0:1.7.3.2-2.el7

Replaced:
  mariadb-libs.x86_64 1:5.5.68-1.el7

Complete!
(ssac) [ssac@centos-server ~]$
```

MySQL 개발자 도구 설치

```
(ssac) [ssac@centos-server ~]$ wget https://dev.mysql.com/get/mysql80-community-release-el7-3.noarch.rpm
--2021-02-17 03:22:44--  https://dev.mysql.com/get/mysql80-community-release-el7-3.noarch.rpm
Resolving dev.mysql.com (dev.mysql.com)... 137.254.60.11
Connecting to dev.mysql.com (dev.mysql.com)|137.254.60.11|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://repo.mysql.com//mysql80-community-release-el7-3.noarch.rpm [following]
--2021-02-17 03:22:45--  https://repo.mysql.com//mysql80-community-release-el7-3.noarch.rpm
Resolving repo.mysql.com (repo.mysql.com)... 23.53.224.54
Connecting to repo.mysql.com (repo.mysql.com)|23.53.224.54|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 26024 (25K) [application/x-redhat-package-manager]
Saving to: 'mysql80-community-release-el7-3.noarch.rpm'
```

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo rpm -Uvh mysql80-community-release-el7-3.noarch.rpm
경고 : mysql80-community-release-el7-3.noarch.rpm: Header V3 DSA/SHA1 Signature, key ID 5072e1f5: NOKEY
준비 중...                          ################################# [100%]
Updating / installing...
   1:mysql80-community-release-el7-3  ################################# [100%]
(ssac) [ssac@centos-server ~]$
```

MySQL 개발자 도구 설치

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo yum install -y mysql-community-devel
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: mirror.kakao.com
 * extras: mirror.kakao.com
 * updates: mirror.kakao.com
Resolving Dependencies
```

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ pip install mysqlclient
Collecting mysqlclient
  Using cached mysqlclient-2.0.3.tar.gz (88 kB)
Building wheels for collected packages: mysqlclient
  Building wheel for mysqlclient (setup.py) ... done
  Created wheel for mysqlclient: filename=mysqlclient-2.0.3-cp37-cp37m-linux_x86_64.whl
 size=100447 sha256=ac3c0028ffa987b85b60079e74fdf5970463fdc7761c2e000405149e188ab7f1
  Stored in directory: /home/ssac/.cache/pip/wheels/79/1c/f8/11fafab45fe6696eea63794a5d
747b9c6b54990ac6f1885fb7
Successfully built mysqlclient
Installing collected packages: mysqlclient
Successfully installed mysqlclient-2.0.3
(ssac) [ssac@centos-server ~]$
```

MariaDB 실행

- 실행

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo systemctl start mariadb
(ssac) [ssac@centos-server ~]$
```

- 실행 확인

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo systemctl status mariadb
● mariadb.service - MariaDB 10.5.8 database server
   Loaded: loaded (/usr/lib/systemd/system/mariadb.service; disabled; vendor preset: di
sabled)
  Drop-In: /etc/systemd/system/mariadb.service.d
           └─migrated-from-my.cnf-settings.conf
   Active: active (running) since 수  2021-02-17 00:23:36 KST; 6s ago
```

MariaDB 초기 설정

- 설정 프로그램 실행 (mysql_secure_installation)

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo mysql_secure_installation
```

```
Enter current password for root (enter for none):
OK, successfully used password, moving on...
```

```
Switch to unix_socket authentication [Y/n] n
 ... skipping.
```

```
Change the root password? [Y/n] Y
New password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..
 ... Success!
```

```
Remove anonymous users? [Y/n] Y
 ... Success!
```

```
Disallow root login remotely? [Y/n] n
 ... skipping.
```

MariaDB 초기 설정

- 설정 프로그램 실행 (mysql_secure_installation)

```
Remove test database and access to it? [Y/n] Y
 - Dropping test database...
 ... Success!
 - Removing privileges on test database...
 ... Success!
```

```
Reload privilege tables now? [Y/n] Y
 ... Success!
```

```
All done!  If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
(ssac) [ssac@centos-server ~]$
```

MariaDB 클라이언트 접속

- 로컬 머신에서 접속

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 10
Server version: 10.5.8-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]>
```

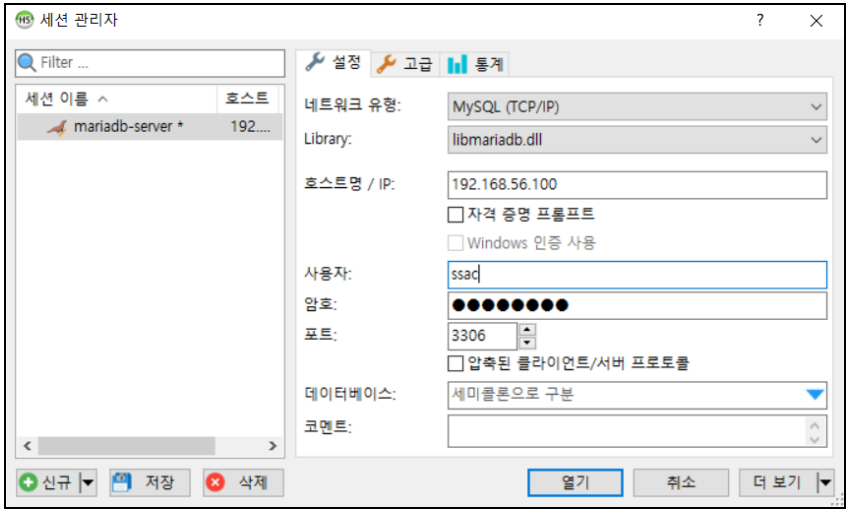
MariaDB 클라이언트 접속

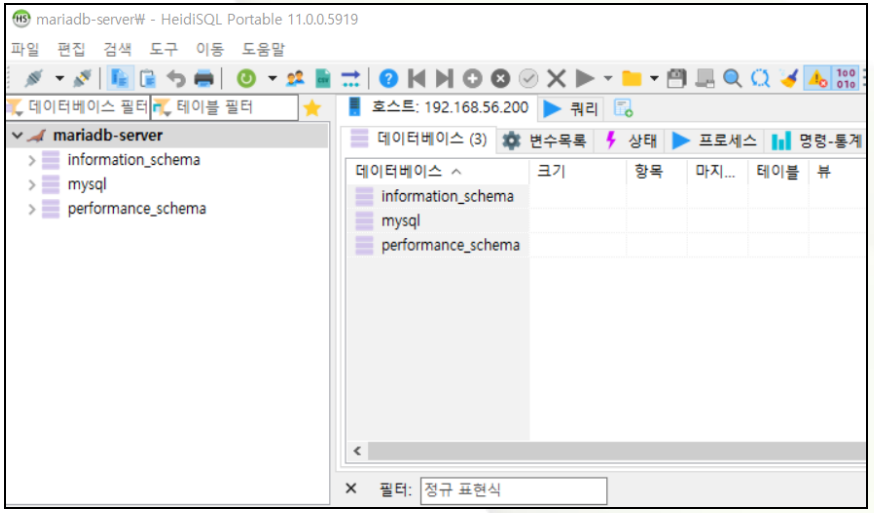
- 방화벽 설정

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo firewall-cmd --permanent --zone=public --add-port=3
306/tcp
[sudo] ssac의  암 호 :
success
(ssac) [ssac@centos-server ~]$
```

```
(ssac) [ssac@centos-server ~]$
(ssac) [ssac@centos-server ~]$ sudo systemctl restart firewalld
(ssac) [ssac@centos-server ~]$
```

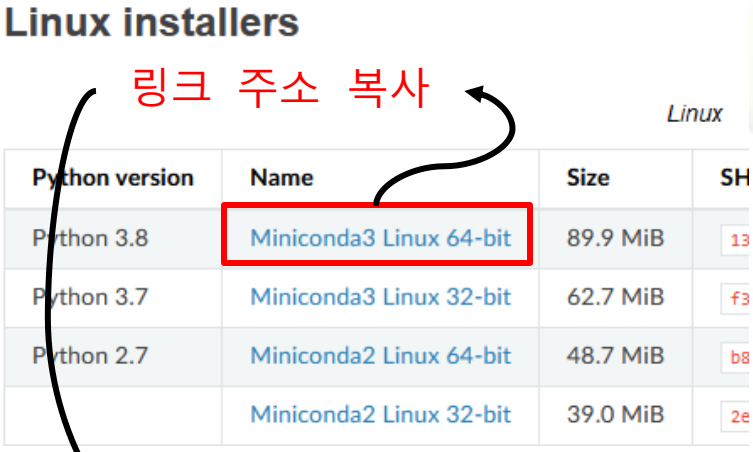
- 원격 접속





miniconda 설치

- 다운로드 → https://docs.conda.io/en/latest/miniconda.html




```
[ssac@centos-server ~]$
[ssac@centos-server ~]$ wget https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86_64.sh
--2021-02-16 20:29:29--  https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86_64.sh
Resolving repo.anaconda.com (repo.anaconda.com)... 104.16.130.3, 104.16.131.3, 2606:4700::6810:8303, ...
Connecting to repo.anaconda.com (repo.anaconda.com)|104.16.130.3|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 94235922 (90M) [application/x-sh]
Saving to: 'Miniconda3-latest-Linux-x86_64.sh'

100%[=======================================>] 94,235,922  4.53MB/s    in 21s

2021-02-16 20:29:49 (4.38 MB/s) - 'Miniconda3-latest-Linux-x86_64.sh' saved [94235922/94235922]
```

miniconda 설치

```
[ssac@centos-server ~]$
[ssac@centos-server ~]$ ls -l
합 계  92028
-rw-rw-r-- 1 ssac ssac 94235922 11월  24 04:21 Miniconda3-latest-Linux-x86_64.sh
[ssac@centos-server ~]$
[ssac@centos-server ~]$ chmod 775 Miniconda3-latest-Linux-x86_64.sh
[ssac@centos-server ~]$
[ssac@centos-server ~]$ ls -l
합 계  92028
-rwxrwxr-x 1 ssac ssac 94235922 11월  24 04:21 Miniconda3-latest-Linux-x86_64.sh
[ssac@centos-server ~]$
[ssac@centos-server ~]$ mkdir apps
[ssac@centos-server ~]$
[ssac@centos-server ~]$ ./Miniconda3-latest-Linux-x86_64.sh

Welcome to Miniconda3 py38_4.9.2
```

```
In order to continue the installation process, please review the license
agreement.
Please, press ENTER to continue
>>>
```

```
Anaconda may, at its option, make available patches, workarounds or other updates to An
aconda Individual Edition. Unless the updates are provided with their separate governin

Do you accept the license terms? [yes|no]
[no] >>> yes
```

miniconda 설치

```
Miniconda3 will now be installed into this location:
/home/ssac/miniconda3

  - Press ENTER to confirm the location
  - Press CTRL-C to abort the installation
  - Or specify a different location below

[/home/ssac/miniconda3] >>> /home/ssac/apps/miniconda3
```

```
Preparing transaction: done
Executing transaction: done
installation finished.
Do you wish the installer to initialize Miniconda3
by running conda init? [yes|no]
[no] >>> yes
```

```
conda config --set auto_activate_base false

Thank you for installing Miniconda3!
[ssac@centos-server ~]$
```

```
[ssac@centos-server ~]$
[ssac@centos-server ~]$ source .bashrc
(base) [ssac@centos-server ~]$
```

가상 파이썬 환경 구성

```
(base) [ssac@centos-server ~]$
(base) [ssac@centos-server ~]$ conda create --name ssac python=3.7
Collecting package metadata (current_repodata.json): done
Solving environment: done
```

생략…

```
  xz                 pkgs/main/linux-64::xz-5.2.5-h7b6447c_0
  zlib               pkgs/main/linux-64::zlib-1.2.11-h7b6447c_3


Proceed ([y]/n)? y
```

생략…

```
# To deactivate an active environment, use
#
#     $ conda deactivate

(base) [ssac@centos-server ~]$
```

```
(base) [ssac@centos-server ~]$ conda info --envs
# conda environments:
#
base                  *  /home/ssac/apps/miniconda3
ssac                     /home/ssac/apps/miniconda3/envs/ssac

(base) [ssac@centos-server ~]$ conda activate ssac
(ssac) [ssac@centos-server ~]$
```