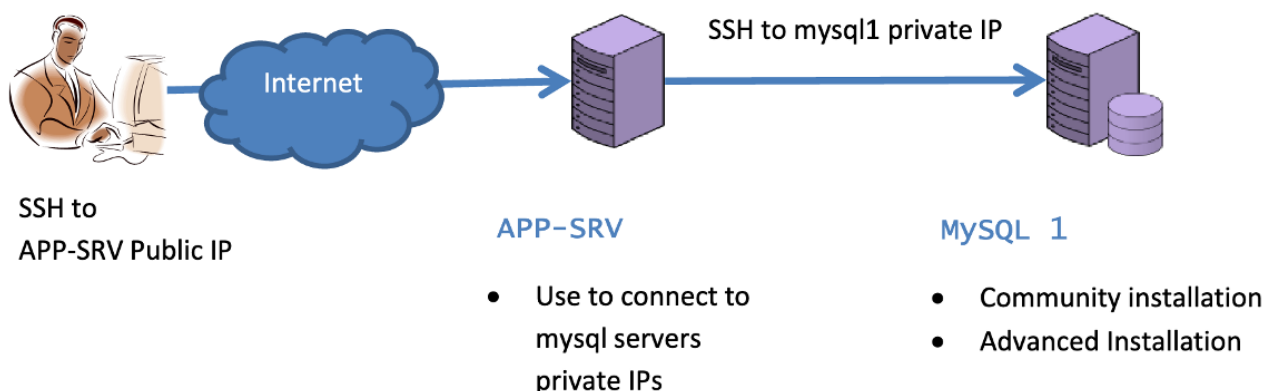


# Installation of MySQL Community

## Introduction

In this lab you will install MySQL Community, this because by default RedHat installs MariaDB so, we update the repository to install the original MySQL.



Estimated Lab Time: 30 minutes

## Objectives

In this lab, you will be guided through the following tasks:

- Installation of MySQL 8 (Community) on Oracle Linux 8.

### Note:

- Server: mysql1
- We call the instance installed here **mysql-gpl**

## Task 1: Install MySQL Community Client

1. Open an SSH client to app-srv
2. Connect to mysql1

```
<span style="color:green">shell-app-srv$</span> <copy>ssh -i  
$HOME/sshkeys/id_rsa_mysql1 opc@mysql1</copy>
```

3. Verify that you are connected to right server ( **mysql1** ).

If you are still connected to app-srv, please repeat previous step and recheck.

```
<span style="color:green">shell-mysql1></span> <copy>hostname</copy>
```

#### 4. Which MySQL packages are installed on your Linux?

```
<span style="color:green">shell-mysql1</span> <copy>sudo rpm -qa | grep  
mysql</copy>
```

#### 5. What happens when you try to install the mysql binaries with RedHat repositories?

Run this command but ***DON'T CONFIRM !***

```
<span style="color:green">shell-mysql1</span> <copy>sudo yum install mysql  
</copy>
```

As you have seen, above command try to install MariaDB sw. Each distribution has its own repositories and different choices for the packages to install.

#### 6. Oracle Linux 8 already have the official MySQL repository, but to show you how to do it, we re-install it from <https://dev.mysql.com/downloads/>

```
<span style="color:green">shell-mysql1</span> <copy>sudo yum -y install  
https://dev.mysql.com/get/mysql84-community-release-el8-1.noarch.rpm</copy>
```

#### 7. Update repository database with the new references

```
<span style="color:green">shell-mysql1</span> <copy>sudo yum repolist  
all</copy>
```

#### 8. Disable the use of OL default repository, to force the usage of one just installed

```
<span style="color:green">shell-mysql1</span> </span><copy>sudo yum -y module  
disable mysql</copy>
```

#### 9. Now install the mysql-client and note that there is not anymore reference to third party components

```
<span style="color:green">shell-mysql1</span> </span><copy>sudo yum install  
mysql</copy>
```

#### 10. If only mysql packages are shown, confirm the installation.

## Task 2: Install MySQL Community Server

### 1. Install mysql-server

```
<span style="color:green">shell-mysql1</span> <copy>sudo yum install mysql-server</copy>
```

2. Because MySQL is automatically installed you can use OS command for service management, for example to check if it's already started

```
<span style="color:green">shell-mysql1</span> <copy>sudo systemctl status mysqld</copy>
```

3. Start MySQL if not started

```
<span style="color:green">shell-mysql1</span> <copy>sudo systemctl start mysqld</copy>
```

```
<span style="color:green">shell-mysql1</span> <copy>sudo systemctl status mysqld</copy>
```

4. Now enable automatic startup of mysqld service

```
<span style="color:green">shell-mysql1</span> <copy>sudo systemctl enable mysqld</copy>
```

## Task 3: Change root password and create admin account

1. Check the content of my.cnf, that is in default folder for linux OS and note the following info (lines that start with "#" are just comments)
  - Where is the database and the error log (mysqld.log) stored?
  - Check if there are error for the instance looking in the error log file

```
<span style="color:green">shell-mysql1</span> <copy>sudo cat /etc/my.cnf</copy>
```

2. Starting from MySQL 5.7 the default installation of MySQL Server generates a one-time password. You find it in error log notes above

```
<span style="color:green">shell-mysql1</span> <copy>sudo grep 'temporary' /var/log/mysqld.log</copy>
```

### 3. Login to MySQL using password retrieved in previous step

```
<span style="color:green">shell-mysql1</span> <copy>mysql -uroot -p -h  
localhost</copy>
```

### 4. Try to run a command and write down the error message

```
<span style="color:blue">mysql</span> <copy>status</copy>
```

### 5. Change root password

```
<span style="color:blue">mysql</span> <copy>ALTER USER 'root'@'localhost'  
IDENTIFIED BY 'Welcome1!';</copy>
```

### 6. Retry command above, now it works

```
<span style="color:blue">mysql</span> <copy>status;</copy>
```

### 7. Which databases are installed by default?

```
<span style="color:blue">mysql</span> <copy>show databases;</copy>
```

```
+-----+  
| Database          |  
+-----+  
| information_schema |  
| mysql              |  
| performance_schema |  
| sys                |  
+-----+  
4 rows in set (0.00 sec)
```

### 8. To see which version of MySQL you are using submit the command

```
<span style="color:blue">mysql</span> <copy>show variables like  
"%version%";</copy>
```

## 9. Check default users in standard installation

```
<span style="color:blue">mysql</span> <copy>SELECT user, host FROM  
mysql.user WHERE user='root';</copy>
```

## 10. The root account can connect only locally, so we create now the 'admin'@'%' account that can connect remotely

```
<span style="color:blue">mysql</span> <copy>CREATE USER admin@'%'  
identified by 'Welcome1!';</copy>
```

```
<span style="color:blue">mysql</span> <copy>GRANT ALL ON *.* TO admin@'%'  
WITH GRANT OPTION;</copy>
```

## 11. Exit MySQL

```
<span style="color:blue">mysql</span> <copy>\q</copy>
```

## Learn More

- <https://dev.mysql.com/doc/mysql-yum-repo-quick-guide/en/>
- <https://dev.mysql.com/doc/refman/8.4/en/validate-password.html>

## Acknowledgements

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- **Last Updated By/Date** - Perside Foster, Partner Solutions Engineer, November 2024