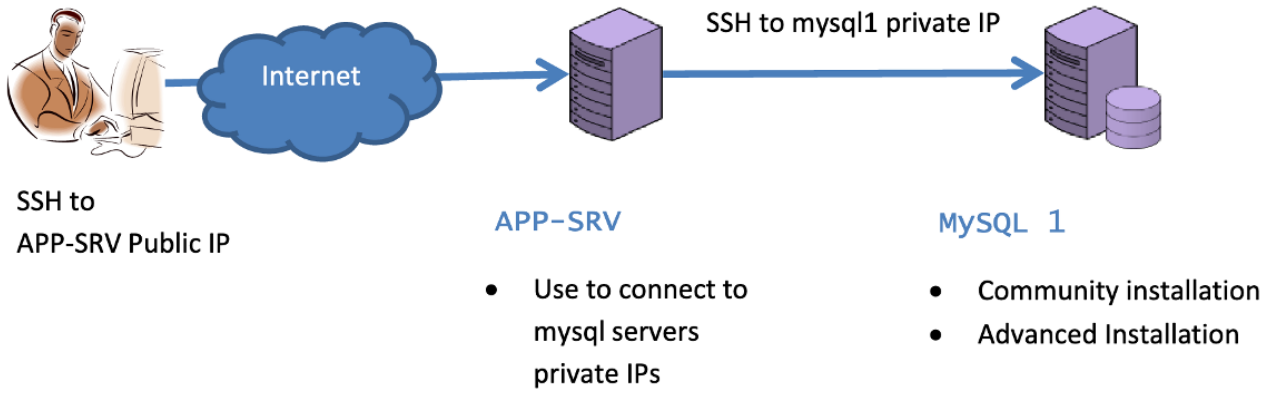
Installation of MySQL Community

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><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><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

- **Author** - Marco Carlessi, Principal Sales Consultant
- **Contributors** - Perside Foster, Principal Sales Consultant, Selena Sánchez, MySQL Solutions Engineer
- **Last Updated By/Date** - Perside Foster, Partner Solutions Engineer, March 2025