

**Document Control**

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| **S No** | **Title** | **Description** |
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| 5 | Release Date | 19/07/2023 |

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**1.1 PURPOSE**

This document is designed to fine-tune the day-to-day operations carried out by the team and it describes the regularly recurring operations relevant to the quality of the investigation. In other words, it is authored keeping in mind the regularly occurring operations relevant to the quality of the investigation.

**1.2 SCOPE**

This is a technically oriented document, and it does not cover any business-related information or processes relevant for various customers. The procedures documented here can be applied based on applicability for different customers and should always be verified by the engineer before being followed. The author does not bear any responsibility for any loss of service being generated thereafter and the steps are expected to be used at the sole discretion of the engineer.

**1.3 INSTALLATION**

1. Download MySQL Community: **Use the Below Link to download the MySQL packages as per OS recommended by the Customer.**

Download link: <https://downloads.mysql.com/archives/community/>

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1. Verify the MySQL packages: **Use the Below Command to verify the MySQL packages.**

**$** dpkg --get-selections | grep mysql ------------------------------------- Ubuntu.

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**$** rpm -qa|grep mysql ------------------------------------------------------ Centos and Redhat.

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**1.3.3** Uncompress the MySQL Packages: **Use the Below Command to Uncompress the MySQL.**

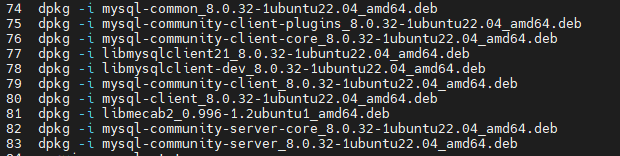
$ tar -xvf  packagename.tar



**1.3.4** MySQL Installation: **Use the Below Command to Install the MySQL.**

rpm -ivh “package name” ------ Centos and Redhat

dpkg -i “package name” --- Ubuntu



**1.3.5** Set the Data directory path for MySQL: **Use the Below Command to set the initial data dir path for MySQL.**

$ cd /data

$ mkdir mysqldata

$ chown -R mysql:mysql /data/mysql

**1.3.6** Start the MySQL services: **Use the Below Command to start the MySQL services.**

**$** Service mysqld start  --------------- To start the MySQL services. --- For Redhat and Centos OS

$Service mysql start  --------------- To start the MySQL services. --- For Ubuntu

**1.3.7** Verify MySQL services are Up and Running: **Use the Below Command to status of MySQL services.**

**$** Service mysqld status  -------------To start the MySQL services. --- For Redhat and Centos OS

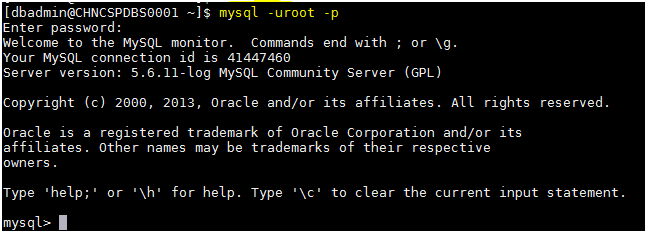
$Service mysql status  --------------- To start the MySQL services. --- For Ubuntu

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**1.3.8** Login: **To login a MySQL instance provide the following command from shell prompt**

**$ mysql -uroot -p**



**1.3.8** Instance Startup & Shutdown: **To check status,startup and shutdown a MySQL instance use:**

1. service mysqld status
2. service mysqld start
3. service mysqld stop

**1.4 Enable the Slow logs query**

**1.4.1** Enable Slow logs: **To Enable the slow logs**

Login to MySQL.

$Mysql -u”username” -p

Password: enter password

MySQL> show variables like ‘slow%’;

MySQL> show variables like ‘long%’;

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MySQL> set global slow\_query\_log\_file= ‘file path.log’;  # to set the path of slow logs

MySQL>  set global slow\_query\_log=1 # To enable the Slow logs

MySQL> set global long\_query\_time=5 # defaults is 10. To set the Time for slow logs

**1.4.2** Configure Slow logs: **Configure the slow logs in My.cnf**

Open the /etc/my.cnf

Under [mysqld] use the below commands.

**[mysqld]** ---- Example

Slow\_query\_log=1

Slow\_query\_log\_file=var/log/mysql-slow.log

Long\_query\_time=5

**1.4.3** Permission for Slow logs: **Provide the permission for slow logs using the below command.**

# chown -R mysql:mysql var/log/mysql-slow.log

**1.5 Enable the Binary logs**

**1.5.1** Enable Binary logs: **To Enable the binary logs**

**Note: To Enable the Binary logs MySQL restart required.**

Login to MySQL.

$Mysql -u”username” -p

Password: enter password

MySQL> show variables like ‘log\_b%’;

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**1.5.2** Configure Binary logs: **Configure the binary logs in My.cnf**

Open the /etc/my.cnf

Under [mysqld] use the below commands.

**[mysqld]** ---- Example

log\_bin=/binlog/binlogs/DC\_LMS

**1.5.3** Permission for Slow logs: **Provide the permission for slow logs using the below command.**

# mkdir -p /binlog/binlogs/

# chown -R mysql:mysql /binlog/binlogs/

After doing the 1.5.2 and 1.5.3 steps Restart the MySQL services

1.6

**1.6 Purging the Binary logs**

Purging the Binary logs

**1.6.1** Binlog purging: **To Purge the binlogs.**

To show which file are being used to store binary logs, use below command.

MySQL> show binary logs;

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To delete old binary log, You can use “purge binary logs” Statement.

Note: Before Purging the Master DB Check the Slave status.

Login to Slave DB.

MySQL> Show Slave status\G

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Example. For purging Binlogs

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MySQL> Purge binary logs to ‘DC\_LMS.024743’  -- This will removed what ever files are above the ‘DC\_LMS.025364’

**1.6.2** Configure Binlogs: **Configure the binlogs in my.cnf**

To configure the Binary logs in config.

[mysqld]

Expire\_logs\_days=7 # binary logs to expire after 7days.

Max\_binlog\_size=100M # To set the Binary logs size

**1.7 MySQL user Credential**

**1.7.1** User Creation: **create the user in MySQL prompt use below command.**

MySQL> create user ‘username’@’localhost’ identified by ‘password’; user login through localhost

MySQL> create user ‘username’@’%’ identified by ‘password’; # user login through globaly

MySQL> create user ‘username’@’IP’ identified by ‘password’; #user login through IP.

**1.7.2** Provide the Grants: **Provide the grants.**

MySQL> grant all privileges on \*.\* to ‘test’@’localhost’

MySQL> grant all privileges on \*.\* to ‘test’@’%’

MySQL> grant all privileges on \*.\* to ‘test’@’IP’

Note: The first asterisk (\*) will represent the database, and the second asterisk represents the table.

**1.7.3** View the users and grants: **To view the users and granst.**

MySQL> select user,host from mysql.user;   ---- To list the users

MySQL> select user,host from mysql.user where user=’username’;   ---- To list the particular users

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MySQL> show grant for ‘test’@’localhost’ ; ----- To view the privileges details.

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**1.7.4** Reset the MySQL users: **To Reset the MySQL user use below command.**

MySQL> set password for ‘username’@’localhost’=password(‘enter password’);Before MySQL 8 version

MYSQL> alter user  ‘username’@’localhost’ identified by ‘enter password’; -After MySQL 8 version

**1.8 REFERENCES**

1. <https://dev.mysql.com/doc/refman/5.7/en/>

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