# How Do I Enable Remote Access To MySQL Database Server?

By default remote access to the MySQL database server is disabled for security reasons. However, some time you need to provide remote access to database server from home or a web server. This post will explain how to setup a user account and access a mysql server remotely on a Linux or Unix-like systems.

## Task: MySQL Server Remote Access

You need type the following commands which will allow remote connections to a mysql server.

**Step # 1: Login Using SSH (if server is outside your data center)**

First, login over ssh to remote MySQL database server. You may need to login to your MySQL server as the root user:

```
ssh user@server1.cyberciti.biz
### login as the root using su or sudo ##
su
#sudo -s
```

OR directly login as root user:

```
ssh root@server1.cyberciti.biz
```

**Step # 2: Edit the my.cnf file**

Once connected you need to edit the MySQL server configuration file my.cnf using a text editor such as vi:

- If you are using **Debian Linux** file is located at `/etc/mysql/my.cnf` location.
- If you are using **Red Hat Linux/Fedora/Centos Linux** file is located at `/etc/my.cnf` location.

- If you are using **FreeBSD** you need to create a
  file **/var/db/mysql/my.cnf** location.

Edit the /etc/my.cnf, run:

```
# vi /etc/my.cnf
```

**Step # 3: Once file opened, locate line that read as follows**

```
[mysqld]
```

Make sure line skip-networking is commented (or remove line) and add following line

```
bind-address=YOUR-SERVER-IP
```

For example, if your MySQL server IP is 65.55.55.2 then entire block should be look like as follows:

```
[mysqld]

user           = mysql

pid-file       = /var/run/mysqld/mysqld.pid

socket         = /var/run/mysqld/mysqld.sock

port           = 3306

basedir        = /usr

datadir        = /var/lib/mysql

tmpdir         = /tmp

language       = /usr/share/mysql/English
```

```
bind-address     = 65.55.55.2


# skip-networking


....


..


....
```

Where,

- **bind-address**: IP address to bind to.
- **skip-networking** : Don't listen for TCP/IP connections at all. All interaction with mysqld must be made via Unix sockets. This option is highly recommended for systems where only local requests are allowed. Since you need to allow remote connection this line should be removed from my.cnf or put it in comment state.

**Step# 4 Save and Close the file**

If you are using Debian / Ubuntu Linux, type the following command to restart the mysql server:

```
# /etc/init.d/mysql restart
```

If you are using RHEL / CentOS / Fedora / Scientific Linux, type the following command to restart the mysql server:

```
# /etc/init.d/mysqld restart
```

If you are using FreeBSD, type the following command to restart the mysql server:

```
# /usr/local/etc/rc.d/mysql-server stop
```

```
# /usr/local/etc/rc.d/mysql-server start
```

OR

```
# /usr/local/etc/rc.d/mysql-server restart
```

**Step # 5 Grant access to remote IP address**

Connect to mysql server:

```
$ mysql -u root -p mysql
```

*Grant access to a new database*

If you want to add a new database called foo for user bar and remote IP 202.54.10.20 then you need to type the following commands at mysql> prompt:

```
mysql> CREATE DATABASE foo;
```

```
mysql> GRANT ALL ON foo.* TO bar@'202.54.10.20' IDENTIFIED BY
```

```
'PASSWORD';
```

*How Do I Grant Access To An Existing Database?*

Let us assume that you are always making connection from remote IP called 202.54.10.20 for database called webdb for user webadmin, To grant access to this IP address type the following command At mysql> prompt for existing database, enter:

```
mysql> update db set Host='202.54.10.20' where Db='webdb';
```

```
mysql> update user set Host='202.54.10.20' where user='webadmin';
```

**Step # 6: Logout of MySQL**

Type exit command to logout mysql:
```
mysql> exit
```

**Step # 7: Open port 3306**

You need to open TCP port 3306 using iptables or BSD pf firewall.

*A sample iptables rule to open Linux iptables firewall*

```
/sbin/iptables -A INPUT -i eth0 -p tcp --destination-port 3306 -j ACCEPT
```

OR only allow remote connection from your web server located at 10.5.1.3:

```
/sbin/iptables -A INPUT -i eth0 -s 10.5.1.3 -p tcp --destination-port 3306 -j ACCEPT
```

OR only allow remote connection from your lan subnet 192.168.1.0/24:

```
/sbin/iptables -A INPUT -i eth0 -s 192.168.1.0/24 -p tcp --destination-port 3306 -j ACCEPT
```

Finally save all rules (RHEL / CentOS specific command):

```
# service iptables save
```

*A sample FreeBSD / OpenBSD / NetBSD pf firewall rule ( /etc/pf.conf)*

Use the following to open port # 3306 on a BSD based systems:

```
pass in on $ext_if proto tcp from any to any port 3306
```

OR allow only access from your web server located at 10.5.1.3:

```
pass in on $ext_if proto tcp from 10.5.1.3 to any port 3306 flags S/SA synproxy state
```

## Step # 8: Test it

From your remote system or your desktop type the following command:

```
$ mysql -u webadmin -h 65.55.55.2 -p
```

Where,

- -u webadmin: webadmin is MySQL username
- -h IP or hostname: 65.55.55.2 is MySQL server IP address or hostname (FQDN)

- -p : Prompt for password

You can also use the telnet or nc command to connect to port 3306 for testing purpose:

```
$ echo X | telnet -e X 65.55.55.2 3306
```

OR

```
$ nc -z -w1 65.55.55.2 3306
```

Sample outputs:

```
Connection to 65.55.55.2 3306 port [tcp/mysql] succeeded!
```

http://www.cyberciti.biz/tips/how-do-i-enable-remote-access-to-mysql-database-server.html

grant all privileges on metropad3.* to root@'%' identified by 'padtec';

[14/08/2015 15:49:59] elielteotonio: grant all privileges on metropad3.* to root@'%' identified by 'padtec';

[14/08/2015 15:51:11] elielteotonio: blz

[14/08/2015 15:51:13] elielteotonio: funcionando

[14/08/2015 15:51:14] elielteotonio: testado

[14/08/2015 15:51:18] elielteotonio: testei no workbench

[14/08/2015 15:53:28] Fabiano Louzada Cesário: mas e for para qq base?

[14/08/2015 15:53:48] elielteotonio: nao

[14/08/2015 15:53:58] elielteotonio: vc tem q fazer isso por base

[14/08/2015 15:54:06] elielteotonio: eu acho

[14/08/2015 15:54:42] Fabiano Louzada Cesário: Loading driver...

Driver loaded!

Conectado!

CONSTRUÍDO COM SUCESSO (tempo total: 0 segundos)

[14/08/2015 15:54:47] Fabiano Louzada Cesário: =)

[14/08/2015 15:54:51] elielteotonio: muahahaahha

[14/08/2015 15:55:04] Fabiano Louzada Cesário: quando "loga" ele ja usa por default o metropad3?

[14/08/2015 15:56:13] elielteotonio: depende do q vc define

[14/08/2015 15:58:12] Fabiano Louzada Cesário: cara foi meio q na cagada esse comando pelo menos a parte do metropad3

[14/08/2015 15:58:19] Fabiano Louzada Cesário: mysql> show databases

   -> ;

+--------------------+

| Database       |

+--------------------+

| information_schema |

| foo          |

| mysql        |

| test         |

[14/08/2015 15:58:31] Fabiano Louzada Cesário: cade o metropad3? rs

[14/08/2015 15:59:18] elielteotonio: sim

[14/08/2015 15:59:23] elielteotonio: vc nao criou ainda

[14/08/2015 15:59:42] Fabiano Louzada Cesário: acho q o erro era esse:

[14/08/2015 15:59:53] elielteotonio: mysql> show databases;

+--------------------+

| Database       |

+--------------------+

| information_schema |

| foo          |

| mysql        |

| test         |

+--------------------+

4 rows in set (0.00 sec)

[14/08/2015 15:59:54] elielteotonio: msm

[14/08/2015 15:59:57] elielteotonio: assim

[14/08/2015 16:00:10] Fabiano Louzada Cesário: 'root'@'%'  é != de root@'%'

[14/08/2015 16:00:19] elielteotonio: sim

[14/08/2015 16:00:24] Fabiano Louzada Cesário: acho q foi isso

[14/08/2015 16:00:26] elielteotonio: eu errei tbm

[14/08/2015 16:00:29] elielteotonio: e nme do bancco

[14/08/2015 16:00:59] Fabiano Louzada Cesário: mas o nome do banco não ta fazendo =!ça

[14/08/2015 16:01:11] elielteotonio: hummm

[14/08/2015 16:01:19] Fabiano Louzada Cesário: enfim

[14/08/2015 16:01:27] Fabiano Louzada Cesário: importante q ta funfando

[14/08/2015 16:01:29] Fabiano Louzada Cesário: =)

[14/08/2015 16:01:37] Fabiano Louzada Cesário: vlw mesmo cara....

[14/08/2015 16:01:40] elielteotonio: de nds

[14/08/2015 16:01:59] Fabiano Louzada Cesário: http://www.cyberciti.biz/tips/how-do-i-enable-remote-access-to-mysql-database-server.html

[14/08/2015 16:02:06] Fabiano Louzada Cesário: sequi esse procedimento tbm

[14/08/2015 16:02:09] Fabiano Louzada Cesário: mto bom

[14/08/2015 16:02:14] Fabiano Louzada Cesário: só faltou esse detalhe

[14/08/2015 16:02:28] elielteotonio: yup

[14/08/2015 16:03:11] Fabiano Louzada Cesário:  GRANT ALL ON foo.* TO bar@'202.54.10.20' IDENTIFIED BY 'PASSWORD';

[14/08/2015 16:03:19] Fabiano Louzada Cesário: tinha la o comando eu q comi bola =;

[14/08/2015 16:03:21] Fabiano Louzada Cesário: =/

[14/08/2015 16:03:24] Fabiano Louzada Cesário: hahaha

[14/08/2015 16:03:26] Fabiano Louzada Cesário: cara to indo nessa

[14/08/2015 16:03:28] Fabiano Louzada Cesário: abração