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Installing MySQL Proxy On CentOS 5 (FINAL) x86_64

This tutorial explains how you can install **MySQL Proxy** on a CentOS 5 (x86_64) system. MySQL Proxy is a simple program that sits between your client and MySQL server(s) that can monitor, analyze or transform their communication. Its flexibility allows for unlimited uses; common ones include: load balancing; failover; query analysis; query filtering and modification; and many more.

On a fresh minium Centos 5 final x86_64 install:

```
yum
install gcc.x86_64 libevent.x86_64 libevent-devel.x86_64
readline.x86_64 readline-devel.x86_64 ncurses.x86_64
ncurses-devel.x86_64 glib2.x86_64 glib2-devel.x86_64
```

```
cd /usr/local/src/
```

```
wget http://www.lua.org/ftp/lua-5.1.3.tar.gz

tar zxvf lua-5.1.3.tar.gz
```

```
cd lua-5.1.3

make linux

make install
```

```
wget
http://dev.mysql.com/get/Downloads/MySQL-Cluster-6.2/mysql-5.1.23-ndb-6.2.15-linux-x86_64-glibc23.tar.gz/\
from/http://www.mirrorservice.org/sites/ftp.mysql.com/
```

```
tar xzvf mysql-5.1.23-ndb-6.2.15-linux-x86_64-glibc23.tar.gz

ln -s mysql-5.1.23-ndb-6.2.15-linux-x86_64-glibc23 mysql



PATH=$PATH:/usr/local/mysql/bin

export PATH
```

Edit your `.profile` to make this permanent:

```
# .bash_profile

# Get the aliases and functions
if [ -f ~/.bashrc ]; then
        . ~/.bashrc
fi

# User specific environment and startup programs

PATH=$PATH:/usr/local/mysql/bin:$HOME/bin

export PATH
unset USERNAME
```

```
wget
http://dev.mysql.com/get/Downloads/MySQL-Proxy/mysql-proxy-0.6.1.tar.gz/from/http://www.mirrorservice.org/sites/ftp.mysql.com/
```

```
tar zxvf mysql-proxy-0.6.1.tar.gz

cd mysql-proxy-0.6.1
```

```
./configure  LDFLAGS="-lm -ldl" LUA_CFLAGS="-I/usr/local/include/" LUA_LIBS=/usr/local/lib/liblua.a
```

```
make

make install
```

Let's create a sample LUA script so you can see some logs.

```
mkdir /var/log/mysql-proxy/

mkdir -p /usr/local/mysql/lua-scripts/
```

```
vi /usr/local/mysql/lua-scripts/simple-log.lua
```

(see: **http://www.oreillynet.com/pub/a/databases/2007/07/12/getting-started-with-mysql-proxy.html?page=3**

Script modified to get IP and to use `proxy.connection.server.thread_id`.)

```
local log_file = '/var/log/mysql-proxy/mysql.log'
local fh = io.open(log_file, "a+")
```

```
function read_query( packet )
 if string.byte(packet) == proxy.COM_QUERY then
   local query = string.sub(packet, 2)
   fh:write( string.format("%s %6d -- %s :IP %s :USER: %s\n",
   os.date('%Y-%m-%d %H:%M:%S'),
   proxy.connection.server.thread_id,
   query,
   proxy.connection.client.address,
   proxy.connection.client.username))
  fh:flush()
 end
end
```

Now start up your proxy using the variable *--proxy-backend-addresses* to point the proxy at your servers.

```
/usr/local/sbin/mysql-proxy
--proxy-lua-script=/usr/local/mysql/lua-scripts/simple-log.lua
--proxy-backend-addresses=192.168.1.33:3306
--proxy-backend-addresses=192.168.1.34:3306 --daemon
```

192.168.1.33 and *192.168.1.34* are the MySQL nodes that the proxy will be connecting to.

Allow connections for the proxy through your firewall:

```
### ALLOWED TO CONNECT TO MYSQL PROXY
###
### LOCAL ADMINS
-A INPUT -s SRC-IP -d DST-IP -p tcp -m state --state NEW -m tcp --dport 4040 -j ACCEPT
```

Where *DST-IP* is my proxy server and *SRC-IP* is my local box (client machine).

Nowfrom your local box (not the mysql-proxy server) try and connect to thebackend databases through the proxy (user with relevent permissionsmust exist in the db).

```
mysql -u dba_admin -p -h PROXY-SERVER -P 4040
```

```
  Welcome to the MySQL monitor.  Commands end with ; or g.
  Your MySQL connection id is 16 to server version: 5.1.23-ndb-6.2.15

Type 'help;' or 'h' for help. Type 'c' to clear the buffer.
```

```
mysql> show databases;
```

```
+--------------------+
  | Database           |
  +--------------------+
  | information_schema |
  | Imap_Forms         |
  | mysql              |
  | test               |
  +--------------------+
4 rows in set (0.01 sec)
```

```
mysql> quit
```

```
Bye
```

N.B. The proxy uses the port *4040* instead of *3306*.

Test the mysql-proxy admin interface from the mysql-proxy server:

```
mysql -u root -p -h 127.0.0.1 -P 4041
```

```
Welcome to the MySQL monitor.  Commands end with ; or g.
  Your MySQL connection id is 1
  Server version: 5.1.20-agent MySQL Enterprise Agent

Type 'help;' or 'h' for help. Type 'c' to clear the buffer.
```

```
mysql> select * from proxy_connections;
```

```
+------+--------+-------+------+
  | id   | type   | state | db   |
+------+--------+-------+------+
|    0 | server | 0     |      |
|    1 | proxy  | 0     |      |
|    2 | server | 10    |      |
+------+--------+-------+------+
3 rows in set (0.00 sec)
```

```
mysql>quit
```

```
  bye
```

Job done! Now read on:

http://dev.mysql.com/tech-resources/articles/proxy-gettingstarted.html
http://forge.mysql.com/wiki/MySQL_Proxy
http://www.oreillynet.com/pub/a/databases/2007/07/12/getting-started-with-mysql-proxy.html?page=1