LizardFS Shadow-Master (Backup master) Configuration

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= Installation of LizardFS Packages

```
apt update
apt install -y lizardfs-master lizardfs-adm lizardfs-cgi lizardfs-cgiserv
```

We have to modify Hosts file as follows.
Here make your **hostname** according to your **groupname** following the bellow format

IP Address	**groupX-nodeY**

// replace **X** with group-number & **Y** with node number as instructor say.

For Example for **Group # 01**

```
vim /etc/hosts
192.168.108.10 group1-node0   mfsmaster

192.168.108.11 group1-node1
192.168.108.12 group1-node2
192.168.108.13 group1-node3
```

This is very important to follow the proper naming of the nodes.
For massive deployment you may use internal dns-server configured by unbound.

= Configuring LizardFS Shadow-Master Metadata-Server

Configure an alias IP address for master server. We will configure it as alias IP so that we can move this IP if our Master-Server fail.

```
cp /usr/share/doc/lizardfs-master/examples/* /etc/lizardfs/
```

```
cd /etc/lizardfs
vim mfsmaster.cfg
```

Now uncomment the following lines | OR | **Copy & Past** the following lines at the end of the file.

```
PERSONALITY = shadow
WORKING_USER = lizardfs
WORKING_GROUP = lizardfs
SYSLOG_IDENT = mfsmaster
EXPORTS_FILENAME = /etc/lizardfs/mfsexports.cfg
TOPOLOGY_FILENAME = /etc/lizardfs/mfstopology.cfg
CUSTOM_GOALS_FILENAME = /etc/lizardfs/mfsgoals.cfg
DATA_PATH = /var/lib/lizardfs
AUTO_RECOVERY = 1
ENDANGERED_CHUNKS_PRIORITY = 1
MASTER_HOST = mfsmaster
MASTER_PORT = 9419
```

Make some more changes;

```
cp /var/lib/lizardfs/metadata.mfs.empty /var/lib/lizardfs/metadata.mfs
```

Change/uncoment parameter as follows in the file **mfstopology.cfg**

```
vim mfstopology.cfg
192.168.108.0/24                1
```

Modify the file **mfsgoals.cfg**

```
vim mfsgoals.cfg
1 1 : _
2 2 : _ _
3 3 : _ _ _
4 xor2 : $xor2
5 xor3 : $xor3
```

Restart the LizardFS-services

```
/etc/init.d/lizardfs-master restart
/etc/init.d/lizardfs-cgiserv restart

systemctl enable lizardfs-master
systemctl enable lizardfs-cgiserv

systemctl status lizardfs-master.service
```

Now browse to http://192.168.108.10:9425 and check that shadow-server is added there and synced.

= Making the script to start LizardFS service start automatically after reboot

```
vim /etc/network/if-up.d/lizardfs-up.sh
#!/bin/bash
# ifconfig eth0:0 192.168.108.10/24 up     # enable this line if you want to use this shadow-server as master-server
/etc/init.d/lizardfs-master restart
sleep 3
/etc/init.d/lizardfs-cgiserv restart
```

Save-and-Exit

```
chmod +x /etc/network/if-up.d/lizardfs-up.sh
echo  'post-up /etc/network/if-up.d/lizardfs-up.sh' >> /etc/network/interfaces
```

Now reboot.

```
reboot
```