

= LizardFS Master-Server Failure & Recovery from Shadow-Master =

= LizardFS Master Node Failure & Manual Recovery from Shadow

Important note:- Please keep in mind that, while master-node failing, all the running VMs may freeze for the time being & all chunk-server may need to restart their service.

To simulate master node failure, manually we can simply down the network-interface

On Master Server, Command:

```
ifconfig eth0:0 down ; So, Master Server is down now.
```

After failure of master node, we will take shadow-master to work as master-node

On Shadow Master, Command:

```
ifconfig bridge0:0 192.168.108.10 netmask 255.255.255.0 up
```

Now change the personality from “shadow” to “master”. To do that, command;

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

```
PERSONALITY= master
```

Restart the master & cgiserv service

```
systemctl restart lizardfs-master  
systemctl restart lizardfs-cgiserv
```

Now check lizardfs GUI <http://192.168.108.10:9425>

= LizardFS Master-Server Failure & Automated Recovery from Shadow-Master

If we want to automate this process we can use some shell script to make shadow-master as master-server when master-server is down.

On Shadow Master:

`vim /usr/bin/shadowmaster-to-master.sh` ; add the following lines

```
#!/bin/bash
ifconfig bridge0:0 192.168.108.10 netmask 255.255.255.0 up
sed -i 's/= shadow/= master/g' /etc/lizardfs/mfsmaster.cfg
systemctl restart lizardfs-master
systemctl restart lizardfs-cgiserv
Save+Exit
```

`chmod +x /usr/bin/shadowmaster-to-master.sh`

`vim /usr/bin/master-check.sh` ; add the following lines

```
#!/bin/bash
count=$(ping -c 20 -i 0.1 192.168.108.10 | grep 'received' | awk -F',' '{ print $2 }' | awk '{ print $1 }');
if [ $count -eq 0 ]; then
    # echo "LizardFS Master is =DOWN= @ [$(date)]" | mail -s "LizardFS Master is =DOWN= @ [$(date)]" nms@ydomain.com;
    nohup /usr/bin/shadowmaster-to-master.sh &
    exit 0;
fi
Save+Exit
```

`chmod +x /usr/bin/master-check.sh`

```
vim /usr/bin/master-check-15s.sh
```

```
#!/bin/bash
/usr/bin/master-check.sh
sleep 15
/usr/bin/master-check.sh
sleep 15
/usr/bin/master-check.sh
sleep 15
/usr/bin/master-check.sh
Save+Exit
```

```
chmod +x /usr/bin/master-check-15s.sh
```

```
vim /etc/crontab
```

```
* * * * * root    master-check-15s.sh
```