

005-LizardFS Storage Node failure

Notebook: <Inbox>
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= LizardFS Storage Node Failure

Now we will simulate some node-failure scenario.

Here we have, three node in a group.

Suppose in a group1

- group1-node1 running a KVM VM named group1-node1-vm1
- group1-node2 running a KVM VM named group1-node2-vm1
- group1-node3 running a KVM VM named group1-node3-vm1

OK, now before failed any-vm, we have to copy the kvm-config file of all VM in a clustered storage directory...

```
mkdir /mnt/mfs/vmconfig  
mv /etc/libvirt/qemu/group1-node1-vm1.xml /mnt/mfs/vmconfig/
```

Now shutdown the first node (laptop) of all group, here it is group1-node1

Then, goto group1-node2 & run the following command to re-activate VM that was running in group1-node1

```
virsh define /mnt/mfs/vmconfig/group1-node1-vm1.xml  
virsh start group1-node1-vm1
```

= LizardFS Master Node Failure

Important note:- Please keep in mind that, while master-node failing, all the running VMs

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

```
-----  
-  
ifconfig eth0:0 down  
-----  
-
```

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

On Shadow Master:

```
-----  
-
```

```
ifconfig bridge0:0 192.168.108.254 netmask 255.255.255.0
```

Now change the personality from "shadow" to "master" on line 283. To do that;

```
vim /etc/mfs/mfsmaster.cfg
```

```
PERSONALITY= master
```

Restart the master & cgiserv service

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

Now check lizardfs GUI <http://192.168.108.254:9425>

NOW WHEN MASTER NODE COMEBACK!

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.

We have to configure previous master-server as shadow-master to re-sync cluster information from current-master and then migrate personality & master-service.

On Original Master: Change personality from master to shadow;

```
vim /etc/mfs/mfsmaster.cfg
```

```
PERSONALITY= shadow
```

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

Now Original master will sync from the Shadow Master (Current Master) with updated data.

To check the status go to LizardFS GUI <http://192.168.108.254:9425>

After completion of data syncing,

On Shadow Master :

Change the personality from master to shadow on current master:

```
-  
vim /etc/mfs/mfsmaster.cfg
```

```
-  
PERSONALITY= shadow
```

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

Now shutdown the alias interface of current master (shadow) node

```
-  
ifconfig bridge0:0 down
```

Now finally,

On Original Master: Change personality from shadow to master:

```
-  
vim /etc/mfs/mfsmaster.cfg
```

```
-  
PERSONALITY= master
```

Now set the master-IP on and alias interface

```
-  
ifconfig eth0:0 192.168.108.254 netmask 255.255.255.0
```

Now restart the services;

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

To check the status, go to LizardFS GUI <http://192.168.108.254:9425>