**Galera Cluster is a synchronous multi-master database cluster, based on**

**synchronous replication and Oracle’s MySQL/InnoDB. When Galera Cluster**

**is in use, you can direct reads and writes to any node, and you can lose**

**any individual node without interruption in operations and without the**

**need to handle complex failover procedures.**

**centos6 (static ip configuration)**

#vi /etc/sysconfig/network-scripts/ifcfg-eth0

ONBOOT= yes

BOOTPROTO= static

IPADDR= 192.168.72.62

NETMASK= 255.255.255.0

GATEWAY= 192.168.72.1

BROADCAST= 192.168.72.255

#vi /etc/resolv.conf

search centos

namerserver 192.168.72.1

nameserver 8.8.8.8

then

#service network restart

#yum update

#vi /etc/sysconfig/network

NETWORKING=yes

HOSTNAME=percona1

**then set hostname percona1**

**then set the hosts ip**

#vi /etc/hosts

192.168.72.62 percona1

192.168.72.64 percona2

**Opening Firewall in all the Cluster’s**

#iptables -I INPUT -p tcp -m tcp --dport 3306 -j ACCEPT

#iptables -I INPUT -p tcp -m tcp --dport 4567 -j ACCEPT

#iptables -I INPUT -p tcp -m tcp --dport 4568 -j ACCEPT

#iptables -I INPUT -p tcp -m tcp --dport 4444 -j ACCEPT

#iptables -I INPUT -p tcp -m tcp --dport 3506 -j ACCEPT

#iptables -I INPUT -p tcp -m tcp --dport 3606 -j ACCEPT

**Deactivate Firewall if Required** :

#service iptables save

#service iptables restart

**Disable Selinux**

#vi /etc/sysconfig/selinux

**then restart your centos by using init 6 or directly close ur terminal**

#init 6

**to check status of selinux**

#sestatus

**then its is disabled...!!!!**

**Installing all the Required Dependency Binaries**

#yum -y remove mysql-libs ;

#yum -y remove mariadb-libs ;

#yum -y install perl-DBD-MySQL.x86\_64 ;

#yum -y install perl-IO-Socket-SSL ;

#yum -y install telnet ;

#yum -y install libevent-devel.x86\_64 ;

#yum -y install openssl098e.x86\_64 ;

#yum -y install perl-Time-HiRes ;

#yum -y install nc ;

#yum -y install perl-Digest-SHA.x86\_64 ;

#yum -y install perl-TermReadKey.x86\_64 ;

#yum -y install compat-readline5.x86\_64 ;

#yum -y install epel-release ;

#yum -y install libev ;

#yum -y install socat ;

#yum -y install php.x86\_64 ;

#yum install -y git scons gcc gcc-c++ openssl check cmake bison \

boost-devel asio-devel libaio-devel ncurses-devel readline-devel pam-devel

**Install Percona XtraDB Binaries using Yum**

#yum install http://www.percona.com/downloads/percona-release/redhat/0.1-3/percona-release-0.1-3.noarch.rpm

#cd /etc/yum.repos.d/

#vi percona-release.repo

**then do changes inside**

gpgcheck=0

gpgcheck=0

#yum install Percona-XtraDB-Cluster-56

**start the Mysql Instance**

#service mysql start

#service mysql status

**Reset the Root Password**

# /usr/bin/mysqladmin -u root password 'temp1234'

**Next we need to run the mysql\_secure\_installation script so we can improve the security**

# /usr/bin/mysql\_secure\_installation

**Configure Mysql on System Startup**

#chkconfig --level 345 mysql on

#chkconfig --add mysql

#chkconfig mysql on

**log in mysql**

#mysql -u root -p

then enter ur password:

**Create the Required MySQL User’s on first node**

mysql>CREATE USER 'sstuser'@'localhost' IDENTIFIED BY 'temp';

mysql>GRANT RELOAD, LOCK TABLES, REPLICATION CLIENT ON \*.\* TO 'sstuser'@localhost;

mysql>CREATE USER 'sstuser'@'%' IDENTIFIED BY 'temp';

mysql>GRANT RELOAD, LOCK TABLES, REPLICATION CLIENT ON \*.\* TO 'sstuser'@'%';

mysql>exit

**service mysql stop both percona1 and percona2**

#service mysql stop

**then we need to add parameters in my.cnf**

# vi /etc/my.cnf

**Configure file of percona xtradb cluster**

[mysqld]

#bind-address=127.0.0.1

sql\_mode=NO\_ENGINE\_SUBSTITUTION,STRICT\_TRANS\_TABLES

skip-host-cache

skip-name-resolve

max\_connections=1500

max\_connect\_errors=20000

wsrep\_replicate\_myisam=1

auto\_increment\_increment=1

max\_allowed\_packet=512M

innodb\_buffer\_pool\_size=10G

query-cache-type=1

key\_buffer=32M

query\_cache\_limit=4M

query\_cache\_size=64M

join\_buffer\_size=2M

#table\_open\_cache=2500

table\_open\_cache=250

# Path to Galera library

wsrep\_provider=/usr/lib64/libgalera\_smm.so

# Cluster connection URL contains IPs of node#1, node#2 and node#3

wsrep\_cluster\_address=gcomm://192.168.72.91,192.168.72.92

# In order for Galera to work correctly binlog format should be ROW

binlog\_format=ROW

# MyISAM storage engine has only experimental support

default\_storage\_engine=InnoDB

# This is a recommended tuning variable for performance

innodb\_locks\_unsafe\_for\_binlog=1

# This changes how InnoDB autoincrement locks are managed and is a requirement for Galera

innodb\_autoinc\_lock\_mode=1

# Node #2 address

wsrep\_node\_address=192.168.72.91

# Cluster name

wsrep\_cluster\_name=my\_centos\_cluster

# SST method

wsrep\_sst\_method=xtrabackup-v2

#Authentication for SST method

wsrep\_sst\_auth="sstuser:temp"

wsrep\_replicate\_myisam=1

**then start first percona1 with**

#service mysql bootstrap-pxc

**and second percona2 is**

#servcie mysql start

**then it is succesfully connected...!!!!**

**at last to check the cluster is successfully connected**

#mysql -u root -p

**then we have run the command**

mysql> show global status like '%wsrep%'

**then it will gives a output...**

**\_\_\_\_\_\_finish\_\_\_\_\_!!!!**

**if you want to learn more about it then click the following link**

https://dinfratechsource.com/2018/11/10/installation-and-configuration-of-percona-xtradb-cluster-on-centos-6-8/#more-94