MYSQL MHA高可用故障转移配制

http://pkgs.repoforge.org/ 这里全是包

URL http://os.51cto.com/art/201307/401702_all.htm

虚拟机
192.168.100.6 atlas
192.168.100.167 atlas 新
192.168.100.99 master
192.168.100.91 slave 管理节点
192.168.100.92 slave
192.168.100.166 master slave

一、健立SSH无密码登陆环镜

1.在主MYSQL上运行以下也就是99那台：

ssh-keygen -t rsa 生成钥匙
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.99
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.166
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.91
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.92
The authenticity of host '192.168.100.99 (192.168.100.99)' can't be established.
RSA key fingerprint is 30:d7:fa:f8:29:60:c7:9a:6f:15:03:fa:42:12:ab:41.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.100.99' (RSA) to the list of known hosts.
root@192.168.100.99's password:
Now try logging into the machine, with "ssh '192.168.100.99'", and check in:

  .ssh/authorized_keys

to make sure we haven't added extra keys that you weren't expecting.

2.在主备MYSQL上运行以下也就是166那台：

ssh-keygen -t rsa 生成钥匙
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.99
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.166
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.91
ssh-copy-id -i /root/.ssh/id_rsa.pub 192.168.100.92

The authenticity of host '192.168.100.99 (192.168.100.99)' can't be established.
RSA key fingerprint is 30:d7:fa:f8:29:60:c7:9a:6f:15:03:fa:42:12:ab:41.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.100.99' (RSA) to the list of known hosts.
root@192.168.100.99's password:
Now try logging into the machine, with "ssh '192.168.100.99'", and check in:

  .ssh/authorized_keys

to make sure we haven't added extra keys that you weren't expecting.
以此类推，有多少台就运行多少台。完事后，进行测式SSH登陆：ssh 192.168.100.99 每台都测式

二、配置所有MYSQL服务器的host文件

vim /etc/hosts
192.168.100.99 mastersql
192.168.100.166 backupsql
192.168.100.91 slavesql1
192.168.100.92 slavesql2

三、做好mysql的主从关系

此处省略
然后在所有mysql节点上运行以下SQL

mysql> grant all privileges on *.* to 'root'@'mastersql' identified by '123';
mysql> grant all privileges on *.* to 'root'@'backupsql' identified by '123';
mysql> grant all privileges on *.* to 'root'@'slavesql1' identified by '123';
mysql> grant all privileges on *.* to 'root'@'slavesql2' identified by '123';
mysql> flush privileges;
====================以上不行

grant all privileges on *.* to 'mha'@'192.168.100.91' identified by '123456';
grant all privileges on *.* to 'mha'@'192.168.100.92' identified by '123456';
grant all privileges on *.* to 'mha'@'192.168.100.99' identified by '123456';
grant all privileges on *.* to 'mha'@'192.168.100.166' identified by '123456';

四、在所有机器上都安装节点包

yum -y install perl-*
yum -y install perl-DBD-MySQL -----------------MHA是perl编写的软件需要perl支持 之前yum安装
mysql已经安装过了 如果没安装过需要安装这个依赖。
*如果没有源可以重新设置为阿里的源
A 先备份一下以免出错没还原：mv /etc/yum.repos.d/CentOS-Base.repo
/etc/yum.repos.d/CentOS-Base.repo.backup
B 下载一个啊里源或修改host为112.124.140.210 mirrors.aliyuncs.com 或在MYSQL工具下的yum
源下有。
都装完了开始装节点包，每台都装：
tar zxvf mha4mysql-node-0.56.tar.gz
cd mha4mysql-node
perl Makefile.PL
如果运行它报错Can't locate ExtUtils/MakeMaker.pm 那么运行这个：yum install perl-ExtUtils-
CBuilder perl-ExtUtils-MakeMaker
如果报错Can't locate CPAN.pm in @INC 运行yum -y install cpan
make && make install

五、安装配置MHA的管理节点(推荐放在从库)我装在了91上

http://pkgs.repoforge.org/ 这里全是包
yum –y install perl-DBD-MySQL perl-Config-Tiny perl-Log-Dispatch perl-Parallel-ForkManager -
-----------安装依赖包
安装：mha4mysql-manager-0.56.tar
tar xvf mha4mysql-manager-0.56.tar
cd mha4mysql-manager-0.52
perl Makefile.PL
make
make install
装完后：
[root@localhost mha4mysql-manager-0.52]#mkdir /etc/masterha
[root@localhost mha4mysql-manager-0.52]#mkdir -p /masterha/app1
[root@localhost mha4mysql-manager-0.52]#cp samples/conf/* /etc/masterha/
进行配置 vim /etc/samples/conf/app1.cnf

```
[server default]
#mysql_admin and password
user=root
password=123
#mha work_dir and mha_log
manager_workdir=/etc/mha
manager_log=/etc/mha/manager.log
#ssh connection account
ssh_user=root  #ssh免密钥登录的帐号名
#AB copy account and password
repl_user=repl
repl_password=repl
#ping_interval=1
#mysql server

[server1]
hostname=192.168.100.166
port=3306
master_binlog_dir="/usr/local/mysql/data"
candidate_master=1#表示该主机优先可被选为new master，当多个[serverX]等设置此参数时，优
先级由[serverX]配置的顺序决定

[server2]
hostname=192.168.100.99
port=3306
master_binlog_dir="/usr/local/mysql/data"
candidate_master=1

[server3]
hostname=192.168.100.92
port=3306
master_binlog_dir="/usr/local/mysql/data"
no_master=1

[server4]
hostname=192.168.100.91
port=3306
master_binlog_dir="/usr/local/mysql/data"
no_master=1
```

六、配制好以后进行检查SSH公钥免密码登陆

在/soft/mha4mysql-manager-0.52/bin下面运行以下这句:
./masterha_check_ssh --conf=/etc/masterha/app1.cnf
 Connecting via SSH from root@192.168.100.92(192.168.100.92) to
root@192.168.100.99(192.168.100.99)..
Sat Feb 6 09:54:59 2016 - [debug] ok.
Sat Feb 6 09:54:59 2016 - [debug] Connecting via SSH from root@192.168.100.92(192.168.100.92)
to root@192.168.100.166(192.168.100.166)..
Sat Feb 6 09:54:59 2016 - [debug] ok.
Sat Feb 6 09:54:59 2016 - [debug] Connecting via SSH from root@192.168.100.92(192.168.100.92)
to root@192.168.100.91(192.168.100.91)..
Sat Feb 6 09:55:00 2016 - [debug] ok.
Sat Feb 6 09:55:00 2016 - [debug]
Sat Feb 6 09:54:56 2016 - [debug] Connecting via SSH from
root@192.168.100.166(192.168.100.166) to root@192.168.100.99(192.168.100.99)..

Sat Feb 6 09:54:57 2016 - [debug]   ok.
Sat Feb 6 09:54:57 2016 - [debug] Connecting via SSH from root@192.168.100.166(192.168.100.166) to root@192.168.100.91(192.168.100.91)..
Sat Feb 6 09:54:58 2016 - [debug]   ok.
Sat Feb 6 09:54:58 2016 - [debug] Connecting via SSH from root@192.168.100.166(192.168.100.166) to root@192.168.100.92(192.168.100.92)..
Sat Feb 6 09:54:59 2016 - [debug]   ok.
Sat Feb 6 09:55:00 2016 - [debug]
Sat Feb 6 09:54:56 2016 - [debug] Connecting via SSH from root@192.168.100.99(192.168.100.99) to root@192.168.100.166(192.168.100.166)..
Sat Feb 6 09:54:58 2016 - [debug]   ok.
Sat Feb 6 09:54:58 2016 - [debug] Connecting via SSH from root@192.168.100.99(192.168.100.99) to root@192.168.100.91(192.168.100.91)..
Sat Feb 6 09:54:58 2016 - [debug]   ok.
Sat Feb 6 09:54:58 2016 - [debug] Connecting via SSH from root@192.168.100.99(192.168.100.99) to root@192.168.100.92(192.168.100.92)..
Sat Feb 6 09:54:59 2016 - [debug]   ok.
Sat Feb 6 09:55:00 2016 - [debug]
Sat Feb 6 09:54:57 2016 - [debug] Connecting via SSH from root@192.168.100.91(192.168.100.91) to root@192.168.100.99(192.168.100.99)..
Sat Feb 6 09:54:57 2016 - [debug]   ok.
Sat Feb 6 09:54:57 2016 - [debug] Connecting via SSH from root@192.168.100.91(192.168.100.91) to root@192.168.100.166(192.168.100.166)..
Sat Feb 6 09:54:58 2016 - [debug]   ok.
Sat Feb 6 09:54:58 2016 - [debug] Connecting via SSH from root@192.168.100.91(192.168.100.91) to root@192.168.100.92(192.168.100.92)..
Sat Feb 6 09:54:59 2016 - [debug]   ok.
Sat Feb 6 09:55:00 2016 - [info] All SSH connection tests passed successfully.

七、检查Mysql的复制

运行这句：检查复制：./masterha_check_repl —conf=/etc/masterha/app1.cnf
如果报错：
Can't exec "mysqlbinlog": 没有那个文件或目录 at /usr/local/share/perl5/MHA/BinlogManager.pm line 106.
mysqlbinlog version command failed with rc 1:0, please verify PATH, LD_LIBRARY_PATH, and client options
 at /usr/local/bin/apply_diff_relay_logs line 493
Sat Feb 6 14:36:44 2016 - [error][/usr/local/share/perl5/MHA/MasterMonitor.pm, ln205] Slaves settings check failed!
Sat Feb 6 14:36:44 2016 - [error][/usr/local/share/perl5/MHA/MasterMonitor.pm, ln413] Slave configuration failed.
Sat Feb 6 14:36:44 2016 - [error][/usr/local/share/perl5/MHA/MasterMonitor.pm, ln424] Error happened on checking configurations. at ./masterha_check_repl line 48
Sat Feb 6 14:36:44 2016 - [error][/usr/local/share/perl5/MHA/MasterMonitor.pm, ln523] Error happened on monitoring servers.
Sat Feb 6 14:36:44 2016 - [info] Got exit code 1 (Not master dead).
运行下面：做个软连接
ln -s /usr/local/mysql/bin/mysqlbinlog /usr/bin/mysqlbinlog
如果出现以下报错：
Sat Feb 6 15:39:01 2016 - [info] Checking replication health on 192.168.100.99..
Sat Feb 6 15:39:01 2016 - [error][/usr/local/share/perl5/MHA/Server.pm, ln485] Slave IO thread is

Sat Feb 6 15:39:01 2016 - [error][/usr/local/share/perl5/MHA/ServerManager.pm, ln1526] failed!

Sat Feb 6 15:39:01 2016 - [error][/usr/local/share/perl5/MHA/MasterMonitor.pm, ln424] Error happened on checking configurations. at /usr/local/share/perl5/MHA/MasterMonitor.pm line 417

Sat Feb 6 15:39:01 2016 - [error][/usr/local/share/perl5/MHA/MasterMonitor.pm, ln523] Error happened on monitoring servers.

最好是去这台上面show slave status一下，因为我这是主，但是以前做过从，所以在上面还有一些信息。先stop slave后再reset slave;

Sat Feb 6 16:00:54 2016 - [info] Reading default configuration from /etc/masterha_default.cnf..

Sat Feb 6 16:00:54 2016 - [info] Reading application default configuration from /etc/masterha/app1.cnf..

Sat Feb 6 16:00:54 2016 - [info] Reading server configuration from /etc/masterha/app1.cnf..

Sat Feb 6 16:00:54 2016 - [info] MHA::MasterMonitor version 0.56.

Sat Feb 6 16:00:55 2016 - [info] GTID failover mode = 0

Sat Feb 6 16:00:55 2016 - [info] Dead Servers:

Sat Feb 6 16:00:55 2016 - [info] Alive Servers:

Sat Feb 6 16:00:55 2016 - [info]   192.168.100.166(192.168.100.166:3306)

Sat Feb 6 16:00:55 2016 - [info]   192.168.100.99(192.168.100.99:3306)

Sat Feb 6 16:00:55 2016 - [info]   192.168.100.92(192.168.100.92:3306)

Sat Feb 6 16:00:55 2016 - [info]   192.168.100.91(192.168.100.91:3306)

Sat Feb 6 16:00:55 2016 - [info] Alive Slaves:

Sat Feb 6 16:00:55 2016 - [info]   192.168.100.166(192.168.100.166:3306) Version=5.6.25-log (oldest major version between slaves) log-bin:enabled

Sat Feb 6 16:00:55 2016 - [info]   Replicating from 192.168.100.99(192.168.100.99:3306)

Sat Feb 6 16:00:55 2016 - [info]   Primary candidate for the new Master (candidate_master is set)

Sat Feb 6 16:00:55 2016 - [info]   192.168.100.92(192.168.100.92:3306) Version=5.6.25-log (oldest major version between slaves) log-bin:enabled

Sat Feb 6 16:00:55 2016 - [info]   Replicating from 192.168.100.99(192.168.100.99:3306)

Sat Feb 6 16:00:55 2016 - [info]   Not candidate for the new Master (no_master is set)

Sat Feb 6 16:00:55 2016 - [info]   192.168.100.91(192.168.100.91:3306) Version=5.6.25-log (oldest major version between slaves) log-bin:enabled

Sat Feb 6 16:00:55 2016 - [info]   Replicating from 192.168.100.99(192.168.100.99:3306)

Sat Feb 6 16:00:55 2016 - [info]   Not candidate for the new Master (no_master is set)

Sat Feb 6 16:00:55 2016 - [info] Current Alive Master: 192.168.100.99(192.168.100.99:3306)

Sat Feb 6 16:00:55 2016 - [info] Checking slave configurations..

Sat Feb 6 16:00:55 2016 - [info] read_only=1 is not set on slave 192.168.100.166(192.168.100.166:3306).

Sat Feb 6 16:00:55 2016 - [warning] relay_log_purge=0 is not set on slave 192.168.100.166(192.168.100.166:3306).

Sat Feb 6 16:00:55 2016 - [warning] relay_log_purge=0 is not set on slave 192.168.100.92(192.168.100.92:3306).

Sat Feb 6 16:00:55 2016 - [warning] relay_log_purge=0 is not set on slave 192.168.100.91(192.168.100.91:3306).

Sat Feb 6 16:00:55 2016 - [info] Checking replication filtering settings..

Sat Feb 6 16:00:55 2016 - [info] binlog_do_db= , binlog_ignore_db=

Sat Feb 6 16:00:55 2016 - [info] Replication filtering check ok.

Sat Feb 6 16:00:55 2016 - [info] GTID (with auto-pos) is not supported

Sat Feb 6 16:00:55 2016 - [info] Starting SSH connection tests..

Sat Feb 6 16:00:58 2016 - [info] All SSH connection tests passed successfully.

Sat Feb 6 16:00:58 2016 - [info] Checking MHA Node version..

Sat Feb 6 16:00:58 2016 - [info] Version check ok.

Sat Feb 6 16:00:58 2016 - [info] Checking SSH publickey authentication settings on the current master..

Sat Feb 6 16:00:58 2016 - [info] HealthCheck: SSH to 192.168.100.99 is reachable.

Sat Feb 6 16:00:59 2016 - [info] Master MHA Node version is 0.56.

Sat Feb 6 16:00:59 2016 - [info] Checking recovery script configurations on 192.168.100.99(192.168.100.99:3306)..

Sat Feb 6 16:00:59 2016 - [info]   Executing command: save_binary_logs --command=test --start_pos=4 --binlog_dir=/usr/local/mysql/data --output_file=/etc/masterha/save_binary_logs_test --manager_version=0.56 --start_file=mysql-bin.000006

Sat Feb 6 16:00:59 2016 - [info]   Connecting to root@192.168.100.99(192.168.100.99:22)..
  Creating /etc/masterha if not exists..   ok.
  Checking output directory is accessible or not..
   ok.
  Binlog found at /usr/local/mysql/data, up to mysql-bin.000006

Sat Feb 6 16:00:59 2016 - [info] Binlog setting check done.

Sat Feb 6 16:00:59 2016 - [info] Checking SSH publickey authentication and checking recovery script configurations on all alive slave servers..

Sat Feb 6 16:00:59 2016 - [info]   Executing command : apply_diff_relay_logs --command=test --slave_user='root' --slave_host=192.168.100.166 --slave_ip=192.168.100.166 --slave_port=3306 --workdir=/etc/masterha --target_version=5.6.25-log --manager_version=0.56 --relay_log_info=/usr/local/mysql/data/relay-log.info --relay_dir=/usr/local/mysql/data/ --slave_pass=xxx

Sat Feb 6 16:00:59 2016 - [info]   Connecting to root@192.168.100.166(192.168.100.166:22)..
  Checking slave recovery environment settings..
    Opening /usr/local/mysql/data/relay-log.info ... ok.
    Relay log found at /usr/local/mysql/data, up to mysql-relay-bin.000018
    Temporary relay log file is /usr/local/mysql/data/mysql-relay-bin.000018
    Testing mysql connection and privileges..Warning: Using a password on the command line interface can be insecure.
 done.
    Testing mysqlbinlog output.. done.
    Cleaning up test file(s).. done.

Sat Feb 6 16:00:59 2016 - [info]   Executing command : apply_diff_relay_logs --command=test --slave_user='root' --slave_host=192.168.100.92 --slave_ip=192.168.100.92 --slave_port=3306 --workdir=/etc/masterha --target_version=5.6.25-log --manager_version=0.56 --relay_log_info=/usr/local/mysql/data/relay-log.info --relay_dir=/usr/local/mysql/data/ --slave_pass=xxx

Sat Feb 6 16:00:59 2016 - [info]   Connecting to root@192.168.100.92(192.168.100.92:22)..
  Checking slave recovery environment settings..
    Opening /usr/local/mysql/data/relay-log.info ... ok.
    Relay log found at /usr/local/mysql/data, up to mysql-relay-bin.000016
    Temporary relay log file is /usr/local/mysql/data/mysql-relay-bin.000016
    Testing mysql connection and privileges..Warning: Using a password on the command line interface can be insecure.
 done.
    Testing mysqlbinlog output.. done.
    Cleaning up test file(s).. done.

Sat Feb 6 16:00:59 2016 - [info]   Executing command : apply_diff_relay_logs --command=test --slave_user='root' --slave_host=192.168.100.91 --slave_ip=192.168.100.91 --slave_port=3306 --

workdir=/etc/masterha --target_version=5.6.25-log --manager_version=0.56 --
relay_log_info=/usr/local/mysql/data/relay-log.info --relay_dir=/usr/local/mysql/data/ --
slave_pass=xxx
Sat Feb 6 16:00:59 2016 - [info]   Connecting to root@192.168.100.91(192.168.100.91:22)..
  Checking slave recovery environment settings..
    Opening /usr/local/mysql/data/relay-log.info ... ok.
    Relay log found at /usr/local/mysql/data, up to mysql-relay-bin.000017
    Temporary relay log file is /usr/local/mysql/data/mysql-relay-bin.000017
    Testing mysql connection and privileges..Warning: Using a password on the command line interface
can be insecure.
 done.
    Testing mysqlbinlog output.. done.
    Cleaning up test file(s).. done.
Sat Feb 6 16:01:00 2016 - [info] Slaves settings check done.
Sat Feb 6 16:01:00 2016 - [info]
192.168.100.99(192.168.100.99:3306) (current master)
 +--192.168.100.166(192.168.100.166:3306)
 +--192.168.100.92(192.168.100.92:3306)
 +--192.168.100.91(192.168.100.91:3306)

Sat Feb 6 16:01:00 2016 - [info] Checking replication health on 192.168.100.166..
Sat Feb 6 16:01:00 2016 - [info] ok.
Sat Feb 6 16:01:00 2016 - [info] Checking replication health on 192.168.100.92..
Sat Feb 6 16:01:00 2016 - [info] ok.
Sat Feb 6 16:01:00 2016 - [info] Checking replication health on 192.168.100.91..
Sat Feb 6 16:01:00 2016 - [info] ok.
Sat Feb 6 16:01:00 2016 - [warning] master_ip_failover_script is not defined.
Sat Feb 6 16:01:00 2016 - [warning] shutdown_script is not defined.
Sat Feb 6 16:01:00 2016 - [info] Got exit code 0 (Not master dead).
MySQL Replication Health is OK.

启动MHA：nohup ./masterha_manager --conf=/etc/masterha/app1.cnf &
停止MHA：./masterha_stop --config=/etc/masterha/app1.cnf
检查MHA的运行情况：masterha_check_status --conf=/etc/masterha/app1.cnf
app1 (pid:3431) is running(0:PING_OK), master:192.168.100.99

--remove_dead_master_conf   该参数代表当发生主从切换后，老的主库的ip将会从配置文件中移
除。
--manger_log   日志存放位置
--ignore_last_failover   在缺省情况下，如果MHA检测到连续发生宕机，且两次宕机间隔不
足8小时的话，则不会进行Failover，之所以这样限制是为了避免ping-pong效应。 该参数代表忽略
上次MHA触发切换产生的文件，默认情况下，MHA发生切换后会在日志目录，也就是上面我设置
的/data产生app1.failover.complete文件，下次再次切换的时候如果发现该目录下存在该文件将不
允许触发切换，除非在第一次切换后收到删除该文件，为了方便，这里设置为—
ignore_last_failover。

八、安装keepalived
在两台主上安装它:
tar xvf keepalived-1.2.19.tar
cd keepalived-1.2.19
./configure --prefix=/usr/local/keepalived/#把它安装到指定目录
make && make install

```
cp /usr/local/keepalived/etc/rc.d/init.d/keepalived /etc/init.d/
cp /usr/local/keepalived/etc/sysconfig/keepalived /etc/sysconfig/
mkdir /etc/keepalived/
cp /usr/local/keepalived/etc/keepalived/keepalived.conf /etc/keepalived/
cp /usr/local/keepalived/sbin/keepalived /usr/sbin/
```

在99上面配制keepalived
把vrrp_instance VI_1里的state 改为MASTER
在virtual_ipaddress里加入虚拟IP我加的是192.168.100.130
把priority 改一下权重，值越大优先级越高。BACKUP不能大于MASTER

```
! Configuration File for keepalived
global_defs {
    router_id HA_MySQL
}

vrrp_instance VI_1 {
    state MASTER
    interface eth0
    virtual_router_id 51 #组ID
    priority 10  #表示优先级
    advert_int 1
    #nopreempt #表示Master恢复正常之后，是否将VIP继续指向Master这样的话，会再次引发切换。
    authentication {
        auth_type PASS
        auth_pass 1111
    }
    #虚拟的IP地址(VIP)
    virtual_ipaddress {
        192.168.100.130
    }
}

virtual_server 192.168.100.130 3306 {
    delay_loop 2 #每个2秒检查一次real_server状态
    lb_algo wrr
    lb_kind DR
    persistence_timeout 60
    protocol TCP
    real_server 192.168.100.99 3306 {
        weight 3
        notify_down /etc/keepalived/check_mysql.sh #检测到服务down后执行的脚本
        TCP_CHECK {
            connect_timeout 10 #连接超时时间
            nb_get_retry 3 #重连次数
            delay_before_retry 3 #重连间隔时间
            connect_port 3306 # 健康检查端口
        }
    }
}
```

在166里配制keepalived

! Configuration File for keepalived
global_defs {
    router_id HA_MySQL
}

vrrp_instance VI_1 {
    state BACKUP
    interface eth0
    virtual_router_id 51 #组ID
    priority 99 #表示优先级
    advert_int 1
    nopreempt #表示Master恢复正常之后，是否将VIP继续指向Master这样的话，会再次引发切换。
    authentication {
        auth_type PASS
        auth_pass 1111
    }
    #虚拟的IP地址(VIP)
    virtual_ipaddress {
        192.168.100.130
    }
}

virtual_server 192.168.100.130 3306 {
    delay_loop 2 #每个2秒检查一次real_server状态
    lb_algo wrr
    lb_kind DR
    persistence_timeout 60
    protocol TCP
    real_server 192.168.100.166 3306 {
        weight 3
        notify_down /etc/keepalived/check_mysql.sh #检测到服务down后执行的脚本
        TCP_CHECK {
            connect_timeout 10 #连接超时时间
            nb_get_retry 3 #重连次数
            delay_before_retry 3 #重连间隔时间
            connect_port 3306 # 健康检查端口
        }
    }
}

/etc/keepalived/check_mysql.sh 文件的内容如下：
#!/bin/bash
pkill keepalived
然后一定要给执行权限：chmod +x check_mysql.sh
启动keepalived:service keepalived start

[root@ares-LNMP ~]# ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo

inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP qlen 1000
    link/ether 00:0c:29:f8:68:37 brd ff:ff:ff:ff:ff:ff
    inet 192.168.100.99/24 brd 192.168.100.255 scope global eth0
    inet 192.168.100.130/32 scope global eth0
    inet6 fe80::20c:29ff:fef8:6837/64 scope link
       valid_lft forever preferred_lft forever
以上是在MASTER上，在BACKUP上没有是正常的
查看状态：service keepalived status