corosync和pacemaker实现httpd和mysql双集群

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一、环境介绍：

三台均为双网卡：

openstack-control.example.com openstack-control
  eth0:172.16.171.100
  eth1:10.1.1.100
openstack-nova.example.com openstack-nova
  eth0:172.16.171.110
  eth1:10.1.1.110
openstack-neutron.example.com openstack-neutron
  eth0:172.16.171.120
  eth1:10.1.1.120

二、corosync和pacemaker配置步骤如下：

1、 配置时区及同步时间

2、配置集群节点间通过主机名互相通信

3、配置集群主机能使root用户基于无密码ssh秘钥方式进行通信

4、 关闭selinux和iptables

5、安装corosync和pacemaker包

6、 修改corosync.conf配置文件

```
compatibility: whitetank

totem {
        version: 2
        secauth: on
        threads: 2
        rrp_mode: passive
        interface {
                ringnumber: 0
                bindnetaddr: 10.1.1.0
                mcastaddr: 239.255.1.1
                mcastport: 5405
                ttl: 1
        }
        interface {
                ringnumber: 1
                bindnetaddr: 172.16.171.0
                mcastaddr: 238.255.1.1
                mcastport: 5406
                ttl: 1
        }
}
```

```
logging {
        fileline: off
        to_stderr: no
        to_logfile: yes
        logfile: /var/log/cluster/corosync.log
        to_syslog: no
        debug: off
        timestamp: on
        logger_subsys {
                subsys: AMF
                debug: off
        }
}
service {
        ver: 0
        name: pacemaker
}
```


7、生成认证文件：authkey 并传给其他集群服务器

8、启动corosync服务，并查看日志

9、安装crmsh

```
http://download.opensuse.org/repositories/network:/ha-clustering:/Stable/CentOS_CentOS-6/
[network_ha-clustering_Stable]
name=Stable High Availability/Clustering packages (CentOS_CentOS-6) type=rpm-md
baseurl=http://download.opensuse.org/repositories/network:/ha-clustering:/Stable/CentOS_CentOS-6/
gpgcheck=1
gpgkey=http://download.opensuse.org/repositories/network:/ha-clustering:/Stable/CentOS_CentOS-6/repodata/repomd.xml.key
enabled=1
```

10、使用crmsh工具配置全局属性

```
crm(live)#configure
crm(live)configure#property stonith-enabled=false
crm(live)configure#property no-quorum-policy=ignore
crm(live)configure#property default-resource-stickiness=100
```

11、使用crmsh工具配置ip资源、nfs资源和mysql资源和配置这两个资源的协同约束（排列约束）、顺序约束

mysql:

```
crm(live)configure#primitive mysqlvip ocf:heartbeat:IPaddr  params  ip='10.1.1.200' nic='eth1' cidr_netmask='24' broadcast='10.1.1.0' op monitor interval=30s(启动延迟时间) timeout=20s（监控超时时间）

crm(live)configure#primitive mysqlnfs ocf:heartbeat:Filesystem params device='10.1.1.100:/mysqldata' directory='/mydata' fstype='nfs' op monitor interval=20s timeout=40s

crm(live)configure#verify

crm(live)configure#primitive mysqlserver lsb:mysqld op monitor interval=30s timeout=15s

crm(live)configure#colocation  myserver inf: mysqlvip mysqlnfs mysqlserver

crm(live)configure#order mysqlnfs_before_mysqlserver mandatory: mysqlnfs mysqlserver
```

httpd:

```
crm(live)configure#primitive httpdvip ocf:heartbeat:IPaddr  params  ip='172.16.171.200' nic='eth0' cidr_netmask='24' broadcast='172.16.171.0' op monitor interval=30s(启动延迟时间) timeout=20s（监控超时时间）
```

crm(live)configure#primitive httpdnfs ocf:heartbeat:Filesystem params device='172.16.171.100:/myhttpd' irectory='/var/www/html' fstype='nfs' op monitor interval=20s timeout=40s

crm(live)configure#verify

crm(live)configure#primitive httpdserver lsb:httpd op monitor interval=30s timeout=15s

crm(live)configure#colocation myapacheserver inf: httpdvip httpdnfs httpdserver

crm(live)configure#order httpdnfs_before_httpdserver mandatory: httpdnfs httpdserver

具体查看如下图：

```
crm(live)# configure
crm(live)configure# show
node openstack-control.example.com \
        attributes standby=off
node openstack-neutron.example.com \
        attributes standby=off
node openstack-nova.example.com \
        attributes standby=off
primitive httpdnfs Filesystem \
        params device="172.16.171.100:/myhttpd" directory="/var/www/html" fstype=nfs \
        op monitor interval=20s timeout=40s
primitive httpdserver lsb:httpd \
        op monitor interval=20s timeout=40s
primitive httpdvip IPaddr \
        params ip=172.16.171.200 nic=eth0 cidr_netmask=24 broadcast=172.16.171.0 \
        op monitor interval=30s timeout=40s
primitive mysqlnfs Filesystem \
        params device="10.1.1.100:/mysqldata" directory="/mydata" fstype=nfs \
        op monitor interval=20s timeout=40s
primitive mysqlserver lsb:mysqld \
        op monitor interval=30s timeout=15s
primitive mysqlvip IPaddr \
        params ip=10.1.1.200 nic=eth1 cidr_netmask=24 broadcast=10.1.1.0 \
        op monitor interval=20s timeout=40s
colocation myapacheserver inf: httpdnfs httpdvip httpdserver
colocation myserver inf: mysqlvip mysqlnfs mysqlserver
order httpdnfs_before_httpdserver Mandatory: httpdnfs httpdserver
order mysqlnfs_before_mysqlserver Mandatory: mysqlnfs mysqlserver
property cib-bootstrap-options: \
        dc-version=1.1.11-97629de \
        cluster-infrastructure="classic openais (with plugin)" \
        expected-quorum-votes=3 \
        stonith-enabled=false \
        no-quorum-policy=ignore \
        default-resource-stickiness=100
```

12、查看节点情况

crm(live)# status
Last updated: Wed Sep 23 00:08:39 2015
Last change: Wed Sep 23 00:08:33 2015
Stack: classic openais (with plugin)
Current DC: openstack-control.example.com - partition with quorum
Version: 1.1.11-97629de
3 Nodes configured, 3 expected votes
6 Resources configured

Online: [openstack-control.example.com openstack-neutron.example.com openstack-nova.example.com]

mysqlnfs (ocf::heartbeat:Filesystem): Started openstack-control.example.com
mysqlvip (ocf::heartbeat:IPaddr): Started openstack-control.example.com
mysqlserver (lsb:mysqld): Started openstack-control.example.com
httpdvip (ocf::heartbeat:IPaddr): Started openstack-control.example.com
httpdnfs (ocf::heartbeat:Filesystem): Started openstack-control.example.com
httpdserver (lsb:httpd): Started openstack-control.example.com

通过如下进行主备切换：

node online openstack-neutron.example.com

node standby openstack-neutron.example.com

corosync pacemaker

上一篇：haproxy 配置详解

下一篇：编译安装mysql5.6以上版本报错解决