OpenVox GSM Gateway 上挂载 NFS

（一）NFS 服务器配置

本 NFS 服务器为 CentOS 5.9，CentOS 6 以上请将以下 portmap 改为 rpcbind

安装相关软件：
    yum install nfs-utils portmap

```
[root@centos61 ~]# yum install nfs-utils portmap
```

配置允许访问的主机，编辑文件 /etc/hosts.allow：
    vi /etc/hosts.allow
    portmap:172.16.210.1

```
[root@centos61 ~]# vi /etc/hosts.allow
#
# hosts.allow    This file describes the names of the hosts which are
#                allowed to use the local INET services, as decided
#                by the '/usr/sbin/tcpd' server.
#

portmap:172.16.210.1
```

配置拒绝访问的主机，编辑文件 /etc/hosts.deny：
    vi /etc/hosts.deny
    portmap:ALL

```
[root@centos61 ~]# vi /etc/hosts.deny
#
# hosts.deny     This file describes the names of the hosts which are
#                *not* allowed to use the local INET services, as decided
#                by the '/usr/sbin/tcpd' server.
#
portmap:ALL
```

配置共享目录信息，编辑文件 /etc/exports：
    vi /etc/exports
    /nfs-share 172.16.210.1(rw,sync,all_squash,anonuid=0,anongid=0)

注意：
    id root
        uid=0(root) gid=0(root) groups=0(root),1(bin),2(daemon),3(sys),4(adm),6(disk),10(wheel)

    rw: read and write
    sync: sync your change to disk
    all_squash: all users chage to nobody
    anonuid: allow uid
    anongid: allow gid

```
[root@centos61 ~]# vi /etc/exports
/nfs-share 172.16.210.1(rw,sync,all_squash,anonuid=0,anongid=0)
```

使共享目录设置生效：
    exports -r
    exports

```
[root@centos61 ~]# exportfs -r
[root@centos61 ~]# exportfs
/nfs-share        172.16.210.1
```

启动NFS服务：
```
service portmap start
service nfs start
```

```
[root@centos61 ~]# service portmap start
Starting portmap:                                          [  OK  ]
[root@centos61 ~]# service nfs start
Starting NFS services:                                     [  OK  ]
Starting NFS quotas:                                       [  OK  ]
Starting NFS daemon:                                       [  OK  ]
Starting NFS mountd:                                       [  OK  ]
Stopping RPC idmapd:                                       [  OK  ]
Starting RPC idmapd:                                       [  OK  ]
[root@centos61 ~]#
```

检查NFS共享目录设置：
```
showmount -e 172.16.8.61
```

```
[root@centos61 ~]# showmount -e 172.16.8.61
Export list for 172.16.8.61:
/nfs-share 172.16.210.1
```

（二）OpenVox GSM Gateway 挂载 NFS

挂载 NFS 共享目录，并在 NFS 共享目录中创建文件：
```
cd nfs
echo "hello" > hello.txt
pwd
cd /etc/asterisk
mkdir nfs
mount -o nolock -t nfs 172.16.8.61:/nfs-share nfs
```

```
root@Openvox-Wireless-Gateway:~# cd /etc/asterisk/
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk# mkdir nfs
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk# mount -o nolock -t nfs 172.16.8.61:/nfs-share nfs
```

在 NFS 服务器中查看创建的文件：
```
cd /nfs-share
ls
cat hello.txt
pwd
```

```
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk# cd nfs/
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk/nfs# echo "hello world" > hello.txt
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk/nfs# pwd
/etc/asterisk/nfs
```

卸载 NFS 共享目录：
```
umount nfs
ls nfs
```

```
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk# umount nfs
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk# ls nfs
root@Openvox-Wireless-Gateway:~/memcfg/etc/asterisk#
```

问题集

```
1) mount: 172.16.8.88:/root failed, reason given by server: Permission denied
    all_squash,anonuid=0,anongid=0

2) mount clntudp_create : RPC Program not registered
    /etc/hosts.allow
        portmap:172.16.8.88

3) mount: mount to NFS server '172.16.8.88' failed: System Error: No route to host.
    server: service iptables start
```

```
4) /usr/sbin/start-statd: line 8: systemctl: command not found
   mount.nfs: rpc.statd is not running but is required for remote locking.
   mount.nfs: Either use '-o nolock' to keep locks local, or start statd.
   mount.nfs: an incorrect mount option was specified
   client: mount -o nolock -t nfs 172.16.8.61:/root nfs
                 |-------|

5) CentOS 7:
   [~]# service iptables start
   [~]# service rpcbind restart
   [~]# service nfs restart
```