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# NFS网络文件系统

linux nfs inotify

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## NFS 系统介绍

network file sysctem 是网络文件系统，它的主要功能是通过网络让i同的主机系统之间可以共享文件或目录，NFS客户端一般为应用服务器，RPC (remote procedure call) 是能使客户端执行其他系统中程序的一种机制。NFS本身是没有提供信息传输的协议和功能的，但NFS却能让我们通过网络进行资料的分享，这是因为NFS使用了一些其它的传输协议。而这些传输协议用到这个RPC功能的。。所以只要用到NFS的地方都要启动RPC服务，不论是NFS SERVER或者NFS CLIENT。这样SERVER和CLIENT才能通过RPC来实现PROGRAM PORT的对应。可以这么理解RPC和NFS的关系：NFS是一个文件系统，而RPC是负责负责信息的传输。在大企业可以用 MFS, FASTDFS, GLUSTERFS, CEPH

在客户端与服务端都需要安装NFS与RPC

1.$ sed -i 's/keepcache=0/keepcache=1/g' /etc/yum.conf

2.$ sed -n '1,4p' /etc/yum.conf

3.$ yum install nfs-utils rpcbind -y

在服务端启动rpcbind 与nfs, 在客户端启动rpcbind

1.$ /etc/init.d/rpcbind **start**

2.$ /etc/init.**d**/nfs **start**

## NFS 服务端配置

NFS的常用目录

* /etc/exports NFS服务的主要配置文件
* /usr/sbin/exportfs NFS服务的管理命令
* /usr/sbin/shownmount 客户端的查看命令
* /var/lib/nfs/etab NFS分享出来的目录的完整权限设定值
* /var/lib/nfs/xtab 记录曾经登录过的客户端信息

### 配置/etc/exprots

<输出目录> [客户端1 选项（访问权限,用户映射,其他）] [客户端2 选项（访问权限,用户映射,其他）]

目录： NFS系统中需要共享给客户机使用的目录

客户端：其中客户端可以指定IP或者指定网段，也可以指定载名中的主机。 （\*）表示所有主机

选项用来设置输出目录的访问权限，用户映射

1. 选项： ro 只读， rw 读写
2. 用户映射：
   * all\_squash: 将远程访问的所有普通用户及所属组映射为匿名用户或组(nfsnobody)
   * no\_all\_squash:
   * root\_squash: 将root用户及所属组都映射为匿名用户或组（默认设置）
   * no\_root\_squash
   * anonuid=xxx: 将远程访问的所有用户都映射为匿名用户，并指定该用户为本地用户
   * anongid=xxx
3. 其它选项：
   * secure: 限制客户端只能从小于1024的tcp/ip端连接nfs服务器（默认设置）
   * insecure： 大于1024
   * sync: 将数据同步写放内存缓存区与磁盘中，效率低。但保证数据一致性
   * async:先保存到内存缓存中，必要时写入磁盘
   * wdelay: 检查是否有相关的写操作，如果有则将这些写操作一起执行，（默认设置）
   * no\_wdelay: 若有写操作则立即执行，与sync配合使用
   * subtree: 若输出目录是一个子目录，则nfs服务器将检查其父目录的权限（默认设置）
   * nosubtree: 不检查父目录的权限。这样可以提高效率

1.$ cat /etc/exports

2./data 172.16.1.0/24(rw, sync)

创建文件修改权限

1.mkdir -p /data

2.chown -R nfsnobody,nfsnobody /data

然后平滑重启，

1.$ /etc/init.d/rpcbind reload

2.$ /etc/init.d/nfs reload

3.$ exportfs

4./data 172.16.1.0/24

5.

6.$ cat /var/lib/nfs/etab

7./data 172.16.1.0/24(rw,sync,wdelay,hide,nocrossmnt,secure,root\_squash,no\_all\_squash,no\_subtree\_check,secure\_locks,acl,anonuid=65534,anongid=65534,sec=sys,rw,root\_squash,no\_all\_squash)

8.

9.$ service rpcbind status

10.rpcbind (pid 1376) is running...

11.

12.$ service nfs status

13.rpc.svcgssd is stopped

14.rpc.mountd (pid 1583) is running...

15.nfsd (pid 1599 1598 1597 1596 1595 1594 1593 1592) is running...

16.rpc.rquotad (pid 1578) is running...

17.

然后可以用showmount 来时候NFS的共享状态

1.$ showmount -e #默认查看自己共享服务

2.Export list **for** NFS01:

3./data 172.16.1.0/24

4.

5.$ showmount -a #查看已经与客户端连接上的目录信息

6.All mount points on NFS01:

## NFS客户端

客户端仅需要启动rpcbind，然后可以用showmount来查询nfs的共享状态

1.$ showmount -e 172.16.1.31

2.Export list **for** 172.16.1.31:

3./data 172.16.1.0/24

mount 语法mount NFS服务器IP:共享目录 本地挂载点目录

现在我们把客户端的/mnt挂载到服务器的/data/test/上

1.$ mount -t 172.16.1.31:/data/**test**/ /mnt/

2.$ mount |grep nfs

3.sunrpc on /var/lib/nfs/rpc\_pipefs **type** rpc\_pipefs (rw)

4.172.16.1.31:/data/**test**/ on /mnt **type** nfs (rw,vers=4,addr=172.16.1.31,clientaddr=172.16.1.8)

这里我要说一下，如果客户端需要使用普通用户在共享目录写文件，可以在服务器里的共享目录下一个字目录给777权限，普通用户创建的文件的属主与组与该普通用户相同

设定权限可以这样

1.mount -t nfs -o noatime,nodiratime,nosuid,noexec,nodev,rsize=131072,wsize=131072 10.0.0.7:/data /mnt

查看挂载信息

1.$ df -h

2.Filesystem Size Used Avail Use% Mounted on

3./dev/sda2 6.9G 1.5G 5.1G 23% /

4.tmpfs 238M 0 238M 0% /dev/shm

5./dev/sda1 190M 36M 145M 20% /boot

6.172.16.1.31:/data/ 6.9G 3.7G 2.9G 57% /data/upload

## 内核性能相关优化

1、/proc/sys/net/core/rmem\_default

该文件指定了接收套接字缓冲区大小的缺省值（以字节为单位），缺省设置：124928

2、/proc/sys/net/core/rmem\_max

该文件指定了接收套接字缓冲区大小的最大值（以字节为单位），缺省设置：124928

3、/proc/sys/net/core/wmem\_default

该文件指定了发送套接字缓冲区大小的缺省值（以字节为单位），缺省设置：124928

4、/proc/sys/net/core/wmem\_max

该文件指定了发送套接字缓冲区大小的最大值（以字节为单位），缺省设置：124928

对上述文件的具体内核优化：

1.$ cat >>/etc/sysctl.conf<<EOF

2.net.core.wmem\_default = 8388608

3.net.core.rmem\_default = 8388608

4.net.core.wmem\_max = 16777216

5.net.core.rmem\_max = 16777216

6.EOF

7.

8.$ sysctl -p

## 相关命令

1. exportfs   
   在启动NFS后，如果修改了/etc/exports，就需要重启nfs，这时候可以用exportfs命令来使之立刻生效 exportfs -rv 相当于 `/etc/init.d/nfs reload
   * -a 全部挂找或卸载
   * -r 重新读取/etc/exports中的信息，并同步更新/etc/exports, /var/lib/nfs/xtab
   * -u 卸载单一目录（和a一起使用为卸载所有/etc/exports文件中的目录)
   * -v 在export的时候， 将详细的信息输出到屏幕上
     1. nfsstat 查看NFS的运行状态，
     2. rpcinfo 查看RPC执行信息，可以用于检测RPC运行情况的工具
     3. showmount
   * -a 显示已经于客户端连接上的目录信息
   * -e IP或hostname显示此IP地址分享出来的目录
     1. netstat
     2. mount 客户端挂载NFS共享目录可选参数 man -a mount
   * soft 当服务端没回应时，会在timeout后重新连接，会回错误信息
   * hard 当服务端没回应时持续在后台尝试连接
   * intr 正在进行NFS请求时，允许用键盘中断
   * nointr 不允许键盘中断
   * timeo 请求过期时间 单位为秒
   * bg 第一次请求不成功，第二次的mount将放到后台执行
   * fg 一直在前台发送请求
   * proto=tcp|udp 修改使用TCP协议还是UDP协议来传输NFS的数据
   * default ， hard nointr
   * rsize 设置块大小(bytes)
   * wsize 写操作的大小，这两个操作会影响服务器客户端NFS缓存大小

NFS优点

1简单，容易上手，容易掌握。

2NFS文件系统内数据是在文件系统之上的，即数据是能看得见的。

3部署快速，维护简单方便，且可控，满足需求就是最好的。

4可靠从软件层面上看，数据可靠性高，经久耐用。数据是在文件系统之上的。

5服务非常稳定

NFS局限：

1、 局限性是存在单点故障，如果nfs server宕机了所有客户端都不能访问共享目录，这个在后期通过负载均衡及高可用方案弥补

2、 在大数据高并发的场合，NFS效率/性能有限

3、 客户端认证时基于ip和主机名、权限时，根据id识别，安全性一般（用于内网问题不大）

4、 NFS数据时明文的，NFS本身对数据完整性不作验证

5、 多台客户机器挂载一个NFS服务器时，连接管理维护麻烦（耦合度高），尤其是NFS服务端出问题后，所有NFS客户端都挂掉状态

%23%20NFS%u7F51%u7EDC%u6587%u4EF6%u7CFB%u7EDF%0A@%28linux%29%5Bnfs%2C%20inotify%5D%0A%0A%5BTOC%5D%0A%23%23%20NFS%20%u7CFB%u7EDF%u4ECB%u7ECD%0Anetwork%20file%20sysctem%20%u662F%u7F51%u7EDC%u6587%u4EF6%u7CFB%u7EDF%uFF0C%u5B83%u7684%u4E3B%u8981%u529F%u80FD%u662F%u901A%u8FC7%u7F51%u7EDC%u8BA9i%u540C%u7684%u4E3B%u673A%u7CFB%u7EDF%u4E4B%u95F4%u53EF%u4EE5%u5171%u4EAB%u6587%u4EF6%u6216%u76EE%u5F55%uFF0CNFS%u5BA2%u6237%u7AEF%u4E00%u822C%u4E3A%u5E94%u7528%u670D%u52A1%u5668%uFF0CRPC%20%28remote%20procedure%20call%29%20%u662F%u80FD%u4F7F%u5BA2%u6237%u7AEF%u6267%u884C%u5176%u4ED6%u7CFB%u7EDF%u4E2D%u7A0B%u5E8F%u7684%u4E00%u79CD%u673A%u5236%u3002NFS%u672C%u8EAB%u662F%u6CA1%u6709%u63D0%u4F9B%u4FE1%u606F%u4F20%u8F93%u7684%u534F%u8BAE%u548C%u529F%u80FD%u7684%uFF0C%u4F46NFS%u5374%u80FD%u8BA9%u6211%u4EEC%u901A%u8FC7%u7F51%u7EDC%u8FDB%u884C%u8D44%u6599%u7684%u5206%u4EAB%uFF0C%u8FD9%u662F%u56E0%u4E3ANFS%u4F7F%u7528%u4E86%u4E00%u4E9B%u5176%u5B83%u7684%u4F20%u8F93%u534F%u8BAE%u3002%u800C%u8FD9%u4E9B%u4F20%u8F93%u534F%u8BAE%u7528%u5230%u8FD9%u4E2ARPC%u529F%u80FD%u7684%u3002%u3002%u6240%u4EE5%u53EA%u8981%u7528%u5230NFS%u7684%u5730%u65B9%u90FD%u8981%u542F%u52A8RPC%u670D%u52A1%uFF0C%u4E0D%u8BBA%u662FNFS%20SERVER%u6216%u8005NFS%20CLIENT%u3002%u8FD9%u6837SERVER%u548CCLIENT%u624D%u80FD%u901A%u8FC7RPC%u6765%u5B9E%u73B0PROGRAM%20PORT%u7684%u5BF9%u5E94%u3002%u53EF%u4EE5%u8FD9%u4E48%u7406%u89E3RPC%u548CNFS%u7684%u5173%u7CFB%uFF1ANFS%u662F%u4E00%u4E2A%u6587%u4EF6%u7CFB%u7EDF%uFF0C%u800CRPC%u662F%u8D1F%u8D23%u8D1F%u8D23%u4FE1%u606F%u7684%u4F20%u8F93%u3002%u5728%u5927%u4F01%u4E1A%u53EF%u4EE5%u7528%20MFS%2C%20FASTDFS%2C%20GLUSTERFS%2C%20CEPH%0A%0A%u5728%u5BA2%u6237%u7AEF%u4E0E%u670D%u52A1%u7AEF%u90FD%u9700%u8981%u5B89%u88C5NFS%u4E0ERPC%0A%60%60%60bash%0A%24%20sed%20-i%20%27s/keepcache%3D0/keepcache%3D1/g%27%20/etc/yum.conf%0A%24%20sed%20-n%20%20%271%2C4p%27%20/etc/yum.conf%0A%24%20yum%20install%20nfs-utils%20rpcbind%20-y%0A%60%60%60%0A%u5728%u670D%u52A1%u7AEF%u542F%u52A8%60rpcbind%60%20%u4E0E%60nfs%60%2C%20%u5728%u5BA2%u6237%u7AEF%u542F%u52A8%60rpcbind%60%0A%0A%60%60%60%0A%24%20/etc/init.d/rpcbind%20start%0A%24%20/etc/init.d/nfs%20start%0A%60%60%60%0A%23%23%20NFS%20%u670D%u52A1%u7AEF%u914D%u7F6E%0ANFS%u7684%u5E38%u7528%u76EE%u5F55%0A-%20/etc/exports%20%20%20%20NFS%u670D%u52A1%u7684%u4E3B%u8981%u914D%u7F6E%u6587%u4EF6%0A-%20/usr/sbin/exportfs%20%20%20%20NFS%u670D%u52A1%u7684%u7BA1%u7406%u547D%u4EE4%0A-%20/usr/sbin/shownmount%20%u5BA2%u6237%u7AEF%u7684%u67E5%u770B%u547D%u4EE4%0A-%20/var/lib/nfs/etab%20%20%20%20%20NFS%u5206%u4EAB%u51FA%u6765%u7684%u76EE%u5F55%u7684%u5B8C%u6574%u6743%u9650%u8BBE%u5B9A%u503C%0A-%20/var/lib/nfs/xtab%20%20%u8BB0%u5F55%u66FE%u7ECF%u767B%u5F55%u8FC7%u7684%u5BA2%u6237%u7AEF%u4FE1%u606F%0A%0A%23%23%23%20%u914D%u7F6E/etc/exprots%0A%3C%u8F93%u51FA%u76EE%u5F55%3E%20%5B%u5BA2%u6237%u7AEF1%20%u9009%u9879%uFF08%u8BBF%u95EE%u6743%u9650%2C%u7528%u6237%u6620%u5C04%2C%u5176%u4ED6%uFF09%5D%20%5B%u5BA2%u6237%u7AEF2%20%u9009%u9879%uFF08%u8BBF%u95EE%u6743%u9650%2C%u7528%u6237%u6620%u5C04%2C%u5176%u4ED6%uFF09%5D%0A%3E%20%u76EE%u5F55%uFF1A%20NFS%u7CFB%u7EDF%u4E2D%u9700%u8981%u5171%u4EAB%u7ED9%u5BA2%u6237%u673A%u4F7F%u7528%u7684%u76EE%u5F55%0A%3E%20%u5BA2%u6237%u7AEF%uFF1A%u5176%u4E2D%u5BA2%u6237%u7AEF%u53EF%u4EE5%u6307%u5B9AIP%u6216%u8005%u6307%u5B9A%u7F51%u6BB5%uFF0C%u4E5F%u53EF%u4EE5%u6307%u5B9A%u8F7D%u540D%u4E2D%u7684%u4E3B%u673A%u3002%20%uFF08\*%uFF09%u8868%u793A%u6240%u6709%u4E3B%u673A%0A%3E%u9009%u9879%u7528%u6765%u8BBE%u7F6E%u8F93%u51FA%u76EE%u5F55%u7684%u8BBF%u95EE%u6743%u9650%uFF0C%u7528%u6237%u6620%u5C04%0A%3E1.%20%u9009%u9879%uFF1A%20ro%20%u53EA%u8BFB%uFF0C%20rw%20%u8BFB%u5199%0A%3E2.%20%u7528%u6237%u6620%u5C04%uFF1A%0A%3E%20-%20all\_squash%3A%20%u5C06%u8FDC%u7A0B%u8BBF%u95EE%u7684%u6240%u6709%u666E%u901A%u7528%u6237%u53CA%u6240%u5C5E%u7EC4%u6620%u5C04%u4E3A%u533F%u540D%u7528%u6237%u6216%u7EC4%28nfsnobody%29%0A%3E%20-%20no\_all\_squash%3A%20%0A%3E%20-%20root\_squash%3A%20%u5C06root%u7528%u6237%u53CA%u6240%u5C5E%u7EC4%u90FD%u6620%u5C04%u4E3A%u533F%u540D%u7528%u6237%u6216%u7EC4%uFF08%u9ED8%u8BA4%u8BBE%u7F6E%uFF09%0A%3E%20-%20no\_root\_squash%0A%3E%20-%20anonuid%3Dxxx%3A%20%u5C06%u8FDC%u7A0B%u8BBF%u95EE%u7684%u6240%u6709%u7528%u6237%u90FD%u6620%u5C04%u4E3A%u533F%u540D%u7528%u6237%uFF0C%u5E76%u6307%u5B9A%u8BE5%u7528%u6237%u4E3A%u672C%u5730%u7528%u6237%0A%3E%20-%20anongid%3Dxxx%0A%3E3.%20%u5176%u5B83%u9009%u9879%uFF1A%0A%3E%20-%20secure%3A%20%u9650%u5236%u5BA2%u6237%u7AEF%u53EA%u80FD%u4ECE%u5C0F%u4E8E1024%u7684tcp/ip%u7AEF%u8FDE%u63A5nfs%u670D%u52A1%u5668%uFF08%u9ED8%u8BA4%u8BBE%u7F6E%uFF09%0A%3E%20-%20insecure%uFF1A%20%u5927%u4E8E1024%0A%3E%20-%20sync%3A%20%u5C06%u6570%u636E%u540C%u6B65%u5199%u653E%u5185%u5B58%u7F13%u5B58%u533A%u4E0E%u78C1%u76D8%u4E2D%uFF0C%u6548%u7387%u4F4E%u3002%u4F46%u4FDD%u8BC1%u6570%u636E%u4E00%u81F4%u6027%0A%3E%20-%20async%3A%u5148%u4FDD%u5B58%u5230%u5185%u5B58%u7F13%u5B58%u4E2D%uFF0C%u5FC5%u8981%u65F6%u5199%u5165%u78C1%u76D8%0A%3E%20-%20wdelay%3A%20%u68C0%u67E5%u662F%u5426%u6709%u76F8%u5173%u7684%u5199%u64CD%u4F5C%uFF0C%u5982%u679C%u6709%u5219%u5C06%u8FD9%u4E9B%u5199%u64CD%u4F5C%u4E00%u8D77%u6267%u884C%uFF0C%uFF08%u9ED8%u8BA4%u8BBE%u7F6E%uFF09%0A%3E%20-%20no\_wdelay%3A%20%u82E5%u6709%u5199%u64CD%u4F5C%u5219%u7ACB%u5373%u6267%u884C%uFF0C%u4E0Esync%u914D%u5408%u4F7F%u7528%0A%3E%20-%20subtree%3A%20%u82E5%u8F93%u51FA%u76EE%u5F55%u662F%u4E00%u4E2A%u5B50%u76EE%u5F55%uFF0C%u5219nfs%u670D%u52A1%u5668%u5C06%u68C0%u67E5%u5176%u7236%u76EE%u5F55%u7684%u6743%u9650%uFF08%u9ED8%u8BA4%u8BBE%u7F6E%uFF09%0A%3E%20-%20nosubtree%3A%20%u4E0D%u68C0%u67E5%u7236%u76EE%u5F55%u7684%u6743%u9650%u3002%u8FD9%u6837%u53EF%u4EE5%u63D0%u9AD8%u6548%u7387%0A%0A%60%60%60bash%0A%24%20cat%20/etc/exports%0A/data%20172.16.1.0/24%28rw%2C%20sync%29%0A%60%60%60%0A%u521B%u5EFA%u6587%u4EF6%u4FEE%u6539%u6743%u9650%0A%0A%60%60%60bash%0Amkdir%20-p%20/data%0Achown%20-R%20nfsnobody%2Cnfsnobody%20/data%0A%60%60%60%0A%u7136%u540E%u5E73%u6ED1%u91CD%u542F%uFF0C%20%0A%0A%60%60%60bash%0A%24%20/etc/init.d/rpcbind%20reload%0A%24%20/etc/init.d/nfs%20reload%0A%24%20exportfs%0A/data%09%09172.16.1.0/24%0A%0A%24%20cat%20/var/lib/nfs/etab%0A/data%09172.16.1.0/24%28rw%2Csync%2Cwdelay%2Chide%2Cnocrossmnt%2Csecure%2Croot\_squash%2Cno\_all\_squash%2Cno\_subtree\_check%2Csecure\_locks%2Cacl%2Canonuid%3D65534%2Canongid%3D65534%2Csec%3Dsys%2Crw%2Croot\_squash%2Cno\_all\_squash%29%0A%0A%24%20service%20rpcbind%20status%0Arpcbind%20%28pid%20%201376%29%20is%20running...%0A%0A%24%20service%20nfs%20status%0Arpc.svcgssd%20is%20stopped%0Arpc.mountd%20%28pid%201583%29%20is%20running...%0Anfsd%20%28pid%201599%201598%201597%201596%201595%201594%201593%201592%29%20is%20running...%0Arpc.rquotad%20%28pid%201578%29%20is%20running...%0A%0A%60%60%60%0A%u7136%u540E%u53EF%u4EE5%u7528showmount%20%u6765%u65F6%u5019NFS%u7684%u5171%u4EAB%u72B6%u6001%0A%60%60%60bash%0A%24%20showmount%20-e%20%23%u9ED8%u8BA4%u67E5%u770B%u81EA%u5DF1%u5171%u4EAB%u670D%u52A1%0AExport%20list%20for%20NFS01%3A%0A/data%20172.16.1.0/24%0A%0A%24%20showmount%20-a%20%20%23%u67E5%u770B%u5DF2%u7ECF%u4E0E%u5BA2%u6237%u7AEF%u8FDE%u63A5%u4E0A%u7684%u76EE%u5F55%u4FE1%u606F%0AAll%20mount%20points%20on%20NFS01%3A%0A%60%60%60%0A%0A%0A%23%23%20NFS%u5BA2%u6237%u7AEF%0A%u5BA2%u6237%u7AEF%u4EC5%u9700%u8981%u542F%u52A8rpcbind%uFF0C%u7136%u540E%u53EF%u4EE5%u7528showmount%u6765%u67E5%u8BE2nfs%u7684%u5171%u4EAB%u72B6%u6001%0A%0A%60%60%60bash%0A%24%20showmount%20-e%20172.16.1.31%20%20%0AExport%20list%20for%20172.16.1.31%3A%0A/data%20172.16.1.0/24%20%0A%60%60%60%0Amount%20%u8BED%u6CD5%60mount%20NFS%u670D%u52A1%u5668IP%3A%u5171%u4EAB%u76EE%u5F55%20%u672C%u5730%u6302%u8F7D%u70B9%u76EE%u5F55%60%0A%u73B0%u5728%u6211%u4EEC%u628A%u5BA2%u6237%u7AEF%u7684/mnt%u6302%u8F7D%u5230%u670D%u52A1%u5668%u7684/data/test/%u4E0A%0A%60%60%60bash%0A%24%20mount%20-t%20172.16.1.31%3A/data/test/%20/mnt/%0A%24%20mount%20%7Cgrep%20nfs%0Asunrpc%20on%20/var/lib/nfs/rpc\_pipefs%20type%20rpc\_pipefs%20%28rw%29%0A172.16.1.31%3A/data/test/%20on%20/mnt%20type%20nfs%20%28rw%2Cvers%3D4%2Caddr%3D172.16.1.31%2Cclientaddr%3D172.16.1.8%29%0A%60%60%60%0A%u8FD9%u91CC%u6211%u8981%u8BF4%u4E00%u4E0B%uFF0C%u5982%u679C%u5BA2%u6237%u7AEF%u9700%u8981%u4F7F%u7528%u666E%u901A%u7528%u6237%u5728%u5171%u4EAB%u76EE%u5F55%u5199%u6587%u4EF6%uFF0C%u53EF%u4EE5%u5728%u670D%u52A1%u5668%u91CC%u7684%u5171%u4EAB%u76EE%u5F55%u4E0B%u4E00%u4E2A%u5B57%u76EE%u5F55%u7ED9777%u6743%u9650%uFF0C%u666E%u901A%u7528%u6237%u521B%u5EFA%u7684%u6587%u4EF6%u7684%u5C5E%u4E3B%u4E0E%u7EC4%u4E0E%u8BE5%u666E%u901A%u7528%u6237%u76F8%u540C%0A%u8BBE%u5B9A%u6743%u9650%u53EF%u4EE5%u8FD9%u6837%0A%60%60%60bash%0Amount%20-t%20nfs%20-o%20noatime%2Cnodiratime%2Cnosuid%2Cnoexec%2Cnodev%2Crsize%3D131072%2Cwsize%3D131072%20%2010.0.0.7%3A/data%20%20/mnt%20%0A%60%60%60%0A%u67E5%u770B%u6302%u8F7D%u4FE1%u606F%0A%60%60%60bash%0A%24%20df%20-h%0AFilesystem%20%20%20%20%20%20%20%20%20%20Size%20%20Used%20Avail%20Use%25%20Mounted%20on%0A/dev/sda2%20%20%20%20%20%20%20%20%20%20%206.9G%20%201.5G%20%205.1G%20%2023%25%20/%0Atmpfs%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20238M%20%20%20%20%200%20%20238M%20%20%200%25%20/dev/shm%0A/dev/sda1%20%20%20%20%20%20%20%20%20%20%20190M%20%20%2036M%20%20145M%20%2020%25%20/boot%0A172.16.1.31%3A/data/%20%206.9G%20%203.7G%20%202.9G%20%2057%25%20/data/upload%0A%60%60%60%0A%0A%23%23%20%u5185%u6838%u6027%u80FD%u76F8%u5173%u4F18%u5316%0A1%u3001/proc/sys/net/core/rmem\_default%0A%20%20%20%u8BE5%u6587%u4EF6%u6307%u5B9A%u4E86%u63A5%u6536%u5957%u63A5%u5B57%u7F13%u51B2%u533A%u5927%u5C0F%u7684%u7F3A%u7701%u503C%uFF08%u4EE5%u5B57%u8282%u4E3A%u5355%u4F4D%uFF09%uFF0C%u7F3A%u7701%u8BBE%u7F6E%uFF1A124928%0A2%u3001/proc/sys/net/core/rmem\_max%0A%20%20%20%u8BE5%u6587%u4EF6%u6307%u5B9A%u4E86%u63A5%u6536%u5957%u63A5%u5B57%u7F13%u51B2%u533A%u5927%u5C0F%u7684%u6700%u5927%u503C%uFF08%u4EE5%u5B57%u8282%u4E3A%u5355%u4F4D%uFF09%uFF0C%u7F3A%u7701%u8BBE%u7F6E%uFF1A124928%0A3%u3001/proc/sys/net/core/wmem\_default%0A%20%20%20%u8BE5%u6587%u4EF6%u6307%u5B9A%u4E86%u53D1%u9001%u5957%u63A5%u5B57%u7F13%u51B2%u533A%u5927%u5C0F%u7684%u7F3A%u7701%u503C%uFF08%u4EE5%u5B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