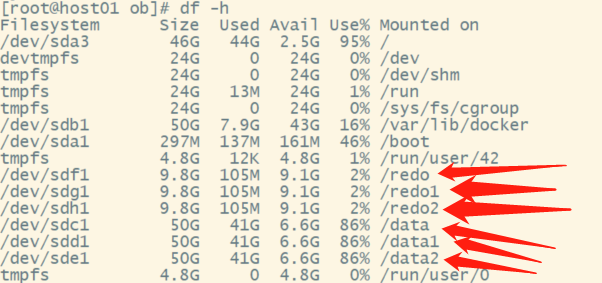
[IMG_256](https://open.oceanbase.com/)

# Simon：一台机器上部署OceanBase集群

## ****准备环境****

操作系统：centos7.8

磁盘情况



## ****基础配置****

创建admin用户并设置密码（所有节点都要设置）：

#useradd -U admin -d /home/admin -s /bin/bash && echo "123" |passwd --stdin admin

#useradd -U admin1 -d /home/admin1 -s /bin/bash && echo "123" |passwd --stdin admin1

#useradd -U admin2 -d /home/admin2 -s /bin/bash && echo "123" |passwd --stdin admin2

更改目录权限：

#chown -R admin.admin /data && chown -R admin.admin /redo && chown -R admin.admin /home/admin

#chown -R admin1.admin /data1 && chown -R admin.admin /redo1 && chown -R admin1.admin /home/admin1

#chown -R admin2.admin /data2 && chown -R admin.admin /redo2 && chown -R admin2.admin /home/admin2

Note:先创建admin用户，后mount挂载/home/admin/ocaeabase 否则创建用户提示家目录存在

配置sudo权限：

# yum remove ntp -y# yum install chrony# vim /etc/chrony.conf

server ntp1.aliyun.com iburst

driftfile /var/lib/chrony/drift

makestep 1.0 3

rtcsync

logdir /var/log/chrony

allow all

stratumweight 0

local stratum 10

# systemctl start chronyd && systemctl enable chronyd && systemctl status chronyd

配置limits.conf（所有目标节点）：

# cat /etc/security/limits.conf |grep ^[^#]

root soft nofile 655350

root hard nofile 655350\* soft nofile 655350\* hard nofile 655350\* soft stack 20480\* hard stack 20480\* soft nproc 655360\* hard nproc 655360\* soft core unlimited\* hard core unlimited

退出当前会话，重新登录。执行 # ulimit -a，查看配置是否生效：

配置sysctl.conf

# cat /etc/sysctl.conf |grep ^[^#]

fs.aio-max-nr=1048576

net.core.somaxconn = 2048

net.core.netdev\_max\_backlog = 10000

net.core.rmem\_default = 16777216

net.core.wmem\_default = 16777216

net.core.rmem\_max = 16777216

net.core.wmem\_max = 16777216

net.ipv4.ip\_local\_port\_range = 3500 65535

net.ipv4.ip\_forward = 0

net.ipv4.conf.default.rp\_filter = 1

net.ipv4.conf.default.accept\_source\_route = 0

net.ipv4.tcp\_syncookies = 0

net.ipv4.tcp\_rmem = 4096 87380 16777216

net.ipv4.tcp\_wmem = 4096 65536 16777216

net.ipv4.tcp\_max\_syn\_backlog = 16384

net.ipv4.tcp\_fin\_timeout = 15

net.ipv4.tcp\_max\_syn\_backlog = 16384

net.ipv4.tcp\_tw\_reuse = 1

net.ipv4.tcp\_tw\_recycle = 1

net.ipv4.tcp\_slow\_start\_after\_idle=0

vm.swappiness = 0

vm.min\_free\_kbytes = 2097152

目录规划：一共三个目录 /home/admin /home/admin1 /home/admin2

/home/admin/oceanbase   --obs部署启动目录   RPM包自动创建

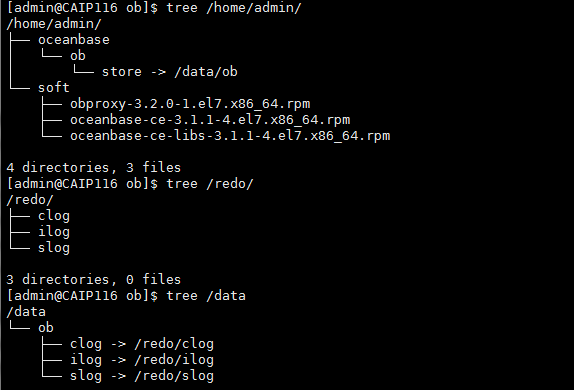
/home/admin/oceanbase/ob  obs数据总目录  手动创建

/data/ob  --obs数据文件实际目录   手动创建连接至数据总目录

/redo/{clog,slog,ilog}  --事务日志实际目录   手动创建连接至数据总目录

/home/admin/oceanbase/etc  --配置文件 启动时在启动目录自动创建

/home/admin/oceanbase/log   --运行日志目录 启动时在启动目录自动创建



分别配置软连接：admin1 admin2 admin3

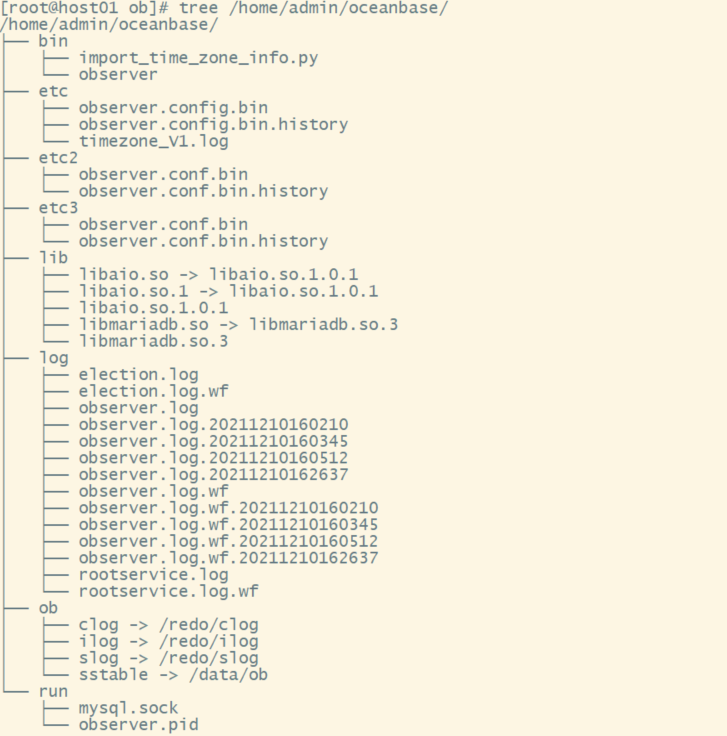
$ cd /home/admin/oceanbase/ob

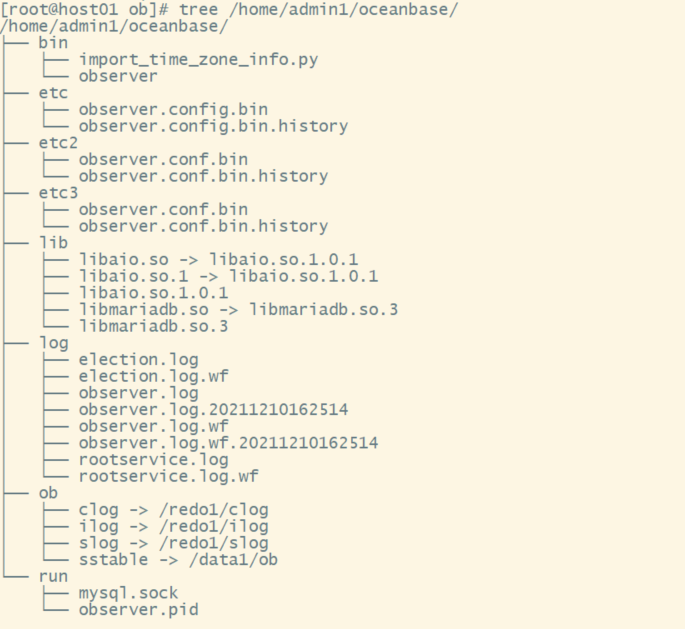
$ ln -sv /data/ob sstable    --只能是sstable，其他名字部署会失败

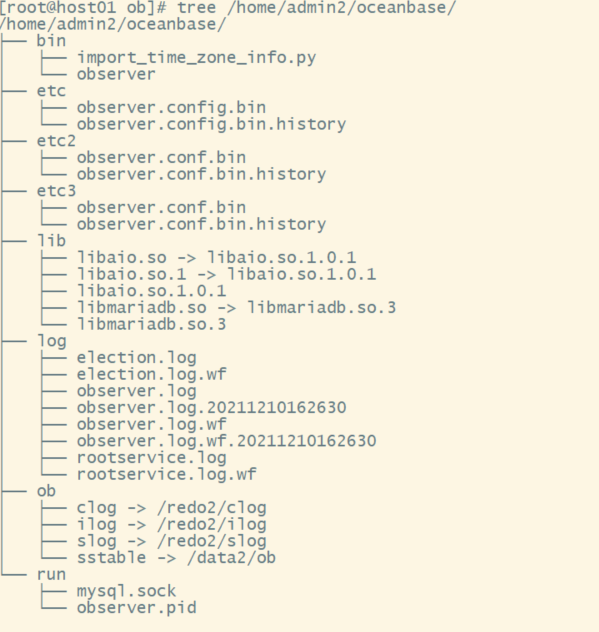
$ ln -sv /redo/clog clog

$ ln -sv /redo/ilog ilog

$ ln -sv /redo/slog slog





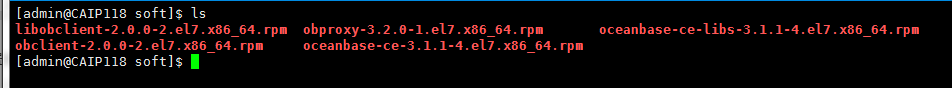


安装部署（切换admin用户）：

$ mkdir ~/soft

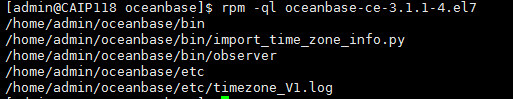
软件包下载：

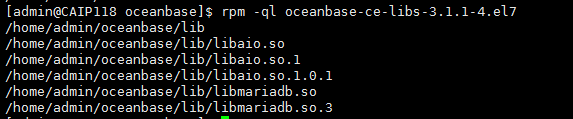
for i in obproxy-3.2.0-1.el7.x86\_64.rpm oceanbase-ce-3.1.1-4.el7.x86\_64.rpm oceanbase-ce-libs-3.1.1-4.el7.x86\_64.rpm libobclient-2.0.0-2.el7.x86\_64.rpm obclient-2.0.0-2.el7.x86\_64.rpm;do wget https://mirrors.aliyun.com/oceanbase/community/stable/el/7/x86\_64/$i;done

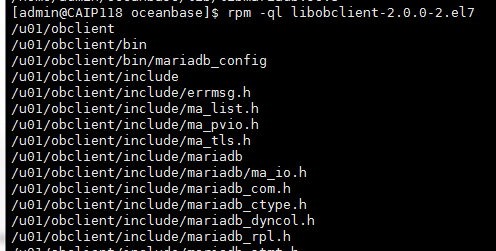


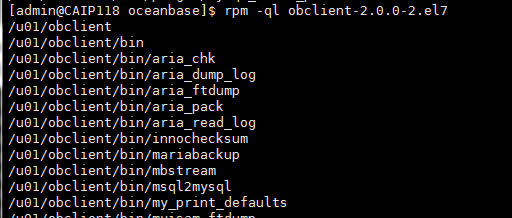
目标机安装oceanbase-ce oceanbase-ce-libs  libobclient  obclient

$ sudo rpm -ivh \*.rpm  --安装软件包

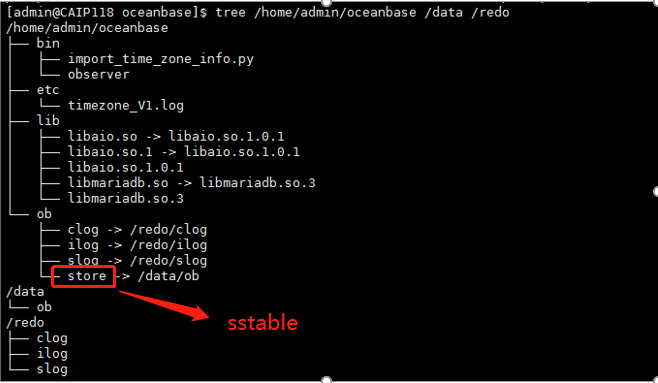








目录机构：



Su - admin

$ echo 'export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:~/oceanbase/lib' >> ~/.bash\_profile

$cd ~/oceanbase && bin/observer -i ens37 -p 2881 -P 2882 -z zone1 -d ~/oceanbase/ob -r '192.168.25.199:2882:2881;192.168.25.199:3882:3881;192.168.25.199:4882:4881' -c 202112 -n obdemo -o "memory\_limit=8G,\_\_min\_full\_resource\_pool\_memory=268435456,system\_memory=2G,datafile\_size=40G"

$Su - admin1

$ echo 'export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:~/oceanbase/lib' >> ~/.bash\_profile

$cd ~/oceanbase && bin/observer -i ens37 -p 3881 -P 3882 -z zone2 -d ~/oceanbase/ob -r '192.168.25.199:2882:2881;192.168.25.199:3882:3881;192.168.25.199:4882:4881' -c 202112 -n obdemo -o "memory\_limit=8G,\_\_min\_full\_resource\_pool\_memory=268435456,system\_memory=2G,datafile\_size=40G"

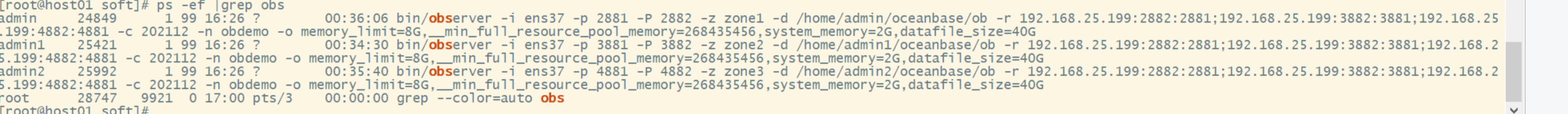
Su - admin

$ echo 'export LD\_LIBRARY\_PATH=$LD\_LIBRARY\_PATH:~/oceanbase/lib' >> ~/.bash\_profile

$cd ~/oceanbase && bin/observer -i ens37 -p 4881 -P 4882 -z zone3 -d ~/oceanbase/ob -r '192.168.25.199:2882:2881;192.168.25.199:3882:3881;192.168.25.199:4882:4881' -c 202112 -n obdemo -o "memory\_limit=8G,\_\_min\_full\_resource\_pool\_memory=268435456,system\_memory=2G,datafile\_size=40G"

验证服务是否启动：

$ ps aux |grep obs$ pidof observer



Note：目标节点配置比较搞，没有输出太多的参数

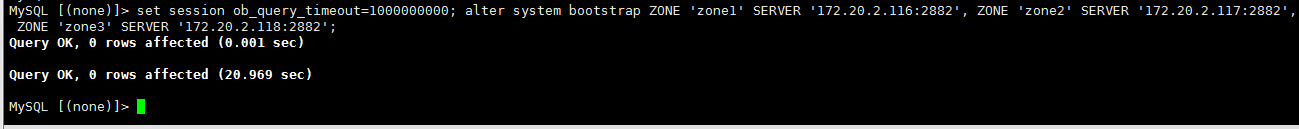
memory\_limit=40G    --设置节点总内存的90%system\_memory=16G    --system\_memory大概是memory\_limt \* 0.4

datafile\_size=500G   --分配磁盘大小

当 OceanBase 集群三个节点都正常启动，并且监听正常时，连接到任一节点（通过 2881 端口直连），进行自举（bootstrap 集群初始化）操作。 初始密码是空

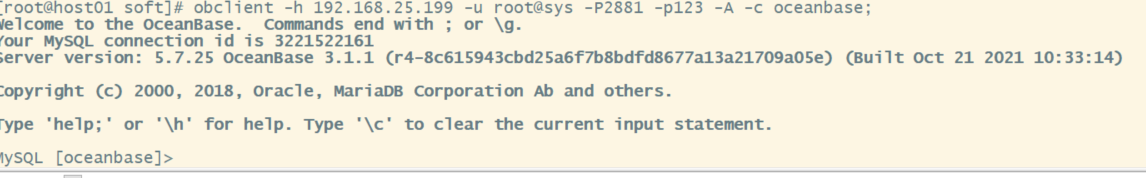
$ obclient -h 172.20.2.116 -u root -P 2881 -p -c –A

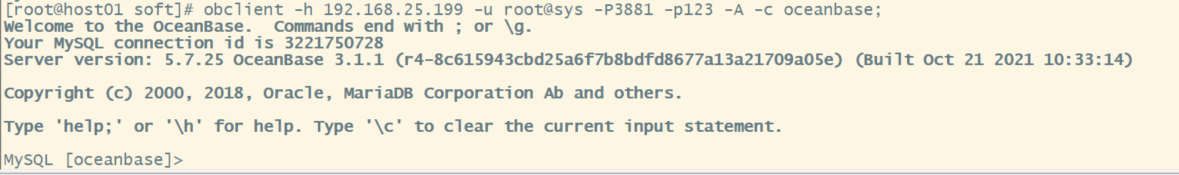
set session ob\_query\_timeout=1000000000;

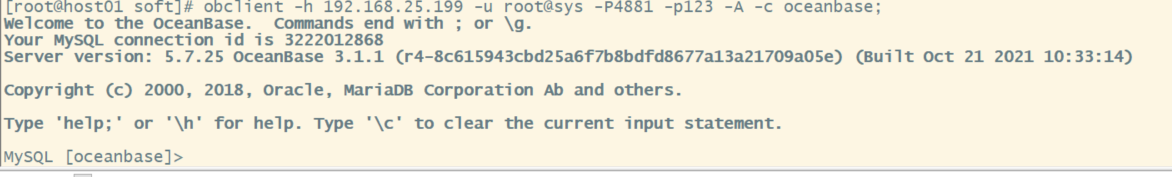
ALTER SYSTEM BOOTSTRAP ZONE 'zone1' SERVER '192.168.25.199:2882', ZONE 'zone2' SERVER '192.168.25.199:3882',ZONE 'zone3' SERVER '192.168.25.199:4882';

$ obclient -h 192.168.25.199 -u root@sys -P 2881 -p -c –A   -- bootstrap集群初始化成功后可以用系统租户连入

alter user root identified by '123';







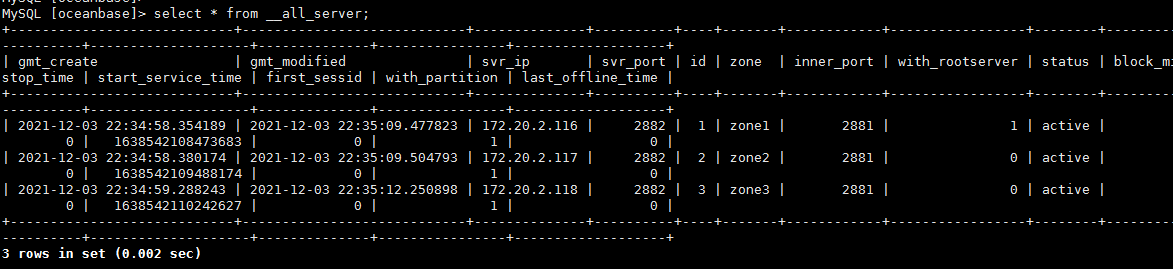
$ obclient -h 172.20.2.116 -u root@sys -P 2881 -psixlens123 -c –A oceanBase

OBPROXY 用户（proxyro）密码默认OBPROXY 连接 OceanBase 集群使用用户 proxyro 。这个用户不存在，需要创建

grant select on oceanbase.\* to proxyro identified by 'psixlens123';

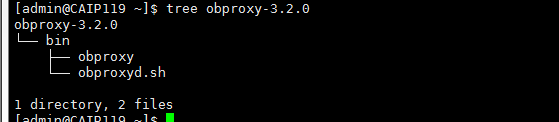
查看集群状态：

select \* from \_\_all\_server;

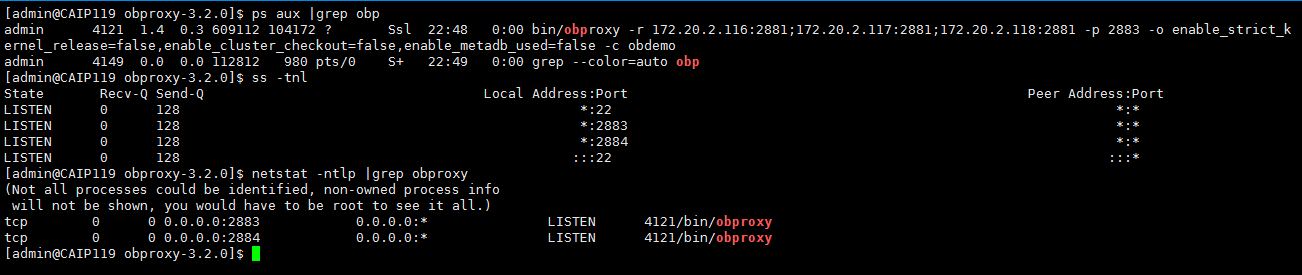


部署obproxy（中控机）：

$ rpm -ivh obproxy-3.2.0-1.el7.x86\_64.rpm



cd ~/obproxy-3.2.0 && bin/obproxy -r "172.20.2.116:2881;172.20.2.117:2881;172.20.2.118:2881" -p 2883 -o "enable\_strict\_kernel\_release=false,enable\_cluster\_checkout=false,enable\_metadb\_used=false" -c obdemo



中控机安装obclient，方便测试连接：

$ rpm -ivh libobclient-2.0.0-2.el7.x86\_64.rpm obclient-2.0.0-2.el7.x86\_64.rpm

$ obclient -h 192.168.25.199-u root@proxysys -P 2883 –p   --默认obp密码为空

修改 OBPROXY 用户密码

alter proxyconfig set obproxy\_sys\_password = '123';

$ obclient -h 192.168.25.199 -u root@proxysys -P 2883 -p123