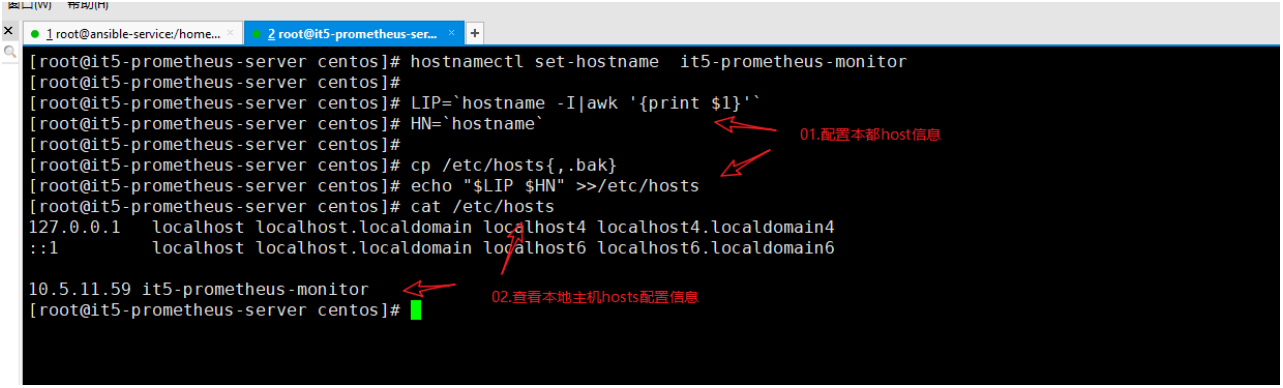
01.Prometheus监控服务器配置二(系…

一、修改主机名”hostname”和/etc/hosts配置

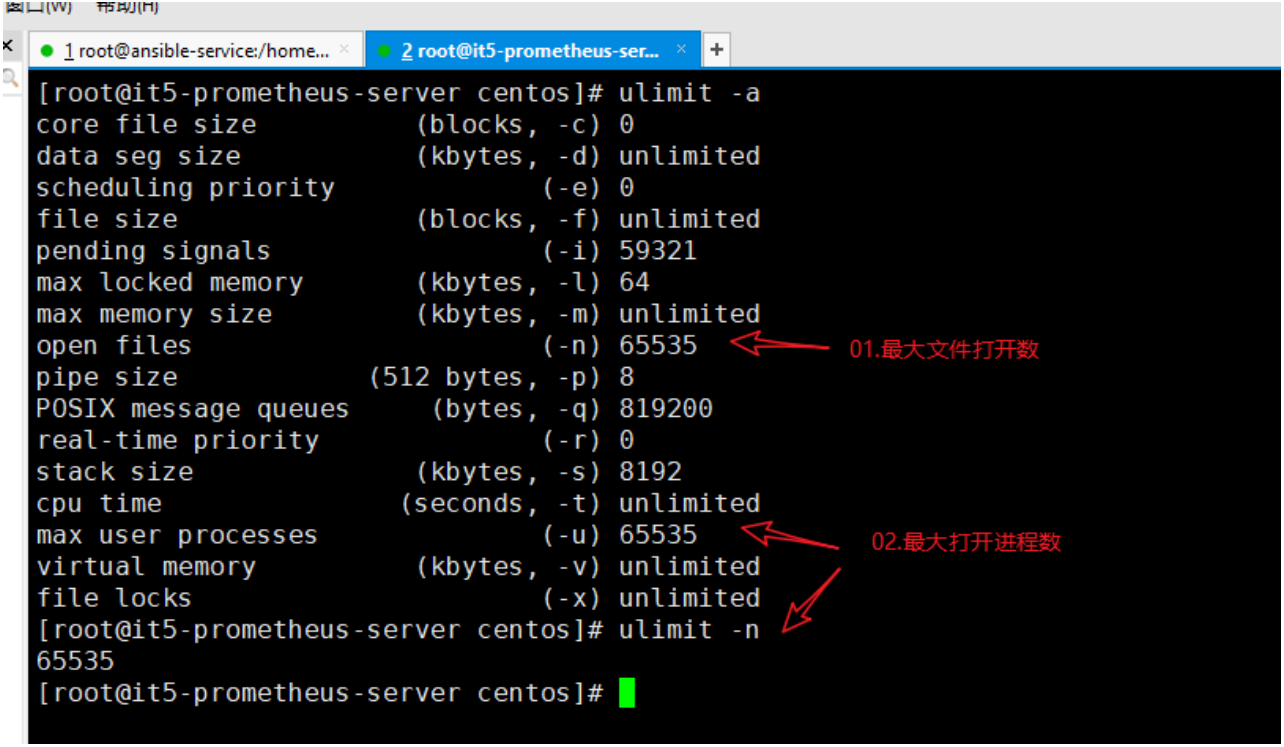
```
hostnamectl set-hostname  it5-prometheus-monitor

LIP=`hostname -I|awk '{print $1}'`
HN=`hostname`

cp /etc/hosts{,.bak}
echo "$LIP $HN" >>/etc/hosts
```



二、CentOS系统参数优化

1.调整同时打开文件数量

```
cp /etc/security/limits.conf{,.bak}
cat >> /etc/security/limits.conf<<EOF
*        soft    nproc 65535
*        hard    nproc 65535
*        soft    nofile 65535
*        hard    nofile 65535
EOF

cp /etc/security/limits.d/20-nproc.conf{,.bak}
cat >> /etc/security/limits.d/20-nproc.conf<<EOF
*          soft    nproc   65535
*          hard    nproc   65535
root       soft    nproc   65535
root       hard    nproc   65535
EOF

ulimit -a
ulimit -n
```

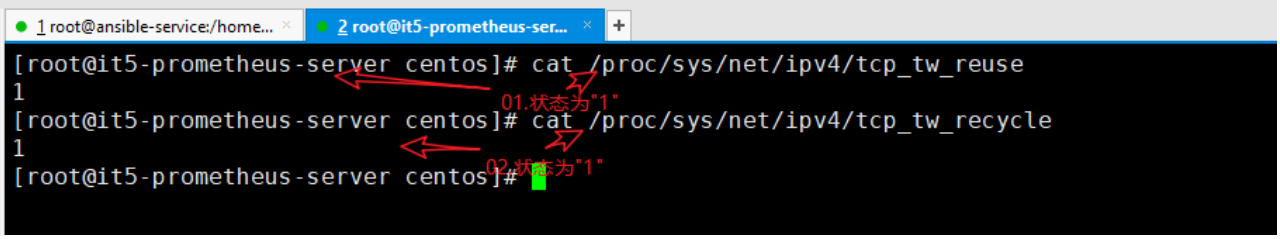


2.TCP最大连接数（somaxconn）

```
echo 10000 > /proc/sys/net/core/somaxconn
```

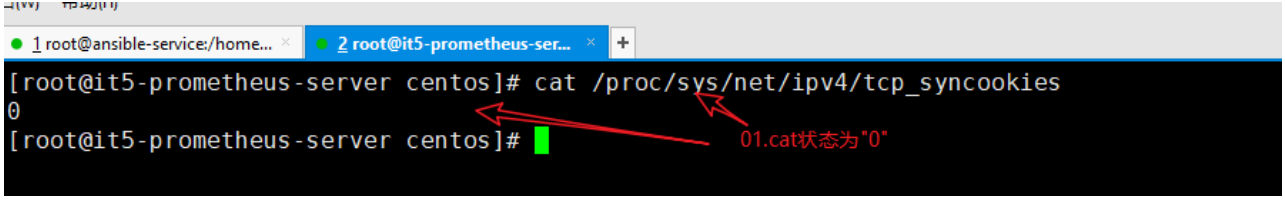
3.TCP连接立即回收、回用（recycle、reuse）

```
echo 1 > /proc/sys/net/ipv4/tcp_tw_reuse
echo 1 > /proc/sys/net/ipv4/tcp_tw_recycle
```



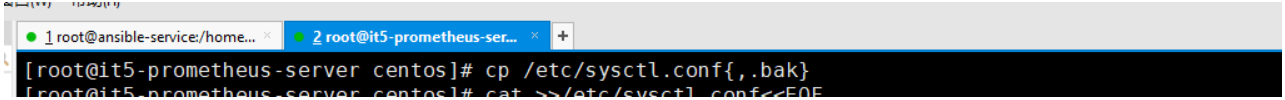
4.不做TCP洪水抵御

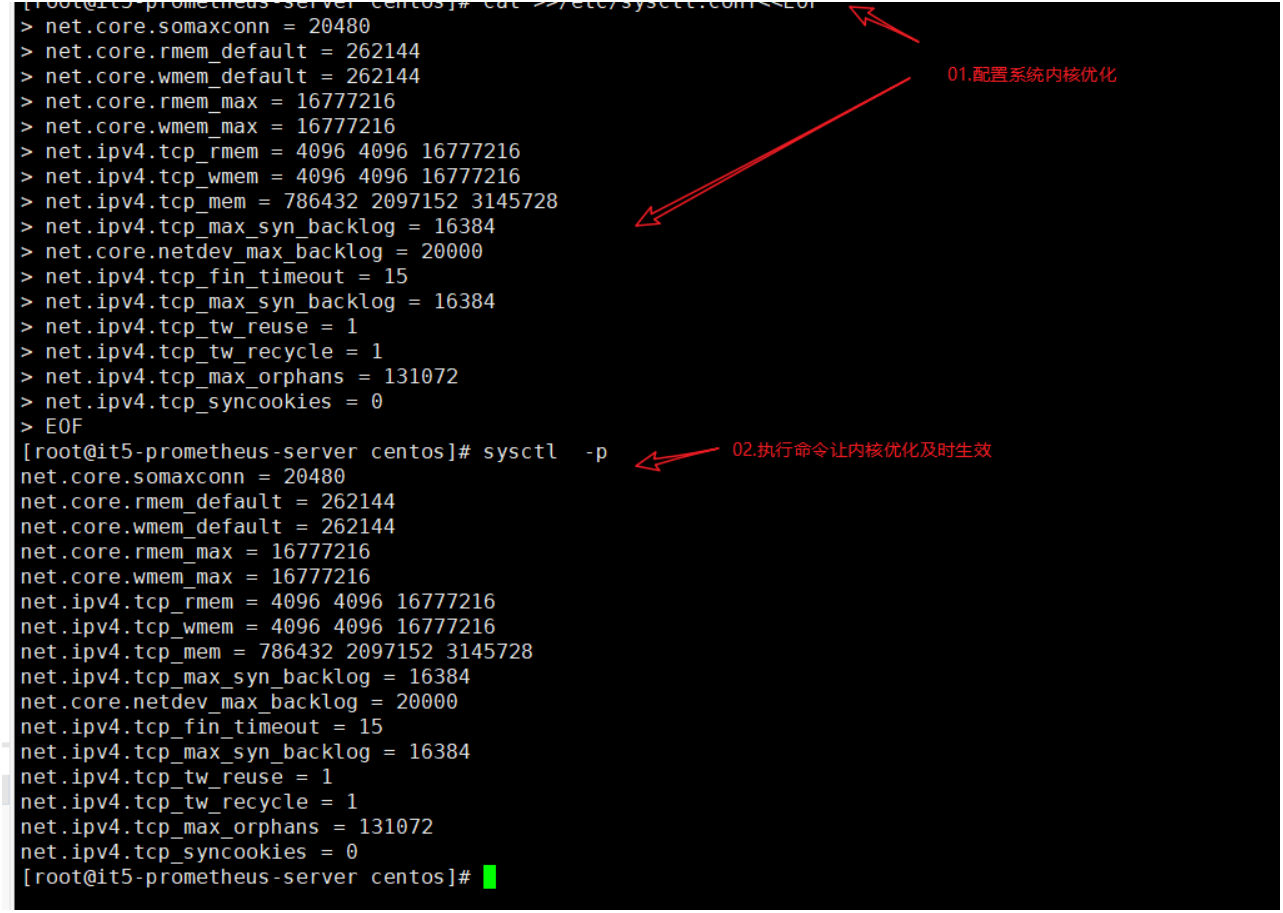
```
echo 0 > /proc/sys/net/ipv4/tcp_syncookies
```



5.系统内核优化参数配置

```
cp /etc/sysctl.conf{,.bak}
cat >>/etc/sysctl.conf<<EOF
net.core.somaxconn = 20480
net.core.rmem_default = 262144
net.core.wmem_default = 262144
net.core.rmem_max = 16777216
net.core.wmem_max = 16777216
net.ipv4.tcp_rmem = 4096 4096 16777216
net.ipv4.tcp_wmem = 4096 4096 16777216
net.ipv4.tcp_mem = 786432 2097152 3145728
net.ipv4.tcp_max_syn_backlog = 16384
net.core.netdev_max_backlog = 20000
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_max_orphans = 131072
net.ipv4.tcp_syncookies = 0
EOF

sysctl -p
```






```
> net.core.somaxconn = 20480
> net.core.rmem_default = 262144
> net.core.wmem_default = 262144
> net.core.rmem_max = 16777216
> net.core.wmem_max = 16777216
> net.ipv4.tcp_rmem = 4096 4096 16777216
> net.ipv4.tcp_wmem = 4096 4096 16777216
> net.ipv4.tcp_mem = 786432 2097152 3145728
> net.ipv4.tcp_max_syn_backlog = 16384
> net.core.netdev_max_backlog = 20000
> 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_max_orphans = 131072
> net.ipv4.tcp_syncookies = 0
> EOF
[root@it5-prometheus-server centos]# sysctl  -p
net.core.somaxconn = 20480
net.core.rmem_default = 262144
net.core.wmem_default = 262144
net.core.rmem_max = 16777216
net.core.wmem_max = 16777216
net.ipv4.tcp_rmem = 4096 4096 16777216
net.ipv4.tcp_wmem = 4096 4096 16777216
net.ipv4.tcp_mem = 786432 2097152 3145728
net.ipv4.tcp_max_syn_backlog = 16384
net.core.netdev_max_backlog = 20000
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_max_orphans = 131072
net.ipv4.tcp_syncookies = 0
[root@it5-prometheus-server centos]#
```

6.重启系统

```
reboot
```

三、系统初始rpm依赖包安装

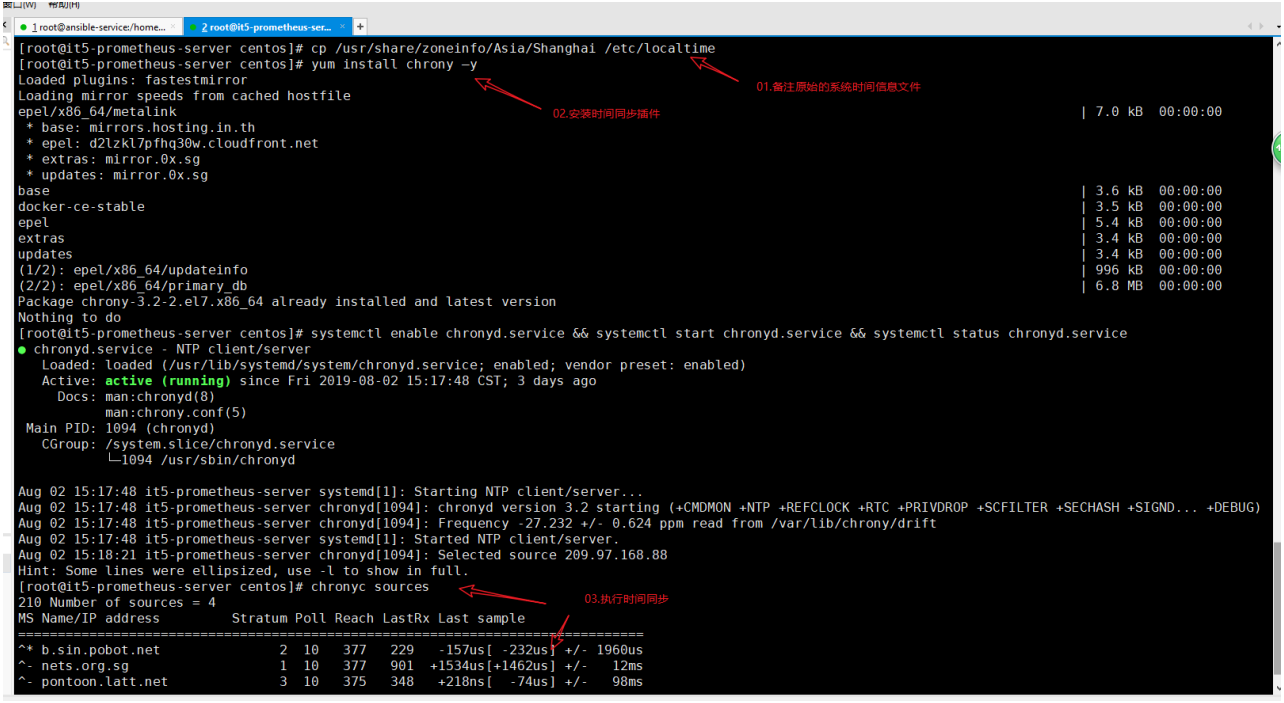
```
yum install gcc gcc-c++ perl dos2unix wget git unzip vim telnet epel-release -y
```

四、关闭centos7系统的 firewall和selinux

```
systemctl stop firewalld.service
systemctl disable firewalld.service

sed -i 's/SELINUX=enforcing/SELINUX=disabled/g' /etc/selinux/config
```

五、服务器时间ntp更新同步

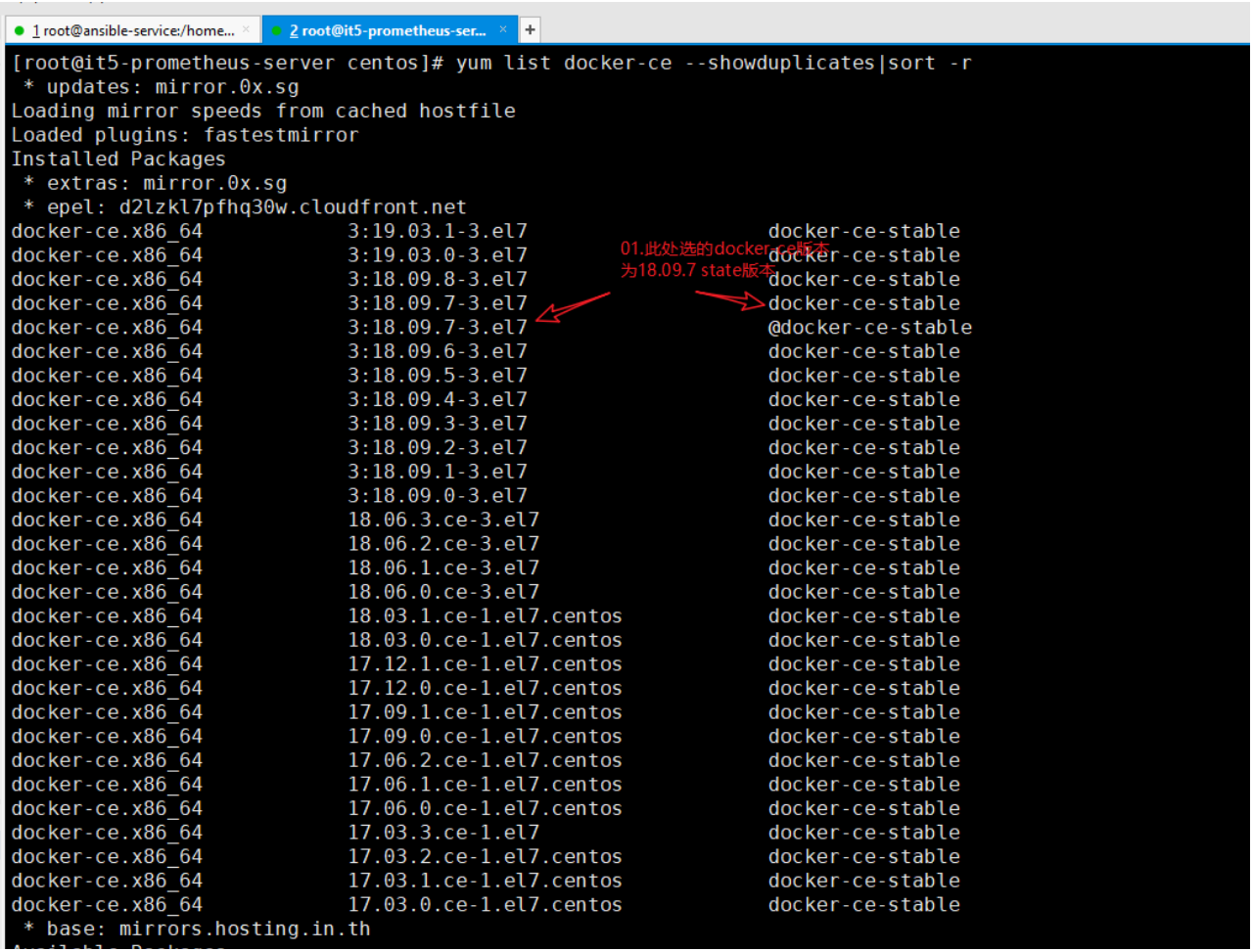
```
mv /etc/localtime{,.bak}
cp /usr/share/zoneinfo/Asia/Shanghai /etc/localtime

yum install chrony –y
systemctl enable chronyd.service && systemctl start chronyd.service && systemctl sta
tus chronyd.service
chronyc sources
```

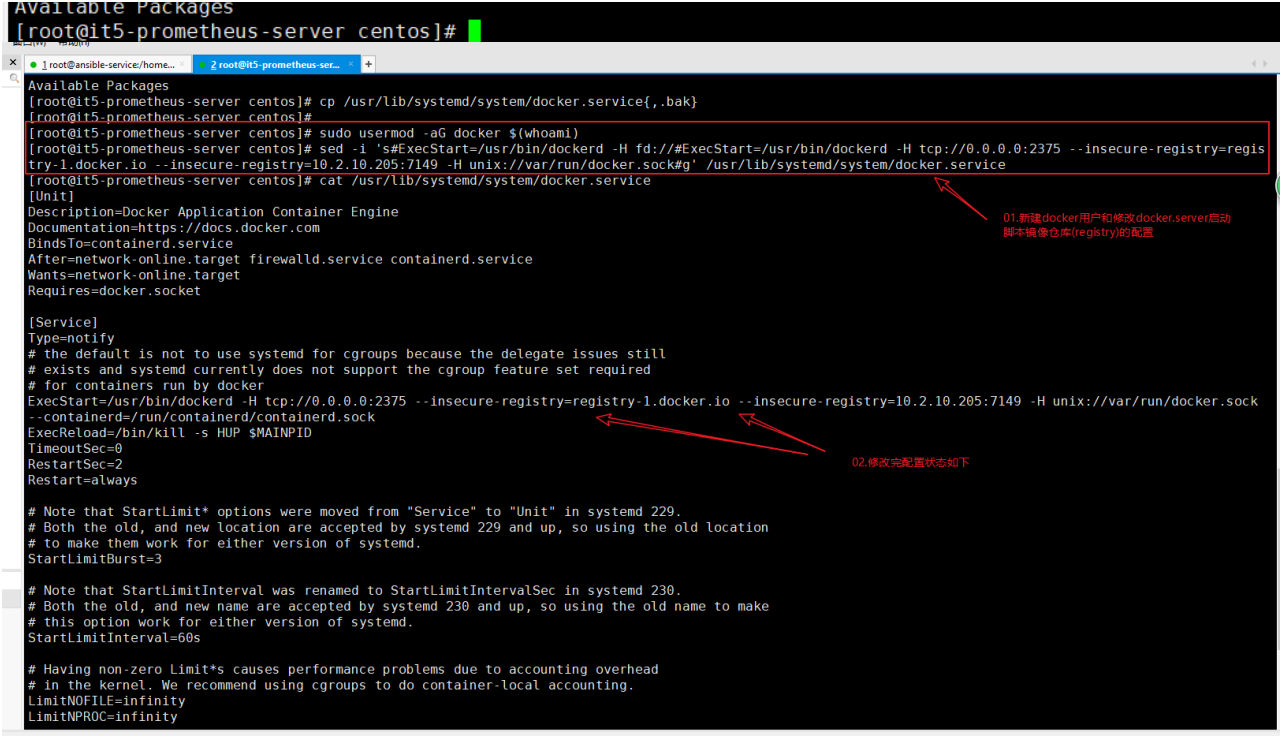



```
[root@it5-prometheus-server centos]# cp /usr/share/zoneinfo/Asia/Shanghai /etc/localtime
[root@it5-prometheus-server centos]# yum install chrony -y
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
epel/x86_64/metalink                                                    | 7.0 kB  00:00:00
 * base: mirrors.hosting.in.th
 * epel: d2lzkl7pfhq30w.cloudfront.net
 * extras: mirror.0x.sg
 * updates: mirror.0x.sg
base                                                                    | 3.6 kB  00:00:00
docker-ce-stable                                                        | 3.5 kB  00:00:00
epel                                                                    | 5.4 kB  00:00:00
extras                                                                  | 3.4 kB  00:00:00
updates                                                                 | 3.4 kB  00:00:00
(1/2): epel/x86_64/updateinfo                                           | 996 kB  00:00:00
(2/2): epel/x86_64/primary_db                                           | 6.8 MB  00:00:00
Package chrony-3.2-2.el7.x86_64 already installed and latest version
Nothing to do
[root@it5-prometheus-server centos]# systemctl enable chronyd.service && systemctl start chronyd.service && systemctl status chronyd.service
● chronyd.service - NTP client/server
   Loaded: loaded (/usr/lib/systemd/system/chronyd.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2019-08-02 15:17:48 CST; 3 days ago
     Docs: man:chronyd(8)
           man:chrony.conf(5)
 Main PID: 1094 (chronyd)
   CGroup: /system.slice/chronyd.service
           └─1094 /usr/sbin/chronyd

Aug 02 15:17:48 it5-prometheus-server systemd[1]: Starting NTP client/server...
Aug 02 15:17:48 it5-prometheus-server chronyd[1094]: chronyd version 3.2 starting (+CMDMON +NTP +REFCLOCK +RTC +PRIVDROP +SCFILTER +SECHASH +SIGND... +DEBUG)
Aug 02 15:17:48 it5-prometheus-server chronyd[1094]: Frequency -27.232 +/- 0.624 ppm read from /var/lib/chrony/drift
Aug 02 15:17:48 it5-prometheus-server systemd[1]: Started NTP client/server.
Aug 02 15:18:21 it5-prometheus-server chronyd[1094]: Selected source 209.97.168.88
Hint: Some lines were ellipsized, use -l to show in full.
[root@it5-prometheus-server centos]# chronyc sources
210 Number of sources = 4
MS Name/IP address         Stratum Poll Reach LastRx Last sample
===============================================================================
^* b.sin.pobot.net               2  10   377   229   -157us[ -232us] +/- 1960us
^- nets.org.sg                   1  10   377   901  +1534us[+1462us] +/-   12ms
^- pontoon.latt.net              3  10   375   348   +218ns[  -74us] +/-   98ms
```

六、docker-ce服务安装配置

```
yum update -y
yum install python-pip -y
pip install docker-compose
yum install -y yum-utils device-mapper-persistent-data lvm2
yum install awscli -y
yum-config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo
yum makecache fast


yum list docker-ce --showduplicates|sort -r

yum install docker-ce-18.09.7-3.el7 -y


sudo usermod -aG docker $(whoami)
sed -i 's#ExecStart=/usr/bin/dockerd -H fd://#ExecStart=/usr/bin/dockerd -H tcp://0.0.0.0:2375 --insecure-registry=registry-1.docker.io --insecure-registry=10.2.10.205:7149 -H unix://var/run/docker.sock#g' /usr/lib/systemd/system/docker.service

systemctl daemon-reload
systemctl restart docker && systemctl enable docker
```


1 root@ansible-service:/home...
2 root@it5-prometheus-ser...
[root@it5-prometheus-server centos]# yum list docker-ce --showduplicates|sort -r
* updates: mirror.0x.sg
Loading mirror speeds from cached hostfile
Loaded plugins: fastestmirror
Installed Packages
* extras: mirror.0x.sg
* epel: d2lzkl7pfhq30w.cloudfront.net
docker-ce.x86_64 3:19.03.1-3.el7 docker-ce-stable
docker-ce.x86_64 3:19.03.0-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.8-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.7-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.7-3.el7 @docker-ce-stable
docker-ce.x86_64 3:18.09.6-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.5-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.4-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.3-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.2-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.1-3.el7 docker-ce-stable
docker-ce.x86_64 3:18.09.0-3.el7 docker-ce-stable
docker-ce.x86_64 18.06.3.ce-3.el7 docker-ce-stable
docker-ce.x86_64 18.06.2.ce-3.el7 docker-ce-stable
docker-ce.x86_64 18.06.1.ce-3.el7 docker-ce-stable
docker-ce.x86_64 18.06.0.ce-3.el7 docker-ce-stable
docker-ce.x86_64 18.03.1.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 18.03.0.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.12.1.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.12.0.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.09.1.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.09.0.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.06.2.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.06.1.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.06.0.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.03.3.ce-1.el7 docker-ce-stable
docker-ce.x86_64 17.03.2.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.03.1.ce-1.el7.centos docker-ce-stable
docker-ce.x86_64 17.03.0.ce-1.el7.centos docker-ce-stable
* base: mirrors.hosting.in.th
01.此处选的docker-ce版本
为18.09.7 state版本


Available Packages
[root@it5-prometheus-server centos]#
1 root@ansible-service:/home...
2 root@it5-prometheus-ser...
Available Packages
[root@it5-prometheus-server centos]# cp /usr/lib/systemd/system/docker.service{,.bak}
[root@it5-prometheus-server centos]#
[root@it5-prometheus-server centos]# sudo usermod -aG docker $(whoami)
[root@it5-prometheus-server centos]# sed -i 's#ExecStart=/usr/bin/dockerd -H fd://#ExecStart=/usr/bin/dockerd -H tcp://0.0.0.0:2375 --insecure-registry=registry-1.docker.io --insecure-registry=10.2.10.205:7149 -H unix://var/run/docker.sock#g' /usr/lib/systemd/system/docker.service
[root@it5-prometheus-server centos]# cat /usr/lib/systemd/system/docker.service
[Unit]
Description=Docker Application Container Engine
Documentation=https://docs.docker.com
BindsTo=containerd.service
After=network-online.target firewalld.service containerd.service
Wants=network-online.target
Requires=docker.socket
[Service]
Type=notify
# the default is not to use systemd for cgroups because the delegate issues still
# exists and systemd currently does not support the cgroup feature set required
# for containers run by docker
ExecStart=/usr/bin/dockerd -H tcp://0.0.0.0:2375 --insecure-registry=registry-1.docker.io --insecure-registry=10.2.10.205:7149 -H unix://var/run/docker.sock
--containerd=/run/containerd/containerd.sock
ExecReload=/bin/kill -s HUP $MAINPID
TimeoutSec=0
RestartSec=2
Restart=always
# Note that StartLimit* options were moved from "Service" to "Unit" in systemd 229.
# Both the old, and new location are accepted by systemd 229 and up, so using the old location
# to make them work for either version of systemd.
StartLimitBurst=3
# Note that StartLimitInterval was renamed to StartLimitIntervalSec in systemd 230.
# Both the old, and new name are accepted by systemd 230 and up, so using the old name to make
# this option work for either version of systemd.
StartLimitInterval=60s
# Having non-zero Limit*s causes performance problems due to accounting overhead
# in the kernel. We recommend using cgroups to do container-local accounting.
LimitNOFILE=infinity
LimitNPROC=infinity
01.新建docker用户和修改docker.server启动
脚本镜像仓库(registry)的配置
02.修改完配置状态如下