

设置系统主机名以及 Host 文件的相互解析

```
hostnamectl set-hostname k8s-master01
```

安装依赖包

```
yum install -y conntrack ntpdate ntp ipvsadm ipset jq iptables curl sysstat libseccomp wget vim  
net-tools git
```

设置防火墙为 Iptables 并设置空规则

```
systemctl stop firewalld && systemctl disable firewalld  
yum -y install iptables-services && systemctl start iptables && systemctl enable iptables  
&& iptables -F && service iptables save
```

关闭 SELINUX

```
swapoff -a && sed -i 's/^swap / s/^\(.*\)$/#\1/g' /etc/fstab  
setenforce 0 && sed -i 's/^SELINUX=.*SELINUX=disabled/' /etc/selinux/config
```

调整内核参数，对于 K8S

```
cat > kubernetes.conf <<EOF  
net.bridge.bridge-nf-call-iptables=1  
net.bridge.bridge-nf-call-ip6tables=1  
net.ipv4.ip_forward=1  
net.ipv4.tcp_tw_recycle=0  
vm.swappiness=0 # 禁止使用 swap 空间，只有当系统 OOM 时才允许使用它  
vm.overcommit_memory=1 # 不检查物理内存是否够用  
vm.panic_on_oom=0 # 开启 OOM  
fs.inotify.max_user_instances=8192  
fs.inotify.max_user_watches=1048576  
fs.file-max=52706963  
fs.nr_open=52706963  
net.ipv6.conf.all.disable_ipv6=1  
net.netfilter.nf_conntrack_max=2310720  
EOF  
cp kubernetes.conf /etc/sysctl.d/kubernetes.conf  
sysctl -p /etc/sysctl.d/kubernetes.conf
```

调整系统时区

```
# 设置系统时区为 中国/上海
timedatectl set-timezone Asia/Shanghai
# 将当前的 UTC 时间写入硬件时钟
timedatectl set-local-rtc 0
# 重启依赖于系统时间的服务
systemctl restart rsyslog
systemctl restart crond
```

关闭系统不需要服务

```
systemctl stop postfix && systemctl disable postfix
```

设置 rsyslogd 和 systemd journald

```
mkdir /var/log/journal # 持久化保存日志的目录
mkdir /etc/systemd/journal.conf.d
cat > /etc/systemd/journal.conf.d/99-prophet.conf <<EOF
[Journal]
# 持久化保存到磁盘
Storage=persistent

# 压缩历史日志
Compress=yes

SyncIntervalSec=5m
RateLimitInterval=30s
RateLimitBurst=1000

# 最大占用空间 10G
SystemMaxUse=10G

# 单日志文件最大 200M
SystemMaxFileSize=200M

# 日志保存时间 2 周
MaxRetentionSec=2week

# 不将日志转发到 syslog
ForwardToSyslog=no
EOF
systemctl restart systemd-journald
```

升级系统内核为 4.44

CentOS 7.x 系统自带的 3.10.x 内核存在一些 Bugs，导致运行的 Docker、Kubernetes 不稳定，例如：[rpm -Uvh http://www.elrepo.org/elrepo-release-7.0-3.el7.elrepo.noarch.rpm](http://www.elrepo.org/elrepo-release-7.0-3.el7.elrepo.noarch.rpm)

```
rpm -Uvh http://www.elrepo.org/elrepo-release-7.0-3.el7.elrepo.noarch.rpm
# 安装完成后检查 /boot/grub2/grub.cfg 中对应内核 menuentry 中是否包含 initrd16 配置, 如果没有, 再安装一次!
yum --enablerepo=elrepo-kernel install -y kernel-lt
# 设置开机从新内核启动
grub2-set-default "CentOS Linux (4.4.182-1.el7.elrepo.x86_64) 7 (Core)"
# 重启后安装内核源文件
yum --enablerepo=elrepo-kernel install kernel-lt-devel-$(uname -r) kernel-lt-headers-$(uname -r)
```

关闭 NUMA

```
cp /etc/default/grub{,.bak}
vim /etc/default/grub # 在 GRUB_CMDLINE_LINUX 一行添加 `numa=off` 参数, 如下所示:
diff /etc/default/grub.bak /etc/default/grub
6c6
< GRUB_CMDLINE_LINUX="crashkernel=auto rd.lvm.lv=centos/root rhgb quiet"
---
> GRUB_CMDLINE_LINUX="crashkernel=auto rd.lvm.lv=centos/root rhgb quiet numa=off"
cp /boot/grub2/grub.cfg{,.bak}
grub2-mkconfig -o /boot/grub2/grub.cfg
```