

root密码破解

```
Red Hat Enterprise Linux (4.18.0-80.el8.x86_64) 8.0 (Ootpa)
Red Hat Enterprise Linux (0-rescue-9e7e555f5def4bcebb4a2bb4317eabe9) 8.0→
```

按e,进入到该行的boot命令下

```
linux ($root)/vmlinuz-4.18.0-80.el8.x86_64 root=/dev/mapper/rhel-root ro resum\
e=/dev/mapper/rhel-swap rd.lvm.lv=rhel/root rd.lvm.lv=rhel/swap net.ifnames=0 \
rhgb quiet
initrd ($root)/initramfs-4.18.0-80.el8.x86_64.img $tuned_initrd
```

找到linux这一行
看看有没有 console=tty0
如果没有 console=tty0 就把它加上
在结尾还要加上 rd.break

```
load_video
set gfx_payload=keep
insmod gzio
linux ($root)/vmlinuz-4.18.0-80.el8.x86_64 root=/dev/mapper/rhel-root ro resum\
e=/dev/mapper/rhel-swap rd.lvm.lv=rhel/root rd.lvm.lv=rhel/swap net.ifnames=0 \
rhgb console=tty0 rd.break
initrd ($root)/initramfs-4.18.0-80.el8.x86_64.img $tuned_initrd
```

加完之后按ctrl+x保存且退出

在该界面进行root密码破解

```
switch_root:/# mount -oremount,rw /sysroot
switch_root:/# chroot /sysroot
sh-4.4# echo glshxwyz | passwd --stdin root
Changing password for user root.
passwd: all authentication tokens updated successfully.
sh-4.4# touch /.autorelabel
sh-4.4# exit
exit
switch_root:/# exit
```

此时以破解的密码登录系统

```
Red Hat Enterprise Linux 8.0 (Ootpa)
Kernel 4.18.0-80.el8.x86_64 on an x86_64

system1 login: root
Password: glshxwyz
Last login: Sat May 16 15:35:53 on tty1
[root@system1 ~]#
```

RHCSA8-配置网络和主机名

#方法1

#直接修改现有的配置文件

```
nmcli connection modify "Wired connection 1"  
ipv4.addresses 172.24.10.150/24 ipv4.gateway  
172.24.10.100 ipv4.dns 172.24.10.254
```

#激活修改后的配置文件

```
nmcli con up "Wired connection 1"
```

#方法2

#直接添加一个新的配置文件

```
nmcli con add con-name static ifname eth0 type ethernet  
ipv4.addresses 172.24.10.150/24 ipv4.gateway  
172.24.10.100 ipv4.dns 172.24.10.254
```

#激活添加的配置文件

```
nmcli con up static
```

#验证

使用ip a show eth0查看地址

修改主机名

#修改主机名

```
hostnamectl set-hostname system1.domain10.example.com
```

#验证

```
hostnamectl
```

或者

```
cat /etc/hostname
```

RHCSA8第一题-配置软件仓库

#解法

```
[root@system1 ~]# cat /etc/yum.repos.d/rhcsa.repo
[baseos]
name = baseos
enable = yes
gpgcheck = 0
baseurl = http://repo.domain10.example.com/rhel80/BaseOS
```

```
[appstream]
name = appstream
enable = yes
gpgcheck = 0
baseurl =
http://repo.domain10.example.com/rhel80/AppStream
```

#验证

```
[root@system1 ~]# yum repolist
Updating Subscription Management repositories.
Unable to read consumer identity
This system is not registered to Red Hat Subscription
Management. You can use subscription-manager to
register.
Last metadata expiration check: 0:01:10 ago on Sat 16
May 2020 04:08:39 PM CST.
```


RHCSA8考试第二题-SELINUX配置

```
[root@system1 ~]# cat /etc/selinux/config
```

```
# This file controls the state of SELinux on the system.
```

```
# SELINUX= can take one of these three values:
```

```
#     enforcing - SELinux security policy is enforced.
```

```
#     permissive - SELinux prints warnings instead of  
enforcing.
```

```
#     disabled - No SELinux policy is loaded.
```

```
SELINUX=enforcing
```

```
# SELINUXTYPE= can take one of these three values:
```

```
#     targeted - Targeted processes are protected,
```

```
#     minimum - Modification of targeted policy. Only  
selected processes are protected.
```

```
#     mls - Multi Level Security protection.
```

```
SELINUXTYPE=targeted
```

```
[root@system1 ~]# setenforce 1
```

```
[root@system1 ~]# getenforce
```

```
Enforcing
```

安装软件包来提供semanage的命令

```
[root@system1 ~]# yum -y install policycoreutils-python-  
utils
```

配置web根目录的安全上下文

```
[root@system1 ~]# semanage fcontext -a -t  
httpd_sys_content_t "/var/www/html(/.*)?"  
[root@system1 ~]# restorecon -RvF /var/www/html/
```

配置selinux的安全端口

```
[root@system1 ~]# semanage port -a -t http_port_t -p tcp  
82
```

```
[root@system1 ~]# semanage port -l | grep http  
http_cache_port_t          tcp      8080, 8118,  
8123, 10001-10010  
http_cache_port_t          udp      3130  
http_port_t                tcp      82, 80, 81, 443,  
488, 8008, 8009, 8443, 9000  
pegasus_http_port_t        tcp      5988  
pegasus_https_port_t       tcp      5989
```

重启httpd服务

```
[root@system1 ~]# systemctl restart httpd  
[root@system1 ~]# systemctl enable httpd
```

此时system1已经可以通过自己的82号端口访问到web页面

```
[root@system1 ~]# curl localhost:82
```

第二题的web页面

检查一下system2是否能访问system1的82号端口

```
[root@system2 ~]# curl 172.24.10.150:82  
curl: (7) Failed to connect to 172.24.10.150 port 82: No  
route to host
```

在system1上放行82号端口


```
[root@system1 ~]# firewall-cmd --add-port=82/tcp
```

```
success
```

```
[root@system1 ~]# firewall-cmd --add-port=82/tcp --per
```

```
success
```

再次检查system2能否访问system1的82端口

```
[root@system2 ~]# curl 172.24.10.150:82
```

第二题的web页面

RHCSA8考试第三题-配置用户和用户组以及密码

```
1 [root@system1 ~]# groupadd sysmgrs -g 30000
2 [root@system1 ~]# useradd -G sysmgrs natasha
3 [root@system1 ~]# useradd -G sysmgrs harry
4 [root@system1 ~]# useradd sarah -s /sbin/nologin
5 [root@system1 ~]# echo 123 | passwd --stdin natasha
6 Changing password for user natasha.
7 passwd: all authentication tokens updated successfully.
8 [root@system1 ~]# echo 123 | passwd --stdin harry
9 Changing password for user harry.
10 passwd: all authentication tokens updated successfully.
11 [root@system1 ~]# echo 123 | passwd --stdin sarah
12 Changing password for user sarah.
13 passwd: all authentication tokens updated successfully.
14
```

RHCSA8考试第四题-创建计划任务

```
1 [root@system1 ~]# crontab -e -u natasha
2 [root@system1 ~]# crontab -l -u natasha
3 */5 * * * * logger "Ex200 in progress"
4
5
6 [root@system1 ~]# systemctl is-enabled crond
7 enabled
8 [root@system1 ~]# systemctl is-active crond
9 active
10
```

RHCSA8考试第五题-Linux的权限

```
1 [root@system1 ~]# mkdir /home/managers
2 [root@system1 ~]# chgrp sysmgrs /home/managers/
3 [root@system1 ~]# ls -ld /home/managers/
4 drwxr-xr-x. 2 root sysmgrs 6 May 16 17:15 /home/managers/
5 [root@system1 ~]# chmod g=rwx,o=--- /home/managers/
6 [root@system1 ~]# ls -ld /home/managers/
7 drwxrwx---. 2 root sysmgrs 6 May 16 17:15 /home/managers/
8 [root@system1 ~]# chmod g+s /home/managers/
9 [root@system1 ~]# ls -ld /home/managers/
10 drwxrws---. 2 root sysmgrs 6 May 16 17:15 /home/managers/
11
```

RHCSA8考试第六题-NTP客户端的设置

```
1 在/etc/chrony.conf中添加
2  server host.domain10.example.com iburst
3
4  [root@system1 ~]# systemctl restart chronyd
5  [root@system1 ~]# systemctl enable chronyd
6
7
8  [root@system1 ~]# chronyc sources
9  210 Number of sources = 1
10 MS Name/IP address          Stratum Poll Reach LastRx Last sample
11
12 =====
13 ===
14 ^? exam.start.com           0   7   0   -   +0ns[  +0ns] +/-
15 Ons
16 [root@system1 ~]# chronyc -n sources
17 210 Number of sources = 1
18 MS Name/IP address          Stratum Poll Reach LastRx Last sample
19
20 =====
21 ===
22 ^? 172.24.10.100            0   7   0   -   +0ns[  +0ns] +/-
23 Ons
24 [root@system1 ~]# ping -c 1 host.domain10.example.com
25 PING host.domain10.example.com (172.24.10.100) 56(84) bytes of data.
26 64 bytes from exam.start.com (172.24.10.100): icmp_seq=1 ttl=64 time=0.650
27 ms
28
29 --- host.domain10.example.com ping statistics ---
30 1 packets transmitted, 1 received, 0% packet loss, time 0ms
31 rtt min/avg/max/mdev = 0.650/0.650/0.650/0.000 ms
```

RHCSA8考试第七题-配置autofs

```
1 [root@system1 ~]# yum -y install nfs-utils
2 [root@system1 ~]# yum -y install autofs
3
4 编辑auto.master配置文件，让/rhel的autofs主目录根据/etc/auto.user1配置文件进行自动挂
  载
5 [root@system1 ~]# vim /etc/auto.master
6 挂载点是user1，以读写权限形式挂载，挂载的文件系统是host.domain10.example.com提供的
  nfs共享，该共享是/rhel/user1
7 [root@system1 ~]# vim /etc/auto.user1
8 [root@system1 ~]# grep rhel /etc/auto.master
9 /rhel /etc/auto.user1
10 [root@system1 ~]# cat /etc/auto.user1
11 user1 -rw host.domain10.example.com:/rhel/user1
12
13
14 [root@system1 ~]# ls /rhel
15 ls: cannot access '/rhel': No such file or directory
16 [root@system1 ~]# systemctl restart autofs
17 [root@system1 ~]# ls /rhel/ -d
18 /rhel/
19
20
21 [root@system1 ~]# grep user1 /etc/passwd
22 user1:x:1000:1000::/rhel/user1:/bin/bash
23
24
25 [root@system1 ~]# su - user1
26 Last login: Sat May 16 18:00:55 CST 2020 on pts/0
27 [user1@system1 ~]$ pwd
28 /rhel/user1
29
30
31 [user1@system1 ~]$ df -Th /rhel/user1
32 Filesystem Type Size Used Avail Use% Mounted on
33 host.domain10.example.com:/rhel/user1 nfs4 100G 18G 82G 18%
  /rhel/user1
34
```

RHCSA8考试第八题-配置文件的acl权限

```
1 [root@system1 ~]# cp /etc/fstab /var/tmp/fstab
2 [root@system1 ~]# chown root:root /var/tmp/fstab
3 [root@system1 ~]# chmod a-x /var/tmp/fstab
4 [root@system1 ~]# chmod o=r-- /var/tmp/fstab
5 [root@system1 ~]# setfacl -m u:natasha:rw /var/tmp/fstab
6 [root@system1 ~]# setfacl -m u:harry:--- /var/tmp/fstab
```

RHCSA8考试题第九题-配置用户

```
1 [root@system1 ~]# useradd user2 -u 3388
2 [root@system1 ~]# echo 123 | passwd --stdin user2
3 Changing password for user user2.
4 passwd: all authentication tokens updated successfully.
5
```


RHCSA8考试题第十题-查找文件

```
1 1. 创建目录
2 mkdir /root/dfiles
3 2. 查找文件并放入目录
4 find / -user user3 -exec cp -a {} /root/dfiles \;
```

RHCSA8考试第十一题-过滤字符串

```
1 | grep re /usr/share/rhel.xml >/root/files
```

RHCSA8-第十二题-文件归档

```
1 1. 安装tar命令
2 [root@system1 ~]# yum -y install tar
3 2. 查找参数
4 [root@system1 ~]# tar --help | grep gzip
5     -z, --gzip, --gunzip, --ungzip    filter the archive through gzip
6
7 3. 归档
8 [root@system1 ~]# tar -zcvf books.tar.gz /usr/local
9
```

RHCSA8考试题第十三题-逻辑卷的扩容

```
1 [root@system1 ~]# lvs
2   LV   VG      Attr      LSize   Pool Origin Data%  Meta%  Move Log
3   Cpy%Sync Convert
4   root rhel    -wi-ao----  <8.00g
5
6   swap rhel    -wi-ao----   1.00g
7
8   vo1  vg-exam -wi-ao----  100.00m
9
10  vo2  vg-exam -wi-ao----  100.00m
11
12 [root@system1 ~]# vgs
13   VG      #PV #LV #SN Attr   VSize  VFree
14   rhel      1  2  0 wz--n-  <9.00g    0
15   vg-exam   1  2  0 wz--n-  <2.00g  1.80g
16
17 [root@system1 ~]# lvextend /dev/vg-exam/vo1 -L 180M
18   Size of logical volume vg-exam/vo1 changed from 100.00 MiB (25 extents) to
19   180.00 MiB (45 extents).
20   Logical volume vg-exam/vo1 successfully resized.
21
22 [root@system1 ~]# lvs
23   LV   VG      Attr      LSize   Pool Origin Data%  Meta%  Move Log
24   Cpy%Sync Convert
25   root rhel    -wi-ao----  <8.00g
26
27   swap rhel    -wi-ao----   1.00g
28
29   vo1  vg-exam -wi-ao----  180.00m
30
31   vo2  vg-exam -wi-ao----  100.00m
32
33 [root@system1 ~]# lvextend /dev/vg-exam/vo2 -L 180M
34   Size of logical volume vg-exam/vo2 changed from 100.00 MiB (25 extents) to
35   180.00 MiB (45 extents).
36   Logical volume vg-exam/vo2 successfully resized.
37
38 [root@system1 ~]# lvs
39   LV   VG      Attr      LSize   Pool Origin Data%  Meta%  Move Log
40   Cpy%Sync Convert
41   root rhel    -wi-ao----  <8.00g
42
43   swap rhel    -wi-ao----   1.00g
44
45   vo1  vg-exam -wi-ao----  180.00m
46
47   vo2  vg-exam -wi-ao----  180.00m
48
49
50
51 [root@system1 ~]# df -Th /mnt/vo2 /mnt/vo1
52
53 Filesystem                                Type  Size  Used Avail Use% Mounted on
54 /dev/mapper/vg--exam-vo2 xfs     95M   6.0M   89M   7% /mnt/vo2
```

```

36 /dev/mapper/vg--exam-vo1 ext4 93M 1.6M 85M 2% /mnt/vo1
37 [root@system1 ~]# resize2fs /dev/vg-exam/vo1
38 resize2fs 1.44.3 (10-July-2018)
39 Filesystem at /dev/vg-exam/vo1 is mounted on /mnt/vo1; on-line resizing
   required
40 old_desc_blocks = 1, new_desc_blocks = 2
41 The filesystem on /dev/vg-exam/vo1 is now 184320 (1k) blocks long.
42
43 [root@system1 ~]# xfs_growfs /mnt/vo2
44 meta-data=/dev/mapper/vg--exam-vo2 isize=512    agcount=4, agsize=6400 blks
45         =                               sectsz=512   attr=2, projid32bit=1
46         =                               crc=1        finobt=1, sparse=1, rmapbt=0
47         =                               reflink=1
48 data      =                               bsize=4096   blocks=25600, imaxpct=25
49         =                               sunit=0      swidth=0 blks
50 naming    =version 2                   bsize=4096   ascii-ci=0, ftype=1
51 log       =internal log                bsize=4096   blocks=1368, version=2
52         =                               sectsz=512   sunit=0 blks, lazy-count=1
53 realtime =none                        extsz=4096   blocks=0, rtextents=0
54 data blocks changed from 25600 to 46080
55 [root@system1 ~]# df -Th /mnt/vo2 /mnt/vo1
56 Filesystem            Type  Size  Used Avail Use% Mounted on
57 /dev/mapper/vg--exam-vo2 xfs    175M  6.8M  168M   4% /mnt/vo2
58 /dev/mapper/vg--exam-vo1 ext4    171M  1.6M  159M   1% /mnt/vo1
59

```

RHCSA8考试题第十四题-创建交换分区

```
1 1.分区
2 [root@system1 ~]# fdisk /dev/vdb
3
4 welcome to fdisk (util-linux 2.32.1).
5 Changes will remain in memory only, until you decide to write them.
6 Be careful before using the write command.
7
8
9 Command (m for help): n
10 Partition type
11   p   primary (1 primary, 0 extended, 3 free)
12   e   extended (container for logical partitions)
13 Select (default p):
14
15 Using default response p.
16 Partition number (2-4, default 2):
17 First sector (4196352-20971519, default 4196352):
18 Last sector, +sectors or +size{K,M,G,T,P} (4196352-20971519, default
19 20971519): +567M
20
21 Created a new partition 2 of type 'Linux' and of size 567 MiB.
22
23 Command (m for help): t
24 Partition number (1,2, default 2):
25 Hex code (type L to list all codes): 82
26
27 Changed type of partition 'Linux' to 'Linux swap / Solaris'.
28
29 Command (m for help): l
30
31 0  Empty                24  NEC DOS               81  Minix / old Lin bf  Solaris
32 1  FAT12                 27  Hidden NTFS Win 82  Linux swap / So c1  DRDOS/sec
33 (FAT-                   39  Plan 9              83  Linux                c4  DRDOS/sec
34 (FAT-                   3c  PartitionMagic      84  OS/2 hidden or     c6  DRDOS/sec
35 (FAT-                   40  Venix 80286         85  Linux extended     c7  Syrix
36 (FAT-                   41  PPC PREP Boot      86  NTFS volume set da  Non-FS
37 (FAT-                   42  SFS                 87  NTFS volume set db  CP/M /
38 (FAT-                   4d  QNX4.x              88  Linux plaintext de  Dell
39 (FAT-                   4e  QNX4.x 2nd part 8e  Linux LVM            df  BootIt
40 (FAT-                   4f  QNX4.x 3rd part 93  Amoeba              e1  DOS access
```

```

40 a OS/2 Boot Manag 50 OnTrack DM 94 Amoeba BBT e3 DOS R/O
41 b W95 FAT32 51 OnTrack DM6 Aux 9f BSD/OS e4 SpeedStor
42 c W95 FAT32 (LBA) 52 CP/M a0 IBM Thinkpad hi ea Rufus
alignment
43 e W95 FAT16 (LBA) 53 OnTrack DM6 Aux a5 FreeBSD eb BeOS fs
44 f W95 Ext'd (LBA) 54 OnTrackDM6 a6 OpenBSD ee GPT
45 10 OPUS 55 EZ-Drive a7 NeXTSTEP ef EFI (FAT-
12/16/
46 11 Hidden FAT12 56 Golden Bow a8 Darwin UFS f0 Linux/PA-
RISC b
47 12 Compaq diagnost 5c Priam Edisk a9 NetBSD f1 SpeedStor
48 14 Hidden FAT16 <3 61 SpeedStor ab Darwin boot f4 SpeedStor
49 16 Hidden FAT16 63 GNU HURD or Sys af HFS / HFS+ f2 DOS
secondary
50 17 Hidden HPFS/NTF 64 Novell Netware b7 BSDI fs fb VMware
VMFS
51 18 AST SmartSleep 65 Novell Netware b8 BSDI swap fc VMware
VMKCORE
52 1b Hidden W95 FAT3 70 DiskSecure Mult bb Boot wizard hid fd Linux raid
auto
53 1c Hidden W95 FAT3 75 PC/IX bc Acronis FAT32 L fe LANstep
54 1e Hidden W95 FAT1 80 Old Minix be Solaris boot ff BBT
55
56 Command (m for help): w
57 The partition table has been altered.
58 Syncing disks.
59
60 [root@system1 ~]# ls /dev/vdb*
61 /dev/vdb /dev/vdb1 /dev/vdb2
62 [root@system1 ~]# partprobe
63
64
65 2. 格式化
66 [root@system1 ~]# mkswap /dev/vdb2
67 Setting up swap space version 1, size = 567 MiB (594538496 bytes)
68 no label, UUID=e707afa3-70bd-49f2-a291-ea4991f5b8f0
69
70
71 3. 永久挂载
72 [root@system1 ~]# vim /etc/fstab
73 [root@system1 ~]# cat /etc/fstab
74
75 #
76 # /etc/fstab
77 # Created by anaconda on Fri Apr 24 00:01:30 2020
78 #
79 # Accessible filesystems, by reference, are maintained under '/dev/disk/'.
80 # See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more
info.
81 #

```

```

82 # After editing this file, run 'systemctl daemon-reload' to update systemd
83 # units generated from this file.
84 #
85 /dev/mapper/rhel-root    /                xfs      defaults        0
86                          0
87 UUID=dd922a92-5c13-4530-a145-e7a8eac5354c /boot          xfs
88 defaults                0 0
89 /dev/mapper/rhel-swap    swap              swap      defaults        0
90                          0
91 /dev/vg-exam/vo1 /mnt/vo1 ext4 defaults 0 0
92 /dev/vg-exam/vo2 /mnt/vo2 xfs defaults 0 0
93 UUID=e707afa3-70bd-49f2-a291-ea4991f5b8f0 swap swap defaults 0 0
94
95 4. 使用命令加载一下永久挂载的新添加部分
96 [root@system1 ~]# free -m
97
98      total        used        free      shared  buff/cache
99      available
100 Mem:           3940           274        2922           160           743
101          3228
102 Swap:          1023             0        1023
103
104 [root@system1 ~]# swapon -a
105 [root@system1 ~]# free -m
106
107      total        used        free      shared  buff/cache
108      available
109 Mem:           3940           274        2922           160           743
110          3228
111 Swap:          1590             0        1590

```


RHCSA8-考试题第15题-创建逻辑卷

```
1 1. 磁盘分区
2 [root@system1 ~]# fdisk /dev/vdb
3
4 welcome to fdisk (util-linux 2.32.1).
5 Changes will remain in memory only, until you decide to write them.
6 Be careful before using the write command.
7
8
9 Command (m for help): n
10 Partition type
11   p   primary (2 primary, 0 extended, 2 free)
12   e   extended (container for logical partitions)
13 Select (default p):
14
15 Using default response p.
16 Partition number (3,4, default 3):
17 First sector (5357568-20971519, default 5357568):
18 Last sector, +sectors or +size{K,M,G,T,P} (5357568-20971519, default
19 20971519): +1G
20
21 Created a new partition 3 of type 'Linux' and of size 1 GiB.
22
23 Command (m for help): w
24 The partition table has been altered.
25 Syncing disks.
26
27 [root@system1 ~]# ls /dev/vdb*
28 /dev/vdb /dev/vdb1 /dev/vdb2 /dev/vdb3
29
30 2. 创建物理卷
31 [root@system1 ~]# pvcreate /dev/vdb3
32 Physical volume "/dev/vdb3" successfully created.
33 [root@system1 ~]# pvs
34
35 PV          VG      Fmt Attr PSize  PFree
36 /dev/vda2   rhel    lvm2 a--  <9.00g    0
37 /dev/vdb1   vg-exam lvm2 a--  <2.00g  1.64g
38 /dev/vdb3           lvm2 ---   1.00g  1.00g
39
40 3. 创建卷组
41 [root@system1 ~]# vgcreate -s 20M npgroup /dev/vdb3
42 volume group "npgroup" successfully created
43 [root@system1 ~]# vgs
44
45 VG          #PV #LV #SN Attr   VSize   VFree
46 npgroup     1  0  0 wz--n- 1020.00m 1020.00m
47 rhel        1  2  0 wz--n-   <9.00g    0
48 vg-exam     1  2  0 wz--n-   <2.00g   1.64g
49
50 4. 创建逻辑卷
51 [root@system1 ~]# lvcreate -n np -l 45 npgroup
52 Logical volume "np" created.
53 [root@system1 ~]# lvs
```

```

51  LV   VG   Attr   LSize   Pool Origin Data%  Meta%  Move Log
    Cpy%Sync Convert
52  np   npgroup -wi-a----- 900.00m
53  root rhel  -wi-ao----- <8.00g
54  swap rhel  -wi-ao----- 1.00g
55  vol1 vg-exam -wi-ao----- 180.00m
56  vo2  vg-exam -wi-ao----- 180.00m
57  5.格式化
58  [root@system1 ~]# mkfs.ext3 /dev/npgroup/np
59  mke2fs 1.44.3 (10-July-2018)
60  Creating filesystem with 230400 4k blocks and 57600 inodes
61  Filesystem UUID: d15bd784-2285-4a6b-966d-d7321affe284
62  Superblock backups stored on blocks:
63      32768, 98304, 163840, 229376
64
65  Allocating group tables: done
66  Writing inode tables: done
67  Creating journal (4096 blocks): done
68  Writing superblocks and filesystem accounting information: done
69
70
71
72  6.创建挂载点
73  [root@system1 ~]# mkdir /mnt/np
74  [root@system1 ~]# ls -ld /mnt/np
75  drwxr-xr-x. 2 root root 6 May 24 11:25 /mnt/np
76
77  7.永久挂载
78  [root@system1 ~]# vim /etc/fstab
79  [root@system1 ~]# cat /etc/fstab
80
81  #
82  # /etc/fstab
83  # Created by anaconda on Fri Apr 24 00:01:30 2020
84  #
85  # Accessible filesystems, by reference, are maintained under '/dev/disk/'.
86  # See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info.
87  #
88  # After editing this file, run 'systemctl daemon-reload' to update systemd
89  # units generated from this file.
90  #
91  /dev/mapper/rhel-root / xfs defaults 0 0
92  UUID=dd922a92-5c13-4530-a145-e7a8eac5354c /boot xfs
    defaults 0 0
93  /dev/mapper/rhel-swap swap swap defaults 0 0
94  /dev/vg-exam/vo1 /mnt/vo1 ext4 defaults 0 0
95  /dev/vg-exam/vo2 /mnt/vo2 xfs defaults 0 0
96  UUID=e707afa3-70bd-49f2-a291-ea4991f5b8f0 swap swap defaults 0 0
97  /dev/npgroup/np /mnt/np ext3 defaults 0 0
98
99

```

RHCSA8考试题第十六题-创建VDO卷

```
1 1. 安装vdo软件
2 [root@system1 ~]# yum -y install vdo
3 2. 创建vdo
4 [root@system1 ~]# ls /dev/vdc*
5 /dev/vdc
6 [root@system1 ~]# vdo create --name=vdoname --device=/dev/vdc --
vdoLogicalSize=80G
7 Creating VDO vdoname
8 Starting VDO vdoname
9 Starting compression on VDO vdoname
10 VDO instance 0 volume is ready at /dev/mapper/vdoname
11
12 3. 格式化vdo为xfs文件系统
13 [root@system1 ~]# mkfs.xfs /dev/mapper/vdoname
14
15
16 4. 创建挂载点
17 [root@system1 ~]# mkdir /vbark
18
19
20 5. 持续性挂载
21 [root@system1 ~]# vim /etc/fstab
22 [root@system1 ~]# cat /etc/fstab
23
24 #
25 # /etc/fstab
26 # Created by anaconda on Fri Apr 24 00:01:30 2020
27 #
28 # Accessible filesystems, by reference, are maintained under '/dev/disk/'.
29 # See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info.
30 #
31 # After editing this file, run 'systemctl daemon-reload' to update systemd
32 # units generated from this file.
33 #
34 /dev/mapper/rhel-root / xfs defaults 0 0
35 UUID=dd922a92-5c13-4530-a145-e7a8eac5354c /boot xfs
defaults 0 0
36 /dev/mapper/rhel-swap swap swap defaults 0 0
37 /dev/vg-exam/vo1 /mnt/vo1 ext4 defaults 0 0
38 /dev/vg-exam/vo2 /mnt/vo2 xfs defaults 0 0
39 UUID=e707afa3-70bd-49f2-a291-ea4991f5b8f0 swap swap defaults 0 0
40 /dev/npgroup/np /mnt/np ext3 defaults 0 0
41 /dev/mapper/vdoname /vbark xfs _netdev 1 2
42 [root@system1 ~]# mount -a
43 [root@system1 ~]# df -Th
44 Filesystem Type Size Used Avail Use% Mounted on
45 devtmpfs devtmpfs 2.0G 0 2.0G 0% /dev
46 tmpfs tmpfs 2.0G 0 2.0G 0% /dev/shm
47 tmpfs tmpfs 2.0G 161M 1.8G 9% /run
48 tmpfs tmpfs 2.0G 0 2.0G 0% /sys/fs/cgroup
49 /dev/mapper/rhel-root xfs 8.0G 1.5G 6.6G 19% /
```

```
50 /dev/vda1          xfs      1014M  144M  871M  15% /boot
51 /dev/mapper/vg--exam-vo2 xfs      175M   6.8M  168M   4% /mnt/vo2
52 /dev/mapper/vg--exam-vo1 ext4      171M   1.6M  159M   1% /mnt/vo1
53 tmpfs              tmpfs     395M    0     395M   0% /run/user/0
54 /dev/mapper/npgroup-np  ext3     870M   1.2M  824M   1% /mnt/np
55 /dev/mapper/vdoname     xfs       80G   604M   80G   1% /vbark
56
57
58
```

RHCSA8考试题第十七题-tuned调优

```
1 [root@system1 ~]# tuned-adm recommend
2 virtual-guest
3 [root@system1 ~]# tuned-adm list
4 Available profiles:
5 - balanced - General non-specialized tuned profile
6 - desktop - Optimize for the desktop use-case
7 - latency-performance - Optimize for deterministic performance at
the cost of increased power consumption
8 - network-latency - Optimize for deterministic performance at
the cost of increased power consumption, focused on low latency network
performance
9 - network-throughput - Optimize for streaming network throughput,
generally only necessary on older CPUs or 40G+ networks
10 - powersave - Optimize for low power consumption
11 - throughput-performance - Broadly applicable tuning that provides
excellent performance across a variety of common server workloads
12 - virtual-guest - Optimize for running inside a virtual guest
13 - virtual-host - Optimize for running KVM guests
14 No current active profile.
15 [root@system1 ~]# tuned-adm profile virtual-guest
16 [root@system1 ~]# tuned-adm list
17 Available profiles:
18 - balanced - General non-specialized tuned profile
19 - desktop - Optimize for the desktop use-case
20 - latency-performance - Optimize for deterministic performance at
the cost of increased power consumption
21 - network-latency - Optimize for deterministic performance at
the cost of increased power consumption, focused on low latency network
performance
22 - network-throughput - Optimize for streaming network throughput,
generally only necessary on older CPUs or 40G+ networks
23 - powersave - Optimize for low power consumption
24 - throughput-performance - Broadly applicable tuning that provides
excellent performance across a variety of common server workloads
25 - virtual-guest - Optimize for running inside a virtual guest
26 - virtual-host - Optimize for running KVM guests
27 Current active profile: virtual-guest
28
```

#必须要以elovodo用户登录system1系统

```
ssh elovodo@localhost
```

#登录容器的镜像仓库

```
podman login utility.example.com:5000
```

用户名是glS

密码是glshxwyz

#拉取镜像

```
podman pull utility.example.com:5000/rlogserver
```

#将考试要求的文件拷贝到指定目录中作为容器的持久性挂载存储

```
cp -a /var/log/journal/* container_journal/
```

```
cp -a /var/log/journal/.[!.*]* container_journal/
```

#运行容器，结尾的:Z不要忘记，这是为了让容器自动解决SELinux的权限问题

```
podman run -itd -v /home/elovodo/container_journal:/var/log/journal:Z --name  
container_logserver utility.example.com:5000/rlogserver
```

#创建普通用户的systemd服务器配置文件目录

```
mkdir ~/.config/systemd/user -p
```

```
cd ~/.config/systemd/user
```

#使用podman命令自动生成podman容器服务文件

```
podman generate systemd --new --files --name container_logserver
```

#将容器服务文件的名字改成题目上要求的名字

```
mv container-container_logserver.service container_logserver.service
```

#停止容器，然后删除容器

```
podman stop container_logserver
```

```
podman rm container_logserver
```

#开启普通用户使用systemd管理自己服务的权限

```
loginctl enable-linger
```

#加载新的服务文件

```
systemctl --user daemon-reload
```

#设置容器服务器文件下次开机启动，--now参数表示立刻启动

```
systemctl --user enable container_logserver --now
```

#可以使用systemctl --user status container_logserver 查看服务的状态

