还在百度Linux命令? 推荐一套我用起来特顺手的命令!

作为一位Java后端开发,怎能不会点Linux命令?总结了一套非常实用的Linux命令(基于CentOS 7.6),希望对大家有所帮助!

系统服务管理

systemctl

systemctl 命令是 service 和 chkconfig 命令的组合体,可用于管理系统。

• 输出系统中各个服务的状态:

systemctl list-units --type=serviceCopy to clipboardErrorCopied

```
ACTIVE SUB
                                                                        DESCRIPTION
                                            loaded active exited Install ABRT coredump hook
abrt-ccpp.service
                                            loaded active running ABRT kernel log watcher
abrt-oops.service
                                            loaded active running ABRT Xorg log watcher
abrt-xorg.service
                                            loaded active running ABRT Automated Bug Reporting Tool
abrtd.service
                                            loaded active running Accounts Service
loaded active running Manage Sound Card State (restore and st
accounts-daemon.service
alsa-state.service
atd.service
                                            loaded active running Job spooling tools
                                            loaded active running Security Auditing Service
loaded active running Avahi mDNS/DNS-SD Stack
auditd.service
avahi-daemon.service
blk-availability.service
                                            loaded active exited Availability of block devices
                                           loaded active running Thunderbolt system service
loaded active running Manage, Install and Generate Color Prof
loaded active running Command Scheduler
bolt.service
colord.service
crond.service
                                            loaded active running CUPS Printing Service
loaded active running D-Bus System Message Bus
cups.service
dbus.service
                                            loaded active running firewalld - dynamic firewall daemon
firewalld.service
```

- 查看服务的运行状态:
- systemctl status firewalldCopy to clipboardErrorCopied

- 关闭服务:
- systemctl stop firewalldCopy to clipboardErrorCopied

• 启动服务:

systemctl start firewalldCopy to clipboardErrorCopied

- 重新启动服务(不管当前服务是启动还是关闭):
- systemctl restart firewalldCopy to clipboardErrorCopied
- 重新载入配置信息而不中断服务:
- 1 systemctl reload firewalldCopy to clipboardErrorCopied
 - 禁止服务开机自启动:
 - systemctl disable firewalldCopy to clipboardErrorCopied

• 设置服务开机自启动:

systemctl enable firewalldCopy to clipboardErrorCopied

```
Created symlink from /etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service to /usr/lib/sy
Created symlink from /etc/systemd/system/multi-user.target.wants/firewalld.service to /usr/lib/sy
[root@local-linux ~]# systemctl status firewalld

firewalld.service - firewalld - dynamic firewall daemon
Loaded: loaded (/usr/lib/systemd/system/firewalld.service; enabled; vendor preset: enabled)
Active: active (running) since Sat 2019-06-01 10:41:03 CST, lmin 57s ago
Docs: man:firewalld(1)
Main PID: 4928 (firewalld)
CGroup: /system.slice/firewalld.service

4928 /usr/bin/python -Es /usr/sbin/firewalld --nofork --nopid
```

文件管理

Is

列出指定目录下的所有文件,列出/目录下的文件:

1 ls -1 /Copy to clipboardErrorCopied

```
[root@local-linux /]# ls -l /
total 20
                            7 May 26 15:13 bin -> usr/bin
lrwxrwxrwx.
             1 root root
             5 root root 4096 May 26 15:40 boot
dr-xr-xr-x.
           20 root root 3180 Jun
drwxr-xr-x.
                                   1 10:27 dev
drwxr-xr-x. 139 root root 8192 Jun
                                   1 10:27 etc
             3 root root
                            19 May 26 15:35 home
drwxr-xr-x.
                             7 May 26 15:13 lib -> usr/lib
lrwxrwxrwx.
              1 root root
                           9 May 26 15:13 lib64 -> usr/lib64
lrwxrwxrwx.
             1 root root
drwxr-xr-x.
             2 root root
                           6 Apr 11
                                       2018 media
drwxr-xr-x.
              2 root root
                                       2018 mnt
                           6 Apr 11
drwxr-xr-x.
             3 root root
                            16 May 26 15:22 opt
dr-xr-xr-x. 166 root root
                           0 Jun
                                   1 10:27 proc
            5 root root 224 Jun
                                   1 10:29 root
dr-xr-x---.
            39 root root 1220 Jun
                                   1 10:27 run
drwxr-xr-x.
                            8 May 26 15:13 sbin -> usr/sbin
lrwxrwxrwx.
             1 root root
                            6 Apr 11
                                       2018 srv
             2 root root
drwxr-xr-x.
dr-xr-xr-x. 13 root root
                             0 Jun
                                   1 10:27 sys
drwxrwxrwt. 14 root root 4096 Jun
                                   1 10:41 tmp
drwxr-xr-x. 13 root root
                           155 May 26 15:13 usr
drwxr-xr-x. 20 root root 282 May 26 15:38 var
```

pwd

获取目前所在工作目录的绝对路径:

```
[root@local-linux home]# pwd
/home
```

cd

改变当前工作目录:

```
1 cd /usr/localCopy to clipboardErrorCopied
```

```
[root@local-linux home]# cd /usr/local/
[root@local-linux local]# pwd
/usr/local
```

date

显示或修改系统时间与日期;

```
date '+%Y-%m-%d %H:%M:%S'Copy to clipboardErrorCopied
```

```
[root@local-linux local]# date '+%Y-%m-%d %H:%M:%S'
2019-06-01 10:55:35
```

passwd

用于设置用户密码:

```
passwd rootCopy to clipboardErrorCopied
```

```
[root@local-linux local]# passwd
Changing password for user root.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@local-linux local]#
```

su

改变用户身份(切换到超级用户):

```
1 su -Copy to clipboardErrorCopied
```

clear

用于清除屏幕信息

man

显示指定命令的帮助信息:

```
1 man lsCopy to clipboardErrorCopied
```

who

• 查询系统处于什么运行级别:

```
1 who -rCopy to clipboardErrorCopied
```

```
[root@local-linux local]# who -r
    run-level 5 2019-06-01 10:27
```

• 显示目前登录到系统的用户:

```
1 who -buTCopy to clipboardErrorCopied
```

free

显示系统内存状态 (单位MB):

```
1 free -mCopy to clipboardErrorCopied
```

```
[root@local-linux local]# free -m
                                                    shared buff/cache
              total
                            used
                                          free
                                                                           available
                                          1144
                1838
                              341
                                                        11
                                                                     351
Mem:
                                         2047
                2047
                               0
Swap:
```

• 显示系统进程运行动态:

```
1 ps -efCopy to clipboardErrorCopied
```

• 查看 sshd 进程的运行动态:

```
ps -ef | grep sshdCopy to clipboardErrorCopied
```

```
[root@local-linux local]# ps -ef |grep sshd
root
          3338
                   1
                      0 10:27 ?
                                        00:00:00 /usr/sbin/sshd -D
          4356
                3338
                      0 10:29 ?
root
                                        00:00:01 sshd: root@pts/0
               4362
                      0 11:03 pts/0
                                        00:00:00 grep --color=auto sshd
root
          5722
```

top

查看即时活跃的进程,类似Windows的任务管理器。

```
top - 11:06:33 up 39 min, 1 user, load aver
Tasks: 155 total, 2 running, 153 sleeping,
%Cpu(s): 0.0 us, 0.3 sy, 0.0 ni, 99.7 id,
KiB Mem: 1882300 total, 1171436 free, 34
                                             load average: 0.00, 0.02,
                                                            0 stopped,
                                                                             0 zombie
                                                           0.0 wa, 0.0 hi, 0.0 si,
                                                                                            0.0 st
                                                       349996 used,
                                                                          360868 buff/cache
KiB Swap: 2097148 total, 2097148 free,
                                                             0 used.
                                                                         1341900 avail Mem
  PID USER
                                                     SHR S %CPU %MEM
                    PR NI
                                 VIRT
                                           RES
                                                                              TIME+ COMMAND
                                                             0.7
 5748 root
                          Θ
                               162016
                                          2316
                                                   1588 R
                                                                    0.1
                                                                            0:00.03 top
 3334 root
                                                                            0:00.39 rsyslogd
                    20
                          0
                               222748
                                          3780
                                                   3028 S 0.3 0.2
                                                                            0:03.69 systemd
     1 root
                    20
                          0
                              193964
                                          7088
                                                   4224 S 0.0 0.4
     2 root
                    20
                          0
                                     0
                                              0
                                                       0 S
                                                             0.0 0.0
                                                                            0:00.00 kthreadd
```

mkdir

创建目录:

```
[root@local-linux /]# mkdir /mydata
[root@local-linux /]# ll
total 20
                              7 May 26 15:13 bin -> usr/bin
              1 root root
lrwxrwxrwx.
              5 root root 4096 May 26 15:40 boot
dr-xr-xr-x.
             20 root root 3180 Jun
                                     1 10:27 dev
drwxr-xr-x.
drwxr-xr-x. 139 root root 8192 Jun
                                     1 10:56 etc
                             19 May 26 15:35 home
drwxr-xr-x.
              3 root root
lrwxrwxrwx.
              1 root root
                              7 May 26 15:13 lib -> usr/lib
                              9 May 26 15:13 lib64 -> usr/lib64
lrwxrwxrwx.
              1 root root
                              6 Apr 11
                                        2018 media
drwxr-xr-x.
              2
                root root
              2 root root
                              6 Apr 11
                                        2018 mnt
drwxr-xr-x.
                                     1 11:07 mydata
drwxr-xr-x.
              2 root root
                              6 Jun
```

more

用于分页查看文件,例如每页10行查看 boot.log 文件:

```
more -c -10 /var/log/boot.logCopy to clipboardErrorCopied
```

cat

用于查看文件,例如查看Linux启动日志文件文件,并标明行号:

```
1 cat -Ab /var/log/boot.logCopy to clipboardErrorCopied
```

touch

用于创建文件,例如创建 text.txt 文件:

```
1 touch text.txtCopy to clipboardErrorCopied
```

```
[root@local-linux mydata]# touch test.txt
[root@local-linux mydata]# ll
total 0
-rw-r--r--. 1 root root 0 Jun 1 14:37 test.txt
[root@local-linux mydata]#
```

rm

• 删除文件:

```
1 rm text.txtCopy to clipboardErrorCopied
```

强制删除某个目录及其子目录:

```
1 rm -rf testdir/Copy to clipboardErrorCopied
```

```
[root@local-linux mydata]# ll

total 0

drwxr-xr-x. 2 root root 6 Jun 1 14:39 testdir

-rw-r--r-. 1 root root 0 Jun 1 14:37 test.txt

[root@local-linux mydata]# rm -rf testdir/

[root@local-linux mydata]# ll

total 0

-rw-r--r-. 1 root root 0 Jun 1 14:37 test.txt

[root@local-linux mydata]# |
```

ср

用于拷贝文件,例如将 test1 目录复制到 test2 目录

```
1 cp -r /mydata/tes1 /mydata/test2Copy to clipboardErrorCopied
```

mv

用于移动或覆盖文件:

```
1 mv text.txt text2.txtCopy to clipboardErrorCopied
```

压缩与解压

tar

- 将 /etc 文件夹中的文件归档到文件 etc.tar (并不会进行压缩):
- 1 tar -cvf /mydata/etc.tar /etcCopy to clipboardErrorCopied
 - 用 gzip 压缩文件夹 /etc 中的文件到文件 etc.tar.gz:
- 1 tar -zcvf /mydata/etc.tar.gz /etcCopy to clipboardErrorCopied
 - 用 bzip2 压缩文件夹 /etc 到文件 /etc.tar.bz2:
- 1 tar -jcvf /mydata/etc.tar.bz2 /etcCopy to clipboardErrorCopied

• 分页查看压缩包中内容 (gzip):

```
1 tar -ztvf /mydata/etc.tar.gz |more -c -10Copy to clipboardErrorCopied
```

```
drwxr-xr-x root/root
                              0 2019-06-01 10:56 etc/
-rw-r--r-- root/root
-rw----- root/root
                            465 2019-05-26 15:11 etc/fstab
                              0 2019-05-26 15:11 etc/crypttab
                              0 2019-05-26 15:11 etc/mtab -> /proc/self/mounts
lrwxrwxrwx root/root
                             51 2019-06-01 10:27 etc/resolv.conf
-rw-r--r-- root/root
drwxr-xr-x root/root
                             0 2019-05-26 15:18 etc/fonts/
                              0 2019-05-26 15:22 etc/fonts/conf.d/
drwxr-xr-x root/root
                              0 2019-05-26 15:18 etc/fonts/conf.d/31-cantarell.d
lrwxrwxrwx root/root
ll.conf
lrwxrwxrwx root/root
                              0 2019-05-26 15:22 etc/fonts/conf.d/66-sil-nuosu.d
--More--
```

• 解压文件到当前目录 (gzip):

```
1 tar -zxvf /mydata/etc.tar.gzCopy to clipboardErrorCopied
```

• 解压文件到指定目录 (gzip):

```
1 tar -zxvf /mydata/etc.tar.gz -C /mydata/etcCopy to clipboardErrorCopied
```

磁盘和网络管理

df

查看磁盘空间占用情况:

```
1 df -hTCopy to clipboardErrorCopied
```

```
[root@local-linux mydata]# df -hT
                                          Used Avail Use% Mounted on
Filesystem
                                    Size
                          Type
                                     27G
/dev/mapper/centos-root xfs
                                          4.2G
                                                  23G
                                                        16% /
                                                        0% /dev
devtmpfs
                         devtmpfs
                                    903M
                                              0
                                                 903M
                                                        0% /dev/shm
tmpfs
                                    920M
                                             0
                                                 920M
                         tmpfs
tmpfs
                         tmpfs
                                    920M
                                          9.2M
                                                 910M
                                                        2% /run
tmpfs
                                    920M
                                                 920M
                                                        0% /sys/fs/cgroup
                         tmpfs
                                              0
/dev/sda1
                                           179M
                                                        18% /boot
                         xfs
                                   1014M
                                                 836M
tmpfs
                                    184M
                                            12K
                                                 184M
                                                        1% /run/user/42
                         tmpfs
                                    184M
                                                 184M
tmpfs
                         tmpfs
                                              0
                                                        0% /run/user/0
```

dh

查看当前目录下的文件及文件夹所占大小:

./etc.tar.gz

ifconfig

11M

显示当前网络接口状态:

```
[root@local-linux mydata]# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.3.101 netmask 255.255.255.0 broadcast 192.168.3.255
    inet6 fe80::a00:27ff:fe5a:4b13 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:5a:4b:13 txqueuelen 1000 (Ethernet)
    RX packets 7064 bytes 562953 (549.7 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 6165 bytes 2418605 (2.3 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

netstat

• 查看当前路由信息:

1 netstat -rnCopy to clipboardErrorCopied

```
[root@local-linux mydata]# netstat -rn
Kernel IP routing table
Destination
                                                          MSS Window
                Gateway
                                                  Flags
                                                                       irtt Iface
                                 Genmask
0.0.0.0
                 192.168.3.1
                                                            0 0
                                 0.0.0.0
                                                  UG
                                                                          0 enp0s3
192.168.3.0
                0.0.0.0
                                 255.255.255.0
                                                            0 0
                                                                          0 enp0s3
                                                  U
192.168.122.0
                0.0.0.0
                                 255.255.255.0
                                                  U
                                                             0
                                                              0
                                                                          0 virbr0
```

• 查看所有有效TCP连接:

```
netstat -anCopy to clipboardErrorCopied
```

• 查看系统中启动的监听服务:

netstat -tulnpCopy to clipboardErrorCopied

```
[root@local-linux mydata]# netstat -tulnp
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address
                                                  Foreign Address
                                                                                            PID/Program name
                                                                              State
                    0 0.0.0.0:111
0 0.0.0.0:6000
                                                  0.0.0.0:*
0.0.0.0:*
tcp
            Θ
                                                                              LISTEN
                                                                                            1/systemd
tcp
            0
                                                                              LISTEN
                                                                                            3384/X
tcp
                    0 192.168.122.1:53
                                                  0.0.0.0:*
                                                                                            3837/dnsmasq
            0
                                                                              LISTEN
                    0 0.0.0.0:22
0 127.0.0.1:631
                                                  0.0.0.0:*
                                                                                            3338/sshd
            0
                                                                              LISTEN
tcp
                                                                                            3336/cupsd
tcp
                                                                              LISTEN
                    0 127.0.0.1:25
0 127.0.0.1:6010
                                                  0.0.0.0:*
0.0.0.0:*
tcp
            0
                                                                              LISTEN
                                                                                            3884/master
tcp
            0
                                                                              LISTEN
                                                                                            4356/sshd: root@pts
            0
                    0 :::111
                                                                              LISTEN
tcp6
                                                                                            1/systemd
            0
                    0 :::6000
                                                                              LISTEN
                                                                                            3384/X
tcp6
                                                                                            3338/sshd
            0
                    0 :::22
                                                                              LISTEN
tcp6
            0
                                                                                            3336/cupsd
tcp6
                                                                              LISTEN
tcp6
            0
                    0 ::1:25
                                                                              LISTEN
                                                                                            3884/master
tcp6
                    0 ::1:6010
                                                                              LISTEN
                                                                                            4356/sshd: root@pts
```

• 查看处于连接状态的系统资源信息:

```
1 netstat -atunpCopy to clipboardErrorCopied
```

wget

从网络上下载文件

文件上传下载

- 安装上传下载工具 lrzsz;
- 1 yum install -y lrzszCopy to clipboardErrorCopied
- 上传文件,输入以下命令 XShell 会弹出文件上传框;
- 1 rzCopy to clipboardErrorCopied
 - 下载文件,输入以下命令 XShell 会弹出文件保存框;
- 1 sz fileNameCopy to clipboardErrorCopied

软件的安装与管理

rpm

RPM是 Red-Hat Package Manager 的缩写,一种Linux下通用的软件包管理方式,可用于安装和管理.rpm 结尾的软件包。

- 安装软件包:
- 1 rpm -ivh nginx-1.12.2-2.el7.x86_64.rpmCopy to clipboardErrorCopied
- 模糊搜索软件包:
- 1 rpm -qa | grep nginxCopy to clipboardErrorCopied
 - 精确查找软件包:
- 1 rpm -qa nginxCopy to clipboardErrorCopied
 - 查询软件包的安装路径:
- 1 rpm -ql nginx-1.12.2-2.el7.x86_64Copy to clipboardErrorCopied
 - 查看软件包的概要信息:
- 1 rpm -qi nginx-1.12.2-2.el7.x86_64Copy to clipboardErrorCopied
 - 验证软件包内容和安装文件是否一致:
- 1 rpm -V nginx-1.12.2-2.el7.x86_64Copy to clipboardErrorCopied
 - 更新软件包:
 - 1 rpm -Uvh nginx-1.12.2-2.el7.x86_64Copy to clipboardErrorCopied
 - 删除软件包:
- 1 rpm -e nginx-1.12.2-2.el7.x86_64Copy to clipboardErrorCopied

Yum是 Yellow dog Updater, Modified 的缩写,能够在线自动下载RPM包并安装,可以自动处理依赖性关系,并且一次安装所有依赖的软件包,非常方便!

- 安装软件包:
- 1 yum install nginxCopy to clipboardErrorCopied
 - 检查可以更新的软件包:
- 1 yum check-updateCopy to clipboardErrorCopied
 - 更新指定的软件包:
 - 1 yum update nginxCopy to clipboardErrorCopied
 - 在资源库中查找软件包信息:
- 1 yum info nginx*Copy to clipboardErrorCopied
 - 列出已经安装的所有软件包:
 - 1 yum info installedCopy to clipboardErrorCopied
 - 列出软件包名称:
- 1 yum list nginx*Copy to clipboardErrorCopied
- 模糊搜索软件包:
- 1 yum search nginxCopy to clipboardErrorCopied

用户管理

用户信息查看

- 查看用户信息:
- 1 cat /etc/passwdCopy to clipboardErrorCopied
 - 用户信息格式如下(密码已过滤):
- 1 # 用户名:密码:用户标识号:组标识号:组注释性描述:主目录:默认shell
- 2 root:x:0:0:root:/root:/bin/bash
- 3 macro:x:1000:982:macro:/home/macro:/bin/bashCopy to clipboardErrorCopied
- 查看用户组信息:
- 1 cat /etc/groupCopy to clipboardErrorCopied
 - 用户组信息格式如下:
- 1 # 组名:密码:组标识号:组内用户列表
- 2 root:x:0:
- docker:x:982:macro,andyCopy to clipboardErrorCopied

passwd

用于设置用户密码:

```
passwd rootCopy to clipboardErrorCopied
```

su

改变用户身份(切换到超级用户):

```
1 # 切換到root用户
2 su -
3 # 切換到macro用户
4 su macroCopy to clipboardErrorCopied
```

groupadd

添加用户组,使用-g可以设置用户组的标志号:

```
groupadd -g 1024 macrozhengCopy to clipboardErrorCopied
```

groupdel

删除用户组:

```
1 groupdel macrozhengCopy to clipboardErrorCopied
```

useradd

添加用户, -u 设置标志号, -g 设置主用户组:

```
useradd -u 1024 -g macrozheng macroCopy to clipboardErrorCopied
```

usermod

修改用户所属用户组:

```
1 usermod -g docker macroCopy to clipboardErrorCopied
```

userdel

删除用户,使用-r可以删除用户主目录:

```
1 userdel macro -r
```