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# 命令大览

文件目录管理

[Ls](#_ls_-_List) [cd](#_cd_-_change) [cp](#_cp_-_Copy) [find](#_find_-_search) [mkdir](#_mkdir_-_Make) [mv](#_mv_-_Move) [pwd](#_pwd_-_Print) rename [rm](#_rm_-_Remove) [rmdir](#_rmdir_remove_empty) [touch](#_touch_-_Change) [tree](#_tree_-_List) basename dirname [chattr](#_chattr_-_change) [lsattr](#_lsattr_-_list) file md5sum

文件管理

[cat](#_cat_-_Concatenate) tac [more](#_more_-_file) [less](#_less_-_opposite) [head](#_head_-_output) [tail](#_tail_-_Output) cut split paste sort uniq wc iconv dos2unix file [diff](#_diff_-_compare) [vimdiff](#_vimdiff_-_edit) [grep](#_grep,_Global_Regular) [egrep](#_grep,_Global_Regular) join vi/vim

文件压缩及解压命令

Tar unzip gzip zip

搜索文件命令

Which find whereis locate

用户管理命令

[Useradd](#_useradd_-_create) [usermod](#_usermod_-_modify) [userdel](#_userdel_-_delete) groupadd [passwd](#_passwd_-_update) chage [id](#_id_-_print) [su](#_su_-_run) [visudo](#_visudo_-_edit) [sudo](#_sudo,_sudoedit_-) [whoami](#_whoami_查看当前用户)

网络命令

Telnet ssh scp wget ping route ifconfig ifup ifdown netstat nmap lsof route mail mutt nslookup dig host traceroute mount umount df du fsck dd dumpe2fs dump fdisk parted mkfs partprobe e2fsck mkswap swapon swapon sysnc resize2fs

系统管理及系统安全

Chmod chown chgrp chage passwd su sudo umask chattr lsattr

Uptime top free vmstat mpstat iostat sar chkconfig

# 基础命令总结

## 用户管理

### useradd - create a new user or update default new user information

When invoked without the -D option, the useradd command creates a new user account using the values specified on the command line plus the default values from the system.Depending on command line options, the useradd command will update system files and may also create the new user's home directory and copy initial files. By default, a group will also be created for the new user如果没有-D参数，那么就创建一个新用户，并创建家目录

OPTIONS:

**-c**, --comment COMMENT Any text string. It is generally a short description of the login, and is currently used as the field for the user's full name.对该用户注释，可以在passwd文件里查看到注释信息

$useradd oldgirl -c 'this is a test'

$tail -1 /etc/passwd

oldgirl:x:500:500:this is a test:/home/oldgirl:/bin/bash

**-d**, --home HOME\_DIR The new user will be created using HOME\_DIR as the value for the user's login directory. The default is to append the LOGIN name to BASE\_DIR and use that as the login directory name. The parent directory of HOME\_DI must exist otherwise the home directory cannot be created.

**-D**, --defaults See below, the subsection "Changing the default values".

**-e**, --expiredate EXPIRE\_DATE The date on which the user account will be disabled. The date is specified in the format YYYY-MM-DD. If not specified, useradd will use the default expiry date specified by the EXPIRE variable in /etc/default/useradd, or an empty string (no expiry) by default.

-m, --create-home Create the user's home directory if it does not exist. The files and directories contained in the skeleton directory (which can be defined with the -k option) will be copied to the home directory. useradd will create the home directory unless CREATE\_HOME in /etc/login.defs is set to no.

-M Do not create the user's home directory, even if the system wide setting from /etc/login.defs (CREATE\_HOME) is set to yes.

$ cat /etc/default/useradd

# useradd defaults file

GROUP=100

HOME=/home

INACTIVE=-1

EXPIRE=

SHELL=/bin/bash

SKEL=/etc/skel

CREATE\_MAIL\_SPOOL=yes

**-f**, --inactive INACTIVE The number of days after a password expires until the account is permanently disabled. A value of 0 disables the account as soon as the password has expired, and a value of -1 disables the feature. If not specified, useradd will use the default inactivity period specified by the INACTIVE variable in /etc/default/useradd, or -1 by default.

-s：指定用户登入后所使用的shell；

-g<群组>：指定用户所属的群组；

-G<群组>：指定用户所属的附加群组；

### userdel - delete a user account and related files

-f, --force This option forces the removal of the user account, even if the user is still logged in. It also forces userdel to remove the user‘s home directory and mail spool, even if another user uses the same home directory or if the mail spool is not owned by the specified user. If USERGROUPS\_ENAB is defined to yes in /etc/login.defs and if a group exists with the same name as the deleted user, then this group will be removed, even if it is still the primary group of another user. 强制删除用户，即使该用户现在在登录中，而且会删除该用户的家目录和邮件

-r, --remove Files in the user’s home directory will be removed along with the home directory itself and the user‘s mail spool. Files located in other file systems will have to be searched for and deleted manually.删除该用户的家目录和邮件

### passwd - update user's authentication tokens

opption

--stdin This option is used to indicate that passwd should read the new password from standard input, which can be a pipe.

不加参数是给当前用户更改密码

$ echo 123456|passwd --stdin oldgirl

Changing password for user oldgirl.

passwd: all authentication tokens updated successfully.

### id - print real and effective user and group IDs

$ id oldgirl

uid=500(oldgirl) gid=500(oldgirl) groups=500(oldgirl)

### whoami 查看当前用户

$ whoami

oldgirl

### sudo, sudoedit - execute a command as another user

sudo allows a permitted user to execute a command as the superuser or another user, as specified by the security policy. sudo supports a plugin architecture for security policies and input/output logging. Third parties can develop and distribute their own policy and I/O logging plugins to work seamlessly with the sudo front end. The default security policy is sudoers, which is configured via the file /etc/sudoers, or via LDAP. See the PLUGINS section for more information.

### su - run a shell with substitute user and group IDs

切换到odlgirl用户

$ su - oldgirl

### visudo - edit the sudoers file

SYNOPSIS visudo [-chqsV] [-f sudoers]

DESCRIPTION visudo edits the sudoers file in a safe fashion, analogous to vipw(8). visudo locks the sudoers file against multiple simultaneous edits, provides basic sanity checks, and checks for parse errors. If the sudoers file is currently being edited you will receive a message to try again later.

visudo the same as vi /etc/sudoers

oldboy ALL=(ALL) /bin/ls

用户 用户管理的机器=（临时拥有的用户使用的权限） 执行的命令

用户在ALL这个机器上 执行 命令时/bin/ls 包含 (ALL)的权限 命令要用全路径which 查看多个命令用“，”隔开

### usermod - modify a user account

usermod [options] LOGIN

The usermod command modifies the system account files to reflect the changes that are specified on the command line.

OPTIONS the same as useradd

### uname - print system information

-a, --all print all information, in the following order, except omit -p and -i if unknown:

-n, --nodename print the network node hostname

-r, --kernel-release print the kernel release

-m, --machine print the machine hardware name

$ uname -a

Linux sandow 2.6.32-573.el6.x86\_64 #1 SMP Thu Jul 23 15:44:03 UTC 2015 x86\_64 x86\_64 x86\_64 GNU/Linux

$ uname -r

2.6.32-573.el6.x86\_64

$ uname -n

sandow

$ uname -m

x86\_64

### which - shows the full path of (shell) commands.

Which takes one or more arguments. For each of its arguments it prints to stdout the full path of the executables that would have been executed when this argument had been entered at the shell prompt. It does this by searching for an executable or script in the directories listed in the environment variable PATH using the same algorithm as bash(1).

查看命令路径 which commands, whereis –b commands, locate commands, find / -type f –name commands,

### hostname - show or set the system’s host name

$ hostname

sandow

## 系统管理

Chmod

Chown

Chgrp

Chage

umask

Uptime

Top

free

vmstat

mpstat

iostat

sar

chkconfig

## 其它

### Netstat (ss) 查看网络连接状态 –lntup

Listening number tcp udp program

### history Display the history list with line numbers

Options:

-c clear the history list by deleting all of the entries

-d offset delete the history entry at offset OFFSET.

-a append history lines from this session to the history file

-n read all history lines not already read from the history file

-r read the history file and append the contents to the history list

-w write the current history to the history file and append them to the history list

-p perform history expansion on each ARG and display the result without storing it in the history list

-s append the ARGs to the history list as a single entry

Sort –n a.txt 按数字排序a.txt

Uniq –c 显示重复的次数，因为只会统计相邻的行，所以需要 先用sort排序然后就

### telnet 远程连接，探测远端端口是否开通

### runlevel

### alias - Define or display aliases.

alias [-p] [name[=value] ... ]

Without arguments, `alias' prints the list of aliases in the reusable form `alias NAME=VALUE' on standard output. Otherwise, an alias is defined for each NAME whose VALUE is given. A trailing space in VALUE causes the next word to be checked for alias substitution when the alias is expanded.

Options:

-p Print all defined aliases in a reusable format

/etc/profile 设置alias全局生效

~/.bashre 当前用户

通过给危险的命令加一些保护参数，防止人为误操作;把很多复杂的字符串或命令变成一个简单的字符串或命令. 定义别名永久生效：

### unalias: Remove each NAME from the list of defined aliases

unalias [-a] name [name ...]

Options:

-a remove all alias definitions.

### Nesysv

### ps - report a snapshot of the current processes.

SYNOPSIS ps [options]

DESCRIPTION ps displays information about a selection of the active processes. If you want a repetitive update of the selection and the displayed information, use top(1) instead.

## 内核管理

**lsmod 显示已加载内核模块**

**insmod添加内核模块**

**modprobe 添加内核模块**

**modinfo 显示内核模块信息**

**rmmod 移除内核模块**

### sysctl configure kernel parameters at runtime

命令描述：在内核运行时动态的个性内核的运行参数

命令语法: sysctl [-n] [-e] [-q] -w variable=value

命令参数：参数存放在/proc/sys中，包含一些TCP/IP和虚拟内存系统的高级选项

variable=value

(如果值里包含引用或者shell的分部程序那么valuse最好用双引号，还要使用-w)

-n 用这个参数来打印出variable对应的值

# sysctl -n abi.vsyscall32

1

-e 用这个参数可以忽略掉未知variable的错误

-N 只打印variable 而不打印值，这这参数可能在shell里更有用

-w 使用这个参数用来修改sysctl的设定

-p 用配置文件/etc/sysctl.conf来加载内核参数的设置，if none given Specifying - as filename means reading data from standard input.

-a 显示所有当前的variable和value

/sbin/sysctl -a

net.ipv6.conf.eth0.accept\_ra\_rtr\_pref = 1

net.ipv6.conf.eth0.router\_probe\_interval = 60

net.ipv6.conf.eth0.accept\_ra\_rt\_info\_max\_plen = 0

………

# /sbin/sysctl -n kernel.hostname

sandow

/sbin/sysctl -w kernel.domainname="exam-ple.com"

/sbin/sysctl -p /etc/sysctl.conf

Free –m 查看内存

Cat /proc/loaddavg

cat /proc/meminfo   #<==内存信息  
cat /proc/cpuinfo    #<==cpu信息  
cat /proc/mounts    #<==挂载信息

rsyslog 控制 mess secure 的信息每周删除一个文件

## mount 查看 及设置挂载（目录 和设备建立联系，目录 作为设备的入口）

## umount 批定挂载点 卸载 强制（umount –lf /mnt）

## df –h 查看分区设备使用情况

du 查看文件大小

要注意 buffers 和cached

Cat /proc/sys/net/ipv4/ip\_forward

# basic info command keys

x Close this help window.  
q Quit Info altogether.  
H Invoke the Info tutorial.  
Up Move up one line.  
Down Move down one line.  
DEL Scroll backward one screenful.  
SPC Scroll forward one screenful.  
M-< Go to the beginning of this node.  
M-> Go to the end of this node.  
TAB Skip to the next hypertext link.  
RET Follow the hypertext link under the cursor.  
l Go back to the last node seen in this window.  
  
[ Go to the previous node in the document.  
] Go to the next node in the document.  
p Go to the previous node on this level.  
n Go to the next node on this level.

U Go up one level.

# POSIX

chattr + i /etc/passwd /etc/shadow /etc/group /etc/gshadow /etc/inittab

lsattr /etc/passwd

----i--------e- /etc/passwd