

(most common)

DOS

- dir
- cd dirname
- cls
- mkdir (md)
- rmdir (rd)

- |s
- cd dirname
- cd \dirname\dirname
   cd \dirname/dirname
  - clear
  - mkdir (md)
  - rmdir (rd)

(most common)

DOS

LINUX

- copy (xcopy)
- del (erase)
- ipconfig
- move
- netsh
- rename (ren)

cp

- rm *(remove)*
- dhcpcd
- mv
- ifconfig
- rename

(process data)

DOS

- echo
- fc (comp -deprecated)
- find (findstr)
- path
- pause

- echo
- diff
- find/grep/locate
  - path
- pause

(process data)

DOS

- set
- sort
- tasklist
- taskkill
- type

- set
- sort
- ps -ef (or top)
- kill
- cat

(miscellaneous)

DOS

- cmd
- date
- prompt
- shutdown
- time
- ver

- bash
- date
- pwd
- halt or reboot
- time
- uname -a
  - ie: rpm -qa | grep release

## Scripting

#### DOS

- for %i in (1,2,3,4,5) do ping 10.1.1.%i
- for /L %i in (254,-1,240) do ping 172.18.32.%i
- for /f "tokens=2 delims=/" %i in ('date /t') do set dayofmonth=%i
   LINUX
- for i in 1 2 3 4 5; do ping -c 4 10.1.1.\$i; done
- for i in {254..240}; do ping -c 4 172.18.32.\$i; done
- dayofmonth=`date +%d`

# Scripting DOS

- if %dayofmonth% LSS 8 set weeknum=1
- if exist c:\temp\ver.txt echo hello
- if exist c:\temp\ver.txt (echo hello) else (echo goodbye)
   LINUX
- if [\$dayofmonth -lt 8]; then weeknum=1; fi
- if [ -e /tmp/ver.txt ]; then echo hello; fi
- if [ -e /tmp/ver.txt ]; then echo hello; else echo goodbye; fi

DOS LINUX

diskpart

- fdisk /dev/sda
- Disk Management (gui)
   Partitioner (gui)

Microsoft (simple management - basic) calls each partition a drive letter. Microsoft (advanced management - dynamic) each disk can have multiple partitions which are made into volume(s) and volume(s) can be combined to drive letters or a folder paths.

Linux (simple management) calls each partition a mount point, aka a folder path.

Linux (advanced management – LVM) each disk can have multiple partitions which are made into volume(s) and volume(s) can be combined to mount point(s), ie. folder path(s).

Comparing Disk structure/labeling

With Microsoft:

Partition1 = "C:\"

Partition2 = "D:\"

Partition3 = mounted folder at c:\windows\system32\LogFiles\

This allows us to add a large drive for MS logs to grow outside drive C:\

#### With Linux:

Partition1 = "/boot" (for boot files, MBR)

Partition2 = "swap" (for page files)

Partition3 = "/" (root partition)

Partition4 = "/var/log" (disk for log files to grow outside '/')

You can look at it this way in Linux,

Create a partition and mount it to the path /c, or /d, or /e for the different lisks/partitions you want to create.

Think of every disk in linux is a folder off the root of C:

My Practice

With Microsoft

I make a 'C' drive just big enough to hold the OS plus future updates. I create a second larger partition for 'D' or 'E' and put all my data on this partition

With Linux

I create a '/' (root) partition just big enough to hold the basic Linux OS plus future updates. I create a second larger partition for '/data', which looks like a folder inside '/'.

Linux commands to check system resources:

du – disk usage

du -sh \* or 'du -sh <dirname dirname filename...>
Displays a Summary of usage in Human readable form.

DOS – this would require a script ( can be found online)

df – disk free

df -h - displays disk usage in MB

free - memory usage

free -m display memory info in MB.

mount – shows what partitions are set up and where they are accessible

Mount is also used to make a partition active.

Umount – removes (or deactivates) a partition.

5/21/12

#### Other Misc Linux commands

Other Linux commands to understand

chown – change ownership rights of a file or folder

chgrp – change group rights of a file or folder

chmod – change permissions of a file or folder

```
linux-fx86:/bradjones # ls -l
total 4
-rw-r--r-- 1 root root 0 2012-01-17 15:52 test
drwxr-xr-x 2 root root 4096 2012-02-18 18:24 test1
-rw-r--r-- 1 root root 0 2012-01-17 15:52 test2
Permissions – owner – group – other
First name listed is owner, second name listed is group.
Filename/foldername is at the end of the line.

passwd – change password of user
```

ssh – program to connect to another computer that supports ssh

#### Other Misc Linux commands

head/tail – displays the x number of lines of a file or output

head /var/log/messages – displays the top 10 lines of the messages file tail -100 /var/log/messages – displays the last 100 lines of the messages file tail -f /var/log/messages – displays the last 10 lines and continues displaying all new lines added. tail +2 /var/log/messages – displays the entire file starting on the second line.

history – displays the last x number of commands you've used

.bash\_history is located in users home folder

cron/crontab are the equivalent to MS Scheduled tasks

dos2unix/unix2dos – file converters between DOS/Windows and unix

vi, pico, or nano, are editors similar to Windows notepad.

sed and awk – two commands that are more powerful that deserves it's own classroom instruction time.

## Other Misc Linux commands

Last but by far NOT the least:

#### man

Man is a "man"ual of just about any linux executable program

Type 'man / rogram name>' without the quotes or greater/less than signs
man ls — displays the manual on how to use the 'ls' command
man sed — displays the manual on how to use the 'sed' command
man awk — displays the manual for the 'gawk'/'awk' command

### Thanks Page

I want to thank my family for putting up my my computer geekiness. I want to thank my boss for allowing me to continue to explore the world of Linux.

I want to thank all those that have helped me learn Linux to the point I can help others learn Linux

I want to thank all those wonderful websites out there that share the knowledge of Linux and make it easy for us to understand it better.

And God for everything he provides

- I can do everything through Him who gives me strength.

- Phil 4:13