

commands miscellanea		commands miscellanea (cont)		commands miscellanea (cont)		commands miscellanea (cont)	
the ps command,	which shows the status of running processes	clear	cleans the screen	kill	terminates a process	ip addr	shows ip address and related information
vimtutor	tutorial for vim	man	manual	mount	it mounts file	expr	allows to perform some mathematical operations
rmdir	erases directory	du	estimates the file memory usage	ifconfig	view the newtwork interface	env	permit to see the current environment variables
whoami	tells what kind of user you are	free	displays the amount of free and used memory in the system	whereis	find the address of a specific command	history	shows the last one hundred commands execute in the system
passwd	set up password or change the one you have	df	report file system disk space usage	uptime	show the running time of the system	iwlist	displays wireless devices plus configuration files
xemacs ".bashrc"	calls text editor	lsblk	command used to report info about block devices as follows	hostname	displays the system hostname	locate	find files by name
cat	scan docs. from conCATenate	fdisk	manipulate disk partion table	cal	show the month calender	lshw	display some basic information about the machine
ln	let you make links between files	uname	print system info	bg	sends a process to the background	lsusb	display information about usb
stty "-funtion key"	lets you set up the function keys	cat /proc/cpuinfo	cpu info	df	shows file system disk space	nice	nice - run a program with modified scheduling priority
stty -a	show the current function key	lscpu	cpu info	diff	serves to find differences between to files	pidof	find the process ID of a running program.
stty sane	fix the shell	sudo	gets root authority	lspci	serves to visualize P.C.I. devices	split	serves to split large files in to smaller ones
ls ["range"]["range"]	looks for combinations that satisfy specification	grep	search for a string in a file	top	used to manage top processes	sum	checksum and count the blocks in a file
tail -"#"	displays the last # of lines of a text file	tar	creates, view or extracts from archive	ping host	send echo message to the host		
head -"#"	displays the first #of lines of a text file	find	find files with a pattern	dig domain	show the dns specification for the domain		
less	show less of a text file	ssh	remotely login	scp	allows to remotely copy files from one machine to another machine		
awk	organize data in in columns and rows	awk	controls output				
sort	sort lines of text files	gzip	creates a *.gz compressed file				
		shutdown	turn off the machine				

commands miscellanea (cont)		setting NFS tutorial (cont)		setting NFS tutorial (cont)		File modification	
watch	execute a program periodically, showing output fullscreen	\$ sudo systemctl restart nfs-server	restart the NFS server	\$ sudo yum install nfs-utils nfs-utils-lib	also need to install nfs in the client side of the relationship	chown USER FILE	changes the user ownership of a file to the specified user
setting NFS tutorial		\$ sudo firewall-cmd --permanent -add-port=111/tcp; \$ sudo firewall-cmd --permanent -add-port=875/tcp; \$ sudo firewall-cmd --permanent -add-port=2049/tcp; \$ sudo firewall-cmd --permanent --add-port=20048/tcp; \$ sudo firewall-cmd --permanent --add-port=42955/tcp; \$ sudo firewall-cmd --permanent --add-port=46666/tcp; \$ sudo firewall-cmd --permanent --add-port=54302/tcp; \$ sudo firewall-cmd --reload	commands to open and configure appropriate ports	\$ sudo systemctl enable rpcbind \$ sudo systemctl start rpcbind \$ sudo systemctl enable nfs-server \$ sudo systemctl start nfs-server \$ sudo systemctl start nfs-lock \$ sudo systemctl start nfs-idmap	commands to start appropriate services	chown USER:GROUP FILE	changes the user and the group to the specified user
sudo yum install nfs-utils nfs-utils-lib	install NFS			\$ sudo systemctl enable rpcbind \$ sudo systemctl start rpcbind \$ sudo systemctl enable nfs-server \$ sudo systemctl start nfs-server \$ sudo systemctl start nfs-lock \$ sudo systemctl start nfs-idmap		chown USER:GROUP FILE	changes the user, and group ownership of the file to the specified user and group respectively
sudo systemctl enable rpcbind; \$ sudo systemctl start rpcbind; \$ sudo systemctl enable nfs-server; \$ sudo systemctl start nfs-server; \$ sudo systemctl start nfs-lock; \$ sudo systemctl start nfs-idmap	commands to start the service in charge of the service's functionality			\$ sudo mkdir /NFSsharedFolder; \$ sudo chmod -R 0755 /NFSsharedFolder		chown :GROUP FILE	changes the group ownership of the file to the specified group
\$ sudo nano /etc/export	open nano to modify the export file			\$ sudo nano /etc/fstab	create and set up share folder	chgrp GROUP FILE	changes the group ownership of the file to the specified group
/NFSsharedFolder 172.25.0.0/16(rw,sync,no_root_squash,no_all_squash)	add this line to the export line	move to the client	to continue the configuration	172.25.22.10:/NFSsharedFolder /NFSfolder nfs4 defaults 0 0	add this line to the fstab folder	chmod [0,1,2,4,7][0,1,2,4,7]	changes readability, writability, and executability of a file to owner, group owner, and everyone respectively
				\$ sudo mount	use this command to check what was mounted in the specified NFS server		

File modification (cont)

chmod [u(user),-g(group),o(others),a(all)][+,-][r(read),-w(write),x(execute),t(write to not delete)] File or a

tutorial on how to setup Samba

\$ sudo cp /etc/samba/smb.conf /etc/samba/smb.conf.backup

sudo mkdir /SharedFolder/

\$ sudo chmod -R 755 /SharedFolder/

\$ sudo firewall-cmd --permanent --zone=public --add-service=samba

\$ sudo firewall-cmd --reload

\$ sudo nano /etc/samba/smb.conf

follow instruction in comment then come back to this line and keep inputting the commands

\$ sudo smbpasswd -a user1

tutorial on how to setup Samba (cont)

\$ sudo systemctl enable smb.service; \$ sudo systemctl start smb.service; \$ sudo systemctl start nmb.service

Move to the client side and continue
smb://server_ip_address type in the server connection screen

the configuration file should look like this:

```
[Shared Folder]
path = /SharedFolder
read only = no
guest ok = yes
browsable = yes
writable = yes
create mask = 0755
directory mask = 0755
workgroup = WORKGROUP
```

then save and create user1.

user and groups creations and modification

groupadd GROUP creates new group

groupmod -n NewGroupName changes the group name

useradd USER creates new user

user and groups creations and modification (cont)

useradd -d /path/to/home/dir/ creates a user with specified home directory

useradd -u USERID allows to create user with personalized ID

useradd -G GROUP1, GROUP2... USER allows to create user with multiples groups

cat /etc/passwd lists all user and displays relevant information

most used commands

pwd outputs the present working directory

sudo + other command(s) allows to gain root privileges

root access root user and its privileges

cd + specific address access a specific address

cd move to home directory

cd .. go back to parent directory

ls outputs information of present directory

ls + specific address shows files in the specific directory

most used commands (cont)

ls -a option a allows to show hidden files

ls -l show deeper description of showed files

ls -h shows files in human readable format

touch "filename" creates file with the specified fileName

echo > "insert desired text" allows to write text to a file(if any, erase old text in file)

echo >> "insert text here" allows to append text to a file

cp "file" "directory" copy files to new address

mv "file" "directory" cut files to new address

mkdir "name" creates a new directory inside the present directory

mkdir /path/to/directory/"name" creates directory with a specific path

rm "file" removes files from the system

most used commands (cont)

`rm -r` removes recursively the
"dir- specified directory from
ect- the system
ory"

service related commands

`journalctl` prompts the user
with the active
services in the
system

`systemctl` Control the systemd
system and service
manager

commands miscellanea 2

`flock` manage locks
from shell scripts

`lockf` apply, test or
remove a POSIX
lock on an open
file

`fcntl` manipulate file
descriptor

`statd` NSM service
daemon

`stat` display file or file
system status

`samba` A Windows AD
and SMB/CIFS
fileserver for
UNIX

`smbpasswd` The Samba
encrypted
password file

`sssd` System Security
Services Daemon

`setgid` set group identity

`mktemp` create a
temporary file or
directory

`true` do nothing,
successfully

commands miscellanea 2 (cont)

`false` do nothing, unsucces-
fully

`if` "use" a Perl module if
a condition holds

`test` check file types and
compare values

`exit` self explanatory

`w` displays who is logged
in and what are they
doing

`fg` brings the most recent
background job to the
foreground

`sleep` delay for a specified
amount of time

`tac` concatenate and print
files in reverse

`wall` write a message to all
users

`whatis` display basic inform-
ation about a
command passed as
parameter

`yes "-` infinitely outputs a
string pass as
parameter to the
command