

RedHat/Fedora command cheat sheet:

Packing, unpacking, and installing files:

gzip compress:

```
#gzip <filename.ext>
```

gzip extract:

```
#gunzip <filename.ext>
```

gzip retrieve information about file:

```
#gzip -l <filename.ext>
```

tar archive:

```
#tar cfv <archive name.ext> <file/folder to archive>
```

tar extract:

```
#tar xvf <filename.ext>
```

tar retrieve information about file:

```
#tar tvf <filename.tar>
```

gzip and tar compress in one command:

```
#tar cvzf <archive name.tar.gz> <file/folder to archive>
```

gzip and tar extract in one command:

```
#tar xvzf <filename.tar.gz>
```

install rpm files:

```
#rpm -ivh <rpm file name>
```

install rpm package even if already installed:

```
#rpm -ivh --replacepks <rpm file name>
```

uninstall rpm packages:

```
#rpm -e <rpm package name>
```

After uninstalling an rpm package, you will find that it still has config files and other bits strewn about. The `rm -rf` and `rm -f` commands are VERY powerful and can easily render your linux installation unusable. Be very careful. A 'reasonably safe' way (provided you pay attention and are careful) to clean the files up is:

- 1) Do a `find / -name "<filename>*" | more`
- 2) Check the output and make SURE it only includes the files you want to remove.
- 3) Do a `find / -name "<filename>*" | xargs rm -f`

tar basic functions and options:

function:

c To create a new archive

x To extract files from an archive

t To list the contents of an archive

r To append files to the end of an archive

u To update files that are newer than those in the archive

d To compare files in the archive to those in the filesystem

options:

f <filename> To specify that the tar file to be read or written is named
<filename>

k To keep any existing files when extracting, i.e. don't delete the original
files

v To make tar show the files it is archiving or restoring (don't use in shell
scripts)

z To specify that the data to be written to the tar file should be gzipped

Miscellaneous commands:

To download a web page(s):

#wget -m -r -l5

Checking open network ports:

#netstat -apn | more

Show file attributes and permissions:

#ll

Show all files in a directory (including hidden .<name> files)

#ls -A

Show information about mounted volumes:

#df -h

Turn off all power management:

#xset -dpms

Load StartX setup routine:

#X86config

Display log file starting at the end:

#tail -f <file name>

Samba commands:

Add user/change password (user must have a unix account first):

#smbpasswd -a <username>

Apache commands:

.htpasswd file creation for Apache Directory security use:

To create a new .htpasswd file and add a user (will prompt for password):

#htpasswd -c /etc/httpd/conf/.htpasswd <name>

To create a new user in an existing .htpasswd file (will prompt for password):
#htpasswd /etc/httpd/conf/.htpasswd <name>

<Directory> security examples in httpd.conf (which use the .htpasswd file):

```
<Directory "/var/www/html/<directory>">
AuthType Basic
AuthName "Restricted Uploads"
AuthUserFile /etc/httpd/conf/.htpasswd
Require valid-user (means anyone in the .htpasswd file can access)
</Directory>
```

****and****

```
<Directory "/var/www/html/<directory>">
AuthType Basic
AuthName "Restricted file access"
AuthUserFile /etc/httpd/conf/.htpasswd
Require jjones (only jjones in the .htpasswd file has access)
</Directory>
```

RedHat/Fedora account creation:

To create a new user account:

```
#useradd <name>
```

To add/change a password:

```
#passwd <name> (will prompt for password twice)
```

To add a user to a group:

```
#usermod -G <groupname> <username>
```

Set owner of a file/folder:

```
#chown <user.group> <file/folder name>
```

```
#chown -R >user.group> <file/folder name> for recursive, i.e. apply changes to subfolders
```

Set permissions on a file/folder:

```
#chmod 777 <file/folder name> for full rights (dangerous!)
```

```
#chmod 775 <file/folder name> for full rights for user/group but no write/execute for 'other'
```

```
#chmod 765 <file/folder name> for full user rights, no write for 'group', and no write/execute for 'other'
```

```
Add -R for recursive, i.e. chmod -R 775 <file/folder name> to apply rights to subfolders
```

File permissions take the form of:

User	Group	Other
-RWX	RWX	RWX

The leading dash in the above table is for the type of data, d would be a directory and - indicates a file.

File permissions can be set using bits, as referenced above:

User			Group			Other		
read	write	execute	read	write	execute	read	write	execute
400	200	100	40	20	10	4	2	1

Another way to look at it would be to visualize -r--r--r-- and calculate it as:

400
40
4
= 444

~examples~

File permissions of -rwxrwxr-x would be:

400+200+100 plus 40+20+10 plus 4+1 (no write for Other) which equals 775

File permissions of -rwxr-xr-x would be:

400+200+100 plus 40+10 plus 4+1 (no write for Group or Other) which equals 755

So, chmod -R 775 /var/www/html means /html and subfolders have -rwxrwxr-x or full rights except 'Other', which doesn't have write permissions.

Making symbolic links:

#ln -s <location/filename> <name of symbolic link>

Example: ln -s /var/www/html/homesite homesite would create a link named homesite to /var/www/html/homesite which is a folder.

Sending Root system messages and logs to an email address:

Edit /etc/aliases

Un-remark (remove # symbol) from 'root:' and add the email address of the recipient.

Save file.

At the command prompt, type newaliases to update the database.

Enable daily yum updates:

Pre-FC6 setup:

chkconfig yum on

service yum start

Should see "Enabling nightly yum update: [OK]"

FC6 and later setup (yum-cron is a separate package):

yum install yum-cron

```
# chkconfig yum-cron on
# service yum-cron start
Should see "Enabling nightly yum update: [OK]"
```

Other yum features:

List all available software:

```
#yum list
```

See if there are updated packages available:

```
#yum check-update
```

Update all installed packages that have a newer version available:

```
#yum update
```

Install specific package(s) (and its dependencies, if missing any):

```
#yum install <packagename>
```

Search all known packages entries (descriptions etc) for <word>

```
#yum search <word>
```

Show basic information about a package

```
#yum info <packagename>
```