BACKUP & RESTORE

To back up the file using tar

```
[root@vivek ~]# tar -cvf etc.tar /etc
tar: Removing leading `/' from member names
/etc/
/etc/mtab
/etc/fstab
/etc/crypttab
/etc/resolv.conf
/etc/dnf/
/etc/dnf/modules.d/
/etc/dnf/modules.d/container-tools.module
```

RESULT

```
[root@vivek ~]# ll
total 27730
drwxr-srwx. 3 root vivekgroup      1024 Feb  9 03:58 acl
-rw-------. 1 root root            1387 Jan 20 06:45 anaconda-ks.cfg
-rw-r--r--. 1 root root        28385280 Feb 15 01:24 etc.tar
-rw-r--r--. 1 root root            1542 Jan 20 06:48 initial-setup-ks.cfg
drwxr-xr-x. 2 root root              21 Feb  9 03:56 sudocopy
drwxrwxr-x+ 2 root root               6 Feb  8 21:40 vivek
[root@vivek ~]#
```

Apply gzip on tar file and check the size

```
[root@vivek ~]# gzip etc.tar
[root@vivek ~]# ll
total 6934
drwxr-srwx. 3 root vivekgroup      1024 Feb  9 03:58 acl
-rw-------. 1 root root            1387 Jan 20 06:45 anaconda-ks.cfg
-rw-r--r--. 1 root root         7088844 Feb 15 01:24 etc.tar.gz
-rw-r--r--. 1 root root            1542 Jan 20 06:48 initial-setup-ks.cfg
drwxr-xr-x. 2 root root              21 Feb  9 03:56 sudocopy
drwxrwxr-x+ 2 root root               6 Feb  8 21:40 vivek
```

COPY FILE OTHER PATH

```
[root@vivek ~]# cd /home/vivek/
[root@vivek vivek]# cp /root/etc.tar.gz .
[root@vivek vivek]# ls
etc.tar.gz
```

To gunzip a file the syntax is

```
[root@vivek vivek]# gunzip etc.tar.gz
[root@vivek vivek]# ls
etc.tar
```

BACKUP & RESTORE

```
[root@vivek vivek]# tar -xvf etc.tar
etc/
etc/mtab
etc/fstab
etc/crypttab
etc/resolv.conf
etc/dnf/
etc/dnf/modules.d/
etc/dnf/modules.d/container-tools.module
etc/dnf/modules.d/llvm-toolset.module
```

RESULT

```
[root@vivek vivek]# ll
total 6924
-rw-r--r--. 1 root root 7088844 Feb 15 01:26 etc.tar.gz
```

BOTH SYNTAX UNTAR WITH UNZIP

```
[root@vivek vivek]# tar -xzvf etc.tar.gz
etc/
etc/mtab
etc/fstab
etc/crypttab
etc/resolv.conf
etc/dnf/
etc/dnf/modules.d/
etc/dnf/modules.d/container-tools.module
etc/dnf/modules.d/llvm-toolset.module
etc/dnf/modules.d/perl.module
```

```
[root@vivek vivek]# ls
etc  etc.tar.gz
```

Backup types:-

Backup type	Data backed up	Backup time	Restore time	Storage space
Full backup	All data	Slowest	Fast	High
Incremental backup*	Only new/modified files/folders	Fast	Moderate	Lowest
Differential backup	All data since last full	Moderate	Fast	Moderate
Mirror backup	Only new/modified files/folders	Fastest	Fastest	Highest

Rsync: - copying and synchronizing files

```
[root@vivek ~]# rsync -vrazh /root/etc.tar.gz  /vivek
sending incremental file list
etc.tar.gz

sent 7.03M bytes  received 35 bytes  14.06M bytes/sec
total size is 7.09M  speedup is 1.01
[root@vivek ~]# cd /
[root@vivek /]# cd vivek
[root@vivek vivek]# ls
etc.tar.gz
[root@vivek vivek]# rsync -vrazh /root/etc.tar.gz  /vivek
```

-v: verbose
-r: copies data recursively
-a : archive
-z: compress file data
-h: human-readable