

Session - 13



* Agenda - RPM / Yum.

* Package management
(Software / package) → (RPM) → (Yum)

* # rpm -q firefox (Query the software)

rpm -q vlc

rpm -e firefox (erase the software)

* # yum install firefox
→ (failed)

(We need to configure yum repos.)

* Software → multiple packages

(Dvd / iso) → for this we get Software.

* File → Here dual attached.

* App Stream & base QL = Both have Software.
→ Both of Software in both.

→ Prod + Present boasting directory.

* In Rpm we get →

rpm -i firefox --

(Install) → Software.

* When we use rpm we have to go to that particular path & then we install →

RPM

Download

URL / website

folders/1

100

folders/2

100

folders/3

200

RPM repository

- * If we need to install any folder we need to go to that path if we have multiple folders then we by one we go to that path and install that folder in our folder.
- * But in open source / Linux world have software we get from internet / website → from the URL we have to go to that path & then we can download that software & use.
- * If we download file in RPM we go to that path & install by rpm -i cmd.
- * Every time we have to go to that open repository → and install that software.
- * for saving that issue we have yum available →

yum

→ we don't need to go to each of repos, anywhere we can install or any they do with software.

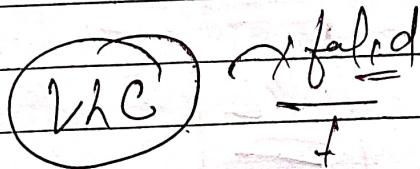
URL

→ we don't need to go to web site just provide URL to yum, internally they download & install for you.

- * If they for download software for you, they always try to get latest version of it. always they get it from after official release, they download the software with latest version.

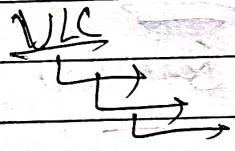
* One other of the reason is dependency.

* If we want to install VLC software, then RPM open you go to Internet they get & download the software, now they have two possibilities →



① They didn't match with my Red Hat version

② They need some other software, they depend on some other software.



(They need these software or
Java, GTK, python to be execute)

* These problems easily solved by yum =
* They go to all the locations, they download
only those software that is supported
for that OS.

* VLC is depend on 10 other software that
needed to VLC i.e. dependencies resolved.

* If these 10 need other 20, you will also
go & solve the dependencies.

* We can provide multiple location to yum i.e. repositoriy. They automatically go & find the software.

* How they going to know that go to find repos &
download & install software →

→ We need to tell yum once they go & always
download software for you.

One time tell to your repo

Date _____
Page _____

Yum

→ Yum configured

Once
they
get locat
=

[dir1] → repo

[dir2] → repo

→ Configuring to yum to
tell file location.

URL
=

* First attach find out after going to know
the software.

Distro → RHEL 8.0 → App Store

→ we have to tell yum files
location & then they get per
software.

proof.
=

* If we configure any they will be put in to
one file that is Configuration file.

cd /etc/yum/repos.d
(Path where yum file will configured)

ls
proof
gedit visual.repo
any file this is first
path

Reconfigure if you
want to configure

both here we
configured
path

Every path → is repository

Date _____

Page _____

- * Get the locatⁿ & put in file →

[dvd 1]

baseurl = /run/ ---

gpgcheck = 0

[dvd 2] file://

baseurl = /run/ ---

[dvd 3]

baseurl = https:// ---

local folder

- * We can give path of website also, so

* baseurl is full url path, they will get from local locatⁿ if we use baseurl we have to tell the protocol →

baseurl = file:/// → Protocol done

- * gpgcheck=0 → They tell Software they signed by this company.

digital signature of company.

- * If any hacker put this url you get to know that is, digital not genuine Software.

*

[dvd 1]

baseurl = file:///run/ ---

gpgcheck = 0

But after config file → we need to check if your repo list.

Test file repo id.

yum repolist

* Note, you configured you not need to do any path by centos detect / find file paths.

* When they install they take latest versions with dependencies.

rpm -qa | grep python3

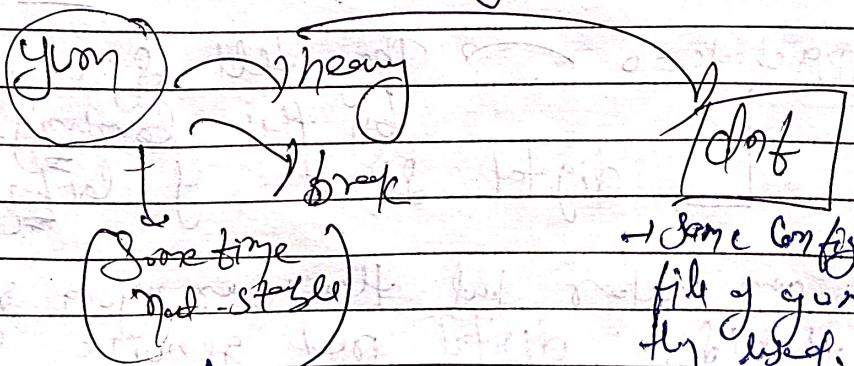
(All the software of python)

* Now the list software in yum repolist.

yum list Python3

* yum is very famous in last few years.

* But some drawbacks of yum =



* dnf → solve lots of issues.

keep yum remove firefox
↳ (uninstall)

dnf install firefox

(Firefox is still installed)

Sometimes open fails so we use yum

- * dnf is more powerful than yum
- * we can see one of the example where dnf is powerful than yum →
- * if we put wrong url in the yum config files
Then →

(and 3)
 Source = http://whole.world.com
 gpgcheck = 0

→ # yum repolist
 (when we use yum they take lots of time
 in searching the URL) can fly & that time
 not support (ctrl + C)
 The program goes hanged up.

dnf repolist
 (they automatically detect wrong url fly
 automatic out)

dnf list vlc (no click = vlc system there or not)

* R. If suppose we need vlc that is not
 in local repo → we can get from internet.
 * Some software we get from internet → if we
 get some software from internet they automatic
 Create repos configuration file & update their
 base URL automatic.

* Auto create repos of config. file.

(ceph - release) → This is the software
 when we ~~create~~ download software from internet
 they automatic create repos of it.

Start
Page

Date _____
Page _____

Software

efel-release

yum # yum config

* download efel from
project

(repo) → (base url)

point to
Project URL

wget http://dl.---

(Code that download Software from project)

Open -i efel-release.

⑧

dmz install http://dl

(They download as well as install also)

dmz repolist

(Now three repos left)

* # fedora
(Auto Config)
repo for you
repo for fed)
↳ There URL
↳ That Confirms We

dmz install (fedora curl)

② install

③ download

ed /etc/yum.repos.d/

l

some repo created by epel & fusion they
have url that go to internet &
get the software.

dnf install vlc

(They
do
anything)

(list of dependencies)

→ some from epel

→ some from fusion

* Just Configure once & download & install
Software.

*

(Yum) → dnf

once tell path

Config file → repo

```
cd /etc/yum.repos.d
ls
-----
vim dvd.repo
-----
press i for edit repo

[dvd1]
baseurl=file:///dvd/AppStream
gpgcheck=0

[dvd2]
baseurl=file:///dvd/BaseOS
gpgcheck=0

:wq(save & exit)
-----
cd
mkdir /dvd
mount /dev/cdrom /dvd
-----
vim /etc/rc.d/rc.local
-----
mount /dev/cdrom /dvd
-----
chmod +x /etc/rc.d/rc.local
-----
for Internet Pakages downloading
configuration
```

1. To install epel-release = yum or dnf
install
<https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm>

2. To install RPM Fusion RHEL 8 or compatible like CentOS

```
sudo dnf install --nogpgcheck
https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm
```

RHEL 8 required additional step

```
sudo subscription-manager repos --enable
"codeready-builder-for-rhel-8-$(uname -m)-rpms"
```