

# Red Hat System Administration I

# UNIT 3

## Installing and Updating Software Packages

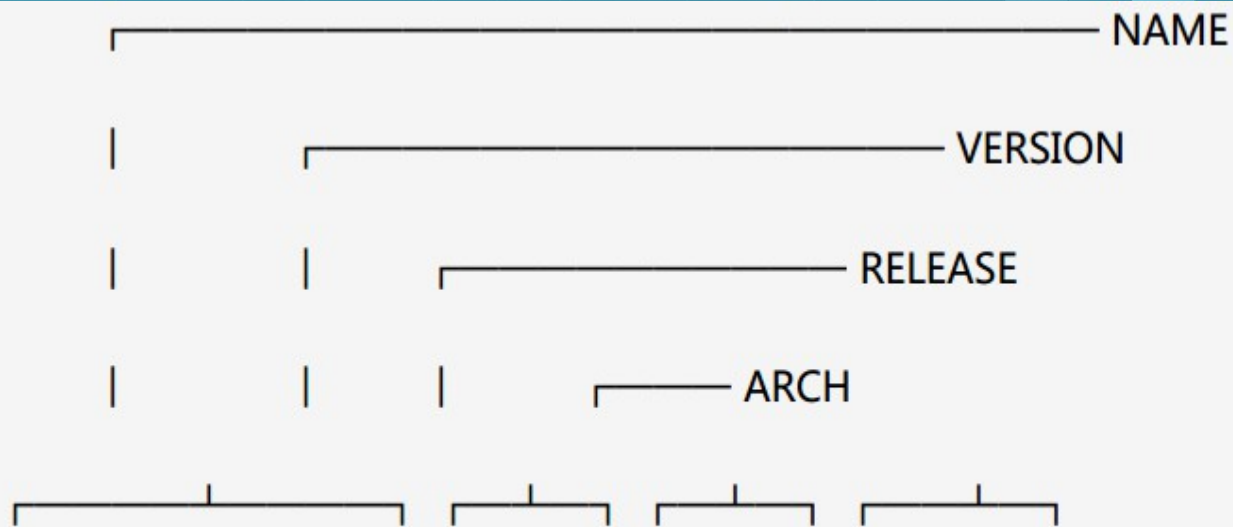
# Objectives

- Explain what an RPM package is and how RPM packages are used to manage software on a Red Hat Enterprise Linux system.
- Find, install, and update software packages using the yum command.
- Enable and disable use of Red Hat or third-party YUM repositories.
- Examine and install downloaded software package files.



# Software packages and RPM

- name-version-release.architecture:



httpd-tools-2.4.6-7.el7.x86\_64.rpm

# The yum package manager

- yum config file
  - /etc/yum.conf
- yum source file directory
  - /etc/yum.repos.d

# add yum source

- create a file in `/etc/yum.repos.d/` like this
  - `vim /etc/yum.repos.d/test.repo`
    - `[yum source name]`
    - `name=` yum source description
    - `baseurl=file|http|nfs|ftp` yum source address
    - `enable=0|1` yum srouce enable or disable
    - `gpgcheck=0|1` check package's gpgkey or not
    - `gpgkey=file` gpgkey's address
- `yum clean all`



# yum command

Task:	Command:
List installed and available packages by name	<b>yum list [NAME-PATTERN]</b>
List installed and available groups	<b>yum grouplist</b>
Search for a package by keyword	<b>yum search KEYWORD</b>
Show details of a package	<b>yum info PACKAGENAME</b>
Install a package	<b>yum install PACKAGENAME</b>
Install a package group	<b>yum groupinstall "GROUPNAME"</b>
Update all packages	<b>yum update</b>
Remove a package	<b>yum remove PACKAGENAME</b>
Display transaction history	<b>yum history</b>

# Examining downloaded packages with rpm

- Examining RPM packagefiles

Task:	Command:
Display information about a package	<code>rpm -q -i NAME</code>
List all files included in a package	<code>rpm -q -l NAME</code>
List configuration files included in a package	<code>rpm -q -c NAME</code>
List documentation files included in a package	<code>rpm -q -d NAME</code>
Show a short summary of the reason for a new package release	<code>rpm -q --changelog NAME</code>
Display the shell scripts included in a package	<code>rpm -q --scripts NAME</code>



# Using yum to install local package files

- `rpm -ivh PACKAGEFILE.rpm`
- `yum localinstall PACKAGEFILE.rpm`

# Extracting files from RPM packages

- `rpm2cpio packagename |cpio -id`

**That's all**