YUM Team:

YUM VS RPM

# Package managers:

Package managers allows us to install, update, view, search and delete software packages to suit our needs.

Each of the distributions has their own set of package managers and use them based on your Linux distributions.

# RPM:

 (formerly known as Red Hat Package Manager) is and old traditional, powerful, command-line package manager developed for the Red Hat operating system in 1997. And now used in Centos, Fedora and other Linux Distributions.

It helps us in package management but when it comes to full system update/upgrade, there is a prominent limitation. RPM can’t download and install all required dependencies automatically, rather it will list all dependencies, and then we have to manually install them.

# YUM:

Yum (stands for Yellowdog Updater Modified.) is a free and open-source command-line package-manager for Linux operating systems. It’s actually a front-end tool that uses the RPM database in the backend.

and YUM replaced the original YUP utility in 2003.

With YUM we can download and install all required dependencies automatically. So we don’t have to manually install them like RPM.

# Comparison:

|  |  |
| --- | --- |
| RPM | YUM |
| RPM is a package format and it is a low-level package manager that does basic things. | This is a top-level front-end package management tool that can do everything you need. |
| It doesn't resolve dependencies, you must install them manually. | It automatically resolves dependencies and install them simultaneously (any package will be installed with its dependencies). |
| It allows us to install multiple versions of the package at once | This does not allow and shows that the package is already installed. |
| When installing we must provide the exact location of the ".rpm" package | We can install any package available in the repository, only using the package name. |
| RPM is not dependent on YUM | It is a frontend tool that uses the RPM package manager on the backend to manage packages. |
| RPM doesn't allow you to upgrade the entire system to the latest available version | YUM allows you to upgrade your system to the latest available version |
| Doesn't allow us to automatically update/upgrade packages | Allows us to automatically update/upgrade packages |
| It doesn't use the online repository to perform any actions. | It relies entirely on the online repository to do all the work. |

# YUM Commands Examples:

1. Installing Packages:

# yum install {packagename} 🡺 EX: # yum install firefox

1. Removing Packages:

# yum remove {packagename} 🡺 EX: # yum remove firefox

1. Update Packages:

# yum update {packagename} 🡺 EX: # yum update mysql

1. List Packages to know if it’s available:

# yum list {packagename} 🡺 EX: # yum list openssh

1. Search Packages when we can’t remember the name:

# yum search {packagename} 🡺 EX: # yum search opens

1. Get information about a package:

# yum info {packagename} 🡺 EX: # yum info firefox

1. Check for updates:

# yum check-update

1. Update system:

# yum update

Required:

* Study this doc and we will prepare the presentation slides tomorrow
* We will discuss about who would talk and who would test commands o his machine.

Thanks.