

## Introduction to Using RPM

**Objective:** To learn how to use the Red Hat Package Manager (RPM).

- RPM can be used to install, update, remove, query, build and validate software packages.
- RPM will check for required disk space and package dependencies when installing the package.

### **Package Installation**

- Package file names have the following format:

***package-version-build.architecture.rpm***

- For example, the Apache package for Linux can be installed as follows:

***rpm -ivh httpd-2.0.54-10.3.i386.rpm***

### **Package Upgrade**

- A package can be installed or upgraded to new version as follows:

***rpm -Uvh httpd-2.0.54-10.3.i386.rpm***

### **Package "Freshening"**

- *rpm* can be instructed to upgrade an RPM package only if a previous version is installed.
- If an older version is not present on the system, the specified package will not be installed.

***rpm -Fvh httpd-2.0.54-10.3.i386.rpm***

### **Package Removal**

- A package can be removed from the system with the *-e* switch. This time the package name not the package file name is passed as an argument.

***rpm -e httpd***

### **Package Verification**

- Verifying an installed package compares the package's file sizes, permissions, type, owner, group and MD5 checksum with the same information in the MD5 database.
- This will indicate whether or not files have been deleted or altered since the package was installed.

***rpm -V httpd***

### **Package Query**

- The package name, version and build can be found using:

***rpm -q httpd***

- The same information about all installed packages can be found using:

***rpm -qa***