

# Installing and Managing Software

# What You Will Learn

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- Packages
- Package Managers
- Managing software for RPM based distros
- Managing software for DEB based distros

# Package

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- A collection of files
- Data / Metadata
  - Package description
  - Version
  - Dependencies

# Package Manager

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- Installs, upgrades, and removes packages
- Manages dependencies
- Keeps track of what is installed

# Installing Software on RPM Distro

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- RedHat
- CentOS
- Fedora
- Oracle Linux
- Scientific Linux

# yum

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`yum search string`

Search for string

`yum info [package]`

Display info

`yum install [-y] package`

Install package

`yum remove package`

Remove package

# **rpm**

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```
rpm -qa
```

List all installed packages.

```
rpm -qf /path/to/file
```

List the file's package.

# **rpm**

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```
rpm -ql package
```

List package's files.

```
rpm -ivh package.rpm
```

Install package.



# **rpm**

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`rpm -e package`

Erase (uninstall) package.

# Installing Software on DEB Distros

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- Debian
- Linux Mint
- Ubuntu

# APT - Advanced Packaging Tool

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```
apt-cache search string
```

Search for string.

```
apt-get install [-y] package
```

Install package.

# APT - Advanced Packaging Tool

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```
apt-get remove package
```

Remove package, leaving configuration.

```
apt-get purge package
```

Remove package, deleting configuration.

# APT - Advanced Packaging Tool

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`apt-cache show package`

Display information about package.

# dpkg

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```
dpkg -l
```

List installed packages.

```
dpkg -S /path/to/file
```

List file's package.

# dpkg

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```
dpkg -L package
```

List all files in package.

```
dpkg -i package.deb
```

Install package.

# Summary

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- Package
- Package Manager
- RPM
  - yum
  - rpm
- DEB
  - apt
  - dpkg