

Chapter 12

Package Maintenance and Update

We Shall be Covering ...

- Packages
- Why update?
- Online update
- Manual update

Packages

- An application – more than just a single file; several executable files, configuration files, documentation notes, guides etc.
- Package – files required by application and information about where to place them in the filesystem
- Installation or upgrading of applications - the installation and maintenance of packages
- Package formats, include:
 - tarballs: generic non-distribution specific
 - rpm: popularised by Red Hat Linux
 - deb: popularised by Debian Linux

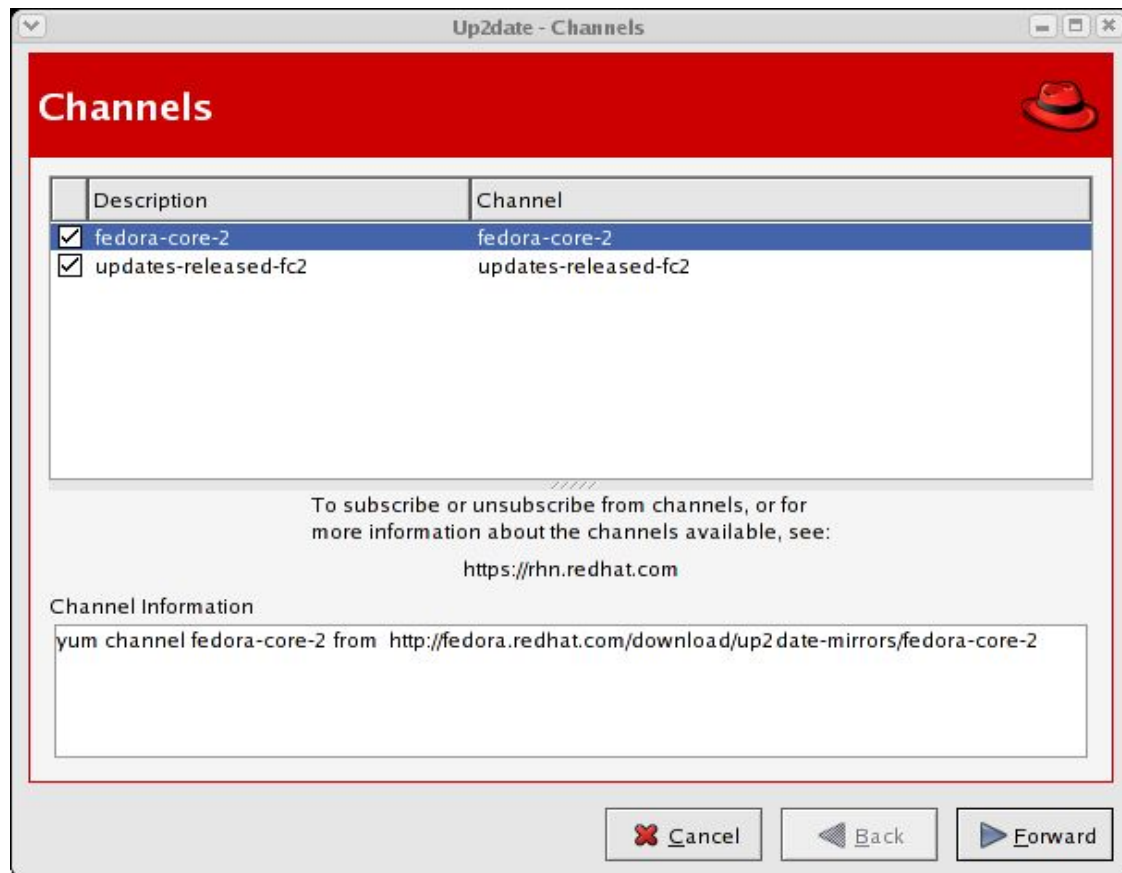
Why Update?

- Need to install obvious
- After installation, if software in use, need to update to newer versions of packages when available. **VERY IMPORTANT!!**
 - vulnerabilities due to programming bugs, configuration and design
 - new features
 - improved features

Online Update

- Best way for updates for normal user
- Exact manner may vary with distribution
- In general, distribution has online website(s) for updates and users make use of the Internet to connect to the website(s) for updating of packages
- Usually a one-click or one command effort if checking and updating all packages
- May not be practical for users on slow Internet links

Red Hat/Fedora



Online update for Red Hat or Fedora:

- Ensure you are online
- Main Menu --> System Tools --> Red Hat Network
- Enter root password (if prompted)
- Follow instructions

Debian

Online update for Debian and distributions derived from it:

- Use *APT*, as root,

```
# apt-get update
```

```
# apt-get dist-upgrade
```

- For GUI tool, install *synaptic* (a GUI front-end for APT); ensure you are online, as root from the command line,

```
# apt-get install synaptic
```

- System Settings --> Synaptic

Manual Update/Upgrade

- Manually download the package to upgrade **and** all its dependence packages (if any)
- Run command line package maintenance tool from a terminal
 - rpm used for packages in rpm format
 - dpkg used for packages in deb format

End of Chapter 12