



Package Management

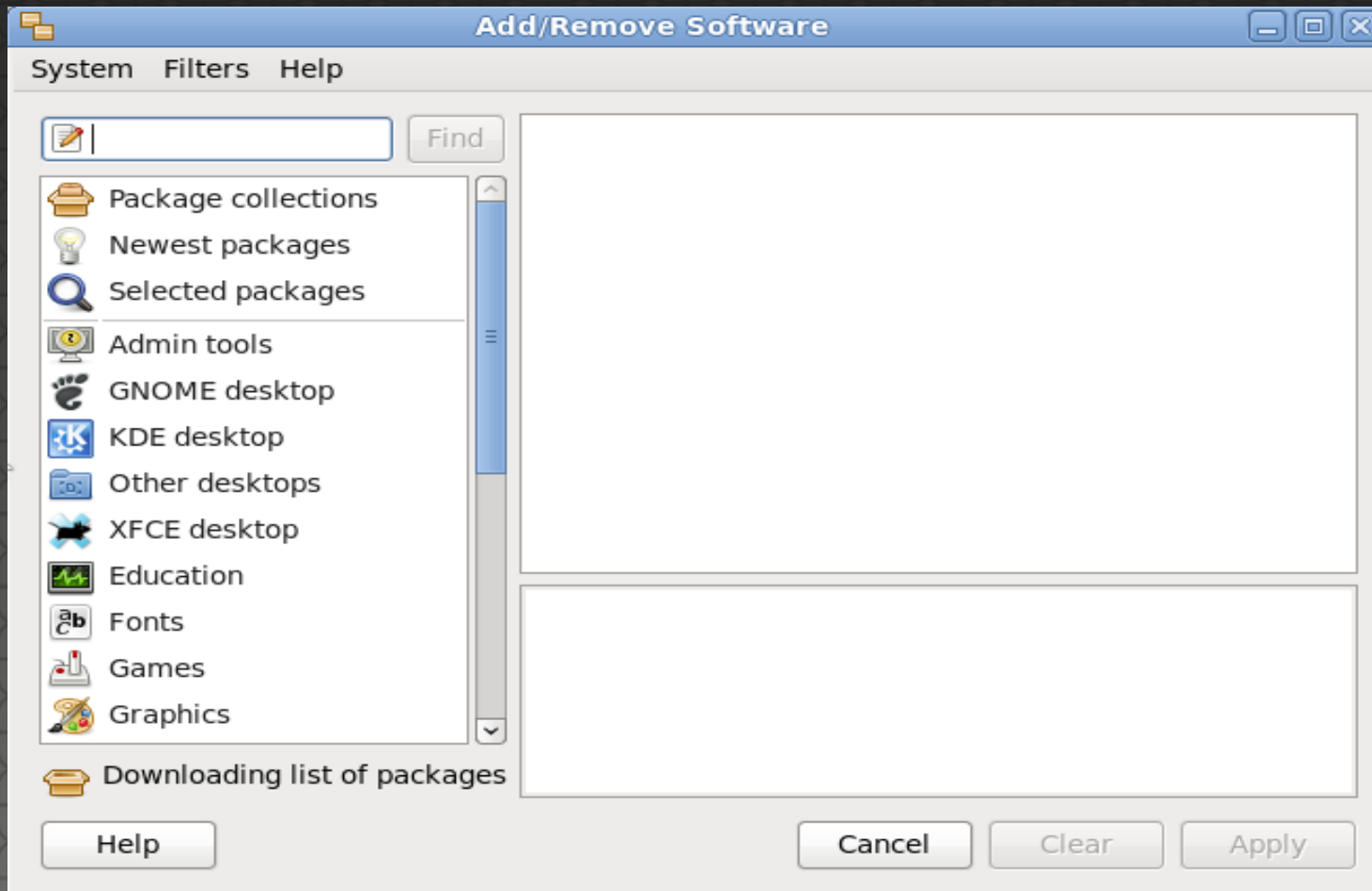
yum and rpm

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PackageKit

PackageKit, the default package manager front-end on Fedora



PackageKit



Front-ends:

There are three front-ends for PackageKit:

- `gnome-packagekit` to be used in the GNOME desktop.
- `kpackagekit` to be used in the KDE desktop.
- `pkcon` to be used on the command line.

PackageKit



Back-ends

There are number of back-ends for PackageKit.
Few of them are:

- YUM
- Opkg
- Simple Package Manager
- Advanced Packaging Tool

Yellowdog Updater Modified

Yellowdog Updater Modified (YUM) is an open-source command-line package-management utility for RPM-compatible Linux operating systems

Yum is System administration commands (usually only for root)

RPM Package Manager

RPM stand for Redhat Package Manager.

Features of RPM include:

- RPM packages can be cryptographically verified with GPG and MD5
- Original source archive(s) (e.g. .tar.gz, .tar.bz2) are included in SRPMs, making verification easier
- PatchRPMs, the RPM equivalent of a patch file, can incrementally update RPM-installed software
- Automatic build-time dependency evaluation.

Few Commands

- Install packages:

```
# rpm -ivh <package_name>
```

The above command has inability to resolve dependencies.

```
# yum install <package_name>
```

The **yum** application can call upon several repositories for dependency resolution.

Few Commands

- Install packages: (continue)

```
# yum localinstall <rpmfile>
```

This command will install the local rpm file and also search for dependencies to pull in.

```
# yum groupinstall <groupname>
```

Eg: yum groupinstall "GNOME Desktop Environment"

Few Commands

- Update packages

yum update (for all packages)

yum update <package>

rpm -F <rpmfile>

If old version currently not install, it will skip

rpm -U <rpmfile>

If old version currently not install, it will install the rpmfile

Few Commands

- Delete packages

```
# yum remove <package>
```

```
# rpm -ev <packagename>
```

```
# yum groupremove <groupname>
```

Few Commands

- Listing packages

```
# yum list [all] [package_glob]
```

```
# yum list (installed | available | updates ...  
[package_glob])
```

```
# yum grouplist
```

```
# rpm -qa          (only installed packages)
```


Few Commands

- Package information

```
# yum info <package>
```

```
# rpm -qi <package>
```

```
# yum groupinfo <packagegroup>
```

- Searching packages and files

```
# yum search <searchterm>
```

```
# rpm -qf <filename>
```

```
# yum provides <filename>
```

Questions?



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