ARYATECHNO

Understanding package management with yum or dnf

Topics : Centos Server
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Package management in CentOS is primarily done using the `yum` (Yellowdog Updater, Modified) or `dnf` (Dandified Yum) commands. These package managers allow users to install, remove, update, and manage software packages on their CentOS systems. Here's an overview of how to use `yum` or `dnf` for package management:

1. Updating Package Repositories:

- Before installing or updating packages, it's essential to update the package repositories to ensure you have the latest information about available packages. Use one of the following commands:

```
sudo yum update
```

or

```
sudo dnf update
```

2. Installing Packages:

- To install a package, use the `install` option followed by the package name. For example:

```
sudo yum install package_name
```

or

```
sudo dnf install package_name
```

- Replace `package_name` with the name of the package you want to install.

3. Removing Packages:

- To remove a package, use the `remove` option followed by the package name. For example:

```
sudo yum remove package_name
```

or

```
sudo dnf remove package_name
```

- Replace `package_name` with the name of the package you want to remove.

4. Searching for Packages:

- You can search for packages using the `search` option followed by a keyword. For example:

```
yum search keyword
```

or

```
dnf search keyword
```

- Replace `keyword` with the term you want to search for.

5. Listing Installed Packages:

- To list installed packages, you can use the `list` option. For example:

```
yum list installed
```

```
dnf list installed
```

6. Updating Packages:

- To update installed packages to the latest available versions, you can use the `update` option. For example:

```
sudo yum update
```

```
sudo dnf update
```

7. Additional Commands:

- Both `yum` and `dnf` offer additional commands and options for advanced package management tasks, such as package group management, dependency resolution, and system upgrade procedures.

8. Differences Between `yum` and `dnf`:

- `dnf` is the next-generation package manager and is the default in newer versions of CentOS (such as CentOS 8).
- `dnf` offers improved performance, dependency resolution, and additional features compared to `yum`.
- While `yum` is still available in CentOS 8, it's recommended to use `dnf` for package management tasks.