

# How to Download a Package With Its Dependencies in RockyLinux?

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To install a package on RockyLinux distro which is a derivative of RHEL and derivatives such as AlmaLinux or CentOS and others, just type **yum install** or **dnf install** and follow by the name of the package to be installed, then the package will be directly installed immediately on the server. But sometimes I just want to download a package with its dependencies for some purposes like installing into the server that can't connect to the internet or just for some experiments.

## Problems

How to download a package with its dependencies in RockyLinux?

## Solution

There are 2 methods to download a package with all its dependencies without installing the package on the server and both methods work successfully on RockyLinux9:

### A. Using **downloadonly** plugin

To execute this method, use the format below:

```
yum install --downloadonly --downloadaddir=/folder/path/in/linux package_name -y
```

For example, suppose you want to download nginx packages along with their dependencies, and all the packages are contained in the **/tmp/nginx** folder, use the following command:

```
yum install --downloadonly --downloadaddir=/tmp/nginx nginx -y
```

After you run the above command, the nginx package and its dependencies files should be in the /tmp/nginx folder as shown below:

```
[root@RockyLinux9 ~]: yum install --downloadonly --downloaddir=/tmp/nginx nginx -y
Last metadata expiration check: 0:24:06 ago on Fri 18 Apr 2025 11:10:24 PM +08.
Dependencies resolved.
=====
Package                Architecture          Version              Repository           Size
=====
Installing:
nginx                  x86_64                2:1.20.1-20.e19.0.1 appstream            36 k
Installing dependencies:
nginx-core             x86_64                2:1.20.1-20.e19.0.1 appstream            566 k

Transaction Summary
=====
Install 2 Packages

Total download size: 601 k
Installed size: 1.7 M
YUM will only download packages for the transaction.
Downloading Packages:
(1/2): nginx-1.20.1-20.e19.0.1.x86_64.rpm           58 kB/s | 36 kB   00:00
(2/2): nginx-core-1.20.1-20.e19.0.1.x86_64.rpm     323 kB/s | 566 kB 00:01
-----
Total                                               212 kB/s | 601 kB 00:02
Complete!
The downloaded packages were saved in cache until the next successful transaction.
You can remove cached packages by executing 'yum clean packages'.
[root@RockyLinux9 ~]#
[root@RockyLinux9 ~]# ls /tmp/nginx/
nginx-1.20.1-20.e19.0.1.x86_64.rpm  nginx-core-1.20.1-20.e19.0.1.x86_64.rpm
[root@RockyLinux9 ~]#
```

Download a nginx file using downloadonly option

By default, if you forget to type the `--downloaddir` option, it will be stored in the `/var/cache/dnf/appstream-*/packages` folder.

## B. Using yumdownloader

Run the command below to install the yum-utils package:

```
yum install yum-utils
```

Then to execute this method, use the format below:

```
yumdownloader --destdir=/path/in/linux --resolve package_name -y
```

For example, suppose you want to download a vim package and it is stored in the `/root/vim` folder, then use the command

below:

```
yumdownloader --destdir=/root/vim --resolve vim -y
```

After you run the above command, the vim package and its dependencies files should be in the `/root/vim` folder as shown below:

```
[root@RockyLinux9 ~]# yumdownloader --destdir=/root/vim --resolve vim -y
Last metadata expiration check: 0:17:29 ago on Fri 18 Apr 2025 11:10:24 PM +08.
(1/4): vim-filesystem-8.2.2637-21.e19.noarch.rpm          13 kB/s | 9.3 kB    00:00
(2/4): gpm-libs-1.20.7-29.e19.x86_64.rpm                1.7 kB/s | 20 kB   00:11
(3/4): vim-enhanced-8.2.2637-21.e19.x86_64.rpm          52 kB/s | 1.7 MB   00:34
(4/4): vim-common-8.2.2637-21.e19.x86_64.rpm           57 kB/s | 6.6 MB   01:57
[root@RockyLinux9 ~]#
[root@RockyLinux9 ~]# ls /root/vim
gpm-libs-1.20.7-29.e19.x86_64.rpm      vim-enhanced-8.2.2637-21.e19.x86_64.rpm
vim-common-8.2.2637-21.e19.x86_64.rpm vim-filesystem-8.2.2637-21.e19.noarch.rpm
```

Download a vim package using yumdownloader

By default, if you forget to type the `--destdir` option, the package and its dependencies will be saved in the folder where the command is run. If for example the command is executed in `/root` then the package and its dependencies files will be stored in the `/root` folder.

### Warning

You can download more than one package either using the first method or the second method, but this is not recommended because there will be mixing between dependencies files in one folder so that it makes confusion. So it is recommended to download only one package in one folder.

### Note

If you have installed a package on the server and you want to download the package along with the dependencies files, but you use the `downloadonly` plugin then you can't download the package like in the image below:

```
[root@RockyLinux9 ~]# yum install --downloadonly --downloaddir=/tmp/httpd httpd -y
Last metadata expiration check: 1:23:27 ago on Fri 18 Apr 2025 11:10:24 PM +08.
Package httpd-2.4.62-1.el9_5.2.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@RockyLinux9 ~]#
```



Failed to download a package

so you have to remove the package from the server first and then you can download the package by running the previous command. However, you can still download packages that are already installed on the server if you use yumdownloader. And if you want to install the downloaded package along with its dependency files then go to the downloaded folder and type the command below:

```
rpm -ivh *
```

so you can install the package easily and quickly like in the image below:

```
[root@RockyLinux9 ~]# cd vim
[root@RockyLinux9 vim]#
[root@RockyLinux9 vim]# ls
gpm-libs-1.20.7-29.el9.x86_64.rpm      vim-enhanced-8.2.2637-21.el9.x86_64.rpm
vim-common-8.2.2637-21.el9.x86_64.rpm  vim-filessystem-8.2.2637-21.el9.noarch.rpm
[root@RockyLinux9 vim]#
[root@RockyLinux9 vim]# rpm -ivh *
Verifying... ##### [100%]
Preparing... ##### [100%]
Updating / installing...
 1:vim-filessystem-2:8.2.2637-21.el9 ##### [ 25%]
 2:vim-common-2:8.2.2637-21.el9 ##### [ 50%]
 3:gpm-libs-1.20.7-29.el9 ##### [ 75%]
 4:vim-enhanced-2:8.2.2637-21.el9 ##### [100%]
[root@RockyLinux9 vim]#
```



Install a package with its dependencies

## References

[access.redhat.com](https://access.redhat.com)  
[dbpilot.net](https://dbpilot.net)  
[ostechnix.com](https://ostechnix.com)