`rpm-ostree` Overview

> **Notice**: Using `rpm-ostree` irresponsibly can be **destructive**.

> **Attention**: Layering packages may prevent updates and **may cause several issues until the layered packages are uninstalled**.

Install Fedora Linux packages by installing them with `rpm-ostree`.

- This is known as "layering packages" to the image.
- Layering packages will **require** a system reboot when it finishes creating the new deployment with the package(s) added to your image.
- Use this method as a **last resort** and for anything at a "system-level" only.

Common `rpm-ostree` Terminal Commands:

```
rpm-ostree install <package>
```

Installs Fedora package(s) to the system that stay between updates.

```
rpm-ostree uninstall <package>
```

Uninstalls any layered packages added to the system.

```
rpm-ostree search <package>
```

Search for Fedora packages that can be installed.

RPM packages installed on the host

Fedora containers should be used for most RPM files, but sometimes they need to be installed to your host.

You can install RPM files **to your host** with `rpm-ostree` by entering:

```
rpm-ostree install <package>.rpm
```

You may need to copy the full path (`/path/to/rpmfile.rpm`) for it to install properly.

> **Note**: The downside of installing local RPM files outside of the Fedora repositories is updates for the specific RPM package will not apply automatically.

How do I install COPR repositories?

> **Note**: It is highly advised to **not** use third-party COPR repos if you can, but if you do realize there are risks associated with it.

1. Download the .repo file and save it to `/etc/yum.repos.d/`

2. Then install the package with `rpm-ostree`

3. Reboot

If you experience issues updating your system due to GPG signature issues, then this can be fixed by either removing the COPR repository, or editing the file by changing `gpgcheck=1` to `gpgcheck=0` (or similar) and saving it **at your own risk**.

There is also an experimental `copr` utility script that ships with Bazzite. Run `copr --help` in the terminal for to see usage documentation, and the source code for the helper script can be found here.

MAJOR caveats using `rpm-ostree`

Layering packages are mostly intended for system-level applications, libraries, and other dependencies. It is recommend by upstream to use all of the methods above **before** installing software with `rpm-ostree`. Typical users should **not** be using `rpm-ostree` to install end-user graphical applications.

Layering packages can cause **severe consequences** including:

- Break upgrades or prevent rebasing.
- Conflict with existing packages as part of the image leading to dependency issues.
- Updates will take longer to download as you layer more packages to your system.
- Eventually package layering will be removed later in the future for Fedora Atomic Desktop and is only used currently as a crutch for the current software ecosystem on desktop Linux.

It is **highly recommended** to only use this command when absolutely necessary especially if the application can be obtained through other methods.

How to remove ALL Layered Packages

If you run into issues upgrading due to a layered package conflict, then either optionally uninstall the conflicted package(s) or remove all layered packages with this **command**:

```
rpm-ostree reset
```

Image Information

See information about image build date, update channel, layered packages, etc. by **entering this command in a host terminal**:

```
rpm-ostree status
```

Project Website

https://coreos.github.io/rpm-ostree/

<-- View online Bazzite documentation