



# Red Hat Enterprise Linux 9.0 Beta

## Administering the system using the GNOME desktop environment

Administering Red Hat Enterprise Linux 9 using the GNOME desktop environment



# Red Hat Enterprise Linux 9.0 Beta Administering the system using the GNOME desktop environment

---

Administering Red Hat Enterprise Linux 9 using the GNOME desktop environment

## Legal Notice

Copyright © 2022 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux<sup>®</sup> is the registered trademark of Linus Torvalds in the United States and other countries.

Java<sup>®</sup> is a registered trademark of Oracle and/or its affiliates.

XFS<sup>®</sup> is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL<sup>®</sup> is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js<sup>®</sup> is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack<sup>®</sup> Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

## Abstract

This document describes how to perform selected system administration tasks using GNOME, which is the only available desktop environment in RHEL 9.

---

## Table of Contents

<b>MAKING OPEN SOURCE MORE INCLUSIVE</b> .....	<b>3</b>
<b>PROVIDING FEEDBACK ON RED HAT DOCUMENTATION</b> .....	<b>4</b>
<b>CHAPTER 1. INSTALLING SOFTWARE IN GNOME</b> .....	<b>5</b>
1.1. PREREQUISITES	5
1.2. THE GNOME SOFTWARE APPLICATION	5
1.3. INSTALLING AN APPLICATION USING GNOME SOFTWARE	5
1.4. INSTALLING AN APPLICATION TO OPEN A FILE TYPE	7
1.5. INSTALLING AN RPM PACKAGE FILE IN GNOME	7
1.6. INSTALLING AN APPLICATION FROM THE ACTIVITIES OVERVIEW SEARCH	8
1.7. ADDITIONAL RESOURCES (OR NEXT STEPS)	9
<b>CHAPTER 2. INSTALLING APPLICATIONS USING FLATPAK</b> .....	<b>10</b>
2.1. THE FLATPAK TECHNOLOGY	10
2.2. SETTING UP FLATPAK	10
2.3. ENABLING THE RED HAT FLATPAK REMOTE	10
2.4. SEARCHING FOR FLATPAK APPLICATIONS	11
2.5. INSTALLING FLATPAK APPLICATIONS	12
2.6. LAUNCHING FLATPAK APPLICATIONS	12
2.7. UPDATING FLATPAK APPLICATIONS	13
2.8. INSTALLING FLATPAK APPLICATIONS IN THE GRAPHICAL INTERFACE	13
2.9. UPDATING FLATPAK APPLICATIONS IN THE GRAPHICAL INTERFACE	14



## MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

## PROVIDING FEEDBACK ON RED HAT DOCUMENTATION

We appreciate your input on our documentation. Please let us know how we could make it better. To do so:

- For simple comments on specific passages:
  1. Make sure you are viewing the documentation in the *Multi-page HTML* format. In addition, ensure you see the **Feedback** button in the upper right corner of the document.
  2. Use your mouse cursor to highlight the part of text that you want to comment on.
  3. Click the **Add Feedback** pop-up that appears below the highlighted text.
  4. Follow the displayed instructions.
- For submitting more complex feedback, create a Bugzilla ticket:
  1. Go to the [Bugzilla](#) website.
  2. As the Component, use **Documentation**.
  3. Fill in the **Description** field with your suggestion for improvement. Include a link to the relevant part(s) of documentation.
  4. Click **Submit Bug**.



# CHAPTER 1. INSTALLING SOFTWARE IN GNOME

You can install applications and other software packages using several methods in GNOME.

## 1.1. PREREQUISITES

- You have administrator permissions on the system.

## 1.2. THE GNOME SOFTWARE APPLICATION

GNOME Software is an utility that enables you to install and update applications and software components in a graphical interface.

GNOME Software provides a catalog of graphical applications, which are the applications that include a **\*.desktop** file. The available applications are grouped into multiple categories according to their purpose.

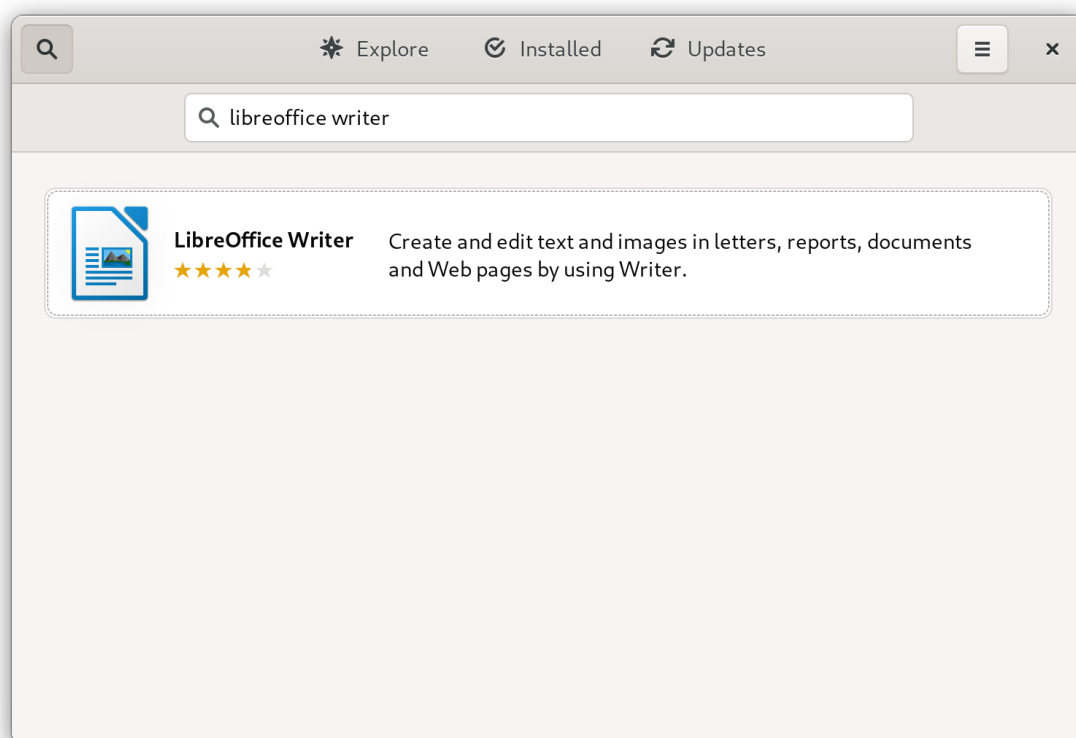
GNOME Software uses the PackageKit and Flatpak technologies as its back ends.

## 1.3. INSTALLING AN APPLICATION USING GNOME SOFTWARE

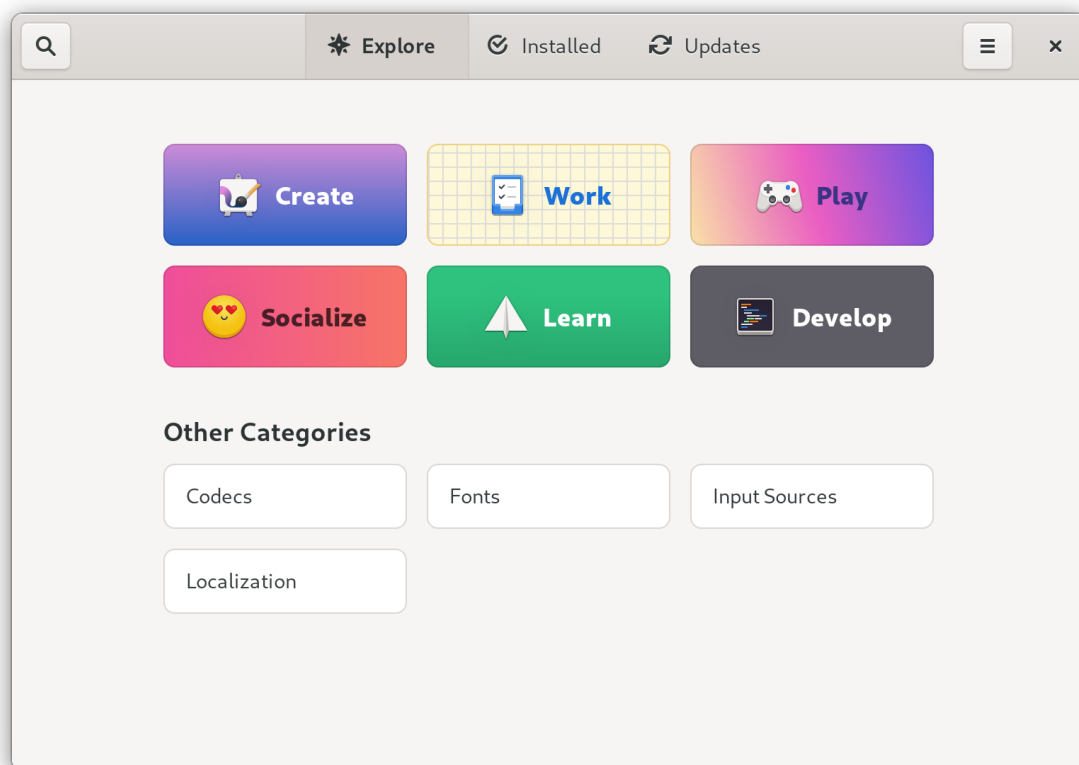
This procedure installs a graphical application using the GNOME Software utility.

### Procedure

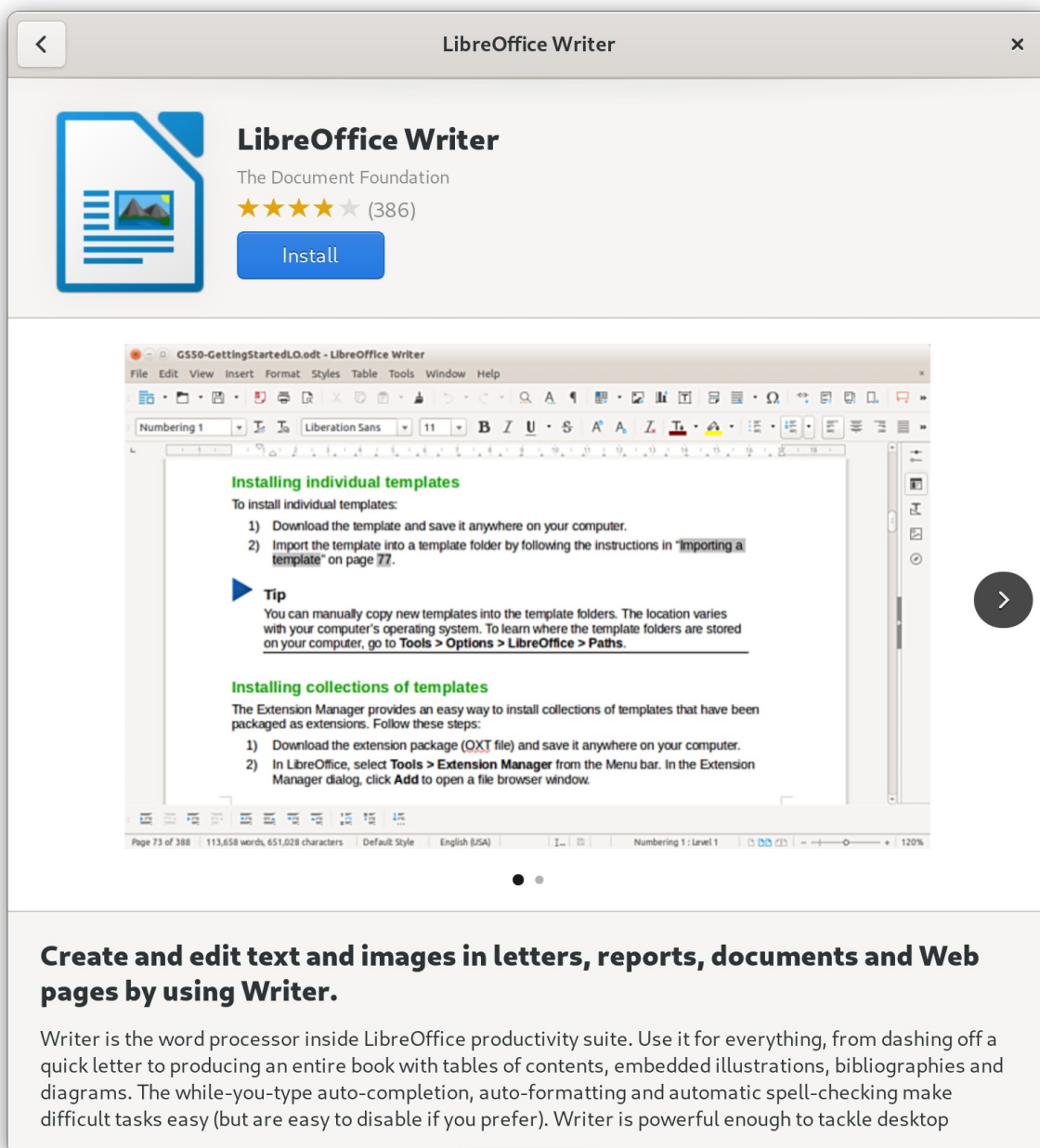
1. Launch the **GNOME Software** application.
2. Find the application that you want to install using any of the following methods:
  - Click the search button ( ) in the upper-left corner of the window and type the name of the application.



- Browse the application categories in the **Explore** tab.



3. Click the selected application.
4. Click **Install**.



### Create and edit text and images in letters, reports, documents and Web pages by using Writer.

Writer is the word processor inside LibreOffice productivity suite. Use it for everything, from dashing off a quick letter to producing an entire book with tables of contents, embedded illustrations, bibliographies and diagrams. The while-you-type auto-completion, auto-formatting and automatic spell-checking make difficult tasks easy (but are easy to disable if you prefer). Writer is powerful enough to tackle desktop

## 1.4. INSTALLING AN APPLICATION TO OPEN A FILE TYPE

This procedure installs an application that can open a given file type.

### Prerequisites

- You can access a file of the required file type in your file system.

### Procedure

1. Try opening a file that is associated with an application that is currently not installed on your system.
2. GNOME automatically identifies the suitable application that can open the file, and offers to download the application.

## 1.5. INSTALLING AN RPM PACKAGE FILE IN GNOME

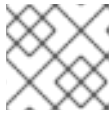
This procedure installs an RPM software package that you manually downloaded as a file.

### Prerequisites

- You have downloaded the required RPM package.

### Procedure

1. In the **Files** application, open the directory that stores the downloaded RPM package.



#### NOTE

By default, downloaded files are stored in the **/home/user/Downloads/** directory.

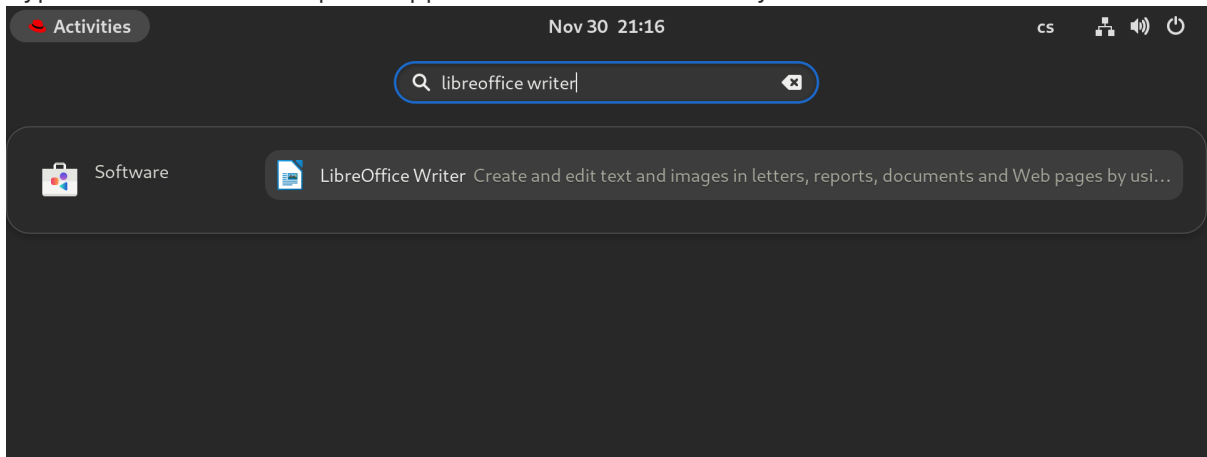
2. Double-click the RPM package file to install it.

## 1.6. INSTALLING AN APPLICATION FROM THE ACTIVITIES OVERVIEW SEARCH

This procedure installs a graphical application from search results on the GNOME **Activities Overview** screen.

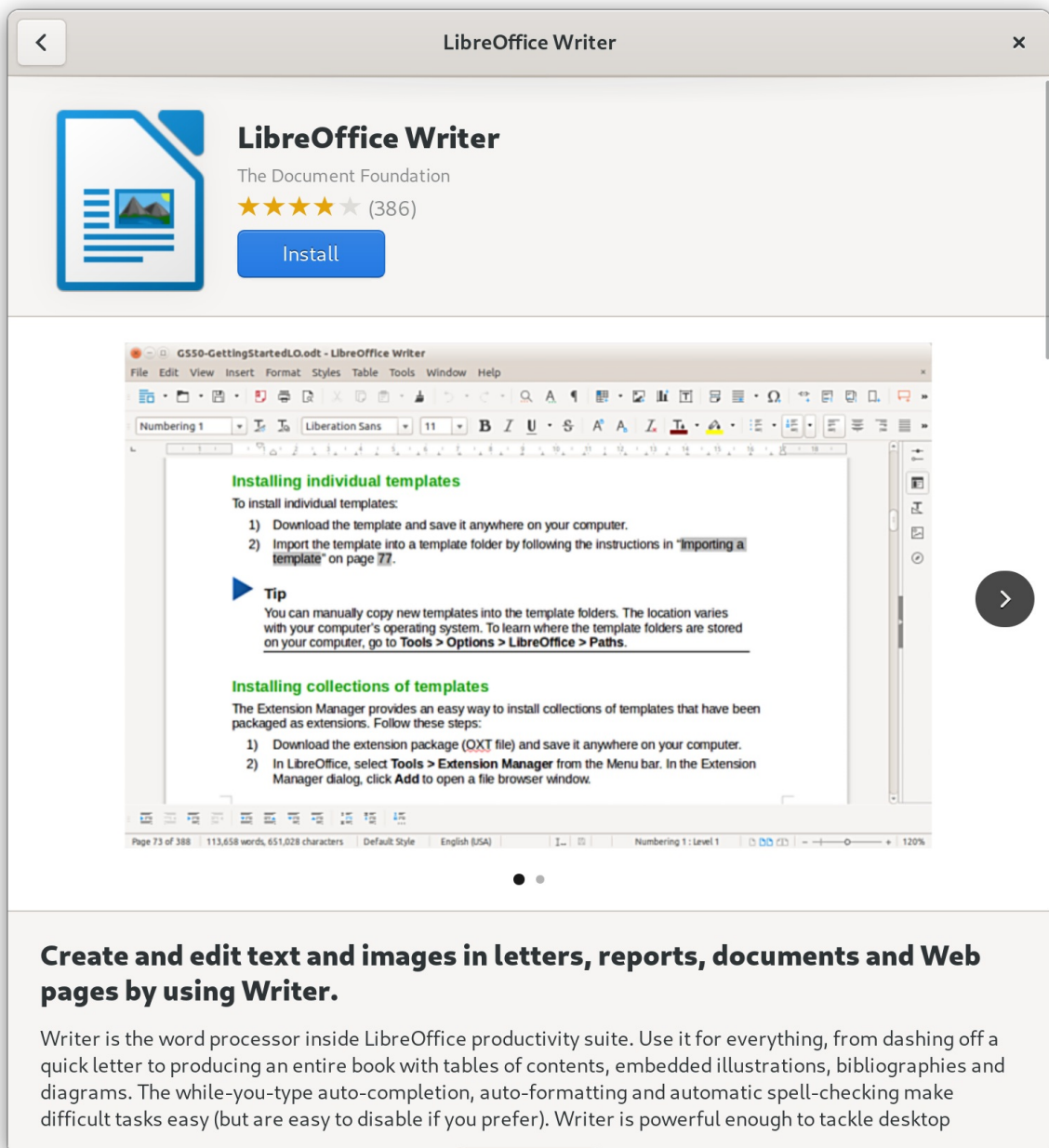
### Procedure

1. Open the **Activities Overview** screen.
2. Type the name of the required application in the search entry.



The search results display the application's icon, name, and description.

3. Click the application's icon to open the **Software** application.



### Create and edit text and images in letters, reports, documents and Web pages by using Writer.

Writer is the word processor inside LibreOffice productivity suite. Use it for everything, from dashing off a quick letter to producing an entire book with tables of contents, embedded illustrations, bibliographies and diagrams. The while-you-type auto-completion, auto-formatting and automatic spell-checking make difficult tasks easy (but are easy to disable if you prefer). Writer is powerful enough to tackle desktop

4. Click **Install** to finish the installation in **Software**.

#### Verification

- Click **Open** to launch the installed application.

## 1.7. ADDITIONAL RESOURCES (OR NEXT STEPS)

- [Managing software with YUM](#)
- [Chapter 2, Installing applications using Flatpak](#)

## CHAPTER 2. INSTALLING APPLICATIONS USING FLATPAK

You can install certain applications using the Flatpak package manager. The following sections describe how to search for, install, launch, and update Flatpak applications on the command line and in the graphical interface.



### IMPORTANT

Red Hat provides Flatpak applications only as a Technology Preview feature. Technology Preview features are not supported with Red Hat production service level agreements (SLAs) and might not be functionally complete. Red Hat does not recommend using them in production. These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process. For more information about the support scope of Red Hat Technology Preview features, see <https://access.redhat.com/support/offerings/techpreview>.

### 2.1. THE FLATPAK TECHNOLOGY

Flatpak provides a sandbox environment for application building, deployment, distribution, and installation.

Applications that you launch using Flatpak have minimum access to the host system, which protects the system installation against third-party applications. Flatpak provides application stability regardless of the versions of libraries installed on the host system.

Flatpak applications are distributed from repositories called remotes. Red Hat provides a remote with RHEL applications. Additionally, third-party remotes are available as well. Red Hat does not support applications from third-party remotes.

### 2.2. SETTING UP FLATPAK

This procedure installs the Flatpak package manager.

#### Procedure

- Install the **flatpak** package:

```
# dnf install flatpak
```

### 2.3. ENABLING THE RED HAT FLATPAK REMOTE

This procedure configures the Red Hat Container Catalog as a Flatpak remote on your system.

#### Prerequisites

- You have an account on the Red Hat Customer Portal.



### NOTE

For large-scale deployments where the users do not have Customer Portal accounts, Red Hat recommends using registry service accounts. For details, see [Registry Service Accounts](#).

## Procedure

1. Enable the **rhel** Flatpak remote:

```
$ flatpak remote-add \
  --if-not-exists \
  rhel \
  https://flatpaks.redhat.io/rhel.flatpakrepo
```

2. Log into the Red Hat Container Catalog:

```
$ podman login registry.redhat.io

Username: your-user-name
Password: your-password
```

Provide the credentials to your Red Hat Customer Portal account or your registry service account tokens.

By default, Podman saves the credentials only until you log out.

3. Optional: Save your credentials permanently. Use one of the following options:

- Save the credentials for the current user:

```
$ cp $XDG_RUNTIME_DIR/containers/auth.json \
  $HOME/.config/flatpak/oci-auth.json
```

- Save the credentials system-wide:

```
# cp $XDG_RUNTIME_DIR/containers/auth.json \
  /etc/flatpak/oci-auth.json
```

For best practices, Red Hat recommends that you log into the Red Hat Container Catalog using registry account tokens when installing credentials system-wide.

## Verification

- List the enabled Flatpak remotes:

```
$ flatpak remotes

Name  Options
rhel  system,oci,no-gpg-verify
```

## 2.4. SEARCHING FOR FLATPAK APPLICATIONS

This procedure searches for an application in the enabled Flatpak remotes on the command line. The search uses the application name and description.

### Prerequisites

- Flatpak is installed.

- The Red Hat Flatpak repository is enabled.

### Procedure

- Search for an application by name:

```
$ flatpak search application-name
```

For example, to search for the **LibreOffice** application, use:

```
$ flatpak search LibreOffice
```

The search results include the ID of the application:

```
Application ID          Version Branch Remotes Description
org.libreoffice.LibreOffice    stable rhel   The LibreOffice productivity suite
```

## 2.5. INSTALLING FLATPAK APPLICATIONS

This procedure installs a selected application from the enabled Flatpak remotes on the command line.

### Prerequisites

- Flatpak is installed.
- The Red Hat Flatpak remote is enabled.

### Procedure

- Install an application from the **rhel** remote:

```
$ flatpak install rhel application-id
```

Replace *application-id* with the ID of the application. For example:

```
$ flatpak install rhel org.libreoffice.LibreOffice
```

## 2.6. LAUNCHING FLATPAK APPLICATIONS

This procedure launches an installed Flatpak application from the command line.

### Prerequisites

- Flatpak is installed.
- The selected Flatpak application is installed.

### Procedure

- Launch the application:



```
$ flatpak run application-id
```

Replace *application-id* with the ID of the application. For example:

```
$ flatpak run org.libreoffice.LibreOffice
```

## 2.7. UPDATING FLATPAK APPLICATIONS

This procedure updates one or more installed Flatpak applications to the most recent version in the corresponding Flatpak remote.

### Prerequisites

- Flatpak is installed.
- A Flatpak remote is enabled.

### Procedure

- Update one or more Flatpak applications:
  - To update a specific Flatpak application, specify the application ID:

```
$ flatpak update application-id
```

- To update all Flatpak applications, specify no application ID:

```
$ flatpak update
```

## 2.8. INSTALLING FLATPAK APPLICATIONS IN THE GRAPHICAL INTERFACE

This procedure searches for Flatpak applications using the **Software** application.

### Prerequisites

- Flatpak is installed.
- The Red Hat Flatpak remote is enabled.

### Procedure

1. Open the **Software** application.
2. Make sure that the **Explore** tab is active.
3. Click the search button in the upper-left corner of the window.
4. In the input box, type the name of the application that you want to install, such as **LibreOffice**.
5. Select the correct application in the search results.

If the application is listed several times, select the version where the **Source** field in the **Details** section reports **flatpaks.redhat.io**.

6. Click the **Install** button.
7. If **Software** asks you to log in, enter your Customer Portal credentials or your registry service account tokens.
8. Wait for the installation process to complete.
9. Optional: Click the **Launch** button to launch the application.

## 2.9. UPDATING FLATPAK APPLICATIONS IN THE GRAPHICAL INTERFACE

This procedure updates one or more installed Flatpak applications using the **Software** application.

### Prerequisites

- Flatpak is installed.
- A Flatpak remote is enabled.

### Procedure

1. Open the **Software** application.
2. Select the **Updates** tab.
3. In the **Application Updates** section, you can find all available updates to Flatpak applications.
4. Update one or more applications:
  - To apply all available updates, click the **Update All** button.
  - To update only a specific application, click the **Update** button next to the application item.
5. Optional: Enable automatic application updates.
  - a. Click the menu button in the upper-right corner of the window.
  - b. Select **Update Preferences**.
  - c. Enable **Automatic Updates**.  
Flatpak applications now update automatically.