



Red Hat build of MicroShift 4.17

Installing optional RPM packages

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Abstract

This document provides information about installing optional RPM packages with MicroShift to provide additional cluster and application services.

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CHAPTER 1. INSTALLING OPTIONAL RPM PACKAGES

You can install optional RPM packages with MicroShift to provide additional cluster and application services.

1.1. INSTALLING OPTIONAL PACKAGES

When you install MicroShift, optional RPM packages can be added. Examples of optional RPMs include those designed to expand your network, add and manage operators, and manage applications. Use the following procedures to add the packages that you need.

1.1.1. Installing the Operator Lifecycle Manager (OLM) from an RPM package

When you install MicroShift, the Operator Lifecycle Manager (OLM) package is not installed by default. You can install the OLM on your MicroShift instance using an RPM package.

Procedure

1. Install the OLM package by running the following command:

```
$ sudo dnf install microshift-olm
```

2. To apply the manifest from the package to an active cluster, run the following command:

```
$ sudo systemctl restart microshift
```

Additional resources

- [Using Operator Lifecycle Manager with MicroShift](#)

1.1.2. Installing the GitOps Argo CD manifests from an RPM package

You can use a lightweight version of OpenShift GitOps with MicroShift to help manage your applications. Install the necessary Argo CD manifests using an RPM package. This RPM package included the necessary manifests that runs core Argo CD.



IMPORTANT

This process installs the basic GitOps functionalities. The Argo CD CLI is not available on MicroShift.

Prerequisites

- You installed MicroShift version 4.14 or higher
- Additional RAM storage of 250MB recommended

Procedure

1. Enable the GitOps repository with the subscription manager by running the following command:

```
$ sudo subscription-manager repos --enable=gitops-1.12-for-rhel-9-$(uname -m)-rpms
```

2. Install the GitOps package by running the following command:

```
$ sudo dnf install -y microshift-gitops
```

3. To deploy Argo CD pods, restart the MicroShift service by running the following command:

```
$ sudo systemctl restart microshift
```

Verification

- You can verify that your pods are running properly by running the following command:

```
$ oc get pods -n openshift-gitops
```

Example output

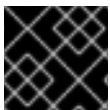
```
NAME                                READY STATUS RESTARTS AGE
argocd-application-controller-0     1/1   Running 0      4m11s
argocd-redis-56844446bc-dzmfh       1/1   Running 0      4m12s
argocd-repo-server-57b4f896cf-7qk8l 1/1   Running 0      4m12s
```

Additional resources

- [Automating application management with the GitOps controller](#)

1.1.3. Installing the multiple networks plugin

Use this procedure to install the MicroShift Multus CNI plugin alongside a new MicroShift installation. The MicroShift Multus Container Network Interface (CNI) plugin is not installed by default. If you want to attach additional networks to a pod for high-performance network configurations, install the **microshift-multus** RPM package.



IMPORTANT

Uninstalling the MicroShift Multus CNI is not supported.

Procedure

- Install the Multus RPM package by running the following command:

```
$ sudo dnf install microshift-multus
```

TIP

If you create your custom resources (CRs) while you are completing your installation of MicroShift, you can avoid restarting the service to apply them.

Next steps

1. Continue with your new MicroShift installation, including any add-ons.
2. Create the custom resources (CRs) needed for your MicroShift Multus CNI plugin.

3. Configure other networking CNIs as needed.
4. After you have finished installing all of the RPMs that you want to include, start the MicroShift service. The MicroShift Multus CNI plugin is automatically deployed.

Additional resources

- [About using multiple networks](#)