



Red Hat build of MicroShift 4.17

Red Hat build of MicroShift release notes

Highlights of what is new and what has changed with this MicroShift release

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Abstract

The release notes for MicroShift summarize all new features and enhancements, notable technical changes, major corrections from the previous version, and any known bugs.

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CHAPTER 1. RED HAT BUILD OF MICROSHIFT 4.17 RELEASE NOTES

Red Hat build of MicroShift (MicroShift) provides developers and IT organizations with small-form-factor and edge computing delivered as an application that customers can deploy on top of their managed Red Hat Enterprise Linux (RHEL) devices at the edge. Built on OpenShift Container Platform and Kubernetes, MicroShift provides an efficient way to operate single-node clusters in low-resource edge environments.

MicroShift is designed to make control plane restarts economical and be lifecycle-managed as a single unit by the operating system. Updates, roll-backs, and configuration changes consist of simply staging another version in parallel and then - without relying on a network - flipping to and from that version and restarting.

1.1. ABOUT THIS RELEASE

Version 4.17 of MicroShift includes new features and enhancements. Update to the latest version of MicroShift to receive all of the latest features, bug fixes, and security updates. MicroShift is derived from OpenShift Container Platform 4.17 and uses the CRI-O container runtime. New features, changes, and known issues that pertain to MicroShift are included in this topic.

You can deploy MicroShift clusters to on-premise, cloud, disconnected, and offline environments.

MicroShift 4.17 is supported on Red Hat Enterprise Linux (RHEL) 9.4.

For lifecycle information, see the [Red Hat build of MicroShift Life Cycle Policy](#) .

1.2. NEW FEATURES AND ENHANCEMENTS

This release adds improvements related to the following components and concepts.

1.2.1. Red Hat Enterprise Linux (RHEL)

- MicroShift 4.17 runs on Red Hat Enterprise Linux (RHEL) 9.4.

1.2.2. Updating

Updating two minor versions in a single step is not supported in 4.17. Updates for both single-version minor releases and patch releases are supported.

1.2.3. Networking

1.2.3.1. IPv6 single and dual-stack IPv6 networking now available

With this release, you can run MicroShift and your workloads with either IPv6 only or IPv4 and IPv6 dual-stack networking protocols. Ingress and egress traffic can be on either IPv4 or IPv6 traffic, mixed or parallel. See [Configuring IPv6 networking](#) .

1.2.4. Storage

1.2.4.1. Resource footprint reduction for LVM storage driver now available

With this release, the resource footprint of the LVM storage driver is significantly reduced, particularly in terms of memory consumption.

1.2.4.2. Disabling and uninstalling LVM Storage CSI provider and CSI snapshot deployments now available

With this release, MicroShift can now be configured to disable and uninstall the container storage interface (CSI) provider or the CSI snapshot capabilities which can reduce the use of runtime resources such as RAM, CPU, and storage. See [Disabling and uninstalling LVMS CSI provider and CSI snapshot deployments](#).

1.2.5. Running applications

1.2.5.1. Low-latency performance for applications now available

You can now run a MicroShift cluster with low-latency response rates. Using a low-latency MicroShift configuration with operating system tuning results in reduced application response times and can include deterministic performance. Using workload partitioning is also recommended. See [Configuring low latency](#) for more information.

1.2.5.2. Support for workload partitioning

With this release, workload partitioning is supported in MicroShift. See [Workload partitioning](#) for more information.

1.2.6. Documentation enhancements

1.2.6.1. Data cleanup now documented

With this release, the **microshift-cleanup-data** script is documented. See [Data cleanup](#) for more information.

1.2.6.2. Installation topics are reorganized

With this release, system requirements, installation types, and information about installing add-ons are reorganized into discrete topics so that they are easier to use.

1.3. TECHNOLOGY PREVIEW FEATURE

One feature in this release is currently in Technology Preview. This experimental feature is not intended for production use. Note the following scope of support on the Red Hat Customer Portal for this feature:

[Technology Preview Features Support Scope](#)

1.3.1. Red Hat Enterprise Linux (RHEL) image mode Technology Preview feature

- You can now install MicroShift using a **bootc** container image. Image mode for RHEL is a Technology Preview deployment method that uses a container-native approach to build, deploy and manage the operating system as a bootc container image.

See [Using image mode for RHEL with MicroShift](#) for more information.

1.4. ASYNCHRONOUS ERRATA UPDATES

Security, bug fix, and enhancement updates for MicroShift 4.17 are released as asynchronous errata through the Red Hat Network. All MicroShift 4.17 errata are [available on the Red Hat Customer Portal](#). For more information about asynchronous errata, read the [MicroShift Life Cycle](#).

Red Hat Customer Portal users can enable errata notifications in the account settings for Red Hat Subscription Management (RHSM). When errata notifications are enabled, you are notified through email whenever new errata relevant to your registered systems are released.



NOTE

Red Hat Customer Portal user accounts must have systems registered and consuming MicroShift entitlements for MicroShift errata notification emails to generate.

This section is updated over time to provide notes on enhancements and bug fixes for future asynchronous errata releases of MicroShift 4.17. Versioned asynchronous releases, for example with the form MicroShift 4.17.z, are detailed in the following subsections.

1.4.1. RHBA-2024:7924 - MicroShift 4.17.1 Generally Available release advisory

Issued: 15 October 2024

Red Hat build of MicroShift release 4.17.1 is now available. Bug fixes and enhancements are listed in the [RHBA-2024:7924](#) advisory. Release notes for bug fixes and enhancements are provided in this documentation. The images that are included in the update are provided by the OpenShift Container Platform [RHSA-2024:7922](#) advisory.

See the latest images included with MicroShift by [listing the contents of the MicroShift RPM release package](#).

1.4.2. RHBA-2024:8231 - MicroShift 4.17.2 bug fix and enhancement update advisory

Issued: 23 October 2024

Red Hat build of MicroShift release 4.17.2 is now available. Bug fixes and enhancements are listed in the [RHBA-2024:8231](#) advisory. Release notes for bug fixes and enhancements are provided in this documentation. The images that are included in the update are provided by the OpenShift Container Platform [RHSA-2024:8229](#) advisory.

See the latest images included with MicroShift by [listing the contents of the MicroShift RPM release package](#).

1.4.3. RHBA-2024:8436 - MicroShift 4.17.3 bug fix and enhancement update advisory

Issued: 29 October 2024

Red Hat build of MicroShift release 4.17.3 is now available. Bug fixes and enhancements are listed in the [RHBA-2024:8436](#) advisory. Release notes for bug fixes and enhancements are provided in this documentation. The images that are included in the update are provided by the OpenShift Container Platform [RHSA-2024:8434](#) advisory.

See the latest images included with MicroShift by [listing the contents of the MicroShift RPM release package](#).

1.4.4. RHBA-2024:8983 - MicroShift 4.17.4 bug fix and enhancement update advisory

Issued: 13 November 2024

Red Hat build of MicroShift release 4.17.4 is now available. Bug fixes and enhancements are listed in the [RHBA-2024:8983](#) advisory. Release notes for bug fixes and enhancements are provided in this documentation. The images that are included in the update are provided by the OpenShift Container Platform [RHSA-2024:8981](#) advisory.

See the latest images included with MicroShift by [listing the contents of the MicroShift RPM release package](#).

1.4.5. RHBA-2024:9612 - MicroShift 4.17.5 bug fix and enhancement update advisory

Issued: 19 November 2024

Red Hat build of MicroShift release 4.17.5 is now available. Bug fixes and enhancements are listed in the [RHBA-2024:9612](#) advisory. Release notes for bug fixes and enhancements are provided in this documentation. The images that are included in the update are provided by the OpenShift Container Platform [RHSA-2024:9610](#) advisory.

See the latest images included with MicroShift by [listing the contents of the MicroShift RPM release package](#).