Red Hat OpenShift Local 2.17

Release Notes and Known Issues

Highlighted features and identified problems in Red Hat OpenShift Local 2.17

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Abstract

This document lists and briefly describes new and improved features of Red Hat OpenShift Local 2.17. It also contains information about potential problems you may encounter while using the software. Where possible, workarounds are described for identified issues.

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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.

PART I. RELEASE NOTES

These are the most important features and bug fixes in the Red Hat OpenShift Local 2.17 product.

CHAPTER 1. COMPONENT VERSIONS

Red Hat OpenShift Local 2.17 has the following versions of the main components:

Table 1.1. Red Hat OpenShift Local, Component versions

Component	Version
OpenShift Container Platform	4.12.9
OpenShift client binary (**oc**)	v4.12.9
Podman binary	4.4.1

CHAPTER 2. MINIMUM SYSTEM REQUIREMENTS

Red Hat OpenShift Local has the following minimum hardware and operating system requirements.

2.1. HARDWARE REQUIREMENTS

Red Hat OpenShift Local is supported on AMD64, Intel 64 processor and M1 architectures. Red Hat OpenShift Local does not support nested virtualization.

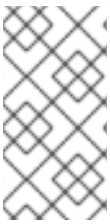
Depending on the desired container runtime, Red Hat OpenShift Local requires the following system resources:

2.1.1. For OpenShift Container Platform

- 4 physical CPU cores
- 9 GB of free memory
- 35 GB of storage space

2.1.2. For Red Hat Device Edge

- 2 physical CPU cores
- 4 GB of free memory
- 35 GB of storage space



NOTE

The OpenShift Container Platform and Red Hat Device Edge presets require these minimum resources to run in the Red Hat OpenShift Local instance. Some workloads may require more resources. To assign more resources to the Red Hat OpenShift Local instance, see Configuring the instance.

2.1.3. For the Podman container runtime

- 2 physical CPU cores
- 2 GB of free memory
- 35 GB of storage space

2.2. OPERATING SYSTEM REQUIREMENTS

Red Hat OpenShift Local requires the following minimum version of a supported operating system:

2.2.1. Microsoft Windows

- On Microsoft Windows, Red Hat OpenShift Local requires the Windows 10 Fall Creators Update (version 1709) or later. Red Hat OpenShift Local does not work on earlier versions of Microsoft Windows. Microsoft Windows 10 Home Edition is not supported.

2.2.2. macOS

- On macOS, Red Hat OpenShift Local requires macOS 11 Big Sur or later. Red Hat OpenShift Local does not work on earlier versions of macOS.

2.2.3. Linux

- On Linux, Red Hat OpenShift Local is supported only on the latest two Red Hat Enterprise Linux/CentOS 8 and 9 minor releases and on the latest two stable Fedora releases.
- When using Red Hat Enterprise Linux, the machine running Red Hat OpenShift Local must be registered with the Red Hat Customer Portal .
- Ubuntu 18.04 LTS or later and Debian 10 or later are not supported and may require manual set up of the host machine.
- See Required software packages to install the required packages for your Linux distribution.

CHAPTER 3. CHANGES AND IMPROVEMENTS

These are some notable changes introduced in Red Hat OpenShift Local 2.17.

3.1. NOTABLE ENHANCEMENTS

- You can use Red Hat OpenShift Local for development and testing purposes.
- Red Hat OpenShift Local installs on your computer one of these presets:
  - A minimal, preconfigured OpenShift Container Platform 4.12 cluster
  - Podman 4.4.1 container runtime
- The preset runs in a Red Hat Enterprise Linux virtual machine, on the native hypervisor, on these platforms:
  - Linux
  - macOS
  - Microsoft Windows 10

3.2. TECHNOLOGY PREVIEW

Support for these features falls under the Technology Preview Features Support Scope .

- Red Hat OpenShift Local 2.17 includes the ability to create a custom bundle based on the currently running cluster with the **crc bundle generate** command. This command, its parameters, and behavior might change in incompatible ways in future releases.

3.3. NOTABLE CHANGES

- With Red Hat OpenShift Local 2.17, the **crc status** command now shows the correct preset information when using the **microshift** preset. See #3594.
- Red Hat OpenShift Local automatically modifies the **kubeconfig** file for a user to make **microshift** as the default context. See #3591.
- Red Hat OpenShift Local adds **microshift** as a possible value to the help string of the **preset** configuration option. See #3576.
- Before this update, the **oc** binary was not found when using the **microshift** preset. Red Hat OpenShift Local now fixes the issue to make the **oc** client available when using the **microshift** preset. See #3581.

PART II. KNOWN ISSUES

Issues that users of Red Hat OpenShift Local 2.17 might have, as well as possible workarounds for these issues.

CHAPTER 4. GENERAL ISSUES

Issues affecting all supported platforms.

4.1. PROXY SETTINGS ARE IMPROPERLY APPLIED TO THE PODMAN PRESET

Proxy settings configured by using the **crc config set** command are not used by the **podman-remote** binary embedded in Red Hat OpenShift Local when the Podman preset is in use.

4.2. RED HAT OPENSHIFT LOCAL DISABLES METRICS BY DEFAULT

To ensure Red Hat OpenShift Local can run on a typical notebook, Red Hat OpenShift Local disables some resource-heavy services, such as Prometheus and all the related monitoring, alerting, and telemetry functions. You can enable these features.

Procedure

1. See Configuring the virtual machine to assign more resources
2. See Starting Monitoring, Alerting, and Telemetry

You cannot disable Monitoring after enabling these features.

Workaround

To disable monitoring again:

1. Delete the virtual machine:

```
$ crc delete
```

2. Create a virtual machine:

```
$ crc start
```

4.3. ENABLING MANY OPERATORS REQUIRES MORE MEMORY THAN THE DEFAULT

The **crc start** command assigns 9 GiB of memory to the Red Hat OpenShift Local virtual machine by default. Enabling many Operators might increase memory requirements.

Workaround

- See Configuring the virtual machine to assign additional memory.

4.4. RED HAT OPENSHIFT LOCAL DOES NOT WORK WHEN THE FIRST NAMESERVER IS IPV6

DNS resolution to the Red Hat OpenShift Local virtual machine might fail if the first **nameserver** is IPv6.

Workaround

- Specify an IPv4 **nameserver** when starting the Red Hat OpenShift Local virtual machine by using the **-n** flag:

```
$ crc start -n 8.8.8.8
```

CHAPTER 5. ISSUES ON MACOS

This section describes Red Hat OpenShift Local issues that affect users on a macOS host.

5.1. HIBERNATION CAUSES VM TIME TO DESYNCHRONIZE

Time in the Red Hat OpenShift Local virtual machine can become desynchronized with the time on your host. This issue occurs if the Red Hat OpenShift Local virtual machine is running when the host machine enters hibernation.

Workaround

1. Stop the Red Hat OpenShift Local virtual machine:

```
$ crc stop
```

2. Restart the Red Hat OpenShift Local virtual machine:

```
$ crc start
```

CHAPTER 6. ISSUES ON MICROSOFT WINDOWS

This section describes Red Hat OpenShift Local issues that affect users on a Microsoft Windows host.

6.1. COMPLETING THE INSTALLATION AFTER INSTALLATION WITH THE MICROSOFT STANDARD INSTALLER (MSI)

Procedure

1. Install Red Hat OpenShift Local with the MSI installer
2. Reboot your computer
3. Run the command in Command Prompt or PowerShell:

```
$ crc setup
```

6.2. THE `crc cleanup` COMMAND MIGHT FAIL WITH A PERMISSION ERROR

Running **crc setup** followed by **crc cleanup** without restarting your host computer between commands will cause **crc cleanup** to report the following error:

```
Post "http://unix/clean": open \\.\pipe\crc-admin-helper: Access is denied.
```

Workaround

1. Reboot your computer
2. Run the command:

```
$ crc cleanup
```

6.3. UNEXPECTED BEHAVIOR WHEN RUN OUTSIDE `%WINDRIVE%`

The Hyper-V driver will fail when you start the **crc** binary from a network drive.

Workaround

- Move the **crc** binary to a location on **%WINDRIVE%**.
  %WINDRIVE% is usually set to **C:**.

6.4. RED HAT OPENSHIFT LOCAL EXPECTS `FULLLANGUAGE` SUPPORT IN POWERSHELL

Red Hat OpenShift Local supports the **ConstrainedLanguage** PowerShell mode with exceptions determined by your system administrator.

6.5. THE CRC OC-ENV COMMAND DOES NOT WORK WITH SPECIAL CHARACTERS IN %PATH%

On Microsoft Windows, PowerShell and Command Prompt do not use the UTF-8 encoding. Therefore, running the **crc oc-env** command with special characters present in the **%PATH%** will not accurately encode UTF-8 characters.

Workaround

- Move the **crc** binary to a location containing no special characters.

ADDITIONAL RESOURCES

- See the Red Hat OpenShift Local Getting Started Guide for an overview of Red Hat OpenShift Local features and an introduction to **OpenShift Container Platform**.
- Report issues with Red Hat OpenShift Local or request features by using the **OpenShift Container Platform** product with the **crc** component on Red Hat Bugzilla.