



Red Hat OpenShift Dev Spaces 3.4

Release notes and known issues

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Robert Kratky
rkratky@redhat.com

Fabrice Flore-Thébault
ffloreth@redhat.com

Jana Vrbkova
jvrbkova@redhat.com

Max Leonov
mleonov@redhat.com

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Abstract

Information about new and noteworthy features as well as known issues in Red Hat OpenShift Dev Spaces 3.4.

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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](#).

CHAPTER 1. ABOUT RED HAT OPENSIFT DEV SPACES

Red Hat OpenShift Dev Spaces is a web-based integrated development environment (IDE). OpenShift Dev Spaces runs in OpenShift and is well-suited for container-based development.

OpenShift Dev Spaces provides:

- an enterprise-level cloud developer workspace server
- a browser-based IDE
- ready-to-use developer stacks for popular programming languages, frameworks, and Red Hat technologies

Red Hat OpenShift Dev Spaces 3.4 is based on Eclipse Che 7.58.

1.1. SUPPORTED PLATFORMS

OpenShift Dev Spaces runs on OpenShift 4.10 and 4.11 on the following CPU architectures:

- AMD64 and Intel 64 (**x86_64**)
- IBM Power (**ppc64le**) and IBM Z (**s390x**)

Additional resources

- [OpenShift Documentation](#)
- [Red Hat OpenShift Dev Spaces administration guide](#)

1.2. SUPPORT POLICY

For Red Hat OpenShift Dev Spaces 3.4, Red Hat will provide support for deployment, configuration, and use of the product.

Additional resources

- [OpenShift Dev Spaces life-cycle and support policy](#) .

1.3. DIFFERENCES BETWEEN ECLIPSE CHE AND RED HAT OPENSIFT DEV SPACES

The main differences between OpenShift Dev Spaces and Eclipse Che are:

- OpenShift Dev Spaces is built on RHEL8 to ensure the latest security fixes are included, compared to Alpine distributions that take a longer time to update.
- OpenShift Dev Spaces uses OpenShift OAuth for user login and management.
- OpenShift Dev Spaces provides a smaller supported subset of plug-ins compared to Che.
- OpenShift Dev Spaces provides devfiles for working with other Red Hat technologies such as EAP and Fuse.

- OpenShift Dev Spaces is supported on OpenShift Container Platform, OpenShift Dedicated, and Red Hat OpenShift Service on AWS (ROSA); Eclipse Che can also run on other Kubernetes clusters.

Red Hat provides licensing, packaging, and support. Therefore, OpenShift Dev Spaces is considered a more stable product than the upstream Eclipse Che project.

CHAPTER 2. NEW FEATURES AND ENHANCEMENTS

2.1. DEPLOYING OPENSIFT DEV SPACES FROM THE `FAST` CHANNEL

With this update, you can deploy OpenShift Dev Spaces from the **fast** channel rather than from the default **stable** channel by running the following command: **dsc server:deploy --olm-channel=fast**.



WARNING

Red Hat support does not extend to OpenShift Dev Spaces instances deployed from the **fast** channel. The **fast** channel is for testing release candidates and CI versions of future supported releases. To switch from the **fast** channel to the **stable** channel, delete the **fast** subscription and create a new subscription from the **stable** channel.

Additional resources

- [CRW-3353](#)

2.2. SUPPORT FOR MORE DEVFILE COMPONENTS

With this update, OpenShift Dev Spaces supports devfile components of types **kubernetes** and **openshift**, which reference Kubernetes and OpenShift manifests and include them as part of a workspace. See the [devfile v2 specification](#) for more details.

Additional resources

- [CRW-3364](#)

2.3. CONFIGURING THE SERVICE ACCOUNT USED FOR RUNNING WORKSPACES

With this update, administrators can configure the service account used for all workspace Pods by adding a **.spec.devEnvironments.serviceAccount** field in the CheCluster custom resource.

Additional resources

- [CRW-3470](#)

2.4. AUTOMATIC INSTALLATION OF RECOMMENDED EXTENSIONS

With this update, the recommended extensions from the **.vscode/extensions.json** file are automatically installed at workspace startup.

Additional resources

- [CRW-3586](#)

2.5. UPDATES TO THE SAMPLE PROJECTS

In OpenShift Dev Spaces 3.4, the sample projects provided in the dashboard have changed as follows:

- Python testing and linting with Flake8 works automatically out of the box.
- The .NET sample has access to a .NET 6 and 7 runtimes. .NET 3.1 has been removed from the Universal Developer Image (UDI).
- The CakePHP sample is replaced by a simpler "Hello, World" CLI PHP sample; Xdebug is now included.
- The Gradle sample has been removed.

Additional resources

- [CRW-3590](#)

2.6. UPDATED UNIVERSAL DEVELOPER IMAGE

In OpenShift Dev Spaces 3.4, the Universal Developer Image (UDI) is updated as follows:

- Python linting now uses Flake8 instead of Pylint in UI and command line.
- Dotnet 3.1 is removed.
- For PHP development: Composer and HTTPd have been removed, Xdebug is now included.
- Gradle is removed.
- Maven is updated to the latest RPM version 3.6.2-7.
- e2fsprogs is updated to the latest RPM version 1.45.6.
- [the Go language server gopls](#), is upgraded to version 0.10.1.
- `odo` is updated to 3.4.0

TIP

To include other tools or runtimes, an administrator can extend or replace the UDI image with one that includes the tools appropriate for your organization and your users' needs. You can refer to the replacement image in the **CheCluster** custom resource so that users can use the custom image in their devfiles. This will ensure that the tools and runtimes they need are persistent and do not need to be installed on each workspace startup.

Users can also develop their own UDI image(s) and refer to them from their devfiles. This requires publishing the image to a registry that is accessible from their organization's cluster. However, this approach is less centralized and standardized, and may not scale or perform as well.

Additional resources

- [CRW-3643](#)

2.7. NEW DEVWORKSPACE SPECIFICATION TAB ADDED TO THE USER DASHBOARD

With this update, you can use the **DevWorkspace** tab from the **Workspaces** menu to view the specification of the DevWorkspace object that defines a workspace.

Additional resources

- [CRW-3860](#)

CHAPTER 3. BUG FIXES

3.1. FIXED ERROR MESSAGE DELAY WHEN WORKSPACES FAILED TO START DUE TO INSUFFICIENT CPU OR MEMORY

Before this update, when workspaces failed to start due to insufficient CPU or memory in available cluster nodes, there was a UI delay in notifying the user. The dashboard **Progress** tab remained at **Waiting for workspace to start** until the workspace startup timeout, and only then the error message **Failed to open the workspace** appeared. With this update, the Dev Workspace Operator aborts workspace startup if it detects an unschedulable condition and then quickly displays the following error message: **Failed to open the workspace: Pod is unschedulable:<reasons_and_statuses>**.

Additional resources

- [CRW-3474](#)

3.2. FIXED UNEXPECTED SESSION EXPIRATIONS RESULTING IN RANDOM LOGOUTS

Before this update, the developer could be logged out unexpectedly because the session expired. With this update, the issue is resolved.

Additional resources

- [CRW-3846](#)

3.3. FIXED LEGACY OLM CATALOGSOURCE POD CRASHES

Before this update, legacy CatalogSource objects used by the Operator Lifecycle Manager (OLM) could enter a crashing state on OpenShift 4.12. This issue affected clusters with [rh-os-devspaces] 3.3 and below with container builds enabled. With this update, the issue is fixed.

Additional resources

- [CRW-3894](#)

CHAPTER 4. TECHNOLOGY PREVIEW

Technology Preview features provide early access to upcoming product innovations, enabling you to test functionality and provide feedback during the development process. However, these features are not fully supported under Red Hat Subscription Level Agreements, may not be functionally complete, and are not intended for production use. As Red Hat considers making future iterations of Technology Preview features generally available, we will attempt to resolve any issues that customers experience when using these features. See: [Technology preview support scope](#).

None.

CHAPTER 5. DEPRECATED FUNCTIONALITIES

5.1. DEPRECATION OF THE ECLIPSE THEIA EDITOR IN WORKSPACES

In OpenShift Dev Spaces 3.4, use of the Eclipse Theia editor in workspaces is deprecated. Red Hat will provide limited bug fixes and support for Eclipse Theia in OpenShift Dev Spaces during the current release lifecycle. Eclipse Theia will no longer receive enhancements for OpenShift Dev Spaces and will be removed from OpenShift Dev Spaces in a later release.



NOTE

[Microsoft Visual Studio Code - Open Source](#) is the default editor with air gap support.

Additional resources

- [CRW-3405](#)

CHAPTER 6. REMOVED FUNCTIONALITIES

None.

CHAPTER 7. KNOWN ISSUES

None.

CHAPTER 8. FREQUENTLY ASKED QUESTIONS

Is it possible to deploy applications to an OpenShift cluster from OpenShift Dev Spaces?

Yes. The user must log in to the OpenShift cluster from their running workspace using **oc login**.

For best performance, what is the recommended storage to use for Persistent Volumes used with OpenShift Dev Spaces?

Use block storage.

Is it possible to deploy more than one OpenShift Dev Spaces instance on the same cluster?

It is not recommended. This feature is subject to removal in a future release.

Is it possible to install OpenShift Dev Spaces offline (that is, disconnected from the internet)?

Yes. See [Installing Red Hat OpenShift Dev Spaces in restricted environments on OpenShift](#) .

Is it possible to use non-default certificates with OpenShift Dev Spaces?

Yes, you can use self-signed or public certificates. See [Importing untrusted TLS certificates](#).

Is it possible to run multiple workspaces simultaneously?

Yes. See [Enabling users to run multiple workspaces simultaneously](#) .

What specific changes have been implemented for IBM Power Systems?

The memory limit for some plug-ins has been increased, to give Pods sufficient RAM to run.

Table 8.1. Example memory limits differences between IBM Power System and other architectures

Plug-in	IBM Power System	Other architectures
Che-Theia editor	2G	512M
OpenShift connector	2.5G	1.5G