



Red Hat CodeReady Workspaces 2.10

Release Notes and Known Issues

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Abstract

Information about new and noteworthy features as well as known issues in Red Hat CodeReady Workspaces 2.10.

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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 CODEREADY WORKSPACES

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

CodeReady Workspaces 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 CodeReady Workspaces 2.10 is based on Eclipse Che 7.32.

1.1. SUPPORTED DEPLOYMENT ENVIRONMENTS

This section describes the availability and the supported installation methods of CodeReady Workspaces 2.10 on OpenShift Container Platform 4.6, 3.11, and OpenShift Dedicated.

Table 1.1. Supported deployment environments for CodeReady Workspaces 2.10 on OpenShift Container Platform and OpenShift Dedicated

Platform	Architecture	Deployment method
OpenShift Container Platform 3.11	AMD64 and Intel 64 (x86_64)	crwctl
OpenShift Container Platform 4.6	AMD64 and Intel 64 (x86_64)	OperatorHub, crwctl
OpenShift Container Platform 4.6	IBM Z (s390x)	OperatorHub, crwctl
OpenShift Container Platform 4.6	IBM Power Systems (ppc64le)	OperatorHub, crwctl
OpenShift Container Platform 4.7	AMD64 and Intel 64 (x86_64)	OperatorHub, crwctl
OpenShift Container Platform 4.7	IBM Z (s390x)	OperatorHub, crwctl
OpenShift Container Platform 4.7	IBM Power Systems (ppc64le)	OperatorHub, crwctl
OpenShift Dedicated 4.7	AMD64 and Intel 64 (x86_64)	Add-On



NOTE

Support for deploying CodeReady Workspaces on OpenShift Container Platform on IBM Z (s390x) is currently only available 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 details about the level of support for Technology Preview features, see Technology Preview Features Support Scope.

Additional resources

- [Installing CodeReady Workspaces from Operator Hub on OpenShift 4.7](#) .
- [Installing CodeReady Workspaces on OpenShift Container Platform 3.11](#) .

1.2. SUPPORT POLICY

For Red Hat CodeReady Workspaces 2.10, Red Hat will provide support for deployment, configuration, and use of the product.

CodeReady Workspaces 2.10 has been tested on Chrome version 90.0.4430.72 (Official Build) (64-bit).

Additional resources

- [CodeReady Workspaces life-cycle and support policy](#) .

1.3. DIFFERENCES BETWEEN ECLIPSE CHE AND RED HAT CODEREADY WORKSPACES

The main differences between CodeReady Workspaces and Eclipse Che are:

- CodeReady Workspaces is built on RHEL8 to ensure the latest security fixes are included, compared to Alpine distributions that take a longer time to update.
- CodeReady Workspaces uses Red Hat Single Sign-On (RH-SSO) rather than the upstream project Keycloak.
- CodeReady Workspaces provides a smaller supported subset of plug-ins compared to Che. CodeReady Workspaces provides devfiles for working with other Red Hat technologies such as EAP and Fuse.
- CodeReady Workspaces is supported on OpenShift Container Platform and OpenShift Dedicated; Eclipse Che can run on other Kubernetes clusters.

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

CHAPTER 2. NOTABLE ENHANCEMENTS

2.1. THE PLUG-IN REGISTRY CAN DEFINE VS CODE EXTENSIONS PREFERENCES

When a VS Code extension have not used environment variables, the user had to set the configuration in the devfile scope. For an extension to modify the configuration of another extension, the user had to create a separate plug-in embedding both extensions. With this release, the user can set default static configurations in the plug-in's **meta.yaml**.

- An extension can modify the configuration of another extension.

Example 2.1. Lombok and Java

The Lombok extension is defining configuration for the Java engine.

Additional resources

- [CRW-1815](#)

2.2. USING A NEW FORMAT TO SPECIFY EDITORS AND PLUG-INS

Before this update, CodeReady Workspaces used the **meta.yaml** format.

With this update, CodeReady Workspaces is using: * Devfile v2 format to specify editors and plug-ins * an additional **che-theia-plugin.yaml** fragment to specify plug-ins preferences

This format enables to define: * dependencies between plug-ins * sidecar options * plug-in preferences

Additional resources

- [CRW-1817](#)

2.3. EDITORS ARE DEFINED USING THE DEVFILE V2 SPECIFICATIONS.

Editors in che-editors.yaml are defined using the devfile v2 specification, rather than the legacy **meta.yaml** syntax

Additional resources

- [CRW-1821](#)

2.4. REDESIGN OF THE CREATE WORKSPACE LANDING PAGE

The landing page is named **Create Workspace** rather than **Get Started Page**. The **Quick Add** tab includes an **Import from Git** section.

Additional resources

- [CRW-1870](#)

2.5. THE PER-USER NAMESPACE STRATEGY IS THE UNIQUE NAMESPACE STRATEGY

The **per-user** namespace strategy is the unique namespace strategy available in CodeReady Workspaces 2.10. Support for other namespace strategies is removed. The CodeReady Workspaces Operator does not allow upgrading installations using a namespace strategy other than **per-user**.

Additional resources

- [CRW-1871](#)

2.6. JUPYTER NOTEBOOKS NATIVE SUPPORT THROUGH LATEST PYTHON VS CODE EXTENSION

Latest python extension includes Jupyter support. This feature is available in CodeReady Workspaces.

Additional resources

- [CRW-1877](#)

2.7. CODEREADY WORKSPACES IS SWITCHING TO PER-USER NAMESPACE STRATEGY

All namespace strategies except the **per-user** strategy are unsupported.

This results in:

- Improving security.
- Better administration control over the assigned resource to a user using namespace quotas.
- Elimination of the need to duplicate sensitive information using Kubernetes secrets, as with the **per-workspace strategy**.

Additional resources

- [CRW-1895](#)

2.8. WHEN ALL WORKSPACES OF A USER ARE DELETED, DELETE THE PVC TO FREE STORAGE (COMMON STORAGE STRATEGY)

When all workspaces of a user are deleted, delete the PVC to free storage (common storage strategy).

Additional resources

- [CRW-1899](#)

2.9. USE THE CODEREADY WORKSPACES SERVICEACCOUNT TO CREATES THE USER NAMESPACE

Before this update, when a user didn't have enough privileges to create a namespace, the workspace

start failed. With this update, CodeReady Workspaces always uses the CodeReady Workspaces ServiceAccount to create the user namespace. An administrator can configure CodeReady Workspaces to create the namespace using the user token.

Additional resources

- [CRW-1938](#)

2.10. FULL SUPPORT FOR CODEREADY WORKSPACES ON IBM POWER SYSTEMS

Support for deploying CodeReady Workspaces on OpenShift Container Platform on IBM Power Systems is no longer a Technology Preview feature. CodeReady Workspaces 2.10 is fully supported on IBM Power Systems infrastructure.

Additional resources

- [CRW-1945](#)

CHAPTER 3. BUG FIXES

3.1. RESOURCES MONITOR PLUG-IN HAS ENOUGH PERMISSIONS TO READ POD INFORMATION

The Resources Monitor Plug-in has enough permissions to read Pod information.

Additional resources

- [CRW-1649](#)

3.2. PROPAGATE ERRORS FROM DEVWORKSPACE ROUTING

Propagate the specific reason the controller cannot reconcile Components and WorkspaceRoutings into the condition message.

Additional resources

- [CRW-1823](#)

3.3. DASHBOARD EXPLAINS FAILURES HAPPENING ON PRE-LOAD

Before this update, when the Dashboard failed to pre-load data, it didn't show any error message. With this update, it displays an error message describing the reason of the failure.

Additional resources

- [CRW-1872](#)

3.4. FIXING GIT CLONING FAILURE BEHIND A PROXY

Before this update, when running CodeReady Workspaces behind a proxy, cloning a git repository failed. With this update, when the editor is Che-Theia, cloning a git repository when running CodeReady Workspaces behind a proxy is possible.

Additional resources

- [CRW-1900](#)

CHAPTER 4. KNOWN ISSUES

4.1. DEBUGGING CANNOT BE ACTIVATED IN GO WORKSPACES ON IBM Z AND IBM POWER SYSTEMS

Delve, a debugger for the Go programming language, is not available for IBM Z and IBM Power Systems architecture. Therefore, debugging features cannot be activated in the Go workspace in CodeReady Workspaces 2.10. An attempt to activate this feature results in the **Failed to continue** error message.

Workaround

- Delve debugger is not available for IBM Z and IBM Power Systems architectures, therefore cannot be used.

Additional resources

- [CRW-1349](#)

4.2. LANGUAGE SERVER FEATURES ARE NOT PREINSTALLED IN THE GO WORKSPACE

In a workspace created using the default Go devfile, some features fail because additional tools are missing. For instance, Auto-complete is unavailable.

Procedure

1. Run the CodeReady Workspaces instance in a non-restricted environment.
2. Install the required module using the **Install** button of the pop-up window in the IDE.

Additional resources

- [CRW-1521](#)

4.3. MISLEADING ERROR MESSAGE FOR A WORKSPACE FAILURE CAUSED BY THE MKDIR POD TIMEOUT

The failure caused by a lack of OpenShift Container Platform cluster resources is accompanied by a misleading error message:

Your session has expired. Please, log in to CodeReady Workspaces again to get access to your OpenShift account.

This message will be fixed in the upcoming release.

Workaround

- Provide more resources to the OpenShift Container Platform cluster.

Additional resources

- [CRW-1767](#)

4.4. STARTING THE SAME TASK MULTIPLE TIMES DOESN'T WORK PROPERLY

If you start a task from **My workspace** multiple times, the task doesn't end properly. The IDE displays a spinning-wheel icon as a replacement for the "✓" marker. As a consequence, the subsequent task execution can't be started.

Workaround

- Execute a task in the **My workspace** environment once.

Additional resources

- [CRW-1782](#)

4.5. FAILING TO RUN THE PHP DEBUG

CodeReady Workspaces fails to run the PHP debug. PHP is a technology preview feature.

Additional resources

- [CRW-1830](#)

4.6. GET-STARTED DEVFILES HAVE INCORRECT SOURCE LOCATION

Get-Started devfiles have incorrect source location after the switch from multi-host to single-host exposure strategy.

Additional resources

- [CRW-1851](#)

4.7. THE LOCATION OF THE GET STARTED DEVFILES IS NOT CALCULATED PROPERLY WHEN AN EXTERNAL DEVFILE REGISTRY IS SPECIFIED

When building the devfile registry, the build process updates the devfiles to set the source location of the artifact archives. When specifying multiple registries, the build process doesn't update the archive source location in the devfiles properly.

Example 4.1. Deployment using multiple registries

The Developer Sandbox enables the community registry and the CodeReady Workspaces registry.

Workaround

- Build the registries specifying one unique registry.

Additional resources

Additional resources

- [CRW-1853](#)

4.8. CRWCTL BINARIES ARE UNSUPPORTED ON IBM Z AND IBM POWER SYSTEMS

The **crwctl** binaries don't run on IBM Z and IBM Power Systems. These platforms are available uniquely as targets to deploy CodeReady Workspaces to.

Workaround

- Run **crwctl** from a supported platform.

Additional resources

- [CRW-1864](#)

4.9. WORKSPACE CREATION FAILING ON UNSTABLE NETWORKS

CodeReady Workspaces is intermittently failing to create a workspace when the network is unstable. CodeReady Workspaces displays following error:

```
Failed to run the workspace: "Waiting for pod 'workspace9fbid1gnx7273d47.maven-545f8c9cf4-hw79f' was interrupted."
```

Additional resources

- [CRW-1888](#)

4.10. UNSUPPORTED DEVFILES ON IBM Z AND IBM POWER SYSTEMS

These devfiles are not supported on IBM Z and IBM Power Systems:

- EAP for OpenJDK 8
- .Net
- Fuse

Workaround

- Don't use unsupported languages on IBM Z and IBM Power Systems.

Additional resources

- [CRW-1896](#)

4.11. TECHNOLOGY PREVIEW SUPPORT FOR IBM Z

Support for deploying CodeReady Workspaces on OpenShift Container Platform on IBM Z is available 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

suggest 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.

Additional resources

- [CRW-1897](#)

4.12. FAILING TO ACTIVATE THE APPLIANCE FOR APACHE CAMEL K BY RED HAT EXTENSION

The activation of the **Appliance for Apache Camel K by Red Hat** extension fails with the error message:

```
Activating extension `Appliance for Apache Camel K by Red Hat` failed: Dependent extension `redhat.vscode-commons` is not installed.
```

Additional resources

- [CRW-1951](#)

4.13. COULD NOT START A WORKSPACE WITH FACTORY USING DEVFILE 2.0 SPECIFICATION

CodeReady Workspaces fails to start a workspace with a factory when the workspace is defined using the devfile 2.0 (DevWorkspace) specification. Then, CodeReady Workspaces displays the following error message:

```
Getting workspace detail data failed. Failed to fetch the workspace sprin-petclinic, reason: Could not retrieve the main URL for the running workspace.
```

Workaround

1. Navigate to the DevWorkspace details
2. Edit the DevWorkspace YAML to set the endpoints attributes type to **main**.

```
endpoints:  
  - attributes:  
      type: main
```

3. Restart the DevWorkspace.

Additional resources

- [CRW-2057](#)

4.14. THE AUTOCOMPLETE AND ERROR HIGHLIGHTING FUNCTION DOES NOT WORK IN PYTHON DEVFILE WORKSPACES

The Python language server functionality does not work, and an error message is displayed while invoking the autocomplete and error highlighting functions.

Additional resources

- [CRW-2063](#)

4.15. THE OPENSIFT CONNECTOR PLUG-IN FAILS TO DEPLOY AN APPLICATION IN A RESTRICTED ENVIRONMENT

The OpenShift Connector plug-in fails to deploy because of the inability to access the **odo** image in the disconnected environment.

Additional resources

- [CRW-2071](#)

4.16. DEBUG CONFIGURATION MISSING

Debug configurations are not loaded. The Debug panel displays:



No Configurations

Workaround

- Refresh the page, and the debug configurations appear.

Additional resources

- [CRW-2078](#)

4.17. UPDATING CODEREADY WORKSPACES INSTANCE FROM MULTI-HOST TO SINGLE-HOST STRATEGY BREAKS THE CREATE WORKSPACE UI

After patching a CodeReady Workspaces 2.10 instances from multi-host to single-host, the "Create Workspace" Dashboard page displays incomplete UI with missing icons.

Workaround

Re-deploy the devfile registry Pod after the update.

Additional resources

- [CRW-2092](#)

4.18. CODEREADY WORKSPACES FAILS TO RESOLVE DEVFILES FOR BITBUCKET FACTORY FOR PUBLIC REPOSITORIES

Bitbucket factory URL fails for public repositories outside OpenShift Container Platform for CodeReady Workspaces without Bitbucket OAuth enabled.

Workaround

1. Add the TLS self-signed certificate to the CodeReady Workspaces instance, see [Importing untrusted TLS certificates to CodeReady Workspaces](#).

Additional resources

- [CRW-2094](#)

CHAPTER 5. FREQUENTLY ASKED QUESTIONS

Is it possible to deploy applications to an OpenShift cluster from CodeReady Workspaces?

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 CodeReady Workspaces?

Use block storage.

Is it possible to deploy more than one CodeReady Workspaces instance on the same cluster?

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

Is it possible to install CodeReady Workspaces offline (that is, disconnected from the internet)?

Yes. See [Installing CodeReady Workspaces in restricted environments](#) .

Is it possible to use non-default certificates with CodeReady Workspaces?

Yes, you can use self-signed or public certificates. See [Installing CodeReady Workspaces on OpenShift Container Platform 3.11](#).

Is it possible to run multiple workspaces simultaneously?

Yes. See [Configuring the number of workspaces a user can run](#) .

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 5.1. 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