



Red Hat CodeReady Workspaces 2.11

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 2.11.

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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 2.11 is based on Eclipse Che 7.34.

1.1. SUPPORTED DEPLOYMENT ENVIRONMENTS

This section describes the availability and the supported installation methods of CodeReady Workspaces 2.11 on OpenShift Container Platform 4.6, 3.11, and OpenShift Dedicated.

Table 1.1. Supported deployment environments for CodeReady Workspaces 2.11 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 4.8	AMD64 and Intel 64 (x86_64)	OperatorHub, crwctl
OpenShift Container Platform 4.8	IBM Z (s390x)	OperatorHub, crwctl
OpenShift Container Platform 4.8	IBM Power Systems (ppc64le)	OperatorHub, crwctl
OpenShift Dedicated 4.8	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 4.8](#) .
- [Installing CodeReady Workspaces on OpenShift Container Platform 3.11](#) .

1.2. SUPPORT POLICY

For Red Hat CodeReady Workspaces 2.11, Red Hat will provide support for deployment, configuration, and use of the product.

CodeReady Workspaces 2.11 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 CHE-THEIA EDITOR DISPLAYING THE OPEN FOLDER AND CLONE REPOSITORY BUTTONS FOR AN EMPTY WORKSPACE

Before this update, the Che-Theia editor displayed an empty file explorer when the workspace contained no projects. For the user, it was not obvious how to create a file or clone a repository. With this update, the Che-Theia editor displays the **Open Folder** and **Clone Repository** buttons in the file explorer.

Additional resources

- [CRW-2051](#)

2.2. FACTORY LINK SUPPORT FOR PRIVATE GITHUB REPOSITORIES THROUGH OPENSIFT OAUTH AUTHENTICATION

With this update, the GitHub factory implementation supports reading from a private repository. Users can load a devfile hosted in a private repository. The added support for OpenShift OAuth token authentication allows working with repositories behind an RH-SSO organization.

Additional resources

- [CRW-2053](#)

2.3. CONFIGURING THE DEFAULT IMAGES FOR PRE-PULLING DURING CODEREADY WORKSPACES INSTALLATION USING OPERATORHUB

Before this release, using the Image Puller involved providing a list of images to pre-pull. With this release, when installed with CodeReady Workspaces using OperatorHub, the Image Puller auto-pulls the relevant images. The images to pre-pull are the default images used for workspace startup, including Theia, plugin broker, and sidecar images.

Additional resources

- [CRW-2082](#)

2.4. UPGRADE OF THE VISUAL STUDIO EXTENSION FOR APACHE CAMEL K

The Tool-set for the Apache Camel K extension has been upgraded to version 0.0.26.

Additional resources

- [CRW-2106](#)

2.5. LIST OF IMAGES TO PRE-PULL UPDATES AUTOMATICALLY WITH EACH NEW RED HAT CODEREADY WORKSPACES RELEASE

- The list of the images to pre-pull is automatically updated on each Red Hat CodeReady Workspaces update.
- This implementation allows having:
 - Kubernetes Image Puller to always pull up-to-date images
 - Cached images for faster workspace start

Additional resources

- [CRW-2107](#)

2.6. IMAGE PULLER SUPPORT FOR ALL IMAGE TYPES

With this update, the Image Puller can pre-pull any CodeReady Workspaces image on all the Nodes of an OpenShift cluster. This includes scratch images.

Additional resources

- [CRW-2142](#)

CHAPTER 3. BUG FIXES

3.1. DISABLING THE GITLAB `MASTER` BRANCH AS THE EXPLICIT DEFAULT TARGET BRANCH

Before this update, CodeReady Workspaces could not create a workspace using a factory link to an on-premises GitLab repository without a branch named **master**. With this update, the GitLab file reading behavior omits the **master** branch name by default, and CodeReady Workspaces can create a factory link to a GitLab repository that has the default branch other than **master**.

Additional resources

- [CRW-1962](#)

CHAPTER 4. KNOWN ISSUES

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

On IBM Z and IBM Power Systems, the debugging features cannot be activated in the Go workspace in CodeReady Workspaces 2.11. Delve, the required debugger for the Go programming language, is not available for these platforms. An attempt to activate this feature results in the **Failed to continue** error message. This issue has no workaround.

Additional resources

- [CRW-1349](#)

4.2. LANGUAGE SERVER FEATURES ARE NOT PREINSTALLED IN GO WORKSPACES

Golang based workspaces do not include basic language server features such as code autocompletion.

Workaround

1. Run the CodeReady Workspaces instance in a non-restricted environment.
2. Install the required module by using the **Install** button in the IDE dialog box.

Additional resources

- [CRW-1521](#)

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

A lack of OpenShift Container Platform cluster resources causes a failure. This failure causes a misleading message: **Your session has expired. Please, log in to CodeReady Workspaces again to get access to your OpenShift account.**

Workaround

- Provide more resources to the OpenShift Container Platform cluster.

Additional resources

- [CRW-1767](#)

4.4. STARTING MULTIPLE INSTANCES OF THE SAME TASK FAILS

Currently, when you start a task from **My workspace** multiple times, the task does not end. The IDE displays the loading circle but no check mark (✓). As a result, the IDE cannot start the following task.

Workaround

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

Additional resources

- [CRW-1782](#)

4.5. ERROR STARTING A PHP DEBUG SESSION

Currently, CodeReady Workspaces fails to run a PHP debug session with the following error message: **There was an error starting the debug session, check the logs for more details**. PHP is a [Technology Preview](#) feature. There is currently no workaround for this issue.

Additional resources

- [CRW-1830](#)

4.6. ATTEMPTS TO CLONE A WORKSPACE FROM A QUICK ADD SAMPLE RESULT IN AN ERROR UNDER THE SINGLE-HOST STRATEGY

When using the **single-host** strategy for workspace exposure, attempting to clone a workspace from a **Quick Add** sample results in an error. There is currently no workaround for this issue.

Additional resources

- [CRW-1851](#)

4.7. CRWCTL BINARIES ARE NOT SUPPORTED ON IBM Z AND IBM POWER SYSTEMS

The **crwctl** binaries do not run on IBM Z and IBM Power Systems. These platforms are available as targets for deploying CodeReady Workspaces.

Workaround

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

Additional resources

- [CRW-1864](#)

4.8. WORKSPACE CREATION FAILS ON UNSTABLE NETWORKS

CodeReady Workspaces might fail to create a workspace when the network is unstable. CodeReady Workspaces displays an error such as the following: **Failed to run the workspace: "Waiting for pod 'workspace9fbid1gnx7273d47.maven-545f8c9cf4-hw79f' was interrupted."** This issue has no workaround.

Additional resources

- [CRW-1888](#)

4.9. UNSUPPORTED DEVFILES ON IBM Z AND IBM POWER SYSTEMS

The following devfiles are not supported on IBM Z and IBM Power Systems:

- EAP for OpenJDK 8
- .Net
- Fuse
- Apache Camel K by Red Hat

Workaround

- Do not use unsupported languages on IBM Z and IBM Power Systems.

Additional resources

- [CRW-1896](#)

4.10. 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 fully function. 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](#)

4.11. ERROR MESSAGE ASKING THE USER TO LOG IN AGAIN AT WORKSPACE STARTUP

When starting a workspace, users might receive the following error message: **Your session has expired. Please login to Che again to get access to your OpenShift account.**

Workaround

- Log in again.

Additional resources

- [CRW-2018](#)

4.12. NO DELEGATECOMMANDHANDLER ERROR FOR JAVA WITH THE JBOSS EAP 7.3 DEVFILE

A workspace using Java with the JBoss EAP 7.3 devfile fails with the following error message: **No delegateCommandHandler for `vscode.java.startDebugSession`.** There is no workaround for this issue.

Additional resources

- [CRW-2067](#)

4.13. NO DISPLAY FOR A TASK AFTER A NETWORKING ISSUE

When a task is running and there is some networking issue, the terminal window is cleared and contains no text. Even when the connection is restored, the terminal remains empty and loading. There is no workaround for this issue.

Additional resources

- [CRW-2070](#)

4.14. 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. There is no workaround for this issue.

Additional resources

- [CRW-2071](#)

4.15. THE DEBUG CONFIGURATION IS MISSING

The **DEBUG** panel displays **No Configurations** in the drop-down list because no configurations are loaded.

Workaround

- Refresh the page to display the debug configurations.

Additional resources

- [CRW-2078](#)

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

After patching the CodeReady Workspaces 2.11 instance from **multi-host** to **single-host**, the Dashboard **Create Workspace** page displays an incomplete UI with missing icons.

Workaround

- Re-deploy the devfile registry Pod after the update.

Additional resources

- [CRW-2092](#)

4.17. THE PYTHON WORKSPACE DISPLAYS THE "PYTHON NOT INSTALLED" ERROR MESSAGE

Currently, the Python workspace displays unexpected dialog boxes, including the following error: **Python is not installed. Please download and install Python before using the extension.** There is currently no workaround for this issue.

Additional resources

- [CRW-2143](#)

4.18. JAVA ANALYTIC PLUG-IN FAILS IN THE JAVA WITH JBOSS EAP XP 3.0 MICROPROFILE SAMPLE

The Java analytic plugin doesn't work with the **jboss-eap-quickstart** sample project, used by the **JBoss EAP XP 3.0 MicroProfile** devfile.

Additional resources

- [CRW-2207](#)

4.19. WORKSPACE CREATION FAILS AFTER UPGRADING DEVWORKSPACE

Currently, after upgrading DevWorkspace 2.10.1 to 2.11, CodeReady Workspaces fails to create a workspace with the following error: **Getting workspace detail data failed. Failed to fetch the workspace <workspace_name>, reason: Could not get exposed endpoints for DevWorkspace: controller not ready to resolve the workspace routing.**

Workaround

Execute the following commands: **oc delete chemanager -n devworkspace-che --waitoc delete namespace devworkspace-che**

Additional resources

- [CRW-2214](#)

4.20. NAMESPACE RESTRICTION FOR OPENSIFT DEDICATED AND ROSA

Don't deploy CodeReady Workspaces to the **openshift-workspaces** namespace on OpenShift Dedicated and ROSA.

Workaround

- Use another namespace when deploying CodeReady Workspaces on OpenShift Dedicated and ROSA.

Additional resources

- [CRW-2235](#)

4.21. TECHNOLOGY PREVIEW FOR DEPLOYING CODEREADY WORKSPACES 2.11 WITH THE DEV WORKSPACE ENGINE

Support for deploying CodeReady Workspaces 2.11 with the Dev Workspace engine is available as a [Technology Preview](#) feature, for OpenShift Container Platform 4.8. 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.

Known limitations

- Workspaces are not protected from inner OpenShift cluster access.
- When deploying CodeReady Workspaces in a restricted environment, starting workspaces will fail because proxy and untrusted TLS certificates are not supported.
- The volumes needed for plug-ins need to be declared in the workspace devfile.
- Workspaces idling is not supported.
- GitHub, GitLab, Bitbucket OAuth flow to automatically configure users accounts is not supported.
- Clusters with a network policy that isolates namespaces networks are not supported.
- Asynchronous storage mode for workspaces is not supported.
- Selecting the editor from the dashboard is not supported.

Additional resources

- [CRW-2250](#)

4.22. UPSTREAM SAMPLE DEVFILES ARE NOT SUPPORTED

Upstream sample devfiles are designed for Eclipse Che. CodeReady Workspaces doesn't support these samples. A workspace running with the Dev Workspace engine might fail to start when using an upstream sample devfile.

Workaround

- Use supported Red Hat CodeReady Workspaces sample devfiles.

Additional resources

- [CRW-2253](#)

4.23. THE OPENSIFT CONNECTOR PLUG-IN DOES NOT ALLOW THE CREATION OF A NEW COMPONENT ON IBM POWER SYSTEMS

On IBM Power Systems, the list of supported image streams is missing, which causes component creation to fail.

Additional resources

- [CRW-2255](#)

4.24. UNINSTALLING CODEREADY WORKSPACES FAILS WHEN THE KUBERNETES IMAGE PULLER IS INSTALLED

When the Kubernetes Image Puller is installed, uninstalling CodeReady Workspaces fails, meaning:

- The deletion process doesn't remove the Kubernetes Image Puller finalizer.
- The **CheCluster** Custom Resource is not empty and can't be removed.

Workaround

- Disable the Kubernetes Image Puller before uninstalling CodeReady Workspaces.

Additional resources

- [CRW-2256](#)

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