Red Hat CodeReady Workspaces 2.13

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 2.13.

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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

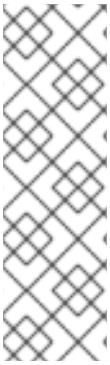
Red Hat CodeReady Workspaces 2.13 is based on Eclipse Che 7.38.

1.1. SUPPORTED DEPLOYMENT ENVIRONMENTS

This section describes the availability and the supported installation methods of CodeReady Workspaces 2.13 on OpenShift Container Platform 4.9 4.8, 3.11, and OpenShift Dedicated.

Table 1.1. Supported deployment environments for CodeReady Workspaces 2.13 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 4.8	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 Container Platform 4.9	AMD64 and Intel 64 (x86_64)	OperatorHub, **crwctl**
OpenShift Container Platform 4.9	IBM Z (s390x)	OperatorHub, **crwctl**
OpenShift Container Platform 4.9	IBM Power Systems (ppc64le)	OperatorHub, **crwctl**
OpenShift Dedicated 4.9	AMD64 and Intel 64 (x86_64)	Add-on service
Red Hat OpenShift Service on AWS (ROSA)	AMD64 and Intel 64 (x86_64)	Add-on service



NOTE

Deploying CodeReady Workspaces on OpenShift Container Platform on IBM Z (s390x) is currently 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 these features in production. Technology Previews provide early access to upcoming product features and enable 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 4.9 .
- Installing CodeReady Workspaces on OpenShift Container Platform 3.11 .

1.2. SUPPORT POLICY

For Red Hat CodeReady Workspaces 2.13, Red Hat will provide support for deployment, configuration, and use of the product.

CodeReady Workspaces 2.13 has been tested on Chrome version 94.0.4606.81 (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. JAKARTAEE DEPENDENCIES HAVE REPLACED JAVAEE DEPENDENCIES

Before this update, CodeReady Workspaces contained JavaEE dependencies. With this update, CodeReady Workspaces contains JakartaEE dependencies.

Additional resources

- CRW-2122

2.2. SELECTING AN EDITOR BY USING A FACTORY LINK PARAMETER ON A CODEREADY WORKSPACES INSTANCE WITH DEV WORKSPACE ENGINE

With this update, on a CodeReady Workspaces instance with Dev Workspace engine, users can specify their choices of an editor with the **che-editor** factory link parameter. For example, **https://codeready-*<openshift_deployment_name>*.*<domain_name>*#*<repository-url>*?che-editor=eclipse/che-theia/latest** is to select Che-Theia.

Additional resources

- CRW-2372

2.3. STANDARDIZED CONFIGURATION FOR GITLAB, GITHUB, AND BITBUCKET

This enhancement standardizes and simplifies configuration of Git hosting services (GitLab, GitHub, and Bitbucket) for CodeReady Workspaces workspaces, with OpenShift secrets and OAuth.

Additional resources

- CRW-2373

2.4. POSTGRESQL UPGRADE

New CodeReady Workspaces deployments use PostgreSQL 13. Before this update, CodeReady Workspaces deployments were using PostgreSQL 9.6. PostgreSQL 9.6 is deprecated. Migrate deployments created by an earlier version of CodeReady Workspaces. See: Migrating from PostgreSQL 9 to PostgreSQL 13.

Additional resources

- CRW-2374

2.5. SUPPORT ALTERNATE DEVFILE PATH

With this update, when using the Dev Workspace engine, you can specify the devfile path when creating a workspace from a URL. Use the **devfilePath** parameter. It enables the coexistence of two devfiles in the same repository, to support the version 1 to version 2 migration.

Additional resources

- CRW-2396

2.6. SYNCHRONIZATION OF THE CODEREADY WORKSPACES SERVER SETTINGS TO WORKSPACES USING THE DEV WORKSPACE ENGINE

Before this update, when using the Dev Workspace engine, CodeReady Workspaces workspaces were missing required configuration settings, such as proxy or self-signed certificates. With this update, the settings stored by the CodeReady Workspaces server are propagated to the workspaces.

Additional resources

- CRW-2397

2.7. ALL WORKSPACE ENGINES SUPPORT DEVFILE V2

With this update, CodeReady Workspaces supports creating workspaces from a devfile version 2 on all workspace engines. Before this update, using the Dev Workspace engine was required.

Additional resources

- CRW-2550

2.8. CODEREADY WORKSPACES WORKSPACES SUPPORT THE GIT LARGE FILE STORAGE EXTENSION

With this update, CodeReady Workspaces workspaces support the Git Large File Storage (LFS) extension.

Additional resources

- CRW-2551

2.9. UPGRADE OF THE OPENSHIFT CONNECTOR EXTENSION FOR VISUAL STUDIO CODE

The OpenShift Connector extension for Visual Studio Code has been upgraded to version 0.2.11.

Additional resources

- CRW-2594

2.10. FIX CODEREADY WORKSPACES OPERATOR ERROR WHEN THE OPENSHIFT CLUSTER HAS MULTIPLE PROJECTS

Before this update, the CodeReady Workspaces operator crashed with an Out Of Memory (OOM) error in OpenShift clusters with multiple projects. With this update, the memory limit is sufficient.

Additional resources

- CRW-2595

CHAPTER 3. BUG FIXES

3.1. OPENSHIFT CONNECTOR NO LONGER SUPPORTS OPENSHIFT CONTAINER PLATFORM 3.11

CodeReady Workspaces includes a version of OpenShift Connector that doesn't support OpenShift Container Platform 3.11.

To use the OpenShift Connector inside CodeReady Workspaces, consider one of the following options:

- Keep OpenShift Container Platform 3.11 and CodeReady Workspaces 2.12.
- Upgrade to OpenShift Container Platform 3.11 and CodeReady Workspaces 2.13.

OpenShift Container Platform 3.11 will become deprecated in June 2022, and will no longer be supported by CodeReady Workspaces after that date.

Additional resources

- CRW-2477

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 2.13. 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. ATTEMPTS TO CLONE A WORKSPACE FROM AQUICK 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

4.5. 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

4.6. 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

4.7. 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

4.8. 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

4.9. 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

4.10. 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

4.11. 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

4.12. THE OPENSHIFT 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

4.13. 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

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

After patching the CodeReady Workspaces 2.13 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

4.15. NAMESPACE RESTRICTION FOR OPENSHIFT 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

4.16. 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

4.17. THE OPENSHIFT 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

4.18. 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

4.19. TECHNOLOGY PREVIEW FOR DEPLOYING CODEREADY WORKSPACES 2.13 WITH THE DEV WORKSPACE ENGINE

Support for deploying CodeReady Workspaces 2.13 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 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.

Known limitations

- When deploying CodeReady Workspaces in a restricted environment, starting workspaces will fail because proxy and untrusted TLS certificates are not supported.
- GitHub and GitLab OAuth flow to automatically configure users accounts is not supported.
- Clusters with a network policy that isolates namespaces networks are not supported.

- Upgrading an instance with the Dev Workspace engine enabled requires manual steps.

Additional resources

- CRW-2284

4.20. PROMETHEUS DOESN'T DISPLAY METRICS WHEN USING THE TECH-PREVIEW OPERATOR CHANNEL

After deploying the CodeReady Workspaces Operator form the **tech-preview** Operator channel in the default namespace and creating a **CheCluster** Custom Resource in the default namespace, the OpenShift Prometheus UI doesn't display the metrics.

Workaround

- Use the **latest** Operator channel.

Additional resources

- CRW-2326

4.21. UPGRADING AN INSTANCE WITH THE DEV WORKSPACE ENGINE ENABLED REQUIRES MANUAL STEPS

Upgrading an instance with the Dev Workspace engine enabled requires manual steps.

Support for deploying CodeReady Workspaces 2.13 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 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.

Procedure

1. Unsubscribe the CodeReady Workspaces Operator from the **latest** channel.
2. Remove the **Dev Workspace Controller** namespace.
3. Subscribe the CodeReady Workspaces Operator to the **tech-preview-latest-all-namespaces** channel.

Additional resources

- CRW-2357

4.22. THE IMAGE PULLER DOESN'T WORK WITH THE TECH-PREVIEW-LATEST-ALL-NAMESPACES CHANNEL

When using OperatorHub to install CodeReady Workspaces with the Dev Workspace engine, the Image Puller can't be enabled. The Image Puller doesn't work with the **tech-preview-latest-all-namespaces** channel

Workaround

- Fetch the standalone CodeReady Workspaces **imagepuller-rhel8** image and use it manually to perform image pulls across the cluster.

Additional resources

- CRW-2441

4.23. THE COMMAND CONFIGURE APACHE WEB SERVER DOCUMENTROOT DOES NOT WORK IN THE CAKE-PHP SAMPLE PROJECT ON IBM POWER

When using the **Cake-php** sample, the **Configure Apache Web Server DocumentRoots** task fails with the following error:

```
error  sed: couldn't open temporary file /etc/httpd/conf/sedSgv1Z4: Permission denied
```

Additional resources

- CRW-2452

4.24. THE QUARKUS SAMPLE WORKSPACE FROM TECH-PREVIEW CHANNEL FAILS TO CLONE GIT REPOSITORIES IN A RESTRICTED ENVIRONMENT

The Quarkus sample workspace from **tech-preview** channel fails to clone Git repositories in a restricted environment.

Additional resources

- CRW-2473

4.25. THE RED HAT CODEREADY WORKSPACES WELCOME PAGE MAY BE EMPTY WHEN A WORKSPACE STARTS

The welcome page tab titled "Red Hat CodeReady Workspaces" may at times load with no content.

Workaround

- Reload the page in your browser.

Additional resources

- CRW-2479

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 Workspacesoffline (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