Red Hat CodeReady Workspaces 1.0 Release Notes and Known Issues

Release Notes and Known Issues for Red Hat CodeReady Workspaces 1.0

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Abstract

Information about new and noteworthy features as well as known issues in Red Hat CodeReady Workspaces 1.0.2.
Table of Contents

CHAPTER 1. RELEASE NOTES ................................................................. 3.
  1.1. ABOUT RED HAT CODEREADY WORKSPACES ...................................... 3
    1.1.1. Installing and deploying CodeReady Workspaces .............................. 3
    1.1.2. Support policy ............................................................................. 3
  1.2. NOTEWORTHY FEATURES ............................................................... 3
    1.2.1. Centralized developer environments ............................................. 3
    1.2.2. Container-based developer workspaces ......................................... 4
    1.2.3. Browser-based IDE .................................................................... 4
    1.2.4. Pre-built stacks or build-your-own stacks ..................................... 4
    1.2.5. One-click developer workspaces .................................................. 4
    1.2.6. Enterprise integration .................................................................. 4
    1.2.7. Tailor development teams ........................................................... 5
    1.2.8. Toolchain integrations ............................................................... 5
    1.2.9. Remote access to developer workspaces ....................................... 5
    1.2.10. Built-in security ........................................................................ 5
    1.2.11. Application dependency analytics .............................................. 5

CHAPTER 2. KNOWN ISSUES ............................................................... 6.
  2.1. GENERAL KNOWN ISSUES .......................................................... 6
    2.1.1. "openshift-oauth-client" rewritten ................................................. 6
    2.1.2. Cannot continue interrupted deployment ....................................... 6
    2.1.3. Multiple workspaces fail to run at the same time ............................ 6
    2.1.4. Workspaces fail to start correctly when using the 'per-workspace' PVC strategy 6
    2.1.5. PVC is not removed when deleting a workspace with the 'per-workspace' PVC strategy 6
    2.1.6. Deploying CodeReady Workspaces with enabled proxy fails .......... 7
    2.1.7. Authentication fails with OpenShift oAuth identity provider .......... 7
CHAPTER 1. RELEASE NOTES

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

This section documents the most important features and bug fixes in the Red Hat CodeReady Workspaces product.

1.1. ABOUT RED HAT CODEREADY WORKSPACES

This releases introduces the 1.0.2 version of Red Hat CodeReady Workspaces. Red Hat CodeReady Workspaces provides cloud developer workspace server and browser-based IDE built for teams and organizations. CodeReady Workspaces provides ready-to-use developer stacks for most of the popular programming languages, frameworks, and Red Hat technologies.

Built on Eclipse Che (version 6.17.1), the next-generation IDE and most advanced open-source cloud development environment, CodeReady Workspaces provides developer workspaces, which includes all the tools and the dependencies that are needed to code, build, test, run, and debug applications. The entire product runs in the cloud and eliminates the need to install anything on a local machine.

CodeReady Workspaces offers:

- fast onboarding capabilities for teams with powerful collaboration, workspace automation, and management at scale
- removes inconsistencies and the “works on my machine” syndrome
- protects source code from the hard-to-secure developer and personal laptops

Red Hat CodeReady Workspaces is available today in 1.0.2 in the Red Hat Container Catalogue. Install it on OpenShift Container Platform or OpenShift Dedicated, starting at version 3.11, by following the instructions in the Release Notes and Known Issues.

1.1.1. Installing and deploying CodeReady Workspaces

See the Installing CodeReady Workspaces chapter of the Administration Guide.

1.1.2. Support policy

For Red Hat CodeReady Workspaces 1.0.2, Red Hat will provide support for deployment, configuration, and use of the product. CodeReady Workspaces.

CodeReady Workspaces 1.0.2 has been tested on Chrome version 71.0.3578.98 (Official Build) (64-bit).

For more information, see CodeReady Workspaces life-cycle and support policy.

1.2. NOTEWORTHY FEATURES

1.2.1. Centralized developer environments

CodeReady Workspaces provides a centralized platform on OpenShift to define, administer, and manage developer environments. It simplifies the configuration of developer tools and secures access to the source code.
1.2.2. Container-based developer workspaces

The product provides developer workspaces running on OpenShift. The workspaces run as pods and support multi-container configurations for developing microservices-based applications. Production environments can be replicated into the developer workspaces.

1.2.3. Browser-based IDE

CodeReady Workspaces bundles a rich, browser-based IDE with language tooling, autocompletion, refactoring, code navigation, debuggers, terminal to access containers, Git integration, and more.

1.2.4. Pre-built stacks or build-your-own stacks

Pre-built stacks with supported Red Hat technologies can be used, or custom stacks can be created and shared across the developer teams.

The following stacks are supported by Red Hat for use with CodeReady Workspaces 1.0.2:

- RHEL 7 Java stack with OpenJDK 1.8 and Maven 3.5
- NodeJS 8x stack

The following stacks are supported by Red Hat as Beta for use with CodeReady Workspaces 1.0.2:

- RHEL 8 Beta Java stack with OpenJDK 1.8 and Maven 3.5

The following stacks are supported by Red Hat as Technology Preview for use with CodeReady Workspaces 1.0.2:

- Vert.x stack
- Java stack with EAP 7.1, OpenJDK 1.8, and Maven 3.5
- Wildfly Swarm stack
- Red Hat Fuse stack
- Spring Boot stack
- C and C++ Developer Tools stack
- .NET 2.0 stack with .NET Core SDK and Runtime
- Golang stack
- PHP 7.1 stack, including most popular extensions
- Python 3.6 stack

1.2.5. One-click developer workspaces

So-called factories allow to share developer workspaces. A factory URL can be used in any development workflow to simplify developer onboarding.

1.2.6. Enterprise integration
Includes Red Hat SSO to handle authentication and security between the developer teams. Allows integration with LDAP or AD.

**1.2.7. Tailor development teams**

Create teams, reflect the structure of your organization, and share pre-configured workspace stacks.

**1.2.8. Toolchain integrations**

With factories, it is easy to generate and integrate developer workspaces that will be available on-demand from any tools used by the team (and the stakeholders).

**1.2.9. Remote access to developer workspaces**

Connect to the developer workspaces from Eclipse or other tools using SSH.

**1.2.10. Built-in security**

CodeReady Workspaces features limited secured entry points and identity checks for each developer. Fine-grained permissions can be used to share resources.

**1.2.11. Application dependency analytics**

Insights about application dependencies: security vulnerabilities, license compatibility, and AI-based guidance for additional, alternative dependencies.

The Analytics plug-in is enabled by default in the Java and NodeJS stacks in CodeReady Workspaces. The plug-in analyzes all project dependencies and shows a report with warnings for CVEs or issues with any of the dependencies. A language server provides in-context analysis of the dependencies. When editing a pom.xml or package.json file, the server displays errors, warnings, and recommendations.
CHAPTER 2. KNOWN ISSUES

This section lists known issues with Red Hat CodeReady Workspaces 1.0.2. Where available, workaround suggestions are provided.

2.1. GENERAL KNOWN ISSUES

2.1.1. "openshift-oauth-client" rewritten

A second deployment of CodeReady Workspaces to the same OpenShift Container Platform cluster causes the oAuth secret in the openshift-oauth-client client to be rewritten. It is recommended not to deploy multiple instances of CodeReady Workspaces top the same OpenShift Container Platform cluster.

To work around this issue, manually create another oAuth client with the right redirectURI, secret, and name.

2.1.2. Cannot continue interrupted deployment

The deployment script does not have an option to continue a deployment that was interrupted or previously failed. When the installation is interrupted before it successfully completes, the used namespace needs to be manually cleared of incomplete deployment artefacts.

Following an interrupted or failed deployment, select the used namespace and deployments, pods, and secrets, as well as the Che configuration map. Then repeat the deployment process from the start.

2.1.3. Multiple workspaces fail to run at the same time

Provided the two following conditions are met, it will not be possible to run two or more workspaces at the same time:

- CodeReady Workspaces uses the commons Persistent Volume Claim (PVC) strategy
- Persistent volumes (PVs) use ReadWriteOnce (RWO) access mode

To work around this limitation, use one of the two following measures:

- set ReadWriteMany (RWX) access mode for PVs
- use the unique PVC strategy

2.1.4. Workspaces fail to start correctly when using the 'per-workspace' PVC strategy

When the per-workspace PVC (Persistent Volume Claim) strategy is configured, workspaces fail to start correctly. Workspace start is extremely slow because the pod that is launched to create directories in the PVC is attempting to mount a wrong PVC.

To work around this issue, set the CHE_INFRA_KUBERNETES_PVC_PRECREATE_SUBPATHS environment variable to false in the che configuration map, and restart CodeReady Workspaces.

2.1.5. PVC is not removed when deleting a workspace with the 'per-workspace' PVC strategy
When the **per-workspace** PVC (Persistent Volume Claim) strategy is configured, associated PVC (Persistent Volume Claim) is not removed nor cleaned up when deleting a workspace. To avoid encountering this issue, do not use the **per-workspace** PVC strategy (instead, use the **common** or **unique** strategy).

Alternatively, the associated PVC can be deleted manually using the `oc delete pvc <pvc_name_or_id>` command.

### 2.1.6. Deploying CodeReady Workspaces with enabled proxy fails

When proxy settings are configured in the `config.yaml` configuration file, the deployment fails. No workaround is available for this issue.

### 2.1.7. Authentication fails with OpenShift OAuth identity provider

When CodeReady Workspaces is installed with TLS and OpenShift OAuth support, authentication on the CodeReady Workspaces login page fails with the following error message: **Unexpected error when authenticating with identity provider.**