



Red Hat OpenShift Dev Spaces 3.15

Release notes and known issues

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Jana Vrbkova

jvrbkova@redhat.com

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Abstract

Information about new and noteworthy features as well as known issues in Red Hat OpenShift Dev Spaces 3.15.

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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 provides web-based development environments on Red Hat OpenShift with an enterprise-level setup:

- Cloud Development Environments (CDE) server
- IDEs such as Microsoft Visual Studio Code - Open Source and JetBrains IntelliJ IDEA Community ([Technology Preview](#))
- Containerized environments with popular programming languages, frameworks, and Red Hat technologies

Red Hat OpenShift Dev Spaces is well-suited for container-based development.

Red Hat OpenShift Dev Spaces 3.15 is based on Eclipse Che 7.88.

1.1. SUPPORTED PLATFORMS

OpenShift Dev Spaces runs on OpenShift 4.12–4.16 on the following CPU architectures:

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

The following CPU architecture requires OpenShift 4.13–4.16 to run OpenShift Dev Spaces:

- IBM Power (**ppc64le**)

Additional resources

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

1.2. SUPPORT POLICY

For Red Hat OpenShift Dev Spaces 3.15, 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 RED HAT OPENSIFT DEV SPACES AND ECLIPSE CHE

There are some differences between Red Hat OpenShift Dev Spaces and the upstream project on which it is based, Eclipse Che:

- OpenShift Dev Spaces is supported only on Red Hat OpenShift.
- OpenShift Dev Spaces is based on Red Hat Enterprise Linux and is regularly updated to include the latest security fixes.

- OpenShift Dev Spaces provides devfiles for working with languages and technologies such as Quarkus, Lombok, NodeJS, Python, DotNet, Golang, C/C++, and PHP. You can find the latest sample projects in the [devspaces-devfileregistry container image sources](#).
- OpenShift Dev Spaces uses OpenShift OAuth for user login and management.

Red Hat provides licensing and packaging to ensure enterprise-level support for OpenShift Dev Spaces.

CHAPTER 2. NEW FEATURES AND ENHANCEMENTS

2.1. AUTOMATIC PODMAN LOGIN INTO EXTERNAL CONTAINER REGISTRIES

Starting from this release, **podman login** is performed automatically during workspace startup for all container registries configured in the **User Preferences**.



NOTE

For Red Hat OpenShift internal container registry **image-registry.openshift-image-registry.svc:5000**, **podman login** is performed automatically. No manual configuration is required.

Additional resources

- [CRW-6523](#)

2.2. DASHBOARD SHOULD SWITCH TO THE TAB WITH ALREADY RUNNING WORKSPACE

When you open a workspace from the User Dashboard, and a browser tab corresponding to the same workspace already exists, the switch to the browser tab happens automatically starting from this release. Previously a new browser tab was created whenever you tried opening a workspace from the User Dashboard.

Additional resources

- [CRW-6804](#)

2.3. "RESTART WORKSPACE FROM LOCAL DEVFILE" COMMAND SHOULD BE MORE INFORMATIVE WHEN DEVFILE IS NOT VALID

Starting from this release, if the 'Restart Workspace from Local Devfile' command is failing due to an invalid devfile, the error notification message is more informative and contains the exact reason for the failure.

Additional resources

- [CRW-6805](#)

2.4. ALLOW DEFINING ANNOTATIONS FOR ALL PODS IN THE CLOUD DEVELOPMENT ENVIRONMENT

With this release, you can define annotations for all Cloud Development Environment (CDE) pods using a dedicated CustomResource field:

```
apiVersion: org.eclipse.che/v2
kind: CheCluster
spec:
```

```
devEnvironments:  
workspacesPodAnnotations:  
  cluster-autoscaler.kubernetes.io/safe-to-evict: false
```

Additional resources

- [CRW-6811](#)

2.5. CONFIGURING CUSTOM EDITOR DEFINITIONS USING A CONFIG MAP

Previously, you could only configure custom editor definitions by modifying and rebuilding the [Plugin Registry](#). Starting from this release, you can configure them by creating a dedicated **ConfigMap**.

Additional resources

- [CRW-6812](#)

2.6. ENABLING FUSE-OVERLAYFS FOR ALL WORKSPACES

Starting from this release, you can enable **fuse-overlayfs** for all CDEs.

Learn more about this feature in the [official documentation](#).

Additional resources

- [CRW-6813](#)

2.7. MEANINGFUL DASHBOARD WARNINGS FOR NAMESPACE PROVISIONING FAILURES WHEN AUTO-PROVISIONING IS DISABLED AND THE ADVANCED AUTHORIZATION IS ENABLED

With this release, the user experience during failures related to pre-configured Advanced Authorization is improved. When your access is denied, you will see a clear error message when accessing the User Dashboard.

Learn more about Advanced Authorization in the [official documentation](#).

Additional resources

- [CRW-6814](#)

2.8. ALWAYS REFRESH OAUTH TOKENS DURING WORKSPACE STARTUP

A new experimental feature that forces a refresh of the OAuth access token during workspace startup has been added in this release.

Learn more about this feature in the [official documentation](#).

Additional resources

- [CRW-6815](#)

2.9. DEVFILE 2.3.0 SUPPORT

With this release, the new 2.3.0 **schemaVersion** of the devfile is supported for the CDE definition:

```
schemaVersion: 2.3.0
metadata:
  generateName: quarkus-api-example
attributes:
  controller.devfile.io/storage-type: ephemeral
components:
- name: tools
  container:
    image: quay.io/devfile/universal-developer-image:ubi8-latest
    env:
      - name: QUARKUS_HTTP_HOST
        value: 0.0.0.0
...
```

More details about version **2.3.0** are available in the [official documentation](#).

Additional resources

- [CRW-6816](#)

CHAPTER 3. BUG FIXES

3.1. NOT POSSIBLE TO LOG IN TO USER DASHBOARD WHEN BOTH BITBUCKET PAT AND BITBUCKET OAUTH ARE CONFIGURED

Before this update, including a Bitbucket Personal Access Token (PAT) in workspaces on a OpenShift Dev Spaces installation with Bitbucket OAuth integration resulted in a "Backend is not available" error message. With this update, it's possible to log in to the User Dashboard without issues.

Additional resources

- [CRW-4351](#)

3.2. MULTIPLE "401 UNAUTHORIZED" ERRORS WHEN OPENING VISUAL STUDIO CODE EDITOR

From time to time, you could encounter multiple "401 Unauthorized" errors when opening a workspace with the Visual Studio Code - Open Source ("Code - OSS") editor. The defect has been fixed in this release.

Additional resources

- [CRW-4943](#)

3.3. AUTOMATIC PODMAN LOGIN WITH CONFIGURED CONTAINER REGISTRY NOT WORKING

Previously, after configuring container registries (quay.io, docker.io, etc.) from the User Dashboard and starting a workspace, you were not automatically logged into the configured registries. The defect has been fixed in this release.

Additional resources

- [CRW-6555](#)

3.4. ENABLE TO USE A DIFFERENT USER FOR SSH URLs THAN GIT

Previously, strict validation prevented workspace creation from URLs such as **user1@repository.example.com:/home/user1/repositories/myrepo.git**. The defect has been fixed in this release.

Additional resources

- [CRW-6566](#)

3.5. PROVIDE EDITS ON '.CODE-WORKSPACE' FILE

In this release, the parsing error of the `.code-workspace` file that contains extra commas has been fixed:

```
{
```

```
"folders": [  
  {  
    "name": "che-code",  
    "path": "/projects/che-code",  
  },  
]  
}
```

Additional resources

- [CRW-6809](#)

3.6. AN EMPTY PROJECT IS DISPLAYED IN THE EDITOR'S PROJECT TREE

An empty project used to be displayed in the project tree of the Visual Studio Code - Open Source ("Code - OSS") editor, if several starter projects were defined in the devfile. The defect has been fixed in this release.

Additional resources

- [CRW-6810](#)

3.7. DASHBOARD GIT SERVICES TAB DUPLICATES STATUS ICON IF TWO GITHUB PROVIDERS ARE CONFIGURED

Before this release, if GitHub OAuth configuration secrets were set up for both SaaS and Enterprise, and if the authorization agreement was accepted for only one of the providers, the authorization status was duplicated for both providers on the **Git Services** tab. The defect has been fixed in this release.

Additional resources

- [CRW-6818](#)

3.8. ZOMBIE PROCESSES REMAIN IN WORKSPACE CONTAINER AFTER A TASK IS TERMINATED

Before this release, you could encounter many processes labeled **<defunct>** in the workspace container while working in Visual Studio Code - Open Source ("Code - OSS").

Additional resources

- [CRW-6819](#)

3.9. ENVIRONMENT VARIABLES ARE IGNORED AND TASKS FAIL

Before this release, **GOPATH** and **GOCACHE** environment variables were not correctly set when running dedicated commands defined in a devfile. This resulted in failed tasks, for tasks such as the **go build** task. The defect has been fixed in this release.

Additional resources

- [CRW-6820](#)

3.10. MOUNTING FILES THAT CONFLICT WITH `stow` DIRECTORY FILES CAUSES FAILURES DURING `$HOME` DIRECTORY PERSISTENCE

Previously, mounting files using a ConfigMap, Secret, or PVC that conflict with **stow** directory files resulted in the **stow** command failure during the execution of the **\$HOME** directory persistence. The defect has been fixed in this release.

Additional resources

- [CRW-6821](#)

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

None.

CHAPTER 6. REMOVED FUNCTIONALITIES

None.

CHAPTER 7. KNOWN ISSUES

7.1. ISSUES WITH STARTING A NEW WORKSPACE FROM A URL THAT POINTS TO A BRANCH OF A REPOSITORY THAT DOESN'T HAVE A DEVFILE

There is a known issue affecting repositories without a **devfile.yaml** file. If you start a new workspace from a branch of such repository, the default branch (e.g. 'main') is used for project cloning instead of the expected branch.

Additional resources

- [CRW-6860](#)

7.2. REFRESH TOKEN MODE CAUSES CYCLIC RELOAD OF THE WORKSPACE START PAGE

There is a known issue when experimental refresh token mode is applied using the **CHE_FORCE_REFRESH_PERSONAL_ACCESS_TOKEN** property for the 'GitHub' and 'Azure DevOps' OAuth providers. This causes the workspace starts to reload the dashboard cyclically, creating a new personal access token on each page restart. The refresh token mode works correctly for 'GitLab' and 'BitBucket' OAuth providers.

Additional resources

- [CRW-6859](#)

7.3. WORKSPACE CREATION FAILURE FOR GITHUB ENTERPRISE PUBLIC REPOSITORIES WITH NO PAT OR OAUTH CONFIGURATION

There is a known issue with creating a workspace from GitHub Enterprise public repositories that have no personal access token (PAT) or OAuth configured. If you try to create a workspace from such a repository, you receive the following error message: "Failed to create the workspace. Cannot build factory with any of the provided parameters. Please check parameters correctness, and resend query."

Workaround

Add a PAT of the Git provider, or configure the OAuth.

Additional resources

- [CRW-6831](#)

7.4. ANSIBLE LIGHTSPEED NOT CONNECTING TO ANSIBLE SERVER

There is a known issue with Ansible Lightspeed and connection to the Ansible server. If the OpenShift Dev Spaces environment is not under *.openshiftapps.com domain, Ansible Lightspeed can not connect to the Ansible server.

There is no workaround available.

Additional resources

- [CRW-5691](#)

7.5. FIPS COMPLIANCE UPDATE

There's a known issue with FIPS compliance that results in certain cryptographic modules not being FIPS-validated. Below is a list of requirements and limitations for using FIPS with OpenShift Dev Spaces:

Required cluster and operator updates

Update your Red Hat OpenShift Container Platform installation to the latest z-stream update for 4.11, 4.12, or 4.13 as appropriate. If you do not already have FIPS enabled, you will need to uninstall and reinstall.

Once the cluster is up and running, install OpenShift Dev Spaces 3.7.1 (3.7-264) and verify that the latest DevWorkspace operator bundle 0.21.2 (0.21-7) or newer is also installed and updated. See <https://catalog.redhat.com/software/containers/devworkspace/devworkspace-operator-bundle/60ec9f48744684587e2186a3>

Golang compiler in UDI image

The Universal Developer Image (UDI) container includes a golang compiler, which was built without the **CGO_ENABLED=1** flag. The check-payload scanner (<https://github.com/openshift/check-payload>) will throw an error, but this can be safely ignored provided that anything you build with this compiler sets the correct flag **CGO_ENABLED=1** and does NOT use **extldflags -static** or **-tags no_openssl**.

The resulting binaries can be scanned and should pass without error.

Statically linked binaries

You can find statically linked binaries not related to cryptography in these two containers:

- code-rhel8
- idea-rhel8.

As they are not related to cryptography, they do not affect FIPS compliance.

Helm support for FIPS

The UDI container includes the **helm** binary, which was not compiled with FIPS support. If you are in a FIPS environment do not use **helm**.

Additional resources

- [CRW-4598](#)

7.6. DEBUGGER DOES NOT WORK IN THE .NET SAMPLE

Currently, the debugger in Microsoft Visual Studio Code - Open Source does not work in the .NET sample.

Workaround

- Use a different image from the following sources:

- [Custom UBI-9 based Dockerfile](#)
- [devfile.yaml](#)

Additional resources

- [CRW-3563](#)

CHAPTER 8. FREQUENTLY ASKED QUESTIONS

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

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?

Only one OpenShift Dev Spaces instance can be deployed per cluster.

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

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

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

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

Is it possible to run multiple workspaces simultaneously?

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