

# Red Hat OpenShift AI Self-Managed 2latest

## Release notes

Features, enhancements, resolved issues, and known issues associated with this release

Last Updated: 2024-05-10

## Red Hat OpenShift Al Self-Managed 2-latest Release notes

Features, enhancements, resolved issues, and known issues associated with this release

### **Legal Notice**

Copyright © 2024 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

http://creativecommons.org/licenses/by-sa/3.0/

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux ® is the registered trademark of Linus Torvalds in the United States and other countries.

Java <sup>®</sup> is a registered trademark of Oracle and/or its affiliates.

XFS <sup>®</sup> is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL ® is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js ® is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack <sup>®</sup> Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

### **Abstract**

These release notes provide an overview of new features, enhancements, resolved issues, and known issues in version 2-latest of Red Hat OpenShift Al.

## **Table of Contents**

CHAPTER 1. OVERVIEW OF OPENSHIFT AI	3
CHAPTER 2. NEW FEATURES AND ENHANCEMENTS  2.1. NEW FEATURES  2.2. ENHANCEMENTS	<b>4</b> 4
CHAPTER 3. TECHNOLOGY PREVIEW FEATURES	
CHAPTER 4. SUPPORT REMOVALS  4.1. DATA SCIENCE PIPELINES V1 UPGRADED TO V2  4.2. EMBEDDED SUBSCRIPTION CHANNEL NO LONGER USED	<b>7</b> 7 7
4.3. REMOVAL OF BIAS DETECTION (TRUSTYAI) 4.4. VERSION 1.2 NOTEBOOK CONTAINER IMAGES FOR WORKBENCHES ARE NO LONGER SUPPORTED 4.5. BETA SUBSCRIPTION CHANNEL NO LONGER USED	7
CHAPTER 5. RESOLVED ISSUES	9
CHAPTER 6. KNOWN ISSUES	11
CHAPTER 7. PRODUCT FEATURES	28

### CHAPTER 1. OVERVIEW OF OPENSHIFT AI

Red Hat OpenShift AI is a platform for data scientists and developers of artificial intelligence and machine learning (AI/ML) applications.

OpenShift Al provides an environment to develop, train, serve, test, and monitor Al/ML models and applications on-premises or in the cloud.

For data scientists, OpenShift Al includes Jupyter and a collection of default notebook images optimized with the tools and libraries required for model development, and the TensorFlow and PyTorch frameworks. Deploy and host your models, integrate models into external applications, and export models to host them in any hybrid cloud environment. You can enhance your data science projects on OpenShift Al by building portable machine learning (ML) workflows with data science pipelines, using Docker containers. You can also accelerate your data science experiments through the use of graphics processing units (GPUs) and Habana Gaudi devices.

For administrators, OpenShift AI enables data science workloads in an existing Red Hat OpenShift or ROSA environment. Manage users with your existing OpenShift identity provider, and manage the resources available to notebook servers to ensure data scientists have what they require to create, train, and host models. Use accelerators to reduce costs and allow your data scientists to enhance the performance of their end-to-end data science workflows using graphics processing units (GPUs) and Habana Gaudi devices.

OpenShift AI offers two distributions:

- A managed cloud service add-on for Red Hat OpenShift Dedicated (with a Customer Cloud Subscription for AWS or GCP) or for Red Hat OpenShift Service on Amazon Web Services (ROSA).
  - For information about OpenShift AI on a Red Hat managed environment, see Product Documentation for Red Hat OpenShift AI.
- Self-managed software that you can install on-premise or on the public cloud in a self-managed environment, such as OpenShift Container Platform.
   For information about OpenShift AI as self-managed software on your OpenShift cluster in a connected or a disconnected environment, see Product Documentation for Red Hat OpenShift AI Self-Managed.

For information about OpenShift AI supported software platforms, components, and dependencies, see Supported configurations.

### **CHAPTER 2. NEW FEATURES AND ENHANCEMENTS**

This section describes new features and enhancements in Red Hat OpenShift AI 2-latest.

### 2.1. NEW FEATURES

#### Distributed workloads

Distributed workloads enable data scientists to use multiple cluster nodes in parallel for faster, more efficient data processing and model training. The CodeFlare framework simplifies task orchestration and monitoring, and offers seamless integration for automated resource scaling and optimal node utilization with advanced GPU support.

Designed for data scientists, the CodeFlare framework enables direct workload configuration from Jupyter Notebooks or Python code, ensuring a low barrier of adoption, and streamlined, uninterrupted workflows. Distributed workloads significantly reduce task completion time, and enable the use of larger datasets and more complex models.

### Authorization provider for single-model serving platform

You can now add Authorino as an authorization provider for the single-model serving (KServe) platform. Adding an authorization provider allows you to enable token authorization for models that you deploy on the platform, which ensures that only authorized parties can make inference requests to the models.

### 2.2. ENHANCEMENTS

### Improved Data Science Projects user interface

The Data Science Projects user interface (UI) has been redesigned to simplify accessing and getting started with different project components. The new design includes an updated layout, a more visually-oriented interface, and additional UI text to provide an overview of each project component.

#### Support for Kubeflow Pipelines v2 in data science pipelines

To keep OpenShift Al updated with the latest features, data science pipelines are now based on KubeFlow Pipelines (KFP) version 2.0. Data Science Pipelines (DSP) 2.0 is enabled and deployed by default in OpenShift Al. For more information, see Enabling Data Science Pipelines 2.0.



#### **IMPORTANT**

Previously, data science pipelines in OpenShift AI were based on KubeFlow Pipelines v1. It is no longer possible to deploy, view, or edit the details of pipelines that are based on DSP 1.0 from the dashboard in OpenShift AI 2-latest. If you already use data science pipelines, Red Hat recommends that you stay on OpenShift AI 2.8 until full feature parity in DSP 2.0 has been delivered in a stable OpenShift AI release and you are ready to migrate to the new pipeline solution.

DSP 2.0 contains an installation of Argo Workflows. OpenShift Al does not support direct customer usage of this installation of Argo Workflows. To install or upgrade to OpenShift Al 2.9 with DSP 2.0, ensure that there is no existing installation of Argo Workflows on your cluster.

If you want to use existing pipelines and workbenches with DSP 2.0 after upgrading to OpenShift Al 2-latest, you must update your workbenches to use the 2024.1 notebook image version and then manually migrate your pipelines from DSP 1.0 to 2.0. For more information, see Upgrading to DSP 2.0 .

### Updated workbench images

Preinstalled packages for workbench images have been updated with the 2024.1 image versions. You can optimize your development environment by using the latest workbench image versions. Python packages used in workbench images include advancements in the Python ecosystem, such as PyTorch and TensorFlow. Operating systems supporting the code-server, RStudio, Elyra, Habana, and CUDA workbench images have also received updates for their tools.

### **CHAPTER 3. TECHNOLOGY PREVIEW FEATURES**



#### **IMPORTANT**

This section describes Technology Preview features in Red Hat OpenShift AI 2-latest. 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 more information about the support scope of Red Hat Technology Preview features, see Technology Preview Features Support Scope.

### code-server workbench image

Red Hat OpenShift AI now includes the **code-server** workbench image. See code-server in GitHub for more information.

With the **code-server** workbench image, you can customize your workbench environment by using a variety of extensions to add new languages, themes, debuggers, and connect to additional services. You can also enhance the efficiency of your data science work with syntax highlighting, auto-indentation, and bracket matching.



#### NOTE

Elyra-based pipelines are not available with the **code-server** workbench image.

The **code-server** workbench image is currently available in Red Hat OpenShift Al 2-latest as a Technology Preview feature. This feature was first introduced in OpenShift Al 2.6.

### **CHAPTER 4. SUPPORT REMOVALS**

This section describes major changes in support for user-facing features in Red Hat OpenShift Al. For information about OpenShift Al supported software platforms, components, and dependencies, see Supported configurations.

### 4.1. DATA SCIENCE PIPELINES V1 UPGRADED TO V2

Previously, data science pipelines in OpenShift AI were based on KubeFlow Pipelines v1. Starting with OpenShift AI 2.9, data science pipelines are based on KubeFlow Pipelines v2, which uses a different workflow engine. Data Science Pipelines (DSP) 2.0 is enabled and deployed by default in OpenShift AI. For more information, see Enabling Data Science Pipelines 2.0.



#### **IMPORTANT**

DSP 2.0 contains an installation of Argo Workflows. OpenShift Al does not support direct customer usage of this installation of Argo Workflows. To install or upgrade to OpenShift Al 2.9 with DSP 2.0, ensure that there is no existing installation of Argo Workflows on your cluster.

It is no longer possible to deploy, view, or edit the details of pipelines that are based on Data Science Pipelines (DSP) 1.0 from the dashboard in OpenShift AI 2-latest. If you already use data science pipelines, Red Hat recommends that you stay on OpenShift AI 2.8 until full feature parity in DSP 2.0 has been delivered in a stable OpenShift AI release and you are ready to migrate to the new pipeline solution. For a detailed view of the release lifecycle, including the full support phase window, see Red Hat OpenShift AI Self-Managed Life Cycle.



### **IMPORTANT**

If you want to use existing pipelines and workbenches with DSP 2.0 after upgrading to OpenShift Al 2-latest, you must update your workbenches to use the 2024.1 notebook image version and then manually migrate your pipelines from DSP 1.0 to 2.0. For more information, see Upgrading to DSP 2.0 .

### 4.2. EMBEDDED SUBSCRIPTION CHANNEL NO LONGER USED

Starting with OpenShift Al 2.8, the **embedded** subscription channel is no longer used. You can no longer select the **embedded** channel for a new installation of the Operator. For more information about subscription channels, see Installing the Red Hat OpenShift Al Operator.

### 4.3. REMOVAL OF BIAS DETECTION (TRUSTYAI)

Starting with OpenShift Al 2.7, the bias detection (TrustyAl) functionality has been removed. If you previously had this functionality enabled, upgrading to OpenShift Al 2.7 or later will remove the feature. The default TrustyAl notebook image remains supported.

# 4.4. VERSION 1.2 NOTEBOOK CONTAINER IMAGES FOR WORKBENCHES ARE NO LONGER SUPPORTED

When you create a workbench, you specify a notebook container image to use with the workbench. Starting with OpenShift AI 2.5, when you create a new workbench, version 1.2 notebook container images are not available to select. Workbenches that are already running with a version 1.2 notebook

image continue to work normally. However, Red Hat recommends that you update your workbench to use the latest notebook container image.

### 4.5. BETA SUBSCRIPTION CHANNEL NO LONGER USED

Starting with OpenShift Al 2.5, the **beta** subscription channel is no longer used. You can no longer select the **beta** channel for a new installation of the Operator. For more information about subscription channels, see Installing the Red Hat OpenShift Al Operator.

### **CHAPTER 5. RESOLVED ISSUES**

The following notable issues are resolved in Red Hat OpenShift AI 2-latest.

## RHOAIENG-5067 - Model server metrics page does not load for a model server based on the ModelMesh component

Previously, data science project names that contained capital letters or spaces could cause issues on the model server metrics page for model servers based on the ModelMesh component. The metrics page might not have received data correctly, resulting in a **400 Bad Request** error and preventing the page from loading. This issue is now resolved.

#### RHOAIENG-5025 - Self-signed certificates do not apply to the first created workbench

Previously, if you added a certificate authority (CA) bundle to use self-signed certificates, the certificates were not applied to the first workbench created in a data science project. This issue is now resolved.

# RHOAIENG-4966 - Self-signed certificates in a custom CA bundle might be missing from thedh-trusted-ca-bundle configuration map

Previously, if you added a custom certificate authority (CA) bundle to use self-signed certificates, sometimes the custom certificates were missing from the **odh-trusted-ca-bundle** ConfigMap, or the non-reserved namespaces did not contain the **odh-trusted-ca-bundle** ConfigMap when the ConfigMap was set to **managed**. This issue is now resolved.

## RHOAIENG-4938 (previously documented asRHOAIENG-4327) - Workbenches do not use the self-signed certificates from centrally configured bundle automatically

There are two bundle options to include self-signed certificates in OpenShift AI, **ca-bundle.crt** and **odh-ca-bundle.crt**. Previously, workbenches did not automatically use the self-signed certificates from the centrally configured bundle and you had to define environment variables that pointed to your certificate path. This issue is now resolved.

## RHOAIENG-4572- Unable to run data science pipelines after install and upgrade in certain circumstances

Previously, you were unable to run data science pipelines after installing or upgrading OpenShift AI in the following circumstances:

- You installed OpenShift Al and you had a valid CA certificate. Within the default-dsci object, you changed the managementState field for the trustedCABundle field to Removed postinstallation.
- You upgraded OpenShift AI from version 2.6 to version 2.8 and you had a valid CA certificate.
- You upgraded OpenShift AI from version 2.7 to version 2.8 and you had a valid CA certificate.

This issue is now resolved.

## RHOAIENG-4524 - BuildConfig definitions for RStudio images contain occurrences of incorrect branch

Previously, the **BuildConfig** definitions for the **RStudio** and **CUDA - RStudio** workbench images pointed to the wrong branch in OpenShift Al. This issue is now resolved.

RHOAIENG-3963 - Unnecessary managed resource warning

Previously, when you edited and saved the **OdhDashboardConfig** custom resource for the **redhat-ods-applications** project, the system incorrectly displayed a **Managed resource** warning message. This issue is now resolved.

#### RHOAIENG-2542 - Inference service pod does not always get an Istio sidecar

Previously, when you deployed a model using the single-model serving platform (which uses KServe), the **istio-proxy** container could be missing in the resulting pod, even if the inference service had the **sidecar.istio.io/inject=true** annotation. This issue is now resolved.

## RHOAIENG-1825 - After setting up self-signed certificates, executing pipelines might fail with workbenches that contain Elyra

Previously, if you added a custom certificate authority (CA) bundle to use self-signed certificates, executing pipelines with workbenches that contained Elyra could fail. This issue is now resolved.

### RHOAIENG-1666 - The Import Pipeline button is prematurely accessible

Previously, when you imported a pipeline to a workbench that belonged to a data science project, the **Import Pipeline** button was accessible before the pipeline server was fully available. This issue is now resolved.

## RHOAIENG-642 (previously documented as RHODS-12903) - Successfully-submitted Elyra pipeline fails to run

Previously, if you used a private TLS certificate and you successfully submitted an Elyra-generated pipeline to the data science pipeline server, the pipeline steps failed to execute and error messages were shown. This issue is now resolved.

### **CHAPTER 6. KNOWN ISSUES**

This section describes known issues in Red Hat OpenShift Al 2-latest and any known methods of working around these issues.

## RHOAIENG-6701 - Users without cluster administrator privileges cannot access the job submission endpoint of the Ray dashboard

Users of the distributed workloads feature who do not have cluster administrator privileges for OpenShift Container Platform might not be able to access or use the job submission endpoint of the Ray dashboard.

## RHOAIENG-6649 - An error is displayed when viewing a model on a model server that has no external route defined

If you use the dashboard to deploy a model on a model server that does not have external routes enabled, a *t.components is undefined* error message might be shown while the model creation is in progress.

#### RHOAIENG-6646 - An error is displayed when viewing the Model Serving page during an upgrade

If you try to use the dashboard to deploy a model while an upgrade of OpenShift AI is in progress, a *t.status is undefined* error message might be shown.

#### Workaround

Wait until the upgraded OpenShift Al Operator is ready and then refresh the page in your browser.

## RHOAIENG-6578 - Models that show authorization tokens do not actually require them after deletion of Authorino Operator

If you added Authorino as an authorization provider for the single-model serving platform, but later delete the Authorino Operator, the OpenShift Al dashboard might still show tokens for models that had token authorization enabled. However, authorization is no longer enabled, and you are able to make successful inference requests to the models without specifying the tokens in your requests.

## RHOAIENG-6505 - Disconnected environments: Extra image needed for RayCluster TLS certificate creation

In OpenShift AI 2-latest, the default image (quay.io/project-codeflare/ray:latest-py39-cu118) is used for TLS certificate creation for Ray Clusters when implementing mutual Transport Layer Security (mTLS). If you use distributed workloads in a disconnected environment, you must add this image to your mirror registry.

# RHOAIENG-6486 - Pod labels, annotations, and tolerations cannot be configured when using the Elyra JupyterLab extension with the TensorFlow 2024.1 notebook image

When using the Elyra JupyterLab extension with the TensorFlow 2024.1 notebook image, you cannot configure pod labels, annotations, or tolerations from an executed pipeline. This is due to a dependency conflict with the kfp and tf2onnx packages.

#### Workaround

If you are working with the TensorFlow 2024.1 notebook image, after you have completed your work, change the assigned workbench notebook image to the Standard Data Science 2024.1 notebook image.

In the **Pipeline properties** tab in the Elyra JupyterLab extension, set the Tensorflow runtime image as the default runtime image for the pipeline node individually, along with the relevant pod label, annotation or toleration, for each pipeline node.

#### RHOAIENG-6435 - Distributed workloads resources are not included in Project metrics

When you click **Distributed Workloads Metrics**> **Project metrics** and view the **Requested resources** section, the **Requested by all projects** value currently excludes the resources for distributed workloads that have not yet been admitted to the queue.

#### RHOAIENG-6409 - Cannot save parameter errors appear in pipeline logs for successful runs

When you run a pipeline more than once with Data Science Pipelines 2.0, **Cannot save parameter** errors appear in the pipeline logs for successful pipeline runs. You can safely ignore these errors.

RHOAIENG-6376 - Pipeline run creation fails after settingpip\_index\_urls in a pipeline component to a URL that contains a port number and path

When you create a pipeline and set the **pip\_index\_urls** value for a component to a URL that contains a port number and path, compiling the pipeline code and then creating a pipeline run results in the following error:

ValueError: Invalid IPv6 URL

#### Workaround

- 1. Create a new pip server using only **protocol://hostname**, and update the **pip\_index\_urls** value for the component with the new server.
- 2. Recompile the pipeline code.
- 3. Create a new pipeline run.

### RHOAIENG-6317 - An error is displayed when viewing pipeline run pod logs in the dashboard

When using the log viewer in the OpenShift Al dashboard to view pipeline run pod logs, a **pods not found** error message might be shown.

#### Workaround

Follow the steps in the Data Science Pipelines workaround for how to view pipeline run pod logs in the Red Hat OpenShift Al dashboard knowledgebase article.

## RHOAIENG-5314 - Data science pipeline server fails to deploy in fresh cluster due to network policies

When you create a data science pipeline server on a fresh cluster, the user interface remains in a loading state and the pipeline server does not start. A "Pipeline server failed" error message might be displayed.

#### Workaround

- 1. Log in to the OpenShift Container Platform web console as a cluster administrator.
- 2. Click Networking > NetworkPolicies.
- 3. Click the **Project** list and select your project.

- 4. Click the Create NetworkPolicy button.
- 5. For **Configure via**, select **YAML view** and define the network policy as shown:

```
kind: NetworkPolicy
apiVersion: networking.k8s.io/v1
metadata:
 name: allow-from-redhat-ods-app-to-mariadb
spec:
 podSelector:
  matchLabels:
   app: mariadb-pipelines-definition
 ingress:
  - ports:
    - protocol: TCP
      port: 3306
   from:
    podSelector:
       matchLabels:
        app.kubernetes.io/name: data-science-pipelines-operator
      namespaceSelector:
       matchLabels:
        kubernetes.io/metadata.name: redhat-ods-applications
 policyTypes:
  - Ingress
```

6. Click Create.

#### RHOAIENG-4812 - Distributed workload metrics exclude GPU metrics

In this release of OpenShift AI, the distributed workload metrics exclude GPU metrics.

### RHOAIENG-4570 - Existing Argo Workflows installation conflicts with install or upgrade

Data Science Pipelines (DSP) 2.0 contains an installation of Argo Workflows. OpenShift Al does not support direct customer usage of this installation of Argo Workflows. To install or upgrade OpenShift Al with DSP 2.0, ensure that there is no existing installation of Argo Workflows on your cluster. For more information, see Enabling Data Science Pipelines 2.0.

#### Workaround

Remove the existing Argo Workflows installation or set **datasciencepipelines** to **Removed**, and then proceed with the installation or upgrade.

## RHOAIENG-3913 - Red Hat OpenShift AI Operator incorrectly shows Degraded condition of False with an error

If you have enabled the KServe component in the DataScienceCluster (DSC) object used by the OpenShift Al Operator, but have not installed the dependent Red Hat OpenShift Service Mesh and Red Hat OpenShift Serverless Operators, the **kserveReady** condition in the DSC object correctly shows that KServe is not ready. However, the **Degraded** condition incorrectly shows a value of **False**.

#### Workaround

Install the Red Hat OpenShift Serverless and Red Hat OpenShift Service Mesh Operators, and then recreate the DSC.

### RHOAIENG-4252 - Data science pipeline server deletion process fails to remove ScheduledWorkFlow resource

The pipeline server deletion process does not remove the **ScheduledWorkFlow** resource. As a result, new DataSciencePipelinesApplications (DSPAs) do not recognize the redundant **ScheduledWorkFlow** resource.

#### Workaround

- 1. Delete the pipeline server. For more information, see Deleting a pipeline server.
- 2. In the OpenShift command-line interface (CLI), log in to your cluster as a cluster administrator and perform the following command to delete the redundant **ScheduledWorkFlow** resource.
  - \$ oc -n <data science project name> delete scheduledworkflows --all

### RHOAIENG-4240 - Jobs fail to submit to Ray cluster in unsecured environment

When running distributed data science workloads from notebooks in an unsecured OpenShift cluster, a **ConnectionError: Failed to connect to Ray** error message might be shown.

#### Workaround

In the ClusterConfiguration section of the notebook, set the openshift\_oauth option to True.

## RHOAIENG-3981 - In unsecured environment, the functionality to wait for Ray cluster to be ready gets stuck

When running distributed data science workloads from notebooks in an unsecured OpenShift cluster, the functionality to wait for the Ray cluster to be ready before proceeding (cluster.wait\_ready()) gets stuck even when the Ray cluster is ready.

#### Workaround

Perform one of the following actions:

- In the ClusterConfiguration section of the notebook, set the openshift\_oauth option to True.
- Instead of using the **cluster.wait\_ready()**, functionality, you can manually check the Ray cluster availability by opening the Ray cluster Route URL. When the Ray dashboard is available on the URL, then the cluster is ready.

## RHOAIENG-3025 - OVMS expected directory layout conflicts with the KServe StoragePuller layout

When you use the OpenVINO Model Server (OVMS) runtime to deploy a model on the single-model serving platform (which uses KServe), there is a mismatch between the directory layout expected by OVMS and that of the model-pulling logic used by KServe. Specifically, OVMS requires the model files to be in the /<mnt>/models/1/ directory, while KServe places them in the /<mnt>/models/ directory.

### Workaround

Perform the following actions:

 In your S3-compatible storage bucket, place your model files in a directory called 1/, for example /<s3 storage bucket>/models/1/<model files>. CVCIII bioli 400 \_0101000 \_0001000 \11110000 \11110000 \11110000 \11110000

- 2. To use the OVMS runtime to deploy a model on the single-model serving platform, choose one of the following options to specify the path to your model files:
  - If you are using the OpenShift AI dashboard to deploy your model, in the **Path** field for your data connection, use the /**<s3\_storage\_bucket>/models/** format to specify the path to your model files. Do not specify the **1/** directory as part of the path.
  - If you are creating your own InferenceService custom resource to deploy your model, configure the value of the storageURI field as /<s3\_storage\_bucket>/models/. Do not specify the 1/ directory as part of the path.

KServe pulls model files from the subdirectory in the path that you specified. In this case, KServe correctly pulls model files from the /**<s3\_storage\_bucket>/models/1**/ directory in your S3-compatible storage.

RHOAIENG-3018 - OVMS on KServe does not expose the correct endpoint in the dashboard

When you use the OpenVINO Model Server (OVMS) runtime to deploy a model on the single-model serving platform, the URL shown in the **Inference endpoint** field for the deployed model is not complete. To send queries to the model, you must add the /**v2/models/\_<model-name>\_/infer** string to the end of the URL. Replace **\_<model-name>\_** with the name of your deployed model.

RHOAIENG-3378 - Internal Image Registry is an undeclared hard dependency for Jupyter notebooks spawn process

Before you can start OpenShift AI notebooks and workbenches, you must first enable the internal, integrated container image registry in OpenShift Container Platform. Attempts to start notebooks or workbenches without first enabling the image registry will fail with an "InvalidImageName" error.

You can confirm whether the image registry is enabled for a cluster by using the following command:

\$ oc get pods -n openshift-image-registry

### Workaround

Enable the internal, integrated container image registry in OpenShift Container Platform. See Image Registry Operator in OpenShift Container Platform for more information about how to set up and configure the image registry.

RHOAIENG-2759 - Model deployment fails when both secured and regular model servers are present in a project

When you create a second model server in a project where one server is using token authentication, and the other server does not use authentication, the deployment of the second model might fail to start.

RHOAIENG-2602 - "Average response time" server metric graph shows multiple lines due to ModelMesh pod restart

The Average response time server metric graph shows multiple lines if the ModelMesh pod is restarted.

RHOAIENG-2585 - UI does not display an error/warning when UWM is not enabled in the cluster

Red Hat OpenShift AI does not correctly warn users if User Workload Monitoring (UWM) is **disabled** in the cluster. UWM is necessary for the correct functionality of model metrics.

#### Workaround

Manually ensure that UWM is enabled in your cluster, as described in Enabling monitoring for user-defined projects.

## RHOAIENG-2555 - Model framework selector does not reset when changing Serving Runtime in form

When you use the **Deploy model** dialog to deploy a model on the single-model serving platform, if you select a runtime and a supported framework, but then switch to a different runtime, the existing framework selection is not reset. This means that it is possible to deploy the model with a framework that is not supported for the selected runtime.

#### Workaround

While deploying a model, if you change your selected runtime, click the **Select a framework** list again and select a supported framework.

## RHOAIENG-2468 - Services in the same project as KServe might become inaccessible in OpenShift

If you deploy a non-OpenShift Al service in a data science project that contains models deployed on the single-model serving platform (which uses KServe), the accessibility of the service might be affected by the network configuration of your OpenShift cluster. This is particularly likely if you are using the OVN-Kubernetes network plugin in combination with host network namespaces.

#### Workaround

Perform one of the following actions:

- Deploy the service in another data science project that does not contain models deployed on the single-model serving platform. Or, deploy the service in another OpenShift project.
- In the data science project where the service is, add a network policy to accept ingress traffic to your application pods, as shown in the following example:

```
apiVersion: networking.k8s.io/v1 kind: NetworkPolicy metadata: name: allow-ingress-to-myapp spec: podSelector: matchLabels: app: myapp ingress: - {}
```

#### RHOAIENG-2312 - Importing numpy fails incode-server workbench

Importing **numpy** in your **code-server** workbench fails.

#### Workaround

1. In your **code-server** workbench, from the **Activity bar**, select the menu icon ( View > Command Palette to open the Command Palette.

In Firefox, you can use the F1 keyboard shortcut to open the command palette.

- 2. Enter python: s.
- 3. From the drop-down list, select the **Python: Select interpreter** action.
- 4. In the Select Interpreter dialog, select Enter interpreter path....
- 5. Enter /opt/app-root/bin/python3 as the interpreter path and press Enter.
- 6. From the drop-down list, select the new Python interpreter.
- 7. Confirm that the new interpreter (**app-root**) appears on the **Status bar**. The selected interpreter persists if the workbench is stopped and started again, so the workaround should need to be performed only once for each workbench.

## RHOAIENG-2228 - The performance metrics graph changes constantly when the interval is set to 15 seconds

On the **Endpoint performance** tab of the model metrics screen, if you set the **Refresh interval** to 15 seconds and the **Time range** to 1 hour, the graph results change continuously.

#### RHOAIENG-2183 - Endpoint performance graphs might show incorrect labels

In the **Endpoint performance** tab of the model metrics screen, the graph tooltip might show incorrect labels.

## RHOAIENG-1919 - Model Serving page fails to fetch or report the model route URL soon after its deployment

When deploying a model from the OpenShift AI dashboard, the system displays the following warning message while the **Status** column of your model indicates success with an **OK**/green checkmark.

Failed to get endpoint for this deployed model. routes.rout.openshift.io"<model\_name>" not found

#### Workaround

Refresh your browser page.

#### RHOAIENG-1452 - The Red Hat OpenShift AI Add-on gets stuck

The Red Hat OpenShift Al Add-on uninstall does not delete OpenShift Al components after being triggered via OCM APIs.

#### Workaround

Manually delete the remaining OpenShift Al resources as follows:

- 1. Delete the **DataScienceCluster** CR.
- 2. Wait until all pods are deleted from the **redhat-ods-applications** namespace.
- 3. If Serverless was set to **Managed** in the **DataScienceCluster** CR, wait until all pods are deleted from the **knative-serving** namespace.
- 4. Delete the **DSCInitialization** CR.
- 5. If Service Mesh was set to **Managed** in the **DSCInitialization** CR, wait until all pods are deleted from the **istio-system** namespace.

- 6. Uninstall the Red Hat OpenShift Al Operator.
- 7. Wait until all pods are deleted from the **redhat-ods-operator** namespace and the **redhat-ods-monitoring** namespace.

#### RHOAIENG-880 - Default pipelines service account is unable to create Ray clusters

You cannot create Ray clusters using the default pipelines Service Account.

#### Workaround

Authenticate using the CodeFlare SDK, by adding the following lines to the pipeline code:

```
from codeflare_sdk.cluster.auth import TokenAuthentication
  auth = TokenAuthentication(
    token=openshift_token, server=openshift_server
)
  auth_return = auth.login()
```



#### **NOTE**

If your cluster uses self-signed certificates, include **ca-cert-path=<path>** in the **TokenAuthentication** parameter list.

## RHOAIENG-404 - No Components Found page randomly appears instead of Enabled page in OpenShift Al dashboard

A No Components Found page might appear when you access the Red Hat OpenShift Al dashboard.

#### Workaround

Refresh the browser page.

### RHOAIENG-234 - Unable to view .ipynb files in VSCode in Insecured cluster

When you use the code-server notebook image on Google Chrome in an insecure cluster, you cannot view .ipynb files.

#### Workaround

Use a different browser.

## RHOAIENG-2541 - KServe controller pod experiences OOM because of too many secrets in the cluster

If your OpenShift cluster has a large number of secrets, the KServe controller pod might continually crash due to an out-of-memory (OOM) error.

#### Workaround

Reduce the number of secrets in the OpenShift cluster until the KServe controller pod becomes stable

RHOAIENG-1128 - Unclear error message displays when attempting to increase the size of a Persistent Volume (PV) that is not connected to a workbench

When attempting to increase the size of a Persistent Volume (PV) that is not connected to a workbench, an unclear error message is displayed.

#### Workaround

Verify that your PV is connected to a workbench before attempting to increase the size.

## RHOAIENG-545 - Cannot specify a generic default node runtime image in JupyterLab pipeline editor

When you edit an Elyra pipeline in the JupyterLab IDE pipeline editor, and you click the **PIPELINE PROPERTIES** tab, and scroll to the **Generic Node Defaults** section and edit the **Runtime Image** field, your changes are not saved.

#### Workaround

Define the required runtime image explicitly for each node. Click the **NODE PROPERTIES** tab, and specify the required image in the **Runtime Image** field.

## RHOAIENG-497 - Removing DSCI Results In OpenShift Service Mesh CR Being Deleted Without User Notification

If you delete the **DSCInitialization** resource, the OpenShift Service Mesh CR is also deleted. A warning message is not shown.

### RHOAIENG-307 - Removing the DataScienceCluster deletes all OpenShift Serverless CRs

If you delete the **DataScienceCluster** custom resource (CR), all OpenShift Serverless CRs (including knative-serving, deployments, gateways, and pods) are also deleted. A warning message is not shown.

### RHOAIENG-282 - Workload should not be dispatched if required resources are not available

Sometimes a workload is dispatched even though a single machine instance does not have sufficient resources to provision the RayCluster successfully. The **AppWrapper** CRD remains in a **Running** state and related pods are stuck in a **Pending** state indefinitely.

#### Workaround

Add extra resources to the cluster.

## RHOAIENG-131 - gRPC endpoint not responding properly after the InferenceService reports as Loaded

When numerous **InferenceService** instances are generated and directed requests, Service Mesh Control Plane (SMCP) becomes unresponsive. The status of the **InferenceService** instance is **Loaded**, but the call to the gRPC endpoint returns with errors.

#### Workaround

Edit the **ServiceMeshControlPlane** custom resource (CR) to increase the memory limit of the Istio egress and ingress pods.

#### RHOAIENG-130 - Synchronization issue when the model is just launched

When the status of the KServe container is **Ready**, a request is accepted even though the TGIS container is not ready.

#### Workaround

Wait a few seconds to ensure that all initialization has completed and the TGIS container is actually ready, and then review the request output.

#### RHOAIENG-3115 - Model cannot be queried for a few seconds after it is shown as ready

Models deployed using the multi-model serving platform might be unresponsive to queries despite appearing as **Ready** in the dashboard. You might see an "Application is not available" response when querying the model endpoint.

#### Workaround

Wait 30-40 seconds and then refresh the page in your browser.

RHOAIENG-1619 (previously documented as DATA-SCIENCE-PIPELINES-165) - Poor error message when S3 bucket is not writable

When you set up a data connection and the S3 bucket is not writable, and you try to upload a pipeline, the error message **Failed to store pipelines** is not helpful.

#### Workaround

Verify that your data connection credentials are correct and that you have write access to the bucket you specified.

RHOAIENG-1207 (previously documented as ODH-DASHBOARD-1758) - Error duplicating OOTB custom serving runtimes several times

If you duplicate a model-serving runtime several times, the duplication fails with the **Serving runtime name "<name>" already exists** error message.

#### Workaround

Change the **metadata.name** field to a unique value.

RHOAIENG-1204 (previously documented as ODH-DASHBOARD-1771) - JavaScript error during Pipeline step initializing

Sometimes the pipeline **Run details** page stops working when the run starts.

#### Workaround

Refresh the page.

RHOAIENG-1203 (previously documented as ODH-DASHBOARD-1781) - Missing tooltip for Started Run status

Data science pipeline runs sometimes don't show the tooltip text for the status icon shown.

#### Workaround

For more information, view the pipeline Run details page and see the run output.

RHOAIENG-1201 (previously documented as ODH-DASHBOARD-1908) - Cannot create workbench with an empty environment variable

When creating a workbench, if you click **Add variable** but do not select an environment variable type from the list, you cannot create the workbench. The field is not marked as required, and no error message is shown.

RHOAIENG-1196 (previously documented as ODH-DASHBOARD-2140) - Package versions displayed in dashboard do not match installed versions

The dashboard might display inaccurate version numbers for packages such as JupyterLab and Notebook. The package version number can differ in the image if the packages are manually updated.

#### Workaround

To find the true version number for a package, run the **pip list** command and search for the package name, as shown in the following examples:

```
$ pip list | grep jupyterlab
jupyterlab 3.5.3
$ pip list | grep notebook
notebook 6.5.3
```

## RHOAIENG-582 (previously documented as ODH-DASHBOARD-1335) - Rename Edit permission to Contributor

The term *Edit* is not accurate:

- For *most* resources, users with the **Edit** permission can not only edit the resource, they can also create and delete the resource.
- Users with the **Edit** permission cannot edit the project.

The term Contributor more accurately describes the actions granted by this permission.

RHOAIENG-432 (previously documented asRHODS-12928) - Using unsupported characters can generate Kubernetes resource names with multiple dashes

When you create a resource and you specify unsupported characters in the name, then each space is replaced with a dash and other unsupported characters are removed, which can result in an invalid resource name.

RHOAIENG-226 (previously documented asRHODS-12432) - Deletion of the notebook-culler ConfigMap causes Permission Denied on dashboard

If you delete the **notebook-controller-culler-config** ConfigMap in the **redhat-ods-applications** namespace, you can no longer save changes to the **Cluster Settings** page on the OpenShift Al dashboard. The save operation fails with an **HTTP request has failed** error.

#### Workaround

Complete the following steps as a user with **cluster-admin** permissions:

- 1. Log in to your cluster by using the **oc** client.
- 2. Enter the following command to update the **OdhDashboardConfig** custom resource in the **redhat-ods-applications** application namespace:

\$ oc patch OdhDashboardConfig odh-dashboard-config -n redhat-ods-applications -- type=merge -p '{"spec": {"dashboardConfig": {"notebookController.enabled": true}}}'

#### RHOAIENG-133 - Existing workbench cannot run Elyra pipeline after notebook restart

If you use the Elyra JupyterLab extension to create and run data science pipelines within JupyterLab, and you configure the pipeline server *after* you created a workbench and specified a notebook image within the workbench, you cannot execute the pipeline, even after restarting the notebook.

#### Workaround

1 Ston the running notehook

- i. Stop the failing hotebook.
- 2. Edit the workbench to make a small modification. For example, add a new dummy environment variable, or delete an existing unnecessary environment variable. Save your changes.
- 3. Restart the notebook.
- 4. In the left sidebar of JupyterLab, click Runtimes.
- 5. Confirm that the default runtime is selected.

#### RHOAIENG-52 - Token authentication fails in clusters with self-signed certificates

If you use self-signed certificates, and you use the Python **codeflare-sdk** in a notebook or in a Python script as part of a pipeline, token authentication will fail.

### RHOAIENG-11 - Separately installed instance of CodeFlare Operator not supported

In Red Hat OpenShift AI, the CodeFlare Operator is included in the base product and not in a separate Operator. Separately installed instances of the CodeFlare Operator from Red Hat or the community are not supported.

#### Workaround

Delete any installed CodeFlare Operators, and install and configure Red Hat OpenShift AI, as described in the Red Hat Knowledgebase solution How to migrate from a separately installed CodeFlare Operator in your data science cluster.

#### RHODS-12798 - Pods fail with "unable to init seccomp" error

Pods fail with **CreateContainerError** status or **Pending** status instead of **Running** status, because of a known kernel bug that introduced a **seccomp** memory leak. When you check the events on the namespace where the pod is failing, or run the **oc describe pod** command, the following error appears:

runc create failed: unable to start container process: unable to init seccomp: error loading seccomp filter into kernel: error loading seccomp filter: errno 524

#### Workaround

Increase the value of **net.core.bpf\_jit\_limit** as described in the Red Hat Knowledgebase solution Pods failing with error loading seccomp filter into kernel: error 524 in OpenShift 4.

#### KUBEFLOW-177 - Bearer token from application not forwarded by OAuth-proxy

You cannot use an application as a custom workbench image if its internal authentication mechanism is based on a bearer token. The OAuth-proxy configuration removes the bearer token from the headers, and the application cannot work properly.

## RHOAIENG-5646 (previously documented as NOTEBOOKS-218) - Data science pipelines saved from the Elyra pipeline editor reference an incompatible runtime

When you save a pipeline in the Elyra pipeline editor with the format **.pipeline** in OpenShift Al version 1.31 or earlier, the pipeline references a runtime that is incompatible with OpenShift Al version 1.32 or later.

As a result, the pipeline fails to run after you upgrade OpenShift AI to version 1.32 or later.

#### Workaround

After you upgrade to OpenShift AI to version 1.32 or later, select the relevant runtime images again.

#### NOTEBOOKS-210 - A notebook fails to export as a PDF file in Jupyter

When you export a notebook as a PDF file in Jupyter, the export process fails with an error.

RHOAIENG-1210 (previously documented as ODH-DASHBOARD-1699) - Workbench does not automatically restart for all configuration changes

When you edit the configuration settings of a workbench, a warning message appears stating that the workbench will restart if you make any changes to its configuration settings. This warning is misleading because in the following cases, the workbench does not automatically restart:

- Edit name
- Edit description
- Edit, add, or remove keys and values of existing environment variables

#### Workaround

Manually restart the workbench.

RHOAIENG-1208 (previously documented as ODH-DASHBOARD-1741) - Cannot create a workbench whose name begins with a number

If you try to create a workbench whose name begins with a number, the workbench does not start.

#### Workaround

Delete the workbench and create a new one with a name that begins with a letter.

RHOAIENG-1205 (previously documented as RHODS-11791) - Usage data collection is enabled after upgrade

If you previously had the **Allow collection of usage data** option deselected (that is, disabled), this option becomes selected (that is, enabled) when you upgrade OpenShift Al.

#### Workaround

Manually reset the **Allow collection of usage data** option. To do this, perform the following actions:

- In the OpenShift AI dashboard, in the left menu, click Settings → Cluster settings.
   The Cluster Settings page opens.
- 2. In the Usage data collection section, deselect Allow collection of usage data.
- 3. Click Save changes.

## KUBEFLOW-157 - Logging out of JupyterLab does not work if you are already logged out of the OpenShift AI dashboard

If you log out of the OpenShift AI dashboard before you log out of JupyterLab, then logging out of JupyterLab is not successful. For example, if you know the URL for a Jupyter notebook, you are able to open this again in your browser.

#### Workaround

Log out of JupyterLab before you log out of the OpenShift Al dashboard.

RHODS-9789 - Pipeline servers fail to start if they contain a custom database that includes a dash in its database name or username field

When you create a pipeline server that uses a custom database, if the value that you set for the **dbname** field or **username** field includes a dash, the pipeline server fails to start.

#### Workaround

Edit the pipeline server to omit the dash from the affected fields.

RHOAIENG-580 (previously documented asRHODS-9412) - Elyra pipeline fails to run if workbench is created by a user with edit permissions

If a user who has been granted edit permissions for a project creates a project workbench, that user sees the following behavior:

- During the workbench creation process, the user sees an Error creating workbench message related to the creation of Kubernetes role bindings.
- Despite the preceding error message, OpenShift AI still creates the workbench. However, the error message means that the user will not be able to use the workbench to run Elyra data science pipelines.
- If the user tries to use the workbench to run an Elyra pipeline, Jupyter shows an **Error making** request message that describes failed initialization.

#### Workaround

A user with administrator permissions (for example, the project owner) must create the workbench on behalf of the user with edit permissions. That user can then use the workbench to run Elyra pipelines.

RHOAIENG-583 (previously documented asRHODS-8921 and RHODS-6373) - You cannot create a pipeline server or start a workbench when cumulative character limit is exceeded

When the cumulative character limit of a data science project name and a pipeline server name exceeds 62 characters, you are unable to successfully create a pipeline server. Similarly, when the cumulative character limit of a data science project name and a workbench name exceeds 62 characters, workbenches fail to start.

#### Workaround

Rename your data science project so that it does not exceed 30 characters.

RHODS-7718 - User without dashboard permissions is able to continue using their running notebooks and workbenches indefinitely

When a Red Hat OpenShift AI administrator revokes a user's permissions, the user can continue to use their running notebooks and workbenches indefinitely.

#### Workaround

When the OpenShift Al administrator revokes a user's permissions, the administrator should also stop any running notebooks and workbenches for that user.

RHOAIENG-1157 (previously documented asRHODS-6955) - An error can occur when trying to edit a workbench

When editing a workbench, an error similar to the following can occur:

### Error creating workbench

Operation cannot be fulfilled on notebooks.kubeflow.org "workbench-name": the object has been modified; please apply your changes to the latest version and try again

RHOAIENG-1132 (previously documented asRHODS-6383) - An ImagePullBackOff error message is not displayed when required during the workbench creation process

Pods can experience issues pulling container images from the container registry. If an error occurs, the relevant pod enters into an **ImagePullBackOff** state. During the workbench creation process, if an **ImagePullBackOff** error occurs, an appropriate message is not displayed.

#### Workaround

Check the event log for further information on the **ImagePullBackOff** error. To do this, click on the workbench status when it is starting.

RHOAIENG-1152 (previously documented asRHODS-6356) - The notebook creation process fails for users who have never logged in to the dashboard

The dashboard's notebook **Administration** page displays users belonging to the user group and admin group in OpenShift. However, if an administrator attempts to start a notebook server on behalf of a user who has never logged in to the dashboard, the server creation process fails and displays the following error message:

Request invalid against a username that does not exist.

#### Workaround

Request that the relevant user logs into the dashboard.

RHODS-5763 - Incorrect package version displayed during notebook selection

The **Start a notebook server** page displays an incorrect version number for the Anaconda notebook image.

RHODS-5543 - When using the NVIDIA GPU Operator, more nodes than needed are created by the Node Autoscaler

When a pod cannot be scheduled due to insufficient available resources, the Node Autoscaler creates a new node. There is a delay until the newly created node receives the relevant GPU workload. Consequently, the pod cannot be scheduled and the Node Autoscaler's continuously creates additional new nodes until one of the nodes is ready to receive the GPU workload. For more information about this issue, see the Red Hat Knowledgebase solution When using the NVIDIA GPU Operator, more nodes than needed are created by the Node Autoscaler.

#### Workaround

Apply the **cluster-api**/accelerator label in **machineset.spec.template.spec.metadata**. This causes the autoscaler to consider those nodes as unready until the GPU driver has been deployed.

RHOAIENG-1149 (previously documented RHODS-5216) - The application launcher menu incorrectly displays a link to OpenShift Cluster Manager

Red Hat OpenShift Al incorrectly displays a link to the OpenShift Cluster Manager from the application launcher menu. Clicking this link results in a "Page Not Found" error because the URL is not valid.

## RHOAIENG-1137 (previously documented as RHODS-5251) - Notebook server administration page shows users who have lost permission access

If a user who previously started a notebook server in Jupyter loses their permissions to do so (for example, if an OpenShift Al administrator changes the user's group settings or removes the user from a permitted group), administrators continue to see the user's notebook servers on the server **Administration** page. As a consequence, an administrator is able to restart notebook servers that belong to the user who's permissions were revoked.

#### RHODS-4799 - Tensorboard requires manual steps to view

When a user has TensorFlow or PyTorch notebook images and wants to use TensorBoard to display data, manual steps are necessary to include environment variables in the notebook environment, and to import those variables for use in your code.

#### Workaround

When you start your notebook server, use the following code to set the value for the TENSORBOARD\_PROXY\_URL environment variable to use your OpenShift AI user ID.

import os os.environ["TENSORBOARD\_PROXY\_URL"]= os.environ["NB\_PREFIX"]+"/proxy/6006/"

## RHODS-4718 - The Intel® oneAPI AI Analytics Toolkits quick start references nonexistent sample notebooks

The Intel® oneAPI AI Analytics Toolkits quick start, located on the **Resources** page on the dashboard, requires the user to load sample notebooks as part of the instruction steps, but refers to notebooks that do not exist in the associated repository.

# RHODS-4627 - The CronJob responsible for validating Anaconda Professional Edition's license is suspended and does not run daily

The CronJob responsible for validating Anaconda Professional Edition's license is automatically suspended by the OpenShift AI operator. As a result, the CronJob does not run daily as scheduled. In addition, when Anaconda Professional Edition's license expires, Anaconda Professional Edition is not indicated as disabled on the OpenShift AI dashboard.

## RHOAIENG-1141 (previously documented as RHODS-4502) - The NVIDIA GPU Operator tile on the dashboard displays button unnecessarily

GPUs are automatically available in Jupyter after the NVIDIA GPU Operator is installed. The **Enable** button, located on the NVIDIA GPU Operator tile on the **Explore** page, is therefore redundant. In addition, clicking the **Enable** button moves the NVIDIA GPU Operator tile to the **Enabled** page, even if the Operator is not installed.

## RHOAIENG-1135 (previously documented as RHODS-3985) - Dashboard does not display Enabled page content after ISV operator uninstall

After an ISV operator is uninstalled, no content is displayed on the **Enabled** page on the dashboard. Instead, the following error is displayed:

Error loading components HTTP request failed

### Workaround

Wait 30-40 seconds and then refresh the page in your browser.

#### RHODS-3984 - Incorrect package versions displayed during notebook selection

In the OpenShift AI interface, the **Start a notebook server page**displays incorrect version numbers for the JupyterLab and Notebook packages included in the oneAPI AI Analytics Toolkit notebook image. The page might also show an incorrect value for the Python version used by this image.

#### Workaround

When you start your oneAPI AI Analytics Toolkit notebook server, you can check which Python packages are installed on your notebook server and which version of the package you have by running the **!pip list** command in a notebook cell.

### RHODS-2956 - Error can occur when creating a notebook instance

When creating a notebook instance in Jupyter, a **Directory not found** error appears intermittently. This error message can be ignored by clicking **Dismiss**.

### RHOAING-1147 (previously documented as RHODS-2881) - Actions on dashboard not clearly visible

The dashboard actions to revalidate a disabled application license and to remove a disabled application tile are not clearly visible to the user. These actions appear when the user clicks on the application tile's **Disabled** label. As a result, the intended workflows might not be clear to the user.

## RHOAIENG-1134 (previously documented as RHODS-2879) - License revalidation action appears unnecessarily

The dashboard action to revalidate a disabled application license appears unnecessarily for applications that do not have a license validation or activation system. In addition, when a user attempts to revalidate a license that cannot be revalidated, feedback is not displayed to state why the action cannot be completed.

## RHOAIENG-2305 (previously documented as RHODS-2650) - Error can occur during Pachyderm deployment

When creating an instance of the Pachyderm operator, a webhook error appears intermittently, preventing the creation process from starting successfully. The webhook error is indicative that, either the Pachyderm operator failed a health check, causing it to restart, or that the operator process exceeded its container's allocated memory limit, triggering an Out of Memory (OOM) kill.

#### Workaround

Repeat the Pachyderm instance creation process until the error no longer appears.

#### RHODS-2096 - IBM Watson Studio not available in OpenShift Al

IBM Watson Studio is not available when OpenShift AI is installed on OpenShift Dedicated 4.9 or higher, because it is not compatible with these versions of OpenShift Dedicated. Contact Marketplace support for assistance manually configuring Watson Studio on OpenShift Dedicated 4.9 and higher.

### **CHAPTER 7. PRODUCT FEATURES**

Red Hat OpenShift AI provides a rich set of features for data scientists and IT operations administrators. To learn more, see Introduction to Red Hat OpenShift AI.