



Red Hat OpenShift Data Science self-managed 1.32

1.32 release notes

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

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Abstract

These release notes provide an overview of new features, enhancements, resolved issues, and known issues in version 1.32 of Red Hat OpenShift Data Science.

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CHAPTER 1. OVERVIEW OF OPENSIFT DATA SCIENCE

Using Red Hat OpenShift Data Science, users can integrate data, artificial intelligence and machine learning software to execute end-to-end machine learning workflows. OpenShift Data Science is supported in two configurations:

1. Installed as an Add-on to a Red Hat managed environment such as Red Hat OpenShift Dedicated and Red Hat OpenShift Service on Amazon Web Services (ROSA).
2. Installed as a self-managed Operator on a self-managed environment, such as Red Hat OpenShift Container Platform.

For data scientists, OpenShift Data Science 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 also accelerate your data science experiments through the use of graphics processing units (GPUs).

For administrators, OpenShift Data Science enables data science workloads in an existing Red Hat OpenShift Dedicated 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.

To learn more, see [Introduction to Red Hat OpenShift Data Science](#) .

CHAPTER 2. LIMITED AVAILABILITY FEATURES

This section describes Limited Availability features in Red Hat OpenShift Data Science 1.32. Limited Availability means that you can install and receive support for the feature only with specific approval from Red Hat. Without such approval, the feature is unsupported. This applies to all features described in this section.

Version 2.1 of the Red Hat OpenShift Data Science Operator

Red Hat OpenShift Data Science 1.32 includes version 2.1 of the Red Hat OpenShift Data Science Operator as a Limited Availability feature.

Composite model-serving runtime based on Caikit and TGIS

A composite model-serving runtime that is based on Caikit and TGIS is available as a Limited Availability feature. You can install the runtime only using version 2.1 of the Red Hat OpenShift Data Science Operator. The runtime consists of the following components:

- [TGIS](#)
- [Caikit](#)
- [Caikit-nlp](#)
- [KServe](#)
- [Service Mesh](#)
- [Serverless](#)

CHAPTER 3. RESOLVED ISSUES

This section describes notable issues that have been resolved in Red Hat OpenShift Data Science 1.32.

ODH-DASHBOARD-1639 - Wrong TLS value in dashboard route

Previously, when a route was created for the OpenShift Data Science dashboard on OpenShift, the **tls.termination** field had an invalid default value of **Reencrypt**. This issue is now resolved. The new value is **reencrypt**.

ODH-DASHBOARD-1638 - Name placeholder in Triggered Runs tab shows Scheduled run name

Previously, when you clicked **Pipelines > Runs** and then selected the **Triggered** tab to configure a triggered run, the example value shown in the **Name** field was **Scheduled run name**. This issue is now resolved.

ODH-DASHBOARD-1547 - "We can't find that page" message displayed in dashboard when pipeline operator installed in background

Previously, when you used the **Data Science Pipelines** page of the dashboard to install the OpenShift Pipelines Operator, when the Operator installation was complete, the page refreshed to show a "We can't find that page" message. This issue is now resolved. When the Operator installation is complete, the dashboard redirects you to the **Pipelines** page, where you can create a pipeline server.

ODH-DASHBOARD-1545 - Dashboard keeps scrolling to bottom of project when Models tab is expanded

Previously, on the **Data Science Projects** page of the dashboard, if you clicked the **Deployed models** tab to expand it and then tried to perform other actions on the page, the page automatically scrolled back to the **Deployed models** section. This affected your ability to perform other actions. This issue is now resolved.

NOTEBOOKS-156 - Elyra included an example runtime called Test

Previously, Elyra included an example runtime configuration called **Test**. If you selected this configuration when running a data science pipeline, you could see errors. The **Test** configuration has now been removed.

CHAPTER 4. KNOWN ISSUES

This section describes known issues in Red Hat OpenShift Data Science 1.32 and any known methods of working around these issues.

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 Data Science.

Workaround

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

1. In the OpenShift Data Science 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**.

DATA-SCIENCE-PIPELINES-OPERATOR-294 - Scheduled pipeline run that uses data-passing might fail to pass data between steps, or fail the step entirely

A scheduled pipeline run that uses an S3 object store to store the pipeline artifacts might fail with an error such as the following:

```
Bad value for --endpoint-url "cp": scheme is missing. Must be of the form http://<hostname>/ or https://<hostname>/
```

This issue occurs because the S3 object store endpoint is not successfully passed to the pods for the scheduled pipeline run.

Workaround

Depending on the size of the pipeline artifacts being passed, you can either partially or completely work around this issue by applying a custom artifact-passing script and then restarting the pipeline server. Specifically, this workaround results in the following behavior:

- For pipeline artifacts smaller than 3 kilobytes, the pipeline run now successfully passes the artifacts into your S3 object store.
- For pipeline artifacts larger than 3 kilobytes, the pipeline run still *does not* pass the artifacts into your S3 object store. However, the workaround ensures that the run continues to completion. Any smaller artifacts in the remainder of the pipeline run are successfully stored.

To apply this workaround, perform the following actions:

1. In a text editor, paste the following YAML-based artifact-passing script. The script defines a **ConfigMap** object.

```
apiVersion: v1
data:
  artifact_script: |-
    #!/usr/bin/env sh
```

```

push_artifact() {
    workspace_dir=$(echo $(context.taskRun.name) | sed -e "s/$(context.pipeline.name)-
//g")

workspace_dest=/workspace/${workspace_dir}/artifacts/$(context.pipelineRun.name)/$(context.
taskRun.name)
    artifact_name=$(basename $2)
    if [ -f "$workspace_dest/$artifact_name" ]; then
        echo sending to: ${workspace_dest}/${artifact_name}
        tar -cvzf $1.tgz -C ${workspace_dest} ${artifact_name}
        aws s3 --endpoint <Endpoint> cp $1.tgz
s3://<Bucket>/artifacts/$PIPELINERUN/$PIPELINETASK/$1.tgz
    elif [ -f "$2" ]; then
        tar -cvzf $1.tgz -C $(dirname $2) ${artifact_name}
        aws s3 --endpoint <Endpoint> cp $1.tgz
s3://<Bucket>/artifacts/$PIPELINERUN/$PIPELINETASK/$1.tgz
    else
        echo "$2 file does not exist. Skip artifact tracking for $1"
    fi
}
push_log() {
    cat /var/log/containers/$PODNAME*$NAMESPACE*step-main*.log > step-main.log
    push_artifact main-log step-main.log
}
strip_eof() {
    if [ -f "$2" ]; then
        awk 'NF' $2 | head -c -1 > $1_temp_save && cp $1_temp_save $2
    fi
}
kind: ConfigMap
metadata:
    name: custom-script

```

2. In the script, replace any occurrences of `<Endpoint>` with your S3 endpoint (for example, <https://s3.amazonaws.com>), and occurrences of `<Bucket>` with your S3 bucket name.
3. Save the YAML file for the **ConfigMap** object.
4. Apply the YAML file.

```
$ oc apply -f <configmap_file_name>.yaml
```

5. Restart the pipeline server.

```

$ oc project <data_science_project_name>
$ oc delete pod $(oc get pods -l app=ds-pipeline-pipelines-definition --no-headers | awk
{print $1})

```

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.

ODH-DASHBOARD-1699 - Workbench does not restart after configuration update

If you update a workbench configuration (for example, by changing an environment variable value), the workbench does not automatically restart and you do not see the changes.

Workaround

Manually restart the workbench.

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

If you log out of the OpenShift Data Science 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 Data Science 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.

RHODS-9764 - Data connection details get reset when editing a workbench

When you edit a workbench that has an existing data connection and then select the **Create new data connection** option, the edit page might revert to the **Use existing data connection** option before you have finished specifying the new connection details.

Workaround

To work around this issue, perform the following actions:

1. Select the **Create new data connection** option again.
2. Specify the new connection details and click **Update workbench** before the page reverts to the **Use existing data connection** option.

RHODS-9583 - Data Science dashboard does not detect an existing OpenShift Pipelines installation

When the OpenShift Pipelines operator is installed as a global operator on your cluster, the Data Science dashboard does not properly detect it.

An alert icon appears next to the **Data Science Pipelines** option in the left navigation bar. When you open **Data Science Pipelines**, you see the message: "To use pipelines, first install the Red Hat OpenShift Pipelines Operator." However, when you view the list of installed operators in the **openshift-operators** project, you see that OpenShift Pipelines is installed as a global operator on your cluster.

Workaround

Follow these steps as a user with **cluster-admin** permissions:

1. Log in to your cluster using the **oc** client

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

```
$ oc patch OdhDashboardConfig odh-dashboard-config -n redhat-ods-applications --
type=merge -p '{"spec": {"dashboardConfig": {"disablePipelines": false}}}'
```

RHODS-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 Data Science 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.

RHODS-9030 - Uninstall process for OpenShift Data Science might become stuck when removing **kfdefs** resources

The steps for uninstalling OpenShift Data Science self-managed are described in [Uninstalling OpenShift Data Science self-managed](#).

However, even when you follow this guide, you might see that the uninstall process does not finish successfully. Instead, the process stays on the step of deleting **kfdefs** resources that are used by the KubeFlow Operator. As shown in the following example, **kfdefs** resources might exist in the **redhat-ods-applications**, **redhat-ods-monitoring**, and **rhods-notebooks** namespaces:

```
$ oc get kfdefs.kfdef.apps.kubeflow.org -A
```

NAMESPACE	NAME	AGE
redhat-ods-applications	rhods-anaconda	3h6m
redhat-ods-applications	rhods-dashboard	3h6m
redhat-ods-applications	rhods-data-science-pipelines-operator	3h6m
redhat-ods-applications	rhods-model-mesh	3h6m
redhat-ods-applications	rhods-nbc	3h6m
redhat-ods-applications	rhods-osd-config	3h6m
redhat-ods-monitoring	modelmesh-monitoring	3h6m
redhat-ods-monitoring	monitoring	3h6m
rhods-notebooks	rhods-notebooks	3h6m
rhods-notebooks	rhods-osd-config	3h5m

Failed removal of the **kfdefs** resources might also prevent later installation of a newer version of OpenShift Data Science.

Workaround

To manually delete the **kfdefs** resources so that you can complete the uninstall process, see the **"Force individual object removal when it has finalizers"** section of the following Red Hat solution article: <https://access.redhat.com/solutions/4165791>.

RHODS-8939 - For a Jupyter notebook created in a previous release, default shared memory might cause a runtime error

For a Jupyter notebook created in a release earlier than 1.31, the default shared memory for a Jupyter notebook is set to 64 Mb and you cannot change this default value in the notebook configuration.

For example, PyTorch relies on shared memory and the default size of 64 Mb is not enough for large use cases, such as when training a model or when performing heavy data manipulations. Jupyter reports a "no space left on device" message and **/dev/smh** is full.

Starting with release 1.31, this issue is fixed and any new notebook's shared memory is set to the size of the node.

Workaround

For a Jupyter notebook created in a release earlier than 1.31, either recreate the Jupyter notebook or follow these steps:

1. In your data science project, create a workbench as described in [Creating a project workbench](#).
2. In the data science project page, in the **Workbenches** section, click the **Status** toggle for the workbench to change it from **Running** to **Stopped**.
3. Open your OpenShift Console and then select **Administrator**.
4. Select **Home → API Explorer**.
5. In the **Filter by kind** field, type **notebook**.
6. Select the **kubeflow v1** notebook.
7. Select the **Instances** tab and then select the instance for the workbench that you created in Step 1.
8. Click the **YAML** tab and then select **Actions → Edit Notebook**.
9. Edit the YAML file to add the following information to the configuration:
 - For the container that has the name of your Workbench notebook, add the following lines to the **volumeMounts** section:

```
- mountPath: /dev/shm
  name: shm
```

For example, if your workbench name is **myworkbench**, update the YAML file as follows:

```
spec:
  containers:
    - env
      ...
      name: myworkbench
```

```
...
volumeMounts:
- mountPath: /dev/shm
  name: shm
```

- In the volumes section, add the lines shown in the following example:

```
volumes:
  name: shm
  emptyDir:
    medium: Memory
```

Note: Optionally, you can specify a limit to the amount of memory to use for the **emptyDir**.

10. Click **Save**.
11. In the data science dashboard, in the **Workbenches** section of the data science project, click the **Status** toggle for the workbench. The status changes from **Stopped** to **Starting** and then **Running**.
12. Restart the notebook.



WARNING

If you later edit the notebook's configuration through the Data Science dashboard UI, your workaround edit to the notebook configuration will be erased.

RHODS-8921 - You cannot create a pipeline server 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.

Workaround

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

RHODS-8865 - A pipeline server fails to start unless you specify an Amazon Web Services (AWS) Simple Storage Service (S3) bucket resource

When you create a data connection for a data science project, the **AWS_S3_BUCKET** field is not designated as a mandatory field. However, if you do not specify a value for this field, and you attempt to configure a pipeline server, the pipeline server fails to start successfully.

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

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

Workaround

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

RHODS-6907 - Attempting to increase the size of a Persistent Volume (PV) fails when it is not connected to a workbench

Attempting to increase the size of a Persistent Volume (PV) that is not connected to a workbench fails. When changing a data science project's storage, users can still edit the size of the PV in the user interface, but this action does not have any effect.

RHODS-6950 - Unable to scale down a workbench's GPUs when all GPUs in the cluster are being used

It is not possible to scale down a workbench's GPUs if all GPUs in the cluster are being used. This issue applies to GPUs being used by one workbench, and GPUs being used by multiple workbenches.

Workaround

To work around this issue, perform the following steps:

1. Stop all active workbenches that are using GPUs.
2. Wait until the relevant GPUs are available again.
3. Edit the workbench and scale down the GPU instances.

RHODS-6539 - Anaconda Professional Edition cannot be validated and enabled in OpenShift Data Science

Anaconda Professional Edition cannot be enabled as the dashboard's key validation for Anaconda Professional Edition is inoperable.

RHODS-6346 - Unclear error message displays when using invalid characters to create a data science project

When creating a data science project's data connection, workbench, or storage connection using invalid special characters, the following error message is displayed:

```
the object provided is unrecognized (must be of type Secret): couldn't get version/kind; json parse error: unexpected end of JSON input ({"apiVersion":"v1","kind":"Sec ...)
```

The error message fails to clearly indicate the problem.

RHODS-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
```

RHODS-6913 - When editing the configuration settings of a workbench, a misleading error message appears

When you edit the configuration settings of a workbench, a warning message appears stating the workbench will restart if you make any changes to its configuration settings. This warning is misleading, as if you change the values of its environment variables, the workbench does not automatically restart.

RHODS-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.

RHODS-6373 - Workbenches fail to start when cumulative character limit is exceeded

When the cumulative character limit of a data science project's title and workbench title exceeds 62 characters, workbenches fail to start.

RHODS-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-6216 - The ModelMesh oauth-proxy container is intermittently unstable

ModelMesh pods do not deploy correctly due to a failure of the ModelMesh **oauth-proxy** container. This issue occurs intermittently and only if authentication is enabled in the ModelMesh runtime environment. It is more likely to occur when additional ModelMesh instances are deployed in different namespaces.

RHODS-5906 - The NVIDIA GPU Operator is incompatible with OpenShift 4.11.12

Provisioning a GPU node on a OpenShift 4.11.12 cluster results in the **nvidia-driver-daemonset** pod getting stuck in a CrashLoopBackOff state. The NVIDIA GPU Operator is compatible with OpenShift 4.11.9 and 4.11.13.

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 [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.

RHODS-5216 - The application launcher menu incorrectly displays a link to OpenShift Cluster Manager

Red Hat OpenShift Data Science 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.

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 Data Science 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 whose permissions were revoked.

RHODS-4769 - GPUs on nodes with unsupported taints cannot be allocated to notebook servers

GPUs on nodes marked with any taint other than the supported *nvidia.com/gpu* taint cannot be selected when creating a notebook server. To avoid this issue, use only the *nvidia.com/gpu* taint on GPU nodes used with OpenShift Data Science.

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 Data Science 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 Data Science 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 Data Science dashboard.

RHODS-4502 - The NVIDIA GPU Operator card 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 card on the **Explore** page, is therefore redundant. In addition, clicking the **Enable** button moves the NVIDIA GPU Operator card to the **Enabled** page, even if the Operator is not installed.

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 Data Science 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**.

RHODS-2881 - Actions on dashboard not clearly visible

The dashboard actions to re-validate a disabled application's license, and to remove a disabled application's card are not clearly visible to the user. These actions only appear when the user clicks on the application card's **Disabled** label. As a result, the intended workflows may not be clear to the user.

RHODS-2879 - License re-validation action appears unnecessarily

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

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 Data Science

IBM Watson Studio is not available when OpenShift Data Science 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 5. PRODUCT FEATURES

Red Hat OpenShift Data Science provides a rich set of features for data scientists and IT operations administrators. To learn more, see [Introduction to Red Hat OpenShift Data Science](#) .