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Accessing Data Visualization in CML

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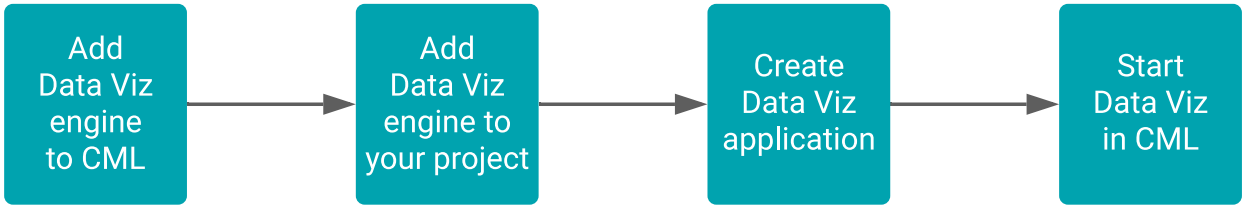
Contents

Accessing Data Visualization with custom engine

CDP Data Visualization is integrated with Cloudera Machine Learning (CML) workflows in CDP Public Cloud, so you can run it as a project application. One option for accessing Data Visualization is to add a custom engine to CML.



Tip:

In CDP Public Cloud, you can also work with Data Visualization in the Cloudera Data Warehouse service.

For on-prem access, you can use Data Visualization in Cloudera Data Science Workbench (CDSW).

Follow these steps to set up your Data Visualization application:

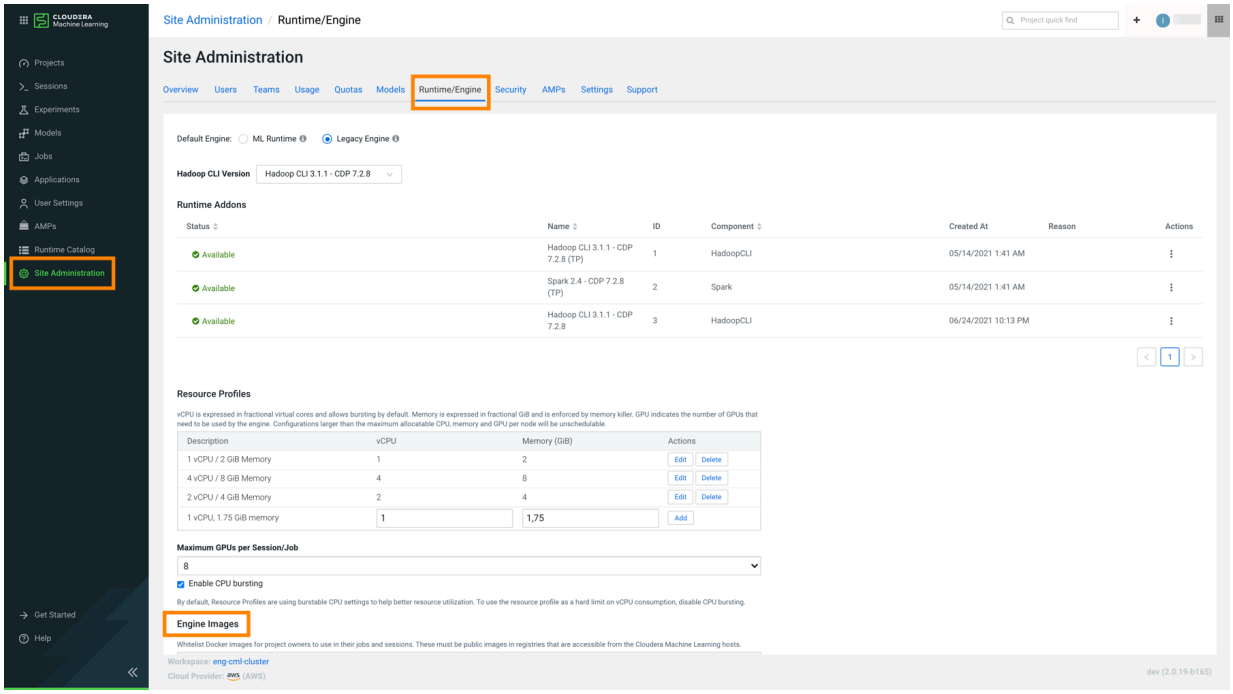
Adding Data Visualization engine to CML

Learn how to add a Data Visualization engine to Cloudera Machine Learning (CML).

Procedure

1. Go to the Cloudera Machine Learning web application and log in as a site administrator.
2. On the left navigation bar, click Site Administration.

   You can see an array of tabs for all the tasks you can perform as a site administrator.
3. Click the Runtime/Engine tab and go to the Engine Images section of the page.



4. Provide a description for the Data Visualization engine along with the link to the docker image in the Cloudera Docker Repository.

   Use the following engine:

   docker.repository.cloudera.com/cloudera/cdv/cmldataviz:6.4.2-b13

   Note: This is the docker image path of the latest released version for the 6.x line of Data Visualization. You can find path information for earlier versions in the Release Notes.

5. Click Add.
6. Once you added the new engine to CML, you can mark it as the default engine for your workspace.

Results

The new engine image is added to the list of engines available in the workspace.

What to do next

Add a Data Visualization engine to your CML project

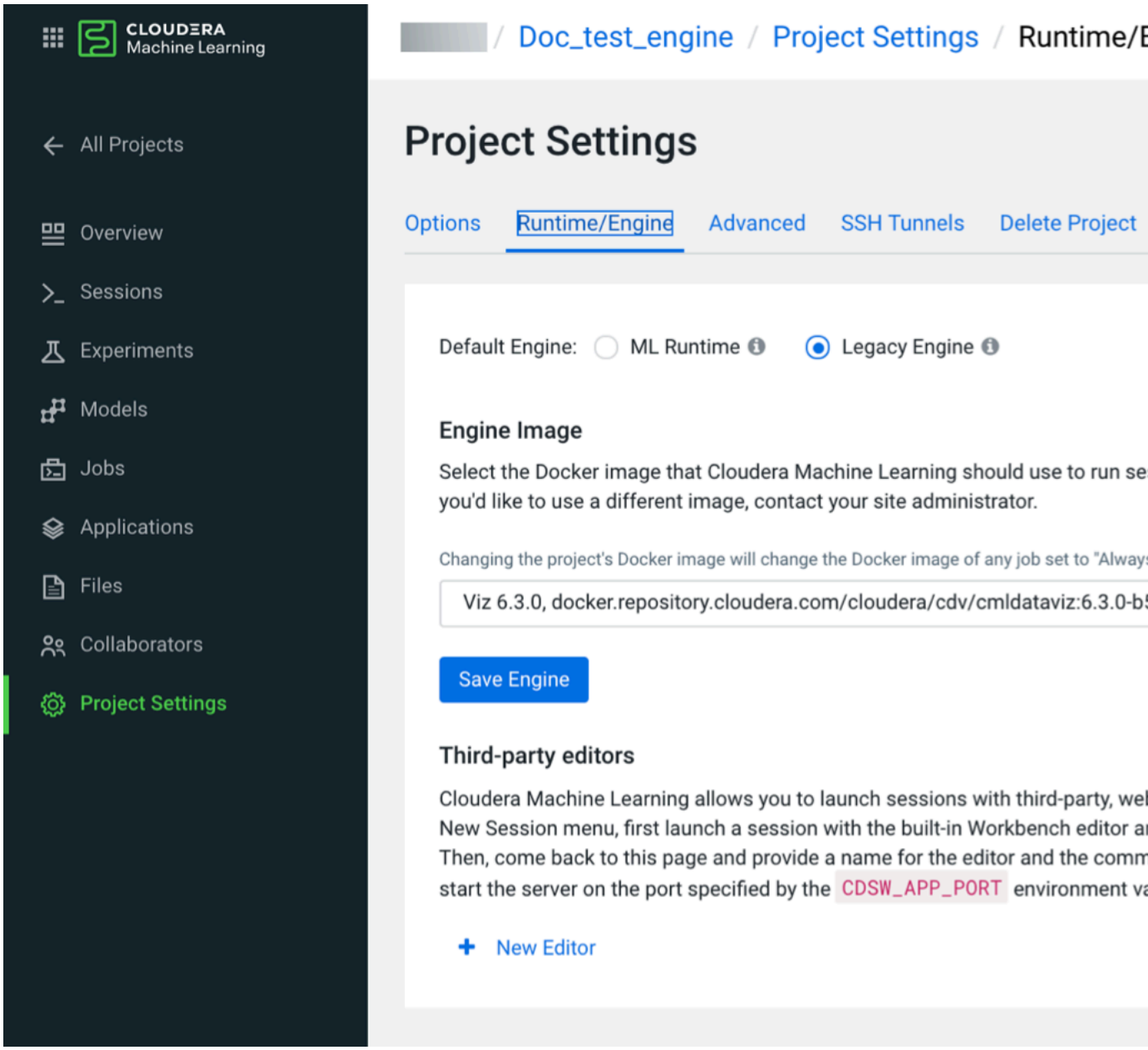
Adding Data Visualization engine to your CML project

Learn how to add the custom CDP Data Visualization engine to a project in Cloudera Machine Learning (CML).

Procedure

1. On the left navigation bar, click Projects.
2. Click the project where you want to use your custom engine.
3. Open Project Settings from the left navigation bar and click the Runtime/Engine tab.
4. Select the Data Visualization image from the drop-down menu.

5. Click Save Engine.



What to do next

Create a Data Visualization application in CML

Creating Data Visualization application using custom engine

Learn how to create an application in Cloudera Machine Learning (CML) to host the Data Visualization platform.

Procedure

1. Go to your CML project's Overview page.
2. On the left navigation bar, click Applications.
3. Click New Application.

4. Provide the following details for your new application:
   - Name – Enter a name for the application.
   - Subdomain – Enter a subdomain that will be used to construct the URL for the web application. Make sure it contains URL friendly characters.
   - Description – Enter a description for the application.
   - Script – Select the path to the startup script.

     Note: Use the script in the location: /opt/vizapps/tools/arcviz/startup_app.py
   - Engine Kernel – Select the kernel needed for this application.

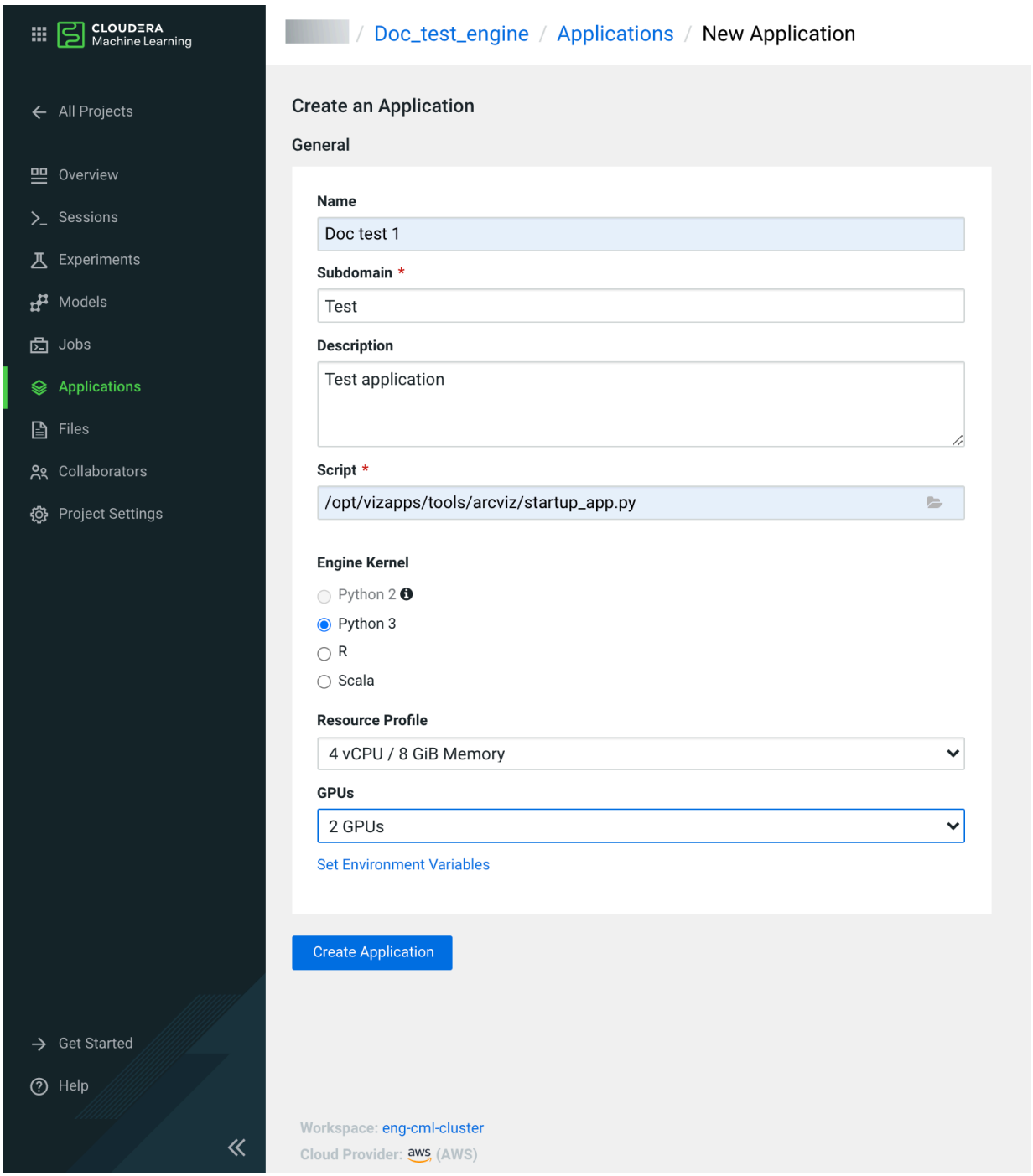
     

     Note: Use Python 3 to run the script as the application.
   - Resource Profile – Select the computing resources needed for this application.

     Tip: Choose an engine profile with 2 vCPU and 4 GiB RAM. A smaller engine profile also works but might have worse performance.
   - GPUs – Select the number of GPUs you need for your application.

     Choose an engine profile with 2 vCPU and 4 GiB RAM for optimal performance.A smaller engine profile also works but might have worse performance.

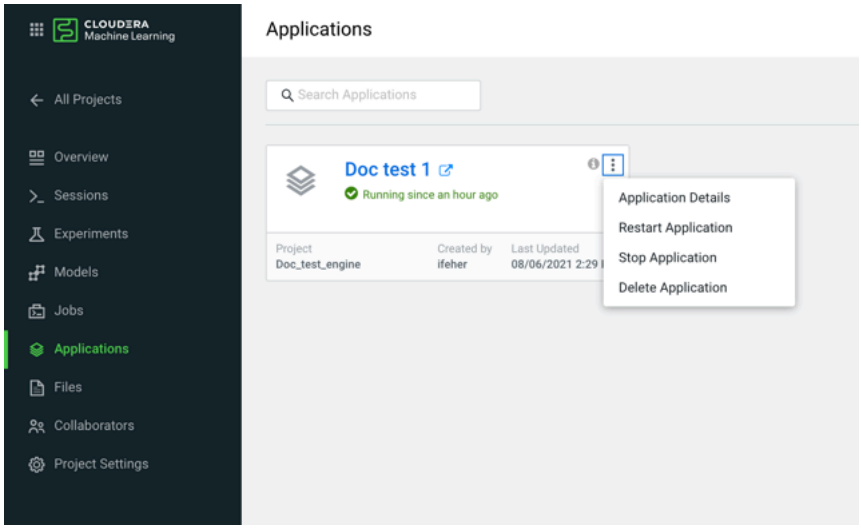


5. Click Create Application.

Results

In a few minutes, you should see the application status change from Starting to Running on the Applications page. Your application has a hosted, fully-functional Data Visualization platform.

You can Restart, Stop, or Delete an application from the supplemental menu of the application. If you want to make changes to the application, click Application Details and go to the Settings tab.



What to do next

Start Data Visualization in CML

Starting Data Visualization in CML

Learn how to start the CDP Data Visualization application you have created in Cloudera Machine Learning (CML).

On the Applications page, click the name of your Data Visualization application to access the web interface.

CDP Data Visualization opens in a new browser tab. SSO authentication is enabled by default, so you are logged in automatically. You land on the homepage view of CDP Data Visualization, where you can explore sample dashboards and access the in-tool Get Started guide for help.

If you want to log in as an administrator, you can use the following default credentials:

- username: vizapps_admin
- password: vizapps_admin

Important: If you use the default credentials, security issues may arise. Cloudera recommends that you change the default username and password.

See Setting authentication parameters for information on how to change authentication settings.

Related Information

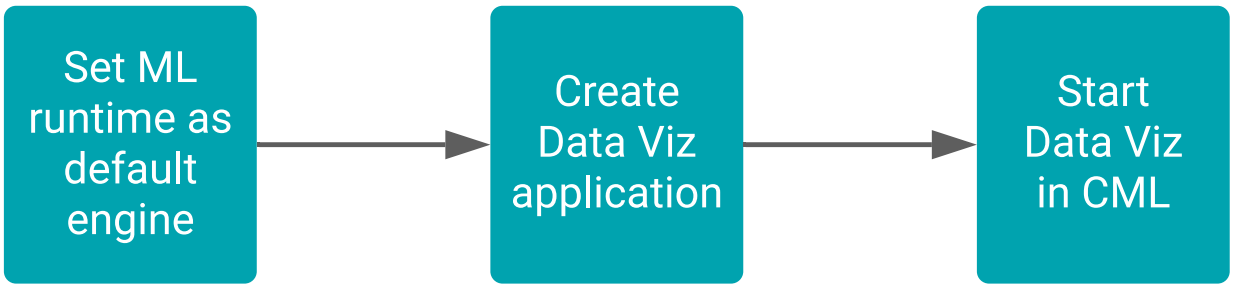
Setting authentication parameters

User interface overview

Data Visualization quickstart

Accessing Data Visualization with ML Runtime

CDP Data Visualization is integrated with Cloudera Machine Learning (CML) workflows in CDP Public Cloud, so you can run it as a project application. One option for accessing Data Visualization is to set ML Runtime as the default engine in CML



For more information about ML Runtimes, see Managing ML Runtimes.

Tip:

In CDP Public Cloud, you can also work with Data Visualization in the Cloudera Data Warehouse service.

For on-prem access, you can use Data Visualization in Cloudera Data Science Workbench (CDSW).

Follow these steps to set up your Data Visualization application in CML:

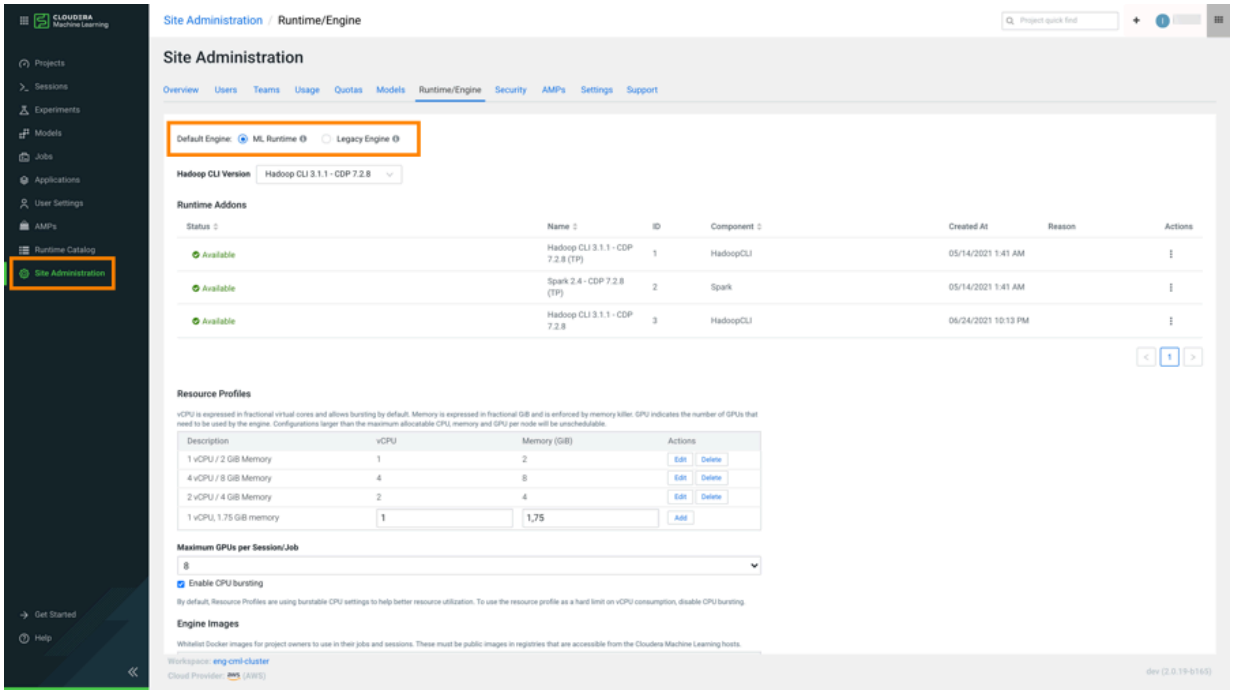
Setting ML runtime as default engine in CML

Learn how to set Machine Learning (ML) Runtime as the default engine in your Cloudera Machine Learning (CML) workspace.

Procedure

1. Go to the Cloudera Machine Learning web application and log in as a site administrator.
2. On the left navigation bar, click Site Administration.

   You can see an array of tabs for all the tasks that you can perform as a site administrator.
3. Click the Runtime/Engine tab.
4. Select ML Runtime as the Default Engine.



Results

The default engine type of the workspace is updated. Now you can create a Data Visualization application. For instructions, see Creating Data Visualization application using ML Runtime.

If you want to use ML Runtime only in selected projects, you can set it as a project-level engine in the Project Settings:

Setting ML Runtime as engine in a CML project

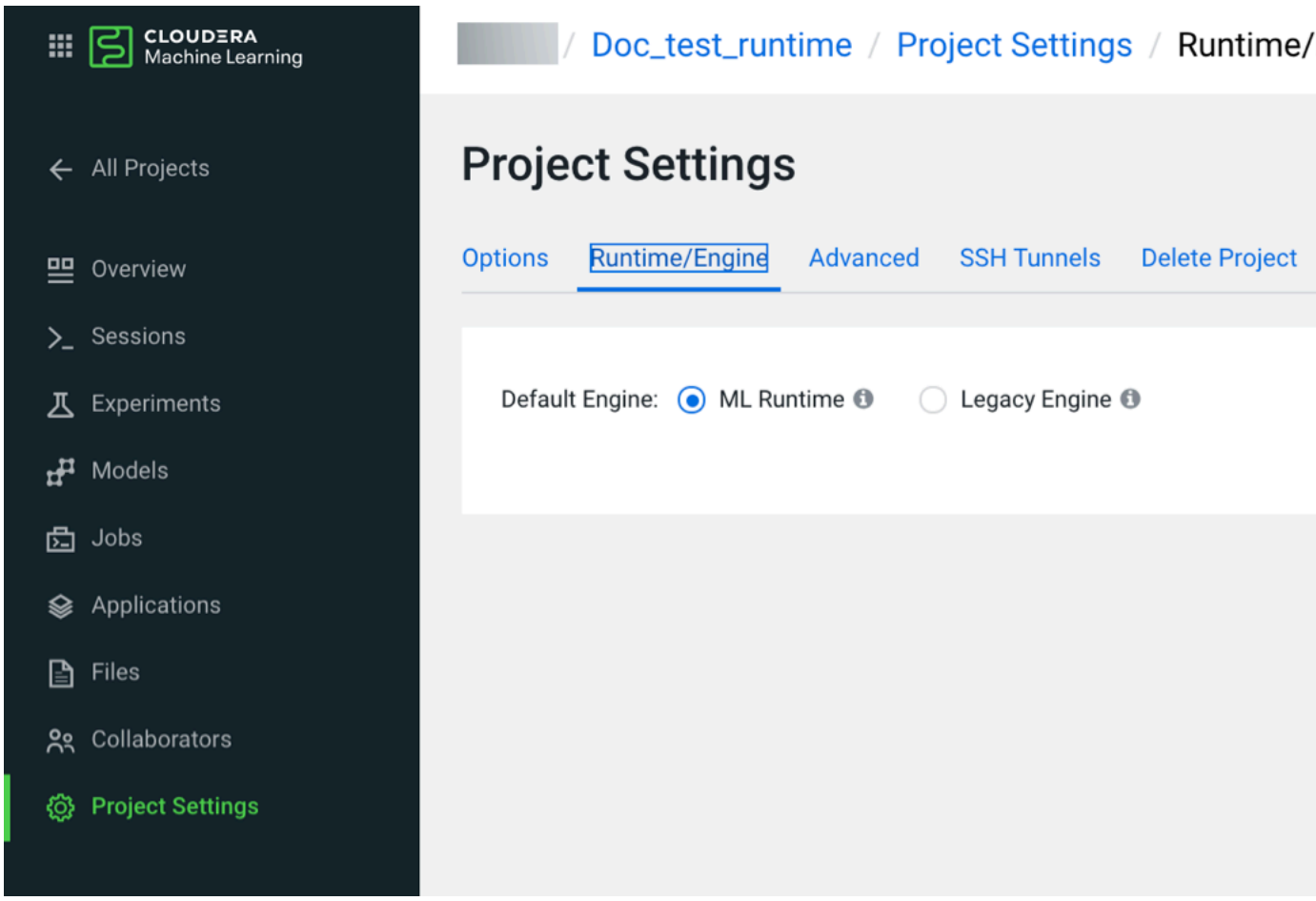
Learn how to define ML Runtime as the default engine in your Cloudera Machine Learning (CML) project.

About this task

Note: You only need to set ML Runtime as your project engine if the workspace of your project is not set to use ML Runtime by default.

Procedure

1. On the left navigation bar, click Projects.
2. Click the project where you want to set ML Runtime as the default engine type.
3. Open Project Settings from the left navigation bar and click the Runtime/Engine tab.
4. Select ML Runtime.



What to do next

Create Data Visualization application using ML Runtime

Creating Data Visualization application using ML Runtime

Learn how to create a Data Visualization application when using ML Runtime in Cloudera Machine Learning (CML).

Procedure

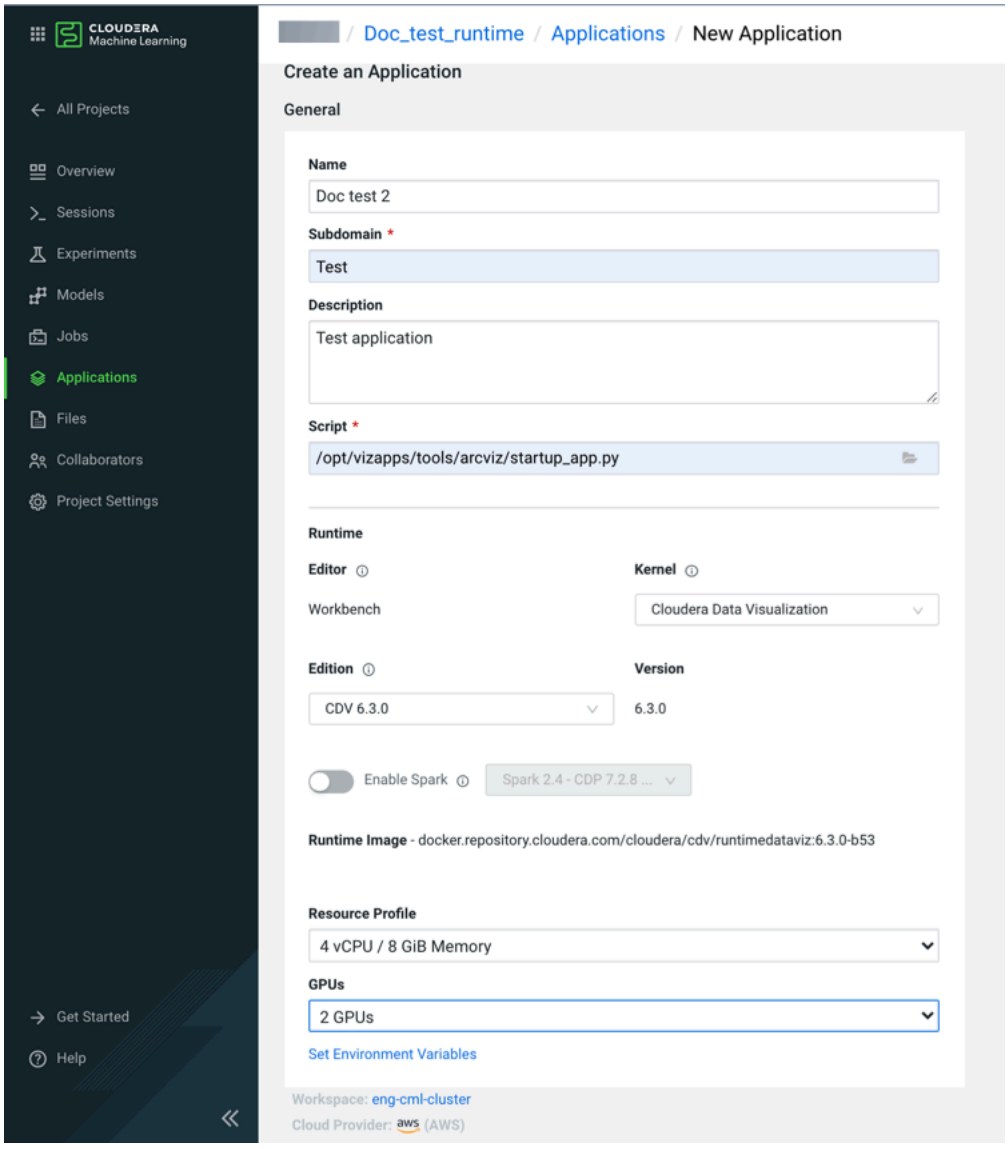
1. Go to your CML project's Overview page.
2. On the left sidebar, click Applications.
3. Click New Application.

4. Provide the following details for your new application:
   - Name – Enter a name for the application.
   - Subdomain – Enter a subdomain that will be used to construct the URL for the web application. Make sure it contains URL friendly characters.
   - Description – Enter a description for the application.
   - Script – Select the path to the startup script.

     Note: Use the script in the location: /opt/vizapps/tools/arcviz/startup_app.py

   - Kernel – Select Cloudera Data Visualization for the kernel supported by the Runtime variant of the CML project.
   - Edition – Select the edition of the Runtime variant you want to use for your application.

     Note: For Data Visualization, the selected edition automatically defines the version of the Runtime variant.



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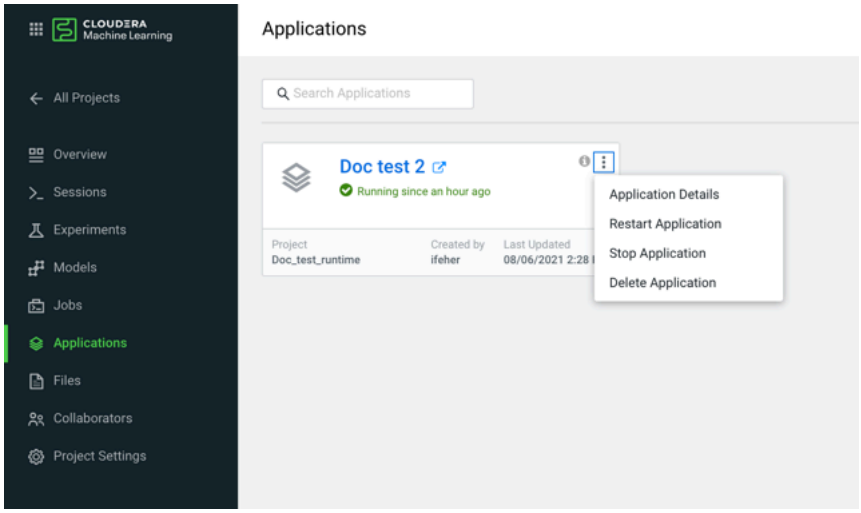

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