

# Starting Cloudera Data Visualization in Cloudera Data Science Workbench

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# Deploying a Cloudera Data Visualization application in Cloudera Data Science Workbench

Learn how to deploy Cloudera Data Visualization in Cloudera Data Science Workbench.

## Creating a Cloudera Data Science Workbench project with Cloudera Data Visualization Runtime

Learn how to create a Cloudera Data Science Workbench project with a Cloudera Data Visualization Runtime as the default runtime.

### Procedure

1. Click Projects on the left sidebar of Cloudera Data Science Workbench.
2. Click New Project on the Projects page.
3. Enter a project name.
4. Select the visibility of the project.
5. Under Initial Setup, you can either create a blank project, or select a source for your project files.
6. Click Create Project.

The created project uses Cloudera ML Runtimes that are managed in the Runtime Catalog.

### What to do next

After the project is created, you can start creating an application. You can select which runtime edition you want to use for the application.

## Creating a Cloudera Data Visualization application in Cloudera Data Science Workbench

Learn how to create a Cloudera Data Visualization application in Cloudera Data Science Workbench to help you visualize and interact with your data insights. This integration allows for seamless data visualization, exploration, and reporting within the same platform.

### About this task

The following steps will guide you on how to create a Cloudera Data Visualization application within Cloudera Data Science Workbench.



#### Important:

Each Cloudera Data Science Workbench project can host only one standalone Cloudera Data Visualization application.

### Procedure

1. Navigate to the Overview page of your Cloudera Data Science Workbench project.
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. Ensure it only contains URL-friendly characters.
- Description – Add a description for the application.
- Enable Unauthenticated Access – Mark the checkbox if you want to allow unauthenticated access to your application. You can also update this setting later on the Settings page of the application.



**Note:** To create public applications on an ML workspace, an Admin user needs to turn on the feature flag in Admin Security by selecting Allow applications to be configured with unauthenticated access. For more information on working with public applications, see *Application Limitations* in the Cloudera Data Science Workbench documentation.

- Script – Select the path to the startup script.



**Note:** Use the script located at: `/opt/vizapps/tools/arviz/startup_app.py`

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



**Note:** The selected edition determines the version of the Runtime variant.

All available runtimes are listed in the Cloudera Data Science Workbench Runtime Catalog. For more information about ML Runtimes, see [Managing ML Runtimes](#) and [Using Runtime Catalog](#).



**Note:** New ML Runtime releases are automatically added to the deployment, if internet connection is available.

**5. Click Create Application.****Results**

After a few minutes, the application status will change from Starting to Running on the Applications page. Your CDV application is now fully operational.

You can restart, stop, or delete a Cloudera Data Science Workbench application from the supplemental menu of the application. If you want to make changes to the application, navigate to Application Details Settings .

**What to do next**

Start Cloudera Data Visualization in Cloudera Data Science Workbench.

**Related Information**

[Application Limitations](#)

## Starting Cloudera Data Visualization in Cloudera Data Science Workbench

Learn how to start the Cloudera Data Visualization application you have created in Cloudera Data Science Workbench.

**Procedure**

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

2. Log in to Cloudera Data Visualization by entering your username and password. Use your workload credentials.

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

- username: vizapps\_admin
- password: vizapps\_admin

When using the default credentials to log in to Cloudera Data Visualization, you are prompted to change your password at the first login.



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

SSO authentication is disabled by default. See [Authentication](#) for information on how to permit user authentication with the Cloudera Data Science Workbench login credentials and log users in automatically.

After logging in, you land on the homepage view of Cloudera Data Visualization. Here you can explore some sample dashboards or access the in-tool Get Started guide for help.

### Related Information

[User interface overview](#)

[Cloudera Data Visualization quickstart](#)

## Using Cloudera Data Visualization in air-gapped Cloudera Data Science Workbench deployment

New Cloudera Data Visualization Runtime releases are automatically added to your deployment when an internet connection is available. However, in air-gapped Cloudera Data Science Workbench deployments, if you want to use Cloudera Data Visualization, you need to manually load the specific Cloudera Data Visualization Runtime in the cluster.

### Before you begin

Ensure you have the following:

- Cloudera Data Science Workbench 1.9.0 or higher to support runtimes
- Root access to all cluster nodes
- Cloudera Data Science Workbench installed as a parcel
- Admin access on the Cloudera Data Science Workbench cluster
- Proficiency in Docker, SQL, and Linux

### Procedure

1. Download the repo-assembly.json file from the [‘artifacts’ directory of the latest Cloudera Data Visualization version](#).
2. Download the Docker image to an Internet-connected node or your local machine.

```
image_identifier=$(jq -r '.runtimedataviz[0].image_identifier' repo-assembly.json)
docker pull "${image_identifier}"
```

3. Load the Docker image to all cluster nodes (master and all workers) using the `docker save` and `docker load` commands.

```
docker save -o runtimedataviz.tar <image_name>
docker load -i runtimedataviz:image_identifier
```

4. Verify that the Docker image is available on all nodes and has its original name and tag using the `docker images` command.

You will get a summary view of the Docker images, showing details such as the repository name, tag, image ID, creation date, and size.

5. Add the Cloudera Data Visualization image as a custom runtime, using the original Docker image name.

For example: `docker.repository.cloudera.com/cloudera/cdv/runtimedataviz:7.1.2-b53`

For detailed instructions, see [Adding New ML Runtimes](#).