

Monitoring Cloudera Data Engineering jobs

Date published: 2020-07-30

Date modified: 2025-11-08

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Cloudera Data Engineering log files

You can view logs for Cloudera Data Engineering using the web console, including Cloudera Data Engineering service logs, virtual cluster logs, and job logs.

To view logs for a Cloudera Data Engineering service or virtual cluster, click the three-dot menu for the service or virtual cluster, and then select View Logs. When the View Logs modal is displayed, you can download the logs or copy them to the clipboard by clicking the associated icon at the top right of the modal.

To view logs for a job run:

1. In the Cloudera console, click the Data Engineering tile. The Cloudera Data Engineering Home page displays.
2. In the left navigation menu, click Jobs. The Jobs page is displayed.
3. Using the dropdown menu, select the virtual cluster containing the job that you want to troubleshoot.
4. Select the job that you want to troubleshoot.
5. In the Run History tab, click the Run ID for the job run that you want to troubleshoot.
6. Go to the Logs tab.
7. Using the Select log type drop-down menu and the log file tabs, select the log you want to view .
8. To download the logs, click the Download menu button. You can download a text file of the currently displayed log, or download a zip file containing all log files.

Viewing Job run timeline

You can view the intermediate stages of the job run at every stage during its life cycle in real-time.

About this task

In case of a job failure, you can view the specific event and component where the job run failed. This reduces turnaround time during the debugging process for job run failure. You can see the step-by-step advancement of the job run on the UI, including all the granular details instead of reviewing extensive logs to obtain the same insights.

Procedure

1. In the Cloudera console, click the Data Engineering tile. The Cloudera Data Engineering Home page displays.
2. In the left navigation pane, click Jobs Runs. The Jobs Runs page displays.
3. Click on the Job Id for which you want to see the status.

4. Go to the Timeline tab. It displays the summary of the Job run progression in the reverse chronological order for both primary and subordinate stages.

The image shows two screenshots of the Cloudera Data Engineering interface. The left screenshot is a navigation menu with the following items:

- Home
- Jobs
- Job Runs** (highlighted with an orange box)
- Sessions
- Repositories
- Resources
- Administration

The right screenshot shows a detailed view of a job run. At the top, it displays the status as "Succeeded". Below that, there is a "Timeline" section with a "New" button, also highlighted with an orange box. The main content area is titled "Summary" and contains three entries:

- Succeeded**
Component: Runtime API Server
[Show Details](#)
- Running**
Component: Spark Container
[Show Details](#)
- Starting**
Component: Runtime API Server

Using Spark history server to troubleshoot Spark jobs

The Spark history server is a monitoring tool that displays information about completed Spark applications. It provides information for debugging, such as Spark configurations, DAG execution, driver and executor resource utilization, application logs, and job, stage and task-level details.



Important:

- To access and load the Spark UI correctly, ensure that the third party cookies for [*.]cloudera.com and [*.]cloudera.site are enabled.
- The Artifact Sharing access of a Cloudera Data Engineering job also applies to the job details in the Spark history server UI.

To view Spark history server information for a job run:

1. In the Cloudera console, click the Data Engineering tile. The Cloudera Data Engineering Home page displays.
2. Click Jobs in the left navigation menu.
3. From the drop-down list in the upper left-hand corner, select the Virtual Cluster that you want to restore jobs to.
4. Select the job that you want to troubleshoot.
5. Click Jobs Runs in the left menu, and click the Run ID for the job run you want to view the information.
6. Click the Spark UI tab to access the Spark history server.