

Cloudera Runtime 7.1.3

Hue Overview

Date published: 2020-05-21

Date modified: 2020-08-10

CLOUdera

<https://docs.cloudera.com/>

Legal Notice

© Cloudera Inc. 2025. All rights reserved.

The documentation is and contains Cloudera proprietary information protected by copyright and other intellectual property rights. No license under copyright or any other intellectual property right is granted herein.

Unless otherwise noted, scripts and sample code are licensed under the Apache License, Version 2.0.

Copyright information for Cloudera software may be found within the documentation accompanying each component in a particular release.

Cloudera software includes software from various open source or other third party projects, and may be released under the Apache Software License 2.0 (“ASLv2”), the Affero General Public License version 3 (AGPLv3), or other license terms. Other software included may be released under the terms of alternative open source licenses. Please review the license and notice files accompanying the software for additional licensing information.

Please visit the Cloudera software product page for more information on Cloudera software. For more information on Cloudera support services, please visit either the Support or Sales page. Feel free to contact us directly to discuss your specific needs.

Cloudera reserves the right to change any products at any time, and without notice. Cloudera assumes no responsibility nor liability arising from the use of products, except as expressly agreed to in writing by Cloudera.

Cloudera, Cloudera Altus, HUE, Impala, Cloudera Impala, and other Cloudera marks are registered or unregistered trademarks in the United States and other countries. All other trademarks are the property of their respective owners.

Disclaimer: EXCEPT AS EXPRESSLY PROVIDED IN A WRITTEN AGREEMENT WITH CLOUDERA, CLOUDERA DOES NOT MAKE NOR GIVE ANY REPRESENTATION, WARRANTY, NOR COVENANT OF ANY KIND, WHETHER EXPRESS OR IMPLIED, IN CONNECTION WITH CLOUDERA TECHNOLOGY OR RELATED SUPPORT PROVIDED IN CONNECTION THEREWITH. CLOUDERA DOES NOT WARRANT THAT CLOUDERA PRODUCTS NOR SOFTWARE WILL OPERATE UNINTERRUPTED NOR THAT IT WILL BE FREE FROM DEFECTS NOR ERRORS, THAT IT WILL PROTECT YOUR DATA FROM LOSS, CORRUPTION NOR UNAVAILABILITY, NOR THAT IT WILL MEET ALL OF CUSTOMER’S BUSINESS REQUIREMENTS. WITHOUT LIMITING THE FOREGOING, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CLOUDERA EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, NON-INFRINGEMENT, TITLE, AND FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION, WARRANTY, OR COVENANT BASED ON COURSE OF DEALING OR USAGE IN TRADE.

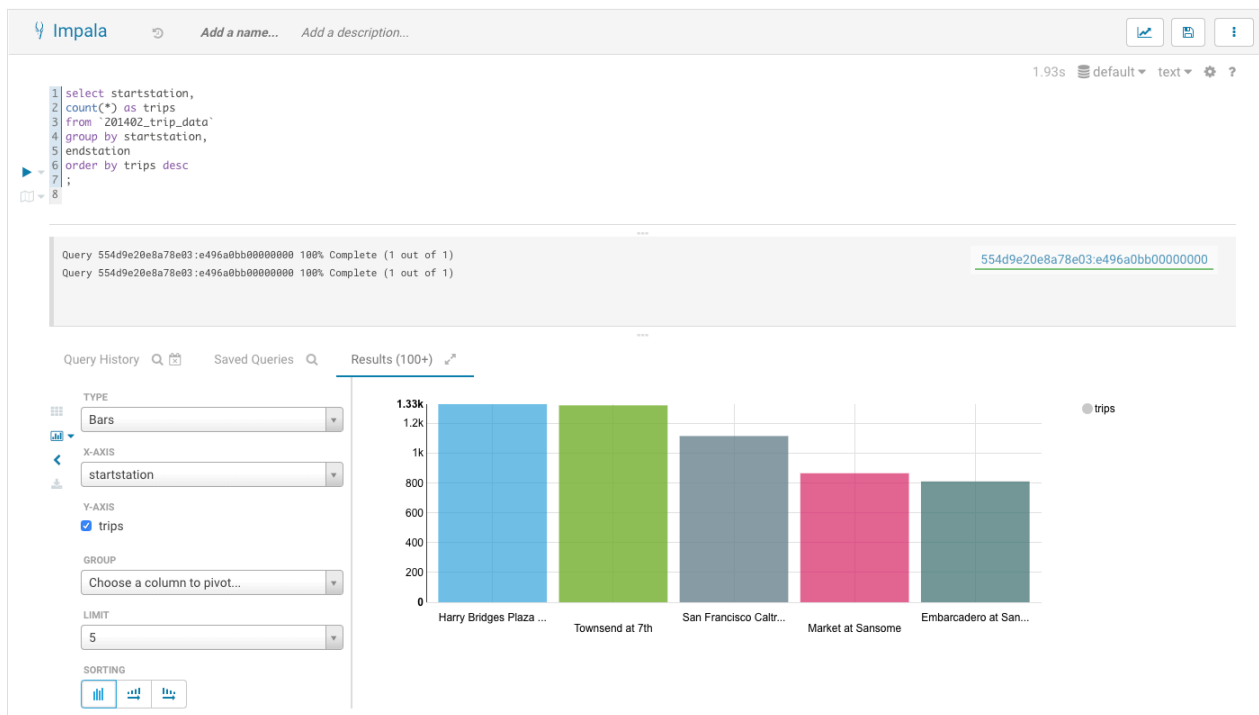
Contents

Hue Overview.....	4
--------------------------	----------

Hue Overview

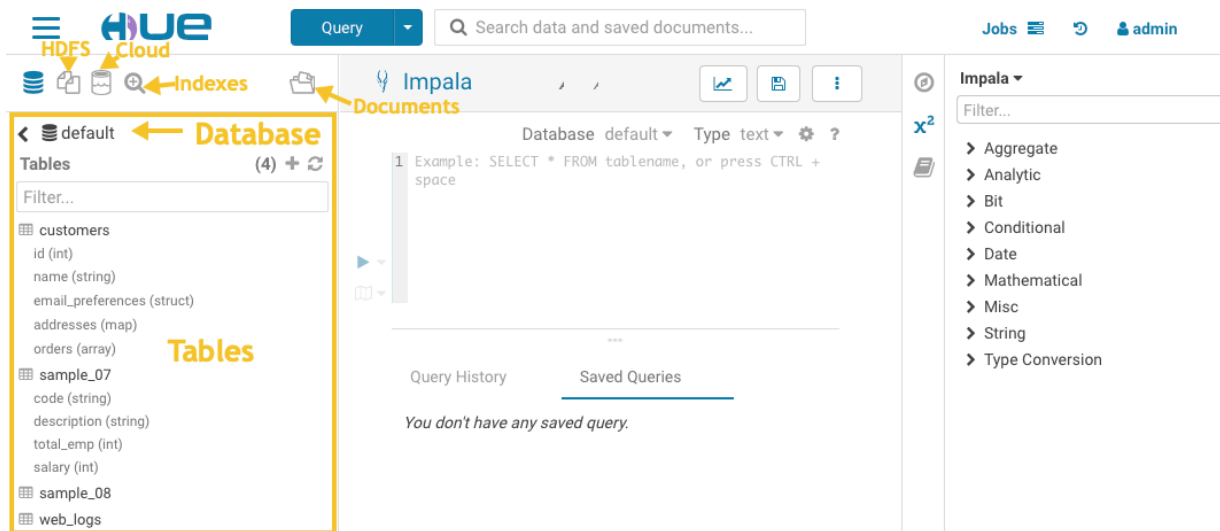
Hue is a web-based interactive query editor that enables you to interact with data warehouses. Data architects, SQL developers, and data engineers use Hue to create data models, clean data to prepare it for analysis, and to build and test SQL scripts for applications.

For example, the following image shows a graphic representation of Impala SQL query results that you can generate with Hue:



You can use Hue to:

- Explore, browse, and import your data through guided navigation in the left panel of the page:

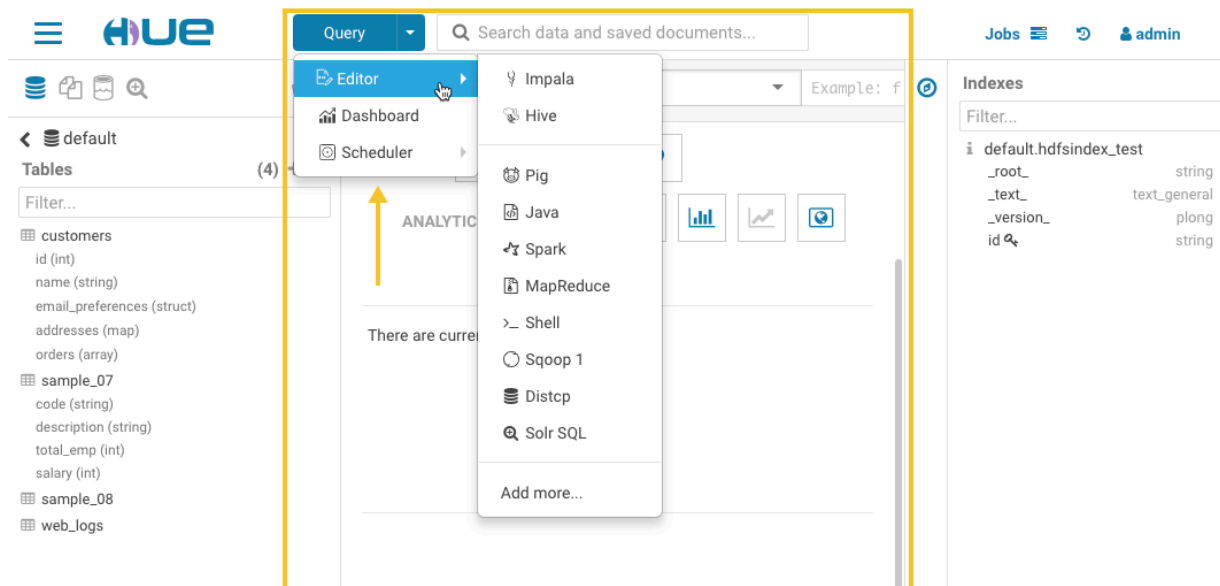


This panel enables you to:

- Browse your databases
- Drill down to specific tables
- View HDFS directories and cloud storage
- Discover indexes and HBase or Kudu tables
- Find documents

Objects can be tagged for quick retrieval, project association, or to assign a more "human-readable" name, if desired.

- Query your data, create a custom dashboard, or schedule repetitive jobs in the central panel of the page:



The central panel of the page provides a rich toolset, including:

- Versatile editors that enable you to create a wide variety of scripts.
- Dashboards that you can create "on-the-fly" by dragging and dropping elements into the central panel of the Hue interface. No programming is required. Then you can use your custom dashboard to explore your data.
- Schedulers that you can create by dragging and dropping, just like the dashboards feature. This feature enables you to create custom workflows and to schedule them to run automatically on a regular basis. A monitoring interface shows the progress, logs, and makes it possible to stop or pause jobs.

- Get expert advice on how to complete a task:

The screenshot shows the Hue web interface. On the left is a sidebar with a 'Tables' section containing a list of tables: customers, sample_07, sample_08, and web_logs. The main central panel is titled 'Impala' and shows a query editor with a placeholder text: 'Example: SELECT * FROM tablename, or press CTRL + space'. Below the editor are tabs for 'Query History' and 'Saved Queries', with a message stating 'You don't have any saved query.' On the right is a panel titled 'Impala' which contains a list of SQL functions categorized under 'Aggregate' and 'Analytic'. The 'Aggregate' category includes functions like appx_median, avg, count, group_concat, max, min, ndv, stddev, stddev_pop, stddev_samp, sum, variance, variance_pop, and variance_samp. The 'Analytic' category includes functions like cume_dist, dense_rank, first_value, lag, last_value, lead, ntile, percent_rank, rank, and row_number. A yellow box highlights the 'SQL Syntax Hints' section, which is a sub-category under 'Analytic'.

SQL Syntax Hints

- Aggregate**
 - appx_median([DISTINCT|ALL] T col)
 - avg([DISTINCT|ALL] col)
 - count([DISTINCT|ALL] col)
 - group_concat([ALL] col [, separator])
 - max([DISTINCT | ALL] T col)
 - min([DISTINCT | ALL] T col)
 - ndv([DISTINCT | ALL] col)
 - stddev([DISTINCT | ALL] col)
 - stddev_pop([DISTINCT | ALL] col)
 - stddev_samp([DISTINCT | ALL] col)
 - sum([DISTINCT | ALL] col)
 - variance([DISTINCT | ALL] col)
 - variance_pop([DISTINCT | ALL] col)
 - variance_samp([DISTINCT | ALL] col)
 - var_pop(col)
 - var_samp(col)
- Analytic**
 - cume_dist(T expr) OVER([partition_by_clause] order_by_clause)
 - dense_rank() OVER([partition_by_clause] order_by_clause)
 - first_value(expr) OVER([partition_by_clause] order_by_clause [window_clause])
 - lag(expr [, offset] [, default]) OVER ([partition_by_clause] order_by_clause)
 - last_value(expr) OVER([partition_by_clause] order_by_clause [window_clause])
 - lead(expr [, offset] [, default]) OVER ([partition_by_clause] order_by_clause)
 - ntile(T expr [, T offset ...])
 - percent_rank(T expr) OVER ([partition_by_clause] order_by_clause)
 - rank() OVER([partition_by_clause] order_by_clause)
 - row_number() OVER([partition_by_clause] order_by_clause)
- Bit**
- Conditional**
- Date**
- Mathematical**
- Misc**
- String**
- Type Conversion**
 - cast(a as T)
 - typeof(T a)

The assistant panel on the right provides expert advice and hints for whatever application is currently being used in the central panel. For example, in the above image, Impala SQL hints are provided to help construct queries in the central panel.