

Cloudera Runtime 7.2.16

Administering Hue

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CLOUDERA

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Hue configurations in Cloudera Data Warehouse

You can customize the settings for Hue at a Virtual Warehouse level by specifying the configurations in the hue-safety-valve field in the Cloudera Data Warehouse (CDW) UI.

The following table lists the safety valve parameters supported by Hue in Cloudera Data Warehouse:

Parameter	Description
<pre>[notebook] [[interpreters]] [[hive]] name=Hive interface=hiveserver2 [[hplsql]] name=Hplsql interface=hiveserver2</pre>	<p>Used to activate and enable switching between Hive and HPL/SQL interpreters for your queries.</p>  <p>Note: Hue enables you to switch between Hive and HPL/SQL interpreters. By default, the Hive interpreter is enabled when you create a Hive Virtual Warehouse. To enable the HPL/SQL interpreter, you must update the configuration in the hue-safety-valve field in your Hive Virtual Warehouse. However, updating hue-safety-valve overrides the default configuration. Therefore, to use both Hive and HPL/SQL interpreters, you must enable both by updating the configuration in the hue-safety-valve field.</p>
<pre>[[desktop]] app_blacklist</pre>	<p>Used to add or remove applications, such as the File Browser, Impala, Hive, Oozie, and so on from the blocked list of applications.</p>
<pre>[desktop] [[session]] ttl=[***NUMBER-OF-SECONDS***]</pre>	<p>Used to configure the duration of a user session. The ttl property determines the length of time that the cookie with the user's session ID lives before expiring. After the ttl setting is reached, the user's session expires whether it is active or not.</p> <p>The default setting for ttl is 1,209,600 seconds, which equals two weeks.</p>
<pre>[jobbrowser] enable_queries_list=true</pre>	<p>Used to display or hide the Queries tab on the Job Browser page. By default, the value of the enable_queries_list property is set to true. To hide the Queries tab, set the value to false.</p>

Hue supported browsers

Hue works with the two most recent [LTS](#) (long term support) or [ESR](#) (extended support release) browsers. Cookies and JavaScript must be enabled.

The lists the minimum tested versions of the most common browsers:

- Chrome: ([Version history](#))
- Firefox: ([Version history](#))
- Safari (Mac only): [Version history](#)
- Microsoft Edge: ([Version history](#))

Hue can display in other browsers and in older versions of the common browsers, but you might not have access to all features.

Customizing the Hue web interface

You can customize the page logo and set the cache timeout value by configuring the parameters in the Virtual Warehouse which is running Hue.

Adding a custom banner

You can add a custom banner to the Hue web interface by adding your custom HTML to the hue-safety-valve configuration for your Virtual Warehouse.

Procedure

1. Log in to the Data Warehouse service as DWAdmin.
2. Go to your Virtual Warehouse tile and click  Edit .
3. Go to CONFIGURATIONS Hue , select hue-safety-valve from the Configuration files drop-down menu and add the following lines:

```
[desktop]
[[custom]]
banner_top_html=<H1>Your company's custom Hue Web UI banner</H1>
```

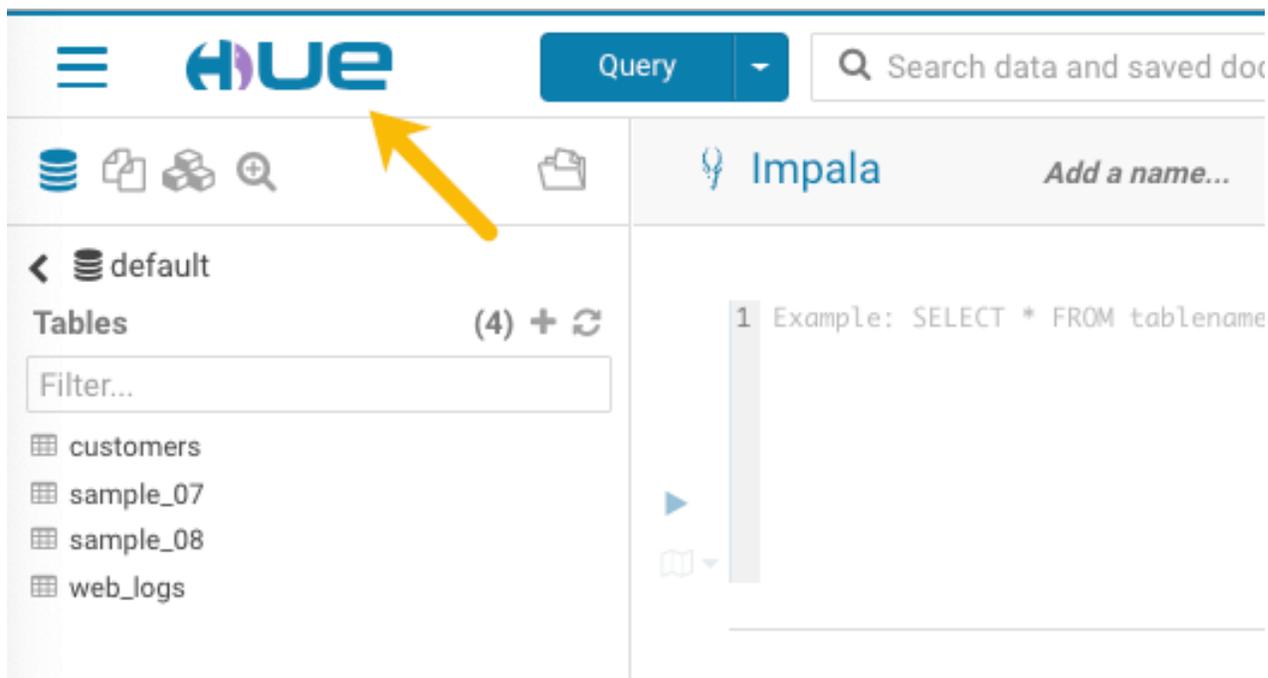
4. Click Apply Changes.
The Virtual Warehouse goes into an "Updating" state. Wait for the update to complete, and then open or refresh Hue.

Changing the page logo

You can replace the Hue web interface logo with a custom log that is created with an SVG code. Add any type of logo you want, but your custom logo should be designed to fit into a 160 x 40 pixel space.

About this task

For example, here is the Hue logo shown in the following image:



You can change this Hue logo by adding the appropriate SVG code to the logo_svg property under the [desktop] [[custom]] section in the hue_safety_valve configuration parameter in Cloudera Data Warehouse (CDW).

Procedure

1. Log in to the Data Warehouse service as an administrator.
2. Go to the Virtual Warehouses Edit CONFIGURATIONS Hue and select hue-safety-valve from the Configuration files drop-down list.
3. Add the custom logo SVG code in the [desktop] [[custom]] section as shown in the following example:

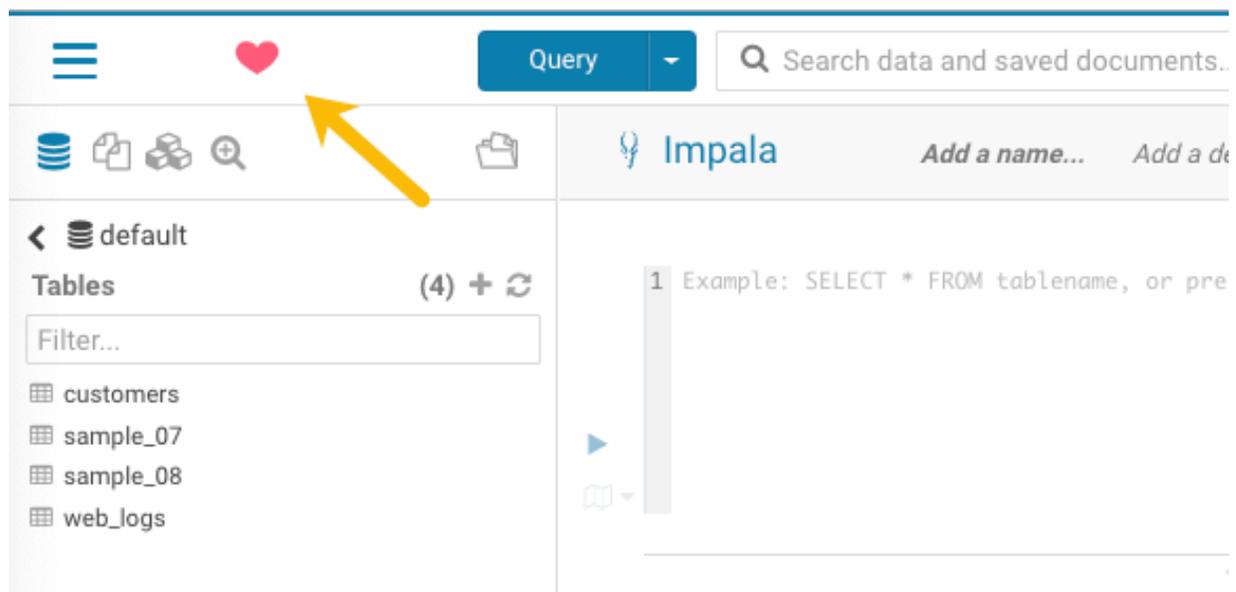
```
[desktop]
[[custom]]
logo_svg=' [ ***SVG-CODE-FOR-CUSTOM-LOGO*** ] '
```

For example, the following SVG code replaces the Hue logo with a red heart:

```
[desktop]
[[custom]]
logo_svg='<g><path stroke="null" id="svg_1" d="m44.41215,11.43463c-4.05
017,-10.71473
-17.19753,-5.90773 -18.41353,-0.5567c-1.672,-5.70253 -14.497,-9.95663
-18.411,0.5643c-4.35797,11.71793 16.891,22.23443 18.41163,23.95773c1.518
1,-1.36927 22.7696,-12.43803
18.4129,-23.96533z" fill="#ffffff"/> <path stroke="null" id="svg_2"
d="m98.41246,10.43463c-4.05016,-10.71473 -17.19753,-5.90773 -18.41353,-
0.5567c-1.672,-5.70253
-14.497,-9.95663 -18.411,0.5643c-4.35796,11.71793 16.891,22.23443 18.4116
4,23.95773c1.5181,-1.36927
22.76959,-12.43803 18.41289,-23.96533z" fill="#FF5A79"/> <path stroke="nu
ll" id="svg_3"
d="m154.41215,11.43463c-4.05016,-10.71473 -17.19753,-5.90773 -18.41353,-0
.5567c-1.672,-5.70253
-14.497,-9.95663 -18.411,0.5643c-4.35796,11.71793 16.891,22.23443 18.41164
,23.95773c1.5181,-1.36927 22.76959,-12.43803 18.41289,-23.96533z" fill="
#ffffff"/> </g>'
```

4. Click APPLY.
5. Restart the Virtual Warehouse.
6. Verify your changes by opening Hue.

If you added the sample SVG code that defines a red heart as the logo, then your Hue web interface looks as shown in the following image:



Related Information

[Scalable Vector Graphics](#)

Setting the cache timeout

Enable Hue UI caching by setting a timeout value in milliseconds. The default is 10 days or 864000000 milliseconds. Set the timeout to 0 to disable caching.

About this task

When you browse tables using the left assist panel or run queries, Hue caches this information for fetching information faster and query autocompletion. You can configure the time for which you want to Hue to cache this information by setting the value of the `cacheable_ttl` property under the `[desktop][[custom]]` section in the `hue_safety_valve` configuration property in Cloudera Data Warehouse.

Procedure

- 1.
2. Log in to the Data Warehouse service as an administrator.
3. Go to the Virtual Warehouses  Edit CONFIGURATIONS Hue and select hue-safety-valve from the Configuration files dropdown menu.
4. Add the following parameters with the cache timeout value to the `hue_safety_valve` configuration parameter:

```
[desktop]
[[custom]]
cacheable_ttl=[ **VALUE-IN-MILLISECONDS** ]
```

For example, the following configuration sets the cache timeout to the default value of 86400000 milliseconds:

```
[desktop]
[[custom]]
cacheable_ttl=86400000
```

5. Click APPLY.
6. Restart the Virtual Warehouse.

Enabling or disabling anonymous usage data collection

Hue tracks anonymized pages and application versions to gather information about application usage levels. The data collected does not include hostnames or IDs. For example, the data collected has the format `/2.3.0/pig` or `/2.5.0/beeswax/execute`.

About this task

To enable or disable anonymous usage data collection:

Procedure

1. In the Cloudera Manager Admin Console, select `ClustersHueConfiguration` to navigate to the configuration page for Hue.
2. In the Search text box, type `usage` to locate the Enable Usage Data Collection check box:
 - To enable anonymous data collection, check the box, which is the default setting.
 - To disable anonymous data collection, clear the check box.

3. Enter a Reason for change..., and then click Save Changes at the bottom of the page to save the configuration change.
- 4.



Refresh the browser page and click the restart icon at the top of the page so the new configuration changes can be read by the server and the new data collection setting takes effect.

Disabling the share option in Hue

Hue allows you to share documents, queries, and workflows with other users, either for viewing only or viewing and modifying in any Hue instances across all Virtual Warehouses within a Database Catalog. Sharing is enabled by default in the Hue UI. For added privacy and control, you can disable sharing by setting the `enable_sharing` property to `false` in the `hue-safety-valve`.

About this task

The sharing option is always available to the admin users. To disable the share option:

Procedure

1. Log in to the Data Warehouse service as an administrator.
2. Go to the Virtual Warehouses Edit CONFIGURATIONS Hue and select `hue-safety-valve` from the Configuration files drop-down list.
3. Add the following lines in the `hue-safety-valve`:

```
[desktop]
enable_sharing=false
```

4. Click APPLY.
5. Restart the Virtual Warehouse.

Adding Query Processor Administrator users and groups in Cloudera Data Warehouse

The Query Store Administrators have special privileges that enable them to view and monitor queries from all users, including the ones that were submitted from query interfaces, such as Beeline, Hive Warehouse Connector (HWC), Tableau, and so on.

About this task



Note: This task is applicable only if you are running Hive queries.

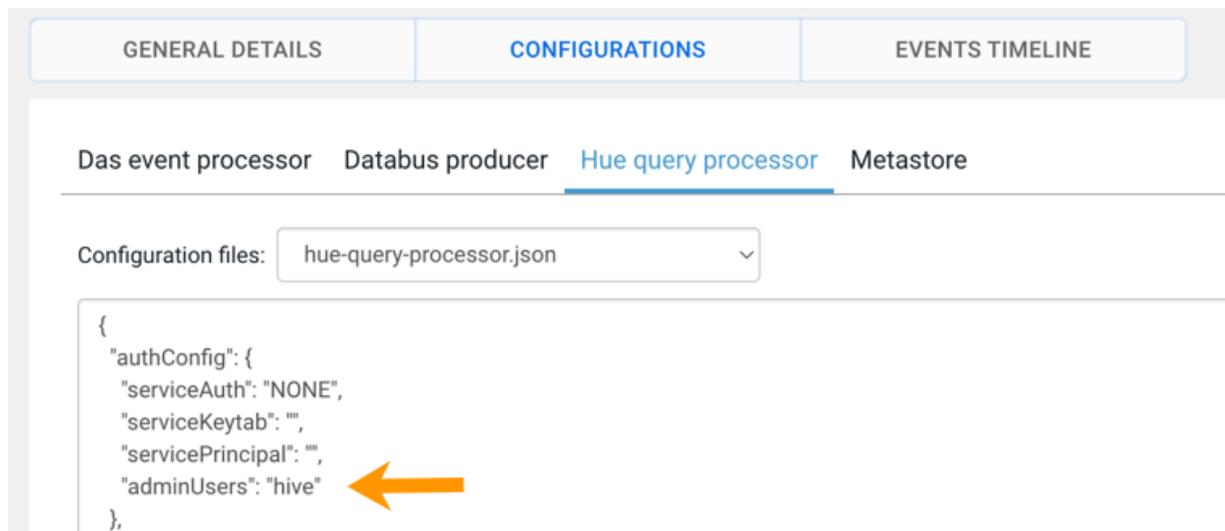
Before you begin

Make sure that the Virtual Warehouse to which you want to add the Hue Query Store Administrators users is in the stopped state.

Procedure

1. Log in to the Cloudera Data Warehouse (CDW) web interface as a DWAdmin.
2. Click Edit on the Database Catalog for which you want to add Hue Query Store Administrators users.

- On the **Database Catalog** details page, click **CONFIGURATIONS** Hue query processor and select hue-query-processor.json from the Configuration files drop-down menu, as shown in the following image:



- In the “authConfig” section, add the list of users to the “adminUsers” key.
For example: "adminUsers": "hive, [***USER-1***], [***USER-2***]"
You can also add a list of admin groups as follows: "adminGroups": "admin-group, [***GROUP-1***], [***GROUP-2***]"
- Click Apply.
The Hue service will be unavailable for approximately 5 minutes to make the update.

Downloading debug bundles

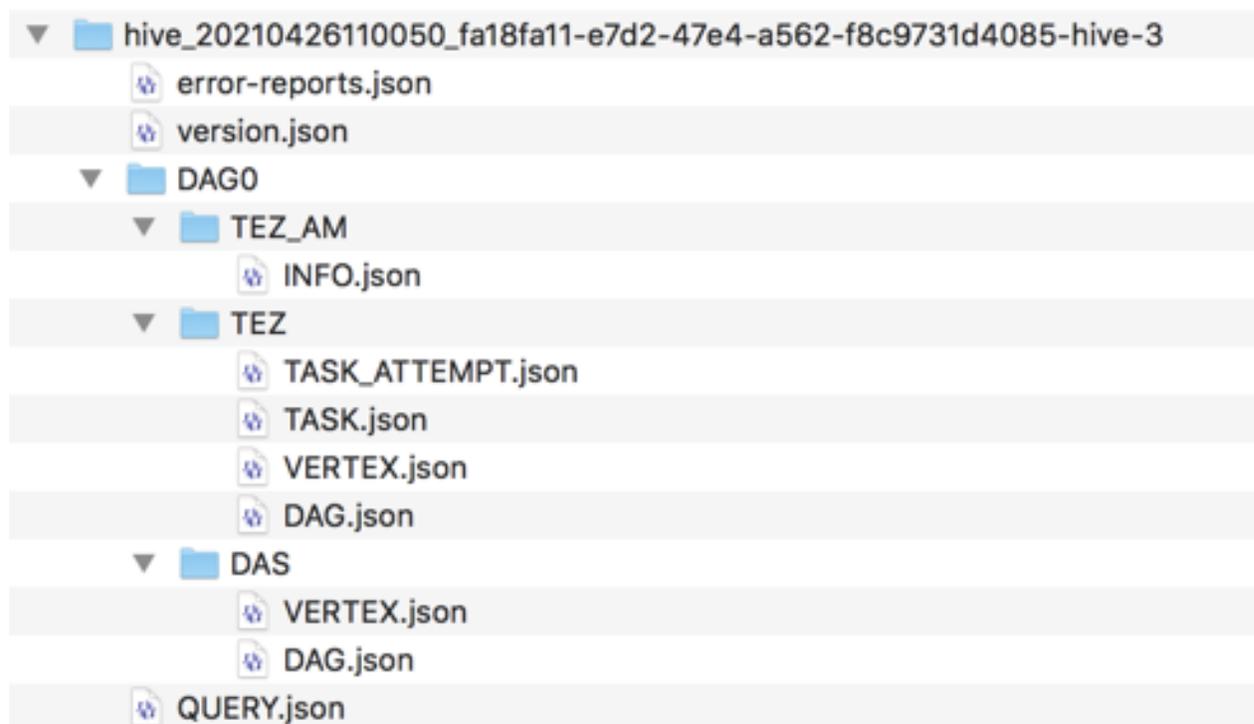
The debug bundle is a ZIP file that contains the query details in JSON format and an error-reports.json file, which is created only if an error occurs while the query is run.

About this task



Note: This feature is available only for Hive queries.

If Tez is used to run a query, then the debug bundle also contains DAG and Tez JSON files, as shown in the following image:



Procedure

1. Go to the Cloudera Data Warehouse (CDW) web interface and open Hue from your Virtual Warehouse.
2. Click Jobs from the left assist panel.
The **Job Browser** page is displayed.
3. Click Queries.
The Hive queries that were run are displayed.
4. Select a query for which you want to download the debug bundle.
5. Click Download and save the ZIP file on your computer.

The filename is in the following format:

```
hive_[***HIVE-QUERY-ID***]_[***USER-ID***]_[***UNIQUE-INDEX***]
```

Enabling Spark 3 engine in Hue

Procedure

1. Log in to Cloudera Manager as an Administrator.
2. Go to Clusters HDFS Configuration and add the following lines in the Cluster-wide Advanced Configuration Snippet (Safety Valve) for core-site.xml field:

```
<property>
  <name>hadoop.proxyuser.hue.groups</name>
  <value>*</value>
  <name>hadoop.proxyuser.hue.hosts</name>
  <value>*</value>
  <name>hadoop.proxyuser.spark.groups</name>
  <value>*</value>
```

```
<name>hadoop.proxyuser.spark.hosts</name>
<value>*</value>
<name>hadoop.proxyuser.livy.groups</name>
<value>*</value>
<name>hadoop.proxyuser.livy.hosts</name>
<value>*</value>
</property>
```

3. Click Save Changes.
4. Go to Clusters Livy for Spark 3 service Configuration and add the following configurations:
 - a) Add the hue user in the Admin Users (livy.superusers) field.
 - b) Go to the HMS Service field and select Hive.
 - c) Click Save Changes.
5. Go to Clusters SPARK_ON_YARN Configuration Admin Users , add hue to the list of admin users (spark.history.ui.admin.acls) and click Save Changes.
6. Go to Clusters SPARK Configuration Admin Users , add hue to the list of admin users (spark.history.ui.admin.acls) and click Save Changes.
7. Go to Clusters SPARK 3 Configuration Admin Users , add hue to the list of admin users (spark.history.ui.admin.acls) and click Save Changes.
8. Go to Clusters Hue Configuration and enter the following lines in the Hue Service Advanced Configuration Snippet (Safety Valve) for hue_safety_valve.ini field and click Save Changes:

```
[desktop]
app_blacklist=zookeeper, pig #custom list of blocked apps
[spark]
#This is not a thrift server port
#If this TLS/SSL is enabled then check to see whether the livy url is on h
ttps or http and modify the url accordingly.
livy_server_url=http(s)://[**LIVY-FOR-SPARK3-SERVER-HOST**]:[**LIVY-
FOR-SPARK3-SERVER-PORT**]
ssl_cert_ca_verify=false
security_enabled=true
#To enable the Notebook editor on the left-assist panel.
[notebook]
show_notebooks=true
[[interpreters]]
[[[sparksqll]]]
name=Spark SQL
interface=livy
```



Attention:

- Ensure that the Spark application is not on the blocked list.
- Set ssl_cert_ca_verify=false if an SSL certificate is not present in Hue's truststore. ssl_cert_ca_verify=true if your environment is a secured environment.
- Set security_enabled=true for Kerberized clusters.
- Enabling the Notebook editor on the left-assist panel is optional.

9. Restart the affected services.

Results

You can now select the “Spark SQL” dialect on the Hue editor and run Spark queries from Hue.



Note: Starting a Livy session can take 30-45 seconds. If you cancel a running Spark SQL query and rerun it, the Livy session expires, and a new session is created.