

# Deploying Hue at Environment Level in Data Warehouse Public Cloud (Preview)

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## About deploying Hue at the environment level

Cloudera Data Warehouse (CDW) allows you to deploy Hue at an environment level. Learn about the advantages and upgrade limitations of deploying Hue at the environment level and some FAQs that can help you understand more about the feature.

**Note:** This feature is in technical preview and not recommended for production deployments. Cloudera recommends that you try this feature in test and development environments.

## Advantages of deploying Hue at the environment level

By deploying Hue at the Virtual Warehouse level, you can manage costs by keeping only those Virtual Warehouses running which your users need at that time. Data Analysts only need to know or bookmark one Hue instance URL and can run queries on any Virtual Warehouses available to them.

If you want to isolate the Hue instances, and thereby, the query history and saved queries for different teams within your organization, then by deploying Hue at the environment level, you can create multiple Hue instances, each with its own database.

Moreover, the Hue instance deployed at the environment level remains active as long as the environment is active. Hue instances, along with the query history and saved queries are deleted when you delete or shutdown a Virtual Warehouse. You can spin up temporary Virtual Warehouses without causing disruption to the Data Analysts.

## Limitations

- In CDW version 1.8.1, you cannot upgrade the Hue instances that are deployed at the environment level.
- Currently, you cannot move or migrate saved queries and query history from a Virtual Warehouse-level Hue to an environment-level Hue.
- When you use the Importer to create tables from files in Hue, by default, Hue creates a Hive table if Hive is available and uses the first Hive Virtual Warehouse that was created. You cannot select a Virtual Warehouse using which you want to create a table by importing a file.  
To create an Impala table using the Importer, you must first select the editor type as Impala, and then click **+** on the **Table Browser**.

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## Understanding access control

You can specify user groups that you have created in the CDP Management Console, similar to how you specify while creating the Virtual Warehouses.

When you specify user groups while creating the Hue instance (at the environment level) or Virtual Warehouses, the subset of users who have access to the Hue instance as well as the Virtual Warehouse can submit queries through that Virtual Warehouse instance.

If you do not specify user groups while creating a Hue instance (at the environment level), then all users within your organization can access the Hue UI. If you do not specify user groups for a Virtual Warehouse, all users within your organization can submit queries through that Virtual Warehouse.

As a best practice, specify user groups while creating Hue and Virtual Warehouse instances so that specific users have access to specific compute resources.

## FAQs

### Can I still use Hue deployed at the Virtual Warehouse level?

Yes, you can continue to access and use Hue from a particular Virtual Warehouse even after deploying Hue at the environment level. However, you cannot view the query history or saved queries in Hue which is deployed at the environment level.

### Can I create more than one Hue instance at the environment level?

Yes, you can create any number of Hue instances. However, Cloudera recommends that you deploy a single Hue unless isolating saved queries is a requirement.

When you create more than one Hue instance, each instance has its own database. The Hue instances deployed at the environment level do not share query history or saved queries.

### Can I view queries submitted from other BI tools?

Hue superusers and administrators can view all queries that are submitted from all Virtual Warehouses linked to a particular Database Catalog. Other logged-in users can view only their queries on the **Impala Queries** and **Hive Queries** tabs.

### Where can I specify advanced Hue configurations (safety valve)?

On a Hue deployed at the environment level, click the more options icon > **Edit** corresponding to the Hue instance that you want to configure, go to the **CONFIGURATIONS** tab, and select **hue-safety-valve** from the **Configuration files** drop-down menu.

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# Enabling Hue to run at the environment level

By deploying Hue at the environment level, you can retain the Hue instance with its query history and saved queries even if the Virtual Warehouses are deleted. You can enable this option by editing the environment configuration.

## Steps

1. Log in to the Data Warehouse service as a DWAdmin.
2. Go to the **Environment(s)** tab, locate the environment in which you want to enable this feature, and click the More Options icon > **Edit**.
3. Go to the **CONFIGURATIONS** tab, select the **Enable Query Editor** option, and click **Apply Changes**.

A new **Query Editor** option is added on the left navigation pane on the CDW UI.

# Creating a Hue instance at the environment level in CDW

After you enable the option to deploy Hue at the environment level, you can create any number of Hue instances. Each Hue instance has its own database. The Hue instances deployed at the environment level do not share query history or saved queries.

## Steps

1. Log in to the Data Warehouse service as a DWAdmin.
2. Click the **Query Editor** option from the left navigation pane of the CDW UI.
3. Create a query editor instance by clicking **Create** on the **Query Editor** page. The **New Query Editor** modal is displayed.
4. Specify a name for your query editor instance and select an environment from the drop-down menu.  
You can optionally specify user groups, the same as what you specify while creating a Virtual Warehouse for fine-grained access control.
5. Select the size of the Hue instance.  
The default value is **1 x Hue Node**. This indicates the number of Hue backend pods you want to create.
6. Click **Create**.  
A new Hue instance is created at the environment level. You can select the Virtual Warehouse you want to use from the **Virtual Warehouse** drop-down menu on the Hue web interface.

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