

Enabling Fine-grained Access Control for Hue in Cloudera Data Warehouse for Azure environments (Preview)

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CLOUDERA TECHNICAL PREVIEW DOCUMENTATION

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Fine-grained access control management using RAZ

Hue offers you the capability to browse ADLS Gen2 containers, upload files to ADLS Gen2 containers, and create tables by importing files from ABFS. With Ranger Authorization (RAZ), you can grant fine-grained access to per-user home directories.

Note: If you have enabled RAZ while registering your Azure environment with CDP, then Hue uses RAZ as the default mechanism for enabling the ABFS File Browser.

Enabling the ABFS File Browser using RAZ is under technical preview and is not recommended for production use. Cloudera recommends that you explore this feature in development or test environments.

Prerequisites for enabling the ABFS File Browser using RAZ

Meet the prerequisites listed in this section before you enable the ABFS File Browser in Hue using RAZ.

Steps

1. Follow the instructions listed in "[Introduction to RAZ on Azure environments](#)" to register an Azure environment with the "**Enable Ranger authorization for ADLS Gen2**" option enabled. You can use the CDP web interface or the CDP CLI to complete this task.
Important: You must enable RAZ while registering your environment with CDP.
2. Log in to the CDP Management Console as a DWAdmin or DWUser and go to the Cloudera Data Warehouse service.
3. From the Database Catalog edit option, click **Open Ranger**.
4. Create the following Ranger policies:

- a. **Hadoop SQL** policy (`all - database, table, column, all - url`).

You must grant permissions to individual users or groups in these Ranger policies. To grant permissions to all users, you can specify `{USER}` in the **Permission** section.

- b. **ABFS (cm_ADLS) policy** (Default: `User Home`)

You must grant permissions to the following users in the **Permissions** section: `hive, impala, and {USER}`.

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5. You must also grant appropriate permissions to the users in CDP User Management Service (UMS). For example, EnvironmentUser.
6. Create a “user” directory within your ABFS container and also create sub-directories for individual users. For example, MY-ABFS-CONTAINER/user/csso_john.smith, MY-ABFS-CONTAINER/user/csso_nick.fry, and so on.
7. Specify the storage account name in the **Storage Account** field and the directory path of the container and its sub-directories in the **Storage Account Container** field of the **cm_ADLS** Ranger policy.

Enabling ABFS File Browser in Hue using RAZ

The ABFS File Browser in Hue is enabled by default. However, you must set the path to your ADLS Gen2 container in the **hue-safety-valve** field to avoid a 403 error when you click on the ABFS File Browser.

Steps

1. Log in to the CDP Management Console as a DWAdmin or DWUser and go to the Cloudera Data Warehouse service.
2. Click on the **More** icon on your Virtual Warehouse and click **Edit**.
3. Go to **CONFIGURATION > Hue** and select **hue-safety-valve** from the **Configuration files** drop-down menu.
4. Add the following lines in the text area:

```
[filebrowser]

remote_storage_home==abfs://[***CONTAINER-FOR-DATA-ACCESS**]/u
ser
```

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

You should be able to view the icon for the ABFS File Browser on the left assist panel on the Hue web interface.