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NIM : 201402064

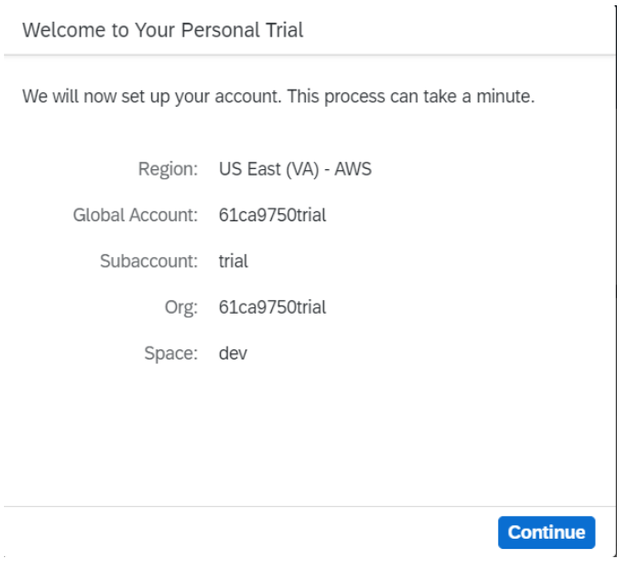
Matkul : Enterprise Development Software

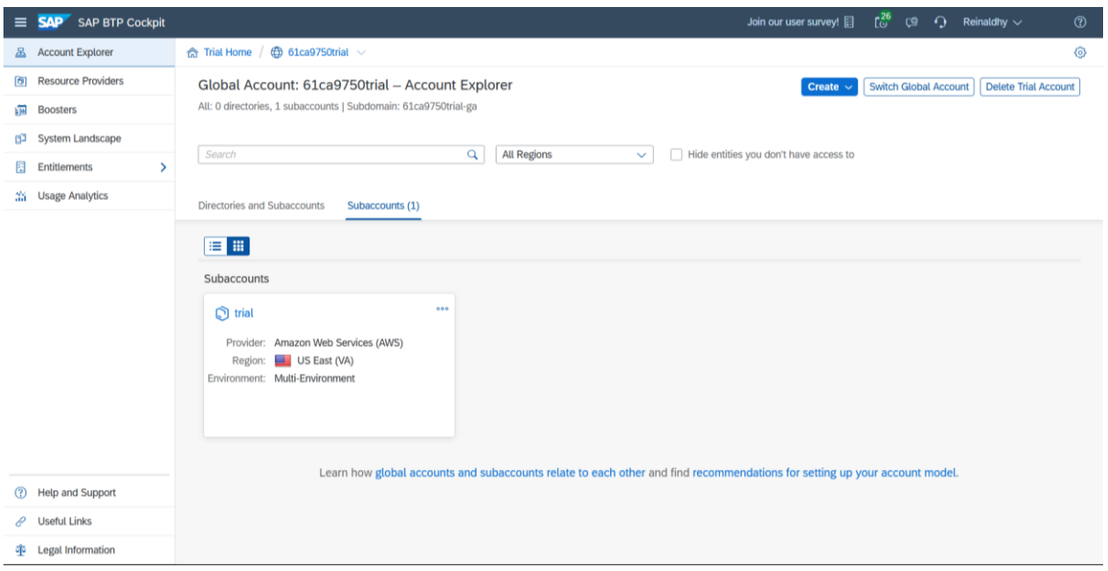
Getting Started with SAP HANA Cloud

1. Modul 1 : Provisioning SAP HANA Cloud

   - Setting Up a Trial Account

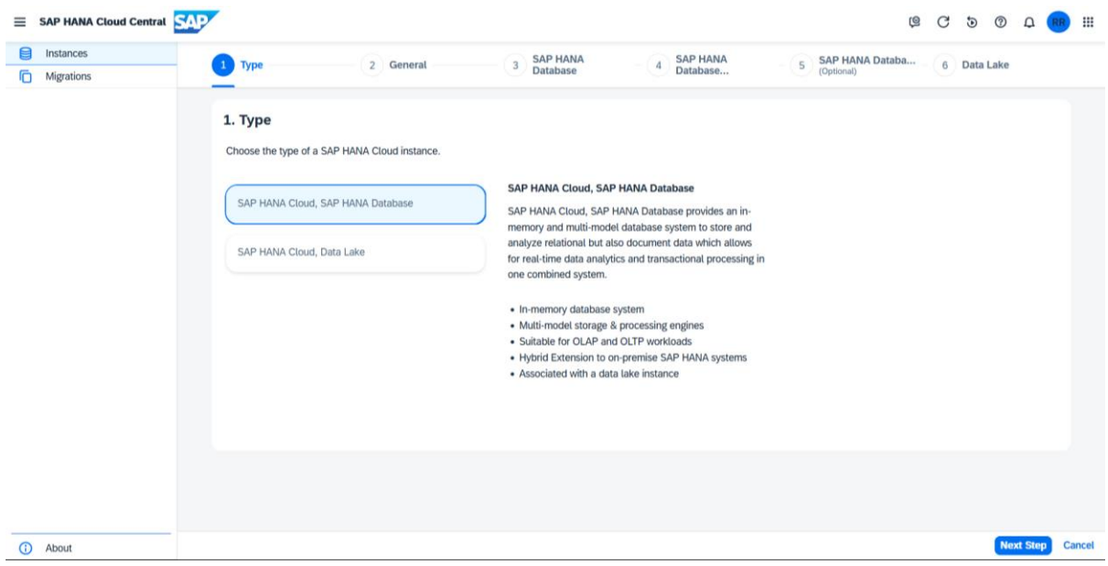
     First, users need to sign up for a SAP HANA Cloud trial account if they haven't already.

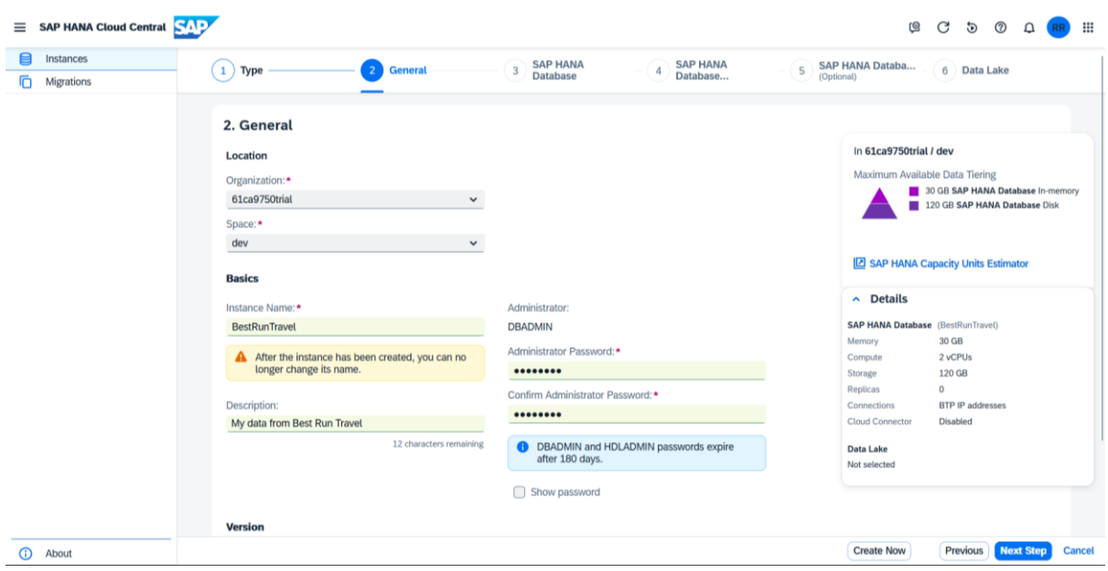


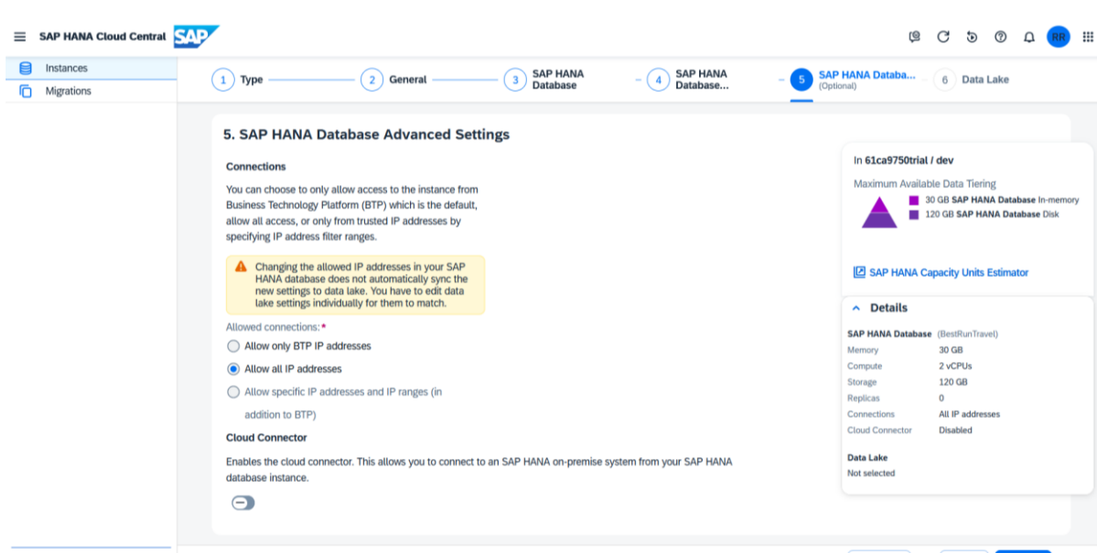


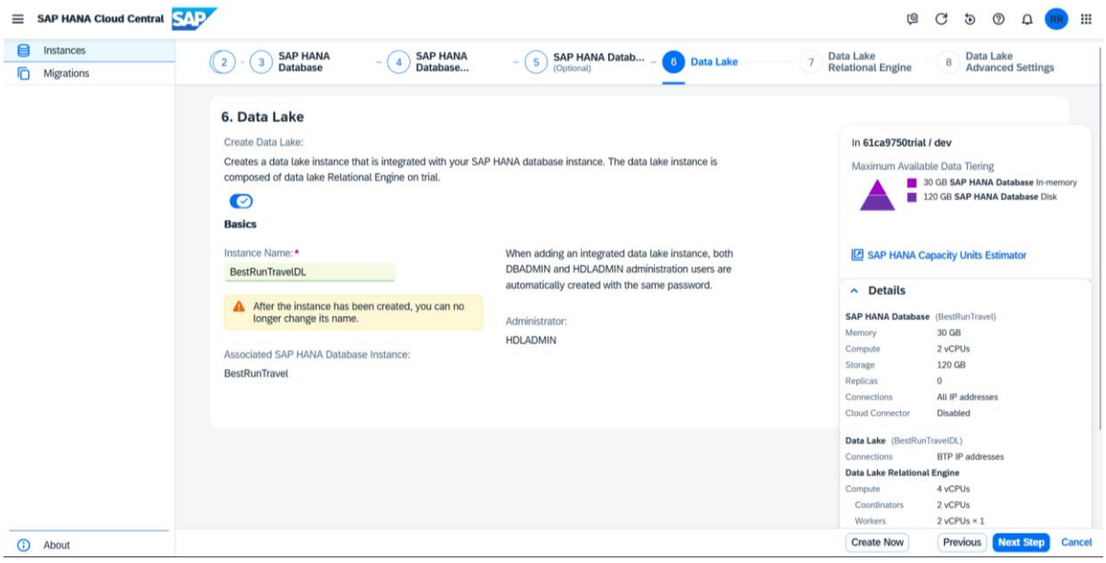
   - Provisioning a SAP HANA Cloud Instance

     To provision a SAP HANA Cloud instance, click "Create Database" to open a database creation wizard, where we enter an instance name (e.g., "Best Run Travel") and a password. Users can then proceed, accepting default trial settings, and enable the SAP HANA Data Lake, which can be disabled later if needed, before clicking "Create Instance" to initiate provisioning.


SAP HANA Cloud Central
Instances
Migrations
1 Type
2 General
3 SAP HANA Database
4 SAP HANA Database...
5 SAP HANA Databa... (Optional)
6 Data Lake
1. Type
Choose the type of a SAP HANA Cloud instance.
SAP HANA Cloud, SAP HANA Database
SAP HANA Cloud, Data Lake
SAP HANA Cloud, SAP HANA Database
SAP HANA Cloud, SAP HANA Database provides an in-memory and multi-model database system to store and analyze relational but also document data which allows for real-time data analytics and transactional processing in one combined system.
• In-memory database system
• Multi-model storage & processing engines
• Suitable for OLAP and OLTP workloads
• Hybrid Extension to on-premise SAP HANA systems
• Associated with a data lake instance
About
Next Step
Cancel

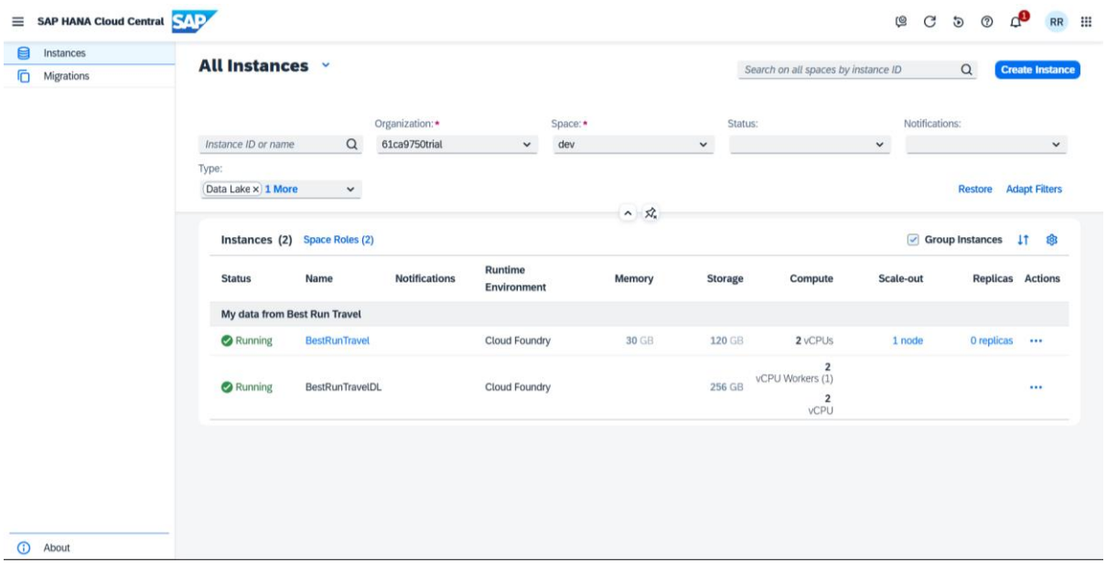

SAP HANA Cloud Central
Instances
Migrations
1 Type
2 General
3 SAP HANA Database
4 SAP HANA Database...
5 SAP HANA Databa... (Optional)
6 Data Lake
2. General
Location
Organization:*
61ca9750trial
Space:*
dev
Basics
Instance Name:*
BestRunTravel
After the instance has been created, you can no longer change its name.
Description:
My data from Best Run Travel
12 characters remaining
Administrator:
DBADMIN
Administrator Password:*
Confirm Administrator Password:*
DBADMIN and HDLADMIN passwords expire after 180 days.
Show password
Version
In 61ca9750trial / dev
Maximum Available Data Tiering
30 GB SAP HANA Database In-memory
120 GB SAP HANA Database Disk
SAP HANA Capacity Units Estimator
Details
SAP HANA Database (BestRunTravel)
Memory 30 GB
Compute 2 vCPUs
Storage 120 GB
Replicas 0
Connections BTP IP addresses
Cloud Connector Disabled
Data Lake
Not selected
About
Create Now
Previous
Next Step
Cancel


SAP HANA Cloud Central
Instances
Migrations
1 Type
2 General
3 SAP HANA Database
4 SAP HANA Database...
5 SAP HANA Databa... (Optional)
6 Data Lake
5. SAP HANA Database Advanced Settings
Connections
You can choose to only allow access to the instance from Business Technology Platform (BTP) which is the default, allow all access, or only from trusted IP addresses by specifying IP address filter ranges.
Changing the allowed IP addresses in your SAP HANA database does not automatically sync the new settings to data lake. You have to edit data lake settings individually for them to match.
Allowed connections:*
Allow only BTP IP addresses
Allow all IP addresses
Allow specific IP addresses and IP ranges (in addition to BTP)
Cloud Connector
Enables the cloud connector. This allows you to connect to an SAP HANA on-premise system from your SAP HANA database instance.
In 61ca9750trial / dev
Maximum Available Data Tiering
30 GB SAP HANA Database In-memory
120 GB SAP HANA Database Disk
SAP HANA Capacity Units Estimator
Details
SAP HANA Database (BestRunTravel)
Memory 30 GB
Compute 2 vCPUs
Storage 120 GB
Replicas 0
Connections All IP addresses
Cloud Connector Disabled
Data Lake
Not selected
About
Create Now
Previous
Next Step
Cancel



- Monitoring Instance Status

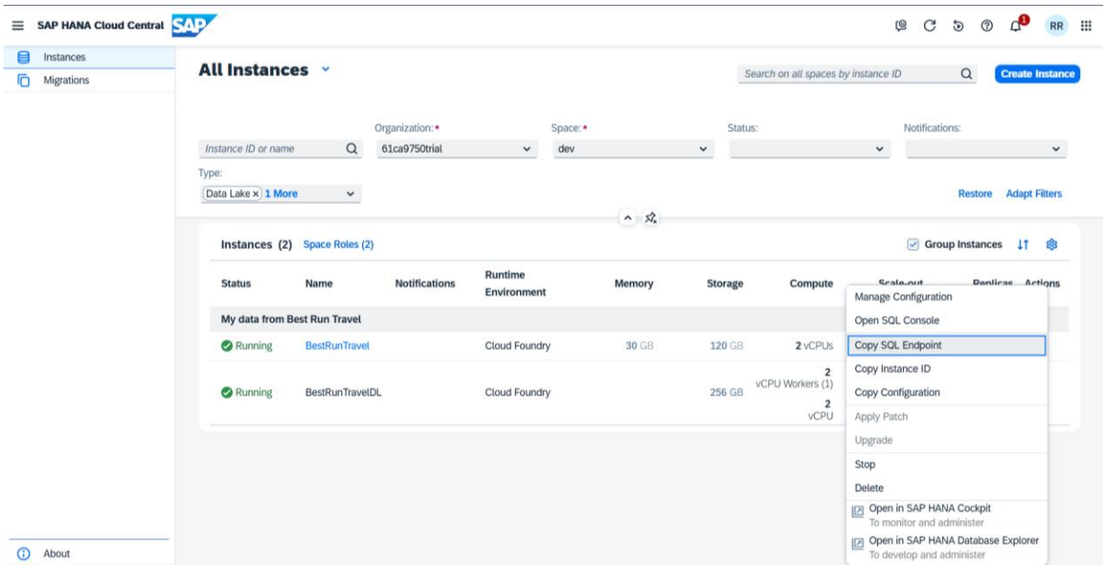
  We can monitor the instance and Data Lake status within the SAP HANA Cloud dashboard. During the trial period, instances are automatically halted at midnight according to the server region's time zone.



2. Modul 2 : Tools to Work With SAP HANA Cloud

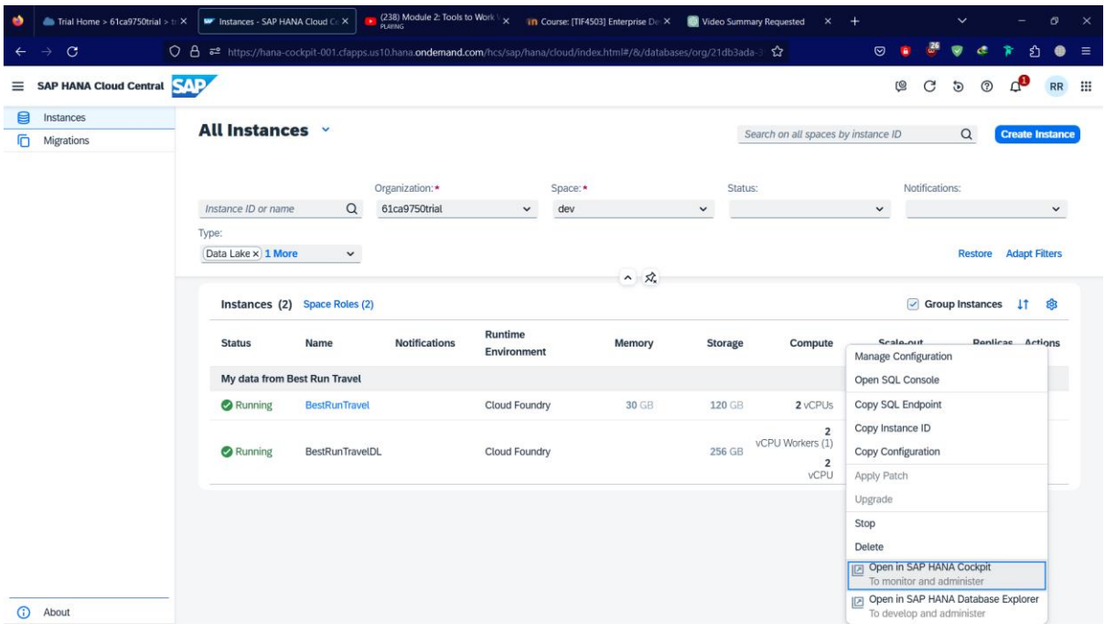
   - Interacting with SAP HANA Cloud Tools

   In this step, users should click on the "Manage HANA Cloud" option. Upon doing so, they will be presented with a list of instances that have been created under their account. Additionally, users can easily locate the endpoint address of their specific instance within this section, providing them with essential information for further interactions with their SAP HANA Cloud setup.

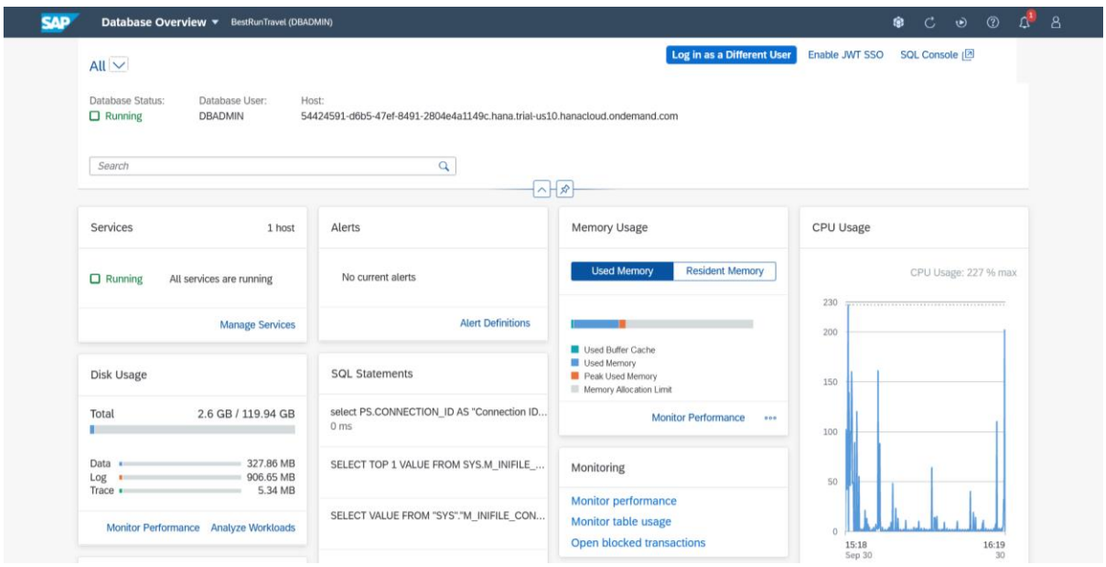


- Using SAP HANA Cockpit

To open the SAP HANA Cockpit, users should click on the three dots adjacent to the database instance and then choose "Open in SAP HANA Cockpit." It's important to note that they will be prompted to provide the initial database username (dbadmin) and the corresponding instance password for access.



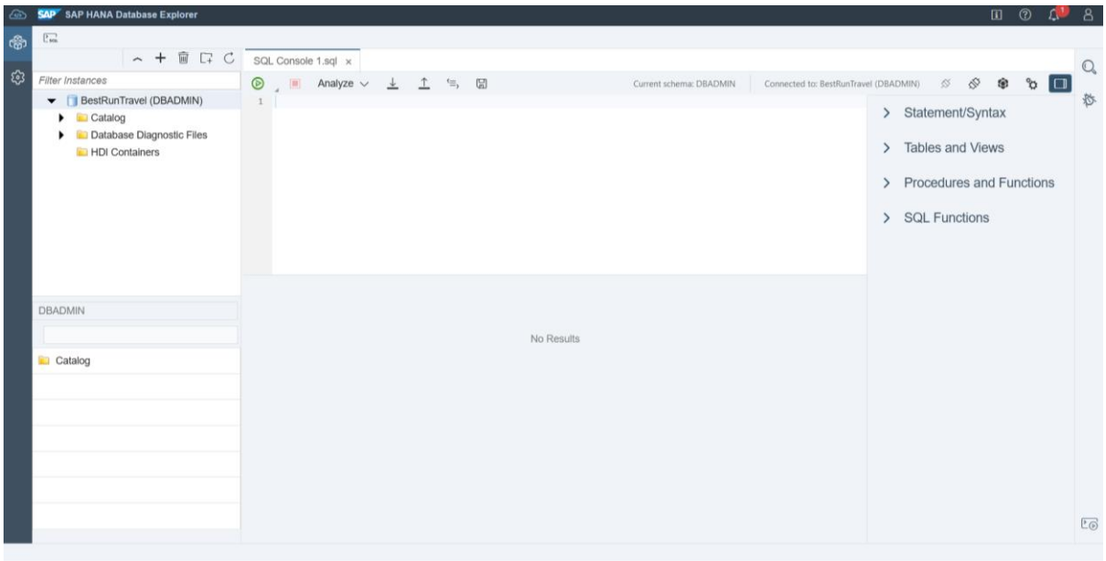
Within the SAP HANA Cockpit, users can engage in various tasks, including monitoring the status of their database, tracking memory and CPU usage, and managing security settings.



- Using SAP HANA Database Explorer

  To access the SAP HANA Database Explorer, users should return to the SAP Cloud Platform, locate the instance tile, and then click on the actions button, selecting "Execute SQL." This action initiates the opening of a new tab featuring the Database Explorer.

  Users can observe a list of databases on the top left section and access the catalog associated with the instance. The catalog serves as a hub for interacting with data stored in databases, managing remote sources, and other essential functions.



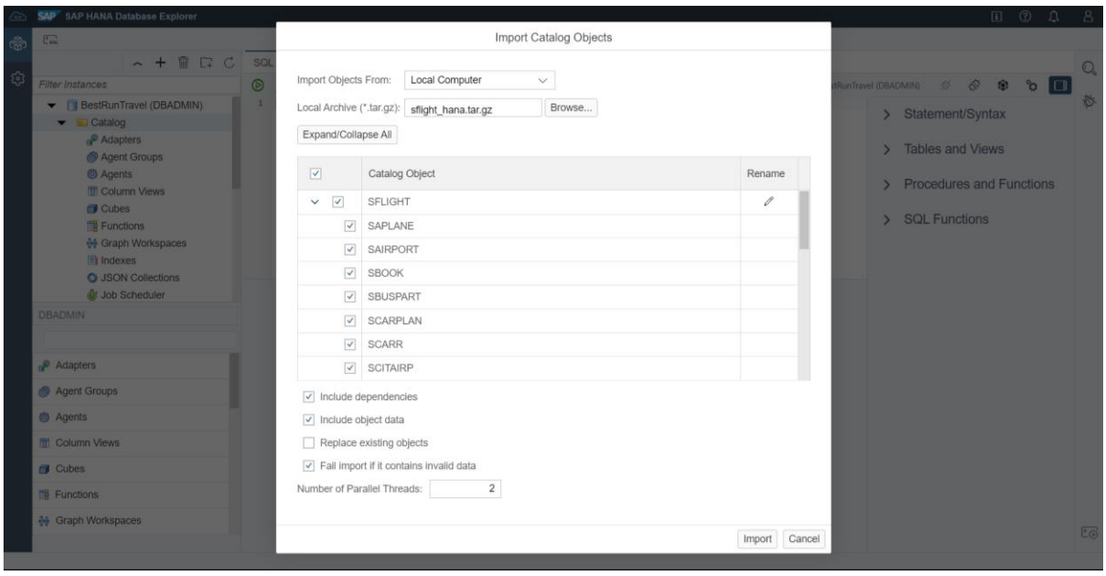
3. Modul 3 : Upload Data to Your Instance

   - Importing Sample Data

   In this step, users are instructed to follow to GitHub and download the "sflight_hana.tar.gz" file to their local computer.

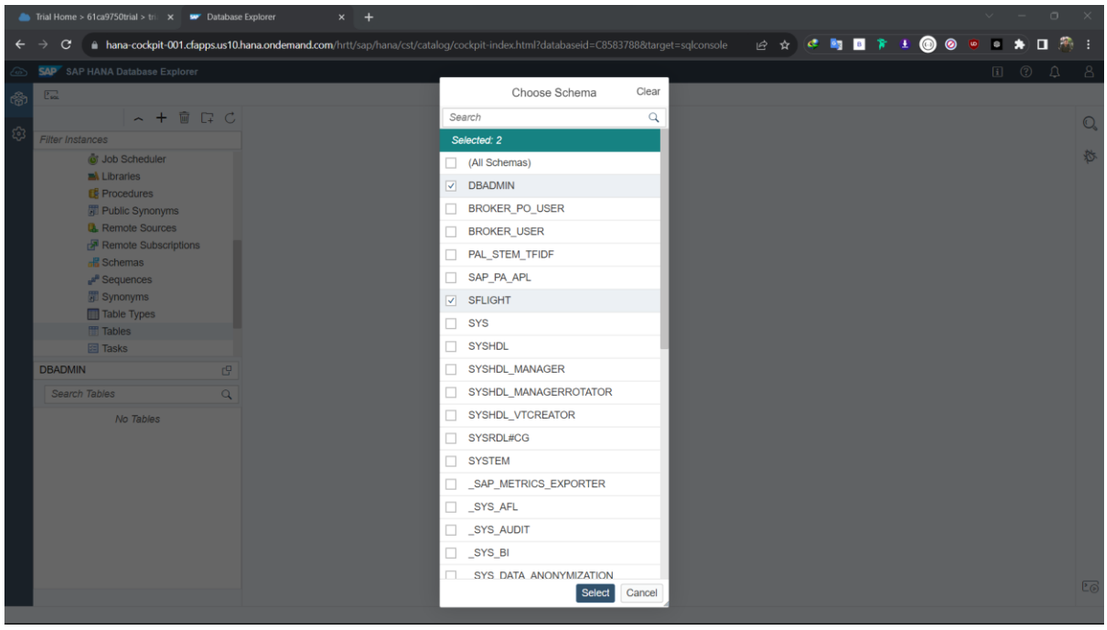
   - Uploading Sample Data

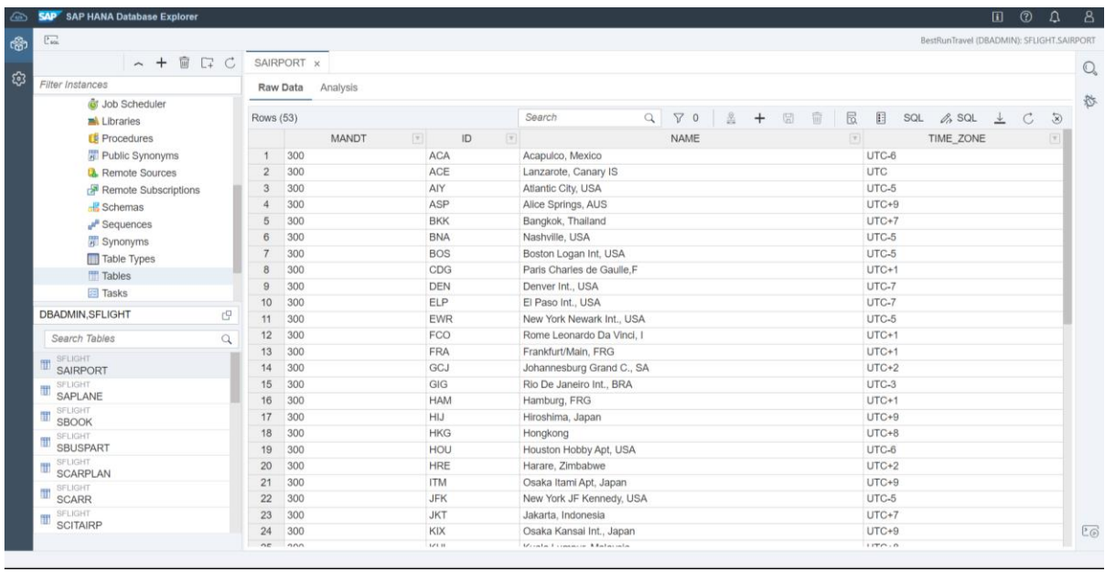
Then, users can access the SAP HANA Database Explorer and select "Import Catalog Objects." On the local computer, users should locate the previously downloaded "sflight_hana.tar.gz" file, select the file and wait for it to be uploaded. After that, Users are advised to check the box at the top of the table to select all catalog objects within the selected file and then click on "Import" to initiate the data import process.



- View Imported Tables

  Once completed, u can expand your catalog and click on "Tables" to view all the newly imported tables. The data will be stored in a new schema called "SFLIGHT." Users can select the " SFLIGHT " schema to access the imported " SFLIGHT " table.

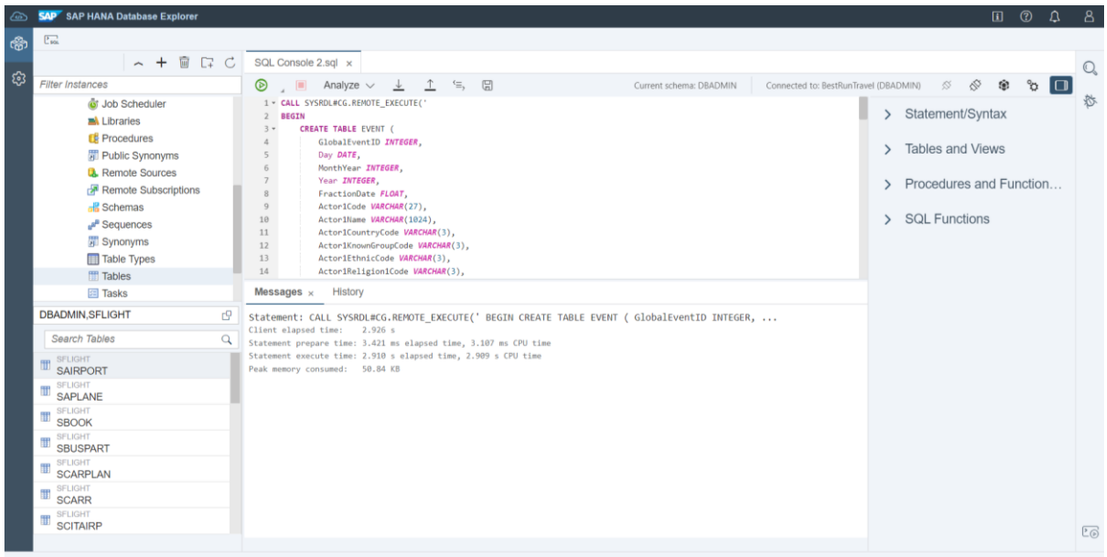




4. Modul 4 : Connecting to and Creating Data on the SAP HANA Cloud Data Lake

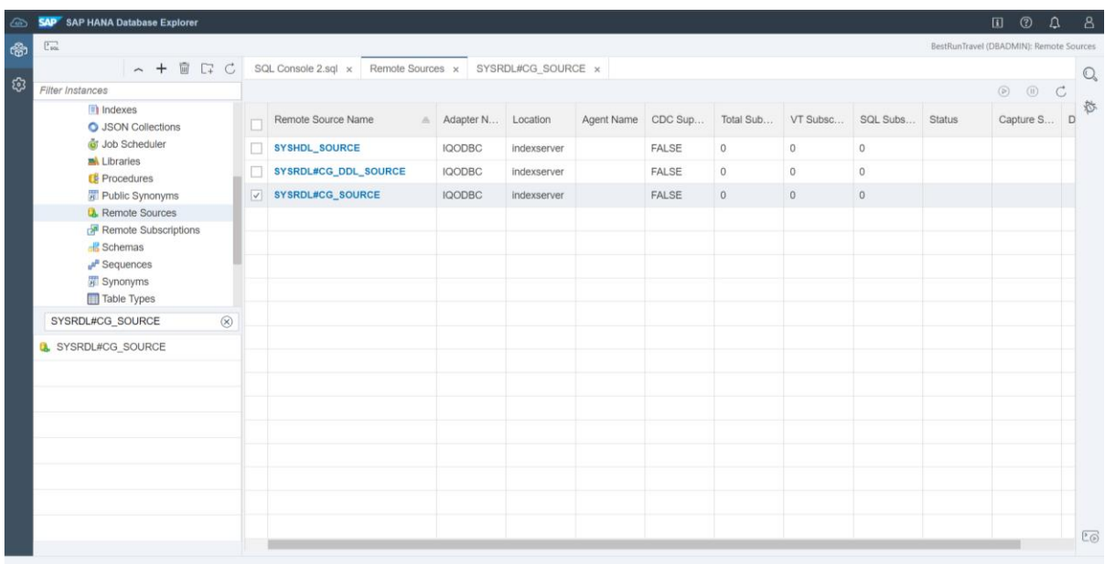
- Creating Physical Tables in Data Lake

  The goal of this step is to create three physical tables in the SAP HANA Cloud Data Lake. Users can copy the SQL code from the GitHub link and paste it into the SQL console in the SAP HANA Database Explorer. Click the "run" button in the SQL console executes the SQL statement, creating the tables.



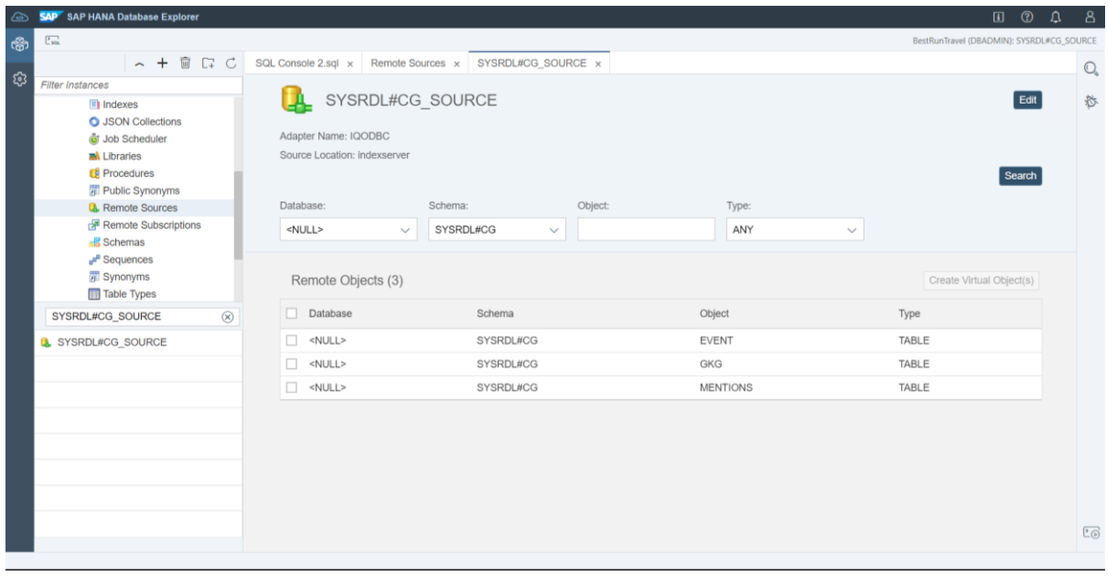
- Verifying Table Creation

  Users can verify if their tables were created correctly by accessing the Data Lake. Users should right-click "Remote Sources" in the catalog and select "Show Remote Sources" to confirm the existence of the tables.



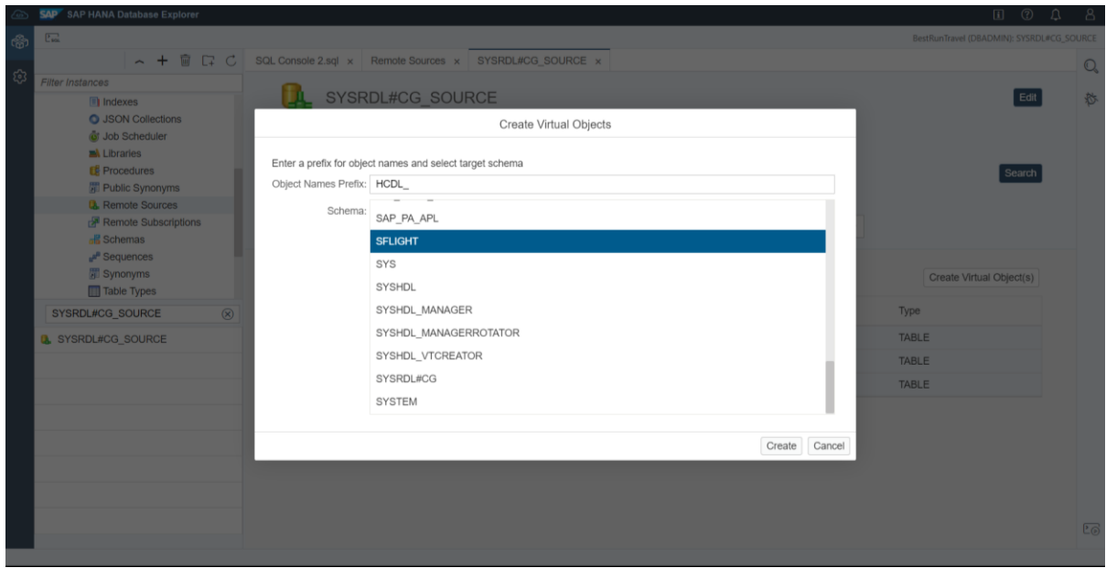
- Accessing Remote Connection

  A connection to the SAP HANA Cloud Data Lake is automatically established, typically named "SYSRDL#CG." Click on this connection to search for database objects. Next, select "SYSRDL#CG" in the schema filter, and then click "search," which displays the three tables on the list of objects found.



- Creating Virtual Tables

  To work with these tables in the future, users need to create virtual tables in their main database. Select the three tables from the list and clicki the "Create Virtual Objects" button. Add your virtual table name for easy identification, and choose the SFLIGHT schema as the target schema, and click "OK" to complete the process.



5. Modul 5 : Query Data on SAP HANA Cloud

   - Creating a New Table - Agency Data

   This step introduces the task of creating a "agency data" table to extract total bookings per agency. Viewers are directed to download an SQL query from resources, paste it into the SQL console, and run it to create the table.

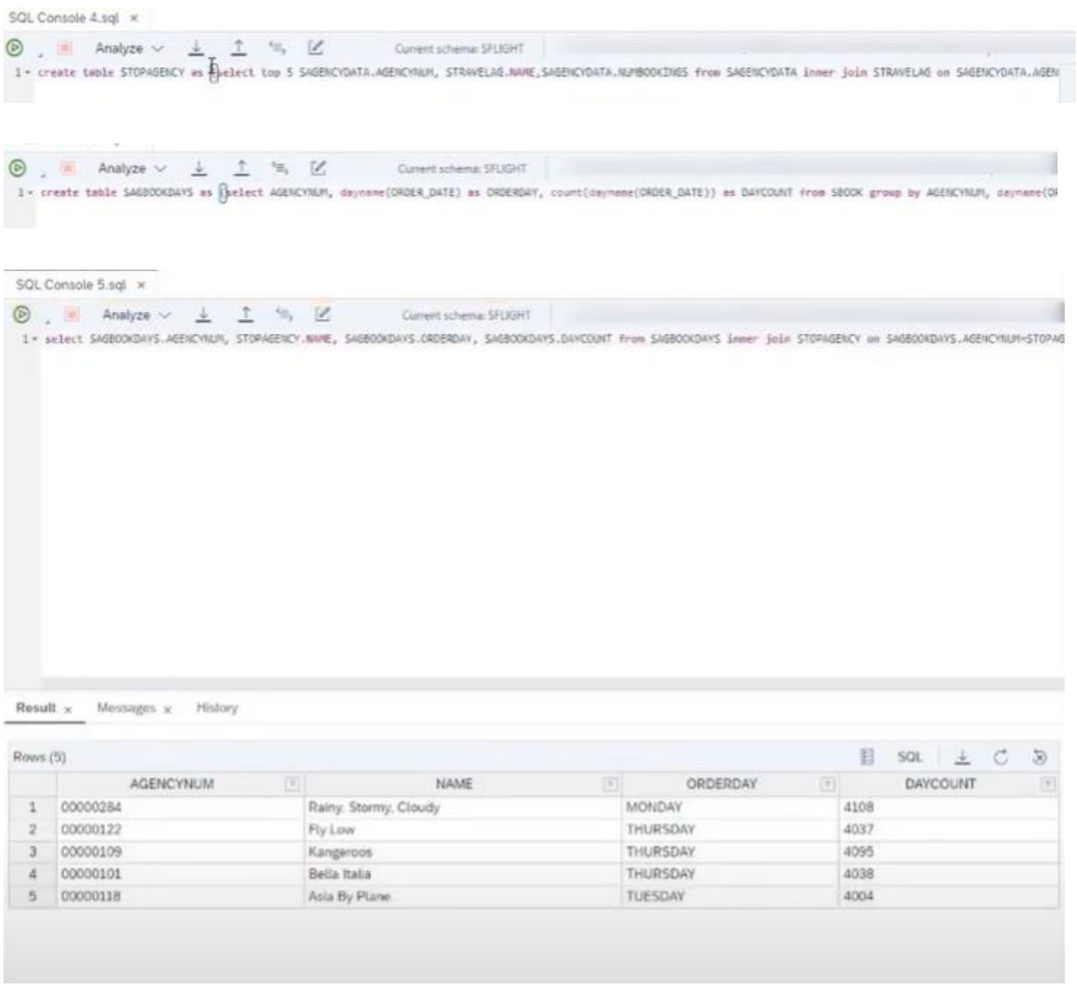
   - Finding Top 5 Agencies

   The need to find the top five agencies with the most bookings is explained. Viewers are given an SQL query to execute this task, which involves copying and pasting the query into the SQL console and running it to display the top agencies.

This step outlines the creation of two new tables, "5 top agency" and "sag book days." Viewers are provided with SQL queries to create these tables, with instructions to copy, paste, and run the queries to view the tables.

- Extracting Booking Days Data

The goal of extracting the days of the week with the most bookings for the top agencies is presented. An SQL query is provided, and viewers are guided on how to execute it to determine the days of the week with the most bookings.



	AGENCYNUM	NAME	ORDERDAY	DAYCOUNT
1	00000284	Rainy. Stormy. Cloudy	MONDAY	4108
2	00000122	Fly Low	THURSDAY	4037
3	00000109	Kangeroos	THURSDAY	4095
4	00000101	Bella Italia	THURSDAY	4038
5	00000118	Asia By Plane	TUESDAY	4004