

HIDDEN REALITY HACKATHON - HACK PACK:

Guide for Team Leads

This document is to help guide participants with the easy to follow step by steps to get them started with the hackathon.

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Intro

We recommend each team appoints a member as the team lead or admin. This person will set up the team's hackathon environment either before the event kicks off or at the start of the day. Getting set up early is preferred!

This part of our quickstart guide is tailor-made for team leads. We'll guide you through all the necessary steps for a smooth setup, including creating your trial account, setting up users, roles, and resource monitors. Plus, we've got straightforward instructions on importing public datasets and connecting to the Women In Data organisers' data share on the big day. Let's get you prepared and ready to hit the ground running!

Creating Trial Snowflake account

If you've not yet signed up, please register for a [complimentary Snowflake free 30-day trial](#). The rest of the sections of this quickstart guide assumes the use of a fresh Snowflake account, one you'll create upon registering for the trial.

Please note: Even if your organisation already uses Snowflake, we strongly advise setting up a new trial account for this event. This will help sidestep any potential complications with data ingestion, security policies, and so forth.

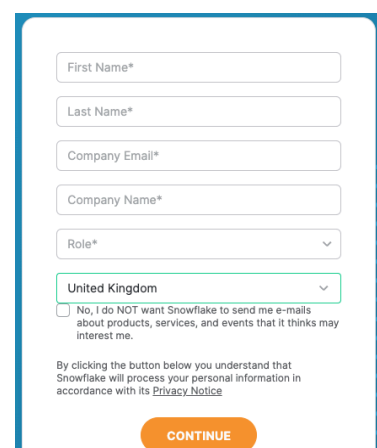
For the hackathon setup, please configure your Snowflake account with the following settings:

- Edition: **Enterprise**
- Cloud Provider: **AWS**
- Region: **Europe (London)**

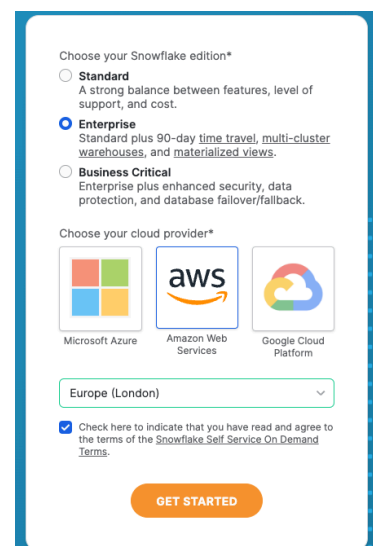
These settings are essential to ensure optimal performance during the hackathon.

After registering, you will receive an email with an activation link and URL for accessing your Snowflake account.

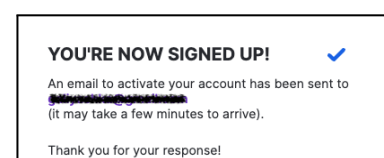
Please note: The activation link is temporary and will expire in 72 hours after your account is created.



Registration form for a Snowflake trial account. It includes input fields for First Name*, Last Name*, Company Email*, and Company Name*. There is a dropdown menu for Role* and another for Country (currently showing United Kingdom). A checkbox option is available: ☐ No, I do NOT want Snowflake to send me e-mails about products, services, and events that it thinks may interest me. Below this is a disclaimer: "By clicking the button below you understand that Snowflake will process your personal information in accordance with its [Privacy Notice](#)". At the bottom is an orange button labeled "CONTINUE".



Configuration form for a Snowflake trial account. It starts with "Choose your Snowflake edition*" and three radio button options:
- ☐ **Standard**: A strong balance between features, level of support, and cost.
- ☒ **Enterprise**: Standard plus 90-day time travel, multi-cluster warehouses, and materialized views.
- ☐ **Business Critical**: Enterprise plus enhanced security, data protection, and database failover/fallback.
Below this is "Choose your cloud provider*" with three icons: Microsoft Azure, Amazon Web Services (AWS), and Google Cloud Platform. The AWS option is selected. Below the icons is a dropdown menu for Region (currently showing Europe (London)). At the bottom is a checkbox: ☒ Check here to indicate that you have read and agree to the terms of the [Snowflake Self Service On Demand Terms](#). At the very bottom is an orange button labeled "GET STARTED".




A confirmation message box with a blue checkmark icon. It says: **YOU'RE NOW SIGNED UP!**
An email to activate your account has been sent to [\[redacted email address\]](#) (it may take a few minutes to arrive).
Thank you for your response!

Admin Login to Snowflake account

Use the activation link provided to create your admin user and set up a password. Ensure your password is strong and memorable, or store it in a password manager application. You'll need these admin credentials in the future.

Tip: While any username will work, using '**Admin**' keeps things simple.



Welcome to Snowflake!

ACCOUNTADMIN, please choose a username and password to get started

Username

Username can contain only letters and numbers.

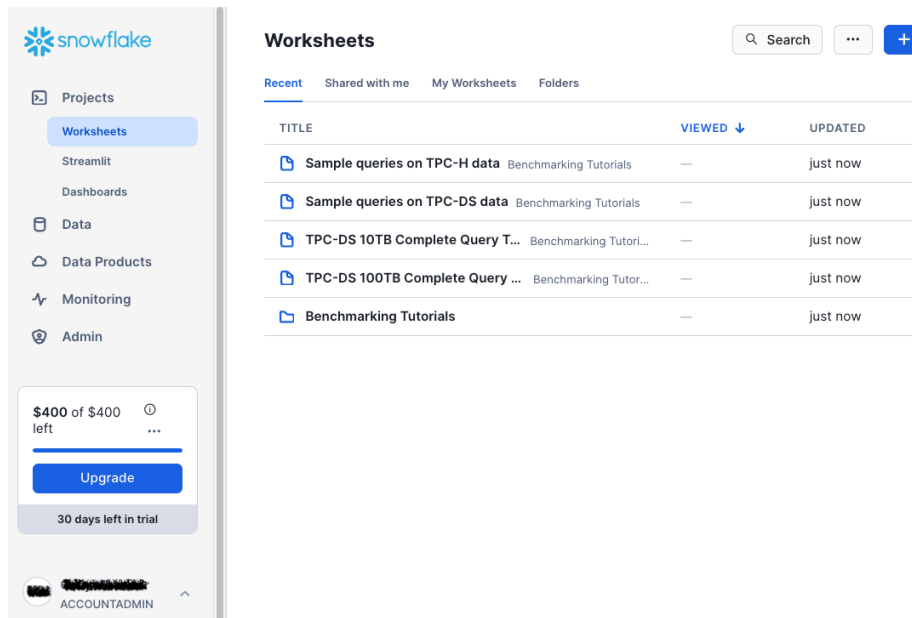
Password

Your password must be 8 - 256 characters and contain at least 1 number(s), 0 special character(s), 1 uppercase and 1 lowercase letter(s).

Confirm password

Get started

After entering your credentials and clicking “Get Started,” you'll be taken to the Snowflake UI, known as Snowsight. It should look like this:



The screenshot shows the Snowflake Snowsight Admin interface. On the left is a sidebar with navigation options: Projects, Worksheets (selected), Streamlit, Dashboards, Data, Data Products, Monitoring, and Admin. Below the sidebar is a trial status box showing "\$400 of \$400 left" and a "30 days left in trial" message with an "Upgrade" button. The main content area is titled "Worksheets" and features a table of recent worksheets. The table has columns for "TITLE", "VIEWED", and "UPDATED". The "VIEWED" column has a dropdown arrow. The table lists five worksheets, all with a status of "just now".

TITLE	VIEWED ↓	UPDATED
Sample queries on TPC-H data Benchmarking Tutorials	—	just now
Sample queries on TPC-DS data Benchmarking Tutorials	—	just now
TPC-DS 10TB Complete Query T... Benchmarking Tutori...	—	just now
TPC-DS 100TB Complete Query ... Benchmarking Tutor...	—	just now
Benchmarking Tutorials	—	just now

Copy the account URL and distribute it to your team members.

It will resemble the following format:

<https://xyz10001.eu-west-2.aws.snowflakecomputing.com>

Your team members will need to use this URL to log in on the day, using their designated usernames (userN).



The screenshot shows the Snowflake account URL setup process. On the left, a sidebar menu has 'Account' highlighted with a red dashed box. The main area shows account details for 'TI93040' with a red dashed box around the account name. On the right, a 'Copy account URL' button is highlighted with a red dashed box.

Locate and copy your Snowflake account identifier.

This is required for establishing data sharing with the WiD Snowflake account during the event, allowing access to an additional dataset.

It will resemble the following format:

[ABCDEFGH.JK10001](#)



The screenshot shows the Snowflake account identifier setup process. On the left, a sidebar menu has 'Account' highlighted with a red dashed box. The main area shows account details for 'TI93040' with a red dashed box around the account name. On the right, a 'Copy account identifier' button is highlighted with a green dashed box.

Keep this identifier easily accessible. Having it on hand for the event day will facilitate a smooth setup for data sharing.

Please use this form to provide organisers with your Snowflake account details

<https://bit.ly/3SZ1a2q>

Supporting SQL Scripts

The scripts below can assist in setting up your team environment swiftly:

- Setup database and warehouse.sql
- Setup users and roles.sql

You can either copy and paste the text into the Snowflake worksheet or download the files from the provided links and open them in Snowflake as described in the following section.

01 - Setup database and warehouse.sql (<https://bit.ly/3km2yfq>)

```

USE ROLE SYSADMIN;
CREATE OR REPLACE DATABASE WID_HACKATHON;
CREATE OR REPLACE SCHEMA DATA;
CREATE OR REPLACE WAREHOUSE WID_COMPUTE_WH WITH
    WAREHOUSE_SIZE = 'X-SMALL'
    AUTO_SUSPEND = 60
    AUTO_RESUME = TRUE;

USE ROLE ACCOUNTADMIN;
CREATE OR REPLACE RESOURCE MONITOR WID_HACKATHON_RM
    WITH CREDIT_QUOTA = 50
    TRIGGERS ON 75 PERCENT DO SUSPEND
        ON 100 PERCENT DO SUSPEND_IMMEDIATE;
ALTER ACCOUNT SET RESOURCE_MONITOR = WID_HACKATHON_RM;

```

02 - Setup users and roles.sql (<https://bit.ly/49TVmyz>)

```

USE ROLE ACCOUNTADMIN;

-- Create the WID_HACKER role
CREATE ROLE WID_HACKER;

-- Grant usage on the warehouse
GRANT USAGE ON WAREHOUSE WID_COMPUTE_WH TO ROLE WID_HACKER;

-- Grant usage on the database and grant all right to the schema(s)
GRANT USAGE ON DATABASE WID_HACKATHON TO ROLE WID_HACKER;
GRANT ALL ON ALL SCHEMAS IN DATABASE WID_HACKATHON TO ROLE WID_HACKER;
GRANT ALL ON FUTURE SCHEMAS IN DATABASE WID_HACKATHON TO ROLE WID_HACKER;

-- Assign the WID_HACKER role to the current user
GRANT ROLE WID_HACKER TO USER ADMIN;
ALTER USER ADMIN SET DEFAULT_ROLE = WID_HACKER;

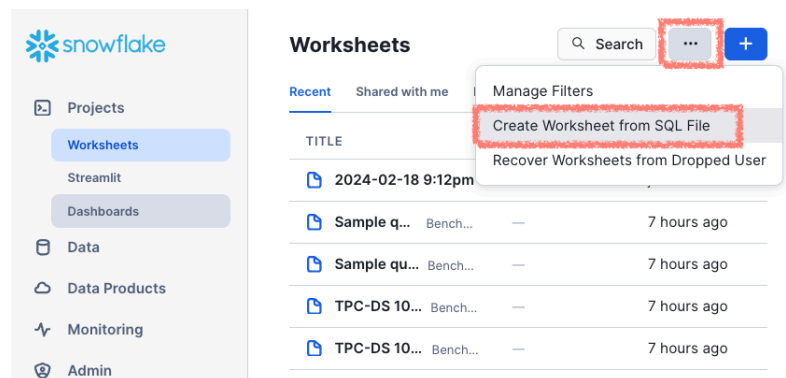
-- Create a new user and assign the WID_HACKER role
CREATE USER user1
    PASSWORD = 'wid_welcome'
    DEFAULT_ROLE = WID_HACKER
    MUST_CHANGE_PASSWORD = TRUE;
GRANT ROLE WID_HACKER TO USER user1;


-- Uncomment and update to create as many new users based on your team as
-- required
/*
CREATE USER user2
    PASSWORD = 'wid_welcome'
    DEFAULT_ROLE = WID_HACKER
    MUST_CHANGE_PASSWORD = TRUE;
GRANT ROLE WID_HACKER TO USER user2;
*/

```

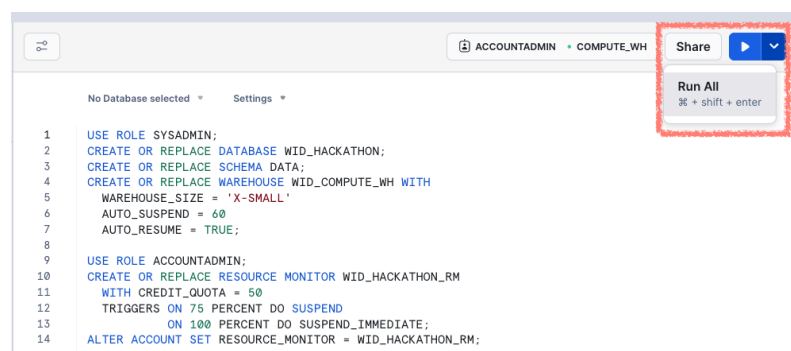
Setting up database, virtual warehouse and resource monitor for account

Select the '**Create Worksheet from SQL File**' option as indicated. Then, use the script named '**01 - Setup database and warehouse.sql**'.



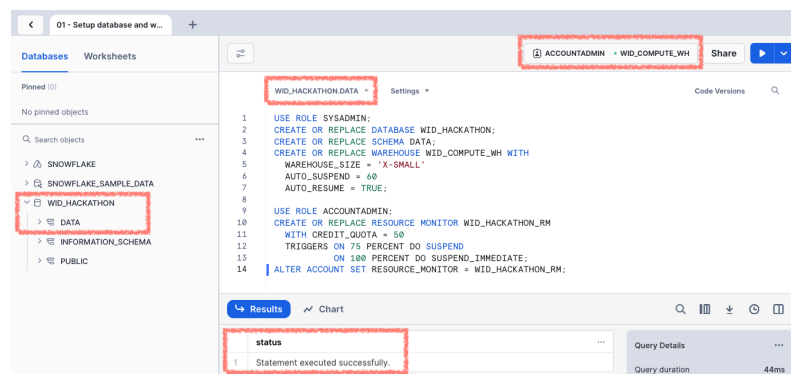
Once the file is open, either select the '**Run All**' option, or highlight all the lines and click the  button.

Alternatively, you can use the shortcut CMD (Mac) or CTRL (Windows) + Enter to execute selected commands.



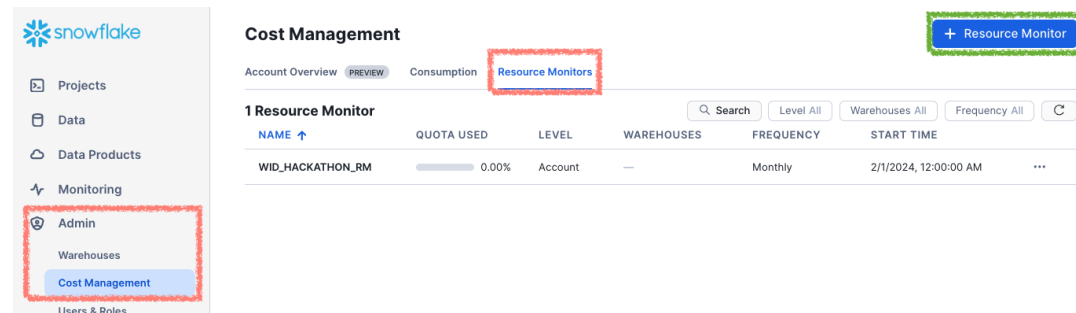
After running the commands, you should see the newly created database on the left-hand side.

Additionally, observe changes in the worksheet's context, such as the role, database, and warehouse, as illustrated on the right

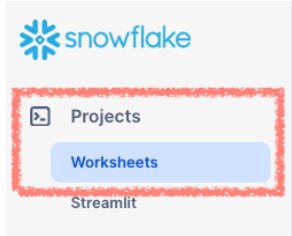
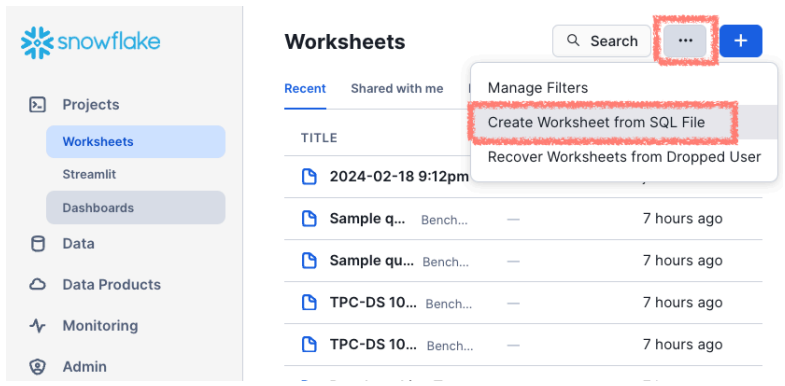

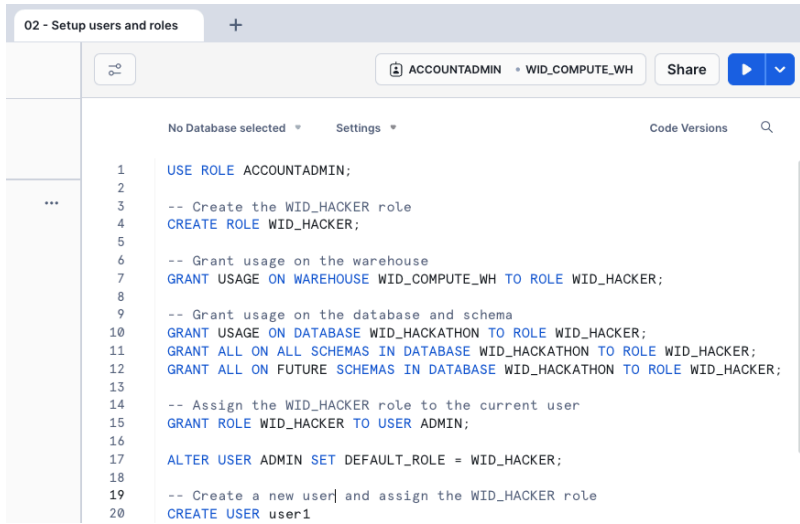


The script sets up a resource monitor to cap activities should there be an unexpected spike in usage of this trial account during the event. To view this monitor and track current usage, navigate to 'Admin' > 'Cost Management' > 'Resource Monitors' tab as shown below.

Note: Button "+ Resource Monitor" allows you to create one manually.



Setting up users & roles

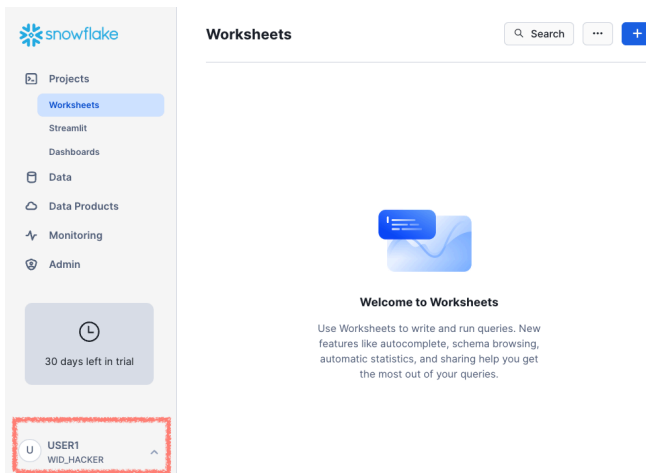
<p>Return to “Worksheets”</p>	 <p>The screenshot shows the Snowflake web interface. On the left sidebar, under the 'Projects' section, the 'Worksheets' button is highlighted with a red dashed box. The main area shows the 'Worksheets' page with a table of recent worksheets.</p> <table border="1"><thead><tr><th>TITLE</th><th>TYPE</th></tr></thead><tbody><tr><td>01 - Setup database and warehouse</td><td>SQL</td></tr></tbody></table>	TITLE	TYPE	01 - Setup database and warehouse	SQL
TITLE	TYPE				
01 - Setup database and warehouse	SQL				
<p>Select the 'Create Worksheet from SQL File' option as indicated. Then, use the script named '02 - Setup users and roles.sql'.</p>	 <p>The screenshot shows the Snowflake web interface. On the left sidebar, the 'Worksheets' button is highlighted. A dropdown menu is open, showing options: 'Manage Filters', 'Create Worksheet from SQL File' (highlighted with a red dashed box), and 'Recover Worksheets from Dropped User'. The main area shows a list of recent worksheets.</p>				
<p>After opening the file, proceed by executing each command line-by-line by clicking the  button.</p> <p>Alternatively, for quicker execution, use the CMD (Mac) or CTRL (Windows) + Enter shortcut to run the selected commands.</p> <p>Important: If you did not choose 'Admin' as your username for Account Administrator, please stop immediately after running the command on line 12.</p>	 <p>The screenshot shows the Snowflake SQL editor with the script '02 - Setup users and roles'. The script contains SQL commands for creating roles and users. Line 12 is highlighted.</p> <pre>1 USE ROLE ACCOUNTADMIN; 2 3 -- Create the WID_HACKER role 4 CREATE ROLE WID_HACKER; 5 6 -- Grant usage on the warehouse 7 GRANT USAGE ON WAREHOUSE WID_COMPUTE_WH TO ROLE WID_HACKER; 8 9 -- Grant usage on the database and schema 10 GRANT USAGE ON DATABASE WID_HACKATHON TO ROLE WID_HACKER; 11 GRANT ALL ON ALL SCHEMAS IN DATABASE WID_HACKATHON TO ROLE WID_HACKER; 12 GRANT ALL ON FUTURE SCHEMAS IN DATABASE WID_HACKATHON TO ROLE WID_HACKER; 13 14 -- Assign the WID_HACKER role to the current user 15 GRANT ROLE WID_HACKER TO USER ADMIN; 16 17 ALTER USER ADMIN SET DEFAULT_ROLE = WID_HACKER; 18 19 -- Create a new user and assign the WID_HACKER role 20 CREATE USER user1</pre> <p>If you did not choose 'Admin' as your username:</p> <ol style="list-style-type: none">1) Type the command 'SELECT CURRENT_USER();' and run it anywhere in the worksheet and copy the output value (username).2) In both lines 15 and 17, replace 'Admin' with the provided username.				
<p>Resume from line 20 to initiate the creation of a new user, named user1.</p> <p>Given that your team will consist of more than one member, it's advisable to create individual user accounts for each team member as required. The provided script aids in this process by generating usernames (user1) with the initial password 'wid_hackathon'. Simply copy & paste the last few lines</p>					

related to the creation of user1, and replicate this process to generate as many users as your team needs (user2, user3, etc.). Your team can decide on the day who will use which username.

Important: Users will be required to update this default password at their 1st login for security reasons.

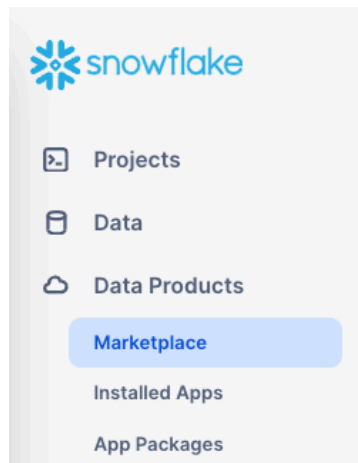
Your team members will require an account URL to login.

After logging in and updating their initial password, new users will gain access to the Snowflake account.

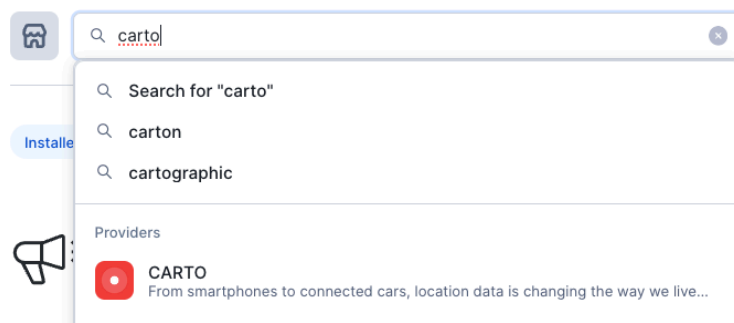


Adding Snowflake Marketplace Datasets (example)

Click on “Data Products”



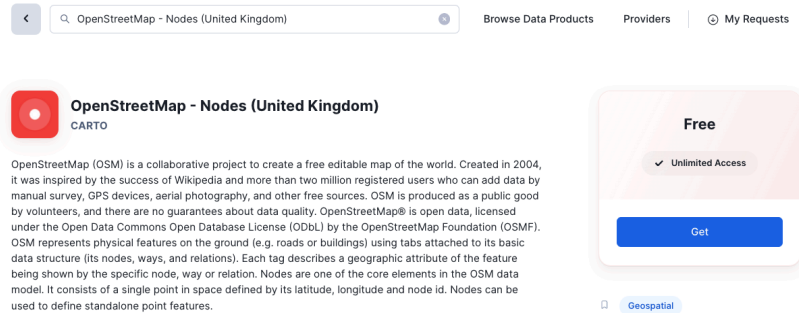
Search for a dataset or providers, i.e. Carto, Cybersyn or any other



Note: We will provide a full list of additional relevant datasets on the event day as part of the hack pack

Search For:
“OpenStreetMap -
Nodes (United
Kingdom)”

Click “Get” Button

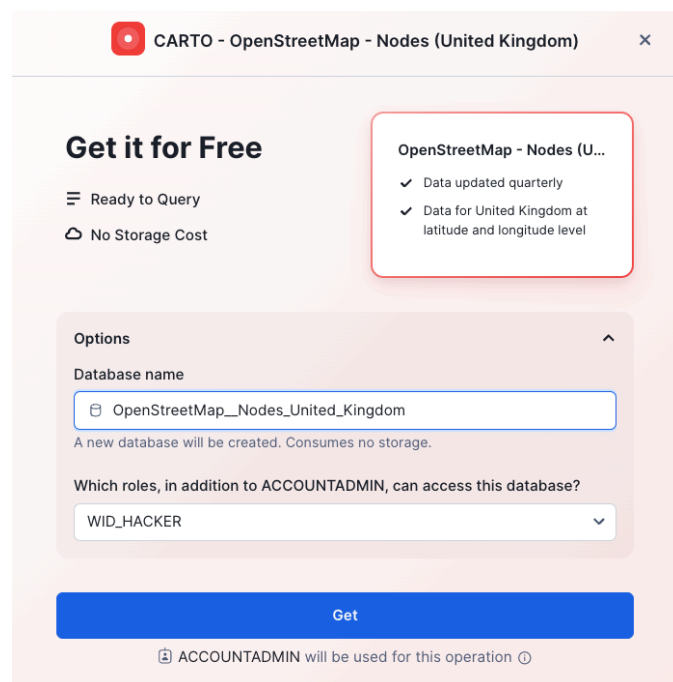


1) Click Options

2) Check DATABASE
NAME (use default or
your own)

3) Check
WID_HACKER role is
selected

4) Click “Get” button



In seconds this dataset is available in your account.

Click “Query Data” to see tables and fire your sql queries



Ready to Use

OPENSTREETMAP_NODES_UNITED_KIN...

Query Data

Done

In the worksheet you will be presented with a sample query that can be run after a WID_COMPUTE_WH is selected

The screenshot displays a data platform interface with a sidebar on the left containing a tree view of databases and worksheets. The main area shows a SQL query editor with a sample query. Below the editor, the 'Results' tab is active, showing a single row of data. To the right of the results, a 'Query Details' panel provides metadata about the query execution.

...	COUNT(GEOID)
1	19697

Query Details

- Query duration: 102ms
- Rows: 1
- Query ID: 01b2a95d-0000-ce5c...

Note: We will provide a full list of additional relevant datasets on the event day as part of the hack pack. You can choose use some, all or none of them for your activity

Private Sharing (On the event day)

The image displays two screenshots of the Snowflake web interface, illustrating data sharing features.

Top Screenshot: The left sidebar shows the navigation menu with 'Private Sharing' highlighted. The main content area is titled 'Shared With You' and includes a search bar. Below the search bar, the 'Direct Shares' section is visible, showing two shares: 'SAMPLE_DATA' (provided by Snowflake during account provisioning) and 'ACCOUNT_USAGE' (provided by Snowflake). Both shares are marked as 'Shared 1 week ago'.

Bottom Screenshot: The left sidebar remains the same. The main content area is titled 'Privately Shared Listings' and includes a search bar. Below the search bar, a listing for 'Example WiD' is shown, provided by 'SFSEEUROPE.GWARRIER_AWS_UK'. The listing is marked as 'Published Just now' and includes a 'Direct Access' button. A 'Get' button is also visible in the top right corner of the main content area.