



# Smart Cities Hackathon Tier 1 Challenge 4

### Challenge 4: Create a Twitter Integration

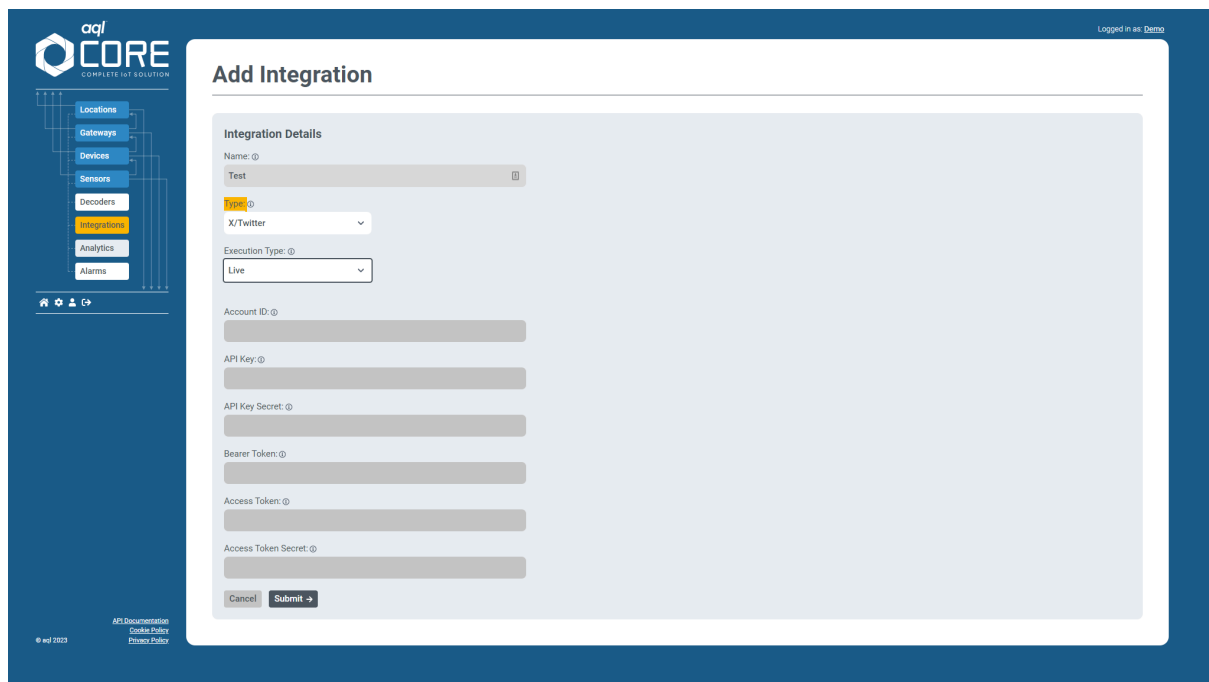
In this challenge, you are going to create an X/Twitter integration that will post a custom Tweet with your chosen sensor readings. The tweets will appear on our aqi Dev X/Twitter account (@DevAqi37849).

#### Step 1

Select “integrations” from the left menu

#### Step 2

Select “add integration”, and you will then see the below form to create an integration. Before entering the API details, enter a unique name for the integration, select X/Twitter as the integration type, then set the execution type to scheduled. Due to the possibility of lots of sensors sending readings through X/Twitter posts on the event day, we suggest selecting 5 minutes as the schedule time and limiting the amount of sensors you enable with the integration (see step 3):



The screenshot shows the 'Add Integration' form in the aqi CORE interface. The form is titled 'Add Integration' and contains the following fields and options:

- Name:** Text input field containing 'Test'.
- Type:** Dropdown menu with 'X/Twitter' selected.
- Execution Type:** Dropdown menu with 'Live' selected.
- Account ID:** Text input field containing '378491647888965649743872'.
- API Key:** Text input field containing 'oiu2mqCWzmX3eVLEbclu1NOJX'.
- API Key Secret:** Text input field containing 'riB9DsxQxgklyS97ET4Q1sgAlptR3ta42HqqFJdW97EDx4U8Nb'.
- Bearer Token:** Text input field (empty).
- Access Token:** Text input field (empty).
- Access Token Secret:** Text input field (empty).

At the bottom of the form are 'Cancel' and 'Submit' buttons.

Next, enter our Dev X/Twitter account API Details

- AccountID: 378491647888965649743872
- API Key: oiu2mqCWzmX3eVLEbclu1NOJX
- API Key Secret: riB9DsxQxgklyS97ET4Q1sgAlptR3ta42HqqFJdW97EDx4U8Nb

- Bearer Token:  
AAAAAAAAAAAAAAAAAAAAAKMjmwEAAAAAFax%2BFxnp%2FBfWVvmw%2FeBLQoActx4%3DonMGxrUna8OGtv0Yh5gQljkJKp7ldhaV9OjQj75T4kA9HQZ00I
- Access Token: 1646868244408532992-ziqjLfkPz0NpUh8FBwkMQPbKVAYLca
- Access Token Secret: miTt8p9cSSG1yo6jbgs8LGGdOwlo8RcruVdJkF70fCVQq

### Step 3

Filter to find sensors you wish to use with the integration and enable by toggling the “Integrate” button.

**Sensors**

**Filter Integrations**

Location:  Gateway:  Device:

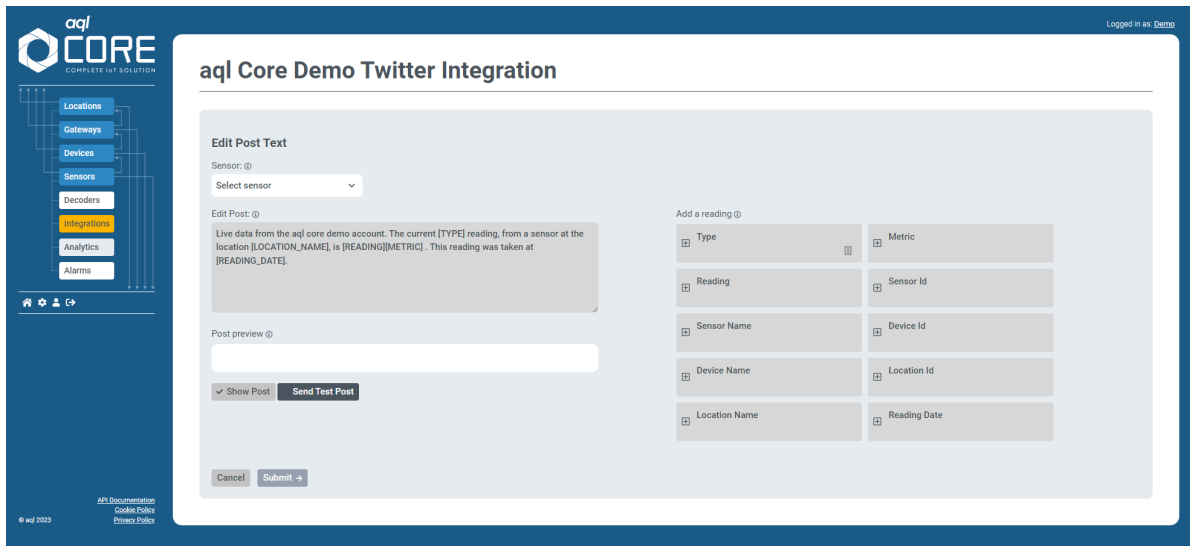
| INTEGRATE                           | SENSOR                     | KEY              | DEVICE                             | LATEST VALUE | LAST UPDATED           | DATA RETENTION |
|-------------------------------------|----------------------------|------------------|------------------------------------|--------------|------------------------|----------------|
| <input checked="" type="checkbox"/> | Particulate matter (PM2.5) | mc_pm2_5         | White Rose Park Air Quality Sensor | 55 µg/m3     | 17th Nov, 2023 - 08:38 | 90 days        |
| <input type="checkbox"/>            | Absolute Humidity          | humidity         | 00137A10000178DF_demo              | 45.9 %       | 17th Nov, 2023 - 08:41 | 90 days        |
| <input type="checkbox"/>            | Absolute Humidity          | humidity         | 00137A10000178DE_demo              | 36.2 %       | 17th Nov, 2023 - 08:44 | 90 days        |
| <input type="checkbox"/>            | Absolute Humidity          | ambient_humidity | 647FDA000000AC7D_demo              | 52.0 %       | 17th Nov, 2023 - 08:42 | 90 days        |
| <input type="checkbox"/>            | Absolute Humidity          | ambient_humidity | 647FDA000000AC9D_demo              | 57.5 %       | 17th Nov, 2023 - 08:44 | 90 days        |
| <input type="checkbox"/>            | Absolute Humidity          | ambient_humidity | 647FDA000000AB4D_demo              | 97.0 %       | 17th Nov, 2023 - 08:46 | 90 days        |
| <input type="checkbox"/>            | Accelerometer X            | accelerationx    | 00137A10000033AB_demo              | 0.000 g      | 17th Nov, 2023 - 06:55 | 0 days         |
| <input type="checkbox"/>            | Accelerometer Y            | accelerationy    | 00137A10000033AB_demo              | 0.000 g      | 17th Nov, 2023 - 06:55 | 0 days         |
| <input type="checkbox"/>            | Accelerometer Z            | accelerationz    | 00137A10000033AB_demo              | 0.000 g      | 17th Nov, 2023 - 06:55 | 0 days         |
| <input type="checkbox"/>            | Analog Input Voltage       | Aux2 Voltage     | 1D24E7_demo                        | 3.30 V       | 17th Nov, 2023 - 08:37 | 0 days         |

Showing 1 to 10 of 1392 results

Results per page:

### Step 4

Select “Edit Post” to change the message that appears in the X/Twitter post. Clicking the plus values will allow you to insert variable values into the body of the post. These change depending on values with each sensor reading that triggers the integration. You can select a sensor to display example values and click “show post” to display how it will appear in the post on X/Twitter.

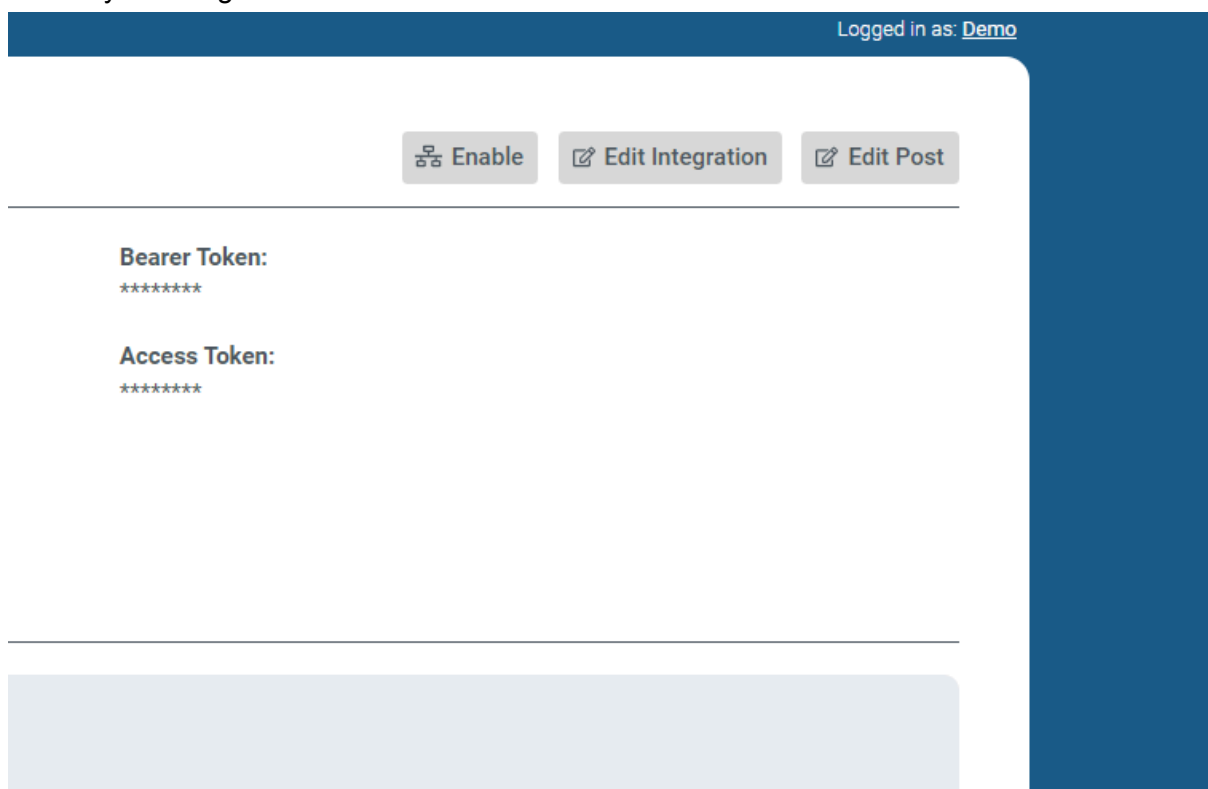


The screenshot shows the 'aq! Core Demo Twitter Integration' page. On the left is a sidebar with navigation links: Locations, Gateways, Devices, Sensors, Decoders, Integrations (highlighted), Analytics, and Alarms. The main content area is titled 'aq! Core Demo Twitter Integration' and contains an 'Edit Post Text' form. The form includes a 'Sensor' dropdown menu, a text area for the post content (pre-filled with a placeholder), a 'Post preview' section, and buttons for 'Show Post', 'Send Test Post', 'Cancel', and 'Submit'. To the right of the text area is a table titled 'Add a reading' with columns for 'Type' and 'Metric'. The table contains several rows with input fields for 'Reading', 'Sensor Id', 'Sensor Name', 'Device Id', 'Device Name', 'Location Id', 'Location Name', and 'Reading Date'.

Review your post with your aq! dev buddy and click “submit” to save your changes.

## Step 5

Enable your Integration.



The screenshot shows the 'aq! Core Demo Twitter Integration' page with the 'Enable' button highlighted. The page displays the 'Bearer Token' and 'Access Token' fields, both masked with asterisks. Below the tokens are buttons for 'Enable', 'Edit Integration', and 'Edit Post'. The 'Enable' button is highlighted with a blue border. The page also shows a 'Logged in as: Demo' status in the top right corner.

Well done! You have now completed this challenge and your posts for the Hackathon can be seen on: <https://twitter.com/DevAql37849>