



Smart Cities Hackathon Tier 1 Challenge 4

Challenge 4: Create a Twitter Integration

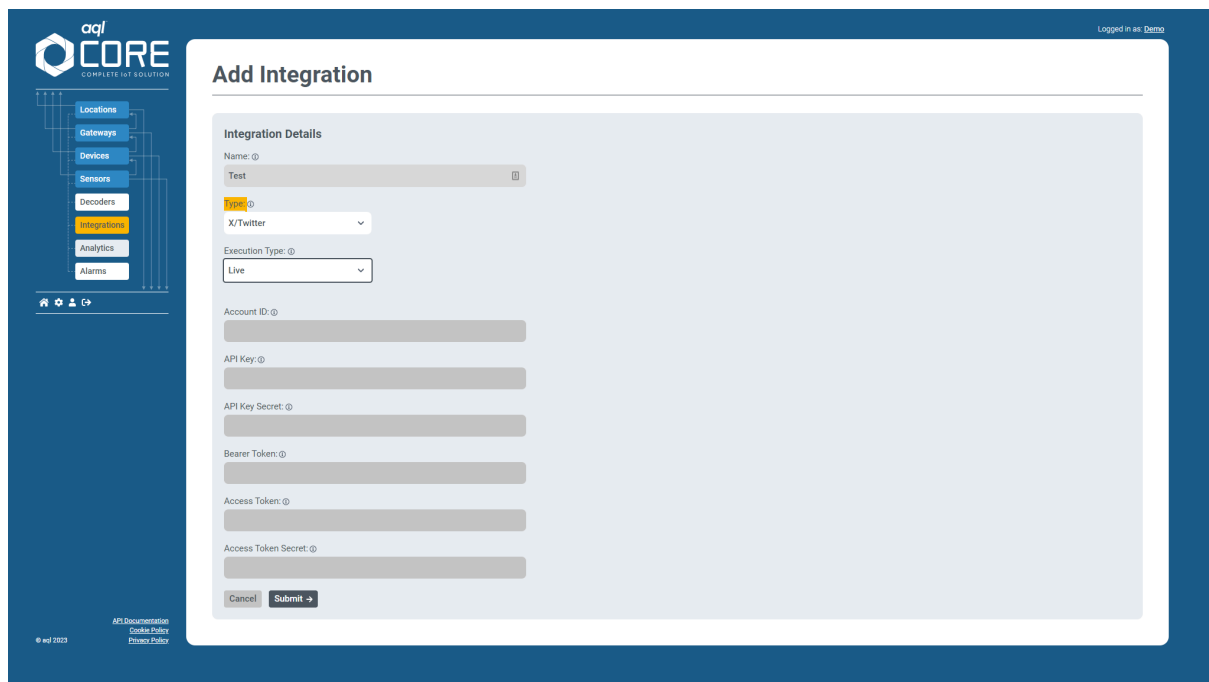
In this challenge, you are going to create an X/Twitter integration that will post a custom Tweet with your chosen sensor readings. The tweets will appear on our aqi Dev X/Twitter account (@DevAqi37849).

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):



Next, enter our Dev X/Twitter account API Details

- AccountID: 378491647888965649743872
- API Key: Y7e5SKjfND01uNfoycS0Hgyxo
- API Key Secret: vT19wHWCibWxbpqIWAJY95w8QaRHcOL5malytvGXF2ht3IWqt6

Tier 1: Challenge 4



- Bearer Token:
AAAAAAAAAAAAAAAAAAAAAKMjmwEAAAAALLeKyfKQVMDbkObcOSverHiRomk
%3Dhda3OzImNk9rL1QTefG0gZLbP184IoK3ZQz9kUm5rpVH9O3LBH
- Access Token: 1646868244408532992-4y8HXUyyacqhDPhmZtYyEmpPiOqEP
- Access Token Secret: o2VVZDOqmOPeySJCy4NuVEEjDJ7mLsWOzKQD6VtS8Dibe

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

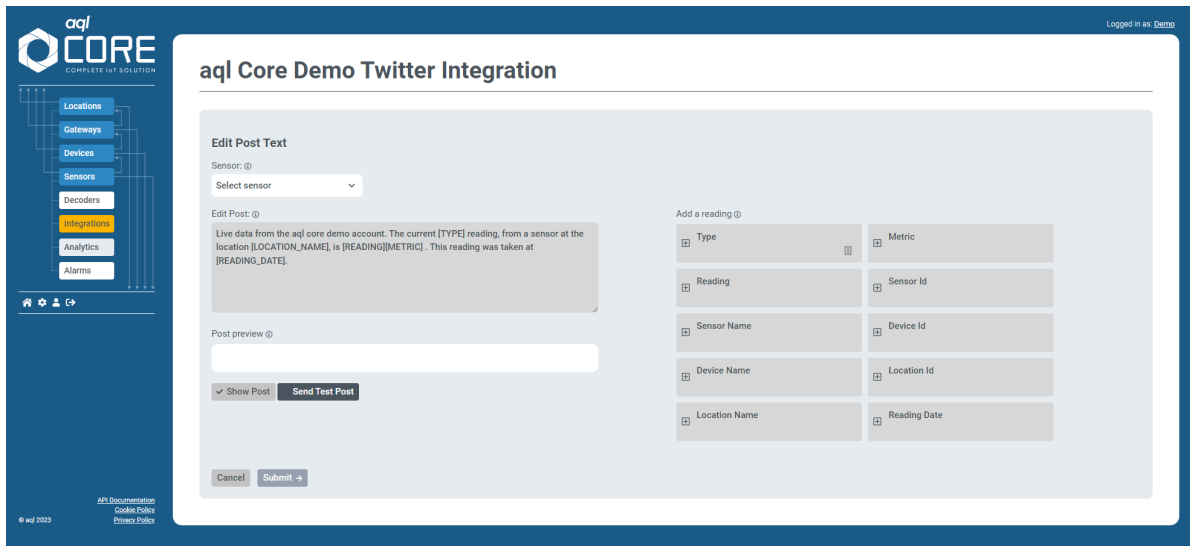
Showing 1 to 10 of 1382 results

...

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.

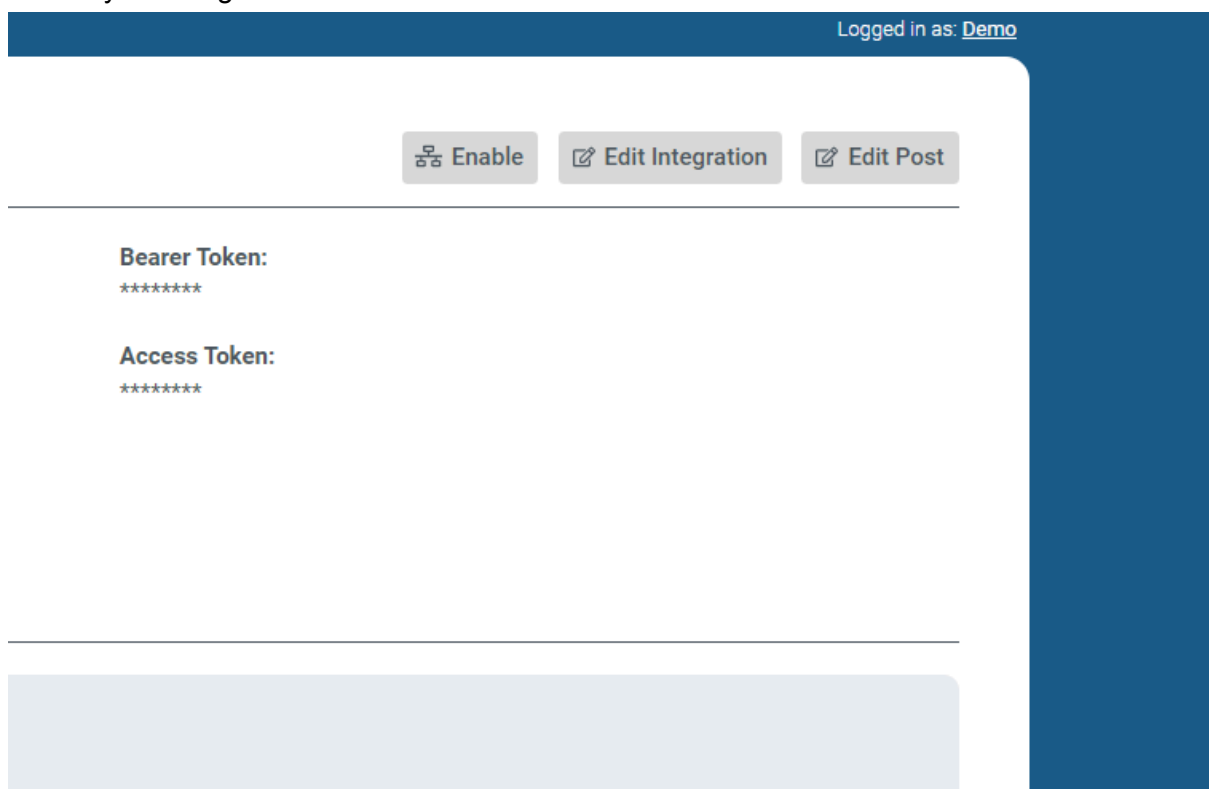


The screenshot shows the 'aqi Core Demo Twitter Integration' interface. On the left is a sidebar with navigation links: Locations, Gateways, Devices, Sensors, Decoders, Integrations (highlighted), Analytics, and Alarms. The main content area is titled 'aqi Core Demo Twitter Integration' and contains an 'Edit Post Text' form. The form includes a 'Sensor' dropdown menu, a text area for the post content (pre-filled with a template: 'Live data from the aqi core demo account. The current [TYPE] reading, from a sensor at the location [LOCATION_NAME], is [READING][METRIC]. This reading was taken at [READING_DATE].'), 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 rows for 'Reading', 'Sensor Name', 'Device Name', 'Location Name', 'Sensor Id', 'Device Id', 'Location Id', and 'Reading Date'.

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

Step 5

Enable your Integration.



The screenshot shows the 'aqi Core Demo Twitter Integration' interface after clicking the 'Enable' button. The top right corner shows 'Logged in as: Demo'. Below the navigation bar, there are three buttons: 'Enable' (highlighted), 'Edit Integration', and 'Edit Post'. Below these buttons, the 'Bearer Token:' and 'Access Token:' are displayed, each followed by a series of asterisks (*****). The bottom of the page shows a large, empty light blue rectangular area.

Well done! You have now completed this challenge and your posts for the Hackathon can be seen on: <https://twitter.com/DevAqi37849>