

Team id: PNT2022TMID05726

Project title: Real-Time River Water Quality Monitoring and Control System

Python code for publishing random sensor data (Water turbidity, pH values,if required temperature) to the IBM IOT Platform.

The screenshot displays the IBM Watson IoT Platform interface. On the left, a sidebar contains navigation icons. The main panel shows a table of devices with columns for Device ID, Status, Device Type, and Class ID. A device with ID 1234567 is selected, showing a status of 'Disconnected' and type 'ESP32_dist'. Below the table, a section titled 'Recent Events' lists five events, each with a timestamp, value, and format. On the right, a 'Simulations' panel shows '1/50 Simulations Running' and a 'New Simulation' button. Below this, a 'Device Type' dropdown is set to 'ESP32_dist', and a '1 Event' toggle is visible. At the bottom of the simulation panel, a status bar indicates '403 events sent' and '8.9 KB sent'.

Event	Value	Format
event01	["Temperature":23,"Ph-value":5,"humidity":86]	json
event01	["Temperature":36,"Ph-value":2,"humidity":60]	json
event01	["Temperature":37,"Ph-value":7,"humidity":88]	json
event01	["Temperature":96,"Ph-value":12,"humidity":65]	json
event01	["Temperature":91,"Ph-value":9,"humidity":60]	json

The screenshot shows the 'Device Type: ESP32_dist' configuration page. The 'Events' section is active, displaying a table with one event type named 'event01'. The 'Schedule' is set to 'Every Minute'. The 'Payload' section shows a JSON payload with three fields: 'Temperature', 'Ph-value', and 'humidity', each with a random value generator. The 'Send' button is visible. At the bottom, there are 'Cancel' and 'Save' buttons.

Event type name	Schedule	Payload
event01	Every Minute	<pre>{ "Temperature": random(10,100), "Ph-value": random(0,14), "humidity": random(0,100) }</pre>