

HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANT POWERED BY IoT

Team ID: PNT2022TMID41272

Project Development Phase: Sprint 1

STEP 1:

Create an account in IBM Watson IoT.

The screenshot shows the IBM Watson IoT Platform interface. At the top, there's a navigation bar with 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present. Below the navigation bar, a table lists devices. The first device is selected, showing its details in a sidebar. The 'Recent Events' tab is active, displaying a table of events.

Event	Value	Format	Last Received
IoTSensor	{"temperature":38,"humidity":19,"vibrate":60}	json	a few seconds ago
IoTSensor	{"temperature":~6,"humidity":45,"vibrate":16}	json	a few seconds ago
IoTSensor	{"temperature":77,"humidity":~6,"vibrate":44}	json	a few seconds ago
IoTSensor	{"temperature":35,"humidity":35,"vibrate":10}	json	a few seconds ago
IoTSensor	{"temperature":~7,"humidity":87,"vibrate":65}	json	a few seconds ago

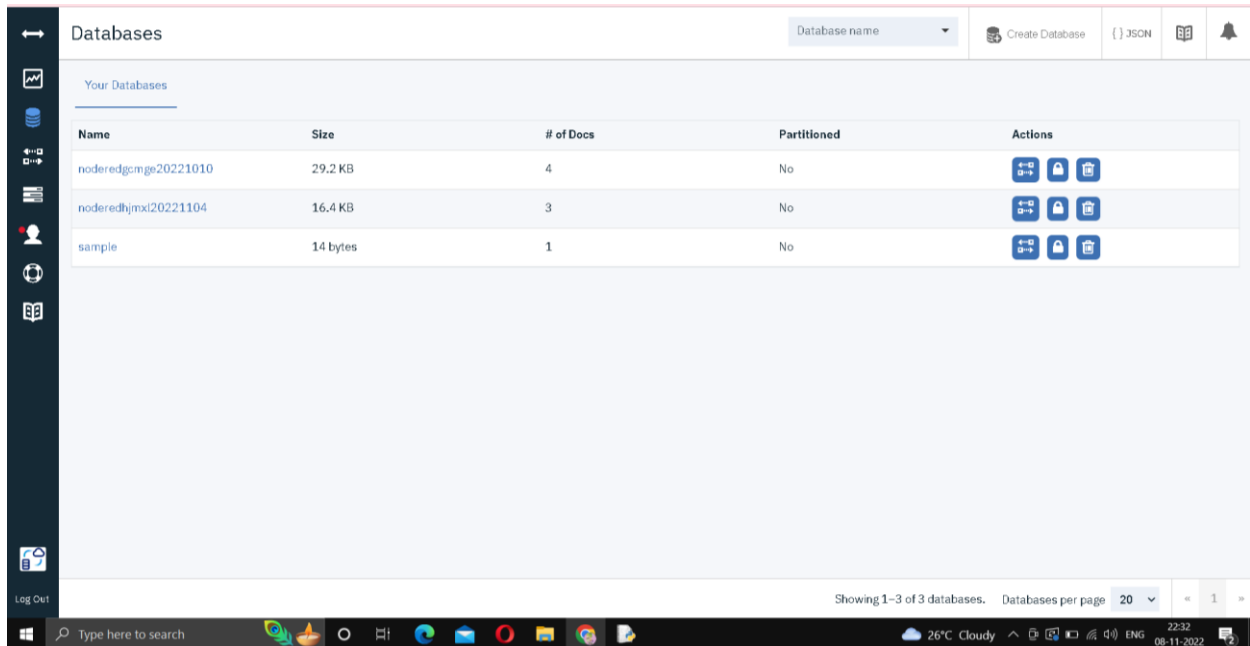
1 Simulation running

The screenshot shows the IBM Watson IoT Platform interface with a detailed view of a device. The top bar shows the device name 'ESP32x'. Below the bar, there are three data cards: 'Temperature' showing 15.0 °F, 'Humidity' showing 39.0 °C, and 'Vibration' showing a line graph. The 'Vibration' card has a dropdown menu set to '5 minutes' and a 'now' button. The bottom status bar indicates '1 Simulation running'.

1 Simulation running

STEP 2:

Create an account in Cloudant Database.

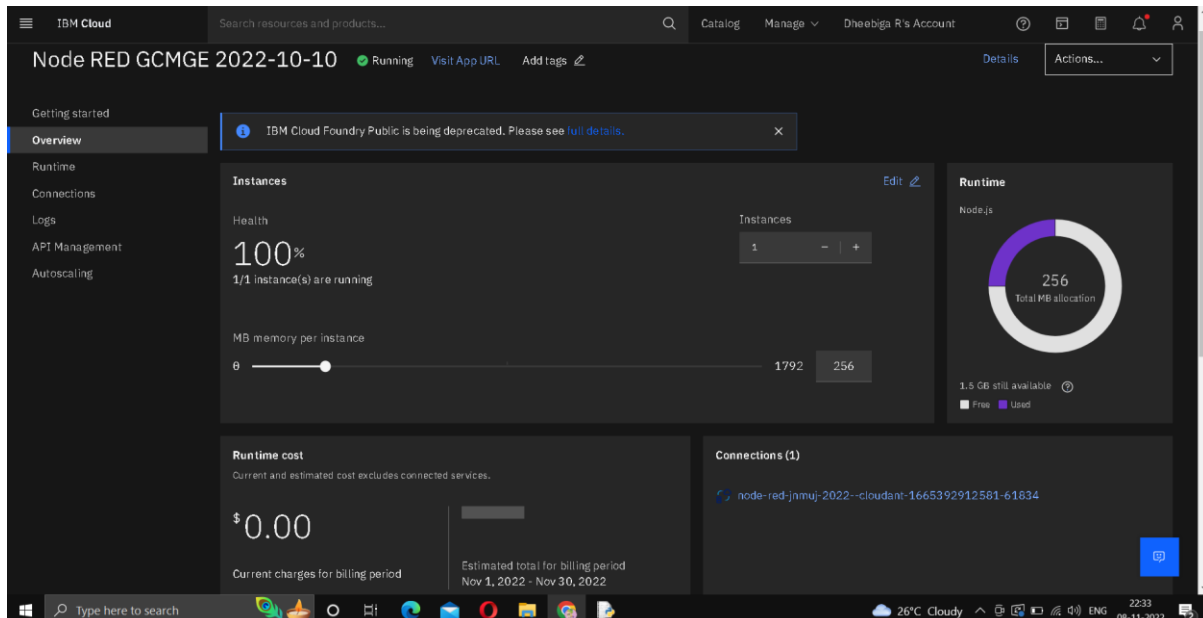


The screenshot shows the Cloudant Databases management console. The interface includes a sidebar with navigation icons, a top navigation bar with a search bar and a 'Create Database' button, and a main content area displaying a table of databases. The table has columns for Name, Size, # of Docs, Partitioned, and Actions. Three databases are listed: 'noderedgcmge20221010' (29.2 KB, 4 docs), 'noderedhmx20221104' (16.4 KB, 3 docs), and 'sample' (14 bytes, 1 doc). Each database has three action icons: a plus sign, a lock, and a trash can. The bottom of the interface shows a status bar with 'Showing 1-3 of 3 databases' and a pagination control.

Name	Size	# of Docs	Partitioned	Actions
noderedgcmge20221010	29.2 KB	4	No	[+][lock][trash]
noderedhmx20221104	16.4 KB	3	No	[+][lock][trash]
sample	14 bytes	1	No	[+][lock][trash]

STEP 3:

Create an account in Node-Red.



The screenshot shows the IBM Cloud console for a Node-RED instance named 'Node RED GCMGE 2022-10-10'. The interface includes a sidebar with navigation options like 'Overview', 'Runtime', 'Connections', 'Logs', 'API Management', and 'Autoscaling'. The main content area displays various metrics and controls. A notification banner at the top states 'IBM Cloud Foundry Public is being deprecated. Please see full details.' The 'Instances' section shows a health status of 100% and 1/1 instance(s) are running. A slider for 'MB memory per instance' is set to 256. The 'Runtime cost' section shows a current charge of \$0.00 and an estimated total for the billing period of Nov 1, 2022 - Nov 30, 2022. The 'Connections (1)' section shows a single connection to 'node-red-jnmuj-2022--cloudant-1665392912581-61834'. A donut chart in the 'Runtime' section shows 256 MB total allocation, with 1.5 GB still available.

Node RED GCMGE 2022-10-10 Running [Visit App URL](#) [Add tags](#) [Details](#) [Actions...](#)

Getting started **Overview** Runtime Connections Logs API Management Autoscaling

IBM Cloud Foundry Public is being deprecated. Please see [full details](#).

Instances [Edit](#)

Health: 100%
1/1 instance(s) are running

MB memory per instance: 0 to 1792 (256 selected)

Runtime cost
Current and estimated cost excludes connected services.
\$0.00
Current charges for billing period
Estimated total for billing period Nov 1, 2022 - Nov 30, 2022

Connections (1)
node-red-jnmuj-2022--cloudant-1665392912581-61834

Runtime
Node.js
256 Total MB allocation
1.5 GB still available
Legend: Free (white), Used (purple)