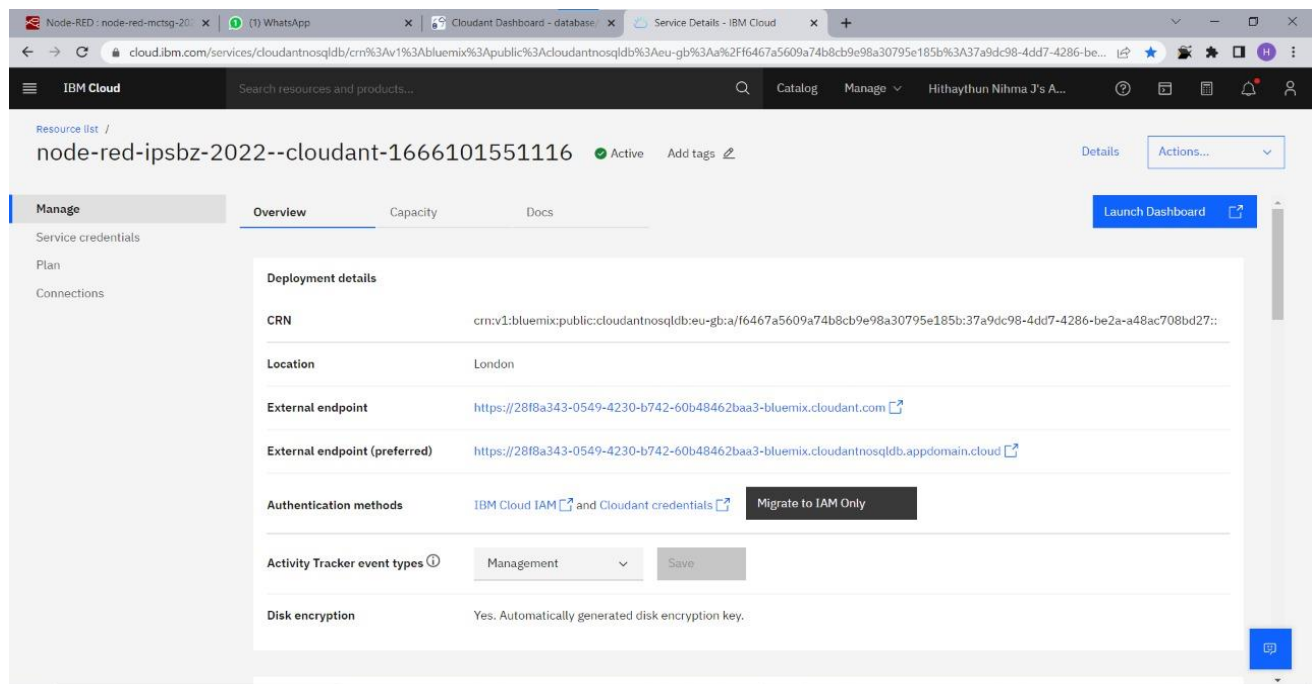


Project Development

| | |
|--------------|---|
| Date | 14 Nov 2022 |
| Team ID | PNT2022TMID21372 |
| Project Name | Iot Based Safety For Child Safety Monitoring & Notification |
| Sprint No | Sprint 4 |

Creating Cloudbant DB and integrating Node-Red with the Web UI

Create Cloudbant DB:



The screenshot displays the IBM Cloud console interface for a Cloudbant database instance. The browser tabs at the top include Node-RED, WhatsApp, Cloudbant Dashboard, and Service Details - IBM Cloud. The URL bar shows the instance ID: `cloud.ibm.com/services/cloudantnosqldb/crn%3Av1%3Abluemix%3Apublic%3Acloudantnosqldb%3Aeu-gb%3Aa%2Ff6467a5609a74b8cb9e98a30795e185b%3A37a9dc98-4dd7-4286-be...`.

The main content area shows the instance details for `node-red-ipsbz-2022--cloudant-1666101551116`, which is in an **Active** state. The left sidebar contains navigation links for **Manage** (Service credentials, Plan, Connections), **Overview** (selected), **Capacity**, and **Docs**. A **Launch Dashboard** button is visible in the top right.

The **Overview** tab displays the following deployment details:

- CRN:** `crn:v1:bluemix:public:cloudantnosqldb:eu-gb:a/f6467a5609a74b8cb9e98a30795e185b:37a9dc98-4dd7-4286-be2a-a48ac708bd27::`
- Location:** London
- External endpoint:** <https://28f8a343-0549-4230-b742-60b48462baa3-bluemix.cloudant.com>
- External endpoint (preferred):** <https://28f8a343-0549-4230-b742-60b48462baa3-bluemix.cloudantnosqldb.appdomain.cloud>
- Authentication methods:** IBM Cloud IAM and Cloudbant credentials. A **Migrate to IAM Only** button is present.
- Activity Tracker event types:** Set to **Management** with a **Save** button.
- Disk encryption:** Yes. Automatically generated disk encryption key.

Node-RED: node-red-mctsg-20

(2) WhatsApp

Cloudant Dashboard - database

28f8a343-0549-4230-b742-60b48462baa3-bluemix.cloudant.com/dashboard.html#database/tracker/_all_docs

Document ID

Options

{ } JSON

tracker

All Documents

Query

Permissions

Changes

Design Documents

Log Out

Table

Metadata

{ } JSON

Create Document

| | id | key | value |
|--------------------------|----------------------------------|----------------------------------|---|
| <input type="checkbox"/> | 0ebfb43b28138b7f7b48f34c5a76c3a | 0ebfb43b28138b7f7b48f34c5a76c3a | { "rev": "1-5e97009804800cf64c39df8dccb6... |
| <input type="checkbox"/> | 1166941e69d252626b8eca46080aeb6 | 1166941e69d252626b8eca46080aeb6 | { "rev": "1-0842bb81b11cd61fe20ed094ab2a... |
| <input type="checkbox"/> | 703d29b74356ef26f949797731137cf2 | 703d29b74356ef26f949797731137cf2 | { "rev": "1-d95bc0f570ae15c90cb7504c862b9... |
| <input type="checkbox"/> | 97c5d59e72ae6c2a155702db7151fe7a | 97c5d59e72ae6c2a155702db7151fe7a | { "rev": "1-c0293566773cc4e2db9e07a5ac8... |
| <input type="checkbox"/> | a79bf4f6dccb1b32ebee5a5c478fa81d | a79bf4f6dccb1b32ebee5a5c478fa81d | { "rev": "1-eefce107643e599a668ede810bb81... |
| <input type="checkbox"/> | c7fc90ace4fcfe8b62132f4a9f2c28ca | c7fc90ace4fcfe8b62132f4a9f2c28ca | { "rev": "1-32cd76c4d4a5dc4aace8fae2a256a... |
| <input type="checkbox"/> | e9e28c06775212fe00e77dc99dc8e97d | e9e28c06775212fe00e77dc99dc8e97d | { "rev": "1-03ac3bfe844e7d696b5970b64dba... |
| <input type="checkbox"/> | f347b088872d7656a0ff956b53c31715 | f347b088872d7656a0ff956b53c31715 | { "rev": "1-fed4def46a583defd9df7960c67198... |
| <input type="checkbox"/> | f908b61af224813129b44b117fda0a5f | f908b61af224813129b44b117fda0a5f | { "rev": "1-24f20fddd2e9e06c4b6ffbeeee6b58... |

Showing document 1 - 9. Documents per page: 20

WhatsApp

Meet

IBM

IBM Wat

Cloudant

Service

Applica

Node-RE

Node-RE

Untitled

Applica

28f8a343-0549-4230-b742-60b48462baa3-bluemix.cloudant.com/dashboard.html#/_all_dbs

Database name

Create Database

{ } JSON

Monitoring

Databases

Replication

Active Tasks

Account

Support

Documentation

IBM Cloudant

Log Out IBMId: 66800DC1HS

Databases

Your Databases

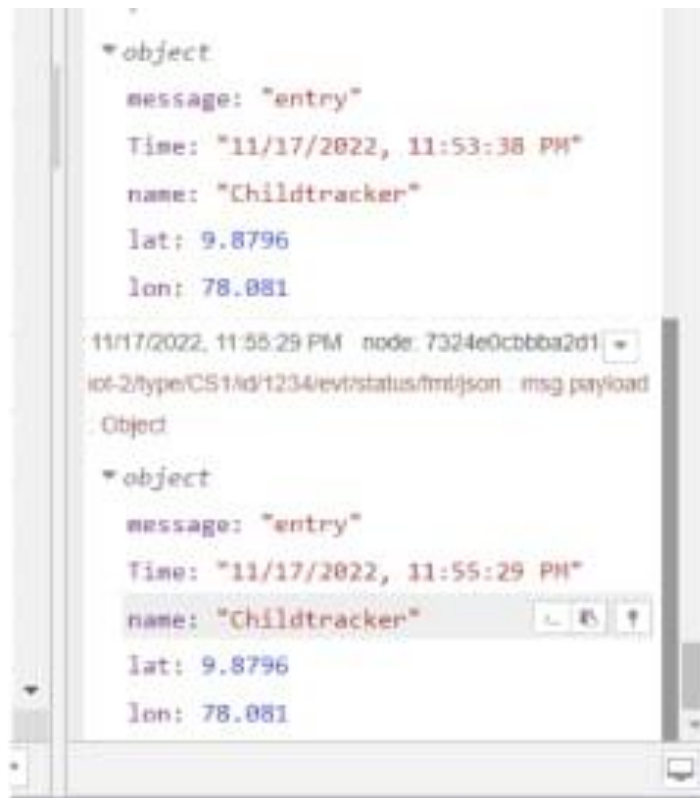
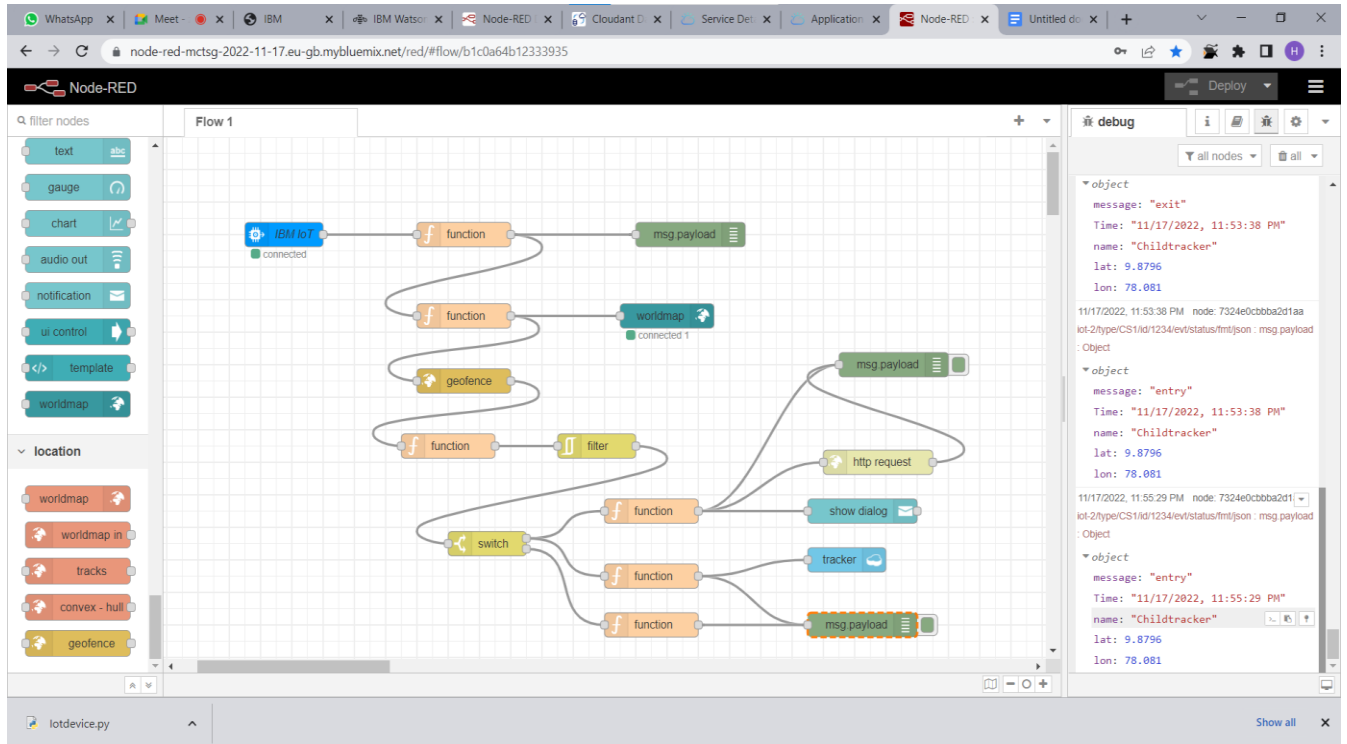
| Name | Size | # of Docs | Partitioned | Actions |
|----------------------|----------|-----------|-------------|--|
| childsafety | 14 bytes | 1 | No | <div><div></div><div></div><div></div></div> |
| noderedmctsg20221117 | 29.5 KB | 4 | No | <div><div></div><div></div><div></div></div> |
| tracker | 1.8 KB | 7 | No | <div><div></div><div></div><div></div></div> |

Showing 1-3 of 3 databases. Databases per page 20

lotdevice.py

Show all

Node-Red Service IN Area:



Node-Red Service OUT Area:

The screenshot shows the Node-RED web interface in a browser. The top bar includes a 'Deploy' button. On the left, the 'filter nodes' sidebar is open, showing various node categories like 'text', 'gauge', 'chart', 'audio out', 'notification', 'ui control', 'template', 'worldmap', and a 'location' section with 'worldmap', 'worldmap in', 'tracks', 'convex - hull', and 'geofence'. The main workspace, titled 'Flow 1', contains a flow starting with an 'IBM IoT' node (labeled 'connected'). This node connects to a 'function' node, which then connects to a 'msg payload' node. The flow continues through another 'function' node to a 'worldmap' node (labeled 'connected 1'). This is followed by a 'geofence' node, then another 'function' node, and a 'filter' node. The 'filter' node connects to a 'switch' node. The 'switch' node has three outputs, each leading to a 'function' node. These 'function' nodes connect to 'http request', 'show dialog', and 'tracker' nodes respectively. The 'http request' node connects to a 'msg payload' node. The 'show dialog' node connects to a 'msg payload' node. The 'tracker' node connects to a 'msg payload' node. The 'debug' sidebar on the right shows a list of messages. The first message is an 'entry' event for a 'Childtracker' with coordinates lat: 9.8796 and lon: 78.001. The second message is a 'string[23]' event with the text 'Not within the geofence'. The third message is an 'exit' event for a 'Childtracker' with coordinates lat: 9.95143 and lon: 78.1158.

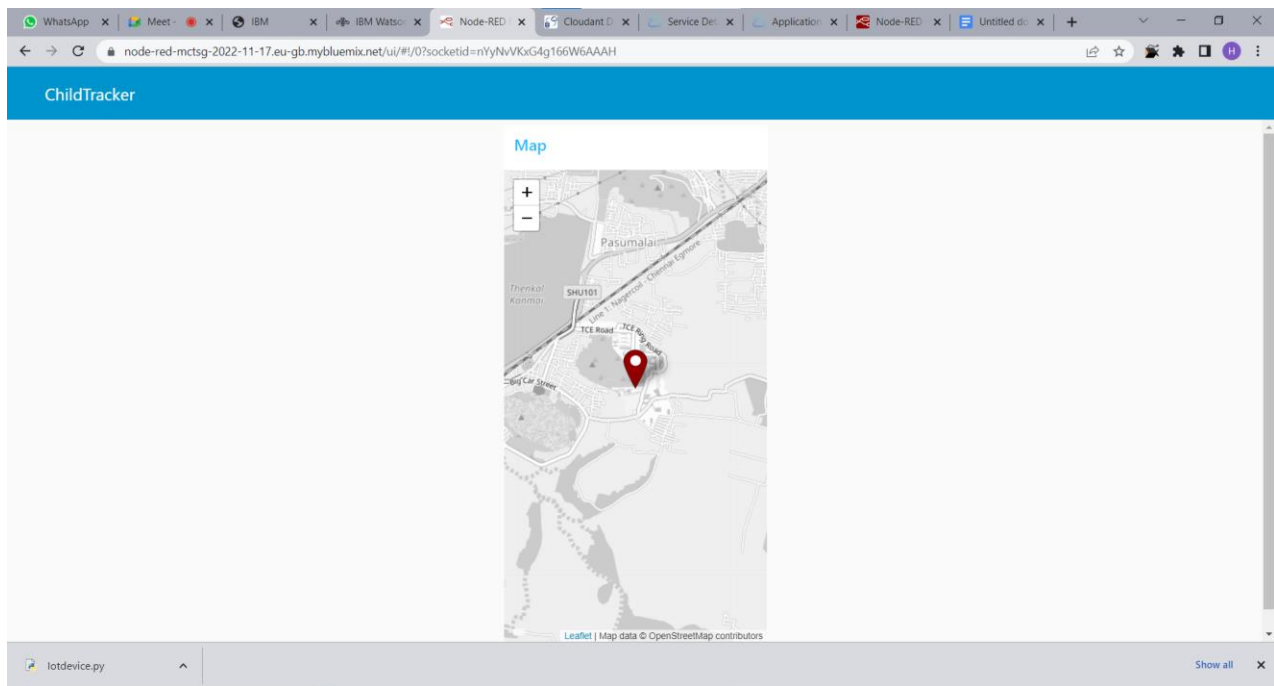
The first screenshot shows a debug console entry for a message received at 11/17/2022, 11:57:15 PM from node 534ecdadeabf5c9. The message is a 'msg.payload' of type 'string[23]' with the value 'Not within the geofence'.

The second screenshot shows a debug console entry for a message received at 11/17/2022, 11:57:15 PM from node 7324e0cbbba2d1aa. The message is a 'msg.payload' of type 'Object' with the following structure:

```
object
  message: "exit"
  Time: "11/17/2022, 11:57:15 PM"
  name: "Childtracker"
  lat: 9.95143
  lon: 78.1158
```

Node-Red Dashboard(Web UI):

IN Area:



OUT Area:

