

Experiment no. 8

Name: Rishabh Anand

UID: 19BCS4525

Branch: CSE-IOT

Sec/Grp: 1-A

Sem: 6th

Date: 21/04/2022

Subject: CCIOT Lab

Code: CSD-387

1. Aim/Overview of the practical:

Create an Internet of Things Platform starter application

2. Steps for experiment/practical:

Resource list / App details / Node RED BAYFK 2022-03-17 [Add tags](#)

Actions...

Details

App URL <https://node-red-bayfk-2022-03-17.eu-gb.mybluemix.net>

Source <https://eu-gb.git.cloud.ibm.com/maboya3697/NodeREDBAYFK...>

Resource group [Default](#)

Deployment target [Node RED BAYFK 2022-03-17](#)

Created 3/17/2022

Services

Cloudant

[Open dashboard](#) [Documentation](#) [API reference](#)

Credentials ▾

[Connect existing services](#) [Create service](#)

Deployment Automation

Name [NodeREDBAYFK2022-03-17](#)

Location [London](#)

Tool integrations

Delivery Pipelines

Name [pr-pipeline](#)

Status [No stages detected](#)

Name [ci-pipeline](#)

Status [Success](#)

Getting started quickly

Configuring your app

To connect services and DevOps toolchains to your app:

1. Use the **Services** card to connect a service to your app. Select an existing service instance, or create a new one. [Learn more.](#)
2. If you want to view the code before your app is deployed, click **Download code** to obtain the .zip file.
3. Click **Deploy your app** in the **Deployment Automation** card to select the deployment target and configure the Continuous Delivery service. The deployment begins automatically.
4. After the deployment begins, you can view the status of the deployment, modify your app, view your repo, or view the app's URL.

ASK A QUESTION

Add a service - Internet of Things

Add Internet of Things Platform

Region

[London](#) ▾

Resource group

[Default](#) ▾

Pricing plans

[Lite](#) ▾

[Pricing details](#) [Terms](#)

App URL	https://node-red-bayfk-2022-03-17.eu-gb.mybluemix.net
Source	https://eu-gb.git.cloud.ibm.com/maboya3697/NodeREDBAYFK...
Resource group	Default
Deployment target	Node RED BAYFK 2022-03-17
Created	3/17/2022


Services



Internet of Things Platform



[Open dashboard](#)  [Documentation](#) 


Credentials 



Cloudant



[Open dashboard](#)  [Documentation](#)  [API reference](#) 

Credentials 

Connect existing services +

Create service +


package.json
771 Bytes
Edit
Replace
Delete

```

1  {
2    "name": "node-red-app",
3    "version": "1.1.3",
4    "dependencies": {
5      "node-red-dashboard": "2.x",
6      "@ibm-cloud/cloudant": "^0.0.25",
7      "bcrypt": "^5.0.1",
8      "body-parser": "1.x",
9      "express": "4.x",
10     "http-shutdown": "1.2.2",
11     "ibm-cloud-env": "^0",
12     "node-red": "^2.2.2",
13     "node-red-contrib-ibm-db2": "0.x",
14     "node-red-node-cf-cloudant": "0.x",
15     "node-red-node-openwhisk": "0.x",
16     "node-red-node-watson": "0.x",
17     "node-red-contrib-scx-ibmiotapp": "0.x",
18     "node-red-nodes-cf-sqlldb-dashdb": "0.x"
19   },
20   "scripts": {
21     "start": "node --max-old-space-size=160 index.js --settings ./bluemix-settings.js -v"
22   },
23   "engines": {
24     "node": "14.x"
25   }
26 }
```

Resource list /
node-red-bayfk-2022--iotplatform-1650520507890
Active
Add tags
Details
Actions...

Manage
Plan
Connections




Let's get started with IBM Watson IoT Platform

Securely connect, control, and manage devices. Quickly build IoT applications that analyze data from the physical world.

Launch
Docs


Ready for the next level?

IBM Watson IoT Platform Journey




Lite

The Lite service plan provides a lightweight development environment to get you started with the connectivity capabilities of Watson IoT Platform.



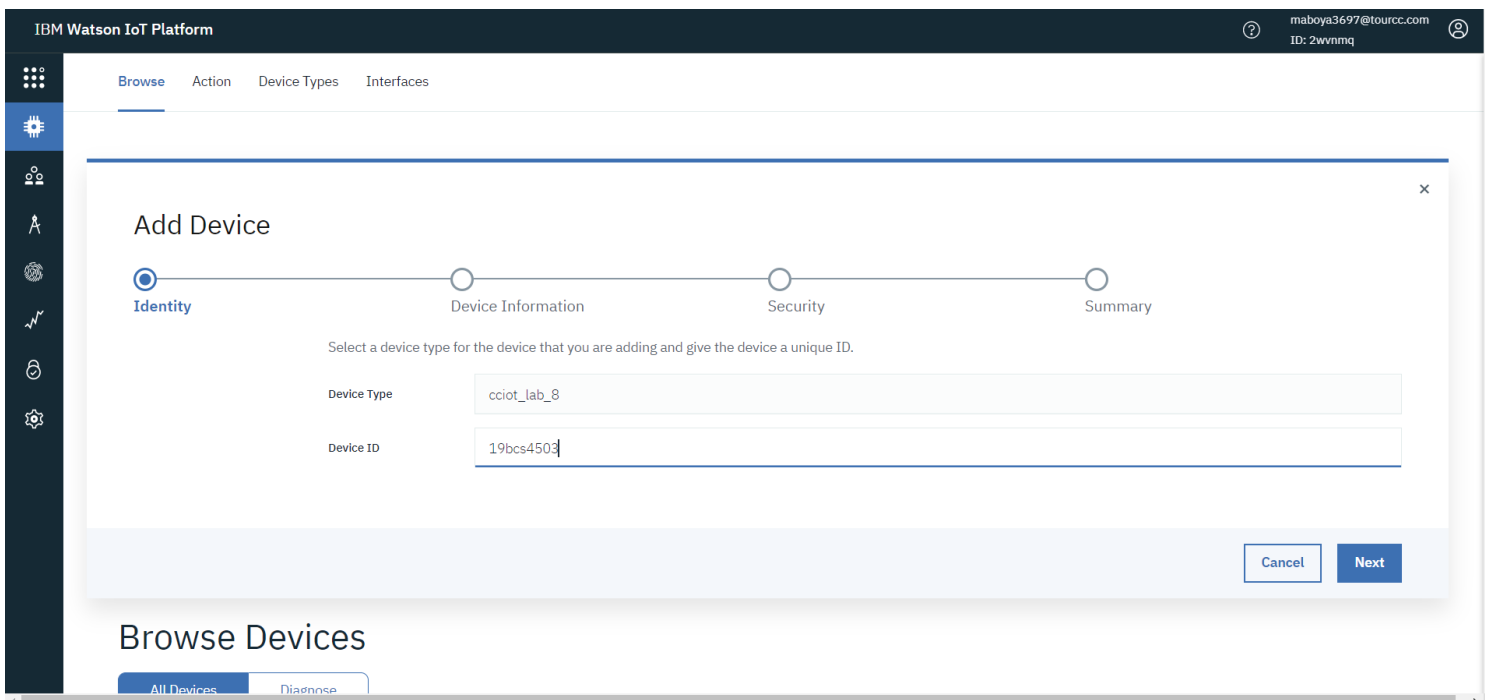
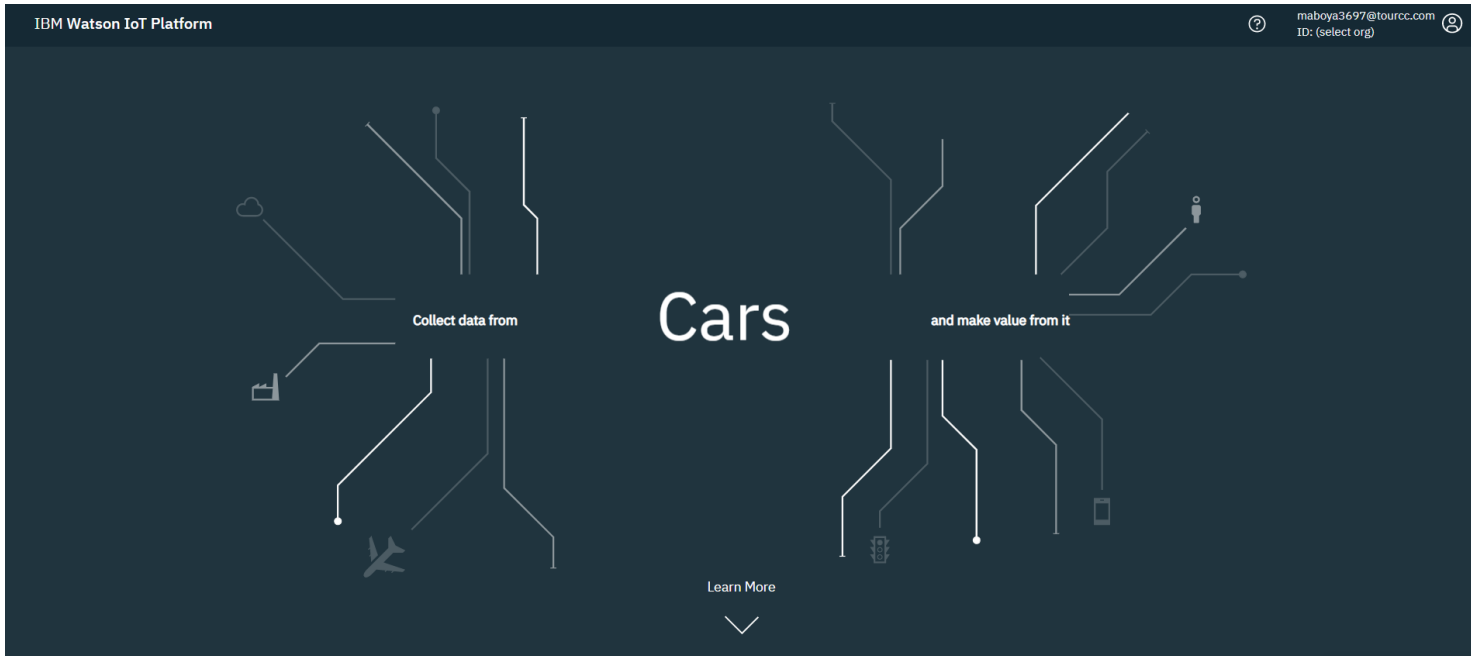
Non-Production

The Non-Production service plan is a full-featured, fully-integrated offering that enables you to explore Watson IoT Platform to see how the service can fit into your IoT environment.



Production

The Production service is a fully managed SaaS offering that enables you to manage and analyze enterprise IoT data.



IBM Watson IoT Platform

maboya3697@tourcc.com
ID: 2wvnmq

← Back

Device Drilldown - 19bcs4503

Device Credentials

Connection Information

Recent Events

State

Device Information

Metadata

Diagnostics

Connection Logs

Device Actions

Device Credentials

You registered your device to the organization. Add these credentials to the device to connect it to the platform. After the device is connected, you can navigate to view connection and event details.

Organization ID	2wvnmq
Device Type	cciot_lab_8
Device ID	19bcs4503
Authentication Method	use-token-auth
Authentication Token	VPbm4yZTE((aJLj(B-

!

Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token.

Find out how to add these credentials to your device

IBM Watson IoT Platform

maboya3697@tourcc.com
ID: 2wvnmq

General Settings

Here you can see and modify global organization information and locally enable experimental Watson IoT Platform features.

Last Event Cache

Client Connection State API

DATA AND DEVICES

Custom Device Management Packages

Device Simulator

SECURITY

Connection Security

CA Certificates

Messaging Server Certificates

Group Access beta

You currently have no custom device management packages

Add a (JSON format) package

Device Simulator

Simulate devices and device data to get up and running quickly on Watson IoT Platform. For more details see the [documentation](#).

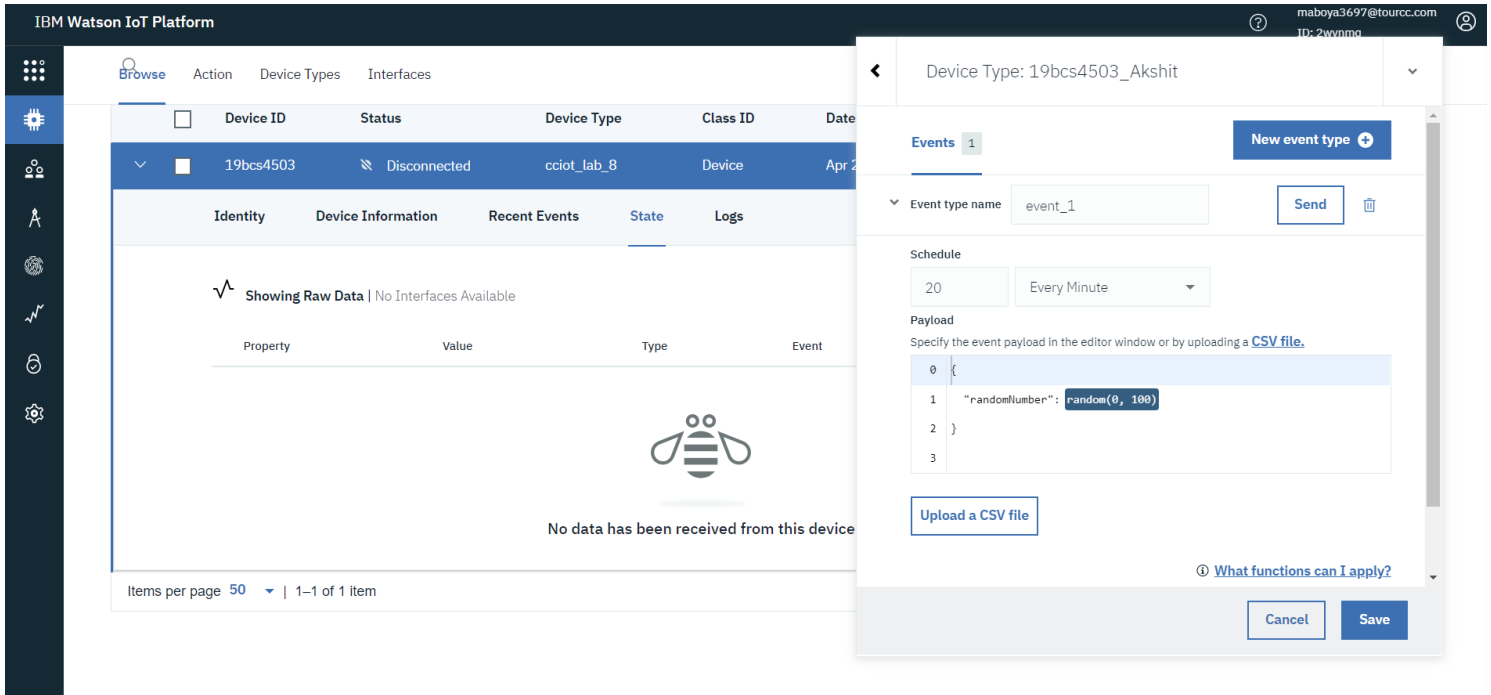
Activate Device Simulator ☒

Connection Security

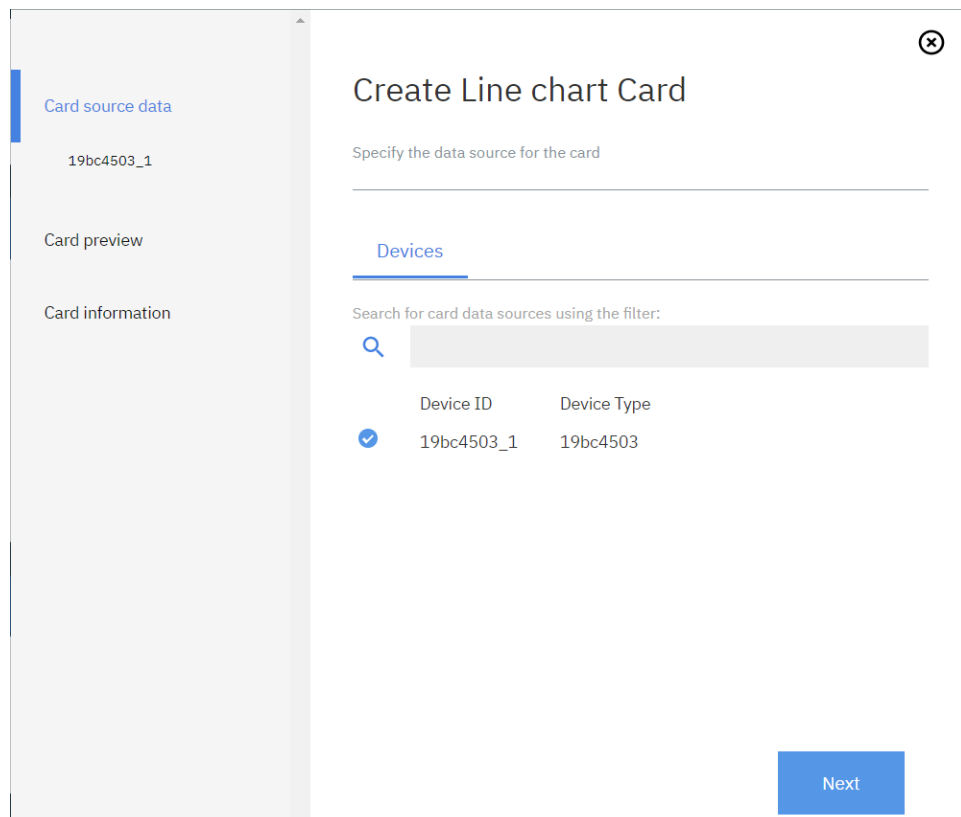
You can use the Connection Security Policy to configure the security level for device connection.

Open Connection Security Policy

0 Simulations running

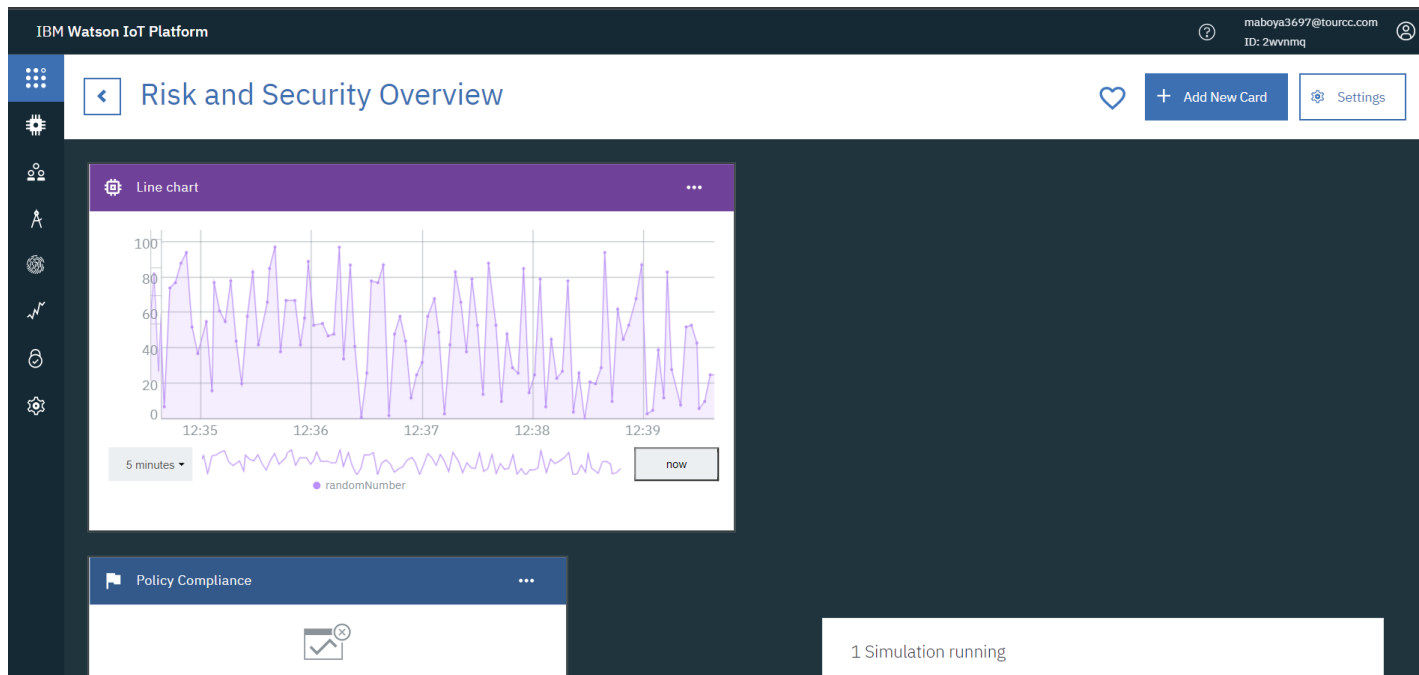


The screenshot displays the IBM Watson IoT Platform interface. On the left, a sidebar contains navigation icons. The main area shows a table of devices with columns: Device ID, Status, Device Type, Class ID, and Date. A device with ID '19bcs4503' and status 'Disconnected' is selected. Below the table, tabs for 'Identity', 'Device Information', 'Recent Events', 'State', and 'Logs' are visible. The 'State' tab is active, showing a 'Showing Raw Data' section with a message 'No data has been received from this device'. A modal window on the right is open for configuring an event for the selected device. It includes fields for 'Event type name' (set to 'event_1'), 'Schedule' (set to 'Every Minute'), and 'Payload' (a JSON object: `{ "randomNumber": random(0, 100) }`). Buttons for 'Send', 'Upload a CSV file', 'Cancel', and 'Save' are present.



The screenshot shows a 'Create Line chart Card' dialog box. On the left, a sidebar lists 'Card source data' (selected), 'Card preview', and 'Card information'. The 'Card source data' section shows a list of data sources, including '19bcs4503_1'. The main area of the dialog is titled 'Create Line chart Card' and contains a section 'Specify the data source for the card'. Below this, there is a 'Devices' section with a search bar and a table of available devices. The table has columns 'Device ID' and 'Device Type'. One device, '19bcs4503_1' with type '19bcs4503', is selected with a blue checkmark. A 'Next' button is located at the bottom right of the dialog.

3. Output: Image of sample output to be attached here



Learning outcomes (What I have learnt):

1. Creating an IOT platform starter application.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			