

PREREQUISITES

(IBM cloud service, Software)

Date	22 October 2022
Team ID	PNT2022TMID13566
Project Name	Industry-specific intelligent fire management system
Maximum Marks	8 Marks

IBM Cloud Services:

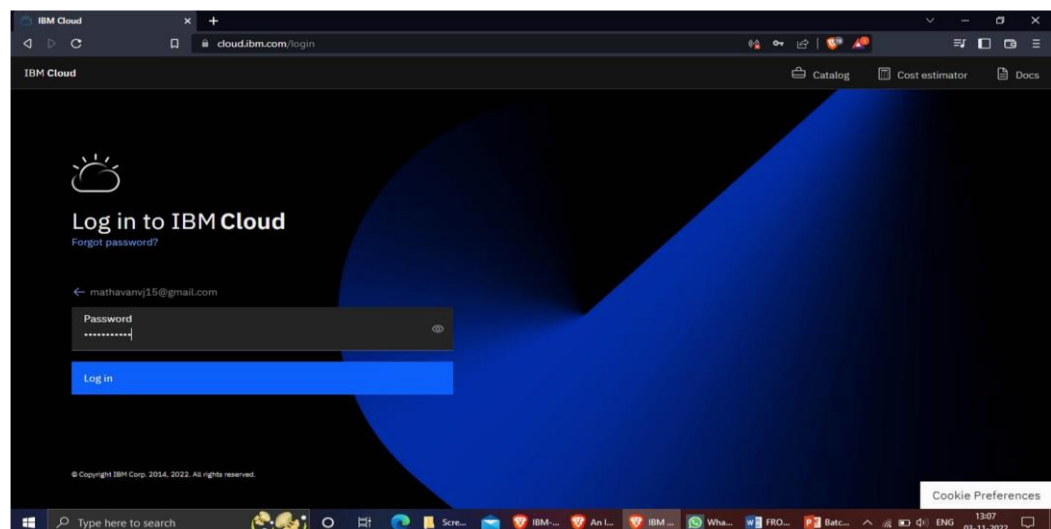
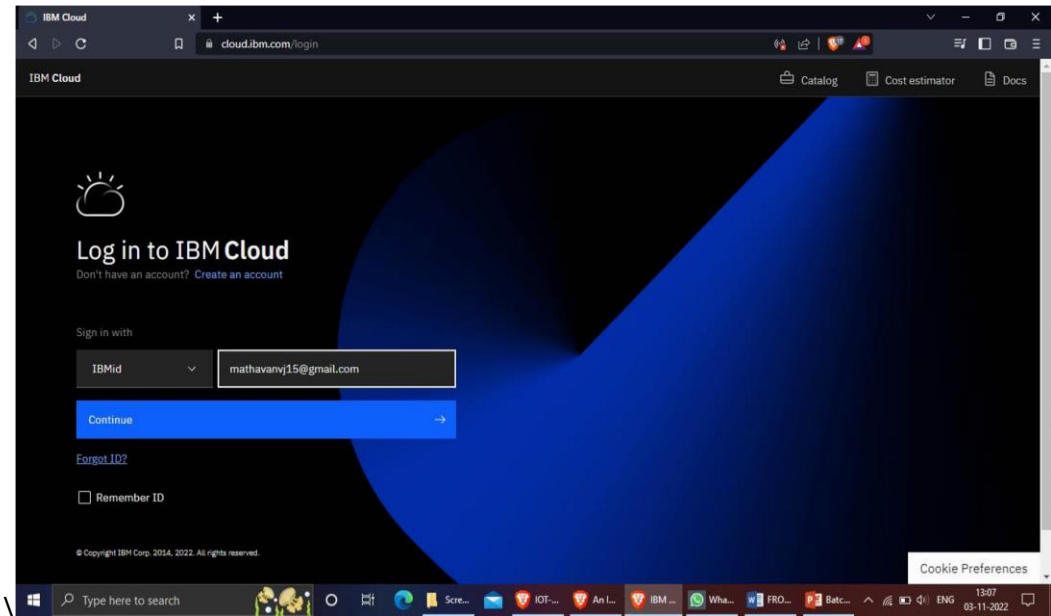
We need to have basic knowledge of the following cloud services:

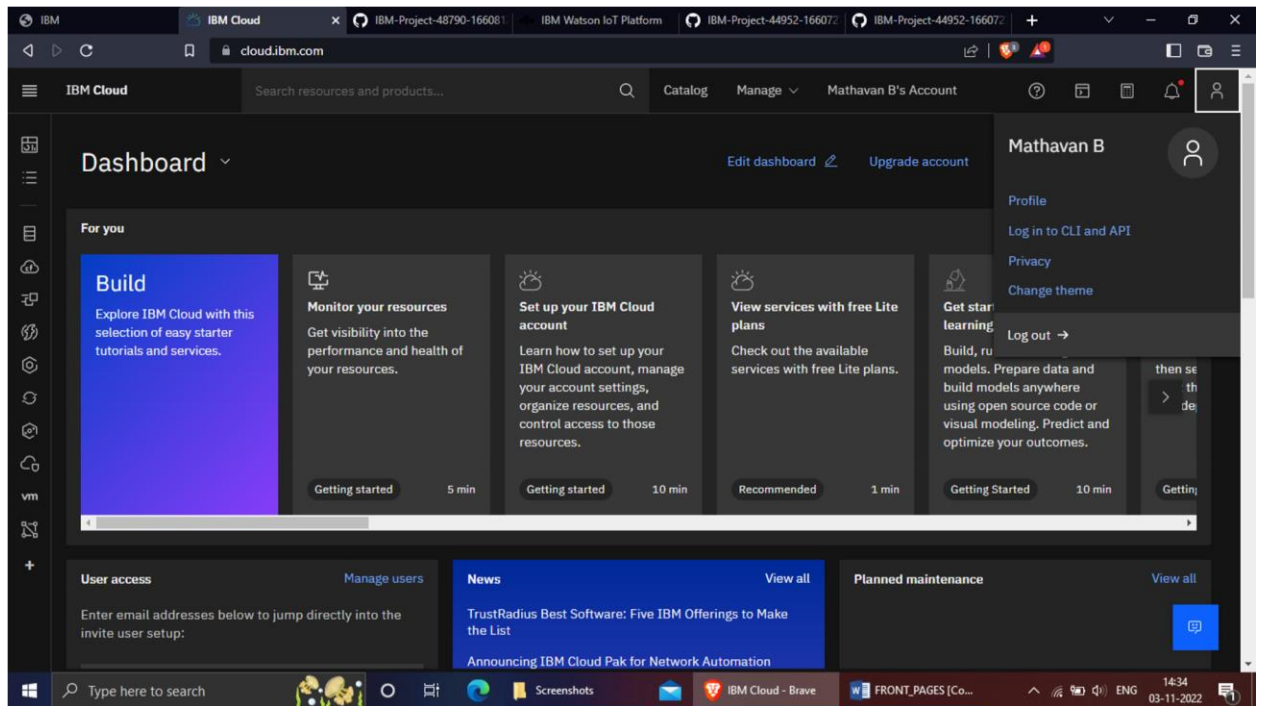
- ✦ IBM Watson IoT Platform
- ✦ Node-RED Service
- ✦ Cloudant DB

IBM Account Creation:

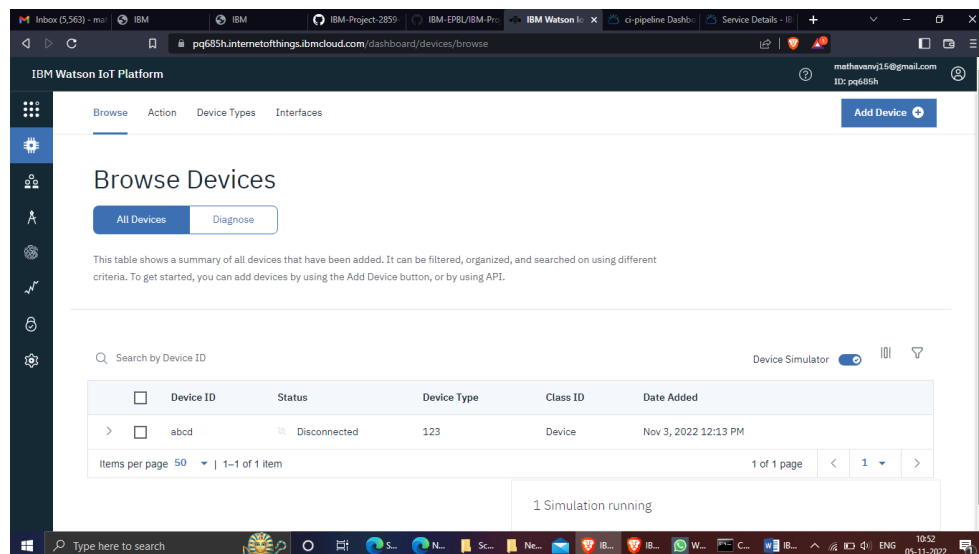
In this we create a account with the register code / promo code using the given mail id at the IBM cloud platform, then login

IBM CLOUD





IBM Watson IoT Platform



NODE-RED SERVICE

The screenshot shows a web browser window with the URL `node-red-vwdvp-2022-11-05-eu-gb.mybluemix.net`. The page has a dark red header with the text "Node-RED on IBM Cloud". Below this is a large red banner with the text "Node-RED" in white, followed by "Flow-based programming for the Internet of Things". The main content area is light gray and contains three paragraphs of text: "Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.", "This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.", and "More information about Node-RED, including documentation, can be found at nodered.org". To the right of the text is a button that says "Go to your Node-RED flow editor" and a link that says "Learn how to customise Node-RED". The browser's taskbar at the bottom shows various application icons and the system clock indicating 10:55 on 05-11-2022.

Node-RED on IBM Cloud

Node-RED

Flow-based programming for the Internet of Things

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways.

This instance is running as an IBM Cloud application, giving it access to the wide range of services available on the platform.

More information about Node-RED, including documentation, can be found at nodered.org.

[Go to your Node-RED flow editor](#)

[Learn how to customise Node-RED](#)

The screenshot shows the Node-RED flow editor interface in a web browser. The URL is `node-red-vwdvp-2022-11-05-eu-gb.mybluemix.net/red/#flow/96e38f7dd30c8b6`. The interface includes a left sidebar with a "filter nodes" search bar and two categories of nodes: "common" (inject, debug, complete, catch, status, link in, link call, link out, comment) and "function" (function, switch). The main workspace, titled "Flow 1", contains a flow with two nodes: "Hello Node-RED!" and "msg payload". The right sidebar shows a "debug" console with three log entries, each displaying a timestamp, node ID, and message payload. The browser's taskbar at the bottom is identical to the one in the first screenshot.

Node-RED

filter nodes

common

- inject
- debug
- complete
- catch
- status
- link in
- link call
- link out
- comment

function

- function
- switch

Flow 1

Hello Node-RED!

msg payload

debug

all nodes

all

11/5/2022, 10:55:40 AM node: f2f2649a-0d0d98
msg payload: string[15]
"Hello Node-RED!"

11/5/2022, 10:55:40 AM node: f2f2649a-0d0d98
msg payload: string[15]
"Hello Node-RED!"

11/5/2022, 10:55:43 AM node: f2f2649a-0d0d98
msg payload: string[15]
"Hello Node-RED!"

Cloudant DB

This screenshot shows the 'Service Details' page for a Cloudant database in the IBM Cloud console. The page is titled 'node-red-eawwb-2022--cloudant-1667472378798' and is marked as 'Active'. The left sidebar contains navigation links for 'Manage', 'Service credentials', 'Plan', and 'Connections'. The main content area is divided into tabs: 'Overview', 'Capacity', and 'Docs'. The 'Overview' tab is selected, displaying 'Deployment details'.

Deployment details:

- CRN:** crn:v1:bluemix:public:cloudantnosqldb:eu-gb/a/385c488a0a5c44ef8e19d6d790a093df:f7222986-a36d-4897-ab99-49511c5f1aa::
- Location:** London
- External endpoint:** <https://ed75f248-e5f6-411c-a1c8-e466095c7806-bluemix.cloudant.com>
- External endpoint (preferred):** <https://ed75f248-e5f6-411c-a1c8-e466095c7806-bluemix.cloudantnosqldb.appdomain.cloud>
- Authentication methods:** IBM Cloud IAM, Cloudant credentials, and a 'Migrate to IAM Only' button.
- Activity Tracker event types:** A dropdown menu set to 'Management' with a 'Save' button.
- Disk encryption:** Yes. Automatically generated disk encryption key.

A 'Launch Dashboard' button is located in the top right corner of the 'Overview' tab.

This screenshot shows the 'Cloudant Dashboard' in a web browser. The page title is 'Databases'. At the top, there is a 'Database name' dropdown, a 'Create Database' button, and links for '{ } JSON' and a notification bell. Below the header, there is a section titled 'Your Databases' containing a table with the following data:

Name	Size	# of Docs	Partitioned	Actions
noderedknkp20221104	2.3 KB	2	No	[Icons for edit, lock, delete]
noderedvvdvp20221105	2.3 KB	2	No	[Icons for edit, lock, delete]
noderedyqsbm20221104	16.1 KB	4	No	[Icons for edit, lock, delete]

At the bottom of the dashboard, it says 'Showing 1-3 of 3 databases. Databases per page 20'. The left sidebar contains various navigation icons, and the bottom status bar shows the time as 10:47 on 05-11-2022.