

Smart waste management for metropolitcan cities

Team ID : PNT2022TMID41127

PREREQUISITES

○ IBM Watson IOT platform

IBM Watson IoT Platform is a managed, cloud-hosted service designed to make it simple to derive value from your Internet of Things devices. STMicroelectronics is an IBM Partner and provides development platforms allowing users to develop applications with direct connection to the IBM Watson IoT platform.

By using Watson IoT Platform, you can collect connected device data and perform analytics on real-time data. The IBM Watson IoT Platform is a fully managed, Cloud-hosted service that provides device management capabilities as well as data collection and management in a time series format.

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

○ NODE-RED SERVICE

Node-RED is a programming tool for wiring together hardware devices, APIs and online services in new and interesting ways. It provides a browser-based editor that makes it easy to wire together flows using the wide range of nodes in the palette that can be deployed to its runtime in a single-click.

Node-RED is an open-source programming tool, for connecting hardware devices, APIs and online services creatively and easily.

Basic commands one should know to start using Node-Red

- ✚ target - Set or view the target URL and port like `http://localhost:1880`
- ✚ login - Log user in to the target of the Node-RED admin API
- ✚ list - List all of the installed nodes
- ✚ info - Display more information about the module or node
- ✚ enable - Enable the specified module or node set
- ✚ disable - Disable the specified module or node set
- ✚ search - Search for Node-RED modules to install
- ✚ install - Install the module from NPM to Node-RED
- ✚ remove - Remove the NPM module from Node-RED
- ✚ hash-pw - Create a password hash that can be used with the adminAuth and httpNodeAuth settings

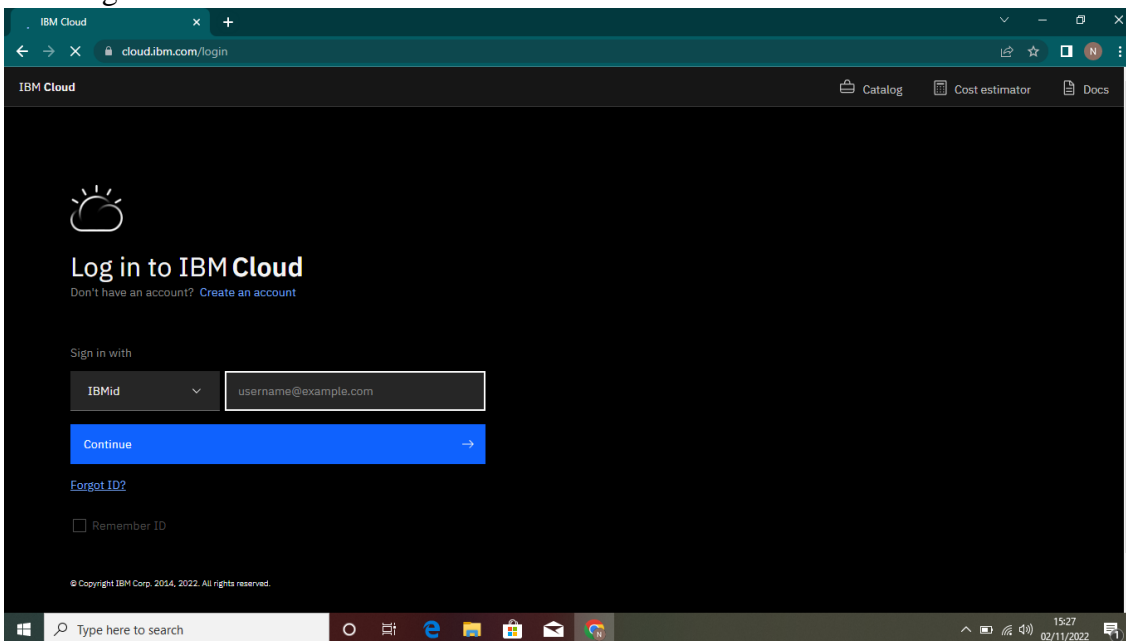
○ Cloudant document database

IBM Cloudant is a fully managed JSON document database that offers independent serverless scaling of throughput capacity and storage.

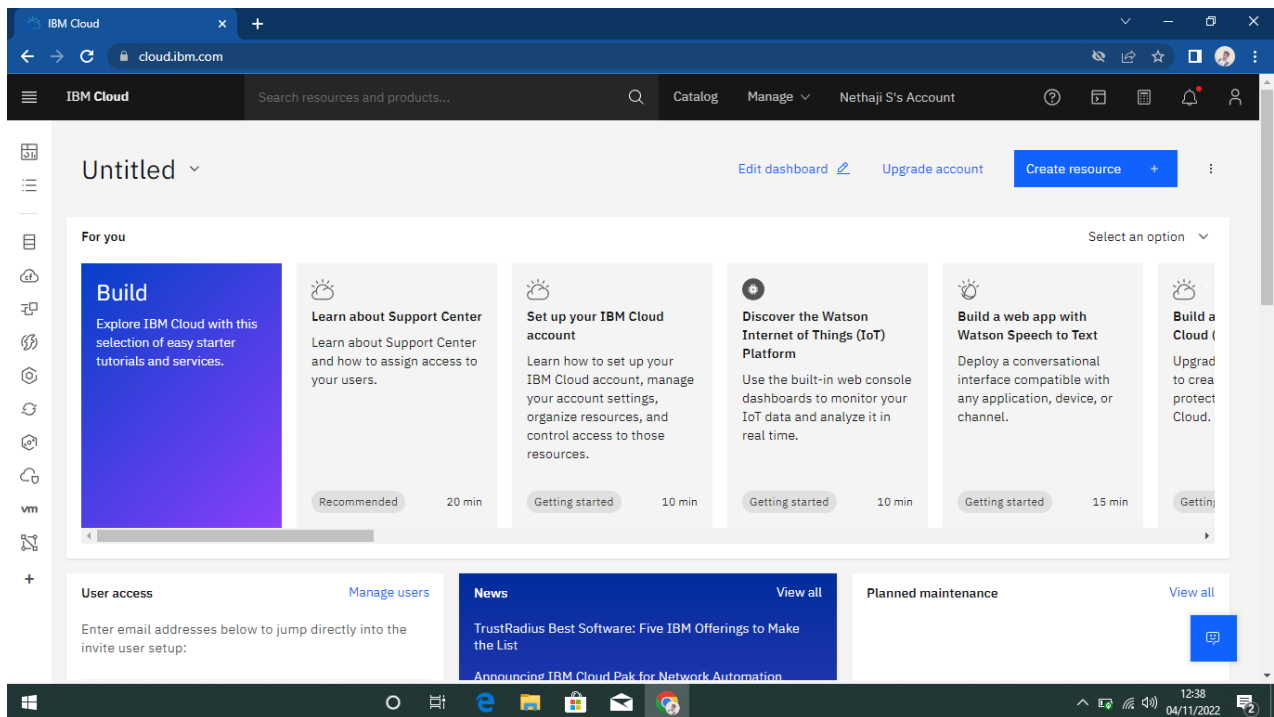
A fully managed, distributed database optimized for heavy workloads and fast-growing web and mobile apps, IBM Cloudant is available as an IBM Cloud® service with a 99.99% SLA.

STEPS:

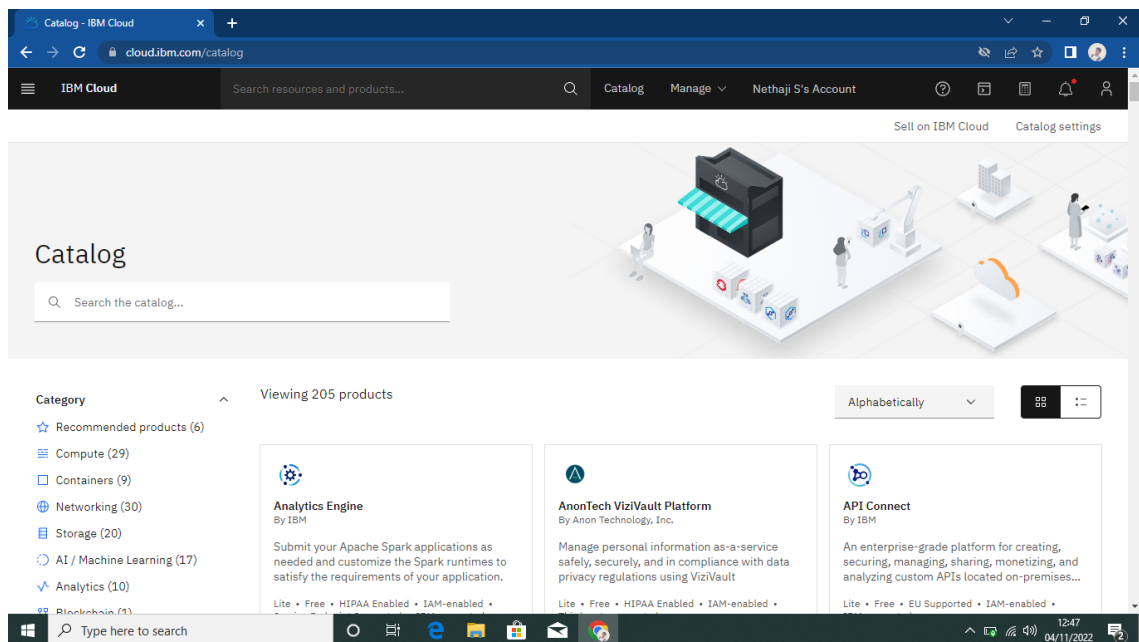
1. First log-in to IBM cloud account with IBM ID and Password.



2. Home page of IBM cloud.



3. Click on the catalog and search Internet of Things.



Internet of Things Platform - IBM

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Internet of Things Platform

This service is the hub of all things IBM IoT, it is where you can set up and manage your connected devices so that your apps can access their live and historical data.

CreateAbout

Type

Service

Provider

IBM

Last updated

08/15/2022

Category

Internet of Things

Compliance

IAM-enabled

Location

Frankfurt

London

Dallas

Washington DC

Summary

This service is the hub for IBM Watson IoT and lets you communicate with and consume data from connected devices and gateways. Use the built-in web console dashboards to monitor your IoT data and analyze it in real time. Then, enhance and customize your IBM Watson IoT Platform experience by building and connecting your own apps by using messaging and REST APIs.

Features

Connect

Quickly and securely register and connect your devices and gateways. You can find simple step-by-step instructions for connecting popular devices, sensors, and gateways in our recipes site.

Information Management

Control what happens to the data that is received from your connected devices. Manage data storage, configure data transformation actions, and integrate with other data services and device platforms.

Summary

Internet of Things Platform

Free

Location: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-wm

Resource group: Default

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Create

Add to estimate

Internet of Things Platform - IBM

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