

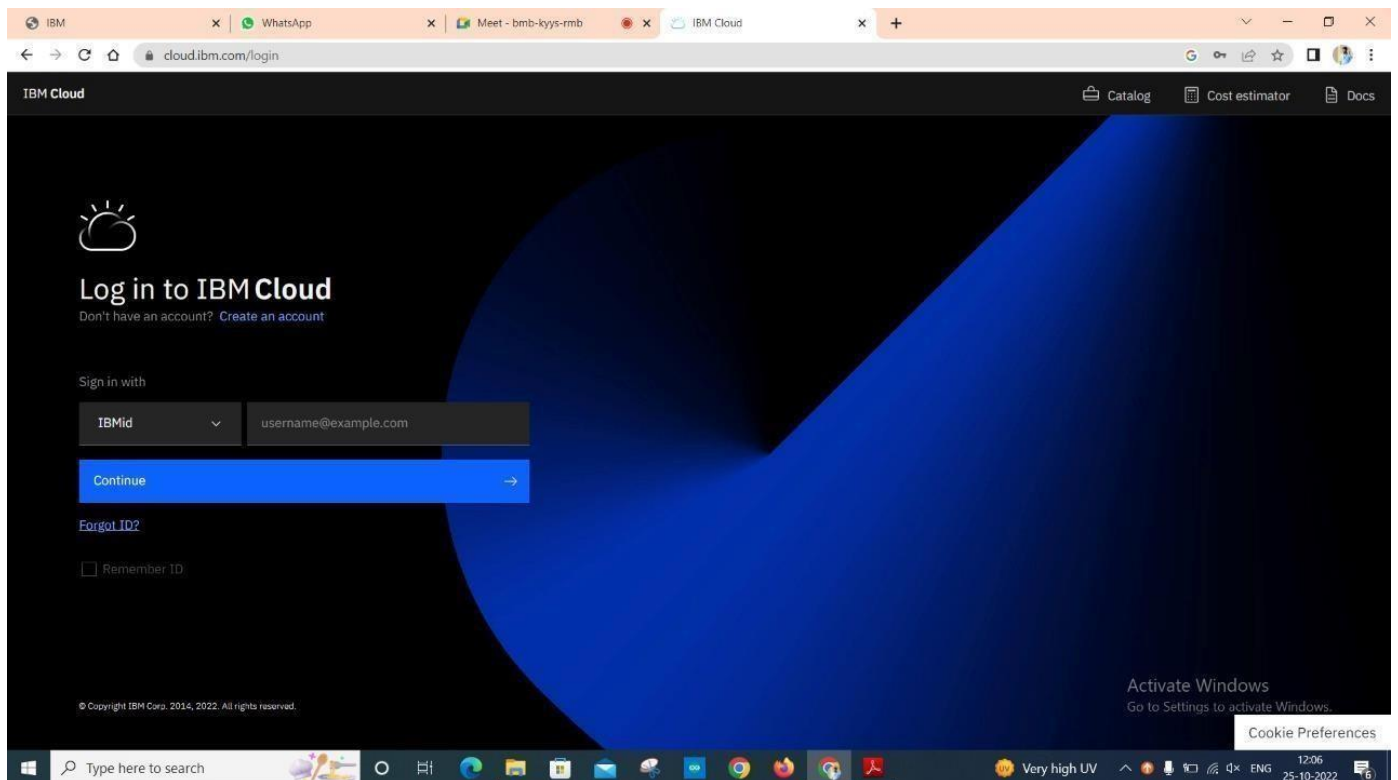
CREATE IBM WATSON IOT PLATFORM AND DEVICE CREATE IBM WATSON IOT PLATFORM AND DEVICE

Team ID	PNT2022TMID53804
Project Name	Gas leakage monitoring and alerting system for industries

AIM:

To create the IBM Watson IOT platform and device.

Steps to be followed

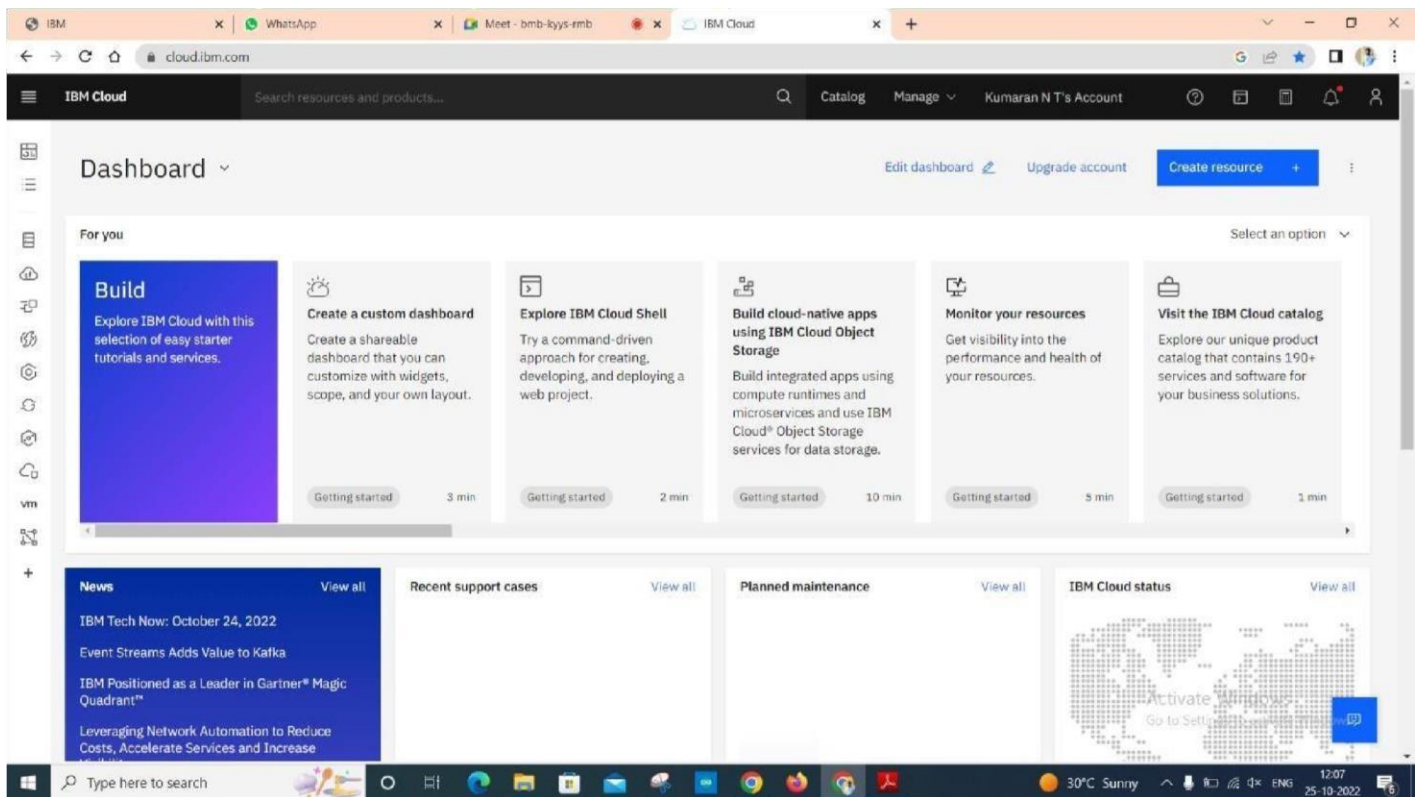


Step

Step 1: Firstly, create an IBM cloud account with IBM id and password.

2: Home page of IBM cloud.

Step



The screenshot displays the IBM Cloud Dashboard in a web browser. The browser's address bar shows the URL `cloud.ibm.com`. The dashboard header includes the IBM Cloud logo, a search bar, and navigation links for Catalog, Manage, and the user's account (Kumaran N T's Account). The main content area is titled "Dashboard" and features a "For you" section with six recommended actions, each with a "Getting started" button and a time estimate:

- Build**: Explore IBM Cloud with this selection of easy starter tutorials and services. (3 min)
- Create a custom dashboard**: Create a shareable dashboard that you can customize with widgets, scope, and your own layout. (2 min)
- Explore IBM Cloud Shell**: Try a command-driven approach for creating, developing, and deploying a web project. (2 min)
- Build cloud-native apps using IBM Cloud Object Storage**: Build integrated apps using compute runtimes and microservices and use IBM Cloud® Object Storage services for data storage. (10 min)
- Monitor your resources**: Get visibility into the performance and health of your resources. (5 min)
- Visit the IBM Cloud catalog**: Explore our unique product catalog that contains 190+ services and software for your business solutions. (1 min)

Below the "For you" section, there are four more widgets:

- News**: View all. Includes articles like "IBM Tech Now: October 24, 2022" and "Event Streams Adds Value to Kafka".
- Recent support cases**: View all.
- Planned maintenance**: View all.
- IBM Cloud status**: View all. Includes a world map and a button to "Activate Alerts".

The bottom of the image shows a Windows taskbar with various application icons, a search bar, and system information indicating 30°C Sunny and the date 25-10-2022.

Step

Step 3: Click on the catalog on the top.

4: Click on IoT in the category mentioned.

The screenshot displays the IBM Cloud Catalog interface. The top navigation bar includes the IBM Cloud logo, a search bar, and links for Catalog, Manage, and the user account (Kumaran N T's Account). The main content area shows a list of products under the 'Internet of Things' category. The products listed are:

- Analytics Engine** (By IBM): Submit your Apache Spark applications as needed and customize the Spark runtimes to satisfy the requirements of your application. Features: Lite, Free, HIPAA Enabled, IAM-enabled, Service Endpoint Supported, IBM supported.
- AnonTech ViziVault Platform** (By Anon Technology, Inc.): Manage personal information as-a-service safely, securely, and in compliance with data privacy regulations using ViziVault. Features: Lite, Free, HIPAA Enabled, IAM-enabled, Third party supported.
- API Connect** (By IBM): An enterprise-grade platform for creating, securing, managing, sharing, monetizing, and analyzing custom APIs located on-premises and on the cloud. Features: Lite, Free, EU Supported, IAM-enabled, IBM supported.
- App Configuration** (By IBM): Centralized, in-flight configuration for web and mobile applications and distributed environments. Features: Lite, Free, IAM-enabled, Service Endpoint Supported, IBM supported.
- App Connect** (By IBM): Connect your applications, automate tasks, and improve productivity. Features: Lite, Free, IBM supported.
- App ID** (By IBM): User Authentication and User Profiles for your apps. Features: Lite, Free, EU Supported, Financial Services Validated, HIPAA Enabled, IAM-enabled, IBM supported.

The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the date and time (12:07, 25-10-2022).

Step

The screenshot displays the IBM Cloud Catalog interface. The browser's address bar shows the URL `cloud.ibm.com/catalog`. The page header includes the IBM Cloud logo, a search bar, and navigation links for Catalog, Manage, and the user account (Kumaran NT's Account). The main content area is titled "Viewing 348 products" and features a grid of service cards. On the left, a sidebar lists categories such as Compute (56), Containers (9), Networking (30), Storage (24), AI / Machine Learning (20), Analytics (26), Blockchain (1), Databases (42), Developer tools (48), Logging and monitoring (8), Migration (8), Integration (60), Internet of Things (1), Security (26), and Mobile (1). The service cards include:

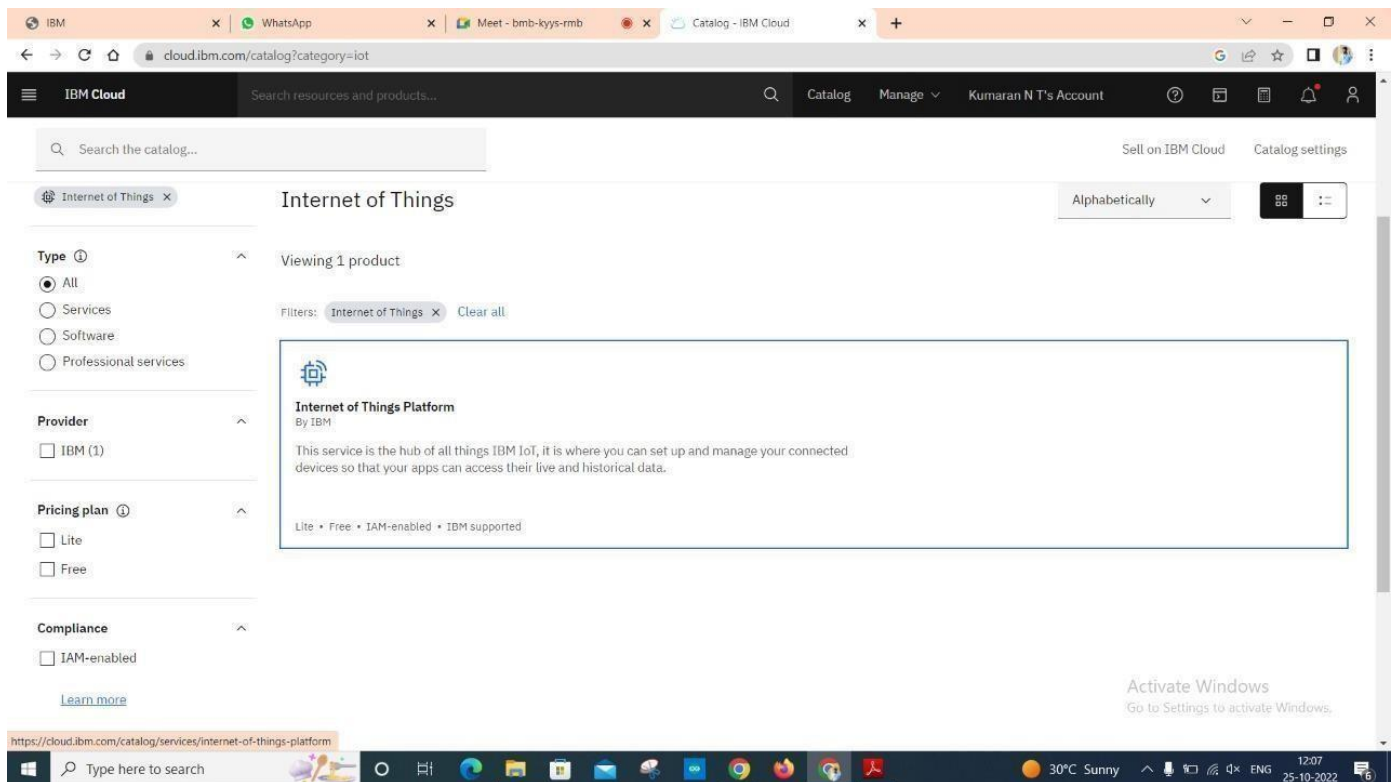
- Analytics Engine** (By IBM): Submit your Apache Spark applications as needed and customize the Spark runtimes to satisfy the requirements of your application. Features: Lite • Free • HIPAA Enabled • IAM-enabled • Service Endpoint Supported • IBM supported.
- AnonTech Vizivault Platform** (By Anon Technology, Inc.): Manage personal information as-a-service safely, securely, and in compliance with data privacy regulations using Vizivault. Features: Lite • Free • HIPAA Enabled • IAM-enabled • Third party supported.
- API Connect** (By IBM): An enterprise-grade platform for creating, securing, managing, sharing, monetizing, and analyzing custom APIs located on-premises and on the cloud. Features: Lite • Free • EU Supported • IAM-enabled • IBM supported.
- App Configuration** (By IBM): Centralized, in-flight configuration for web and mobile applications and distributed environments. Features: Lite • Free • IAM-enabled • Service Endpoint Supported • IBM supported.
- App Connect** (By IBM): Connect your applications, automate tasks, and improve productivity. Features: Lite • Free • IBM supported.
- App ID** (By IBM): User Authentication and User Profiles for your apps. Features: Lite • Free • EU Supported • Financial Services Validated • HIPAA Enabled • IAM-enabled • IBM supported.

An "Activate Windows" watermark is visible in the bottom right corner of the page. The Windows taskbar at the bottom shows the search bar, task view button, and several application icons, along with system information: 30°C Sunny, 12:07, 25-10-2022.

Step

Step 5: Click on Internet of Things Platform.

6: If already a lite is present delete it else u can't create another.



Step

IBM Cloud

Search resources and products...

IBM

Updated on 08/15/2022

Category: Internet of Things

Compliance: IAM-enabled

Location: Frankfurt, London, Dallas, Washington DC

Related links: Docs, Terms

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or location: [United States](#)

Plan	Features	Pricing
Lite	Includes up to 500 registered devices, and a maximum of 200 MB of each data metric Maximum of 500 registered devices Maximum of 500 application bindings Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed	Free

The Lite service plan for Internet of Things Platform includes up to 500 registered devices, and a maximum of 200 MB each of data exchanged, data analyzed, and edge data analyzed per month.

Lite plan services are deleted after 30 days of inactivity.

Configure your resource

Service name:

Tags:

Select a resource group:

Access management tags:

Summary

Internet of Things Platform **Free**

Location: Frankfurt
Plan: Lite
Service name: Internet of Things Platform-9j
Resource group: Default

Existing Lite plan instance

You can have only 1 Lite plan instance of this service per resource group. [Delete](#) your current Lite plan instance in Default resource group to create a new one, or [view the existing instance](#).

☐ I have read and agree to the following license agreements: [Terms](#)

Create

Activate Windows
Go to Settings to activate Windows.
Add to estimate

30°C Sunny 12:08 25-10-2022

Step

Step 7: Tick agreements and then click on create.

8: Click on the launch button.

The screenshot displays the IBM Cloud catalog page for the Internet of Things Platform. The page is titled "Select a pricing plan" and shows the "Lite" plan as the selected option. The plan is free and includes up to 500 registered devices and a maximum of 200 MB of each data metric. The plan also includes a maximum of 500 application bindings and a maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed. The plan is available in Frankfurt, London, Dallas, and Washington DC. The "Configure your resource" section shows the service name "Internet of Things Platform-9j" and the resource group "Default". The "Summary" panel on the right shows the service name "Internet of Things Platform" and the plan "Lite". A warning message states: "Existing Lite plan instance. You can have only 1 Lite plan instance of this service per resource group. Delete your current Lite plan instance in Default resource group to create a new one, or view the existing instance." The "Create" button is disabled. The "Terms" link is visible. The "Activate Windows" watermark is present. The "Add to estimate" button is visible.

IBM Cloud

Search resources and products...

IBM

Updated on 08/15/2022

Category Internet of Things

Compliance IAM-enabled

Location Frankfurt London Dallas Washington DC

Related links Docs Terms

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or location: [United States](#)

Plan	Features	Pricing
Lite	<p>Includes up to 500 registered devices, and a maximum of 200 MB of each data metric</p> <p>Maximum of 500 registered devices</p> <p>Maximum of 500 application bindings</p> <p>Maximum of 200 MB of each of data exchanged, data analyzed and edge data analyzed</p>	Free

The Lite service plan for Internet of Things Platform includes up to 500 registered devices, and a maximum of 200 MB each of data exchanged, data analyzed, and edge data analyzed per month.

Lite plan services are deleted after 30 days of inactivity.

Configure your resource

Service name

Internet of Things Platform-9j

Select a resource group

Default

Tags

Access management tags

Examples: env:dev, version:1

Examples: access:dev, prod:version:1

Summary

Internet of Things Platform Free

Location: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-9j

Resource group: Default

Existing Lite plan instance

You can have only 1 Lite plan instance of this service per resource group. [Delete](#) your current Lite plan instance in Default resource group to create a new one, or [view the existing instance](#).

I have read and agree to the following license agreements: [Terms](#)

Create

Activate Windows

Go to Settings to activate Windows.

Add to estimate

Step

The screenshot displays the IBM Cloud console interface for the 'Internet of Things Platform-hg' resource. The browser tabs at the top include 'IBM', '(1) WhatsApp', 'Meet - bmb-lyys-rmb', and 'Service Details - IBM Cloud'. The URL bar shows a long alphanumeric string. The IBM Cloud header includes a search bar and navigation links for 'Catalog', 'Manage', and 'Kumaran N T's Account'. The left sidebar lists 'Manage', 'Plan', and 'Connections'. The main content area features a 'Resource list' section with the resource name 'Internet of Things Platform-hg' and status 'Active'. Below this is a 'Let's get started with IBM Watson IoT Platform' section with a 'Launch' button. A 'Ready for the next level?' section shows the 'IBM Watson IoT Platform Journey' with three stages: 'Lite', 'Non-Production', and 'Production'. The 'Lite' stage is selected and shows details about the development environment, including a 'Free' price and a '200 MB data-transfer limit'. The 'Non-Production' stage shows a 'Starts at \$500 per month' price and a 'Capacity limit based on device type'. The 'Production' stage shows 'Includes IBM Service & Support' and 'Pricing based on number of devices per'. An 'Activate Windows' watermark is visible in the bottom right corner. The Windows taskbar at the bottom shows the search bar, taskbar icons, and system tray with the date '25-10-2022' and time '12:10'.

IBM Cloud

Search resources and products...

Resource list /

Internet of Things Platform-hg 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.

- Free
- 200 MB data-transfer limit

☐ 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.

- Starts at \$500 per month
- Capacity limit based on device type

☐ Production

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

- Includes IBM Service & Support
- Pricing based on number of devices per

Activate Windows

Go to Settings to activate Windows.

Type here to search

30°C Sunny

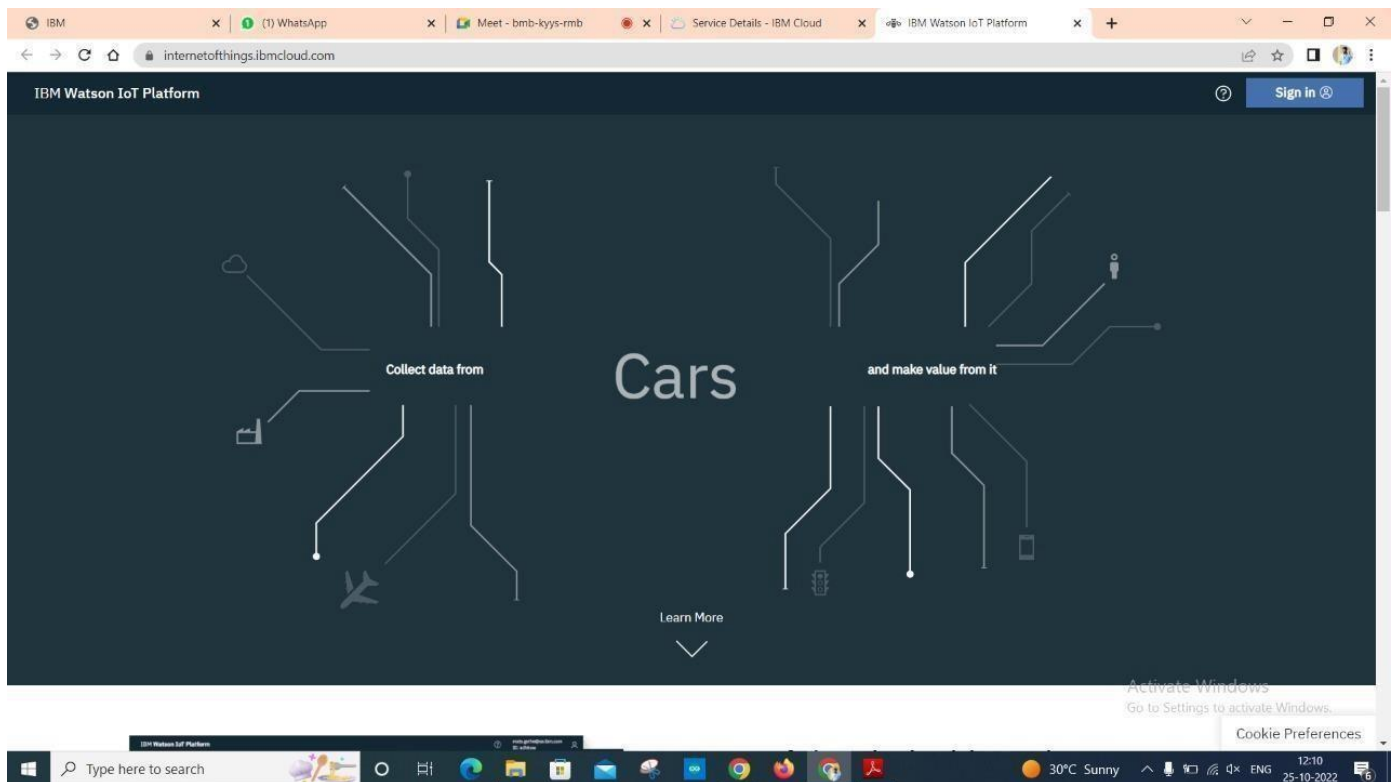
12:10

25-10-2022

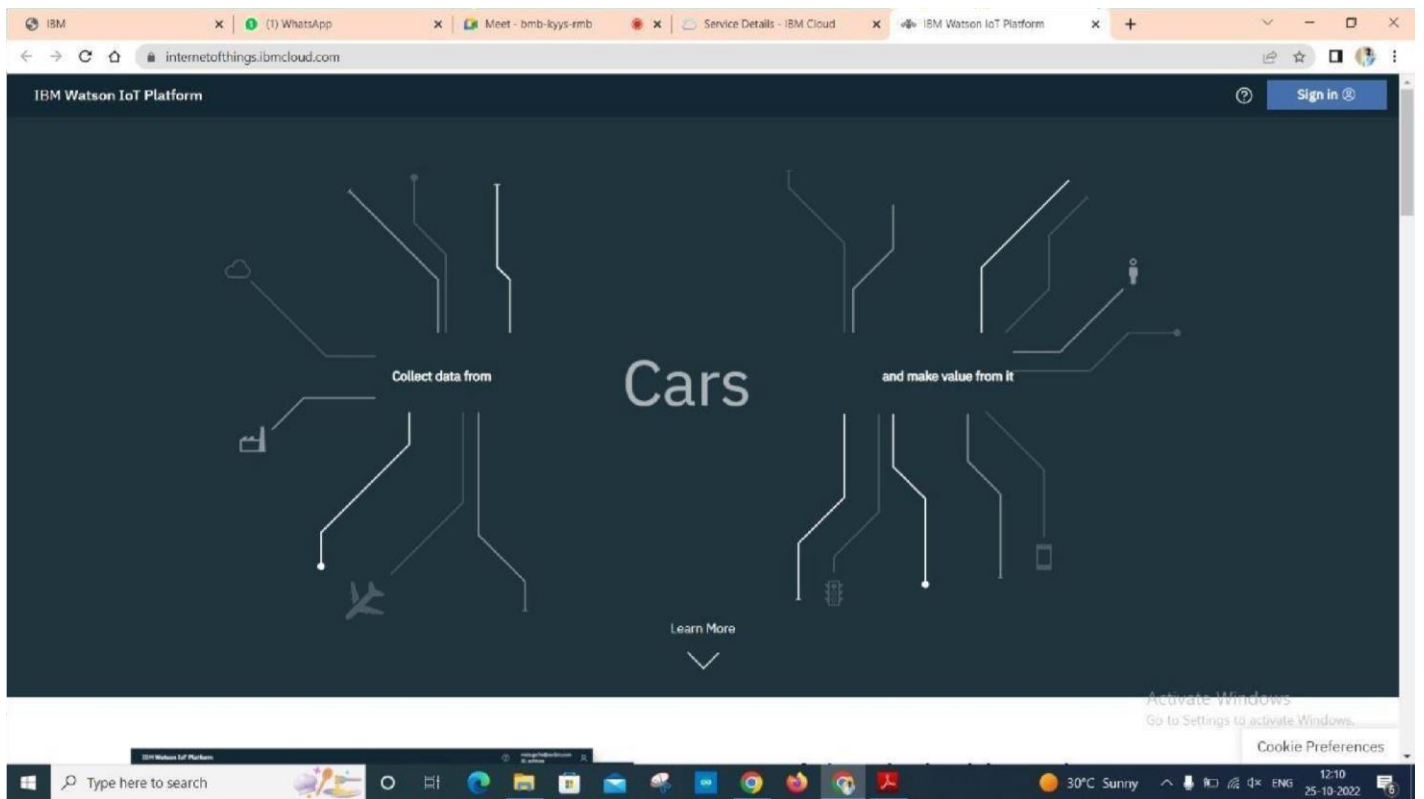
Step

Step 9: After clicking on the launch button this tab will open.

10: Click on Sign in.



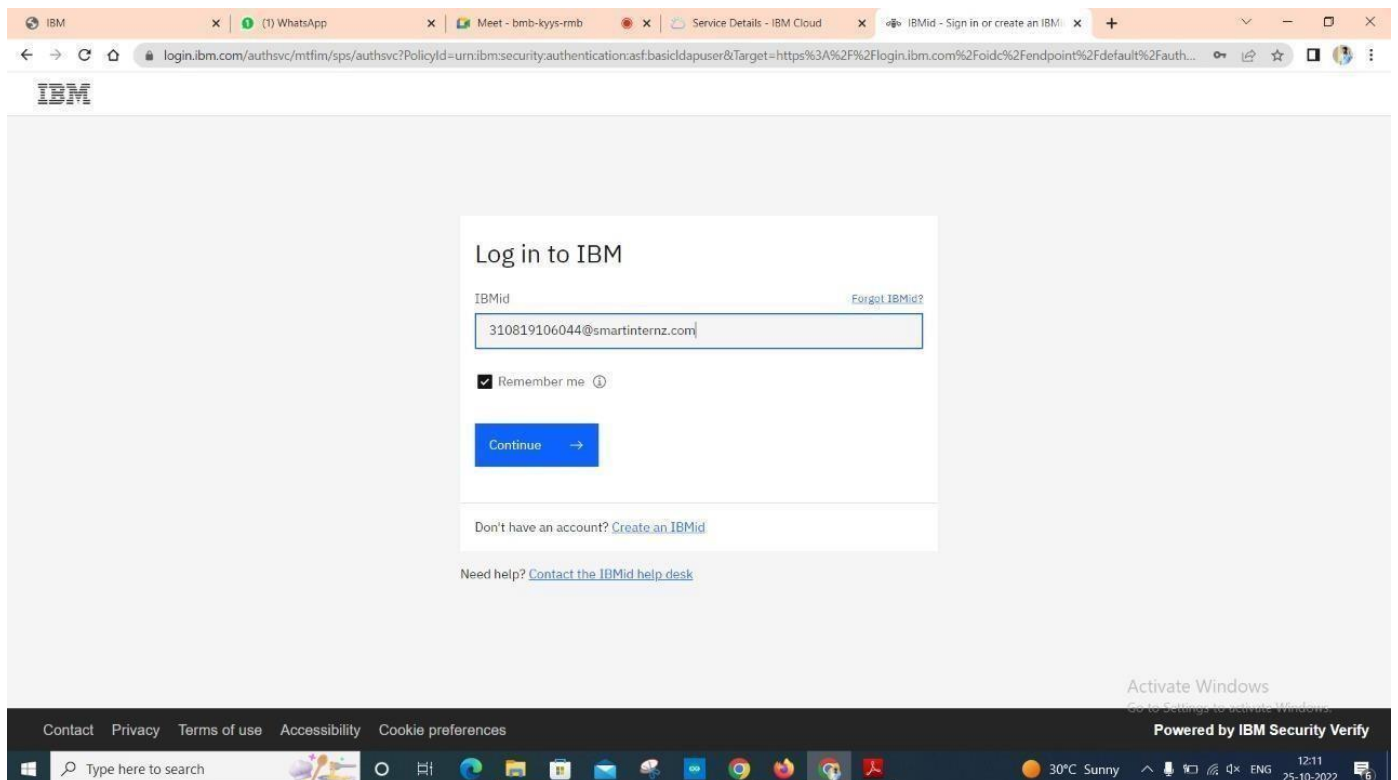
Step



Step

Step 11: Fill the login details.

12: Sign in on progress.

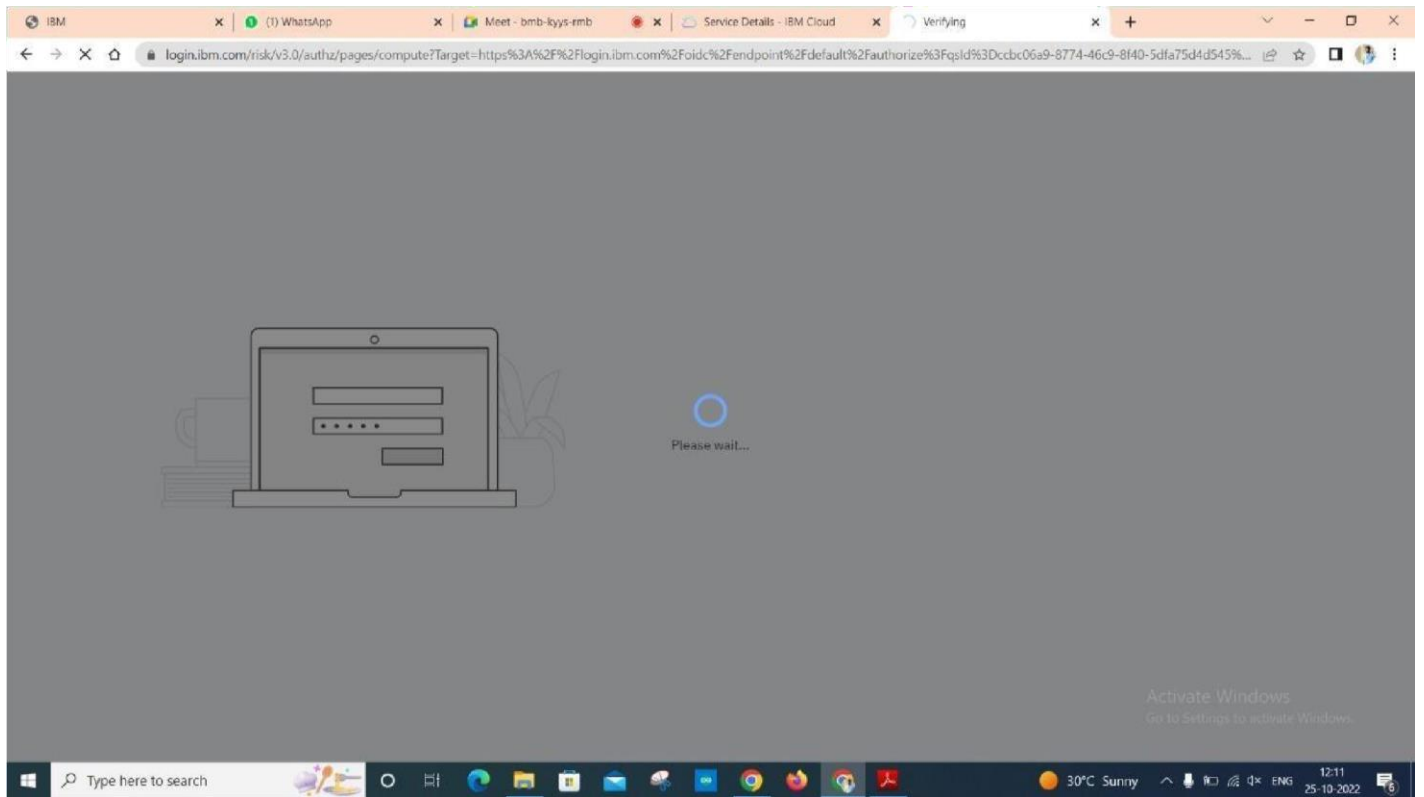


The screenshot shows a web browser window with the URL `login.ibm.com/authsvc/mtfim/sps/authsvc?PolicyId=urn:ibm:security:authentication:asf:basicdapuser&Target=https%3A%2F%2Flogin.ibm.com%2Foidc%2Fendpoint%2Fdefault%2Fauth...`. The page displays the IBM logo at the top left. The main content area is a light gray box titled "Log in to IBM". Inside this box, there is a form with the following elements:

- A label "IBMid" with a link "Forgot IBMid?" to its right.
- A text input field containing the email address "310819106044@smartinternz.com".
- A checkbox labeled "Remember me" with an information icon.
- A blue "Continue" button with a right-pointing arrow.
- A link "Don't have an account? Create an IBMid" below the button.

Below the form, there is a link "Need help? Contact the IBMid help desk". At the bottom of the page, there is a dark blue footer bar with links for "Contact", "Privacy", "Terms of use", "Accessibility", and "Cookie preferences". On the right side of the footer, it says "Powered by IBM Security Verify". The Windows taskbar is visible at the very bottom, showing the search bar, task view button, and several application icons. The system tray shows the date and time as "12:11 25-10-2022" and the weather as "30°C Sunny".

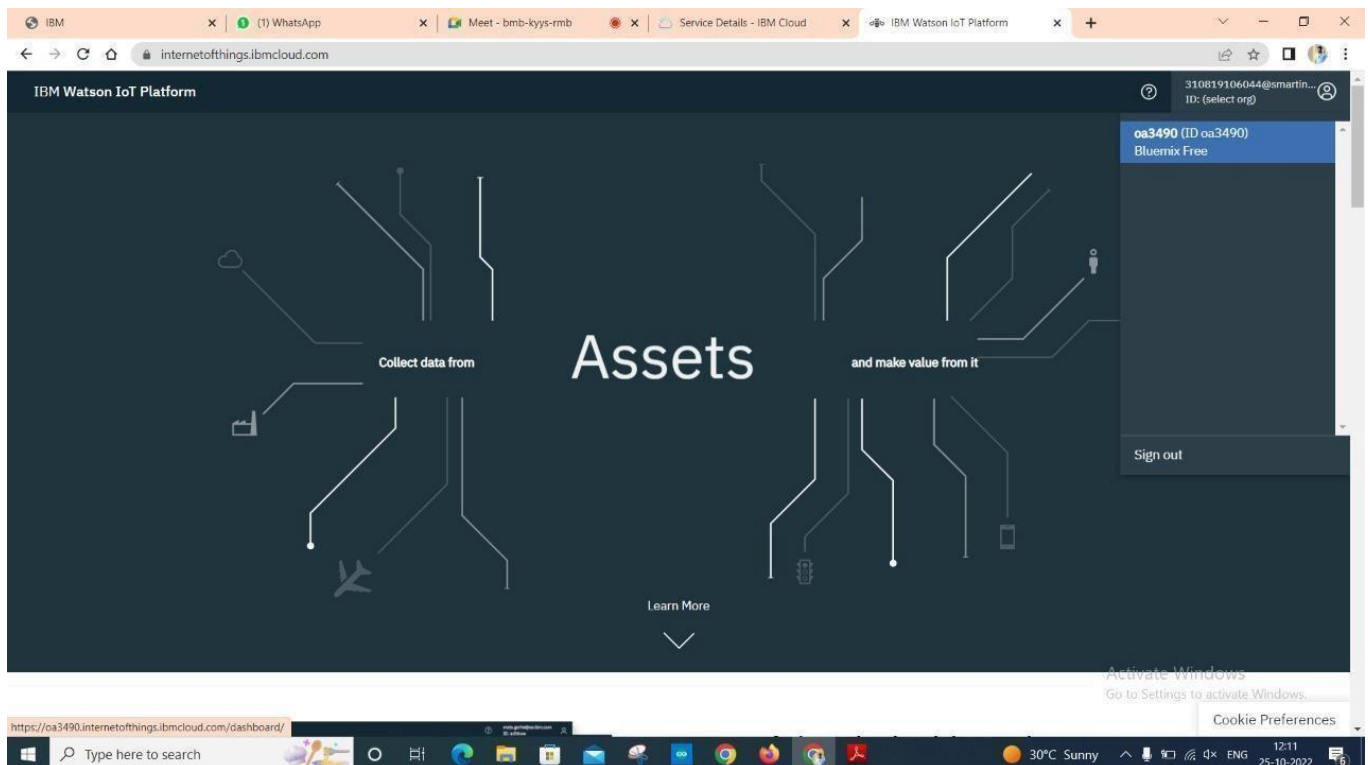
Step



Step

Step 13: Once it id logged in, the name will be displayed click on it and then click on Bluemix Free.

14: This is the IBM Watson platform.



Step

IBM Watson IoT Platform

310819106044@smartinternz.com
ID: oa3490

Browse Action Device Types Interfaces

Add Device +

Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator ☒ IDI

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
> <input type="checkbox"/>	12345	Disconnected	TestDeviceType	Device	Oct 23, 2022 1:42 PM	

Items per page 50 | 1-1 of 1 item

1 of 1 page

1 Simulation running

Activate Windows
Go to Settings to activate Windows.

Type here to search

30°C Sunny 12:12 25-10-2022

Step

Step 15: Click on Add Device.

16: Click on Device Type.

IBM Watson IoT Platform

Browse Action Device Types Interfaces

Add Device

Browse Devices

All Devices Diagnose

This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using different criteria. To get started, you can add devices by using the Add Device button, or by using API.

Search by Device ID

Device Simulator: ☒

	Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
>	12345	Disconnected	TestDeviceType	Device	Oct 23, 2022 1:42 PM	

Items per page 50 | 1-1 of 1 item

1 of 1 page

1 Simulation running

Activate Windows
Go to Settings to activate Windows.

Type here to search

30°C Sunny

12:12
25-10-2022

Step

The screenshot shows the IBM Watson IoT Platform interface in a web browser. The browser's address bar displays the URL `oa3490.internetofthings.ibmcloud.com/dashboard/devices/browse/add`. The page title is "IBM Watson IoT Platform". The user is logged in as `310819106044@smartinternz.com` with ID `oa3490`. The navigation menu includes "Browse", "Action", "Device Types", and "Interfaces". The "Add Device" wizard is active, showing a progress bar with four steps: "Identity" (selected), "Device Information", "Security", and "Summary". Below the progress bar, a message states: "Select a device type for the device that you are adding and give the device a unique ID." There are two input fields: "Device Type" with the placeholder text "Select or create a device type..." and "Device ID" with the placeholder text "Enter Device ID". At the bottom right of the wizard are "Cancel" and "Next" buttons. Below the wizard, the "Browse Devices" section is visible, featuring "All Devices" and "Diagnose" buttons. A status bar at the bottom indicates "0 Simulations running" and an "Activate Windows" notification. The Windows taskbar at the very bottom shows the search bar, task view, and various application icons, with the system tray displaying "30°C Sunny" and the date "25-10-2022".

Step

Step 17: Fill the details.

18: Click on Register Devices.

The screenshot shows the 'Add Type' form in the IBM Watson IoT Platform. The form is titled 'Add Type' and has two tabs: 'Identity' (selected) and 'Device Information'. Below the tabs, there is a description: 'Device types group devices that have similar characteristics, such as model number, firmware version, or location. Give the device type a unique name and a description that identifies characteristics that are shared by devices of this type.' The form has three main input fields: 'Type', 'Name', and 'Description'. The 'Type' field has two radio buttons: 'Device' (selected) and 'Gateway'. The 'Name' field contains the text 'TestDeviceType'. The 'Description' field is empty. At the bottom right of the form, there are 'Cancel' and 'Next' buttons. The top of the browser window shows the URL 'oa3490.internetofthings.ibmcloud.com/dashboard/devices/types/add' and the user's email '310819106044@smartinternz.com'. The bottom of the browser window shows the Windows taskbar with the search bar and various application icons.

IBM Watson IoT Platform

310819106044@smartinternz.com
ID: oa3490

Browse Action **Device Types** Interfaces

Add Type

Identity Device Information

Device types group devices that have similar characteristics, such as model number, firmware version, or location. Give the device type a unique name and a description that identifies characteristics that are shared by devices of this type.

Type ☒ Device Or ☐ Gateway

Name

The device type name is used to identify the device type uniquely and uses a restricted set of characters to make it suitable for API use.

Description

Cancel Next

0 Simulations running

Activate Windows
Go to Settings to activate Windows.

Type here to search

30°C Sunny 12:16 25-10-2022

Step

The screenshot shows the IBM Watson IoT Platform dashboard. The browser's address bar displays the URL: `oa3490.internetofthings.ibmcloud.com/dashboard/devices/types/add`. The page title is "IBM Watson IoT Platform". The user is logged in as `310819106044@smartinternz.com` with ID `oa3490`.

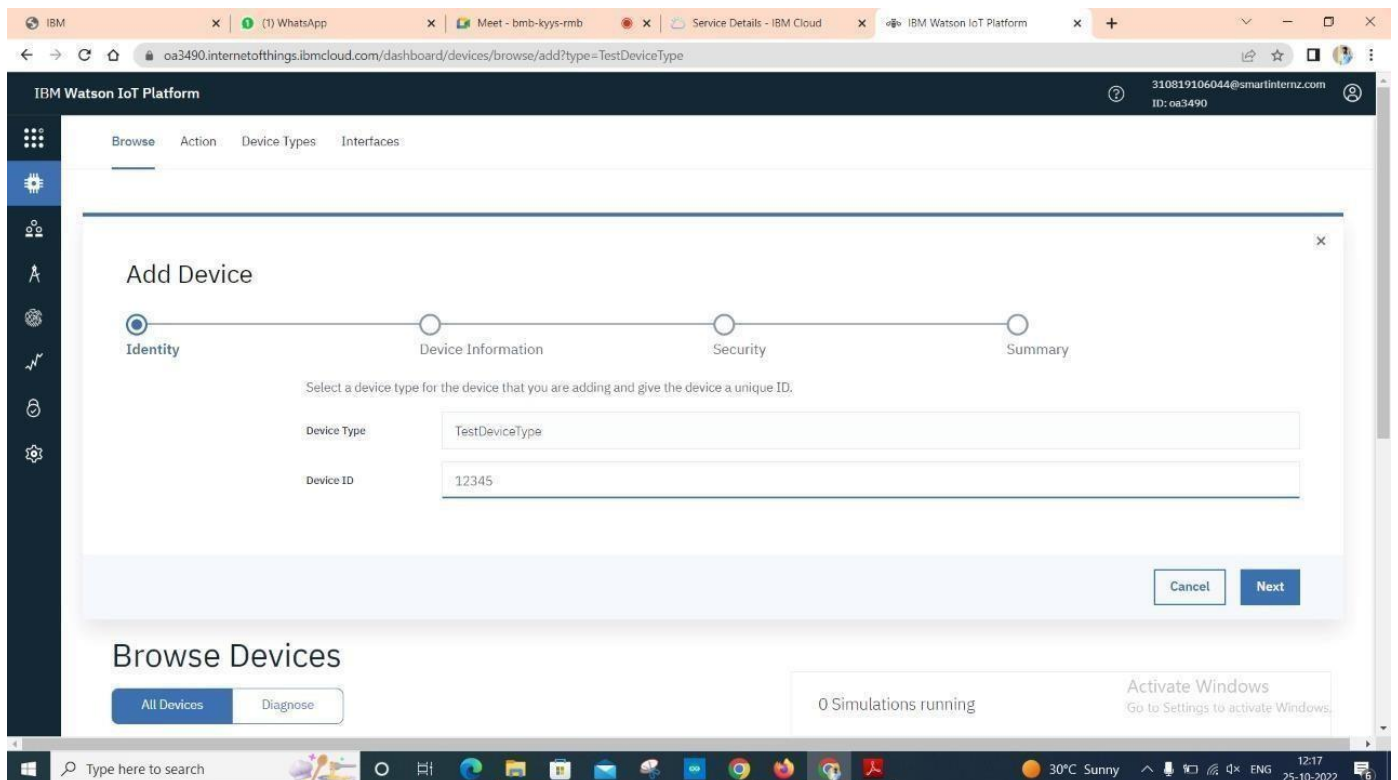
The main content area shows a confirmation message: "You added the new device type: TestDeviceType". Below this, there are two tabs: "Register Device" (selected) and "Advanced Flow". The "Register Device" tab contains the heading "Optional Register Devices, Define Interfaces" and a subheading "Now that you added a device type, you can register and connect devices for this type.". A blue button labeled "Register Devices" is visible.

The bottom of the screen shows a Windows taskbar with various application icons, a search bar, and system information including the date and time (12:16, 25-10-2022) and weather (30°C Sunny).

Step

Step 19: Give the device name which you have created and give Device ID.

20: After giving all the data, Click on Finish.



Step

The screenshot shows the IBM Watson IoT Platform interface in a web browser. The browser's address bar displays the URL: `oa3490.internetofthings.ibmcloud.com/dashboard/devices/browse/add?type=TestDeviceType`. The page title is "IBM Watson IoT Platform". The user is logged in as "310819106044@smartinternz.com" with ID "oa3490".

The main content area is titled "Add Device" and shows a progress bar with four steps: Identity, Device Information (current step), Security, and Summary. Below the progress bar, a message states: "Verify that the following information is correct then select Finish".

The "Device Information" section contains the following details:

- Device Type: TestDeviceType
- Device ID: 12345
- View Metadata (button)
- Security Token: To be generated

At the bottom right of the form, there are "Back" and "Finish" buttons.

Below the form, the "Browse Devices" section is visible, featuring "All Devices" and "Diagnose" buttons. A status bar indicates "0 Simulations running".

The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray displays the date and time: "12:17 25-10-2022".

Step

Step 21: After creating the device, Copy the Device Credentials.

22: Go to Setting, click on Data and Devices.

The screenshot displays the IBM Watson IoT Platform interface. The browser address bar shows the URL: `oa3490.internetofthings.ibmcloud.com/dashboard/devices/drilldown/TestDeviceType:12345?returnTo=/devices/browse`. The page title is "Device Drilldown - 12345". On the left, a sidebar menu lists options: "Device Credentials" (selected), "Connection Information", "Recent Events", "State", "Device Information", "Metadata", "Diagnostics", "Connection Logs", and "Device Actions". The main content area, titled "Device Credentials", contains a table of credentials:

Organization ID	oa3490
Device Type	TestDeviceType
Device ID	12345
Authentication Method	use-token-auth
Authentication Token	qvUymv*BGwD&jLz9C3

Below the table, a warning message states: "Authentication tokens are non-recoverable. If you misplace this token, you will need to re-register the device to generate a new authentication token." A link "Find out how to add these credentials to your device" is provided. At the bottom of the page, a status bar indicates "0 Simulations running". The Windows taskbar at the bottom shows the date and time as 12:17 on 25-10-2022.

Step

The screenshot shows the IBM Watson IoT Platform Settings page in a web browser. The browser's address bar displays the URL `oa3490.internetofthings.ibmcloud.com/dashboard/settings`. The page header includes the IBM Watson IoT Platform logo and a user profile with the email `310819106044@smartinternz.com` and ID `oa3490`. A dark sidebar on the left contains navigation links: Boards, Devices, Members, Apps, Access Management, Usage, Security, and Settings (which is highlighted). The main content area is titled 'Settings' and includes a subtitle: 'and modify global organization information and locally enable experimental Watson IoT Platform features.' The 'About' section provides details: 'Date Created' is 10/23/2022, 'Organization Type' is Bluemix Free, and 'Geographic Location' is eu-de. The 'Identity' section shows the 'Organization ID' as oa3490 and a 'Friendly Name' field containing oa3490. At the bottom, the 'Experimental Features' section is partially visible, showing '0 Simulations running'. A Windows taskbar is at the bottom with a search bar, application icons, and system status (30°C Sunny, 12:18, 25-10-2022). An 'Activate Windows' watermark is present in the bottom right.

IBM Watson IoT Platform

Settings

and modify global organization information and locally enable experimental Watson IoT Platform features.

About

The organization type sets the limits for the amount of data traffic your organization supports. An administrator for your IBM Cloud organization can choose a new plan from the IBM Cloud service page.

Date Created: 10/23/2022

Organization Type: Bluemix Free

Geographic Location: eu-de

Identity

The organization ID and friendly name are the global identifiers of your organization. Administrators can modify the global name.

Organization ID: oa3490

Friendly Name: oa3490

Experimental Features

Experimental features let you test the latest and greatest Watson IoT Platform features.

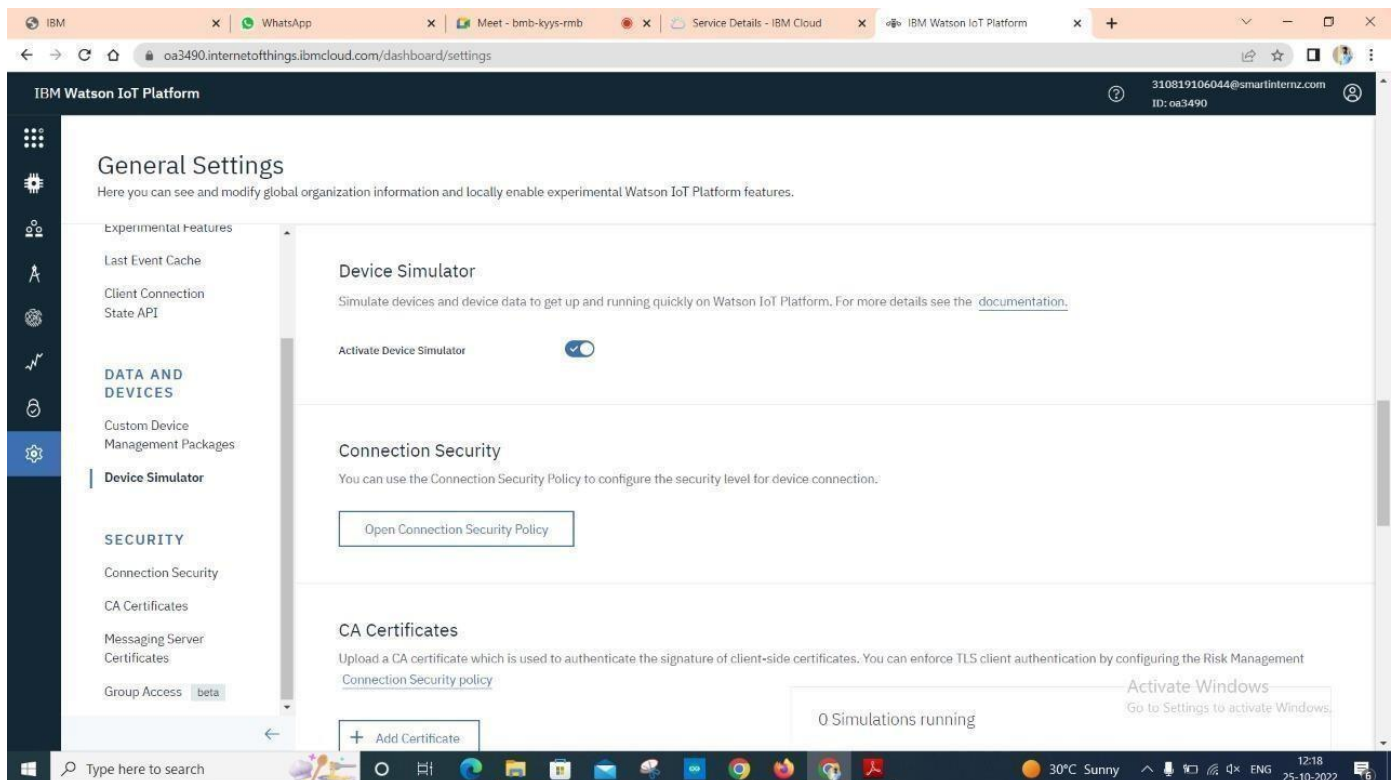
0 Simulations running

Activate Windows
Go to Settings to activate Windows.

Step

Step 23: Then click on Device Simulator and Activate Device Simulator.

24: Click on the pop-up screen on the right side.



Step

The screenshot shows the IBM Watson IoT Platform 'General Settings' page in a web browser. The browser's address bar displays the URL `oa3490.internetofthings.ibmcloud.com/dashboard/settings`. The page header includes the IBM Watson IoT Platform logo and the user's email `310819106044@smartinternz.com` with ID `oa3490`. A left-hand navigation menu lists various settings categories: Experimental Features, Last Event Cache, Client Connection State API, DATA AND DEVICES (highlighted), Custom Device Management Packages, Device Simulator, SECURITY, Connection Security, CA Certificates, Messaging Server Certificates, and Group Access (beta). The main content area is titled 'General Settings' and contains several sections: a message about experimental features, a section for custom device management packages stating 'You currently have no custom device management packages' with a link to 'Add a (JSON format) package', a 'Device Simulator' section with a description and a link to documentation, and a 'Connection Security' section with a description and a link to 'Open Connection Security Policy'. A status bar at the bottom indicates '0 Simulations running'. The Windows taskbar at the very bottom shows the search bar, task view button, and several open applications, along with system information like '30°C Sunny' and the date '25-10-2022'.

IBM Watson IoT Platform

General Settings

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

Experimental 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

Activate Windows

Go to Settings to activate Windows.

Type here to search

30°C Sunny

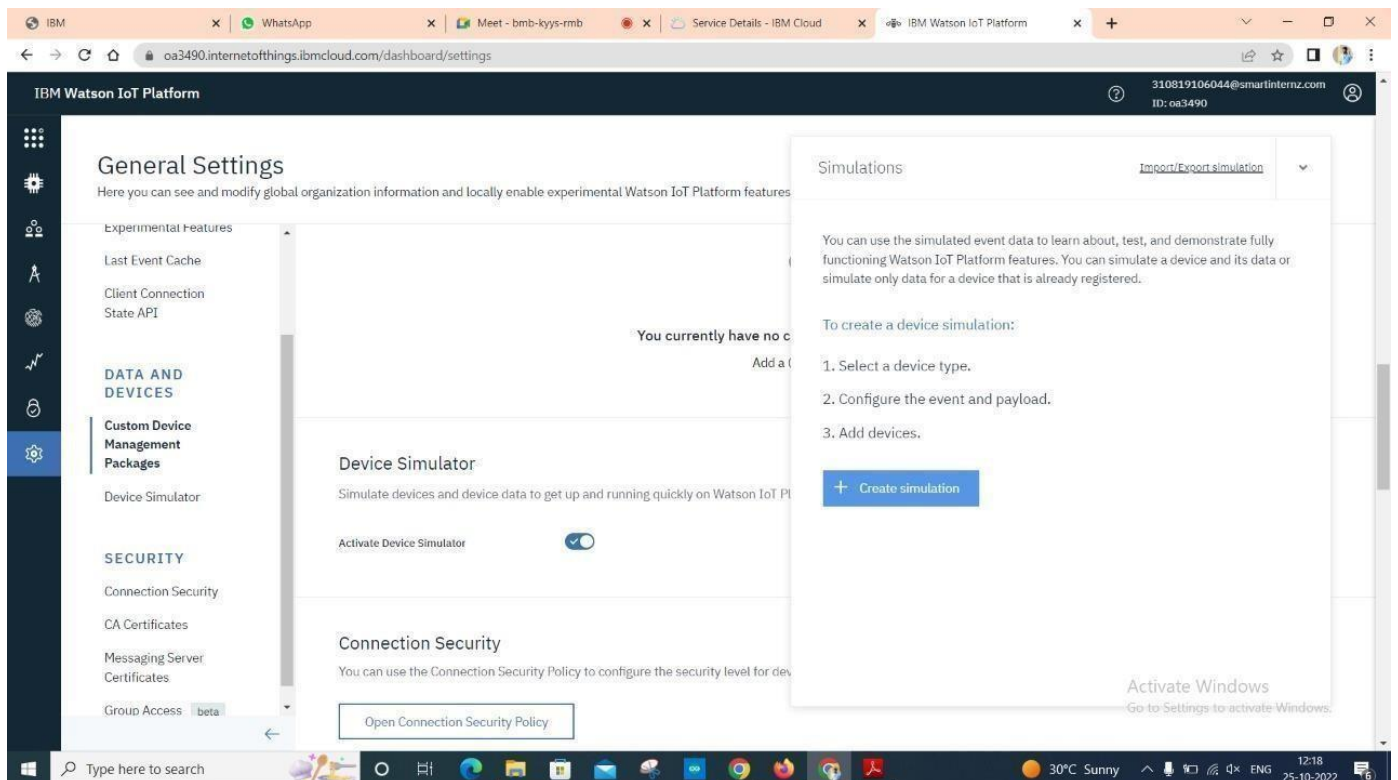
12:18

25-10-2022

Step

Step 25: Click on Create Simulation.

26: Choose the Device.



Step

The screenshot shows the IBM Watson IoT Platform 'General Settings' page. The left sidebar contains navigation links for 'Experimental 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', and 'Group Access'. The main content area is titled 'General Settings' and includes sections for 'Device Simulator' (with an 'Activate Device Simulator' toggle) and 'Connection Security' (with an 'Open Connection Security Policy' button). A 'Simulations' modal is open, displaying instructions on how to create a device simulation and a list of device types, including 'TestDeviceType'. The browser's address bar shows the URL 'oa3490.internetofthings.ibmcloud.com/dashboard/settings'. The Windows taskbar at the bottom shows the system clock as 12:19 on 25-10-2022.

IBM Watson IoT Platform

General Settings

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

Experimental 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

Device Simulator

Simulate devices and device data to get up and running quickly on Watson IoT Platform.

Activate Device Simulator ☒

Connection Security

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

[Open Connection Security Policy](#)

Simulations [Report Error Simulation](#)

You can use the simulated event data to learn about, test, and demonstrate fully functioning Watson IoT Platform features. You can simulate a device and its data or simulate only data for a device that is already registered.

To create a device simulation:

1. Select a device type.
2. Configure the event and payload.
3. Add devices.

Select or create a device type...

TestDeviceType

Activate Windows
Go to Settings to activate Windows.

Step

Step 27: Type the code.

28: Click on Use Registered Device and choose the device and run it.

The screenshot displays the IBM Watson IoT Platform dashboard. The main page is titled "General Settings" and includes sections for "Experimental Features", "DATA AND DEVICES", and "SECURITY". The "Device Simulator" section is active, showing a toggle switch for "Activate Device Simulator" which is turned on. A modal window titled "Device Type: TestDeviceType" is open, showing a list of events. The first event, "event_1", is selected. The "Schedule" is set to "Every Minute" with a value of "20". The "Payload" is defined as a JSON object with "Temperature" and "Humidity" fields, both using the function `random(0, 100)`. The modal also includes a "Send" button, a "New event type" button, and an "Upload a CSV file" button. The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the date and time as 12:21 on 25-10-2022.

IBM Watson IoT Platform

General Settings

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

Experimental Features

Last Event Cache

Client Connection State API

DATA AND DEVICES

Custom Device Management Packages

Device Simulator

Activate Device Simulator

SECURITY

Connection Security

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Group Access beta

You currently have no connections. Add a connection.

Device Simulator

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Open Connection Security Policy

Device Type: TestDeviceType

Events 1

New event type +

Event type name event_1

Send

Schedule

20 Every Minute

Payload

Specify the event payload in the editor window or by uploading a CSV file.

```
0 {
1  "Temperature": random(0, 100),
2  "Humidity": random(0, 100),
3 }
4
```

Upload a CSV file

Cancel Save

Activate Windows

Go to Settings to activate Windows.

Type here to search

30°C Sunny

12:21 25-10-2022

Step

The screenshot shows the IBM Watson IoT Platform 'General Settings' page. The left sidebar contains navigation links for 'Experimental 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', and 'Group Access'. The main content area displays 'Device Simulator' (with an 'Activate Device Simulator' toggle) and 'Connection Security' (with an 'Open Connection Security Policy' button). A 'Simulations' modal is open, showing '1/50 Simulations Running', a 'New Simulation' button, a table with one device 'TestDeviceType' (ID: 12345), and buttons for 'Create Simulated Device' and 'Use Registered Device'. The modal also shows '41 events sent' and an 'Activate W15860 agent' link. The browser's address bar shows 'oa3490.internetofthings.ibmcloud.com/dashboard/settings'. The Windows taskbar at the bottom shows the date as 25-10-2022 and time as 12:21.

IBM Watson IoT Platform

General Settings

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

- Experimental 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 c...
Add a (...)

Device Simulator

Simulate devices and device data to get up and running quickly on Watson IoT Platform

Activate Device Simulator ☒

Connection Security

You can use the Connection Security Policy to configure the security level for devices

[Open Connection Security Policy](#)

Simulations

[Import/Export simulation](#)

1/50 Simulations Running [+ New Simulation](#)

Device Type: **TestDeviceType** 1 Event ⓘ ⌵

1 Device

ID: 12345	⋮
-----------	----------------

[1 x Create Simulated Device](#) [Use Registered Device](#)

41 events sent W15860 agent [Activate W15860 agent >](#)

Go to Settings to activate Windows!

Step

Step 29: Go to devices then click on devices and check the recent events whether the code is running or not.

30: Go to Board and click on + Create New Board, fill the details and create a board.

The screenshot displays the IBM Watson IoT Platform dashboard. The top navigation bar includes tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main content area shows details for a device with ID '12345', which is currently 'Disconnected'. Below this, the 'Recent Events' tab is selected, showing a table of live data streams. The table has four columns: 'Event', 'Value', 'Format', and 'Last Received'. It lists three events, each with a JSON value containing temperature and humidity data. The bottom of the dashboard shows a status bar with '1 Simulation running' and a system tray with the date '25-10-2022' and time '12:22'.

Event	Value	Format	Last Received
event_1	{"Temperature":42,"Humidity":88}	json	a few seconds ago
event_1	{"Temperature":71,"Humidity":36}	json	a few seconds ago
event_1	{"Temperature":3,"Humidity":53}	json	a few seconds ago

Step

IBM Watson IoT Platform

310819106044@smartinternz.com
ID: oa3490

+ Create New Board

Your boards Public boards

USAGE OVERVIEW 3 Cards
Owned by you

RISK AND SECURITY OVERVIEW 4 Cards
Owned by you

Boards shared with you

1 Simulation running

Activate Windows
Go to Settings to activate Windows

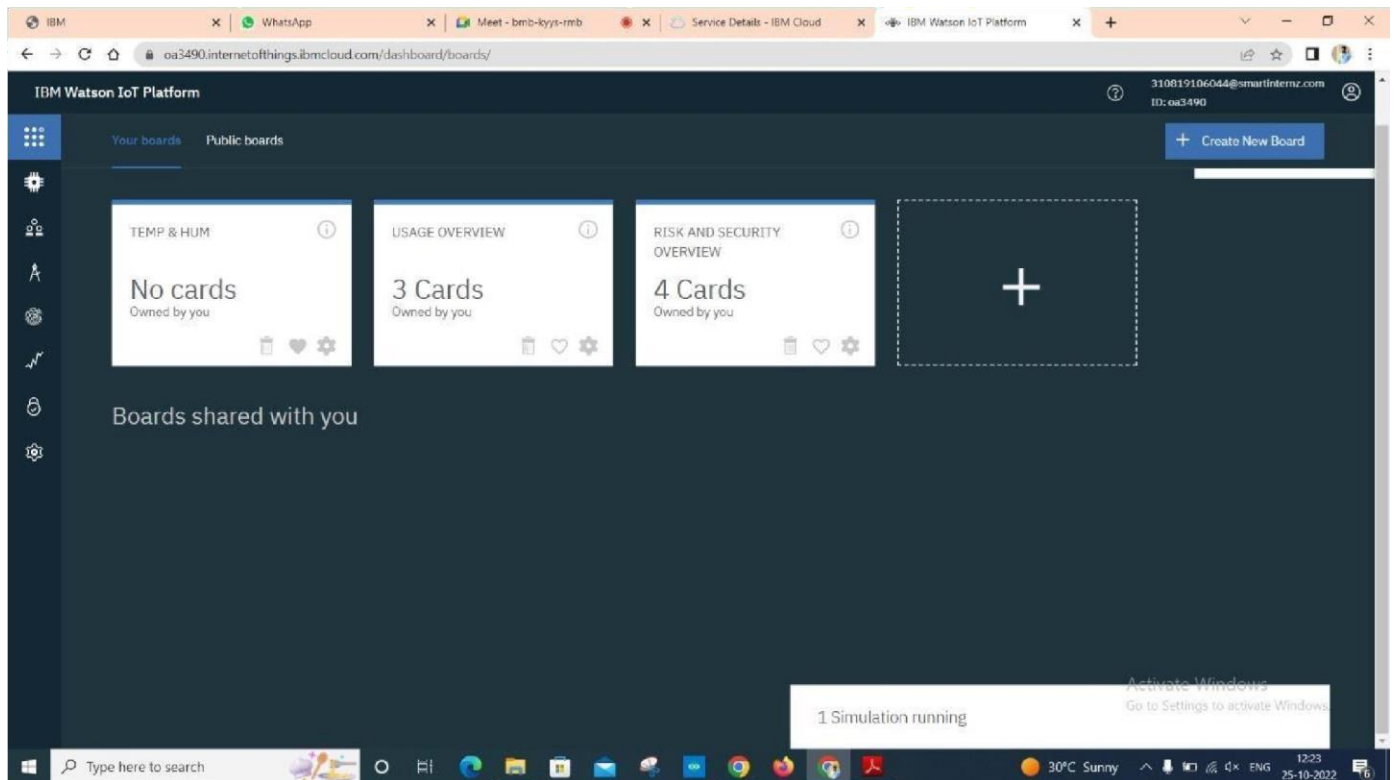
Type here to search

30°C Sunny 12:22 25-10-2022

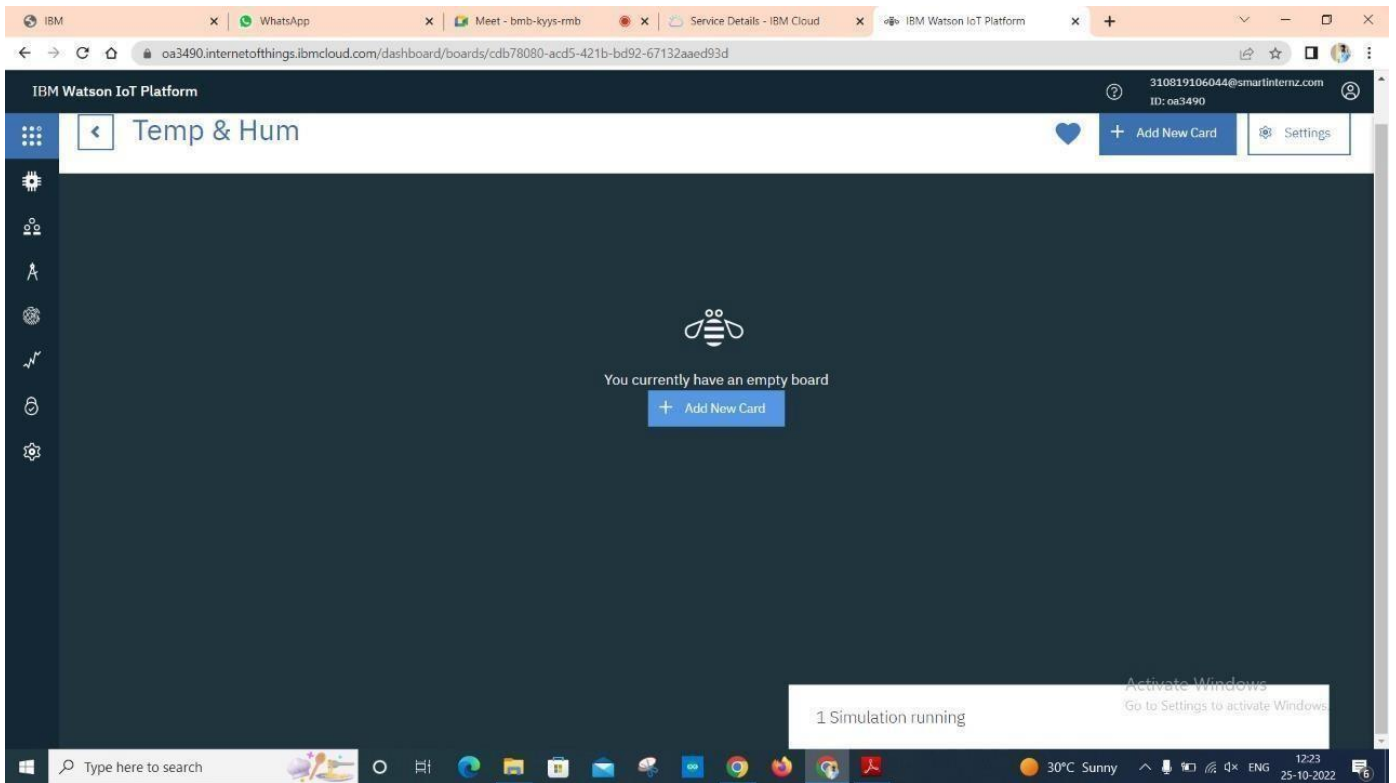
Step

Step 31: Click on the board which is created.

32: Go Add New Card.



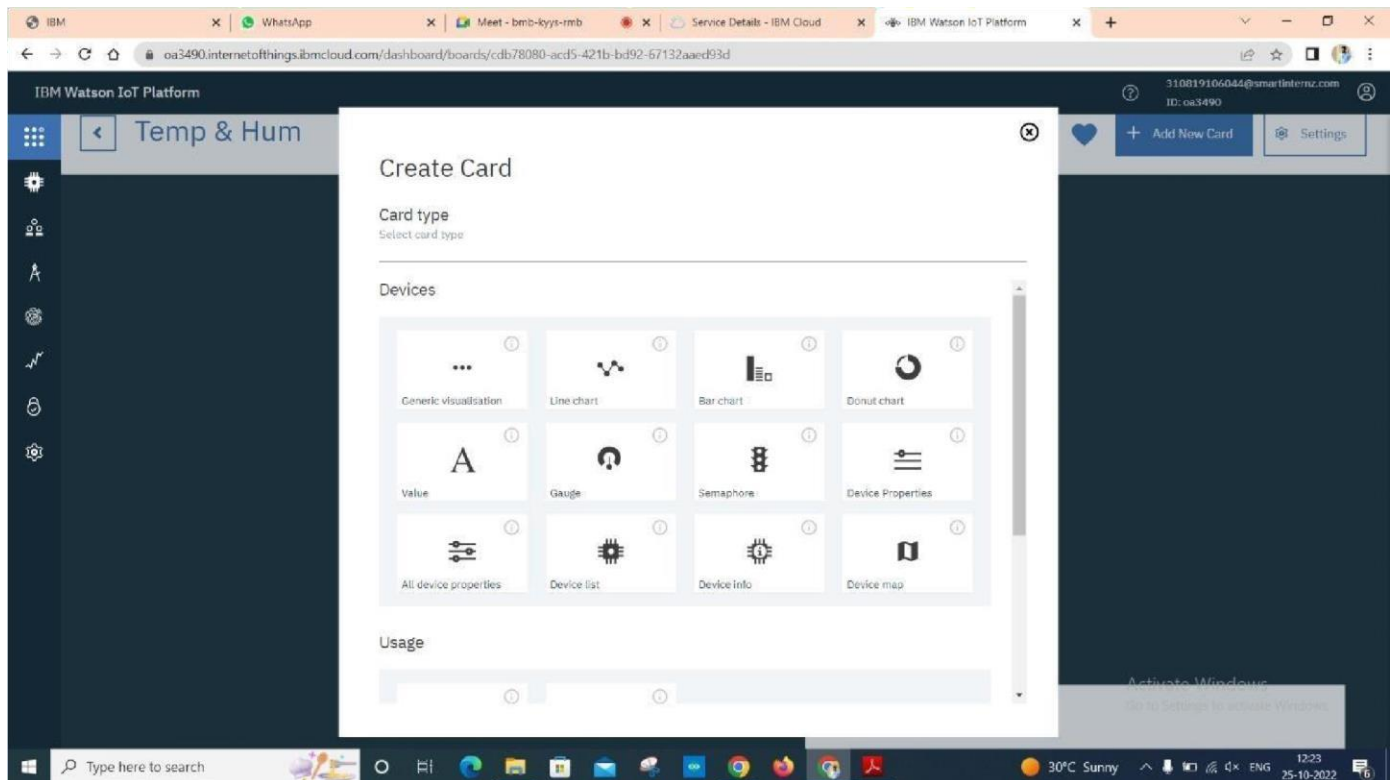
Step



Step

Step 33: Choose the Card Type.

34: Choose the device.



Step

The screenshot displays the IBM Watson IoT Platform interface. The browser's address bar shows the URL: `oa3490.internetofthings.ibmcloud.com/dashboard/boards/cdb78080-acd5-421b-bd92-67132aaed93d`. The page title is "IBM Watson IoT Platform".

The main content area is titled "Temp & Hum" and features a sidebar with navigation options: "Card source data", "12345", "Card preview", and "Card information". The "Card source data" section is currently active.

The central panel displays the "Create Line chart Card" wizard. It prompts the user to "Specify the data source for the card" and shows a table of available devices:

Device ID	Device Type
12345	TestDeviceType

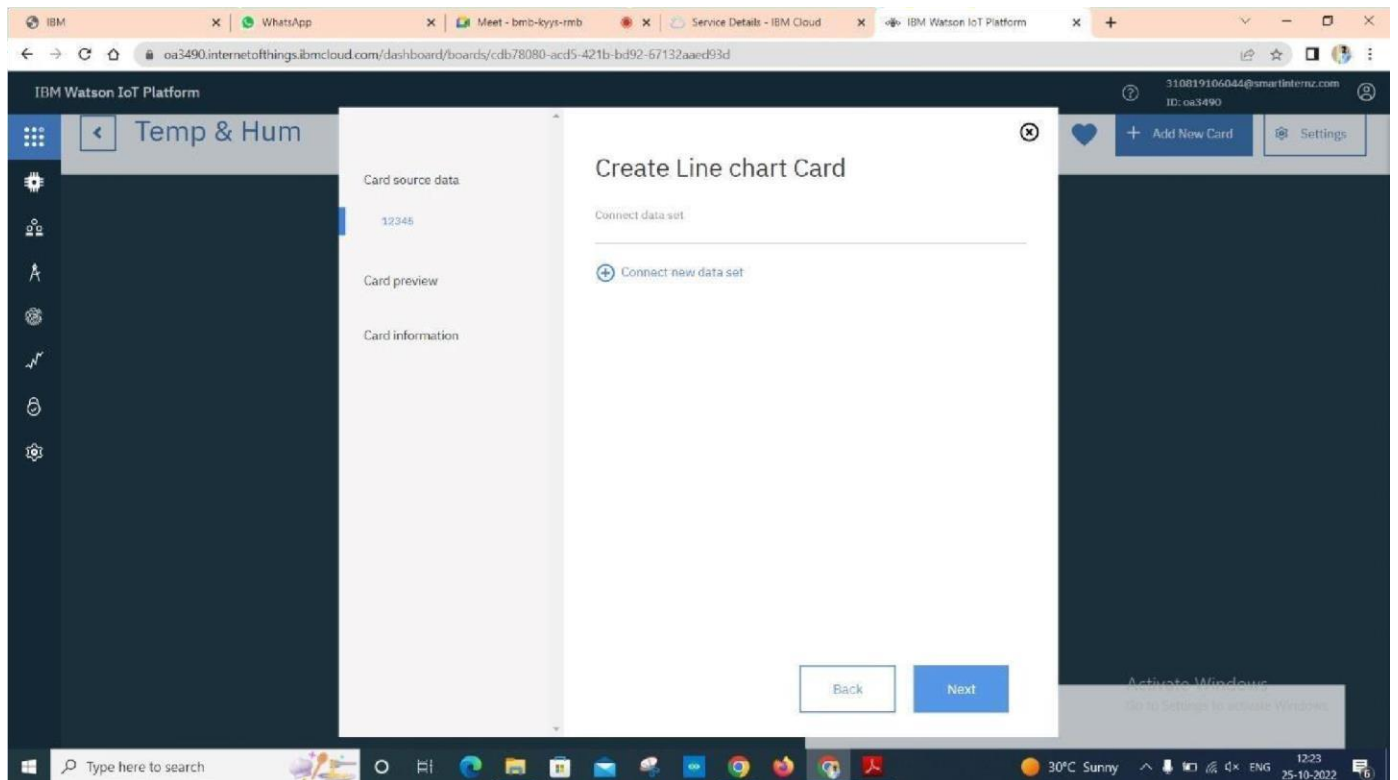
A "Next" button is located at the bottom right of the wizard.

The bottom of the screen shows a Windows taskbar with the search bar "Type here to search" and various application icons. The system tray indicates the date and time as "12:23 25-10-2022" and the weather as "30°C Sunny".

Step

Step 35: Click on Connect new data set.

36: Fill the details to get Temperature graph.



Step

The screenshot displays the IBM Watson IoT Platform interface. The browser's address bar shows the URL: `oa3490.internetofthings.ibmcloud.com/dashboard/boards/cdb78080-acd5-421b-bd92-67132aaed93d`. The dashboard header includes the title "Temp & Hum" and navigation links for "Add New Card" and "Settings".

The main content area is titled "Create Line chart Card". It features a "Connect data set" section with the following fields:

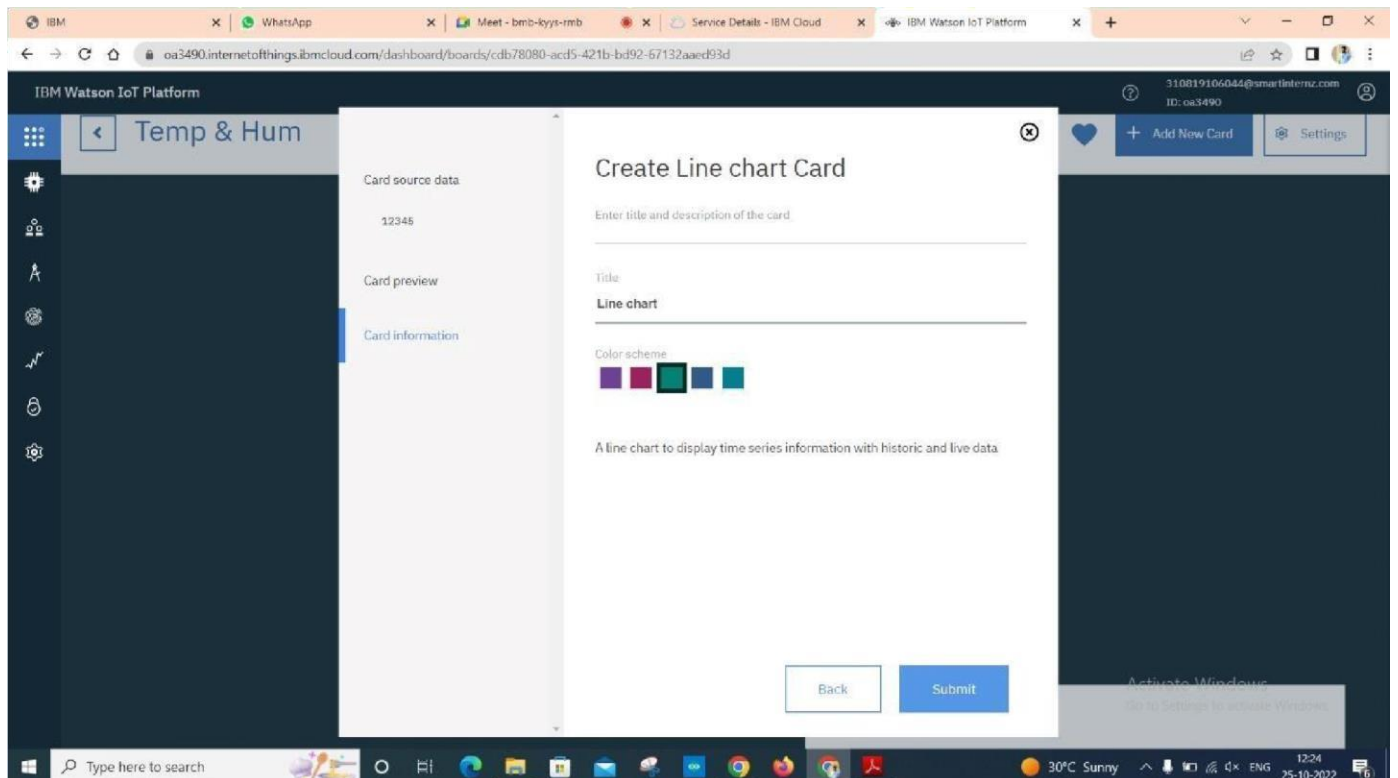
- Event:** `event_1`
- Property:** `Temperature`
- Name:** `Temperature`
- Type:** `Number` (selected from a dropdown menu)
- Unit:** `100` (with a "Max" label)

At the bottom of the form are "Back" and "Next" buttons. The left sidebar contains a menu with icons for various dashboard functions. The bottom of the screen shows a Windows taskbar with the search bar and system tray.

Step

Step 37: Choose the Colour.

38: Repeat the same process again to get the Humidity graph.

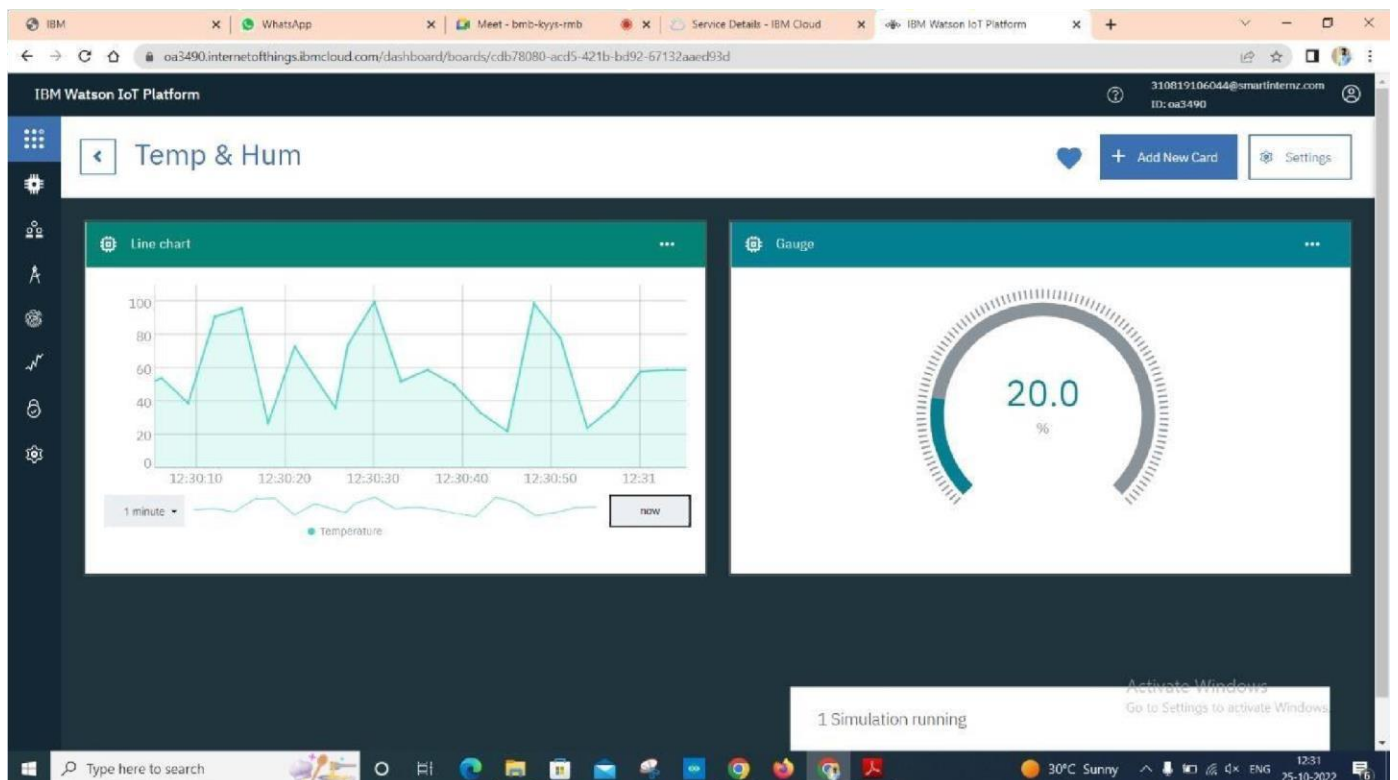


Step

The screenshot displays the IBM Watson IoT Platform interface. The browser's address bar shows the URL: `oa3490.internetofthings.ibmcloud.com/dashboard/boards/cdb78080-acd5-421b-bd92-67132aaed93d`. The dashboard header includes the title "IBM Watson IoT Platform" and a user profile section with the email `310819106044@smartinternz.com` and ID `oa3490`. A sidebar on the left contains navigation icons and a "Temp & Hum" card. The main content area features a "Create Line chart Card" wizard. The wizard's "Connect data set" step is active, showing a "New data set" section with an "Event" field containing "event_1", a "Name" field with "New data set", and "Type" and "Unit" dropdowns set to "Text". A "Connect new data set" link is visible at the bottom of the wizard. The background dashboard shows a "Temp & Hum" card with a "Card source data" section displaying the value "12345". The Windows taskbar at the bottom shows the search bar, task view, and various application icons, with a system tray indicating 30°C Sunny and the date 25-10-2022.

Step

Step 39: Here is the Final graph.



Result:

An IBM Watson cloud for IoT and a device is created successfully.