

CREATE IBM WATSON IOT PLATFORM AND DEVICE

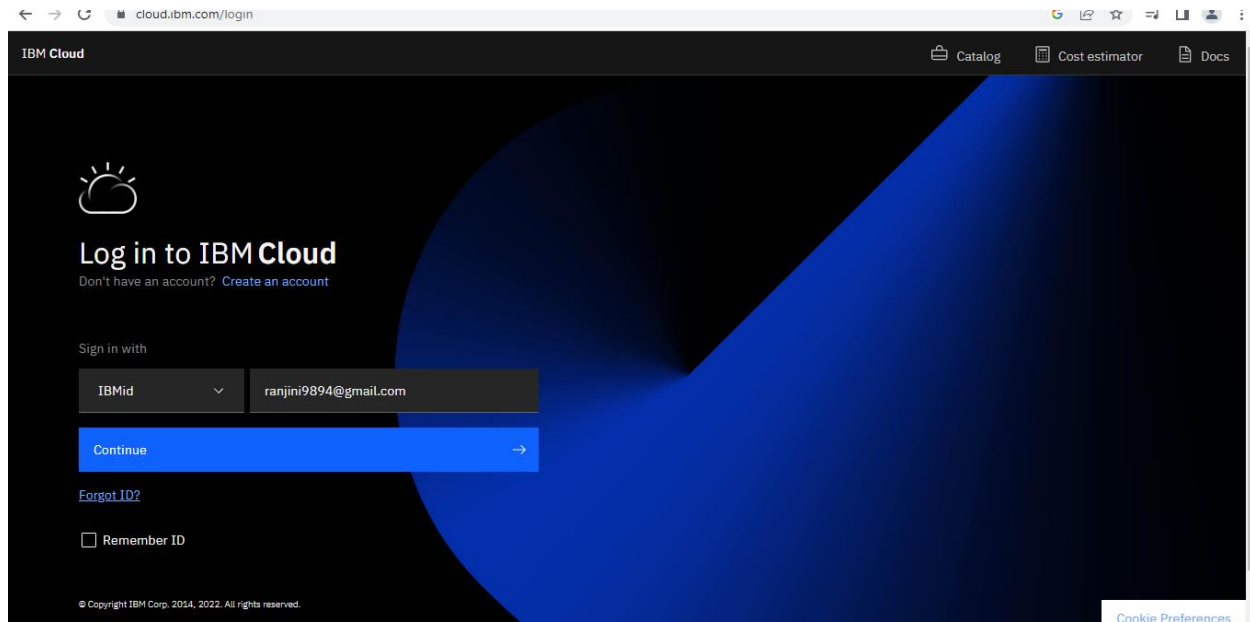
TEAM ID: PNT2022TMID38891

AIM:

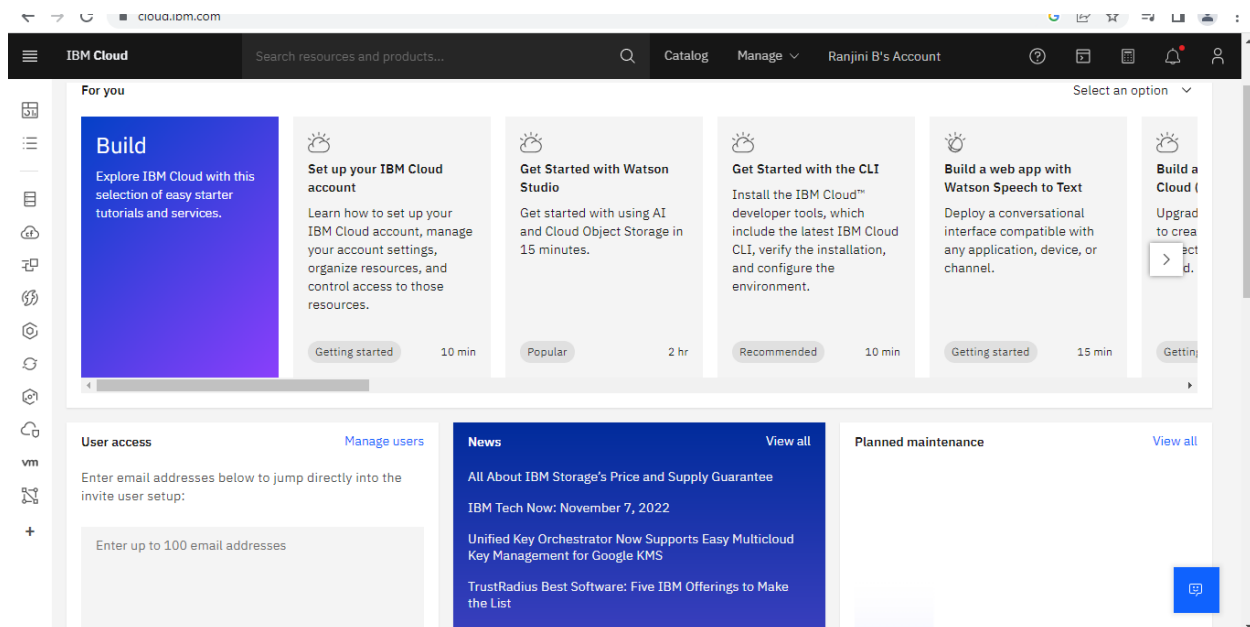
To create the IBM Watson IoT platform and device

STEPS:

1. First create an IBM cloud account with IBM id and password

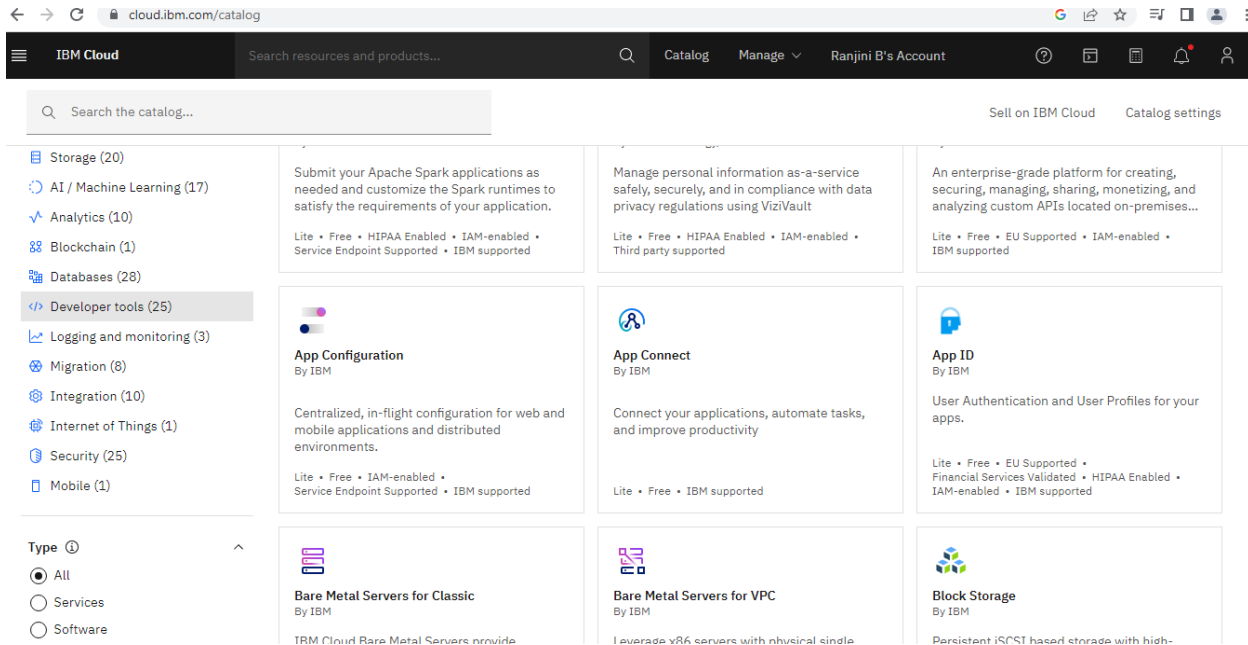


2. Home page of IBM cloud

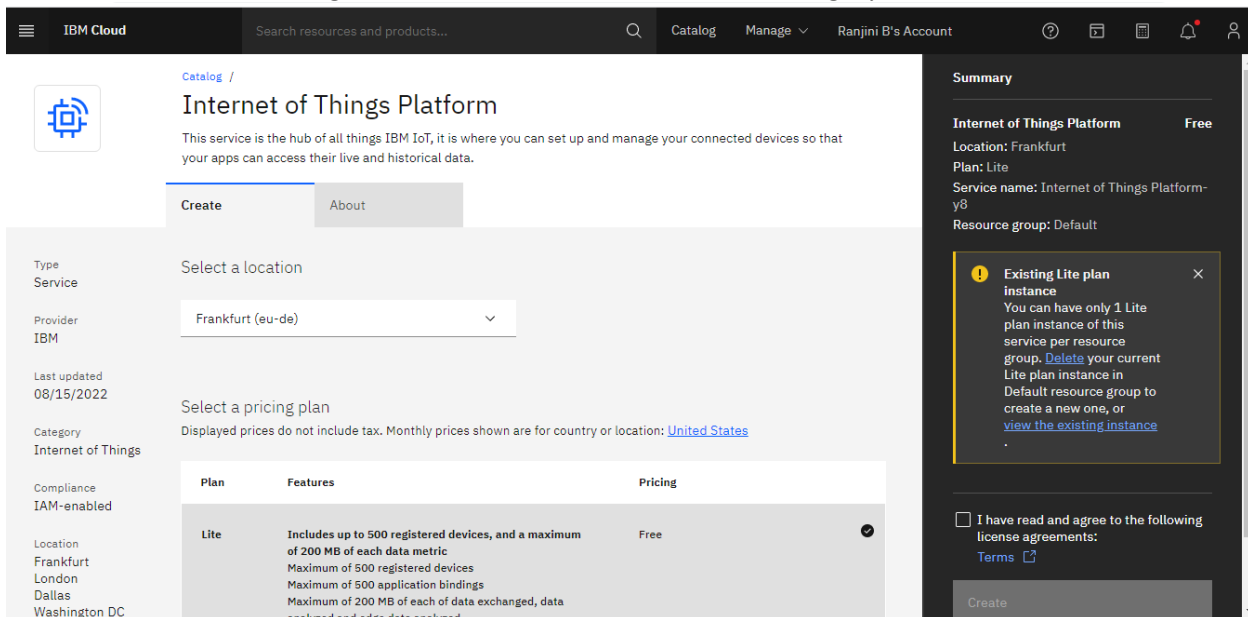


3. Click on the "catalog" option

CREATE IBM WATSON IOT PLATFORM AND DEVICE



4. Click on “Internet of Things Platform” in the below mentioned category



5. If already a Lite is present delete it or else u can't create another

CREATE IBM WATSON IOT PLATFORM AND DEVICE

IBM Cloud Search resources and products... Catalog Manage Ranjini B's Account

Select a pricing plan

Category: Internet of Things

Compliance: IAM-enabled

Location: Frankfurt, London, Dallas, Washington DC

Related links: Docs, Terms

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: Internet of Things Platform-y8

Select a resource group: Default

Tags: Access management tags

Summary

Internet of Things Platform Free

Location: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-y8

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

6. Enter the location and in the configure your resource type the service name and choose the plan, tick the agree with license agreements and then click on create option

IBM Cloud Search resources and products... Catalog Manage Ranjini B's Account

Select a pricing plan

Category: Internet of Things

Compliance: IAM-enabled

Location: Frankfurt, London, Dallas, Washington DC

Related links: Docs, Terms

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: Internet of Things Platform-y9

Select a resource group: Default

Tags: Access management tags

Summary

Internet of Things Platform Free

Location: Frankfurt

Plan: Lite

Service name: Internet of Things Platform-y9

Resource group: Default

I have read and agree to the following license agreements: Terms

Create

Add to estimate

7. Internet of Things Platform-Child_safety will be created, where there are different options like manage, plan and connection (manage is for launch, plan is for payment package and its upgrade, and finally connection is for to connect IoT with other services)

CREATE IBM WATSON IOT PLATFORM AND DEVICE

IBM Cloud

Search resources and products...

Q

Catalog

Manage

Ranjini B's Account

?

Resource list /

Internet of Things Platform-Child Safety

Active

Add tags

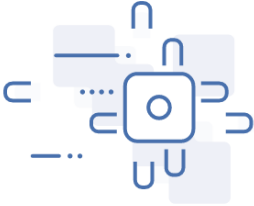
Details

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

Non-Production

The Non-Production service plan is a full-featured, fully-integrated offering that enables

Production

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

IBM Cloud

Search resources and products...

Q

Catalog

Manage

Ranjini B's Account

?

Resource list /

Internet of Things Platform-Child Safety

Active

Add tags

Details

Actions...

Manage

Plan

Connections

Current plan

Lite

Features

- 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

Current usage

N/A

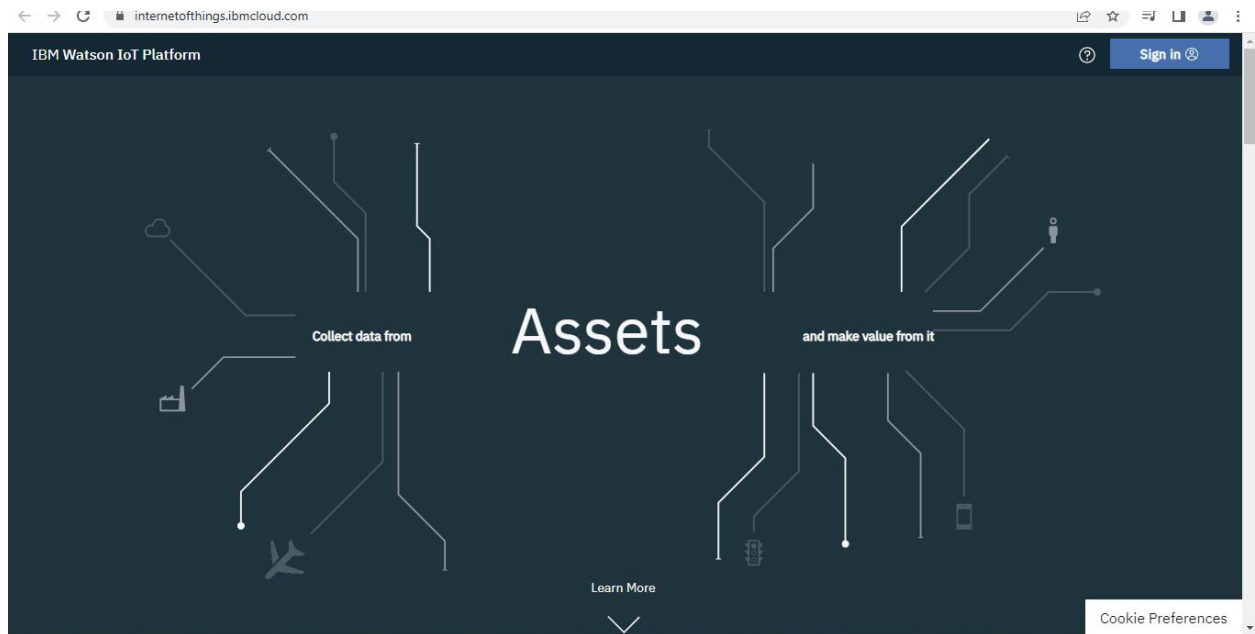
Lite plan services are deleted after 30 days of inactivity.

Change pricing plan

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	Free

8. Click on the launch option it will directly open to this page

CREATE IBM WATSON IOT PLATFORM AND DEVICE

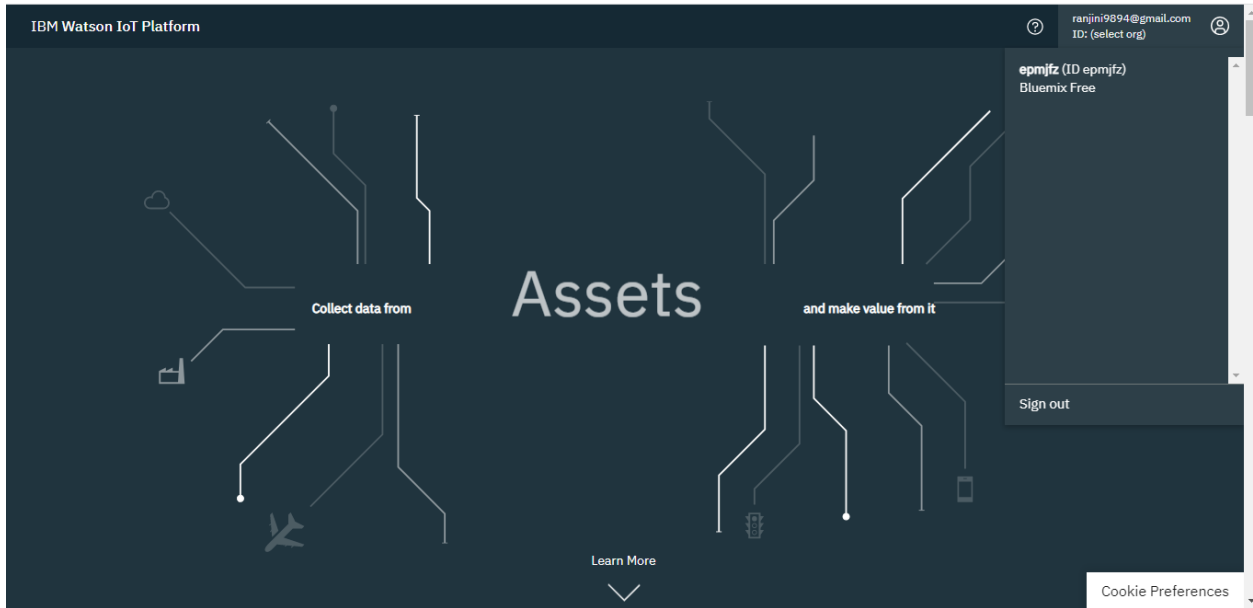


9. Click sign in option to give the details of mail id and password to enter the IBM Watson IoT Platform

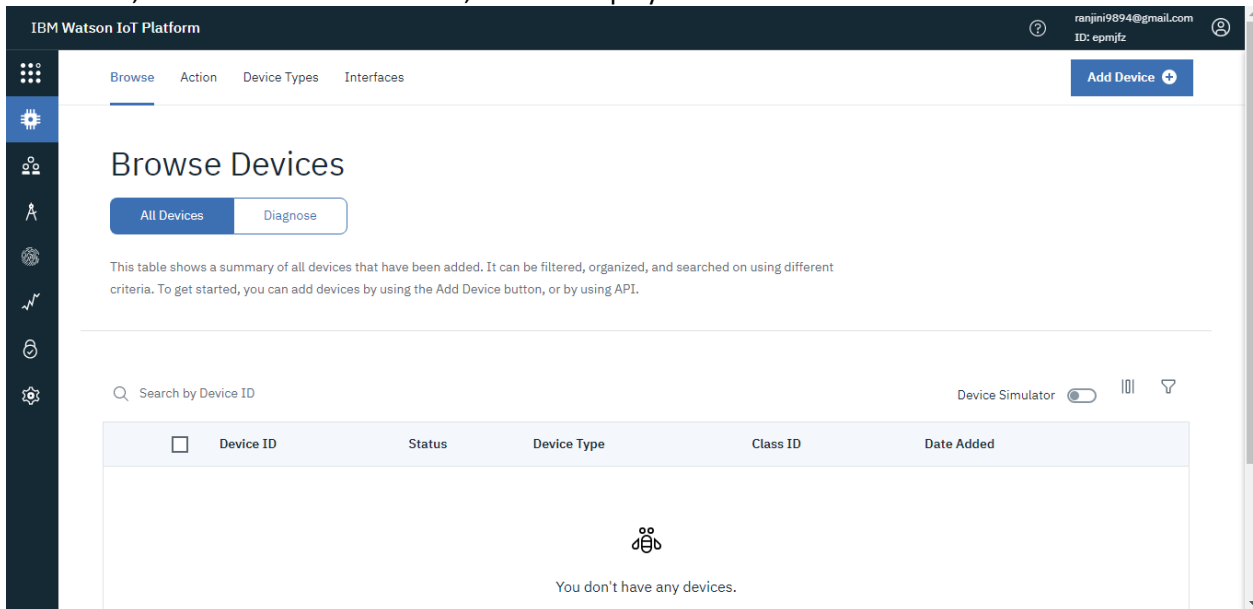
The screenshot shows the IBM login page. The IBM logo is in the top left corner. The main heading is 'Log in to IBM'. Below it, there is a form with the following elements: a label 'IBMid' with a 'Forgot IBMId?' link; a text input field containing 'ranjini9894@gmail.com'; a checkbox labeled 'Remember me' with an information icon; a blue 'Continue' button with a right arrow; a link 'Don't have an account? Create an IBMId'; and a link 'Need help? Contact the IBMId help desk'. The footer contains links for 'Contact', 'Privacy', 'Terms of use', 'Accessibility', and 'Cookie preferences', followed by the text 'Powered by IBM Security Verify'.

10. Once logged in the name will be displayed and it goes back to the first page

CREATE IBM WATSON IOT PLATFORM AND DEVICE



11. And gain clicking on the launch button will open this tab, the device will help in the creation of the Devices, the addition of the devices, and the display of details of the devices



12. The member tab is add the teams members to work in the platform

CREATE IBM WATSON IOT PLATFORM AND DEVICE

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjtz

+ Add Members

Browse Members

Type the member email to search for

This table shows a summary of the members of the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add members by clicking Add Members, or by using the API. For more information about members, see [Managing user access](#).

<input type="checkbox"/>	Email Address	Name	Role	Added By	Expires	
5 results						
<input type="checkbox"/>	ranjini9894@gmail.com	Ranjini.B	Administrator	-	-	⋮
<input type="checkbox"/>	nivi85656@gmail.com	Nivetha R.P	Developer	ranjini9894@gmail.com	-	⋮ <input checked="" type="checkbox"/>
<input type="checkbox"/>	g.princeimmanuel@gmail.com	Princeimmanuel.G	Analyst	ranjini9894@gmail.com	-	⋮ <input checked="" type="checkbox"/>
<input type="checkbox"/>	usman27401@gmail.com	Usman H	Operator	ranjini9894@gmail.com	-	⋮ <input checked="" type="checkbox"/>
<input type="checkbox"/>	logeshlogesh45948@gmail.com	Logesh M	Reader			⋮

0 Simulations running

13. This tab is used when you want to connect to some other platform and to integrate with others Services

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjtz

+ Generate API Key

Browse API Keys

Type the app description to search for

This table shows a summary of the API keys that have been added for the organization. It can be filtered, organized, and search on using different criteria. To get started, you can add API keys by clicking Generate API Key, or by using the API. For more information about adding API keys, see [API key connection](#).

<input type="checkbox"/>	Key	Description	Role	Expires	
2 results					
<input type="checkbox"/>	a-epmjtz-pj2rutz49w	API Key for the device simulator	Standard Application	-	⋮ <input checked="" type="checkbox"/>
<input type="checkbox"/>	a-epmjtz-u6vnlc1g5r	API Key for the device simulator	Standard Application	-	⋮ <input checked="" type="checkbox"/>

0 Simulations running

14. Click on the device tab and click on the add device button, then give the device type and device id and click next

CREATE IBM WATSON IOT PLATFORM AND DEVICE

The screenshot shows the 'Add Device' dialog box in the IBM Watson IoT Platform. The dialog has a title bar with the platform name and user information. Below the title bar is a navigation bar with tabs: 'Browse', 'Action', 'Device Types', and 'Interfaces'. The 'Add Device' dialog is a modal window with a close button (X) in the top right corner. It features a progress bar with four steps: 'Identity' (selected), 'Device Information', 'Security', and 'Summary'. The 'Identity' step is active, showing a message: 'Select a device type for the device that you are adding and give the device a unique ID.' Below this message are two input fields: 'Device Type' with a placeholder 'Select or create a device type...' and 'Device ID' with a placeholder 'Enter Device ID'. At the bottom right of the dialog are 'Cancel' and 'Next' buttons.

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjfr

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

Select a device type for the device that you are adding and give the device a unique ID.

Device Type Select or create a device type...

Device ID Enter Device ID

Cancel Next

Browse Devices

15. This page to enter extra details and of the hardware

The screenshot shows the 'Add Device' dialog box in the IBM Watson IoT Platform, now at the 'Device Information' step. The progress bar shows 'Identity' as completed and 'Device Information' as the current step. The 'Device Information' step is active, showing a message: 'You can modify the default device information and enter more information about the device for identification purposes.' Below this message are two columns of input fields. The left column contains: 'Serial Number' (placeholder: 'Enter Serial Number'), 'Model' (placeholder: 'Enter Model'), 'Description' (placeholder: 'Enter Description'), and 'Hardware Version' (placeholder: 'Enter Hardware Version'). The right column contains: 'Manufacturer' (placeholder: 'Enter Manufacturer'), 'Device Class' (placeholder: 'Enter Device Class'), 'Firmware Version' (placeholder: 'Enter Firmware Version'), and 'Descriptive Location' (placeholder: 'Enter Descriptive Location'). Below the left column is an 'Add Metadata' button with a plus icon. At the bottom right of the dialog are 'Back' and 'Next' buttons.

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjfr

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

You can modify the default device information and enter more information about the device for identification purposes.

Serial Number Enter Serial Number

Model Enter Model

Description Enter Description

Hardware Version Enter Hardware Version

Manufacturer Enter Manufacturer

Device Class Enter Device Class

Firmware Version Enter Firmware Version

Descriptive Location Enter Descriptive Location

Add Metadata +

Back Next

16. Clicking next it goes to the security where we do authentication token id

CREATE IBM WATSON IOT PLATFORM AND DEVICE

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform. The 'Security' step is active, showing two options for selecting a device authentication token: 'Auto-generated authentication token (default)' and 'Self-provided authentication token'. The 'Auto-generated' option is selected. Below the options, there is a text input field for the 'Authentication Token' with the placeholder text 'Enter an optional token'. A warning message states: 'Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.' A status bar at the bottom indicates '0 Simulations running'.

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjfz

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

There are two options for selecting a device authentication token.

Auto-generated authentication token (default)

Allow the service to generate an authentication token for you. Tokens are 18 characters and contain a mix of alphanumeric characters and symbols. The token is returned to you at the end of the device registration process.

Self-provided authentication token

Provide your own authentication token for this device. The token must be between 8 and 36 characters and contain a mix of lowercase and uppercase letters, numbers, and symbols, which can include hyphens, underscores, and periods. Do not use repeated characters, dictionary words, user names, or other predefined sequences.

Authentication Token

Make a note of the generated token. Lost authentication tokens cannot be recovered. Tokens are encrypted before being stored.

0 Simulations running

17. Clicking on next it goes to the summary of the device then click finish

The screenshot shows the 'Add Device' wizard in the IBM Watson IoT Platform, now at the 'Summary' step. The 'Summary' step is active, showing the device details: 'Device Type' is 'Child_Safety_Gadgets', 'Device ID' is '54321', and 'Security Token' is '12345678'. A 'View Metadata' button is visible. The status bar at the bottom indicates '0 Simulations running'.

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjfz

Browse Action Device Types Interfaces

Add Device

Identity Device Information Security Summary

Verify that the following information is correct then select Finish

Device Type
Child_Safety_Gadgets

Device ID
54321

[View Metadata](#)

Security Token
12345678

0 Simulations running

18. The device credentials will be displayed with all the details

CREATE IBM WATSON IOT PLATFORM AND DEVICE

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjtz

← Back

Device Drilldown - 54321

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	epmjfz
Device Type	Child_Safety_Gadgets
Device ID	54321
Authentication Method	use-token-auth
Authentication Token	12345678

⚠ 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](#)

Save the details of the device as the authentication tokens are non-recoverable and if misplaced then we have to create a new one.

19. Clicking on the device tab we can now see the added device. Clicking on it will display the other details.

It has different tabs like Identity, Device Information, State and login.

IBM Watson IoT Platform

ranjini9894@gmail.com
ID: epmjtz

Browse Action Device Types Interfaces

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

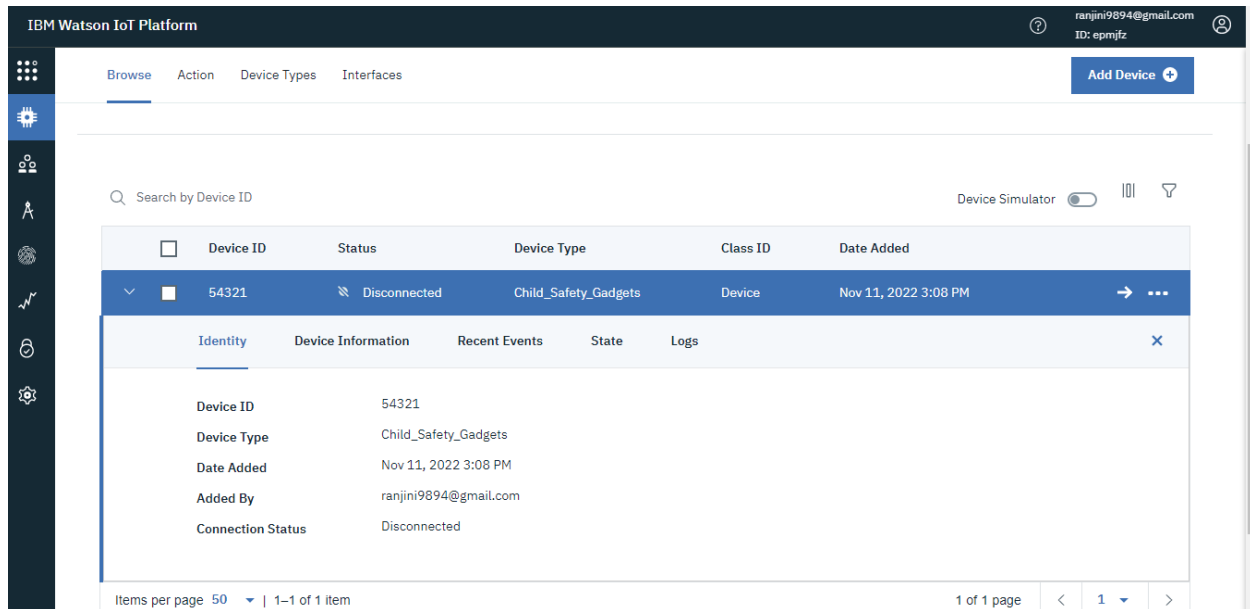
Device Simulator

Device ID	Status	Device Type	Class ID	Date Added
> 54321	Disconnected	Child_Safety_Gadgets	Device	Nov 11, 2022 3:08 PM

Items per page 50 | 1-1 of 1 item

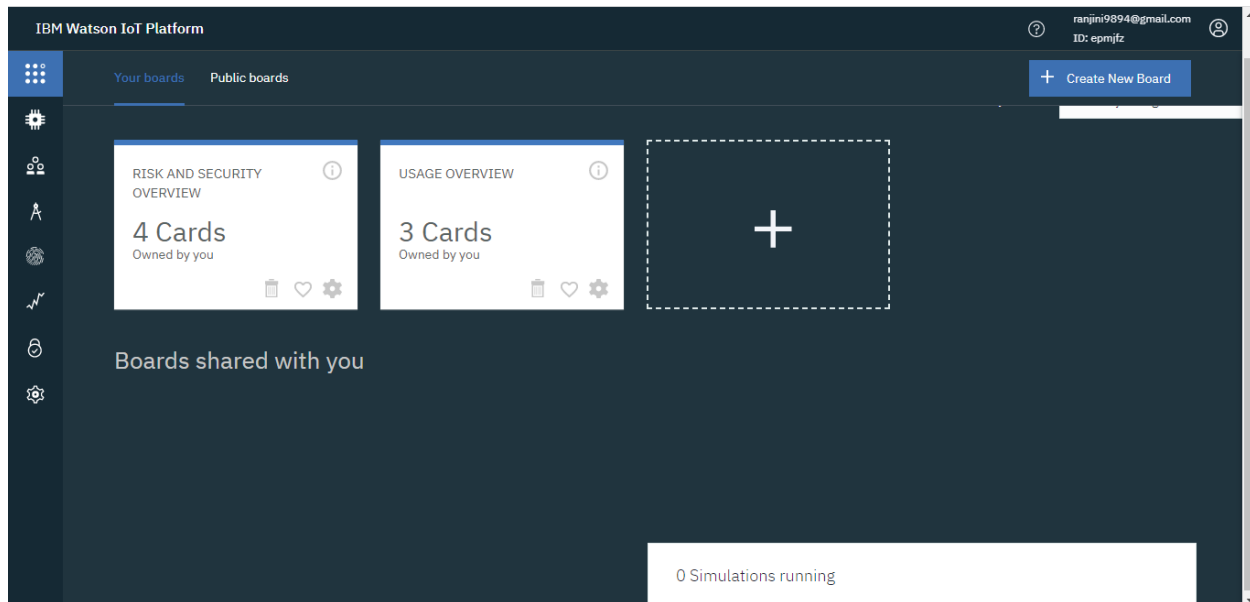
1 of 1 page

CREATE IBM WATSON IOT PLATFORM AND DEVICE



In a similar way, we can create n number of devices with a 50 per page limit as per the requirement of project.

20. The board will display card for the project



RESULT:

An IBM Watson cloud for IoT and a device is created

CREATE IBM WATSON IOT PLATFORM AND DEVICE