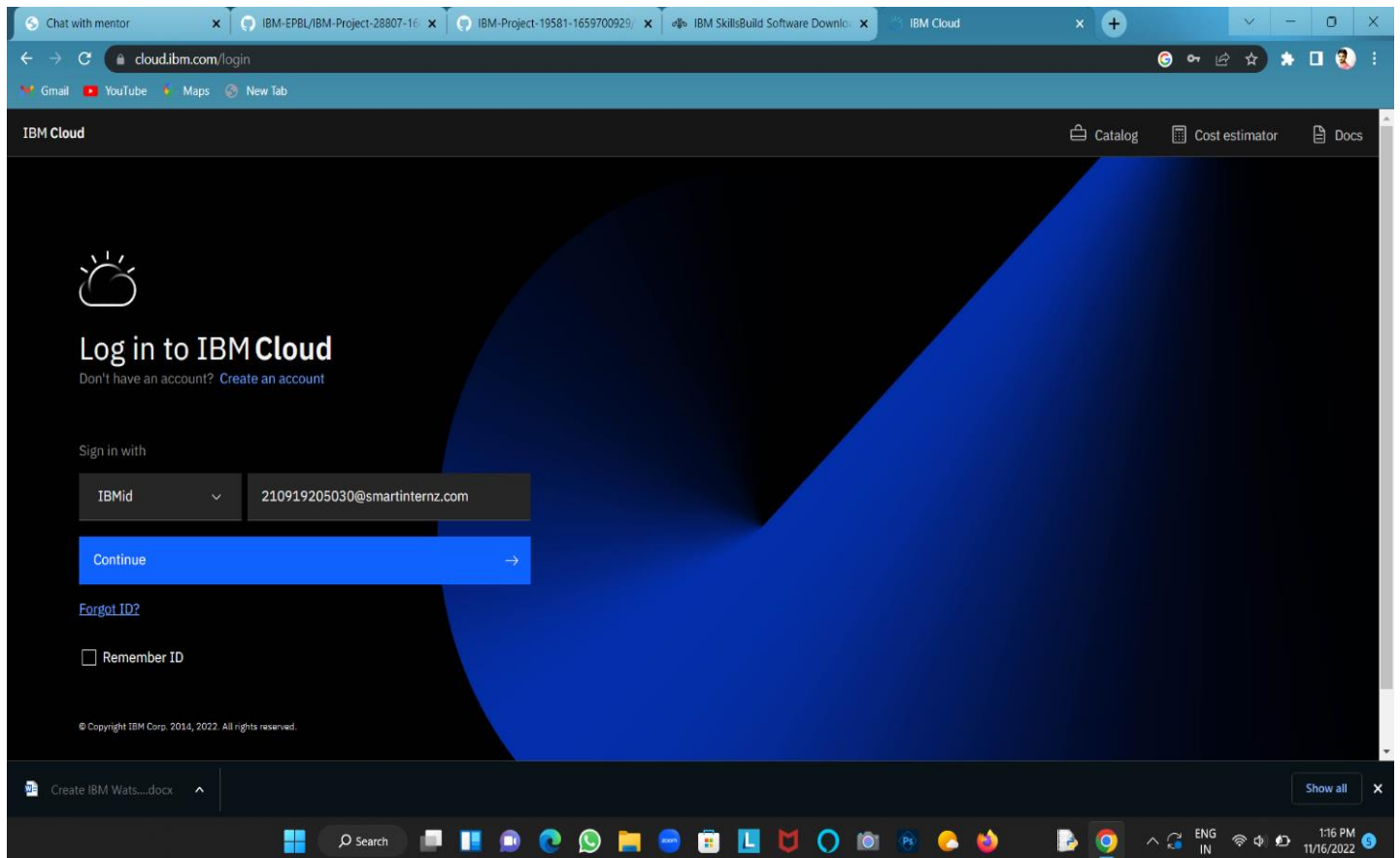


## IBM Watson IOT Platform and Device

<b>Team ID</b>	<b>PNT2022TMID25722</b>
<b>Topic</b>	<b>SMART SOLUTION FOR RAILWAYS</b>

### STEP 1



## STEP 2

The screenshot shows the IBM Cloud catalog page for the Internet of Things Platform. The browser address bar shows the URL `cloud.ibm.com/catalog/services/internet-of-things-platform`. The page header includes the IBM Cloud logo, a search bar, and navigation links for Catalog, Manage, and the user account (Manoj Kumar M's Acco...). The left sidebar contains a navigation menu with links for Category (Internet of Things), Compliance (IAM-enabled), Location (Frankfurt, London, Dallas, Washington DC), and Related links (Docs, Terms). The main content area displays a table of service plans. The table has three columns: Plan, Features, and Pricing. The 'Lite' plan is selected, showing features such as 'Includes up to 500 registered devices, and a maximum of 200 MB of each data metric' and 'Maximum of 500 registered devices'. The pricing is listed as 'Free'. Below the table, there is a section titled 'Configure your resource' with fields for Service name (Internet of Things Platform-br), Tags (Examples: env:dev, version-1), Select a resource group (Default), and Access management tags (Examples: access:dev, proj:version-1). On the right side, a Summary panel shows the selected plan details: Internet of Things Platform, Location: Frankfurt, Plan: Lite, Service name: Internet of Things Platform-br, and Resource group: Default. Below the summary, there is a checkbox for 'I have read and agree to the following license agreements:' with a link to 'Terms'. A 'Creating...' status indicator and an 'Add to estimate' button are also present.

IBM Cloud

Search resources and products...

Category  
Internet of Things

Compliance  
IAM-enabled

Location  
Frankfurt  
London  
Dallas  
Washington DC

Related links  
Docs  
Terms

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

Plan	Features	Pricing
Lite	<b>Includes up to 500 registered devices, and a maximum of 200 MB of each data metric</b> 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-br

Tags ⓘ  
Examples: env:dev, version-1

Select a resource group ⓘ  
Default

Access management tags ⓘ  
Examples: access:dev, proj:version-1

**Summary**

**Internet of Things Platform** Free

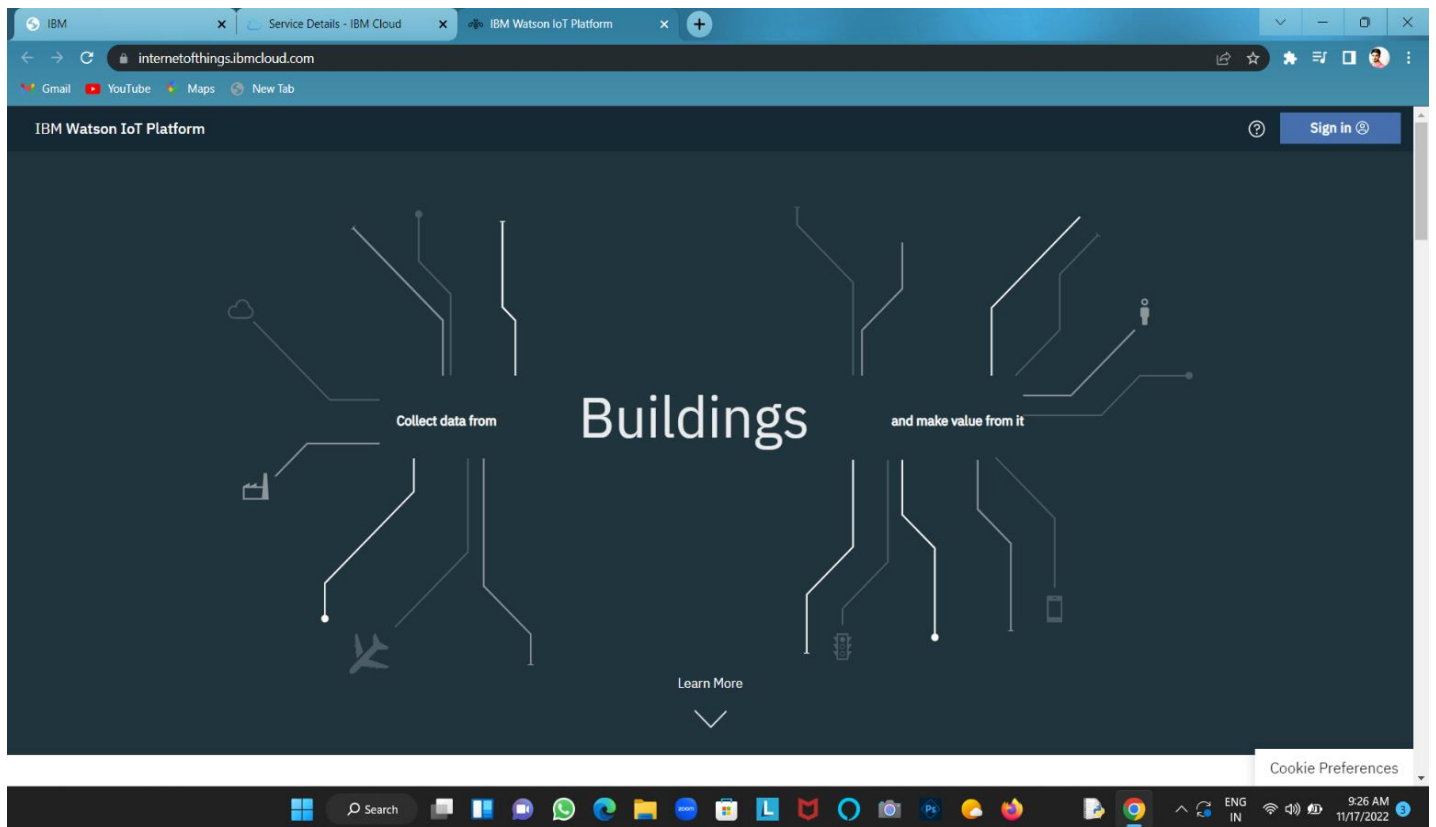
Location: Frankfurt  
Plan: Lite  
Service name: Internet of Things Platform-br  
Resource group: Default

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

Creating...

Add to estimate

## STEP 3



## STEP 4

The screenshot shows the IBM Watson IoT Platform interface in a web browser. The address bar displays the URL `5ach18.internetofthings.ibmcloud.com/dashboard/devices/browse/add`. The page title is "IBM Watson IoT Platform". The user is logged in as `210919205030@smartinternz.com` with ID `5ach18`.

The main content area is titled "Add Device" and features a four-step progress bar: 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 value "device" and "Device ID" with the value "14873". At the bottom right of the form are "Cancel" and "Next" buttons.

Below the "Add Device" form, the "Browse Devices" section is partially visible.

The Windows taskbar at the bottom shows the time as 9:38 AM on 11/17/2022, with system language set to ENG IN.

# STEP 5

IBM Watson IoT Platform

210919205030@smartinternz.com  
ID: 5ach18

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.

Authentication Token 936141487 ⓘ

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

Authentication tokens are encrypted before we store them.

### 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.

9:47 AM 11/17/2022

## STEP 6

The screenshot shows a web browser window with multiple tabs. The active tab is 'IBM Watson IoT Platform'. The address bar shows the URL: `5ach18.internetofthings.ibmcloud.com/dashboard/devices/drilldown/device:14873?returnTo=/devices/browse`. The page header displays the user's email `210919205030@smartinternz.com` and ID `5ach18`. The main content area is titled 'Device Drilldown - 14873' and features a sidebar with navigation options: Device Credentials (selected), Connection Information, Recent Events, State, Device Information, Metadata, Diagnostics, Connection Logs, and Device Actions. The 'Device Credentials' section contains a table with the following information:

Organization ID	5ach18
Device Type	device
Device ID	14873
Authentication Method	use-token-auth
Authentication Token	936141487

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 is provided to 'Find out how to add these credentials to your device'.

The Windows taskbar at the bottom shows the time as 9:48 AM on 11/17/2022, with system icons for language (ENG IN), network, and volume.

## STEP 7

[illegible]

## STEP 8

IBM Watson IoT Platform

210919205030@smartinternz.com  
ID: 5ach18

Browse IBM Cloud Apps

[+ 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	
1 result					
<input type="checkbox"/>	a-5ach18-dillqigbb	-	Standard Application	-	
<b>API Key Information</b> Access Control/Permissions					
Key	a-5ach18-dillqigbb		Last Edited By	210919205030@smartinternz.com	
Description	-		Expires	Never	
Date Added	Nov 17, 2022 9:53 AM				
Last Update	Nov 17, 2022 9:53 AM				



## STEP 9

The screenshot shows the IBM Watson IoT Platform interface. The main page is titled "Browse Devices" and includes a search bar and a table of devices. A modal window is open for creating a new event type.

**Device Type: device**

**Events 1** [New event type +](#)

Event type name:  [Send](#) [Delete](#)

**Schedule**

**Payload**

Specify the event payload in the editor window or by uploading a [CSV file](#).

```
0 {  
1   "randomNumber": random(0, 100)  
2 }  
3
```

[Upload a CSV file](#)

[What functions can I apply?](#)

[Cancel](#) [Save](#)

Device ID	Status	Device Type	Class ID	Date
14873	Disconnected	device	Device	Nov 1

# STEP 10

The screenshot displays the IBM Watson IoT Platform dashboard. The browser address bar shows the URL: `Sach18.internetofthings.ibmcloud.com/dashboard/devices/browse`. The dashboard header includes the IBM Watson IoT Platform logo and a user profile with email `210919205030@smartinternz.com` and ID `Sach18`.

The main content area shows a list of devices. The selected device is **14873**, with status **Disconnected**, device type **device**, class ID **Device**, and date added **Nov 17, 2022 9:48 AM**. A modal window titled **Recent Events** is open, displaying a table of recent events.

Event	Value	Format	Last Received
event	<code>{"data":90}</code>	json	a few seconds ago
event	<code>{"data":84}</code>	json	a minute ago

At the bottom of the dashboard, a status bar indicates **1 Simulation running**. The Windows taskbar at the bottom shows the time as **10:06 AM 11/17/2022**.