

Configure IBM Watson IoT Platform to Connect a Device

IBM Watson IoT Platform is a complete end-to-end solution for IoT needs. It integrates a bundled set of services to connect, capture, register, analyze, and archive your IoT devices and data. Can securely connect, collect and start processing IoT data from devices.

For more information and documentation on IBM Watson IoT Platform please see the following - https://www.ibm.com/support/knowledgecenter/en/SSQP8H/iot/kc_welcome.htm

For more information and documentation on IBM Cloud please see the following - https://cloud.ibm.com/docs

The first steps to capture data from devices is to create IBM Watson IoT Platform and IBM cloud accounts, register device type(s) and register device(s).

Registering a device involves classifying the device as a device type, giving the device a name, and providing device information. Then, you provide a connection token or accept a token that is generated by IBM Watson IoT Platform.

This document covers the above steps to get started with connecting devices. This document assumes no IBM Watson IoT Platform account exists. This document is part one of a series of documents. Part two will cover configuring the device to connect and connecting to IBM Watson IoT Platform.



The process is:

I. Create an IBM Watson IoT Platform account



II. Login to IBM Watson IoT Platform with newly created account



III. <u>Create an Organization</u>



IV. Create an IBM Cloud Account



V. Create a Resource



VI. Add a new Device Type



VII. Add a new Device



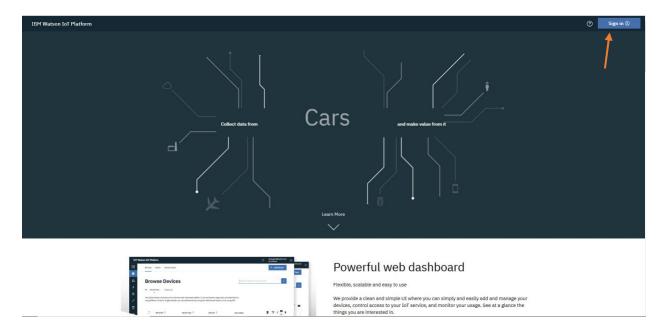
VIII. Generate API Keys (Optional)



I. Create an IBM Watson IoT Platform Account

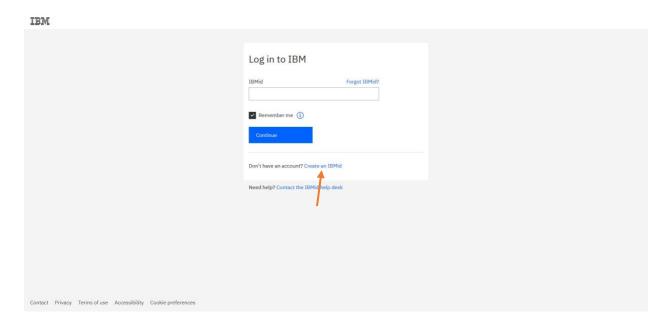
An account can be created from the IBM Watson IoT Platform Page - https://internetofthings.ibmcloud.com/

Click Sign in

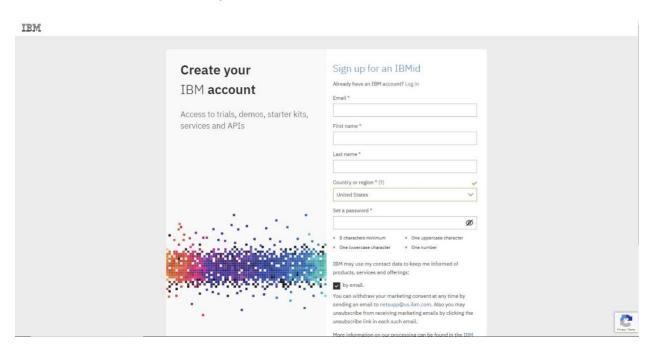




Click Create an IBMid

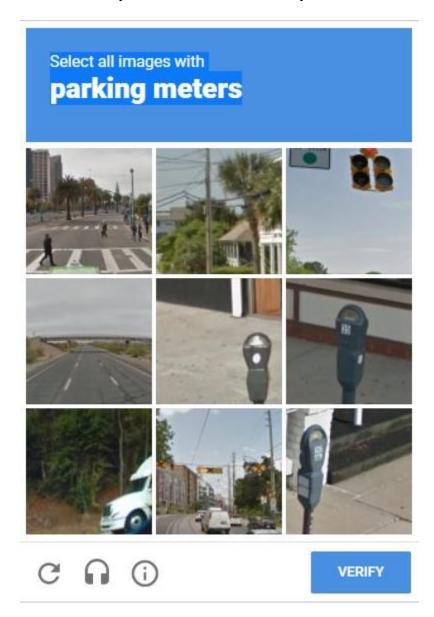


Enter the information on the page and click Continue





Follow the verify instructions and click Verify





Review the Privacy information and click Proceed

About your IBMid Account Privacy

This notice provides information about accessing your IBMid user account (Account). If you have previously been presented with a version of this notice, please refer to "Changes since the previous version of this notice" below for information about the new updates.

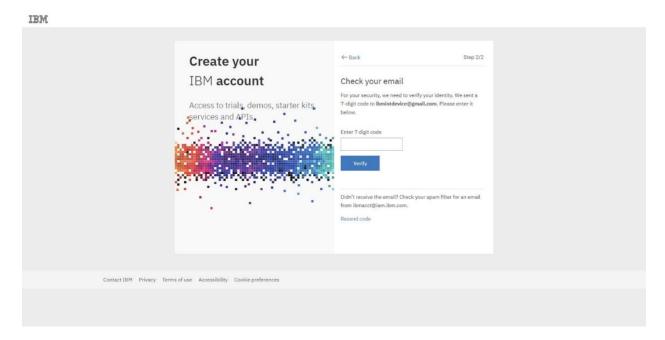
| + | Changes since the previous version of this notice |
|---|---|
| + | What data does IBM collect? |
| + | Why IBM needs your data |
| + | How your data was obtained |
| + | How IBM uses your data |
| + | How IBM protects your data |
| + | How long we keep your data |
| + | Your rights |

Proceed

This document was last updated on 2018-05-04



Enter the 7 digit code sent to the email address earlier entered and click Verify



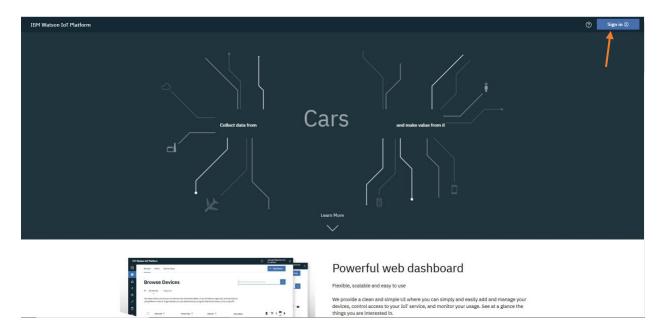
Now you can login to IBM Watson IoT Platform



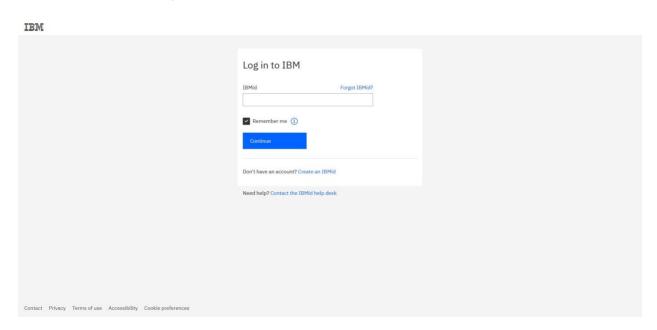
II. Login to IBM Watson IoT Platform

Go to URL - https://internetofthings.ibmcloud.com/

Click Sign in



Enter the IBMid earlier created and click Continue (Click Remember Me if you want)





Enter the Password earlier created and click Login (Click Remember Me if you want)

You are now logged into IBM Watson IoT Platform





Powerful web dashboard

We provide a clean and simple UI where you can simply and easily add and manage yo devices, control access to your IoT service, and monitor your usage. See at a glance the things you are interested in

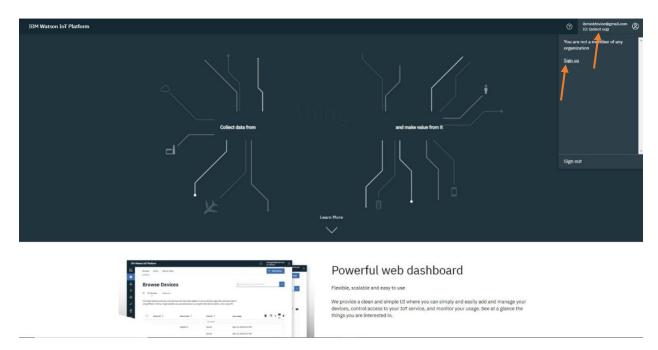


III. Create an Organization

Being logged into IBM Watson IoT Platform, Click Select org. The org that will be created is an Internet of Things resource in IBM Cloud. For information on resources see the following -

https://cloud.ibm.com/docs/resources?topic=resource#resource

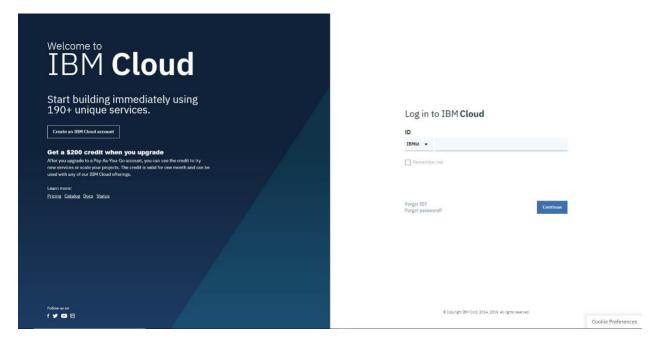
Click Sign up



This takes you to the IBM Cloud page



Enter your IBMid and click Continue (Click Remember Me if you want)



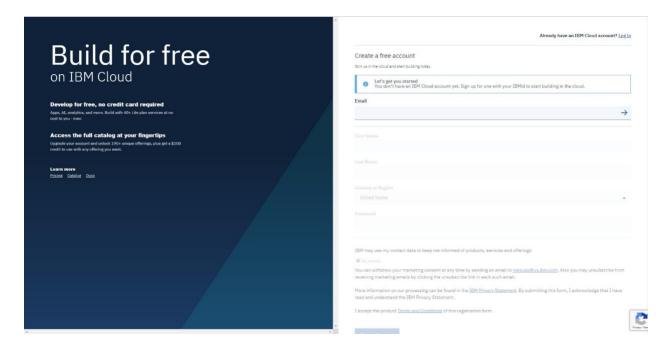
Enter Password and click Log in







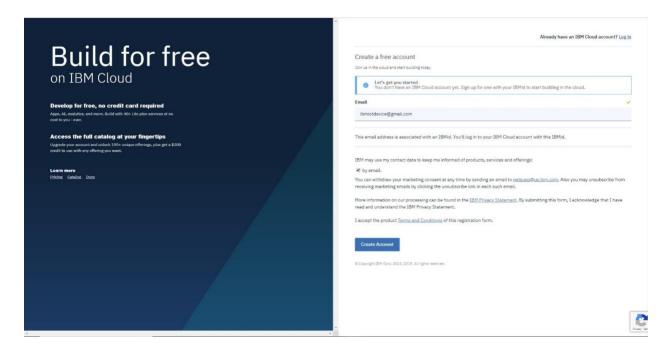
If you already have an IBM Cloud account, you will see your IBM Cloud Dashboard. You can skip the steps to create an account and go to the <u>Create Resource</u> section.





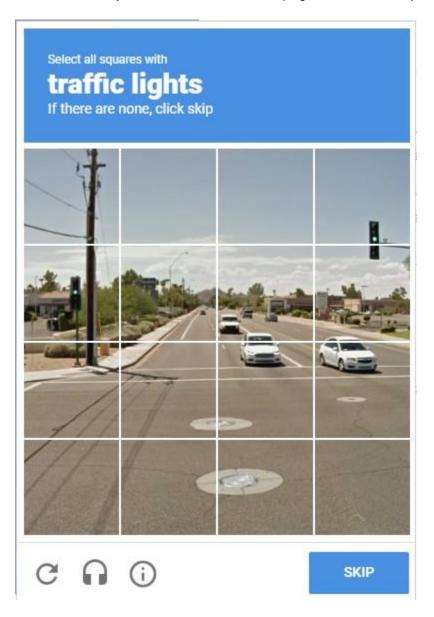
IV. Create an IBM Cloud Account

Enter the IBMid earlier created email and click the arrow (->) at the end of the field Click Create Account



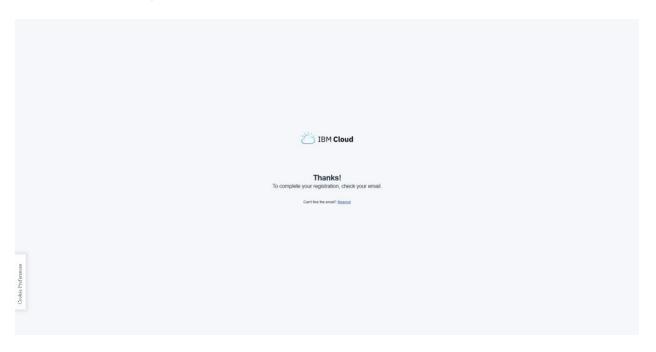


Follow the Verify instructions and click the appropriate button (skip or next) Follow the Verify instructions on the next page and click Verify

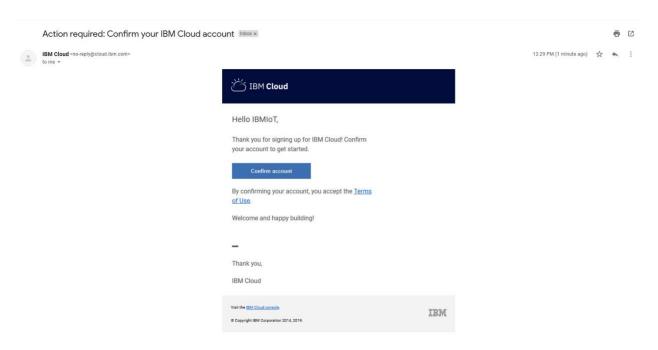




As instructed, check your email



From the email received, click Confirm account





Browser opens with the following message Click Log in



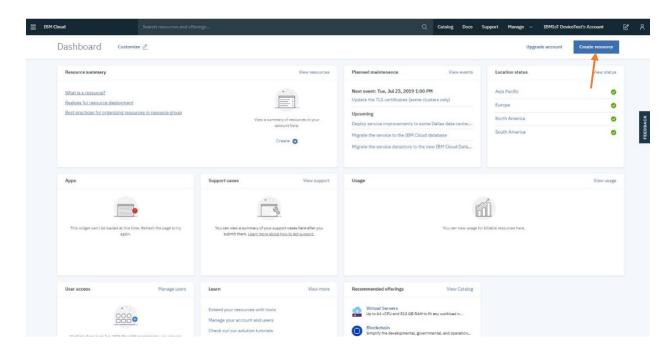
If prompted, enter IBMid and password
If you are in the same browser session, you will be logged into the IBM Cloud
Dashboard



V. Create a Resource

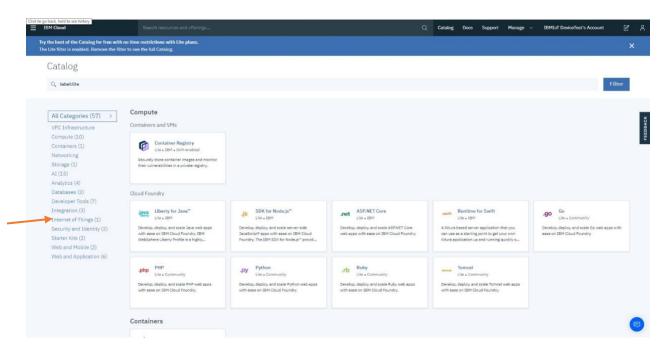
For information on resources see the following - https://cloud.ibm.com/docs/resources?topic=resource#resource

Click Create resource

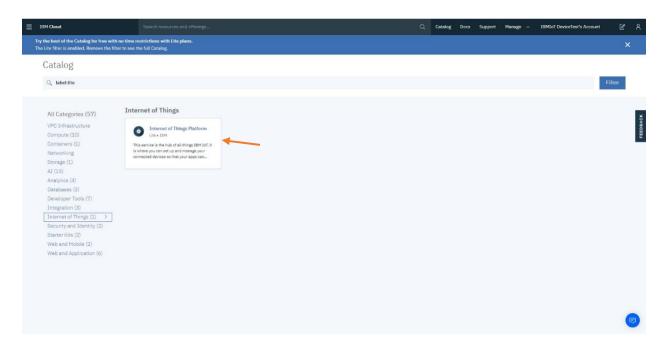




Click Internet of Things

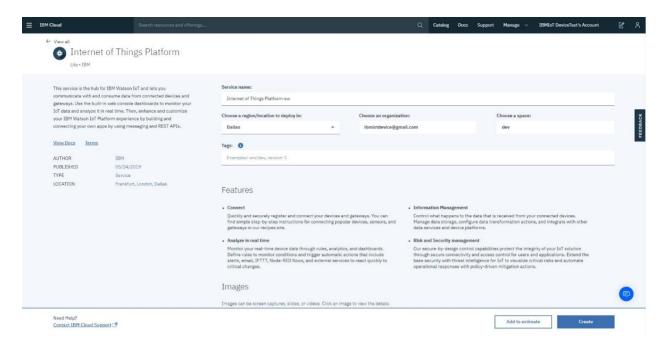


Click the Internet of Things Platform card



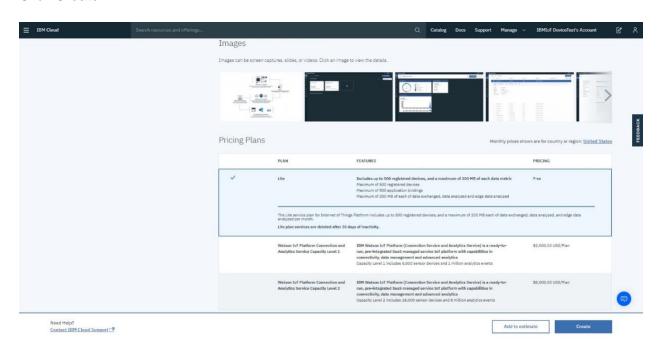


Accept the defaults or change the field values and scroll down

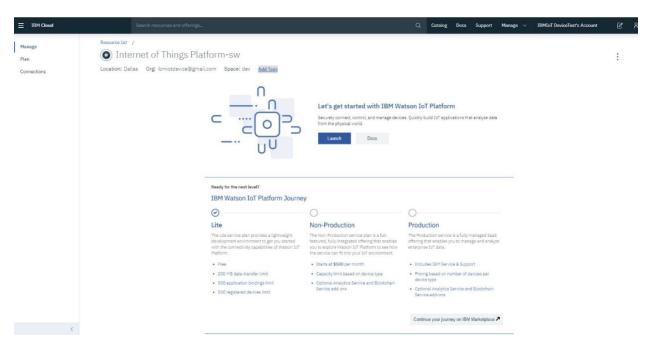


Select the pricing plan for your needs. Default is Lite which will be good for quick start and testing.

Click Create



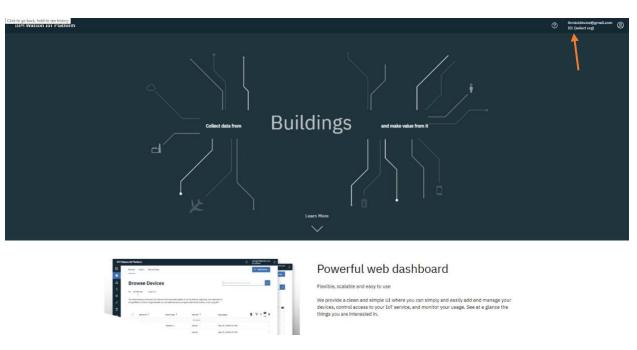




Go back to IBM Watson IoT Platform and Sign in if you are not already logged in https://internetofthings.ibmcloud.com/

or you can click Launch from the IBM Cloud page

Click select org





Select the newly created org





Powerful web dashboard

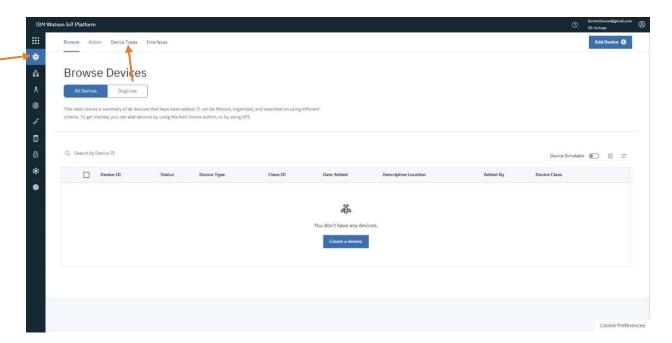
We provide a clean and simple UI where you can simply and easily add and manage you devices, control access to your IoT service, and monitor your usage. See at a glance the



VI. Add a new Device Type

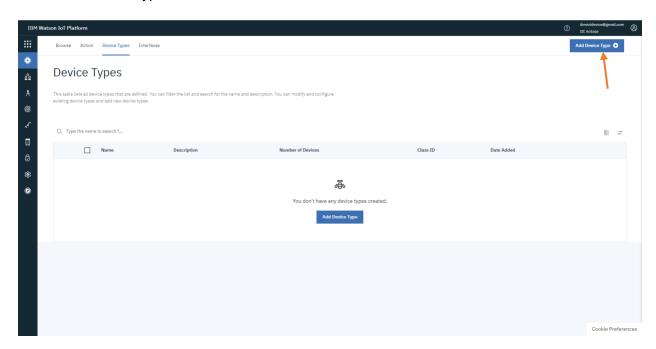
For information on device types see the following - https://www.ibm.com/support/knowledgecenter/SSQP8H/iot/platform/reference/regist ry/device_model.html

If not selected, click the Devices option and then click Device Types tab

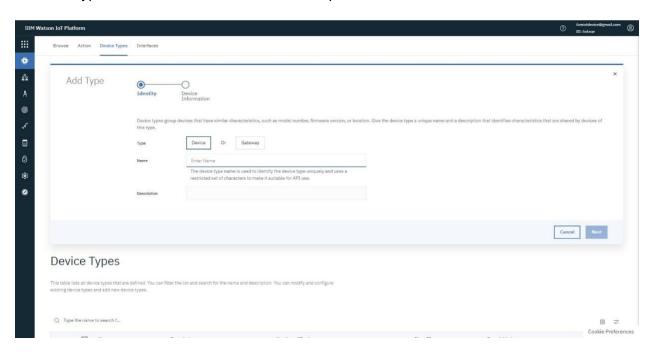




Click Add Device Type

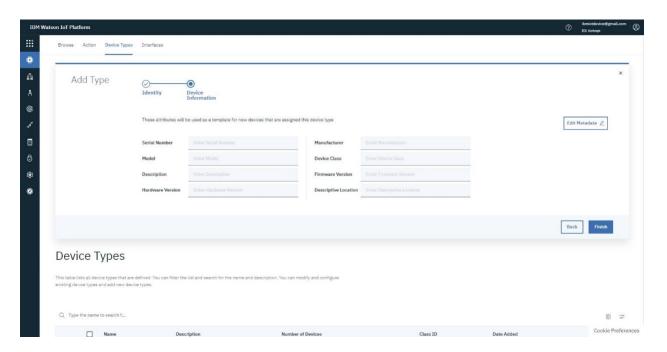


Select - Type - Device, enter a name and description. Click Next





(Optional) Populate fields for a template for like devices of this type. Click Finish



Device Type has been created.

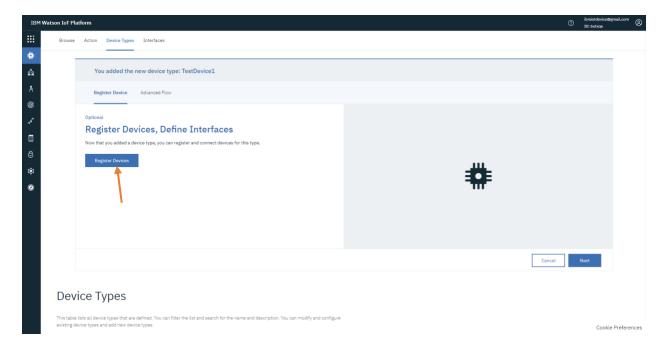


VII. Add a new Device

Now you register your device in IBM Watson IoT Platform. For information on devices see the following -

https://www.ibm.com/support/knowledgecenter/SSQP8H/iot/platform/reference/registry/device_model.html

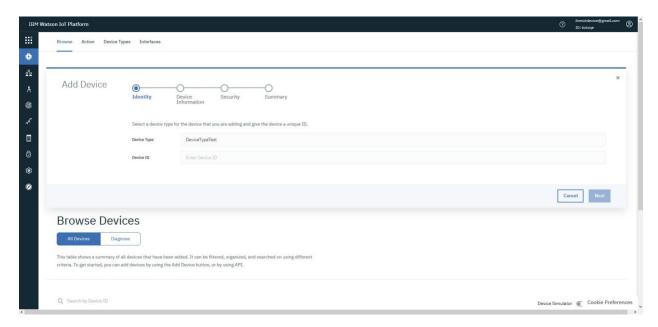
Click Register Devices





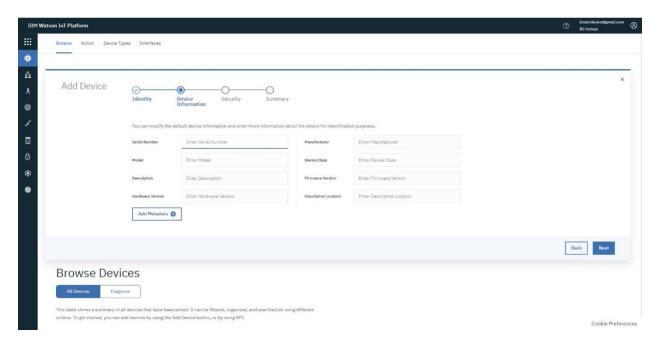
The newly created Device Type is the Device Type selected.

Add a Device ID, this can be anything to identify this device, and click Next





(Optional) Populate fields for the device. Click Next

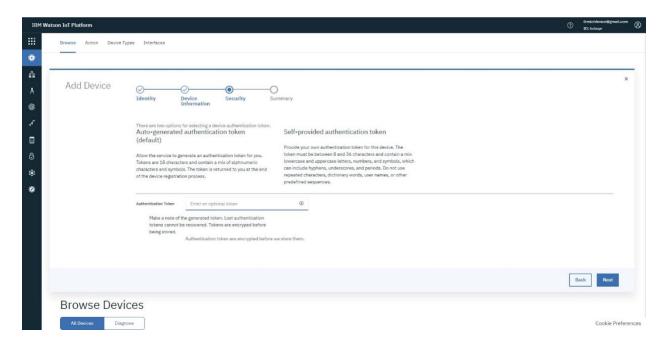




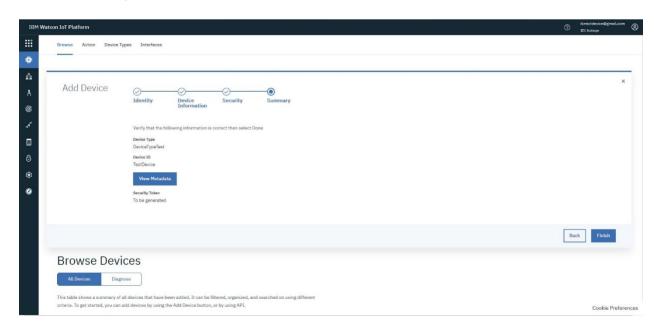
Click Next, this will auto-generate an authentication token or

If you want to specify a token value, enter an authentication token (make note of token value used).

Click Next



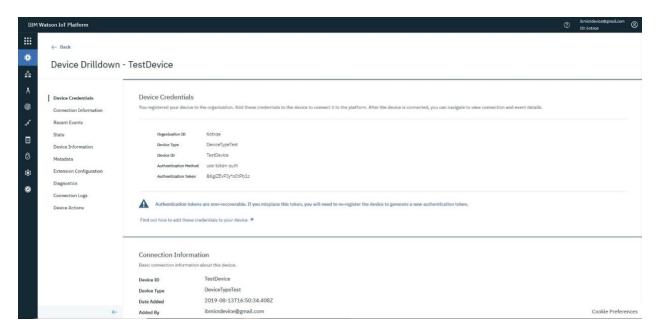
Review summary information and click Finish



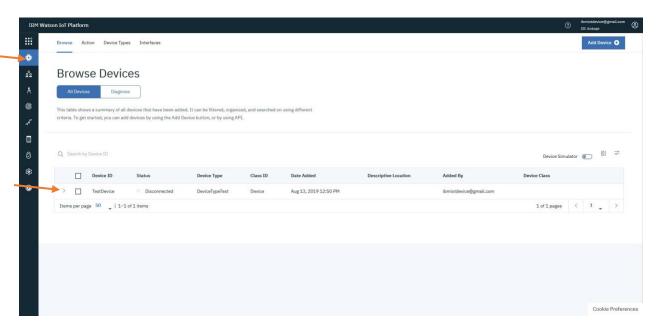


Make note of the Device Credentials, specifically the Authentication Token. This value is not recoverable.

Important Note: The authentication token value is not visible in the device details once created. This value is not recoverable. If you do not have the authentication token, you will need to register the device again. Note the value before leaving the screen.



Click Devices option and see that the device has been added. Device will show as Disconnected.





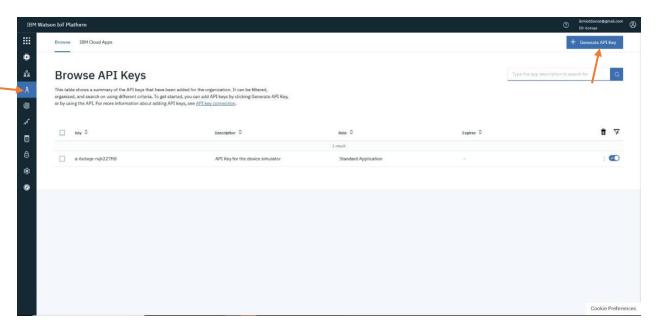
VIII. Generate API Keys (Optional)

If you will be making an API connection from the device to IBM Watson IoT Platform you can generate an API key to use.

Note: an MQTT connection does not require an API key.

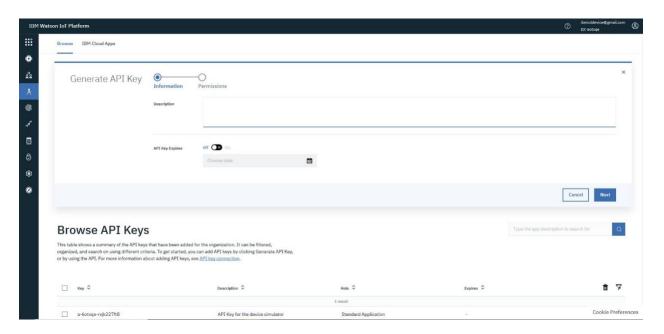
Click Apps option

Click generate API Key

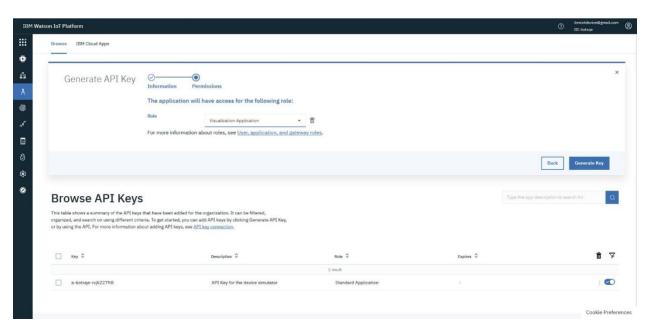




Add description and set expiration date if you want key to expire. Click Next



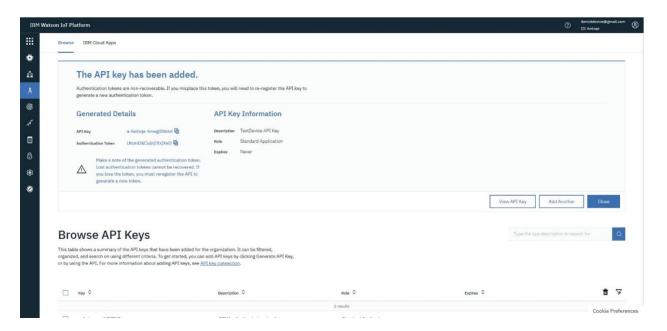
Select the appropriate role and click Generate Key





Make note of the Authentication token. This information is not recoverable. **Important Note**: The authentication token value is not visible in the API details once created. This value is not recoverable. If you do not have the authentication token, you will need to create the API key again. Note the value before leaving the screen.

Click Close



The device is now created in IBM Watson IoT Platform. The next step is to configure your hardware device and connect it to this configured IBM Watson IoT Platform environment. Please see part 2 - Connect Device to IBM Watson IoT Platform for device connection information.