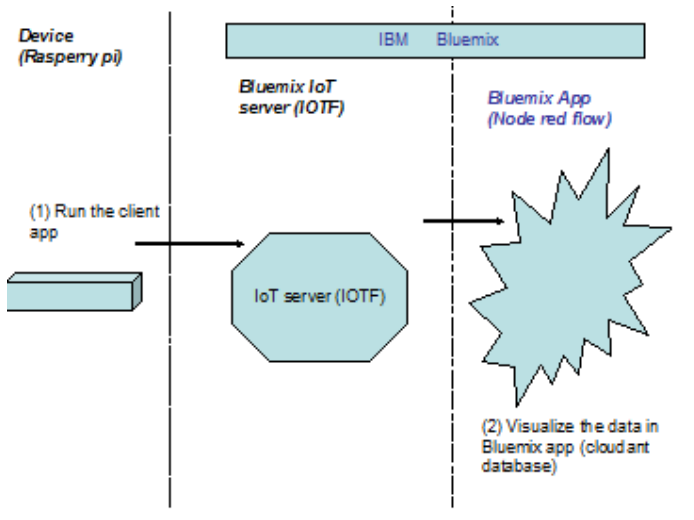


Quick start Lab :

Device data Quick view



Step A

1. Register/Login to Bluemix

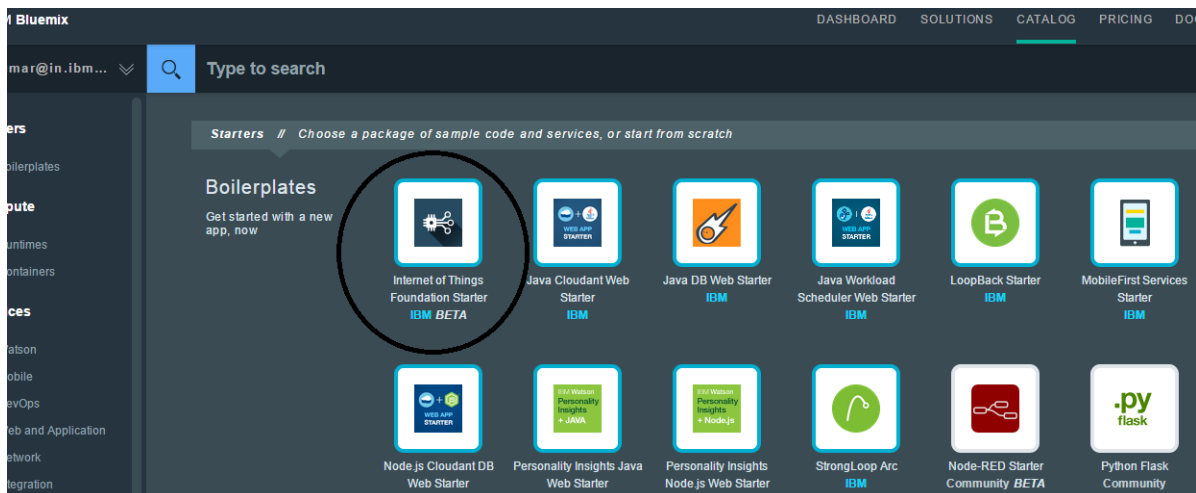
Register with Bluemix to get a 30days free bluemix trial using <https://ibm.biz/hackblue>

Or <https://bluemix.net>


NOTE: GCTC hackathon participants has to register with Bluemix only using the following URL

✓ **www.ibm.biz/gctc2016**

2. Deploy the Internet of Things Boiler plate (Catalog tab)



[DASHBOARD](#)
[SOLUTIONS](#)
[CATALOG](#)
[PRICING](#)
[DOCS](#)
[COMMUNITY](#)



Cloudant NoSQL DB

apps with ease. The IBM SDK for Node.js™ provides

[VIEW DOCS](#)

Monthly prices shown are for country or region: [India](#)

B-hours free). ₹4.2263 INR/GB-Hour

time.

Create an app:

Space:

Name:

Host:

Domain:

Selected Plan:

SDK for Node.js™

Cloudant NoSQL DB

[CREATE](#)

- (i) Name -> It should be an unique name. e.g Yourname123
- (ii) Space -> Create any space name
- (iii) Leave the rest to default value
- (iv) Click on CREATE
- (v) Application getting staged. At this stage, Node Red editor and Cloudant database is provisioned.
- (vi) Proceed to App overview (scroll down to see the button)

- 5 Deploy your app to Bluemix.


```
$ cf push chennaiiot
```
- 6 Access your app. See your changes here:


```
chennaiiot.mybluemix.net
```
- GS For detailed directions, see [Creating apps with Internet of Things starter application](#) and [Creating apps with Node-RED starter](#).



chennaiiot
Routes: chennaiiot.mybluemix.net

SDK FOR NODE.JS™

INSTANCES: 1
MEMORY QUOTA: 512 MB
AVAILABLE MEMORY: 128.0 MB

+ ADD A SERVICE OR API

+ BIND A SERVICE OR API

Cloudant NoSQL DB
chennaiiot-cloudantNoSQLDB
Shared

Show Credentials Docs

APP HEALTH
Your app is healthy

ACTIVITY LOG

1/29/16 11:21 PM
1/29/16 11:21 PM
1/29/16 11:21 PM

Estimate the cost

- (i) click on the route to open the Node Red editor (as shown above)

Node-RED in Bluemix

A visual tool for wiring the Internet of Things
IBM Internet of Things Foundation

Node-RED provides a browser-based editor that makes it easy to
together flows that can be deployed to the runtime in a single
click.

The version running here has been customized for the IBM Internet
of Things Foundation.

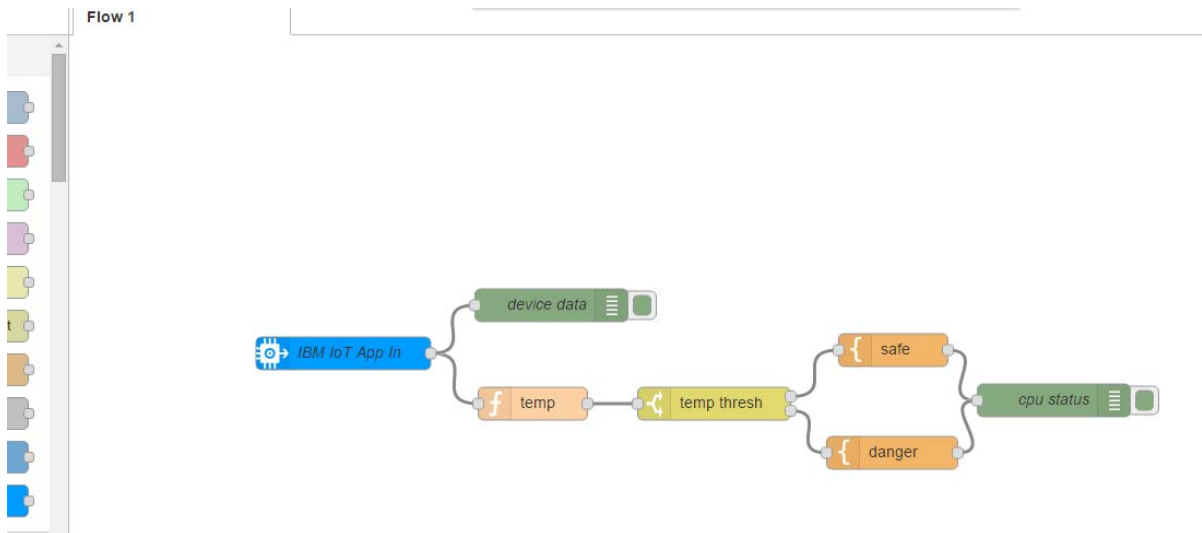
Go to your Node-RED flow editor

[Learn how to password-protect your instance](#)

[Learn how to customize Node-RED](#)

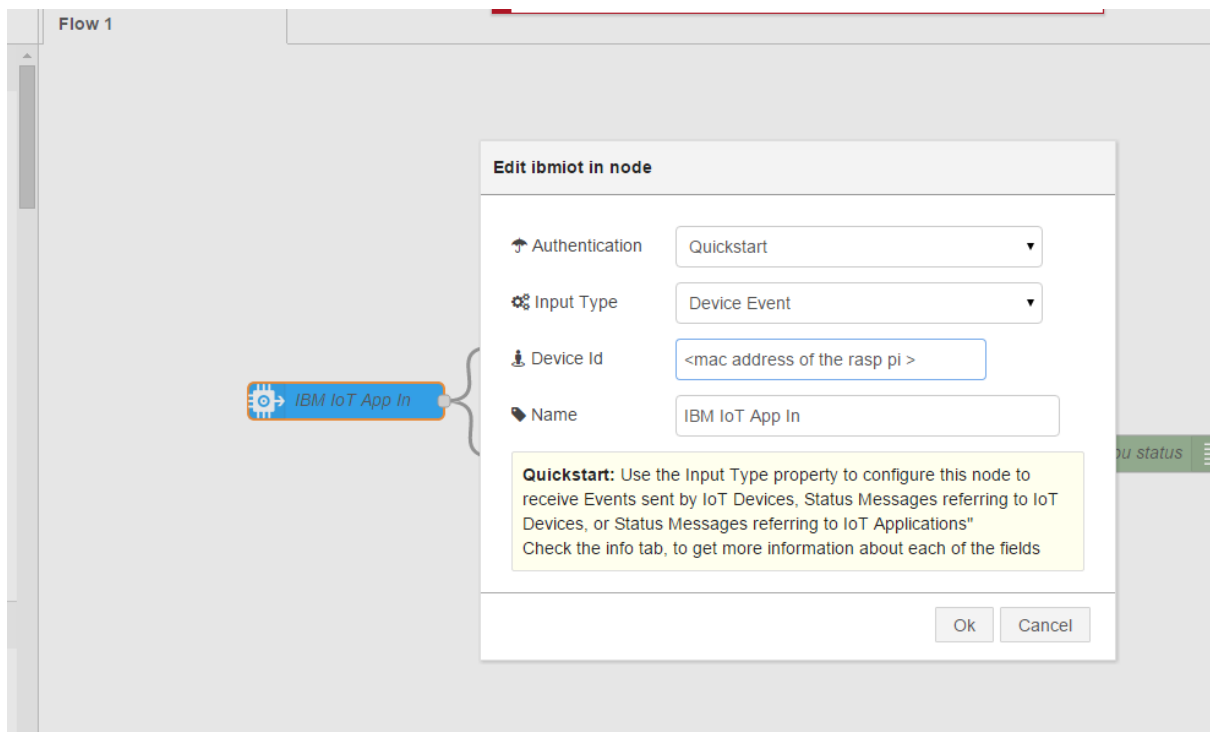
- (i) click on 'Go to your Node-RED flow editor'

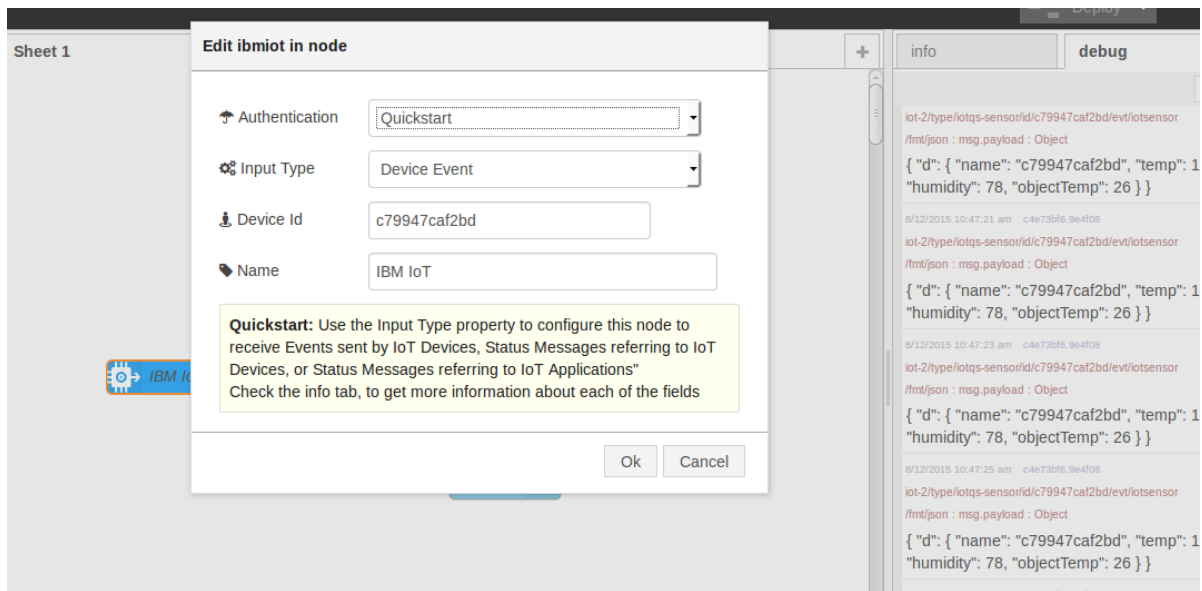
1. Click the link which will open the nodered in bluemix. (as shown below)



Note: What you see here are all different nodes which are wired to move the data from device to the Bluemix

- (i) click on “IBM IoT App In” node
- (ii) Provide the MAC address of the raspberry pi (to be shared by the event admin)
- (iii) Let the Authentication be “Quickstart” and Input type be “Device Event”





STEP B

Moving the data from device to the Bluemix cloud

- (i) Go back to the recently deployed IoT Bluemix Boilerplate application , as shown in STEP A
(In our case, it will be xxxx123 .mybluemix.net)
- (ii) Deploy the node red application , as shown below:

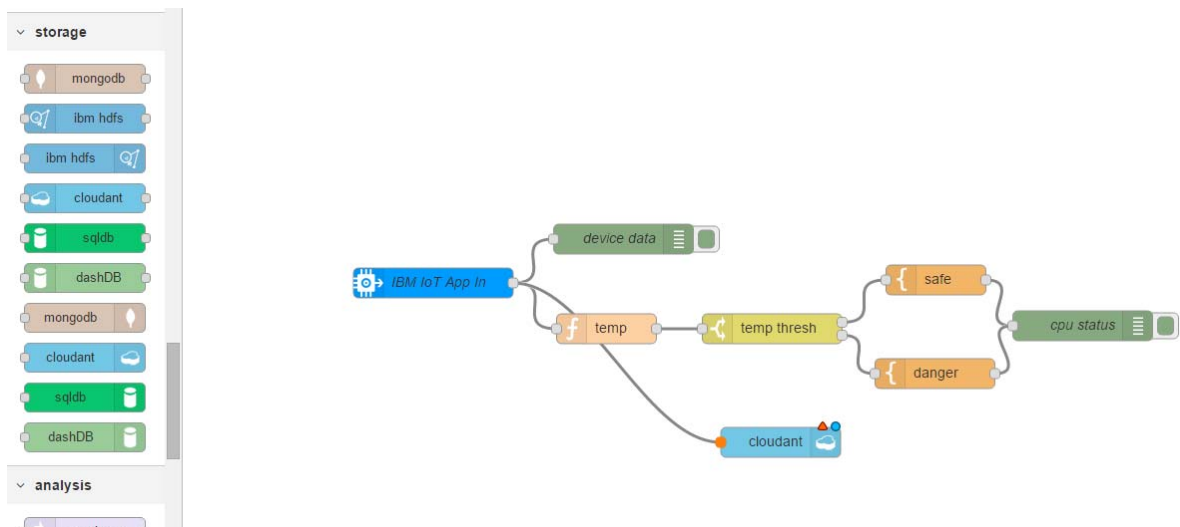


Note: The data from the raspberry pi displayed in the Bluemix nodered console, as shown above

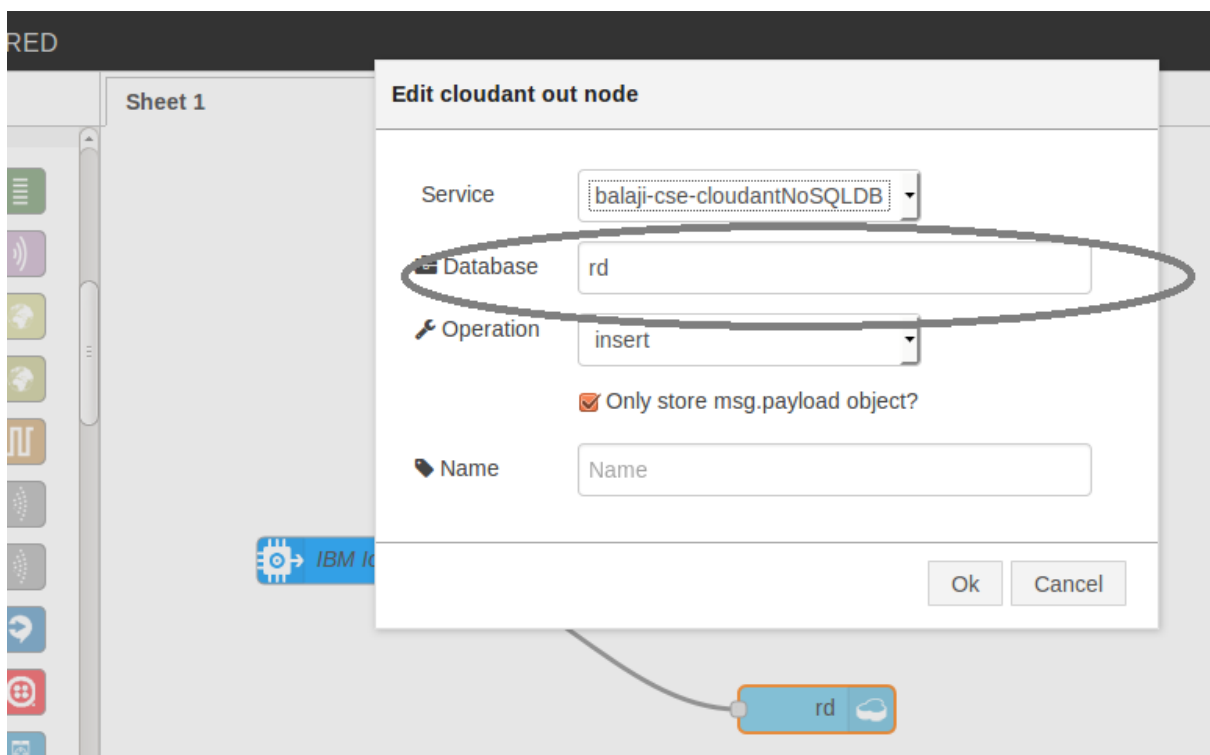
STEP 4

Moving the data to cloudant database


- (i) Go to the node red editor, add cloudant node as shown below



Click on the cloudnat node and provide the database name.In our case “rd”



View the data in cloudant console by going back to Bluemix application console


SDK FOR NODE.JS™

INSTANCES:
1

MEMORY QUOTA:
512

AVAILABLE MEMORY:
128.0 MB


SAVE

RESET

(MB per Instance)

+ ADD A SERVICE OR API

+ BIND A SERVICE OR API



Cloudant NoSQL DB
chennaiiot-cloudantNoSQLDB
Shared

Show Credentials

APP HEALTH

✓ Your app is healthy

ACTIVITY

1/29/16 11:21 PM

1/29/16 11:21 PM

1/29/16 11:21 PM

Estimate the cost

le8f-441fa56c-ba840dce4dcf-bluemix.cloudant.com/dashboard.html







Databases

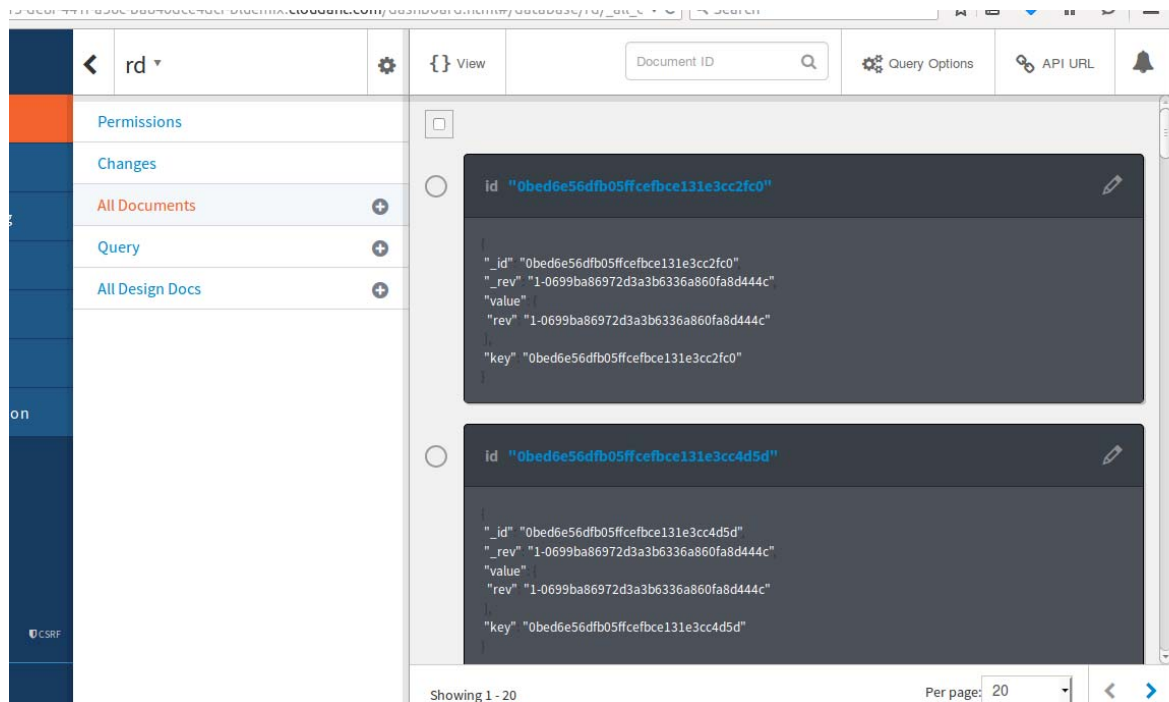
Database name

Add New Database

API URL

Your Databases

Name	Size	# of Docs	Update Seq	Actions
nodered	18.4 KB	3	9	 
rasp-data	0 bytes	0	0	 
rd	2.4 KB	19	1	 



That's it...now the data flows down to cloudant database

Explore:

- (i) Tweet once the temperature goes above say 35 deg
- (ii) Similarly try sending the data to other databases

Proceed to next lab on how to register the device and send command back to the device...

Prepared by IBM EcoD India Team @ Feb 2016

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