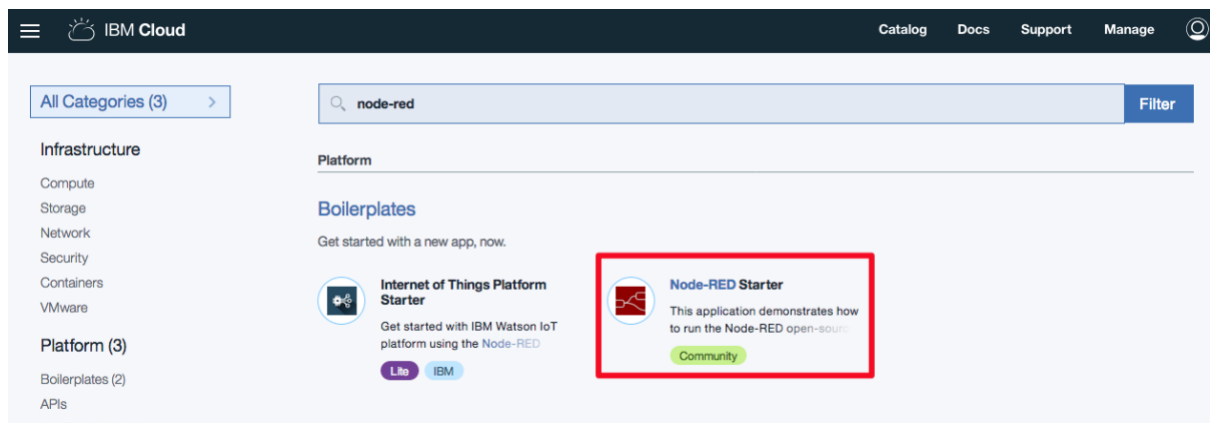


## IBM Cloud Node-Red:

- <https://console.bluemix.net/docs/starters/Node-RED/nodered.html>
- Sample REST API with Node-Red <https://www.youtube.com/watch?v=GlkoFnK8hXY>
- Sample Node-Red using CloudantDB as database:  
<https://www.youtube.com/watch?v=FXm2Bk-tClc>

When you select Node-RED Start in IBM Cloud it would create all needed components including CloudantDB:



You can get more info on how to register on IBM Cloud (Bluemix) and create a Bluemix CloudantDB instance, configure REST APIs at the document “**Sample bluemix cloudantDB connect:direct integration**” and you can use the same document (page 6) to create a *pemdata* named database in CloudantDB Dashboard:

<https://www.ibm.com/developerworks/community/forums/html/topic?id=3140d580-8579-48fc-89ed-f070dfc219b9>

Sample Node-Red process created by me (You can skip the username password process in the first time you clicked the route link in UI since this is a proof of technology)

Node-RED interface showing a flow named "Flow 1".

**Input Nodes:**

- inject
- catch
- status
- link
- mqtt
- http
- websocket
- tcp
- mqttlight
- ibmiot

**Output Nodes:**

- debug
- link
- mqtt
- http response
- websocket
- tcp
- udp

**Flow 1 Diagram:**

```
graph LR;
    A["[post] /add"] --> B["http"];
    A --> C["pemdata"];
    C --> D["msg.payload"];
    E["catch all"] --> D;
    F["[get] /all"] --> G["pemdata"];
    G --> H["http"];
```

The flow consists of two main parts. The top part starts with a "[post] /add" node connected to an "http" node and a "pemdata" node. The "pemdata" node is connected to a "msg.payload" node. A "catch all" node is also connected to the "msg.payload" node. The bottom part starts with a "[get] /all" node connected to a "pemdata" node, which is then connected to an "http" node.

**add** is HTTP POST REST API

**Edit http in node**

Delete

Cancel

Done

▼ node properties

Method

POST

☒ Accept file uploads?

URL

/add

Name

Name

**pemdata** is the CloudantDB storage (pemdata database can be created at your IBM CloudantDB Dashboard)

**Edit cloudant out node**

Delete

Cancel

Done

▼ node properties

Service

testapp1-cloudantNoSQLDB

Database

pemdata

Operation

insert

☒ Only store msg.payload object?

Name

Name

all is to get all documents In the database via HTTP GET REST API

**Edit http in node**

Delete

Cancel

Done

▼ node properties

Method

GET

URL

/all

Name

Name

pemdata after all is the CloudantDB get info returns all documents in database

**Edit cloudant in node**

Delete

Cancel

Done

▼ node properties

Service

testapp1-cloudantNoSQLDB

Database

pemdata

Search by

all documents

Name

Name