

# PROJECT DEVELOPMENT PHASE

## SPRINT 1 – CREATION AND CONFIGURATION OF

## IBM CLOUD SERVICES

### STEP – 1 : CREATING IBM WATSON PLATFORM AND IOT DEVICE

The screenshot shows the IBM Watson IoT Platform interface. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. The 'Device Simulator' toggle is turned off. The main content area displays a table with columns: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. The first row shows device ID 12345, status 'Disconnected', device type 'NodeMCU', class ID 'Device', and date added 'Oct 30, 2022 12:53 PM'. Below the table, the 'Identity' tab is selected, showing device information: Device ID (12345), Device Type (NodeMCU), Date Added (Oct 30, 2022 12:53 PM), Added By (sec19ec115@sairamtap.edu.in), and Connection Status (Disconnected). The bottom of the page shows 'Items per page 50' and '1-1 of 1 item'.

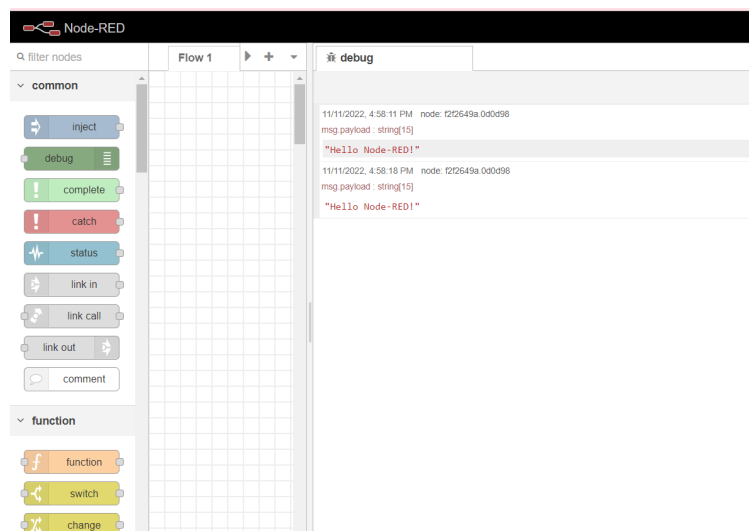
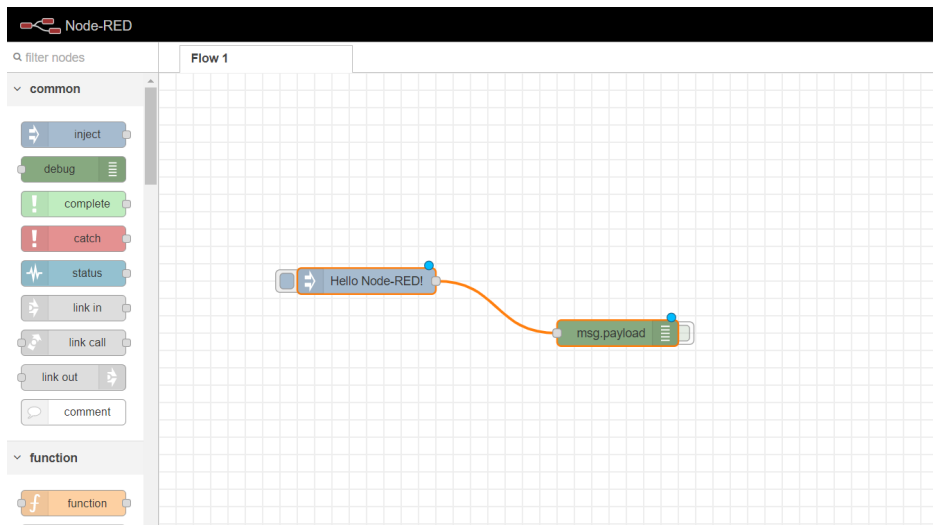
Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Disconnected	NodeMCU	Device	Oct 30, 2022 12:53 PM	

Device ID	Device Information	Recent Events	State	Logs
Device ID	12345			
Device Type	NodeMCU			
Date Added	Oct 30, 2022 12:53 PM			
Added By	sec19ec115@sairamtap.edu.in			
Connection Status	Disconnected			

The screenshot shows the IBM Watson IoT Platform interface, similar to the previous one, but with the 'Recent Events' tab selected. The main content area displays a table with columns: Event, Value, Format, and Last Received. The table shows three rows of events, all with the value '{"MESSAGE":"ALERT"}' and format 'json', received 'a few seconds ago'. The bottom of the page shows 'Items per page 50' and '1-1 of 1 item'.

Event	Value	Format	Last Received
msg	{"MESSAGE":"ALERT"}	json	a few seconds ago
msg	{"MESSAGE":"ALERT"}	json	a few seconds ago
msg	{"MESSAGE":"ALERT"}	json	a few seconds ago

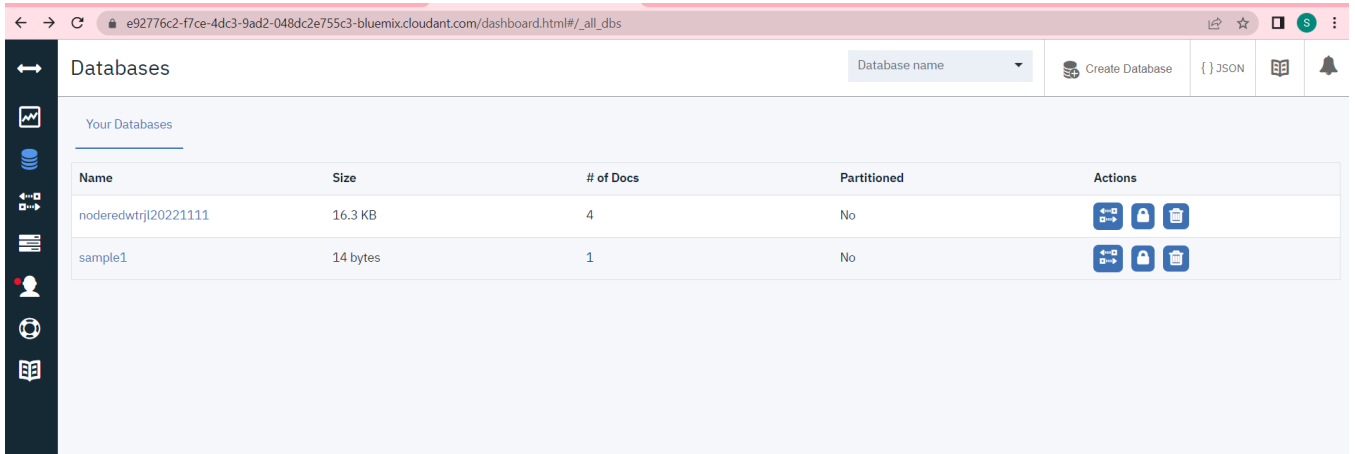
## STEP – 2 : CREATING NODE – RED SERVICE









The image shows the IBM Cloud Resource list table. The table has columns for Name, Group, Location, Product, Status, and Tags. The resources are listed under the 'Developer tools' group.

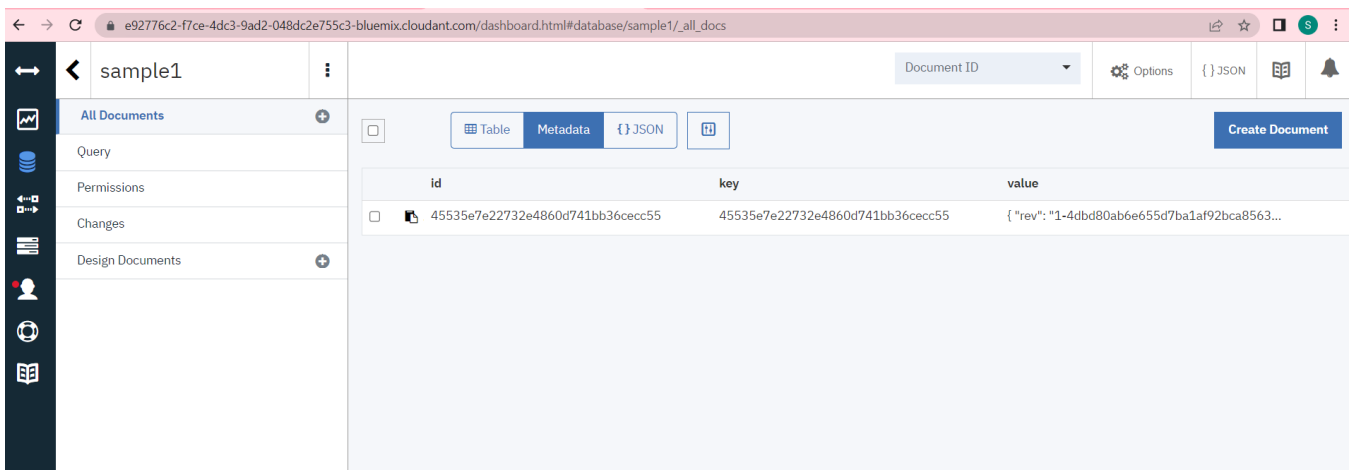
Name	Group	Location	Product	Status	Tags
Continuous Delivery	Default	London	Continuous Delivery	Active	—
Node RED ACKYP 2022-11-11	Default	Global	Cloud Application	—	—
Node RED CDBUQ 2022-11-11	Default	Global	Cloud Application	—	—

## STEP – 3 : CREATING A DATABASE IN CLOUDANT DB




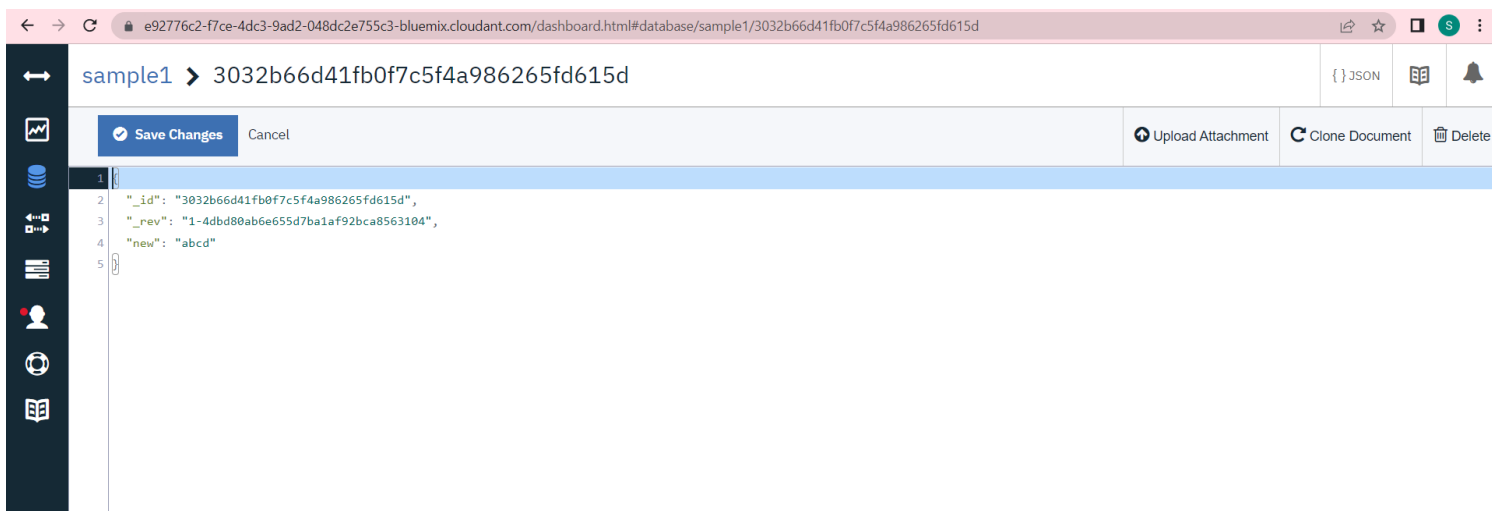
The screenshot shows the Cloudant Databases dashboard. The URL is `e92776c2-f7ce-4dc3-9ad2-048dc2e755c3-bluemix.cloudant.com/dashboard.html#/_all_dbs`. The page title is "Databases". There is a "Database name" dropdown, a "Create Database" button, and buttons for JSON, a book icon, and a bell icon. Below the header, there is a section "Your Databases" with a table listing databases.

Name	Size	# of Docs	Partitioned	Actions
noderedwtrj20221111	16.3 KB	4	No	  
sample1	14 bytes	1	No	  



The screenshot shows the Cloudant database "sample1" dashboard. The URL is `e92776c2-f7ce-4dc3-9ad2-048dc2e755c3-bluemix.cloudant.com/dashboard.html#database/sample1/_all_docs`. The page title is "sample1". There is a "Document ID" dropdown, "Options" button, and buttons for JSON, a book icon, and a bell icon. Below the header, there is a section "All Documents" with a table listing documents.

id	key	value
 45535e7e22732e4860d741bb36cecc55	45535e7e22732e4860d741bb36cecc55	{ "rev": "1-4dbd80ab6e655d7ba1af92bca8563..." }



The screenshot shows the Cloudant database "sample1" document editor. The URL is `e92776c2-f7ce-4dc3-9ad2-048dc2e755c3-bluemix.cloudant.com/dashboard.html#database/sample1/3032b66d41fb0f7c5f4a986265fd615d`. The page title is "sample1 > 3032b66d41fb0f7c5f4a986265fd615d". There is a "Save Changes" button, a "Cancel" button, an "Upload Attachment" button, a "Clone Document" button, and a "Delete" button. Below the header, there is a text area containing the following JSON document:

```
1 {
2   "_id": "3032b66d41fb0f7c5f4a986265fd615d",
3   "_rev": "1-4dbd80ab6e655d7ba1af92bca8563104",
4   "new": "abcd"
5 }
```

# STEP – 4 : CREATING A CLOUD OBJECT STORAGE SERVICE

IBM Cloud

Cloud Object Storage

Storage instances

Cloud Object Storage-v6

**Buckets**

Integrations

Endpoints

Usage details

Service credentials

Connections

Plan

Search resources and products...

Catalog Manage Sakthi Meenakshi S's A...

Buckets

Buckets serve as containers for objects, and can be individually configured in terms of their location, resiliency, billing rates, security, and object lifecycle rules.

Search

Create bucket +

Name	Public access ①	Location ①	Storage class	Created
samplestoragesakthi	No	jp-tok	Smart Tier	2022-11-11 6:41 PM

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Catalog Manage Sakthi Meenakshi S's A...

Storage / Cloud Object Storage-v6 / samplestoragesakthi

Transfers Details Actions...

Objects Configuration Permissions

If you're seeing more usage than expected, versions count towards your usage or you may have incomplete uploads [Learn more](#)

Prefix filter

Upload

Object name	Archived ①	Size	Last modified
Technology Architec...t Crop Protection.pdf		892.9 KB	2022-11-11 6:43 PM

Drag and drop files (objects) here or click to upload

IBM Cloud

Cloud Object Storage

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Catalog Manage Sakthi Meenakshi S's A...

Service credentials

You can generate a new set of credentials for cases where you want to manually connect an app or external consumer to an IBM Cloud service. [Learn more](#)

Search credentials...

New credential +

Key name	Date created
Service credentials-1	2022-11-11 6:52 PM

```
{
  "apikey": "ffJDa9S-BXS1PwgtcNQQuoRgy_bnteThCPdDPNdLy5L",
  "endpoints": "https://control.cloud-object-storage.cloud.ibm.com/v2/endpoints",
  "iam_apikey_description": "Auto-generated for key crn:v1:bluemix:public:cloud-object-storage:global:a/9fbed82b073f4ea2877ad3f0a23d254f:7a4c4600-7289-4edf-bfb7-467f16936677:resource-key:5b04b0b2-9715-454d-863c-783838590dff",
  "iam_apikey_name": "Service credentials-1",
  "iam_role_crn": "crn:v1:bluemix:public:iam::::serviceRole:Writer",
  "iam_serviceid_crn": "crn:v1:bluemix:public:iam-identity:a/9fbed82b073f4ea2877ad3f0a23d254f::serviceid:ServiceId-2eb76212-6d36-4c25-96cc-ec155df140ec",
  "resource_instance_id": "crn:v1:bluemix:public:cloud-object-storage:global:a/9fbed82b073f4ea2877ad3f0a23d254f:7a4c4600-7289-4edf-bfb7-467f16936677::"
}
```