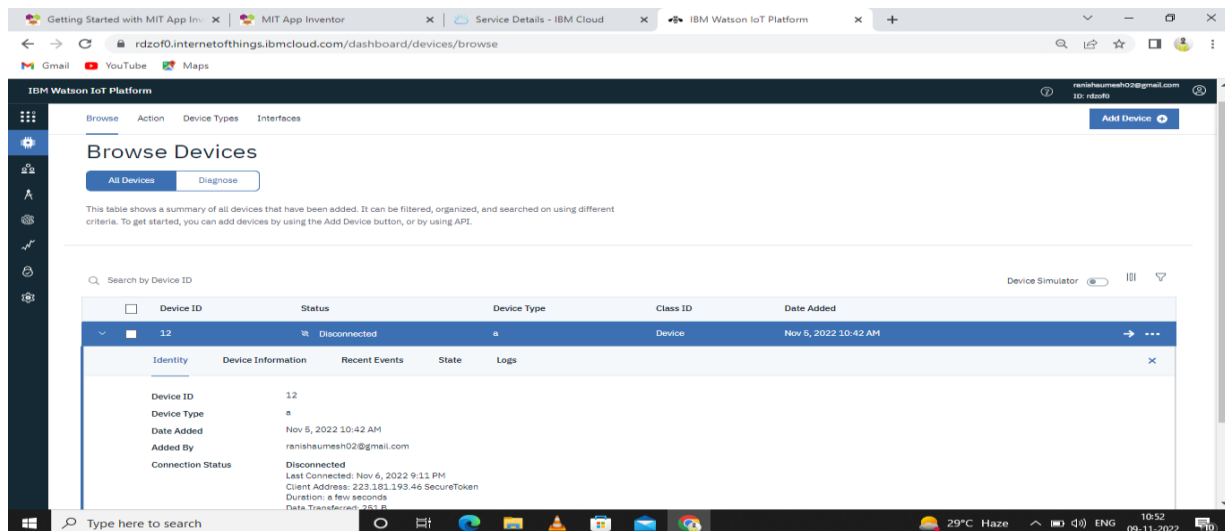
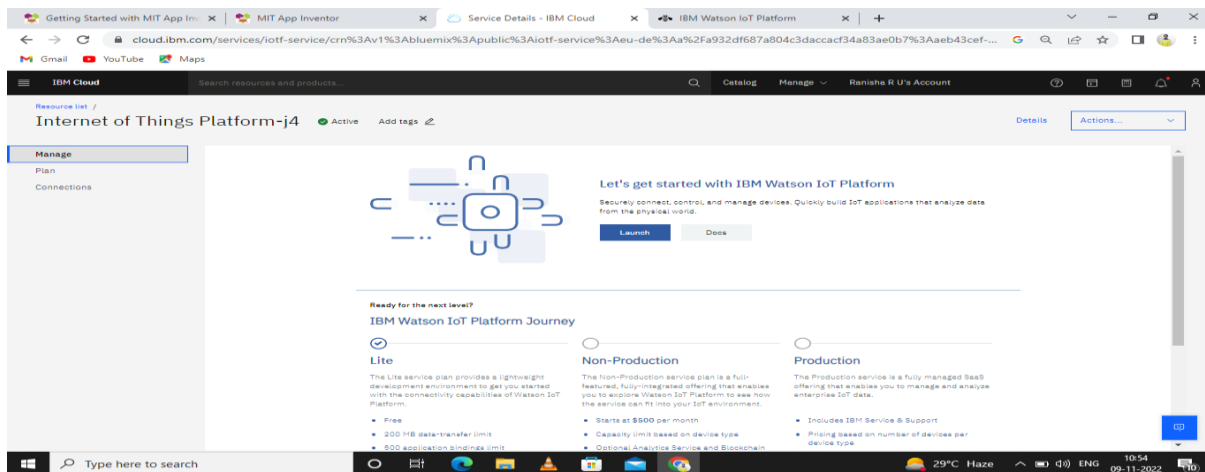


Create And Configure IBM Cloud Services

TEAMID:- PNT2022TMID51485

Created IBM Watson IOT Platform And Devices:



Create Node Red Services:

The screenshot shows the IBM Cloud console interface for a Node-RED service instance named "Node RED JNERK 2022-11-05". The instance is in a "Running" state. The left sidebar contains navigation links: "Getting started", "Overview", "Runtime", "Connections", "Logs", "API Management", and "Autoscaling". The main content area displays the following information:

- Health:** 100% (1/1 instance(s) are running).
- Instances:** A slider showing 1 instance, with a total of 256 instances available.
- Runtime cost:** \$0.00 (Current charges for billing period: Nov 1, 2022 - Nov 30, 2022).
- Connections (1):** A single connection to "node-red-jnerk-2022--cloudant-1467631084904-2854".
- Runtime:** A circular gauge showing 256 total MB allocation, with 1.75 GB still available.

The bottom of the screen shows a Windows taskbar with the search bar and various application icons.

The screenshot shows the Node-RED web interface for the "Node-RED : node-red-jnerk-2022" service. The interface displays a flow diagram with the following components:

- Flow 1:** A flow starting with an "IBM IoT" node connected to a "msg payload" node. The "msg payload" node is connected to two "temp" nodes and one "humid" node. Below this, there is a "function" node connected to an "http" node.
- Light on:** A button node connected to an "IBM IoT" node, which is connected to a "msg payload" node. The "msg payload" node is connected to two "Light Off" nodes and one "http" node.
- Light Off:** A button node connected to an "IBM IoT" node, which is connected to a "msg payload" node. The "msg payload" node is connected to two "Light On" nodes and one "http" node.

The left sidebar shows the "filter nodes" section with "common" and "function" categories. The right sidebar shows the "debug" section with "all nodes" and "all" filters.

The bottom of the screen shows a Windows taskbar with the search bar and various application icons.

Created Database In Cloudant DB:

The screenshot shows the IBM Cloud Catalog page for Cloudant. The page is titled "Cloudant" and describes it as "A scalable JSON document database for web, mobile, IoT, and serverless applications." The "Create" button is highlighted. The "Summary" section on the right shows the "Cloudant Lite" plan, which is free and includes 20 Reads/sec, 10 Writes/sec, 5 Global Queries/sec, and 1 GB Storage. The "Create" button is also visible in the bottom right corner.

Cloudant

A scalable JSON document database for web, mobile, IoT, and serverless applications.

Create About

Select an offering

Cloudant

IBM Cloudant is a fully managed JSON document database that offers independent serverless scaling of throughput capacity and storage.

Lite plan available

Select an environment

Multitenant Dedicated

Your instance will be running securely on environments with shared resources.

Available regions

Summary

Cloudant Lite Free

20 Reads/sec Free

10 Writes/sec Free

5 Global Queries/sec Free

1 GB Storage Included

Create

Add to estimate

The screenshot shows the IBM Cloud Service Details page for the service "node-red-jnerk-2022--cloudant-1667631084904". The page is titled "Service credentials" and provides instructions on how to generate a new set of credentials. The "Service credentials" section is active, and the "New credential" button is visible. The "Key name" and "Date created" columns are shown, with the key name "28d9278b-b3a0-4c22-b6ab-b5b1649eba8a" and the date "2022-11-05 12:21 PM". The "API key" and "Password" fields are also visible.

node-red-jnerk-2022--cloudant-1667631084904

Active Add tags

Details Actions...

Manage

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](#)

Plan

Connections

Search credentials...

New credential

Key name Date created

28d9278b-b3a0-4c22-b6ab-b5b1649eba8a 2022-11-05 12:21 PM

{

"apikey": "dnKKhYTY9XAK-YQP08vbJOF4KIK1DctCvuenhxz0e-xe",

"host": "22ba8c1a-4dd2-4add-b5df-f93b784f5e59-blumix.cloudantnosqldb.appdomain.cloud",

"iam_apikey_description": "Auto-generated for key czn:v1:blumix:public:cloudantnosqldb:eu-gb:a/a932df687a804c3daccacf34a83ae0b7:4ece37be-a89c-4dc6-b9d6-317e08f3b602:resource-key:b1a022e0-0f66-4f0d-ab66-9f4d1d655a27",

"iam_apikey_name": "28d9278b-b3a0-4c22-b6ab-b5b1649eba8a",

"iam_role_czn": "cn:v1:blumix:public:iam:::serviceRole:Writer",

"iam_serviceid_czn": "cn:v1:blumix:public:iam-identity:a/a932df687a804c3daccacf34a83ae0b7:::serviceid:ServiceId-2fbae76d-aaa6-42e5-894c-9b1c-e5146c92",

"password": "fd28fd7874a3800b56b75c4efce28e96",

"port": 443,

"url": "https://apikey-v2-104701kzm8r1w107440xn37yqhgul4cba9khuprncap6:fd28fd7874a3800b56b75c4efce28e96@22ba8c1a-4dd2-4add-b5df-f93b784f5e59-blumix.cloudantnosqldb.appdomain.cloud",

"username": "apikey-v2-104701kzm8r1w107440xn37yqhgul4cba9khuprncap6"

}

Create A Cloud Object Storage Services:

This screenshot shows the IBM Cloud console interface for creating a new Cloud Object Storage service. The browser tabs include 'Welcome to Project! Delight', 'DMI ENGINEERING COLLEGE', 'IBM', 'Applications | Clarifai Portal', and 'Cloud Object Storage - IBM'. The URL is cloud.ibm.com/objectstorage/create. The main content area displays three pricing plans: Life, Standard, and One Rate. The 'Life' plan is highlighted as the selected option. To the right, a 'Summary' panel shows the configuration: Cloud Object Storage, Region: Global, Plan: Life, Service name: Cloud Object Storage-b9, and Resource group: Default. Below the plans, a 'Configure your resource' section allows setting the service name and resource group. A 'Create' button is visible in the summary panel.

Plan	Features	Pricing
Life	Life plan instance is free to use for Storage capacity up to 25 GB per month. Life plan instance is used for trial, and can be easily upgraded to Standard plan for unlimited scalability and full functionality. Only one Life plan instance is allowed per account. The Life plan instance includes up to 25 GB of storage capacity, 2,000 Class A (PUT, COPY, POST, and LIST) requests, 20,000 Class B (GET and all others) requests, 10 GB of data retrieval, 5GB of egress (public outbound bandwidth) each month. These thresholds apply to the aggregate total across all storage class buckets. Life plan services are deleted after 30 days of inactivity.	Free
Standard	Standard plan is our most popular Pay-as-You-Go pricing plan. There is no minimum fee. This plan meets the requirements of most of the enterprise workloads.	View storage class pricing
One Rate	One Rate plan offers a flat monthly charge that includes capacity, and built-in allowances for outbound bandwidth and data access. It is best suited for active workloads with large amounts of outbound bandwidth as a percent of their storage capacity.	View storage class pricing

Configure your resource

Service name:

Select a resource group:

Tag:

Examples: env:dev, version:1

Summary

Cloud Object Storage **Free**

Region: Global

Plan: Life

Service name: Cloud Object Storage-b9

Resource group: Default

[Create](#)

[Add to estimate](#)

[View terms](#)

This screenshot shows the IBM Cloud console interface for configuring a newly created Cloud Object Storage bucket. The browser tabs are the same as the previous screenshot. The URL is cloud.ibm.com/objectstorage/crm%3Av1%3Abluemix%3Apublic%3Acloud-object-storage%3Aglobal%3Aa%2Fa932df687a804c3daccacf34a83ae0b7%3Ae7fd2.... The left sidebar shows the navigation menu with 'Cloud Object Storage' selected. The main content area displays the 'Bucket configuration' page for the bucket named 'smartcrop'. A green notification banner at the top right states: 'A bucket created successfully! The bucket smartcrop has been created and is now available to add objects.' The 'Bucket details' section shows: Bucket name: smartcrop, Service instance: cloud-object-storage, Total objects: 0, Storage class: Smart Tier, Cloud Functions trigger: Disabled, Total bytes: 0 bytes, Resiliency: Regional, Location: au-syd, and Date created: 2022-11-10 9:42 AM. The 'Endpoints' section explains that endpoints are used with credentials to tell the service where to look for the bucket.

Objects Configuration Permissions

Bucket configuration >

Jump to

[Bucket details](#) [Endpoints](#) [Versioning](#) [Key management](#) [Activity Tracker](#) [Monitoring](#) [Archive rule](#)

[Quota enforcement](#) [Retention policy](#) [Lifecycle policy](#) [Cross-Origin Resource Sharing \(CORS\) rules](#)

Bucket details

Bucket name: smartcrop

Service instance: cloud-object-storage

Total objects: 0

Storage class: Smart Tier

Cloud Functions trigger: Disabled [Learn more](#)

Total bytes: 0 bytes

Resiliency: Regional

Location: au-syd

Date created: 2022-11-10 9:42 AM

Bucket instance CRN

This value identifies the service instance when listing or creating buckets via the API. [Learn more](#)

crn:v1:bluemix:public:cloud-object-storage:global:a/a932df687a804c3daccacf34a83ae0b7:a7fd206d-1354-4795-80e5-cb25a39f4f32:bucket:smartcrop

Endpoints

Endpoints are used hand in hand with your credentials (i.e. keys, CRN, bucket name) to tell your service where to look for this bucket. Depending on where your service or application is located you will use one of the below endpoint types.