

BASIC KNOWLEDGE

ABOUT CLOUD SERVICES

IBM WATSON IOT PLATFORM :

It is a powerful web Dashboard. Flexible, scalable and easy to use. It provide a clean and simple UI where we can simply and easily add and manage devices, control access to IoT services, monitor the usage. It is fully managed cloud-hosted service that is designed to simplify and derive value from IoT devices.

Device Management :

Using device management service, we can perform device actions like rebooting or updating firmware, receive device diagnostics and metadata, and perform bulk device addition and removal.

Responsive, Scalable connectivity :

It uses the Industry-standard MQTT protocol to connect devices and applications. MQTT is designed for efficient exchange of data to and from devices in real-time.

Secure Communication :

Securely receive data from and send commands to your devices. Do this using MQTT with TLS to support secure all communications.

between your devices and our services.

Data Lifecycle Management:

Having access to real-time data stored coming from our devices, you can opt to store data for a period of our choice, allowing you to have access to historical and real-time data for your devices.

NODE-RED SERVICE

Node-Red is a programming tool for wiring together hardware devices, API's and online service in new and interesting ways. It provides a browser based editor that makes it easy to wire together flows using wide range of nodes in its palette that can be deployed to its runtime.

Browser-Based Flow Editing:

Node-Red provides a browser based flow editor that makes it easy to wire together flows using wide range of nodes in the palette.

Javascript functions can be created within the editor using a rich text editor.

A built in library allows you to save useful functions templates or flows for re-use.

Built on Node.js :

The light weight runtime is built on node.js taking full advantages of its client event driven, non-blocking model. This makes it ideal to run at the edge of the network on low-cost hardware such as Raspberry Pi as well as in the cloud.

Social Development :

The flows created in Node-RED are stored using JSON which can be easily improved and exported for sharing with others.

An online flow library allows you to share your best flows with the world.

IBM CLOUDANT

IBM cloudant is a fully managed, distributed database optimized for heavily workloads and fast, growing web and mobile apps, IBM cloudant is available as an IBM cloud service with a 99.99% SLA. cloudant elastically scales throughput and storage, and its API and replication protocols are compatible with Apache CouchDB for hybrid or multcloud architecture.

Serverless web APP and API :

It'll create a serverless web application by hosting static website content on GitHub pages and implementing the application back-end, using IBM Cloud Applications mobile APP with serverless.

Mobile APP with serverless :

It'll use create IBM cloud functions along with cognitive and data services to build a serverless back end for a mobile app.

Find anomalies in IOT APP data :

It sets up an IOT devices and gather data in IBM Watson IOT platform. It will create visualization and use advanced ML services to analyze historical data and detect anomalies.

Open Hybrid Multicloud :

It shows how to pair the API and powerful replication protocol of cloudant with Apache CouchDB in a hybrid cloud environment.