

BASIC KNOWLEDGE ABOUT CLOUD SERVICE

Title	IoT Based Safety Gadget for Child Safety Monitoring and Notification.
Domain Name	Internet of Things (IOT)
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IBM Watson IoT Platform

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

1. DEVICE MANAGEMENT:

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

2. RESPONSIVER, SCALABLE CONNECTIVITY:

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

3. SECURE COMMUNICATION:

Securely receiver data from and send commande do your devices. Do this using MQTT with TLS to secure all communication ceturen your devices and our services.

4. DATA LIFECYCLE MANAGEMENT:

Having accessed to real-time dat 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.

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5. NODE-RED Service:

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

6. BROWSER BASED FLOW EDITING:

Node-RED provide a browser based flow editor that make It easy to wire together flows using wide range of nodes in the palette.

Javascript functions can be related within the editor using a rich text editor to save useful functions templates or four for reuse

7. BUILT ON NODE-JS:

The light-weight runtime is built on node-js taking full advantage of it's event driven, non-blocking nodes. In this makes it's ideal to run at the edge of the network on low-cost hardware such as Raspberry PI as well as in the cloud.

8. SOCIAL DEVELOPMENT:

The flows created in node-red are stored using json which can be easily imported and exported for sharing with others.

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

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9. IBM CLOUDANT:

IBM Cloudant is a fully managed, distributed database optimized for heavy 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's and replication protocols are compatible with Apache CouchDB for hybrid or multicloud architecture.

10. SERVERLESS WEB APP AND API :

It'll create a secure web applications by hosting static website contents on fit hub pages and implementing the application handler, end, using IBM cloud applications

11. MOBILE APP WITH SERVERLESS :

It was IBM cloud functions along with connect and data services to build a secure web back end for a mobile app.

12. FIND ANOMALIES IN IoT DATA:

It sets up an IoT device and gather data in IBM Watson IoT platform. It wires create visualizations and we advanced ML services to analyze historical data and detect anomalies.

13. OPEN HYBRID MULTICLOUD:

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