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Develop IoT apps using the Node-RED visual tool

Clemence Lebrun, IBM

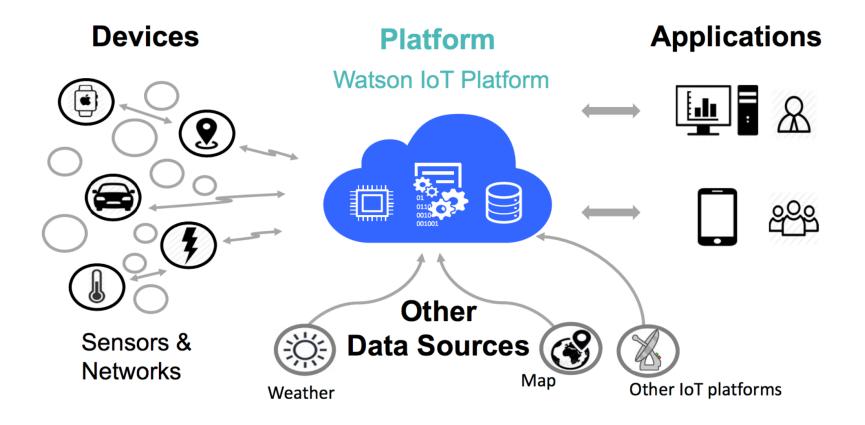


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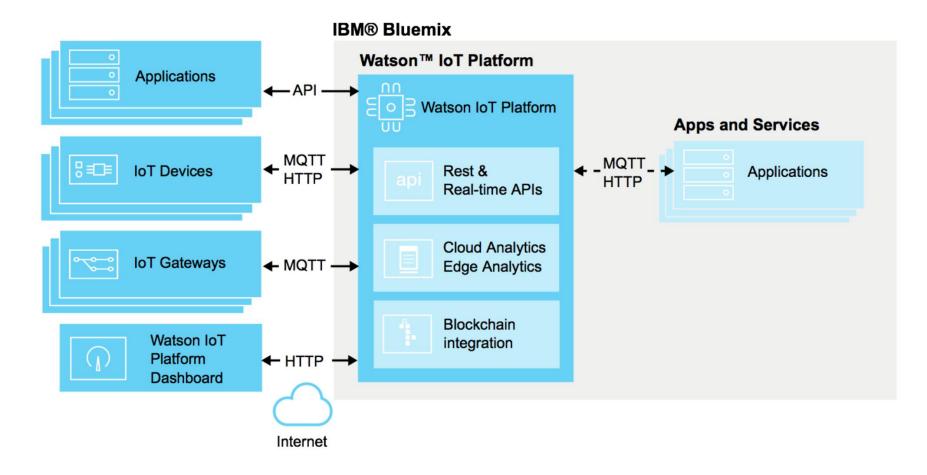
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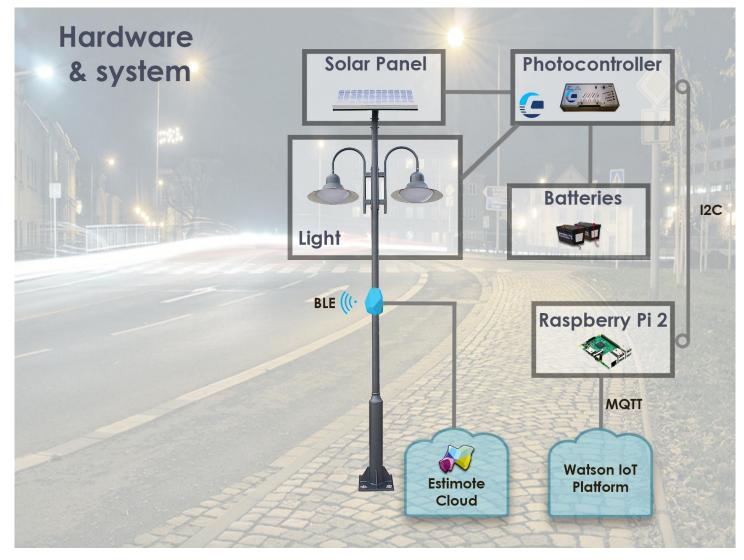
What is an IoT platform ?



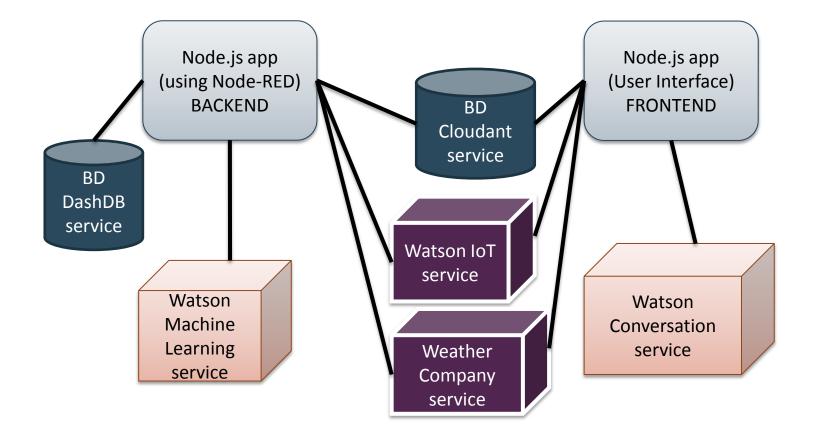
Architecture





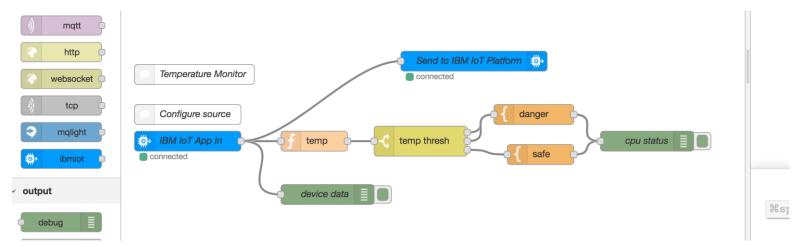






How to quickly get started ?

- 1. Connect to Bluemix
- Create a ready IoT boilerplate app: Node.js Runtime + IoT platform service → Node-RED app



- 3. Connect your device to your IoT organization
- 4. Start to create workflows using Node-RED and your real time data
- 5. Use other Bluemix APIs to add value to your app

Bluemix differentiatiors

Differentiate Bluemix from Amazon Web Services, Microsoft Azure, Heroku, Openshift?

- 1 Bluemix has the whole package: scalability, performance, and wide range of services, including **130+ services**
- 2 Complete Cloud platform with IBM services and third party services built on top of different runtime options (Bare Metal, VMs, Containers, Cloud Foundry, OpenWisk)
- 3 IBM software **catalog** : proven IBM on premise solutions are now also available as service
- 4 IBM unique **services**: such as Watson and Cognitive, Decision Services, IoT, Node-Red, API Connect and Integration services
- 5 With **SoftLayer integration**, which is a high performance public cloud, IBM propose also Docker Containers and VMs that can be used to host applications and services
- 6 IBM support and consultation

Watson IoT Platform differentiators

Enterprise-ready components to connect, secure, provide data insight, assemble and manage IoT Applications

Industry Leading Analytics

- Watson-inside machine learning and cognitive
- Industry models deep, industry-specific analytics models
- Third party data sources leading the industry at partnering with outside data providers (e.g. Weather Company)
- Industry Integrations easily push and pull data from leading industry solutions, both IBM's and its partners'

Unmatched Scale and Scope

- Global data centers 40+ data centers across the globe
- Low latency and high throughput at enterprise scale
- Hybrid delivery form factors... public cloud, dedicated cloud, on premise
- Bluemix and Softlayer built to work on IBM's core cloud offerings but also deliver the transactional scale required by the new world of IoT

Most Trusted IoT Platform

- Device neutral IBM does not compete with its sensor, gateway, network, and processor partners
- · Built on open standards
- Data neutral IBM's business model does not depend on owning its customer's data
- Privacy protection and access control
- Platform of Platforms IBM is committed to integrating with other leading platforms so customers are not forced to chose proprietary tech stacks
- IoT specific security security micro-services built specifically for IoT-based solutions

To Learn more about Bluemix and IoT

- Try one of the <u>DeveloperWorks recipies</u>
- How to integrate with the <u>Watson IoT service</u>
- Check the swagger <u>APIs</u>
- Try <u>Bluemix</u>!
- Watson IoT Platform: <u>from sensors to Insights!</u>