

# Connecting your RPi to the IBM Watson IoT Foundation(NodeRed and Cloudant!)

**AP Cloud | IoT Training Workshop** 





### **AP Cloud Team**

Leadership Members and Trainers Miracle Software Systems, Inc.

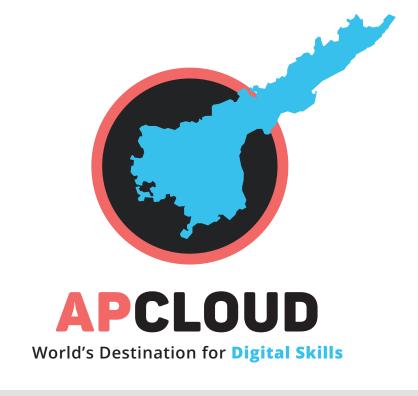
# Agenda

9:30 AM	Introducing AP Cloud, ViBUG and Workshop Agenda
9:45 AM	Setup and Installation
10:15 AM	Introductions to IoT
10:30 AM	Watson IoT Foundation
11:00 AM	Lab #1 - Connect OBD Simulator
1:00 PM	Interactive Lunch with Innovative Conversation
1:45 PM	Introduction to Node Red
2:00 PM	Lab #2 - Node Red to Cloudant
3:45 PM	Recap, Q&A and Interaction



### **AP Cloud and Our Goal**

SMAC Technologies to students across AP through the network of 50 associated Universities and Colleges and industry knowledge coming from affiliated US Based IT Organizations



100,000 Digital Transformation Skills Professionals enabled in Andhra Pradesh in the next 24 months





# Vizag Bluemix User Group

- Vizag-based User group focused on IBM Bluemix with topics including,
  - Cloud Infrastructure Provisioning
  - Cloud Application Architecture
  - Cognitive Services and Applications
  - IoT Platform and Devices



Sponsored By







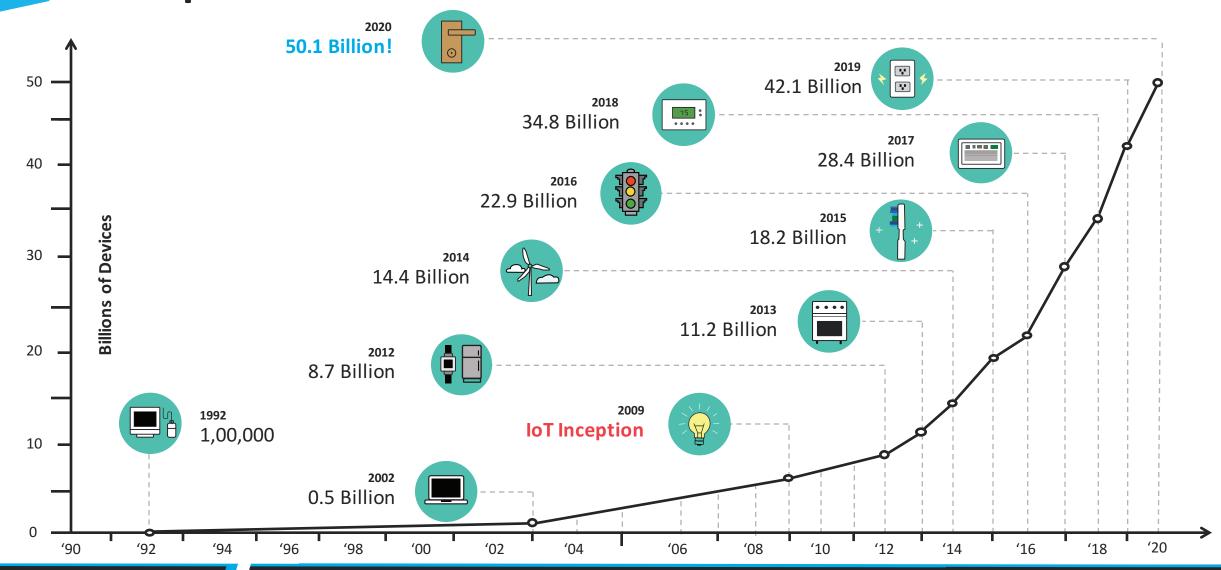


### **ViBUG** – Introduction and Goals

- Spread Digital Technology with platforms such as IBM Bluemix and Watson
- Meet every month and deliver hands-on workshops from a variety of speakers
- Ensure that Vizag can become a hub for the skills required for digital transformation
- Focus on student and IT professional enablement around IBM Bluemix
- Have fun and build new things with technology!



# **An Explosion of Possibilities**





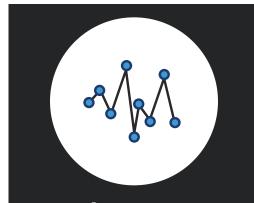
# An Explosion of Possibilities

"From homes to retail stores, things around you are starting to become intelligent and communicate with each other! Welcome to the new age of Connected Things ©"





# What can you do with IoT Data?



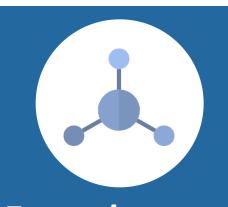
### **Predict**

Outcomes and demand through data and patterns collected by connected things



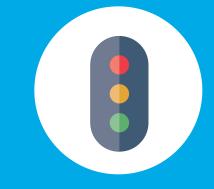
### Monetize

Data coming from your network of things and expose to the world for innovation



### **Extend**

Your devices and sensors as APIs and Services to be consumed in innovative ideas



### **Control**

Machines, homes and more through your smart phones and network of connections

Control your car with a mobile device (or) predict machine health and failure with a sensor!





# IBM Bluemix and the Watson IoT Platform

Connect Devices and Sensors to the Cloud in minutes ©

### **IBM Bluemix for Innovation**



Rapidly bring new products and services to market at lower cost



Balance agility with quality, security and governance



Extend existing IT investments into cloud business and delivery models

### Build your apps, your way

Use the most prominent compute technologies to power your app: Cloud Foundry, Docker, OpenStack

### Scale more than just instances

Development, monitoring, deployment, and logging tools allow the developer to run and manage the entire application

### **Extend apps with services**

A catalog of IBM, third party, and open source services allow the developer to stitch an application together quickly

# Deploy and manage hybrid apps seamlessly

Get a seamless dev and management experience across a number of hybrid implementations options

### Scale more than just instances

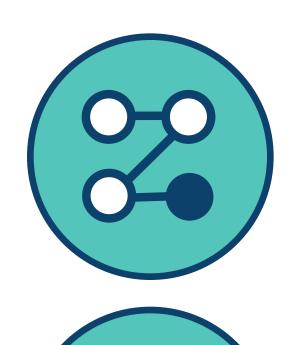
Development, monitoring, deployment, and logging tools allow the developer to run and manage the entire application

### **Flexible Pricing**

Try compute options and services for free and, when you're ready, pay only for what you use. Pay as you go and subscription models offer choice and flexibility



## **Watson IoT Platform**



Responsive Connectivity

Secure Communication





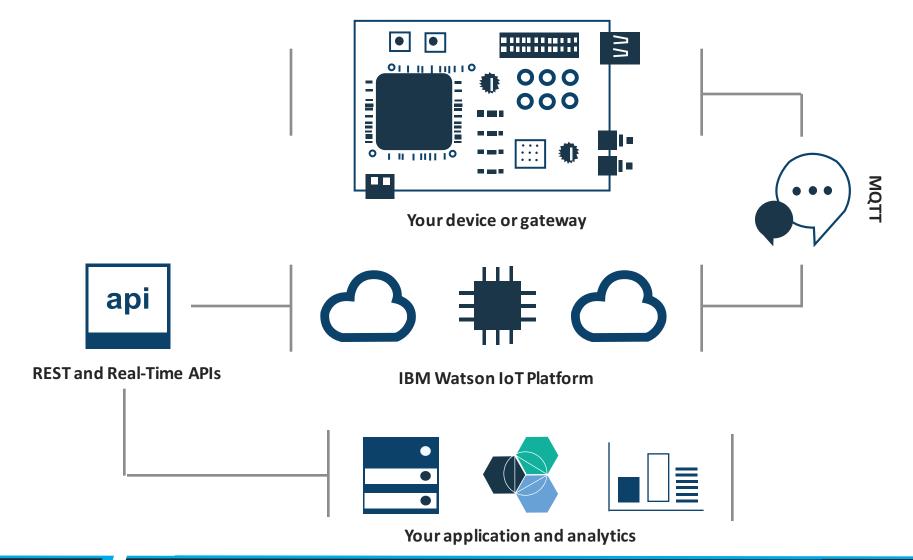
Device Management

Storage and Access to Data



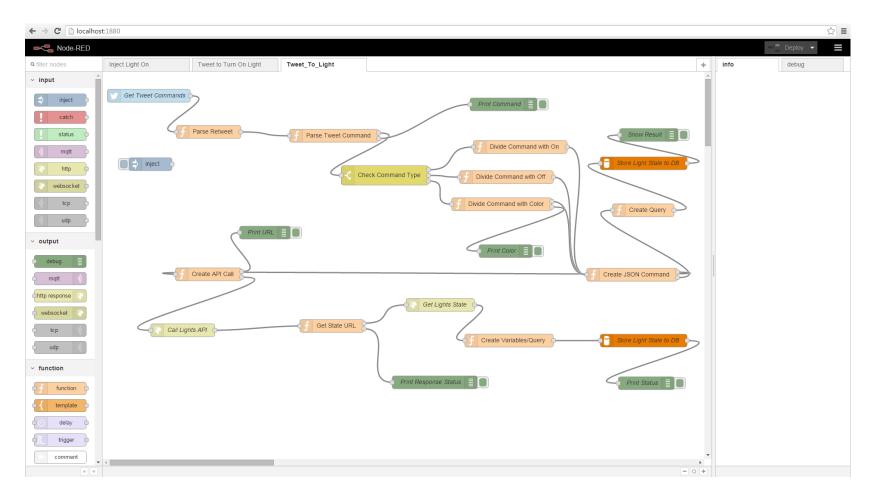


# **Understanding Things?**





# **Introducing NodeRed**



A Visual Tool for WIRING the Internet of Things ©





Lets go Hands On with IoT and Devices

Storing data from your OBD Simulator to a Cloud DB

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# **Thank You**

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