



Our Platform is Cloud

IBM



Our solutions are cognitive

$$d = b^2 - 4ac$$

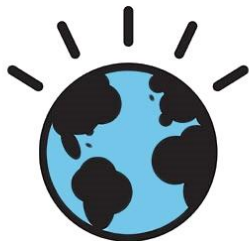


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Five years ago...

... we started envisioning a Smarter Planet

Smarter Planet



Our world is becoming

INSTRUMENTED



Our world is becoming

INTERCONNECTED




Virtually all things, processes and ways
of working are becoming

INTELLIGENT

fueling innovation across industries.

Digital revolution



Creating new business models
where digital meets physical



4 Guiding Principles



**Choice with
Consistency**



**DevOps
Productivity**



**Industrialized
Hybrid Cloud**



**Powerful, Accessible
Analytics with Cognitive**

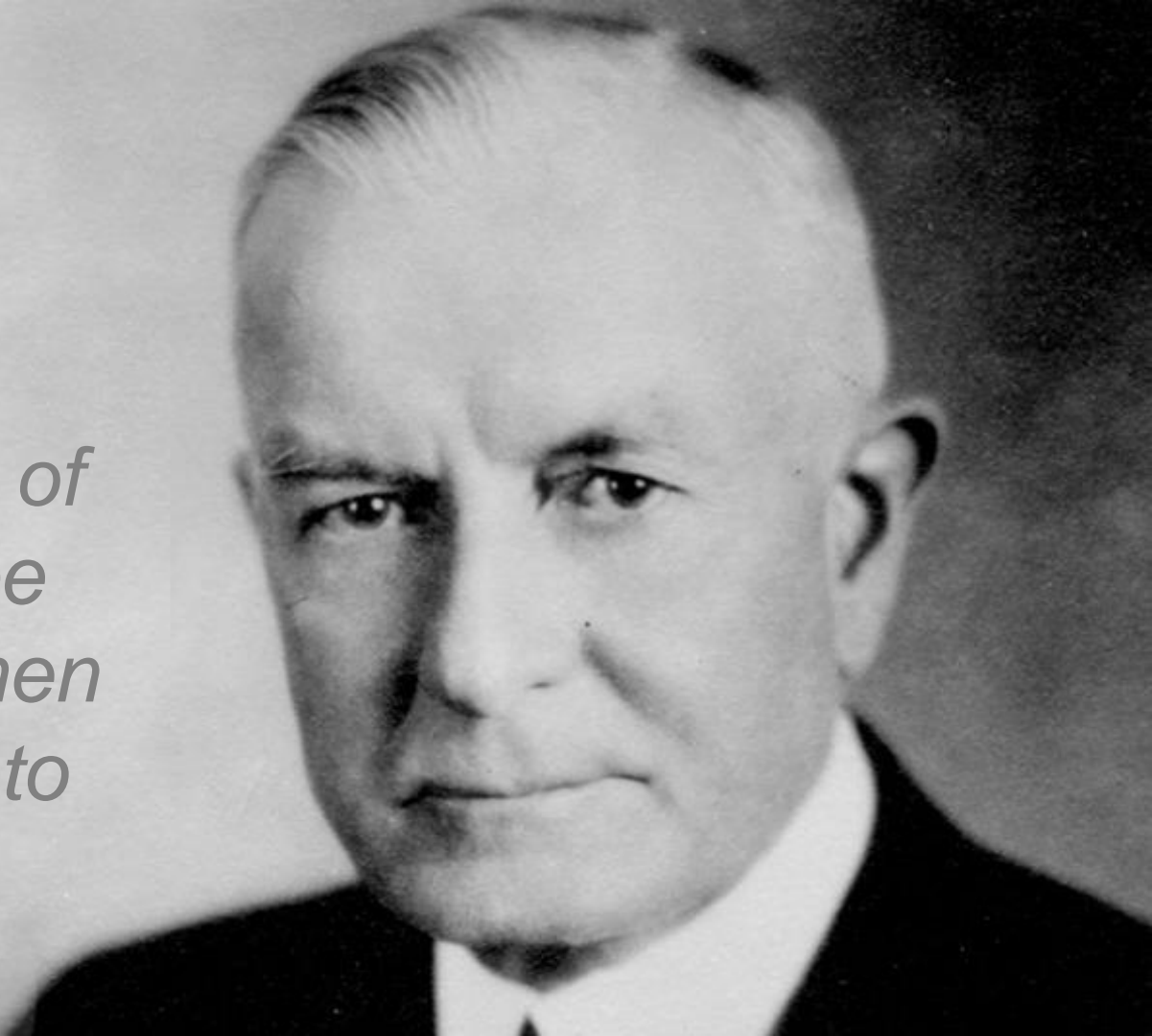
IBM Cloud

Open by design

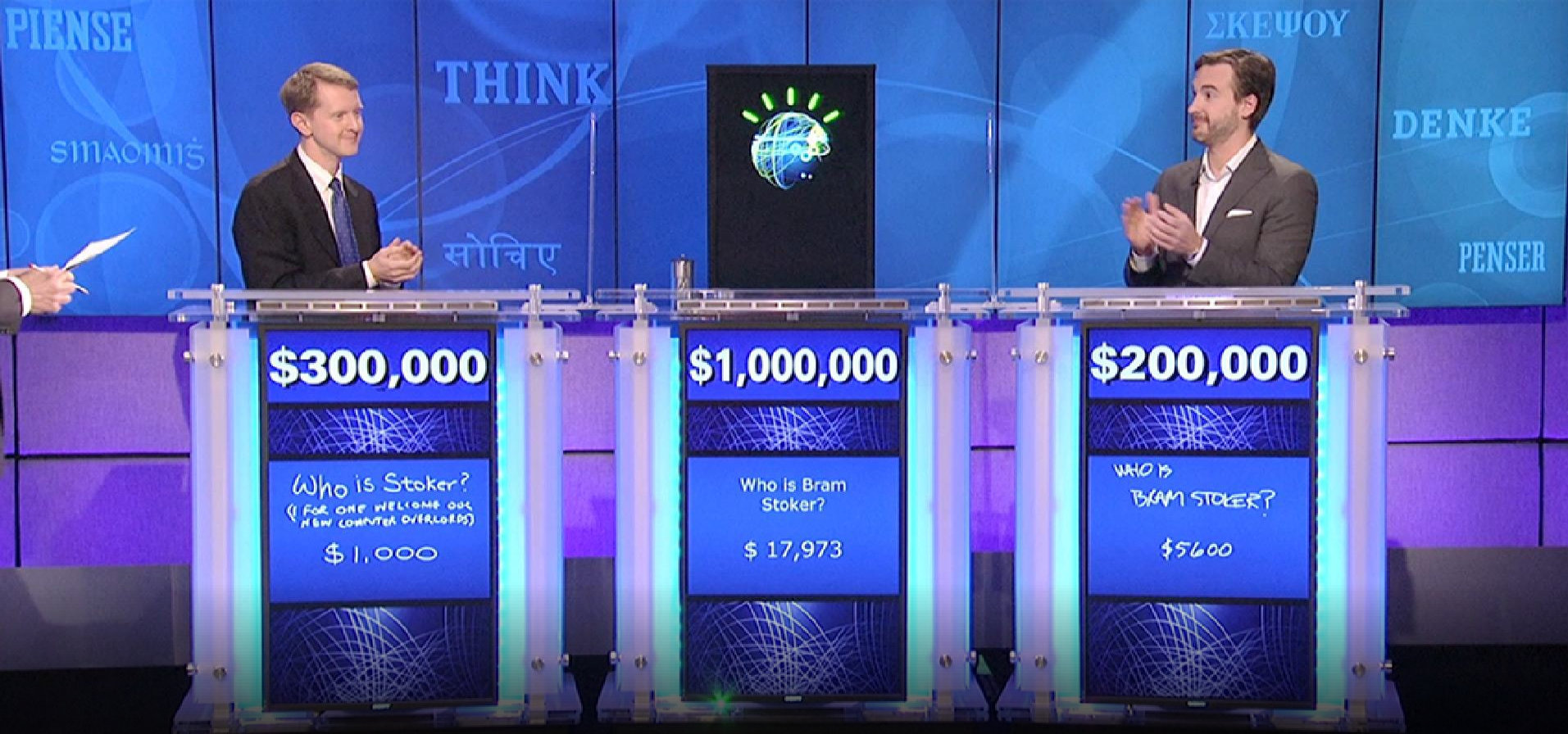
THINK

Thomas J. Watson

“All the problems of the world could be settled easily if men were only willing to think.”



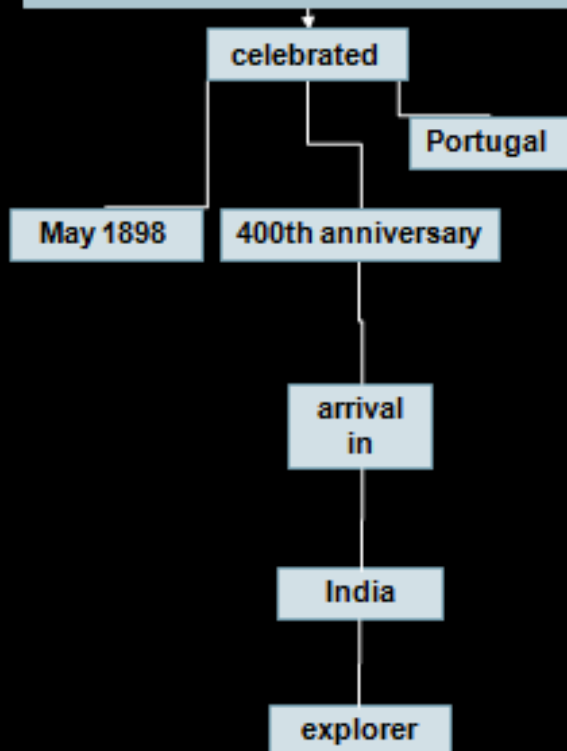




The Jeopardy! Challenge

Question

In May 1898 Portugal celebrated the 400th anniversary of this explorer's arrival in India.



Human using search engine



Has question



Distills to 2-3 keywords



Finds documents containing keywords



Delivers documents based on popularity



Reads documents



Finds answers



Finds and analyzes evidence

Answering questions is not about searching for documents

Search engine



Has question



Distills to 2-3 keywords



Finds documents containing keywords



Delivers documents based on popularity



Reads documents



Finds answers



Finds and analyzes evidence

IBM Watson



Asks a question



Understands question



Produces possible answers and evidence



Analyzes evidence



Computes confidence

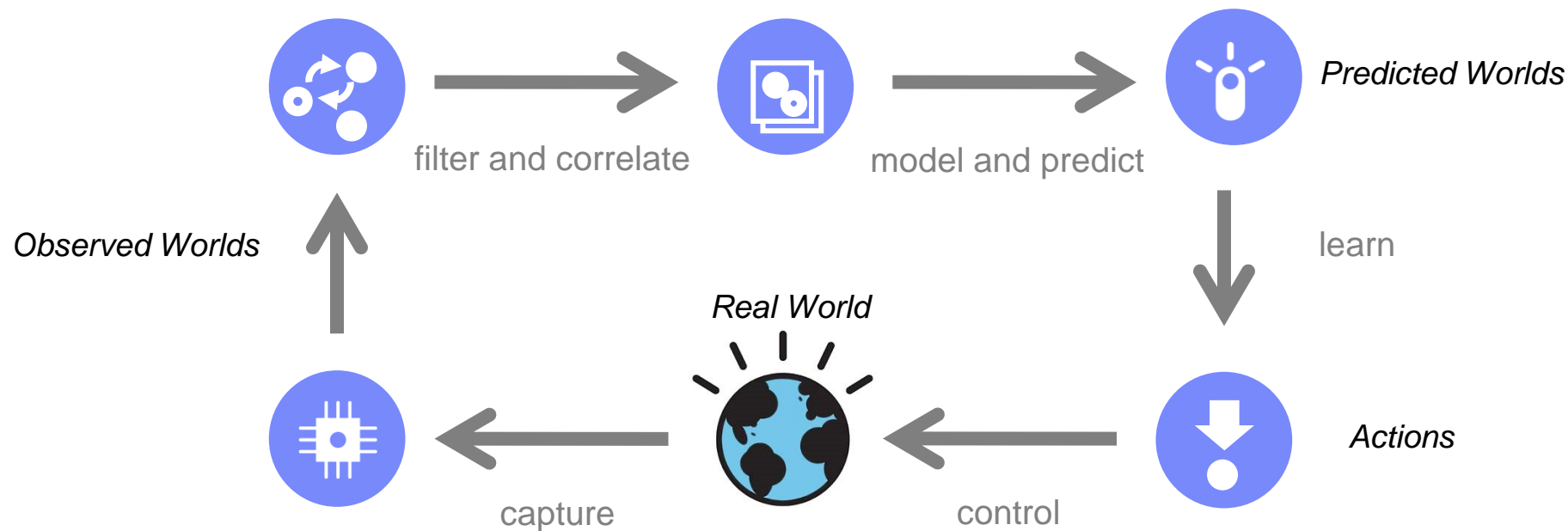


Delivers response, evidence and confidence

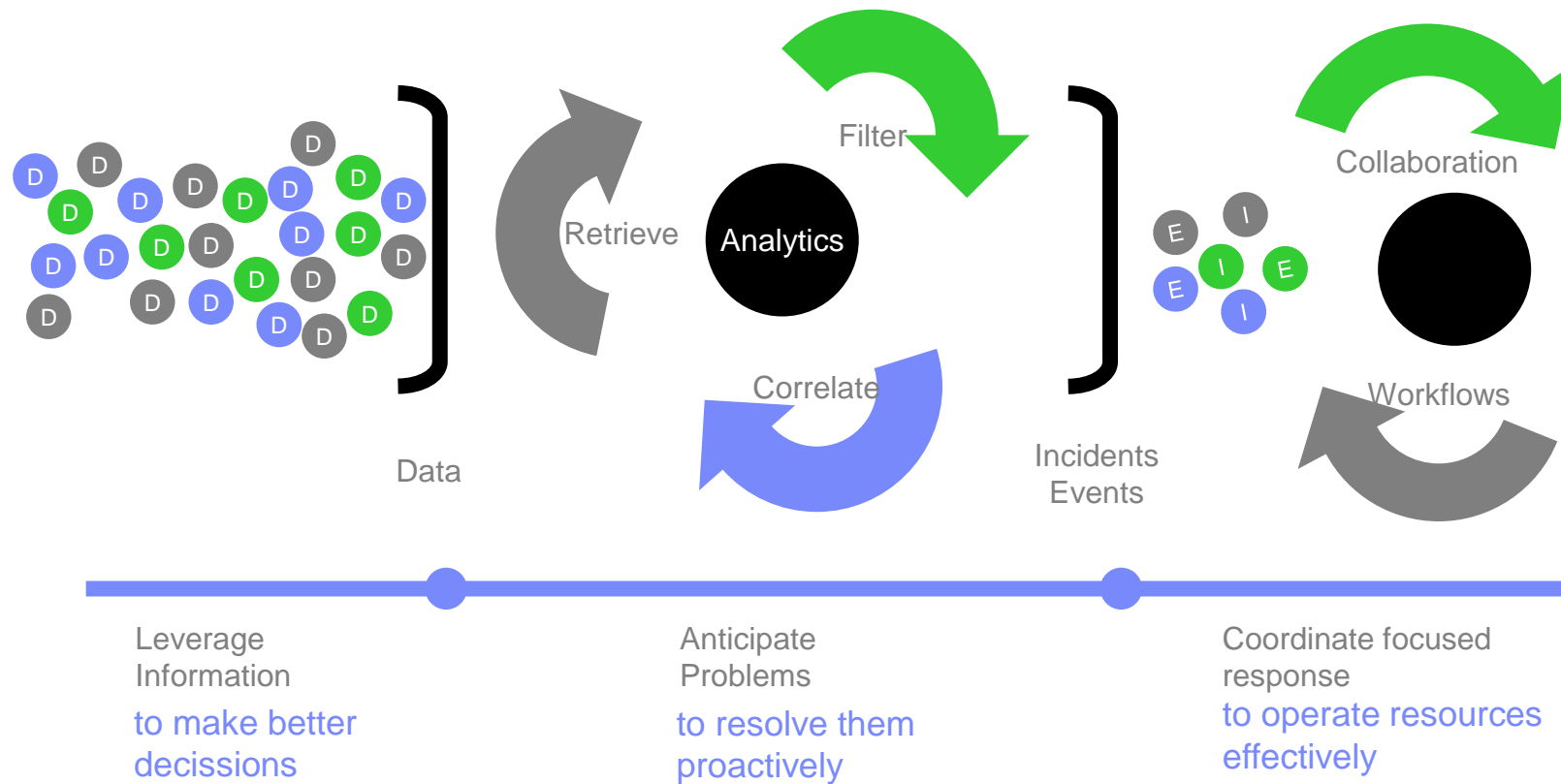


Considers answers and evidence

Interconnected and interdependent behavioral models will provide the intelligence to predict outcomes and exercise closed loop control

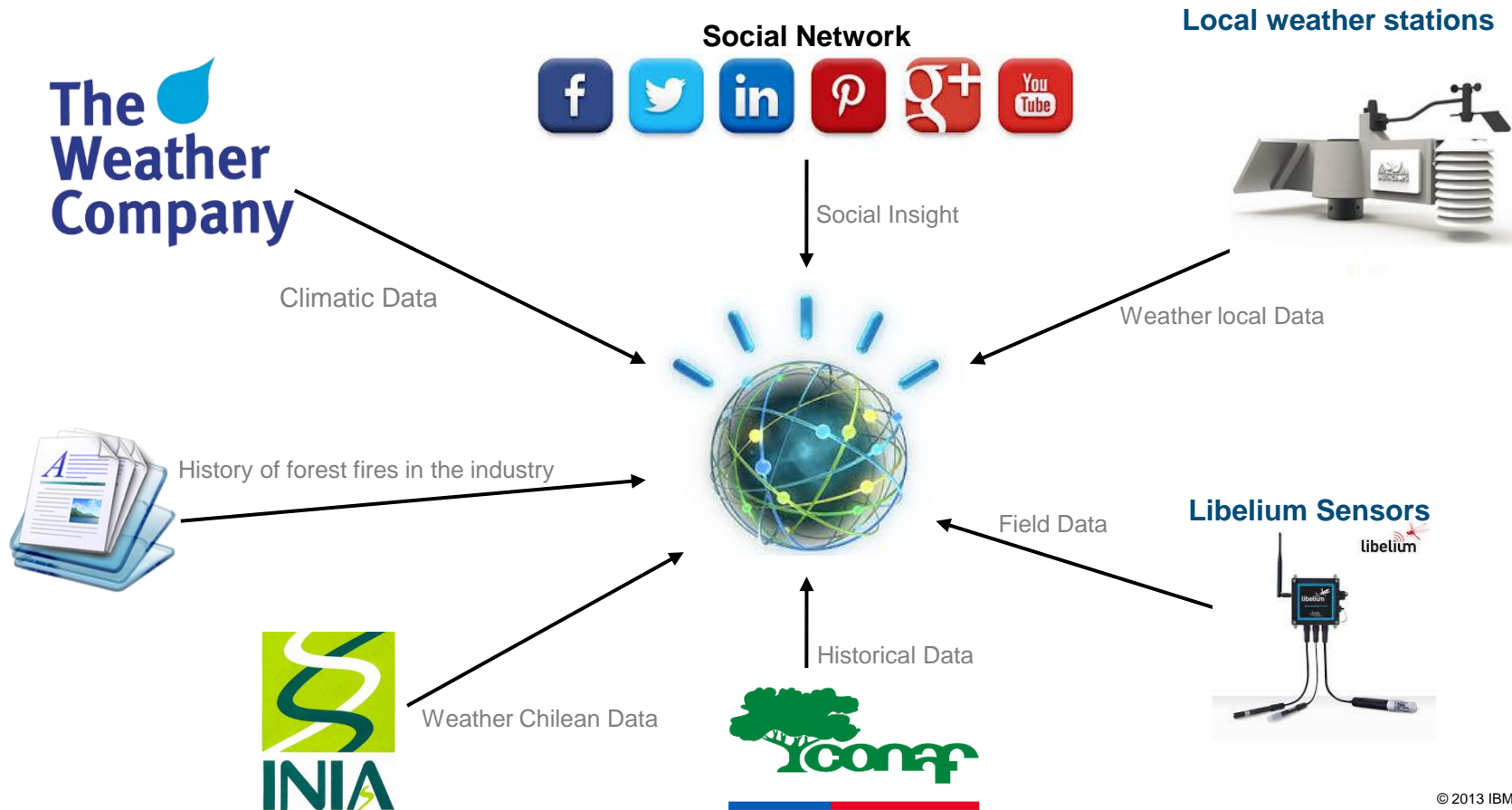


Smarter Operations: Providing Insight and Delivering a Coordinate Response





Watson Forest Fire Prevention



Sustainability - Bari Fishing Industry



<https://www.youtube.com/watch?v=snZPevfRuus>

Galway SmartBay



Sequencing the Food Supply Chain

IBM Research and Mars launch new consortium to drive advances in global food safety



With **DNA and RNA sequencing**, we are able to profile communities of microorganisms—the **microbiomes**—in the supply chain anywhere along the **process from farm to table**.



Analyze hundreds of ingredient samples for millions of genes.



Combine with contextual data like weather conditions, shipping methods, and dates to **create a baseline of what safe ingredient microbiomes look like**.



Discover new genes, gene variants, and previously undetected anomalies to **alert when food ingredient safety is at risk** before it gets to a finished product, store shelf, or table.



Customize Your Granola

Create your own Bear Naked granola with over 50 different chef-inspired ingredients. We've got everything from jalapeños to kiwi, so go wild. And we've got IBM Chef Watson here to help you create the perfect blend.

[START BLENDING NOW](#)

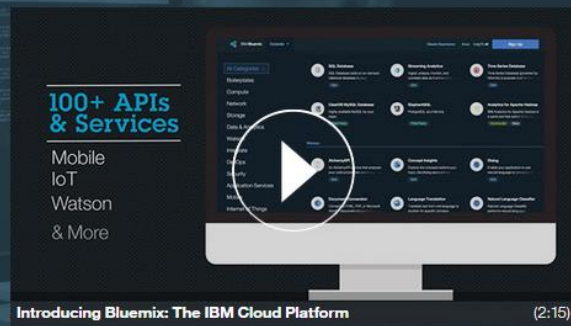
www.ibm.com/cloud-computing/bluemix/getting-started/

IBM > Bluemix > Why Bluemix > Getting started

Learn how to get started quickly with Bluemix

Sign up to deploy a solution in minutes or build your first app today.

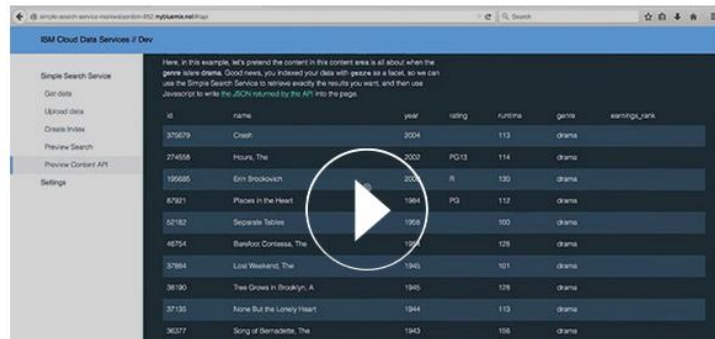
Get started free



Ramp up on Bluemix with Simple Search

Implementing a powerful search engine in your web or mobile app is easier than you think. Simple Search Service is an IBM Bluemix app that enables you to quickly and securely create a faceted search engine. Learn how to expose this API and bring search into your apps.

[Learn more about Simple Search](#)



ORG: peralbert@es.i... ▾



Type to search

Starters

Boilerplates

Compute

Runtimes

Containers

Services

Watson

Mobile

DevOps

Web and Application

Network

Integration

Data and Analytics

Security

Storage

Business Analytics

Internet of Things

APIs

Provider

IBM

Third Party

Community

Beta

Mv Ora

Compute

Runtimes

Containers

Boilerplates

Get started with a new app, now

Conversational Agent:
Movie Assistant
IBMInternet of Things
Platform Starter
IBMJava Cloudant Web
Starter
IBMJava Workload
Scheduler Web Starter
IBMLoopBack Starter
IBMMobileFirst Services
Starter
IBMNode.js Cloudant DB
Web Starter
IBMPersonality Insights Java
Web Starter
IBMPersonality Insights
Node.js Web Starter
IBMStrongLoop Arc
IBMMendix Rapid Apps
CommunityNode-RED Starter
Community *BETA*Python Flask
CommunityRuby Sinatra
CommunityVaadin Rich Web Starter
Community

Compute // Start with Cloud Foundry or Docker images

Runtimes

Run an app in the
language of your choice

Web and Application

Deliver new web and mobile apps



Business Rules
IBM



Data Cache
IBM



Message Hub
IBM



MQ Light
IBM



Session Cache
IBM



WebSphere Application
Server
IBM



Workflow
IBM



Workload Scheduler
IBM



box
Third Party



CloudAMQP
Third Party



DreamFace
Third Party



Geocoding
Third Party



Hiptest
Third Party



Memcached Cloud
Third Party



Moni.ai
Third Party



PubNub
Third Party



Reappt from Push
Technology
Third Party



Reverse Geocoding
Third Party



Searchly
Third Party



SendGrid
Third Party



Simplicite aPaaS for
Bluemix



Statica
Third Party



Travel Boundary Service
Third Party



Ustream
Third Party

Mobile

Quickly get started with
your next app



IBM Push Notifications
IBM



Mobile Application
Content Manager
IBM



Mobile Client Access
IBM



Mobile Foundation
IBM BETA



Mobile Quality
Assurance
IBM



Presence Insights
IBM



Kinetise
Third Party



Twilio
Third Party

DevOps

From development to
deployment



Active Deploy
IBM BETA



Auto-Scaling
IBM



Delivery Pipeline
IBM



Globalization Pipeline
IBM BETA



IBM Alert Notification
IBM



Monitoring and Analytics
IBM



Track & Plan
IBM



BlazeMeter
Third Party



jKool
Third Party



Load Impact
Third Party



New Relic
Third Party

Network

Build your cloud networking infrastructure



Blockchain
IBM BETA



Content Delivery (CDN)
IBM BETA



Virtual Private Network (VPN)
IBM

Integration

Extend existing investments and infrastructure



Cloud Integration
IBM



Secure Gateway
IBM



Service Discovery
IBM BETA



Service Proxy
IBM BETA



Rocket Mainframe Data
Third Party

Data and Analytics

Essential data services; limitless possibilities

HELP ME PICK



Apache Spark
IBM



Biginsights for Apache Hadoop
IBM



Cloudant NoSQL DB
IBM



dashDB
IBM



DataWorks
IBM



Elasticsearch by Compose
IBM



Geospatial Analytics
IBM



IBM DB2 on Cloud
IBM



IBM Graph
IBM BETA



Insights for Twitter
IBM



Insights for Weather
IBM



MongoDB by Compose
IBM

Internet of Things

A new generation of applications



Internet of Things
Platform
IBM



IoT Real-Time Insights
IBM



flowthings.io
Third Party



IQP IoT Code-Free App
Development
Third Party

APIs

APIs published in your org or shared from API Management



API Connect
IBM



API Management
IBM



Connect & Compose
IBM BETA

Watson

Build cognitive apps that help enhance, scale, and accelerate human expertise



AlchemyAPI
IBM



Concept Insights
IBM



Dialog
IBM



Document Conversion
IBM



Language Translation
IBM



Natural Language
Classifier
IBM



Personality Insights
IBM



Relationship Extraction
IBM BETA



Retrieve and Rank
IBM



Speech To Text
IBM



Text to Speech
IBM



Tone Analyzer
IBM BETA



Tradeoff Analytics
IBM



Visual Recognition
IBM BETA



Cognitive Commerce™
Third Party



Cognitive Graph
Third Party



Cognitive Insights™
Third Party

Bluemix DevOps

Enabling rapid software delivery

Source Control



Hosted Git



Jazz SCM

Plan and Code



Agile
Planning



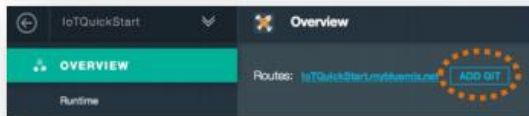
Web IDE

Build and Deploy

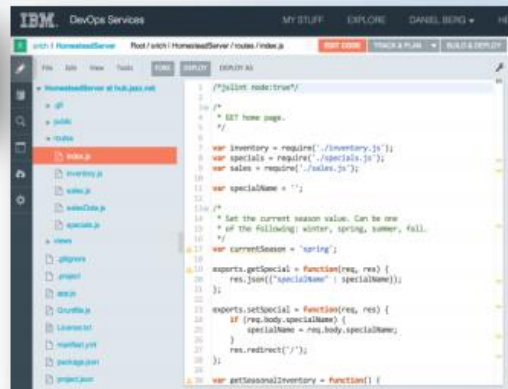


Delivery Pipeline

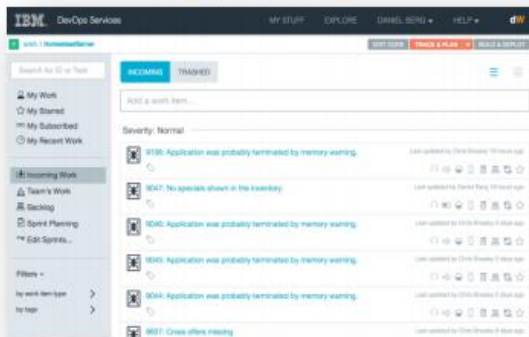
Hosted Git



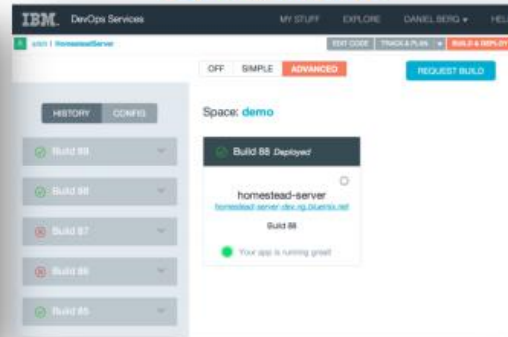
Web IDE



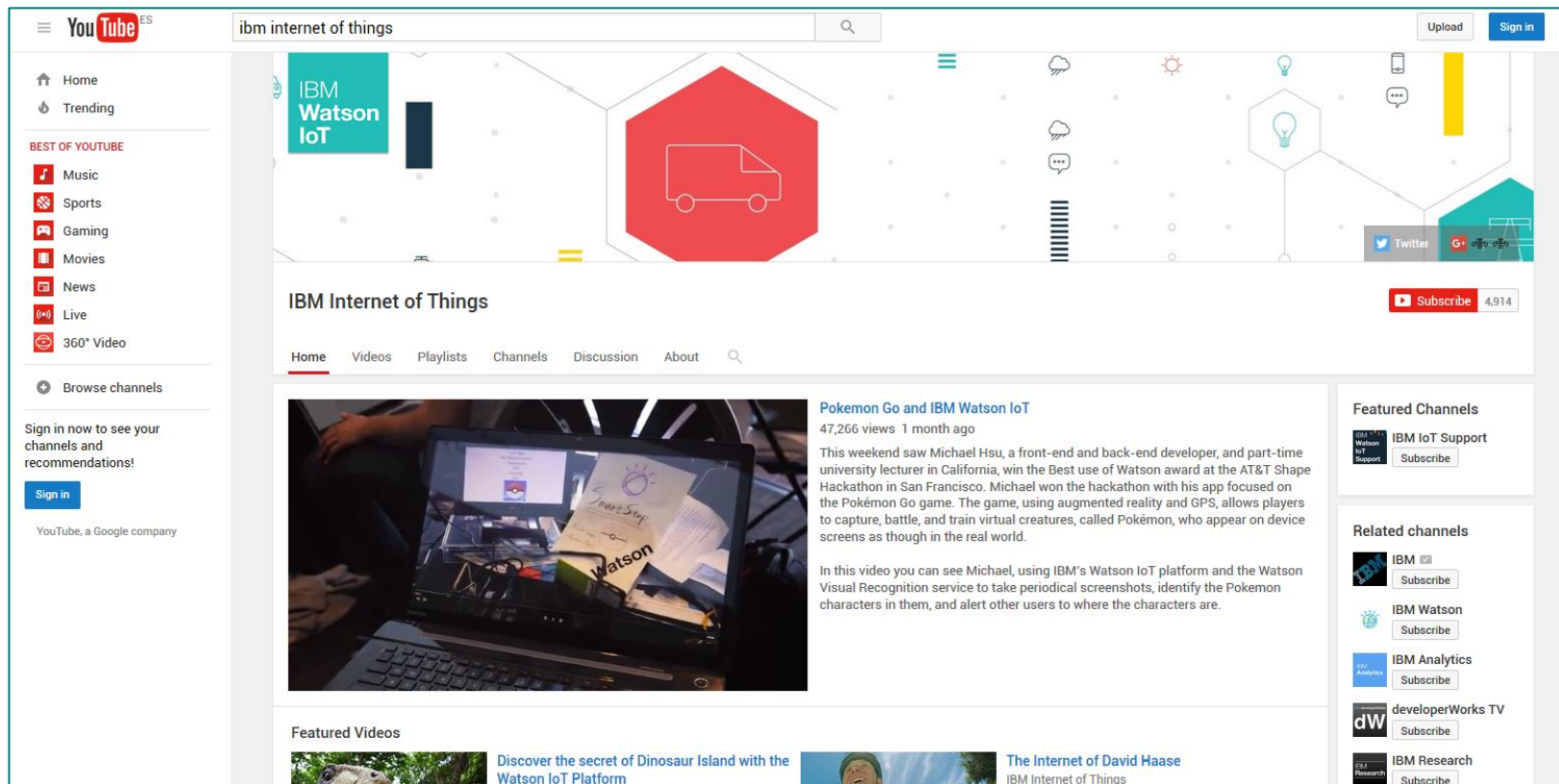
Agile Planning



Delivery Pipeline



IBM Internet of Things Channel on Youtube



The screenshot shows the YouTube channel page for 'IBM Internet of Things'. The header includes the YouTube logo, a search bar with 'ibm internet of things', and buttons for 'Upload' and 'Sign in'. The left sidebar features navigation links for Home, Trending, and categories like Music, Sports, Gaming, Movies, News, Live, and 360° Video. Below these are 'Browse channels' and a sign-in prompt. The main content area displays the channel banner with 'IBM Watson IoT' text and a red hexagon containing a white truck icon. The channel name 'IBM Internet of Things' is prominently displayed with a 'Subscribe' button showing 4,914 subscribers. Navigation tabs for Home, Videos, Playlists, Channels, Discussion, and About are visible. The featured video is 'Pokemon Go and IBM Watson IoT' with 47,266 views, showing a person using a laptop with a 'Watson' sign. To the right, 'Featured Channels' and 'Related channels' are listed, including IBM IoT Support, IBM Watson, IBM Analytics, developerWorks TV, and IBM Research.

IBM Internet of Things [Subscribe](#) 4,914

[Home](#) [Videos](#) [Playlists](#) [Channels](#) [Discussion](#) [About](#)

Featured Video

Pokemon Go and IBM Watson IoT
47,266 views 1 month ago

This weekend saw Michael Hsu, a front-end and back-end developer, and part-time university lecturer in California, win the Best use of Watson award at the AT&T Shape Hackathon in San Francisco. Michael won the hackathon with his app focused on the Pokémon Go game. The game, using augmented reality and GPS, allows players to capture, battle, and train virtual creatures, called Pokémon, who appear on device screens as though in the real world.

In this video you can see Michael, using IBM's Watson IoT platform and the Watson Visual Recognition service to take periodical screenshots, identify the Pokémon characters in them, and alert other users to where the characters are.

Featured Videos

[Discover the secret of Dinosaur Island with the Watson IoT Platform](#)

[The Internet of David Haase](#)
IBM Internet of Things

Featured Channels

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- [IBM Watson](#) [Subscribe](#)
- [IBM Analytics](#) [Subscribe](#)
- [developerWorks TV](#) [Subscribe](#)
- [IBM Research](#) [Subscribe](#)

Internet of Things Foundation - Example



Show how to connect a specific device,
send data in both directions and visualise the data

Internet of Things Recipes IoT Foundation Quickstart Blog Answers Search

Device Recipes

Pick from the recipes below to connect a real physical device to the Internet of Things. We'll be adding new device recipes over time; but if you've got your own device there's nothing to stop you improvising with it!

ARM
mbed

Texas Instruments
SensorTag + BeagleBone

Texas Instruments
SimpleLink CC3200

intel
Galileo

Raspberry Pi
Model B

Use my own device

<https://developer.ibm.com/iot/>

Internet of Things Recipes IoT Foundation Quickstart Blog Answers Search

BeagleBone with SensorTag

Use a BeagleBone Black board to connect a TI SensorTag to the IBM Internet of Things Cloud. Then you can visualize the data generated by the SensorTag's temperature, humidity, pressure, accelerometer, gyroscope, and magnetometer sensors.

Ingredients

Hardware Requirements

- BeagleBone Black
- TI SensorTag CC2541
- Bluetooth Low Energy (Type 4) USB adapter to connect the SensorTag to the BeagleBone (for example, <http://plugable.com/products/usb-bt4le>)

ID	Sensor	Reading	Operation
01	Object Temperature	20.1 deg. C	
02	Ambient Temperature	20.0 deg. C	
03	Gyroscope X	18.7%	
04	Gyroscope Y	18.7%	
05	Gyroscope Z	18.7%	
06	Pressure	1010.0 mBar	
07	Magnetic X	14.2 uT	
08	Magnetic Y	32.5 uT	
09	Magnetic Z	-4.9 uT	
10	Humidity	69.8 %	
11	Temperature	25.4 deg. C	
12	Acceleration X	-0.1 g	
13	Acceleration Y	0.1 g	
14	Acceleration Z	1.0 g	



Live Data Feed

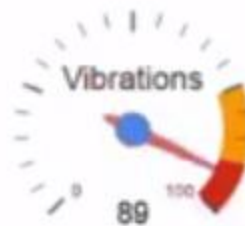
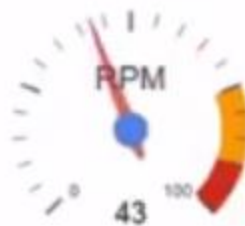
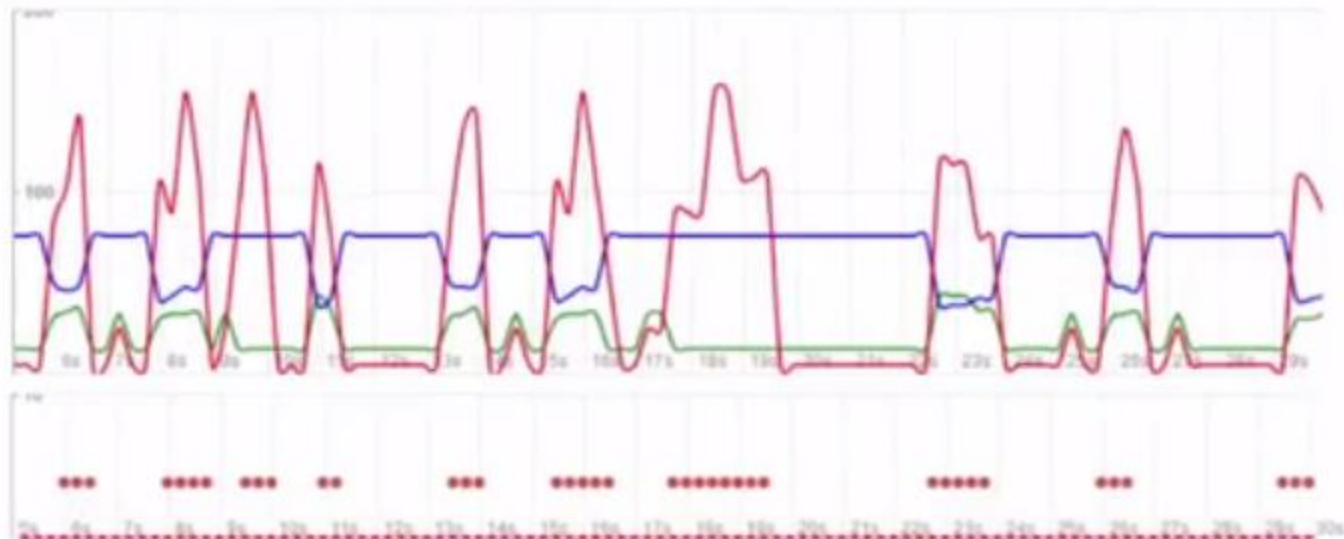
Configure Data Feed

- ☒ Vibrations
- ☒ RPM
- ☒ Temperature

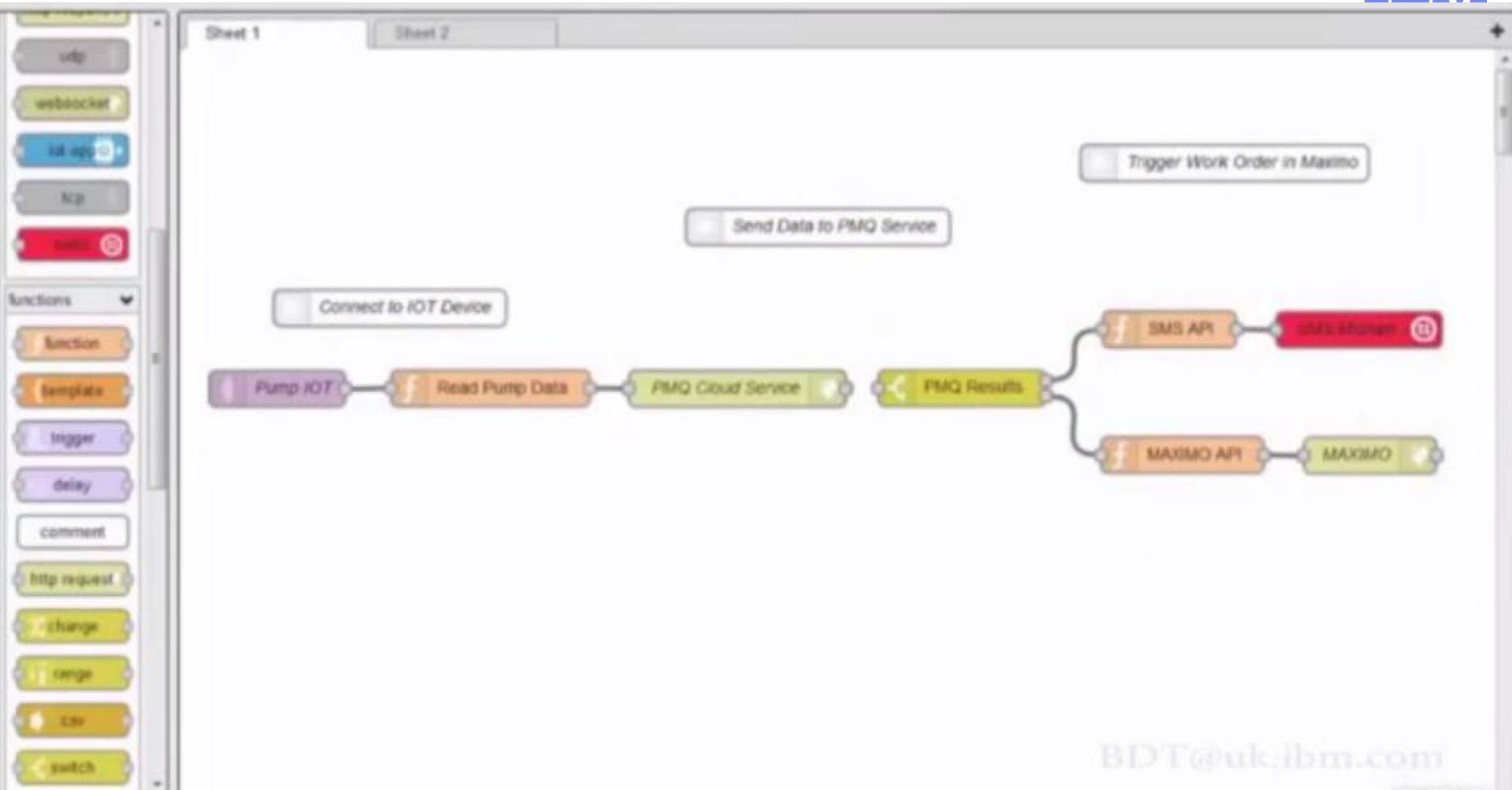


- ☐ stock
- ☐ stream
- ☐ pct
- ☐ value
- ☐ cardinal
- ☐ linear
- ☐ multi-step

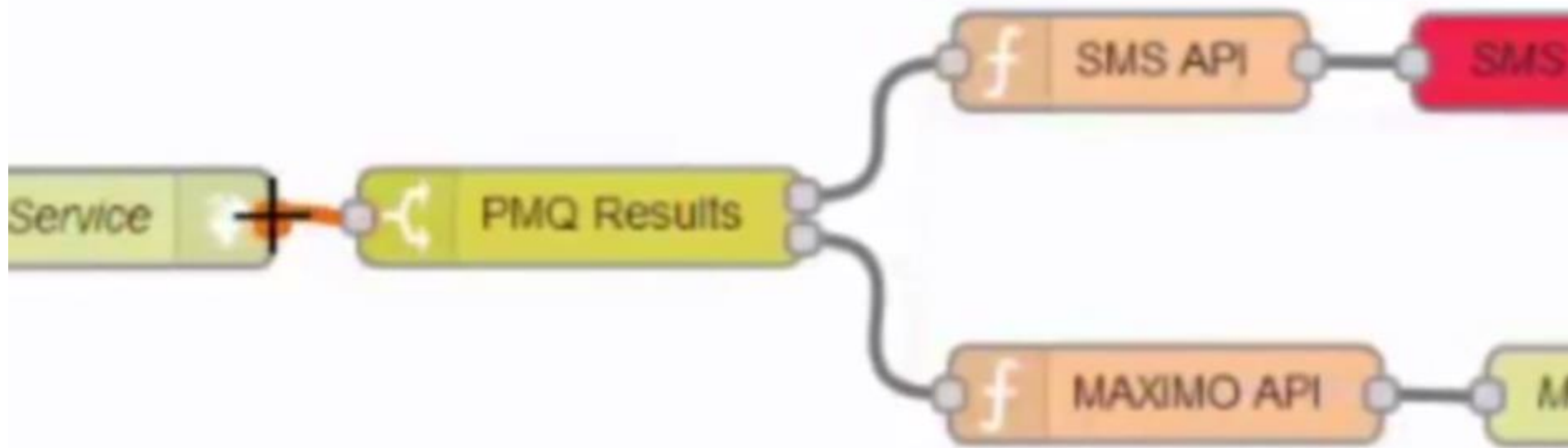
Smoothing



B



Send Data to PMQ Service



BDT@uk.ibm.com

- ✓ Vibrations
- ✓ RPM
- ✓ Temperature



- stack
- stream
- pd
- value
- cardinal
- linear
- step

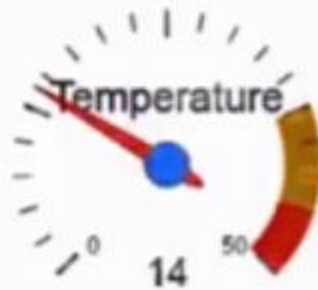
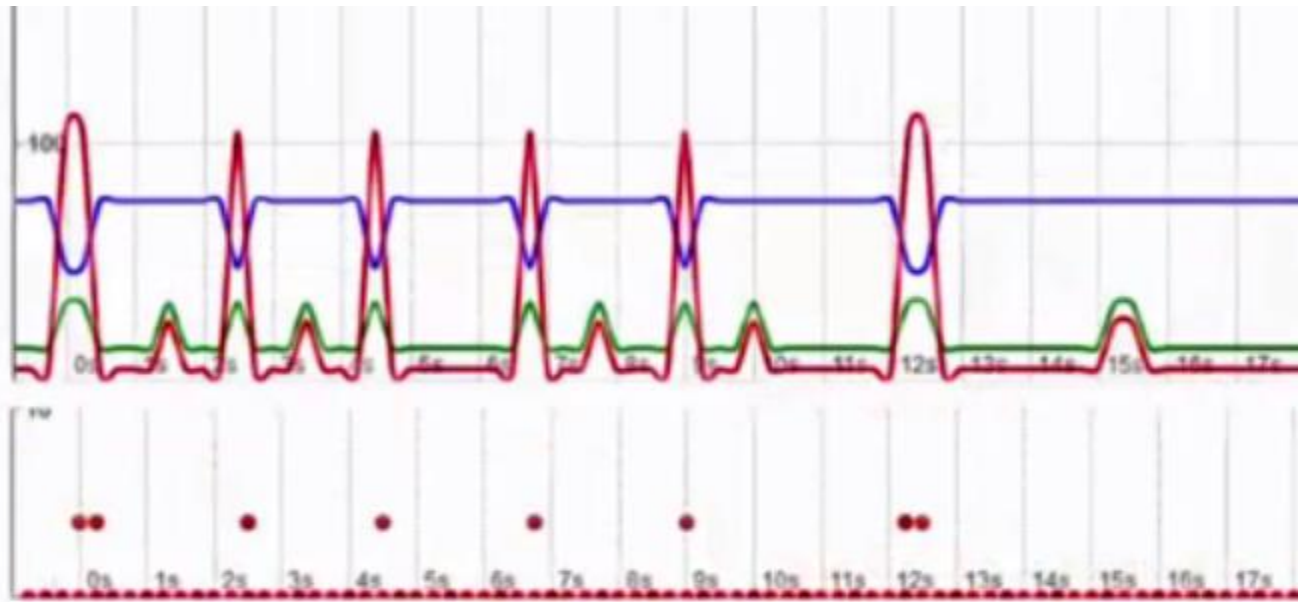
Smoothing



PMQ Recommendation

Tue, 22 Jul 2014 20:42:38 GMT
Recommendation : Within Limits

SPSS Analytics (Modeler Stream)



value

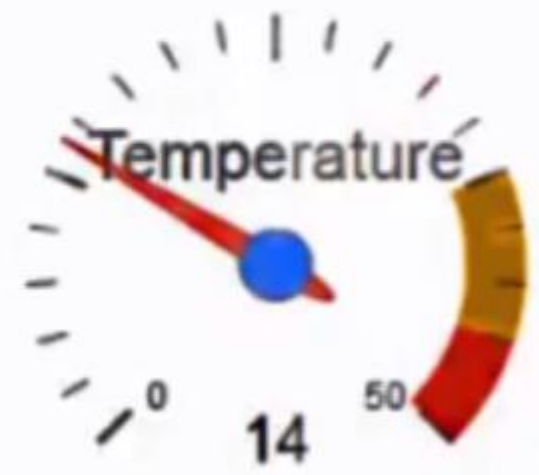
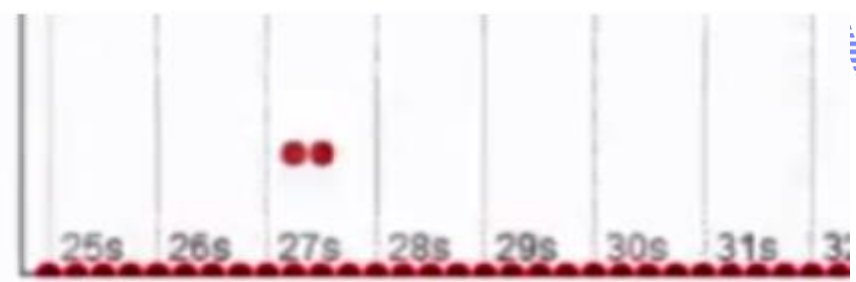
Smoothing



PMQ Recommendation

Tue, 22 Jul 2014 20:43:33 GMT
 Asset : SCS000667 - inspect and replace
 impeller bearing

SPSS Analytics (Modeler Stream)





Applications

able Queries

Work Orders

Open Work Orders

Work Orders by logged in supervisor

Waiting Engineering Appr...

for Planner

rs assigned to logged in u...

Waiting Environmental Ap...

non Actions

Work Order

ge Status

d Owner

Ownership

Work Orders

Filter

1 - 1 of 1

Work Order	Description	Location	Asset	Status
<input type="text"/>	<input type="text"/>	<input type="text"/>	667	<input type="text"/>
2793	Inspect and replace impeller bearing	SCS000667	SCS000667	WA

☐ Select Records

[Back to List tab](#)

Work Order

Plans

Assignments

View

Related Records

Actuals

Safety Plan

Work Order:

2793

Inspect and replace impeller bearing



Site:

ALBUQUER

Status:

WAPPR

Parent WO:

 >>

Children of Work Order 2793

[Filter](#) >

0 - 0 of 0

SequenceRecordRecord ClassSummary

...No rows to display...

Tasks for Work Order 2793

[Filter](#) >[Next Row \(CTRL+Down Arrow\)](#)

1 - 6 of 6

SequenceTaskSummaryEstimated DurationStatusOwner[View Details](#)

1

10

Shutdown pump



0:10

WAPPR

[View Details](#)

2

20

Drain Pump



0:15

WAPPR

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Your 30-day trial is free, with no credit card required. You get access to 2 GB of runtime and container memory to run apps, unlimited IBM services and APIs, and complimentary support.

Already signed up for Bluemix? [Log in](#)

Email Address*

Phone Number*

First Name*

Password*

Last Name*

Re-enter Password*

Company

Security Question*

Select your country or region.

Security Answer*

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CREATE ACCOUNT

