



IBM Brings Bluemix to Developers!

This document has been prepared for the TMSummit Hackathon in Lisbon, Portugal.

IBM® Bluemix™ is an open-standard, cloud-based platform for building, managing, and running apps of all types, such as web, mobile, big data, and smart devices. Capabilities include Java, mobile back-end development, and application monitoring, as well as features from ecosystem partners and open source—all provided as-a-service in the cloud.

Software and accounts

1. You need to create an account for Bluemix and Bluemix DevOps Services:

- Bluemix account
<https://www.ibm.com/account/us-en/signup/register.html?a=tkM810HLsH>
- DevOps services for Bluemix account
<https://hub.jazz.net>

2. Depending on how and which programming language you plan to use. You'll need to install several software products on your workstation. Below gives some examples:

- Java SE Development Kit 8 (Not JRE)
<http://www.oracle.com/technetwork/java/javase/downloads/index.html>
- Eclipse Mars(4.5) Java Enterprise Edition
From Eclipse.org: <http://eclipse.org>

From Eclipse Marketplace: From Eclipse, click Help > Eclipse marketplace
! IBM Bluemix plugin
! Enide.p2f – Eclipse Node.js IDE .17.plus plugin
- Node.js
<https://nodejs.org>
- Cloud Foundry command-line interface
<https://github.com/cloudfoundry/cli>

A video showing how to install the prerequisites can be seen here: Windows: <https://youtu.be/tmBeyLPZ>

Enablement:

Following links are to assist enablement via videos and step by step instructions.

Get started with Bluemix: <http://www.ibm.com/developerworks/cloud/bluemix/quick-start-bluemix.html> or <https://www.youtube.com/watch?v=MtBdbaCQV8A>
Bluemix Developers Community: <https://developer.ibm.com/bluemix/>

Getting started with Node-Red – wiring the Internet of Things:

<https://www.youtube.com/watch?v=f5o4tlz2Zzc&list=PL83YQ8UxxP6yTrJUXglwem6UnvqYzmrqu>

Link to Node Red APIs for TMSummit and Ericsson: <http://nicetmfapis.mybluemix.net/red/>



Additional information:

Built on the **Cloud Foundry** open source technology, Bluemix offers more control to application developers by using its Platform as a Service (PaaS) offering, and also provides pre-built Mobile Backend as a Service (MBaaS) capabilities. The goal is to simplify the delivery of an application by providing services that are ready for immediate use and hosting capabilities to enable internal scale development.

Bluemix provides the following features:

- A range of services and APIs that enable you to build and extend apps fast.
- Access to **Watson** Services for Bluemix
- Processing power for you to deliver app changes continuously.
- Fit-for-purpose programming models and services such as Mobile Cloud, Python, Ruby on Rails, Arduino, Cloudant, MongoDB, PHP, BigInsights, IBM Analytics for Hadoop and more.
- Manageability of services and applications.
- Optimized and elastic workloads.
- Continuous availability.

For more information about the power of IBM Bluemix, Node Red for IoT, and Watson APIs visit this community: <http://www.cloudlabhub.com/>

Lab Hub is not an IBM affiliated site. It acts as a repository for training material, demos, and content related to IBM Cloud solutions. Simply put it's a place to learn where to learn. There are some great blogs out there so check out the Blogs to Follow in the footer.

Cloud Evangelists are always looking for ways to improve our hackathons, meet-ups, and contests. In this case, we created a 'cheat sheet' website, www.hackathon.help, to lower the barrier of entry to build an app. By showcasing our favorite tools and guides to our popular APIs, will save you time, and get you onboard to Bluemix building apps in no time (IoT as well). We are keen to make it clean, clear, and fun to use. Please tweet to #hackathonhelp for any suggestions, comments, or questions.

1. Building an App Step-by-Step
2. Popular Hackathon APIs
 - a. Trade-off Analytics
 - b. Convert Text to Speech
 - c. Personality Insights
 - d. Twitter Analytics
 - e. Alchemy APIs
 - f. Tone Analyzer
 - g. Document Conversion
 - h. Concept Expansion
3. Popular Tools
4. Open Source Demo Apps