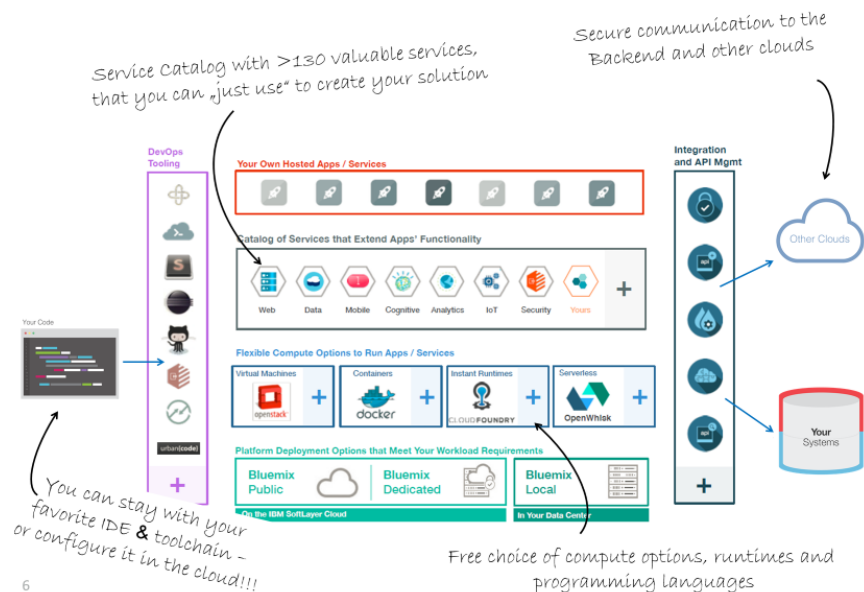# IBM Bluemix Fact Sheet

Bluemix is an open-standards, cloud-based platform (PaaS) for building, running, and managing applications.

Compute Options and Runtimes

With Bluemix you have the free choice how to get your code running. From the compute options you can choose whether to upload and execute Docker containers or Cloud Foundry Apps, or to execute your „serverless" code event driven, based on OpenWhisk. In Cloud Foundry again, you have the choice of a large number of runtimes and languages, e.g. Java, Node.js, Ruby, Go, PHP, Swift, … Just choose your preferred technology, that supports your solution best – or decide to learn and experiment with something new!

Toolchain

For the development and deployment of your code you also have the freedom of choice. Use your well known toolchain in your local environment and just load the build result up to your Bluemix project, or you may alternatively decide for a configurable toolchain offered as a service in the cloud.

Service Catalog with >130 valuable services, that you can „just use" to create your solution

Secure communication to the Backend and other clouds

You can stay with your favorite IDE & toolchain – or configure it in the cloud!!!

Free choice of compute options, runtimes and programming languages

Services

Bluemix provides a comprehensive catalog of services, which you can use as building blocks for your solution – independently of your compute option and runtime choice. Just snoop through the catalog and let yourself be inspired. This is a short overview of the service categories for your orientation:

Data & Analytics – SQL and NoSQL database services, complemented by data oriented services for data transformation and analytics, e.g. *IBM Watson Machine Learning, Geospacial Analytics, Apache Spark,* and others which analyse Twitter and weather data.	**APIs** – create your APIs in minutes, then run, secure and manage them with the *API Connect* service.
Watson – Cognitive Computing for processing of speech, text and images. This covers for example the transformation from speech to text (and vice versa), keyword extraction, tone analysis, as well as the modelling of conversions and image recognition.	**DevOps** – building blocks for the development and operation of apps on Bluemix. This includes components for configurable toolchains, zero downtime deployments, auto scaling, monitoring, and more.
	Application Services – helpful services that support the creation of web apps and mobile backends. The category includes e.g. a Liberty application server, session cache, rule engines, messaging, and a complete blockchain implementation as a service.
Internet of Things – contains the *Internet of Things Platform* as the core service, which allows to securely connect and manage devices and applications. The category grows with complementary and industry-specific services.	**Mobile** – the *Mobile Foundation* framework is complemented by services that make the life of mobile developers easier, e.g. for authentification, Push messages, analytics or feedback collection.

Learn more at https://hackathon-intro.mybluemix.net