IBM BLUEMIX
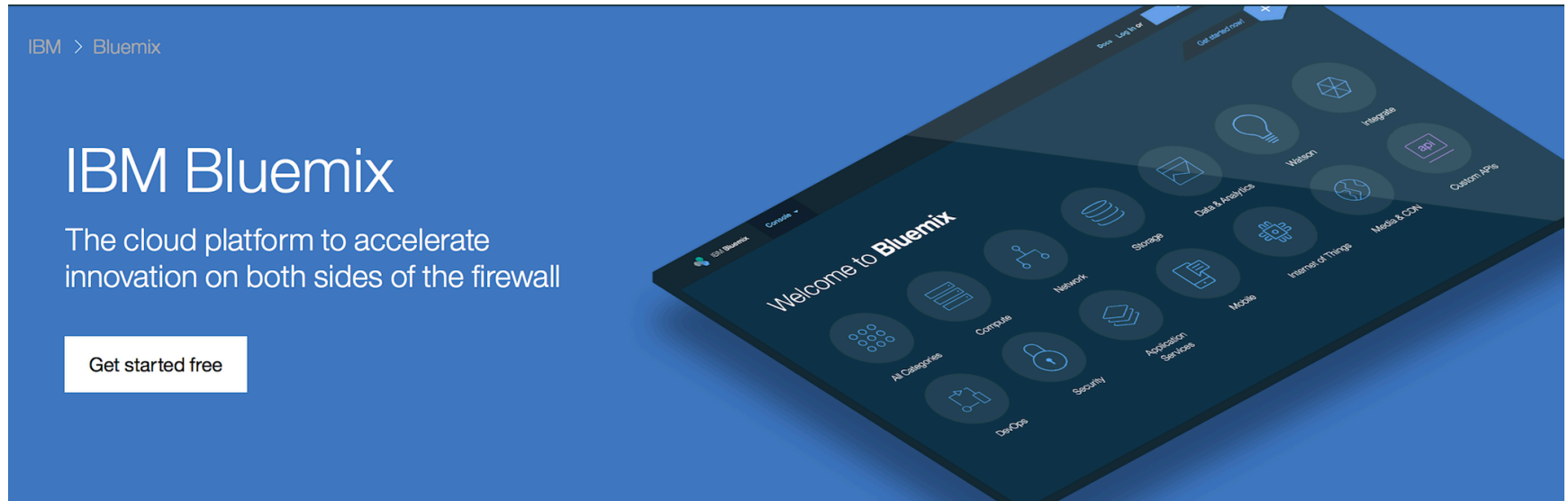
INTRODUCTION TO COMPUTE

- SRIKANTH K MURALI, IBM

IBM Bluemix

❖ Built on a foundation of open technology – Cloud Foundry, Open Stack and more..

❖ Build, run, scale, manage, integrate and secure applications in the cloud
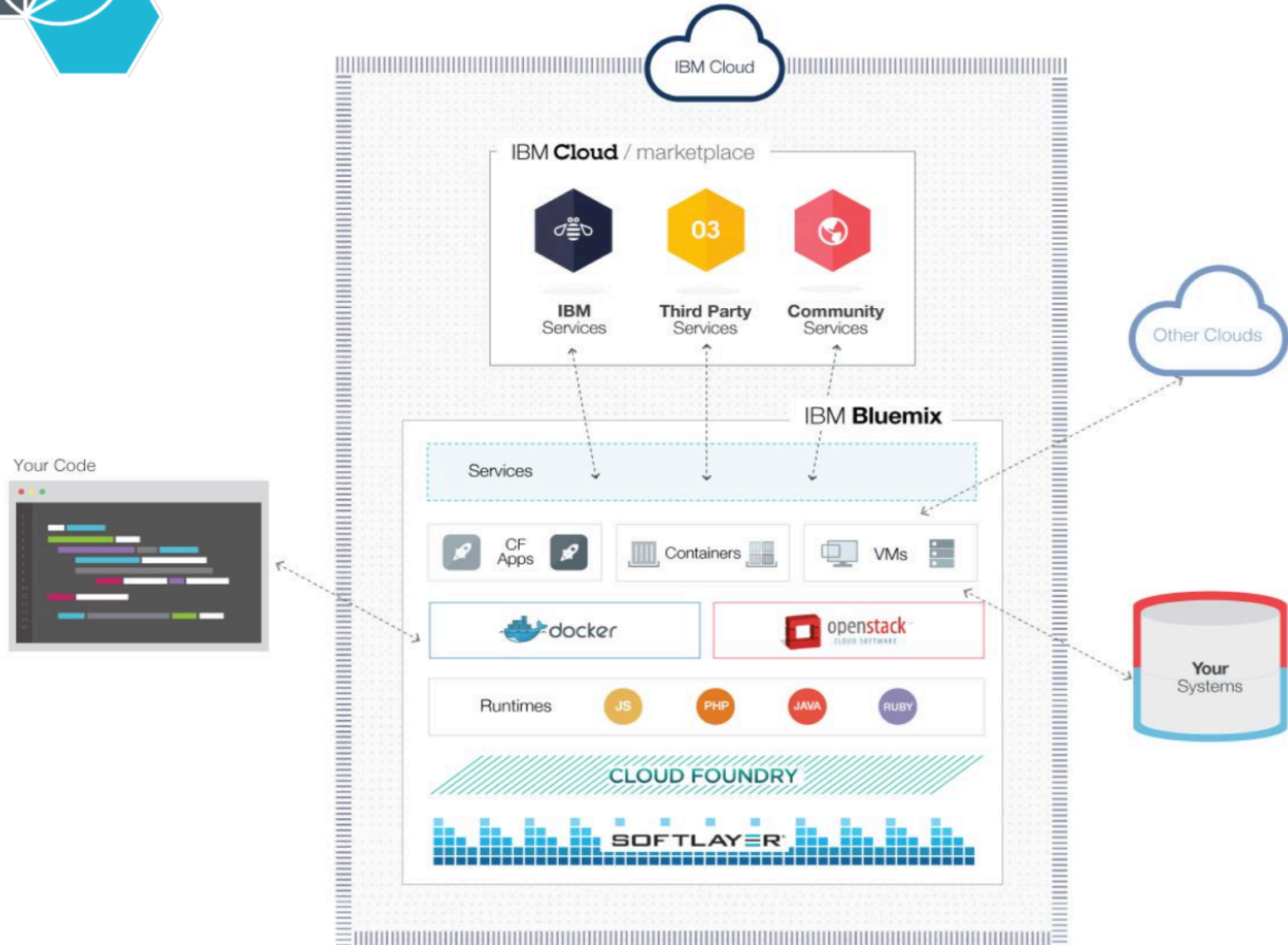
IBM Bluemix Cloud Platform

Developer Experience

- Rapidly develop application in any language
- Realize fast time-to-value and scale

Enterprise Capability

- Securely integrate with existing on-premises data & system
- Manage the full application lifecyle using DevOps

Bluemix Structure

Bluemix Compute

Cloud Foundry Applications

Deploy your app without managing underlying infrastructure.

IBM Containers

Portable and consistent delivery of your app without having to manage an OS.

IBM Virtual Servers

A higher degree of customization, transparency, predictability, and

Beta

Bluemix Compute

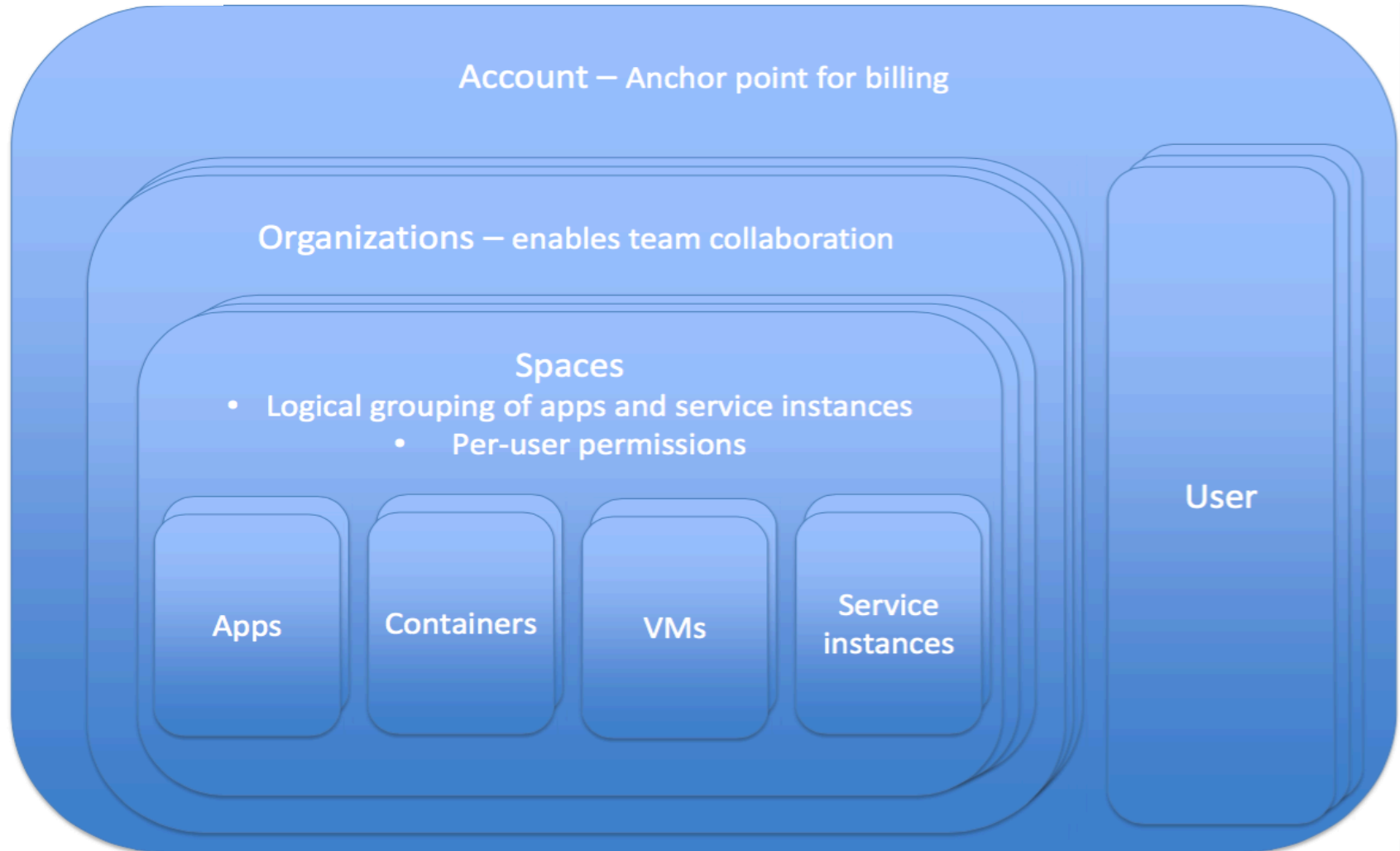| Cloud Foundry application | Docker container | Virtual machine |

expanding →

Flexibility

Level of abstraction

Bluemix Fundamentals

Account – Anchor point for billing

Organizations – enables team collaboration

Spaces
- Logical grouping of apps and service instances
  - Per-user permissions

Apps

Containers

VMs

Service instances

User

Cloud Foundry Application

- Provides support to deploy apps of various runtimes.

Cloud Foundry Services

- Provides a large range of services that can be used to build your application

| Compute | Network | Storage | Data & Analytics | Watson | Internet of Things | APIs |

| DevOps | Security | Application Services | Mobile | Integrate |

Cloud Foundry Services

- Provides a large range of services that can be used to build your application

Compute	Network	Storage	Data & Analytics	Watson	Internet of Things	APIs
DevOps	Security	Application Services	Mobile	Integrate		

Cloud Foundry Application

How do you want to start coding?

Eclipse Tools for Bluemix

Develop, integrate, and push applications to Bluemix using Eclipse.

Command Line Interface
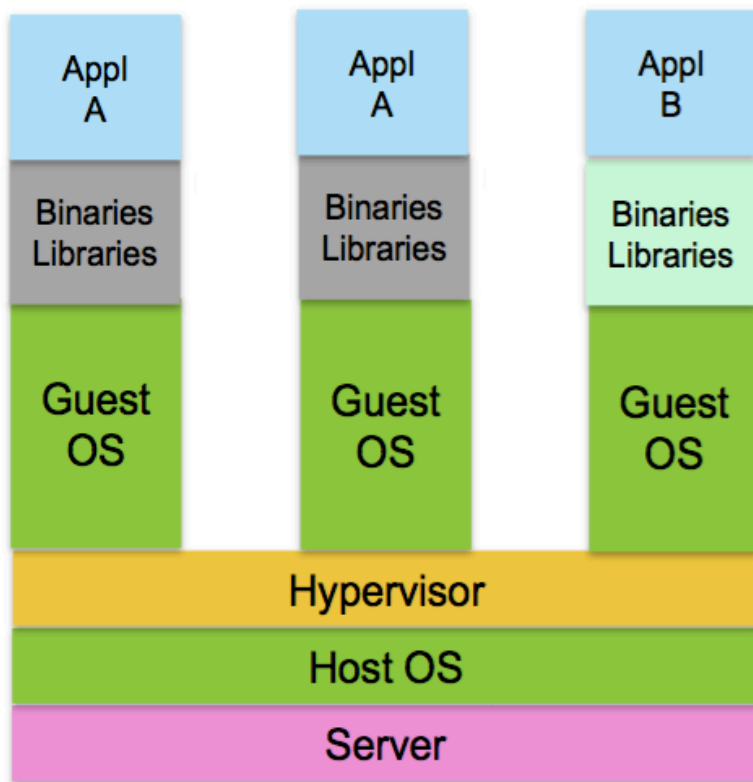
Run your code locally.
Manually push to Bluemix.

Git

Deploy your app with the Git CLI, or use Bluemix DevOps Services.

Containers & VMs

VM

Appl A	Appl A	Appl B
Binaries Libraries	Binaries Libraries	Binaries Libraries
Guest OS	Guest OS	Guest OS

Hypervisor
Host OS
Server

Docker

Appl A | Appl A | Appl B | Appl B | Appl B | Appl B | Appl B | Appl B

Binaries Libraries	Binaries Libraries

Docker Engine
Host OS
Server

References

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- https://developer.ibm.com/courses/all-courses/bluemix-essentials/

- https://blog.docker.com/2016/03/containers-are-not-vms/

THANK YOU