



IBM Bluemix Development & Certification

Summary decks for a course that covers the A to Z of IBM Bluemix.

For more information visit:
<http://www.acloudfan.com>

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1. Bluemix offering
2. Bluemix Account Management
3. Starters, Boilerplate, Runtime

PS: Certification practice test questions NOT available in the summary decks

Discounted access to the courses:



<https://www.udemy.com/ibm-bluemix/?couponCode=BLUE100>

Coupon Code = **BLUE100**



<https://www.udemy.com/rest-api/?couponCode=REST100>

Coupon Code = **REST100**

PS:

- For latest coupons & courses please visit: <http://www.acloudfan.com>
- Enter to **WIN Free access** – please visit: <http://www.acloudfan.com/win-free-access>



Introduction to Bluemix

- Offering
- Capabilities

Flexible deployment & compute options

Instant Runtimes

App-centric runtime environments based on Cloud Foundry.



Containers

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



Virtual Machines

Get the most flexibility and control over your environment with VMs.



Tip: Pay attention to open standards in use



PaaS offering

Built on Open source

CLOUD **FOUNDRY**

<http://www.cloudfoundry.org>



Pivotal



vmware



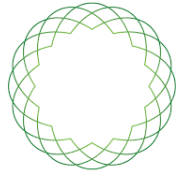
EMC²

Abstraction

Portability

Extensibility

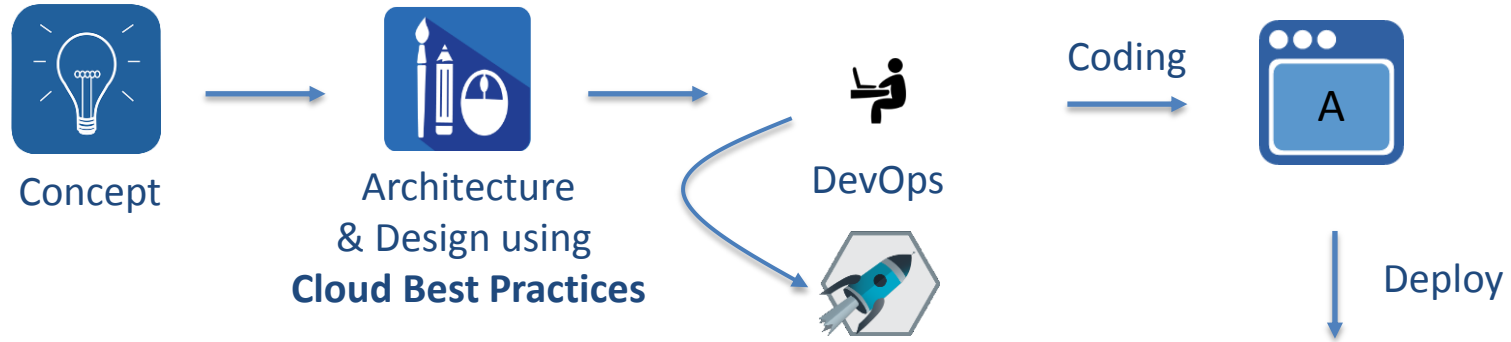
DevOps/Openness



Predix



Applications Development - Bluemix

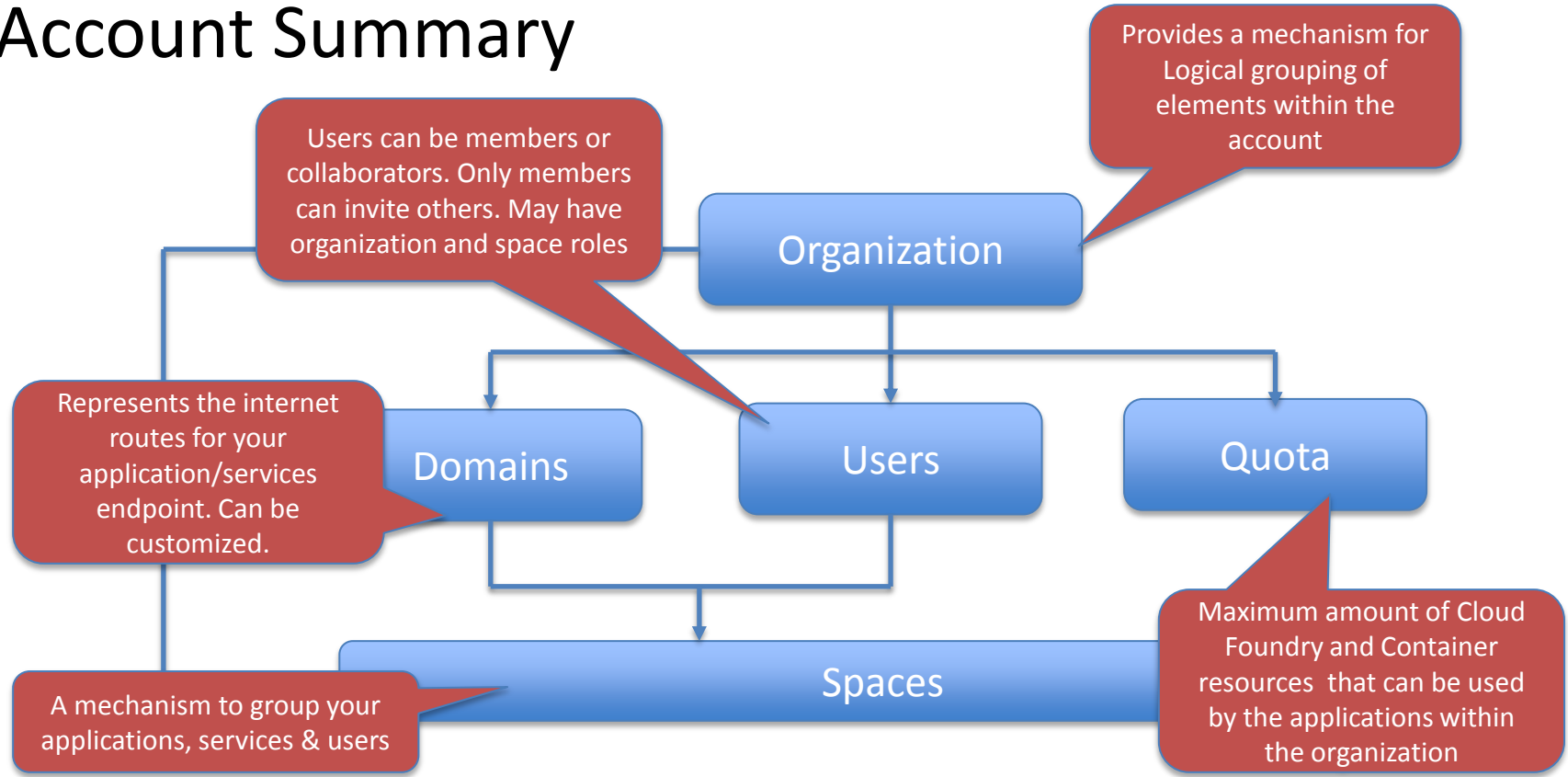


- Applications are portable due to open standards
- Applications get deployed to the Bluemix Runtime
- Applications can leverage readily available services & API on the Bluemix platform



- Organizations
- Spaces
- Users
- Domains
- Quota

Account Summary



Users

- Participate in organizations and have varying capabilities depending on the assigned **Role**. May be members of multiple organizations & can use the dashboard on portal to switch between organizations
- Once the user is created in the organization, they can be granted access to the spaces within the organization
- There are 2 types of users:
 1. **Member** User who created the account. Or accepted invitation
 2. **Collaborator** You already are using the account but accepted invitation to join this account



- Organization roles

1. Organization **Managers**
2. Organization **Billing Manager**
3. Organization **Auditor**

- Space roles

1. Space **Managers**
2. Space **Developers**
3. Space **Auditors**



Domains

- Provide route on the internet for the organization. By default if you do not setup a domain it is *mybluemix.net*
- An application route is composed of the hostname (application name) + the domain name.

E.g., `myapp.mybluemix.net` << *default domain*

E.g., `myapp.acme.com` << *custom domain acme.com*

- To add a custom domain you need to setup your DNS to point your domain to the Bluemix system domain



Quota

- Defines the resource limits on the organization at **Cloud Foundry** & at **Container** level.

E.g., Memory 512 GB by default for Cloud Foundry

E.g., Public IP 2 by default for Containers

- All applications under the spaces defined under the same organization will contribute towards usage of resources from the defined quota
- Quotas can be changed as the needs of the organization changes



Organization

- Enabler for collaboration among the users
- Facilitates logical grouping of project resources
 - Group the spaces, applications, services, domains, routes and users together in an organization
 - Manage the access to organization and spaces on per user basis
- Organization names MUST be unique in Bluemix. Creator of the organization is automatically assigned the role of Organization Manager



Starter

- A *starter* is a template that includes predefined services and application code
 - Higher productivity
 - Faster speed to release
 - Consistency
- Two types:

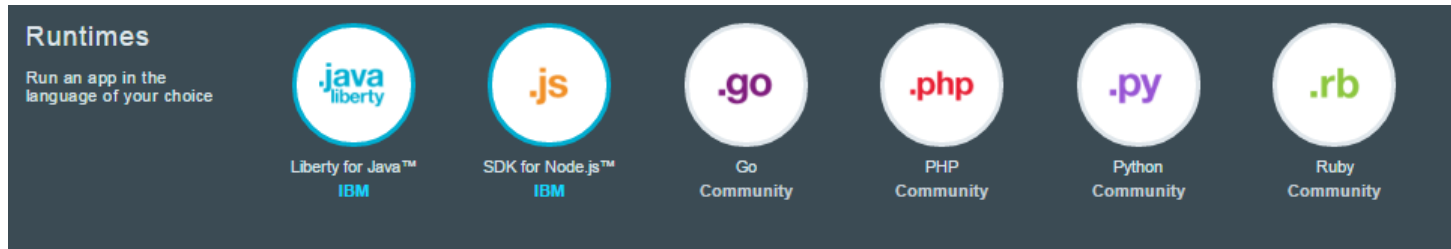
Runtime

Boilerplate



Runtime

- A set of resources to run your application
- Bluemix provides runtime containers for different type of applications



- Runtime environments are automatically configured
- Runtime = *Buildpacks*; Additional runtimes may be supported



Boilerplate

- Provides a starting point for a specific solution
- Combination of **Runtime** and **Services**

