IBM Certified Advisor Cloud Foundations v1 : Exam Prep Workshop

Cloud computing

- Cloud definition
- Cloud platform services
    - Infrastructure-as-a-Service (IaaS)
    - Platform-as-a-Service (PaaS)
    - Software-as-a-Service (SaaS)
- Types of Cloud
    - Public
    - Private
    - Hybrid
    - IBM Cloud
    - IBM Cloud Private

IBM Cloud

- Public Cloud
- Private cloud on IBM Cloud
- Hybrid cloud on IBM Cloud
- IBM Cloud Private
- Single cloud vs Multi-cloud Solution
- IBM Cloud Functions
    - Cloud Foundry
    - Containers - Docker
    - IBM Cloud Kubernetes Service
    - VMware Solutions Portal
        - VMware Cloud Foundation (VCF)
    - Virtual servers
    - Boot storage for virtual servers
    - Bare metal server
    - IBM Cloud Garage
        - IBM Cloud Garage Method

- IBM Garage Method Reference Architectures

Security

- Security Services
- Secure Gateway
- App ID
- IBM Cloud Virtual Private Cloud
- Vulnerability Advisor
- Cloud Internet Services
  - DDoS protection
  - WAF
  - Global load balancer
- IPSec VPN

Networking

- IBM Cloud Infrastructure global network
  - Public Network
  - Private network
  - IBM Cloud management network
- Account isolation in Bluemix Infrastructure
- How are VLANs used by IBM Bluemix Infrastructure?
- VLAN spanning in Bluemix Infrastructure
- Firewalls in IBM Cloud
  - Operating System level firewall
  - Multitenant firewall
  - Dedicated hardware firewall
  - FortiGate Security Appliance (FSA)
  - vRouter
- Load balancers
  - IBM Cloud LLB

- o NetScaler
- o IBM Cloud Infrastructure GSLB functionality
- o Security Groups

DevOps

Monitoring

- Metrics
- Logging
- Synthetic Monitoring

Storage

- Cloud Storage
  - o Block storage iSCSI
  - o File storage
- Cloud configuration options
  - o Endurance tiered IOPS
  - o Performance Allocated IOPS
- Object Storage
  - o IBM Cloud Infrastructure Cloud Object Storage (COS)
  - o IBM Cloud Infrastructure COS Standard Regional (OpenStack)
  - o IBM Cloud Infrastructure COS Standard Cross-Region (S3 API)
- Mass storage (bring your own storage)
  - o Examples of data types stored in Object Storage
  - o Example uses of Object Storage
- Content Delivery Network (CDN)
- A Storage Cloud
  - o Public Storage cloud
  - o Private storage cloud
  - o Local private storage cloud
  - o Hybrid storage cloud

Application Design

Microservices

- Microclimates
- Urbancode
- IBM Cloud Functions
- API Connect
- Economy of API
- Enterprise Design Thinking
- Strangler Application pattern
- IBM Cloud Log Analysis
- IBM Blockchain Platform
- Watson Assistant

Designing for IBM Cloud

- IBM Cloud Garage
- IBM Cloud Garage Method
  - Culture
  - Discover
  - Think
  - Develop
  - Reason
  - Operate
  - Learn
- Application Modernization

Watson

- Watson Studio
- Watson Knowledge Catalog

- Watson Assistant
- Watson Discovery
- Watson IoT Platform (This may need more)
- Watson Speech to Text (STT)
- Watson Text to Speech (TTS)
- Watson Language Translator
- Watson Natural Language Classifier
- Watson Natural Language Understanding
- Watson Visual Recognition
- Watson Tone Analyzer
- Watson Personality Insights
- Data Refinery
- Watson Machine Learning
- Deep Learning
- Analytics Engine
- Skytap
- IBM App Connect
- IBM App Connect Enterprise
- IBM Cloud Event Management
- Event Streams for IBM Cloud
- Hybrid integration services

VMware

- VMware Cloud Foundation (VCF)
  - Benefits
- vCenter Server
- VMware Back-up and Disaster Recovery
  - Veeam
  - Zerto
  - Multi-Datacenter