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| --- | --- | --- | --- | --- | --- |
| **Compute** | Azure Virtual Machines, Azure Virtual Machines Scale set, Azure App Service, Azure Container Instances, Azure Kubernetes Service, Azure Functions, Azure Virtual Desktop, Docker (Server🡪Hypervisor->Guest OS->Docker Engine->Bin/Lib, App1) | | | | |
| **Storage** | Blob, Queue, File, Disk (Backup, DR) | Block Blob, Page Blob, append blob, LRS, GRS, ZRS, GZRS | Azure Data Factory(Linked Service, Dataset, Activity)  Azure data bricks (Create workspace, cluster, notebook, libraries, Data) | | |
| **Network** | VPN, Subnet, NSG,ASG, DDOS, Azure Firewall, Resource firewall, Azure DNS Zone, Azure region, subregion, FrontDoor, Traffic manager, load balancer, CDN, application Gateway, Azure CLI, YAML, PVC, PV, | | | | |
| **Governance & Security** | Azure Policies, Security policies, Guest Security, Locks (Resource Lock (RBAC), Azure service Principle, Azure security Center, Azure Defender, Azure AD (B2C, B2B), MFA, | Azure Blueprint, apply suggested System update, Vulnerability, Security thread, Azure Service health | Cluster Role & Role Binding, Azure Advisor (Cost, performance, High availability) Azure Active Directory(User, Group, Role),Azure Active Directory domain service, Azure AD Connect | SSL/ TLS Certificate, Encryption in transit Azure Disk encryption, Privilege Identity Management (PIM), Azure Sentinel (Security information event management, Security Orchestration automated response)  Azure BluePrint(Resource Group, 2. ARM Template, 3. Policy Assignment (Compliance)  , 4. Role Assignment  **BluePrint Stages: (**Definition (above all 4 component), Publish (Assign Version number), Assignment(Actual deployment) – assign to subscription. | |
| **monitoring, logging** | **monitoring, logging, and orchestration of container applications running on Kubernetes**  Azure Monitor, Application Insight, Log Analytics | | | | |
| **DevOps**  Docker(Build, Push, run)  **Command**: restore, Build, test, publish)  **Pipeline**- Stage  **Stage**- Agent(Job)  **Steps** – (inside Job) | Terraform(init, Plan, apply, deploy), AKS, Ingress, Helm chart, Service Fabric , Azure Pipeline, Terraform, AKS, Ingress, Helm chart, Service Fabric , Azure Pipeline | DevOps triggers master,(steps, scripts) tools: VS code, Azure CLI,  Code Quality tool - SOnarQube  SAST (Static application security testing)- Fortify, Veracode, Checkmarx)  SCA (Software composition analysis)-Fortify, Snyk, Veracode, Blackduck  DAST(Dynamic Application Security Testing)- Owasp zap, Webinspect, Veracode DAST, Acunetix  IAC Security tool (Bridgecrew, Synk)  Container Security tool(Aqua, Qualys, Prisma Cloud)  RASP(Runtime Application Self-Protection)  IASP (Interactive application security testing)  OWASP (Open Web Application Security)  Veracode, SonarQube, Snyk, Anchore, Zap scanner webapp(OWASP zip)  Integrated security tools like Fortify, Veracode, Snyk, SonarQube, Checkmarx  Build Pipeline tool (Azure DevOps, Github Actions, Gitlab)  **BlackDuck** | | Kubernetes(Automate application deployment, Scaling and management), Control Plane, workernode,  Container Registory, Kubernetes Master(API Server, Scheduler, Controller,etcd(Persistent store) Services, Worker Node (Kubelet, CRE(Docker), , Automation, Lint issue,Terraform Providers, tfstates,Kubectl, Kubeadm,nod, Pod, replicaset, PVC, PV, Deployment, Services, Ingress, let's encrypt, Helm chart, Canary, Blue green deployment, Config Map, APIVersion, Kind, Metadata, Spec, template, Container,Istio ingress gateway, envoy proxy, side car(Security, retry, metrics, Tracing, Communication config), init, Istiod(pilot,citadel, Galley), Autoscaling with HPA, Matrics server, OpenShift,  Azure Static Analysis tools like CredScan, BinSkim  Cloud Security tool(AWS Security hub, Azure defender)  Infrastructure scanning tool( chef inspect (Compliance), Nessus  Container registry scanning tool (Aqua, AWS Native registry scanning)  Management tool (Aqua, BridgeCrew) | |
| **App Services & LoadBalancer** | Azure cloud shell, Azure Public Ips, Automation, Azure migration, availability zone, Azure Redis | Azure Marketplace, Web apps, Service bus(Message)- order Processing, event hub -Partition based(Event streaming (series)- | Azure function, Durable function (Sequence, Fan out & Fan In, Automated long running job, Human interaction, Key vault,  Azure service fabric to package, deploy, | Logic app (Schedule automate, Orchestration), manage scalable and reliable microservices and containers | Telematry(IOT), Telemetry and distributed data streaming (million record in second) ,event grid (Event distribution)-Discreate-Trigger function when file delivered,Relay, API Management, Service Fabric,Azure SQL DB |
| .**Role & Responsibility** | automatically deploys, builds and configures the platform and services. Monitoring, Health check  Review and integrate all application requirements, **including functional, secur, ity, integration, performance, quality and operations** requirement.   Provide input into final decisions regarding hardware, network products, system software and security.  **Key Responsibilities :**Understand the programs strategic direction and influence related technologies, tools, and processes Own the overall solution blueprint and roadmap Work closely with clients to articulate business problems and translate them into an appropriate solution design Ensure integrated solution, understanding the capabilities and limitations of packaged software and platforms Serve as subject matter expert for modular architectures and next-generation integration techniques with a cloud-first  **Technical Experience :**Understand the programs strategic direction and influence related technologies, tools, and processes Own the overall solution blueprint and roadmap Work closely with clients to articulate business problems and translate them into an appropriate solution design Ensure integrated solution, understanding the capabilities and limitations of packaged software and platforms Serve as subject matter expert for modular architectures and next-generation integration techniques with a cloud-first  **Professional Attributes :**Understand the programs strategic direction and influence related technologies, tools, and processesOwn the overall solution blueprint and roadmap Work closely with clients to articulate business problems and translate them into an appropriate solution design Ensure integrated solution | | | | |