🔄 Azure → AWS Mapping for Interview Prep

Category	Azure	AWS Equivalent
Cloud & Hybrid	Azure, Azure Stack	AWS + **Outposts**, AWS Local Zones
Networking	VNET, NSG	VPC, Security Groups, NACLs
Identity	Azure AD	AWS IAM, AWS SSO, Cognito
IaC	Terraform, Ansible	Same (Terraform/Ansible)
CI/CD	Azure DevOps	CodePipeline, CodeBuild, GitHub Actions, Jenkins
Containers	AKS	EKS (or self-managed K8s on EC2)
Service Mesh	Istio/Linkerd	Istio/Linkerd on **EKS** (no native AWS mesh)
DNS	Azure DNS	Route 53
PKI	Azure Key Vault + Certificates	AWS ACM (Certificate Manager), KMS, Secrets Manager
Zero Trust	Azure Zero Trust framework	AWS Verified Access, IAM Identity Center + PrivateLink
Hybrid Identity	Azure AD + Keycloak	Keycloak + AWS IAM / Cognito federation

◆ **Interview Prep (AWS Angle)**

1. Cloud & Hybrid (AWS + Outposts)

- Know **AWS Outposts**, Direct Connect, VPN.

- Understand hybrid identity (Keycloak ↔ AWS IAM).
  Sample Q: How would you extend an on-prem workload to AWS securely?

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2. IaC (Terraform/Ansible)

- Practice reusable Terraform modules for VPCs, EKS, IAM roles.

- Ansible: EC2 provisioning, config management.
  Sample Q: How do you manage Terraform state in a team? (Answer: S3 + DynamoDB lock)

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3. Containers (EKS + Service Mesh)

- Deploy EKS clusters with Terraform.

- Add Istio/Linkerd service mesh (mTLS, traffic routing).

- IAM roles for service accounts (IRSA).
  Sample Q: How would you secure pod-to-pod communication in EKS?

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4. CI/CD (Jenkins, GitHub Actions, AWS-native)

- Jenkins + GitHub Actions for pipelines.

- AWS CodePipeline + CodeBuild basics.

- Security in pipelines (storing secrets in AWS Secrets Manager).
  Sample Q: Walk me through a GitHub Actions workflow that builds Docker images, pushes to ECR, and deploys to EKS.

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5. Networking & Security

- VPC, Subnets, Security Groups, NACLs.

- Route 53 for DNS.

- ACM + KMS for certs + PKI.

- Zero Trust: IAM boundaries, Verified Access, PrivateLink.
  Sample Q: How would you design a multi-VPC secure network for EKS workloads?

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6. Identity (Keycloak + AWS)

- Connect Keycloak with Cognito/IAM for federation.

- OAuth2 / OIDC flows in AWS.
  Sample Q: How would you integrate Keycloak as an IDP for an EKS app?

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7. Scripting (PowerShell, Bash, Python)

- Bash: automation for AWS CLI commands.

- Python (boto3) for custom provisioning.

- PowerShell (less common on AWS, but possible).
  Sample Q: Write a Python script to rotate ACM certificates for an ALB.

✅ **AWS-Centric Prep Strategy**

1. **Terraform + AWS** → Build reusable modules (VPC, EKS, IAM).

2. **EKS** → Deploy Istio, secure workloads with IRSA & mTLS.

3. **CI/CD** → Jenkins or GitHub Actions → ECR → EKS.

4. **Networking** → Multi-VPC, PrivateLink, Route 53, SGs.

5. **Security** → TLS, PKI, KMS, Secrets Manager.

6. **Identity** → Keycloak + AWS Cognito/IAM federation.