



Ace Your Azure Architecture Interview!

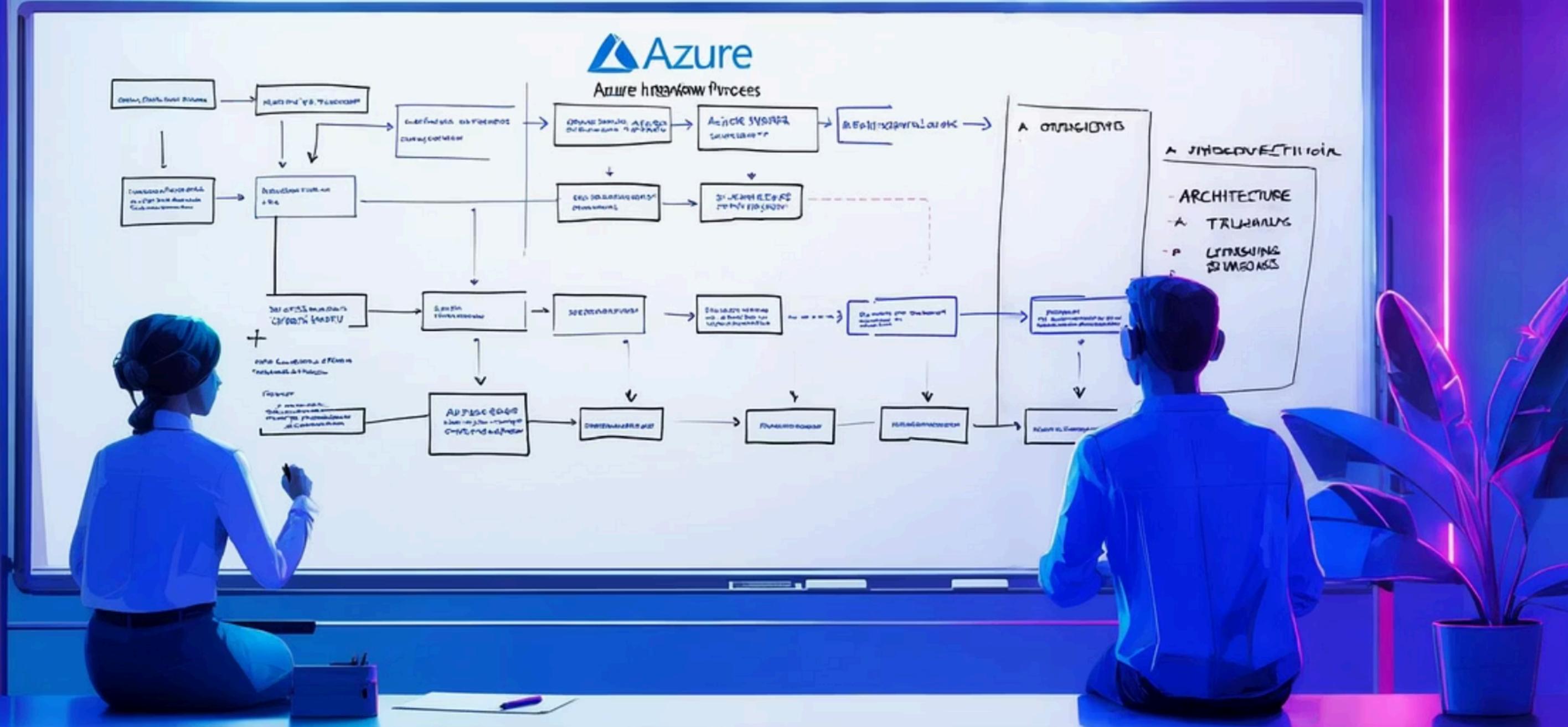
Master the essential Azure diagrams and concepts to nail your solution architect interview. Keep scrolling to see real-world examples!



SANGEETHA



@CAREERBYTECODE



The Interviewer's Mindset

Technical Depth

They want detailed understanding of Azure services and how they work together

Problem Solving

Can you apply Azure solutions to real business challenges?

Best Practices

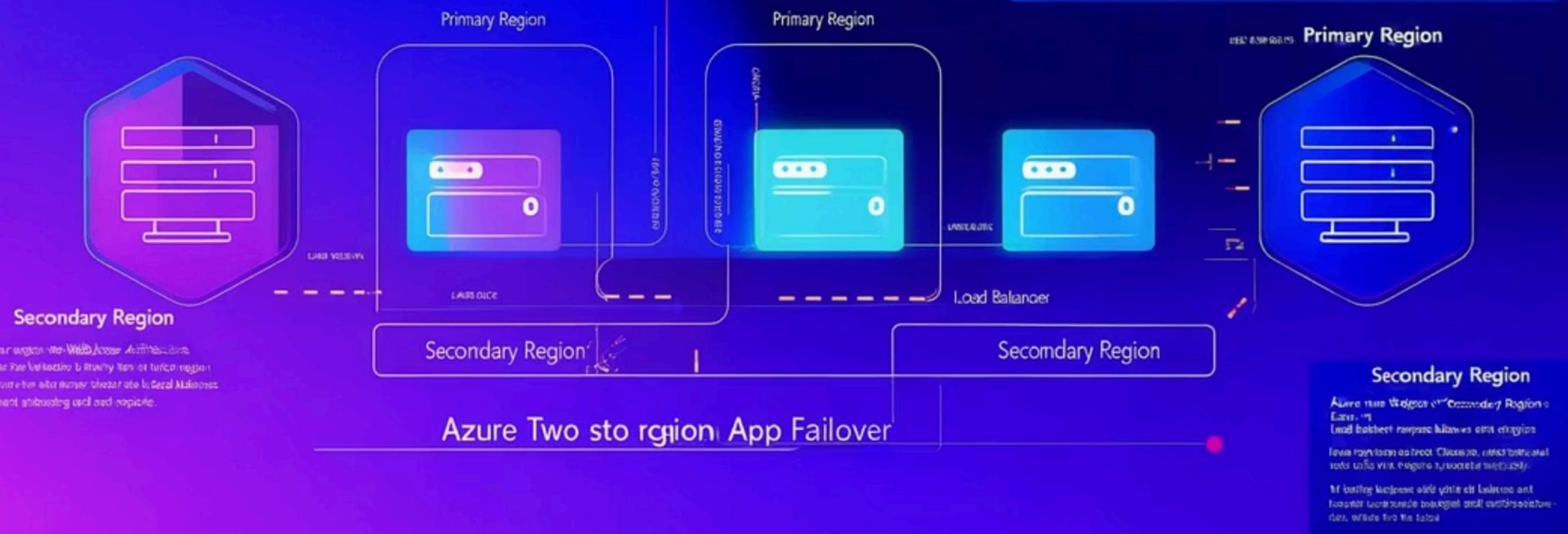
Do you follow Azure Well-Architected Framework principles?

Azure Well-Architected Pillars Overview



Azure Two-Region Web App Failover

Azure Two-Region Web App Failover automatically failover to a secondary region if the primary region becomes unavailable. It can be triggered by Azure Monitor Metrics or CloudWatch Metrics.



Reliability Pillar: High-Availability



Active-Active or Active-Passive

Implement multi-region deployments to ensure continuous availability



99.99% SLA

Achieve higher SLAs through proper redundancy implementation



Availability Zones

Protect against datacenter failures within a region

with VM ScalSet



Reliability: Autoscale Web Apps



Monitor Load

CPU, memory, and request metrics

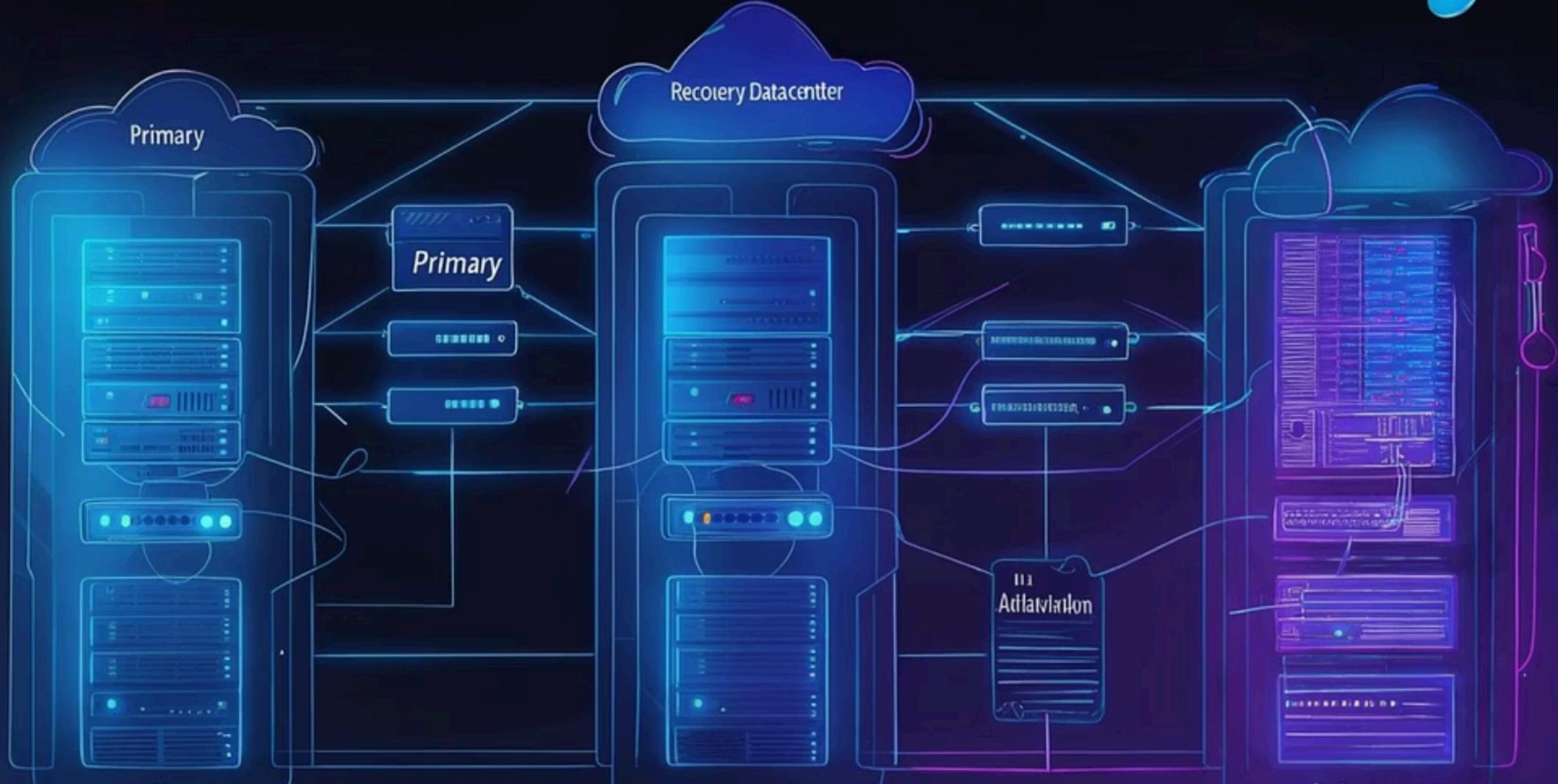
Apply Rules

Define thresholds for scaling actions

Scale Out/In

Add or remove VM instances automatically

Azure Site Recovery



Reliability: Disaster Recovery (DR)

- 🕒 RPO: Recovery Point Objective
Maximum acceptable data loss measured in time
- ⌚ RTO: Recovery Time Objective
Maximum acceptable downtime for recovery
- 🛡️ Azure Site Recovery
Orchestrates DR workflow between regions



Reliability: Global Distribution



Traffic Manager

DNS-based traffic routing to nearest deployment



Front Door

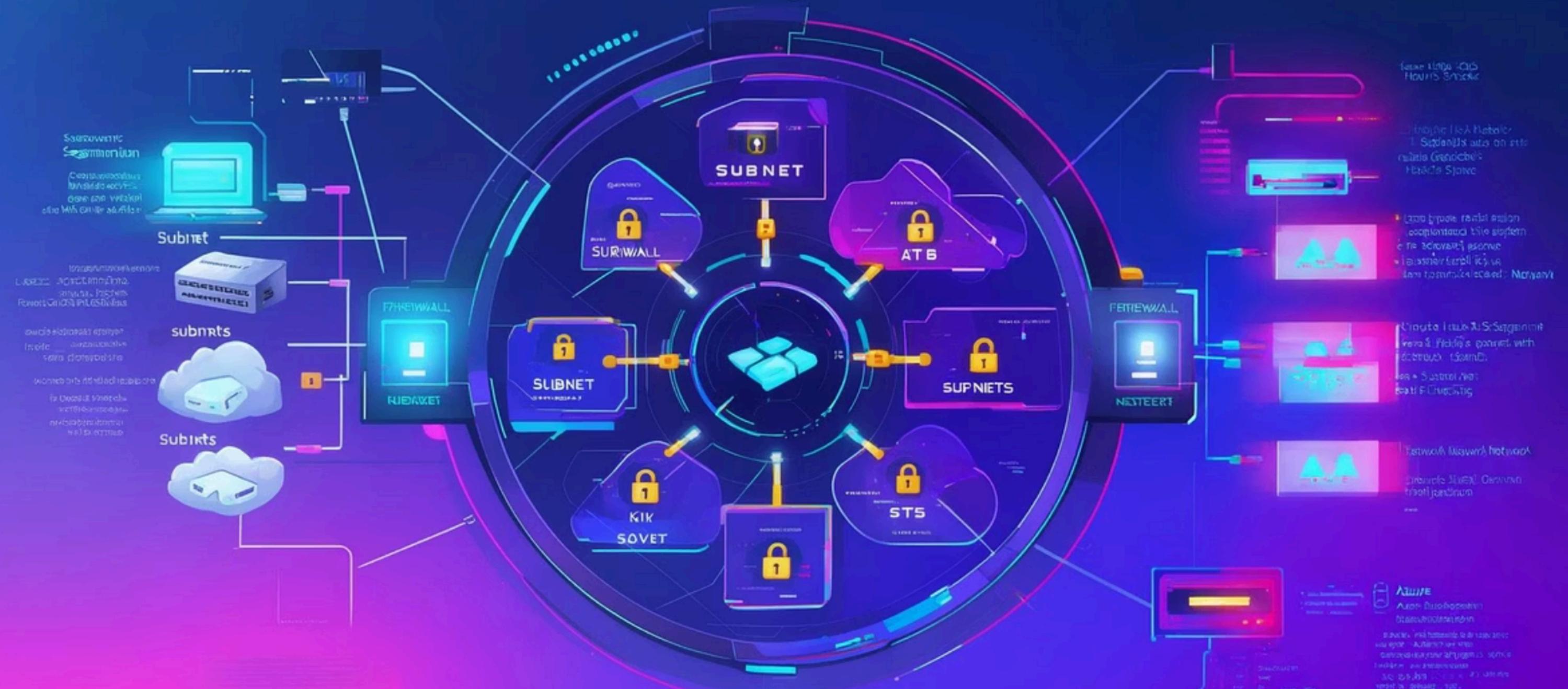
Global HTTP load balancing and acceleration



Cosmos DB

Multi-region write capabilities for databases

Network Segmentation



Security Pillar: Network Segmentation

Hub VNet

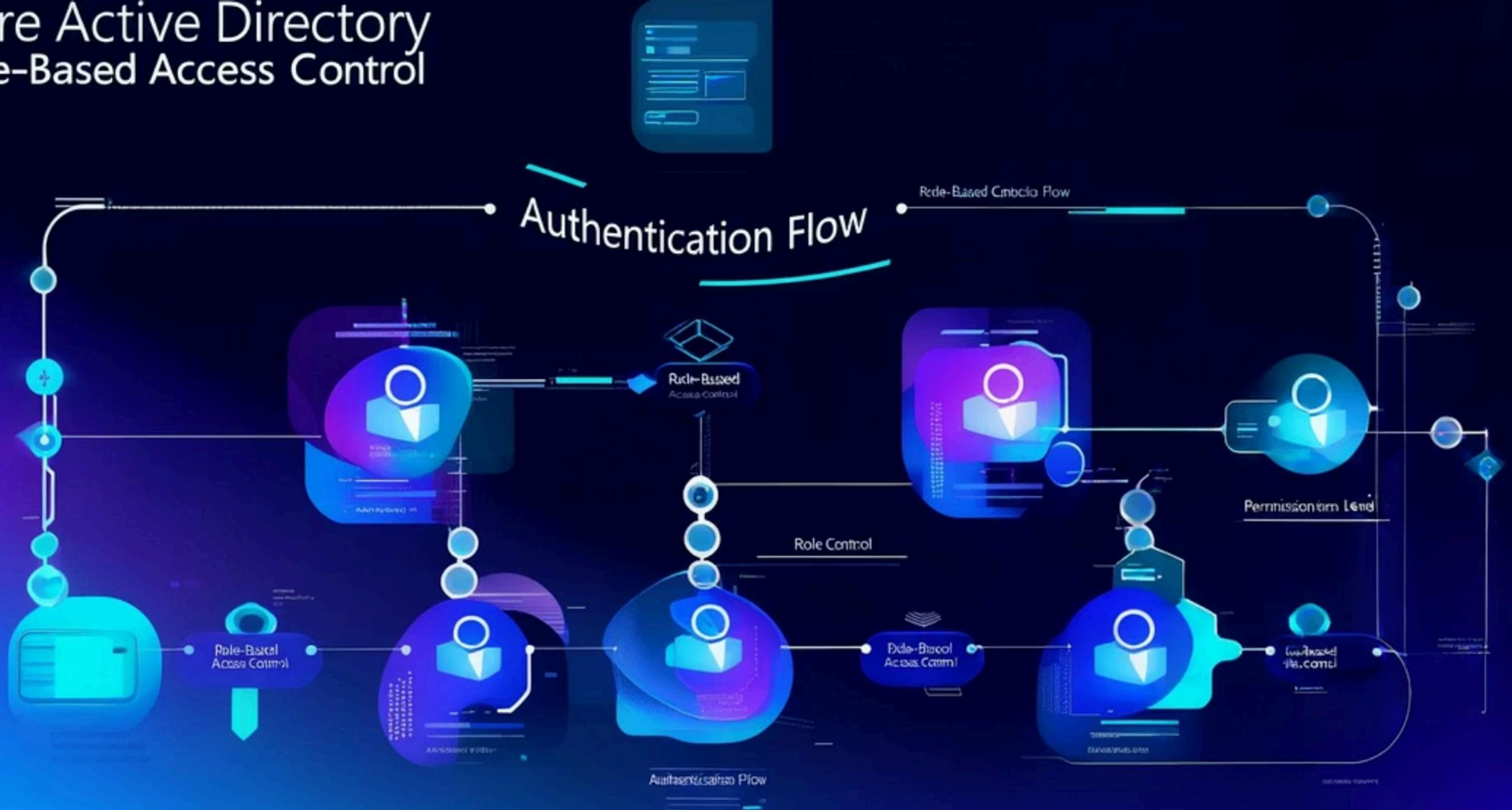
Central connectivity and shared services like firewalls

Spoke VNets

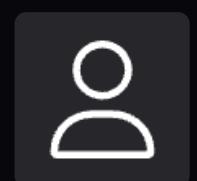
Isolated workloads with peering to hub

NSGs

Network Security Groups filter traffic at subnet level

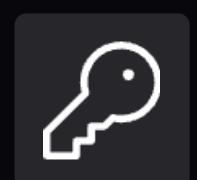


Security: Identity & Access Control



Azure AD

Cloud identity service for authentication



RBAC

Role-Based Access Control for fine-grained permissions



Managed Identities

No stored credentials for Azure resources

Security: Data Encryption

Application-level Encryption

Encrypt before sending to Azure

Transport-level Encryption

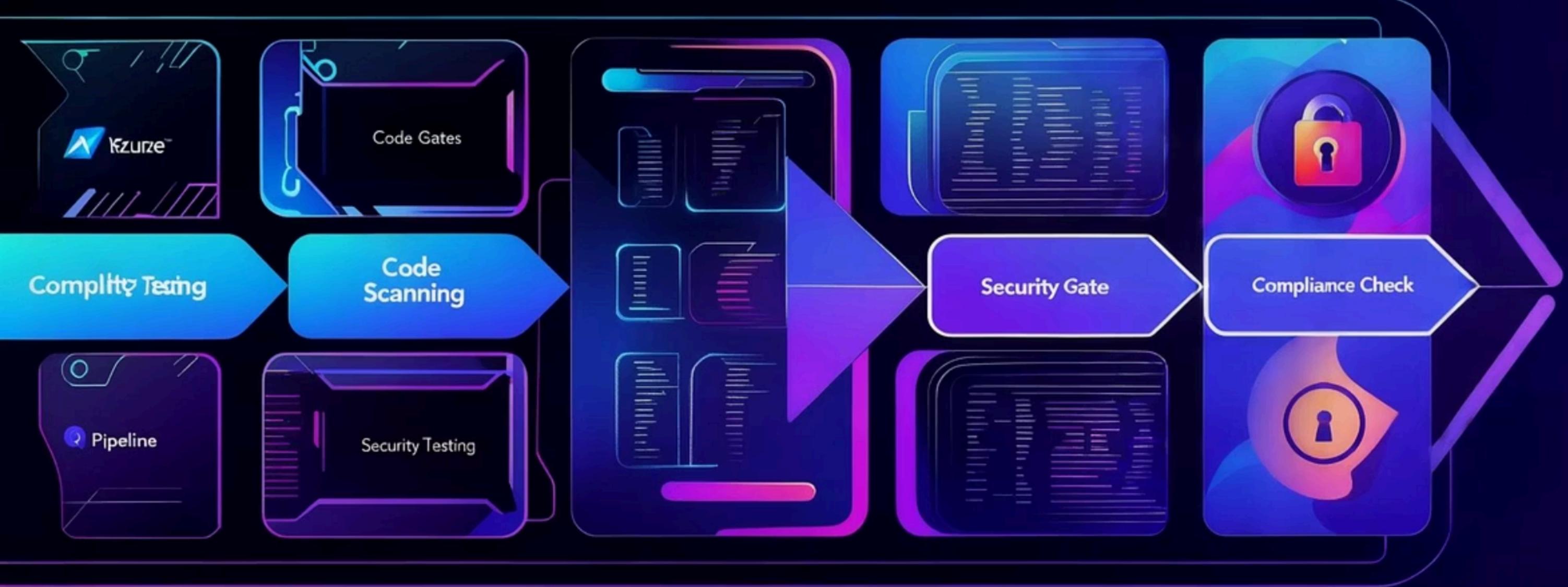
TLS/SSL for data in transit

Platform-level Encryption

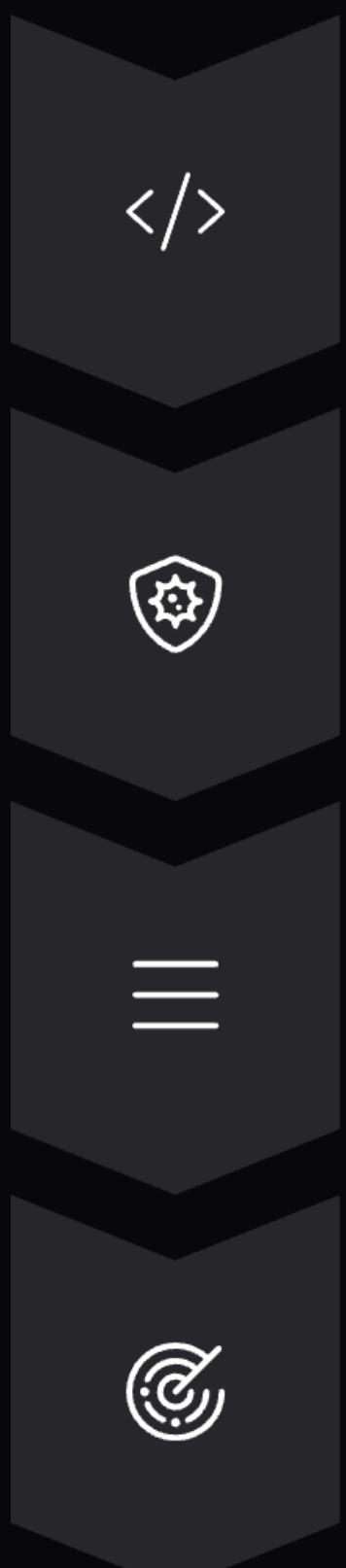
Azure-managed keys for data at rest

Key Management

Azure Key Vault for custom key control



Security: Secure DevOps



Pay-as-you go

Reserved instances



Cost Optimization Pillar: Reserved Instances

72%

Max Savings

Potential discount with 3-year Reserved Instances

40%

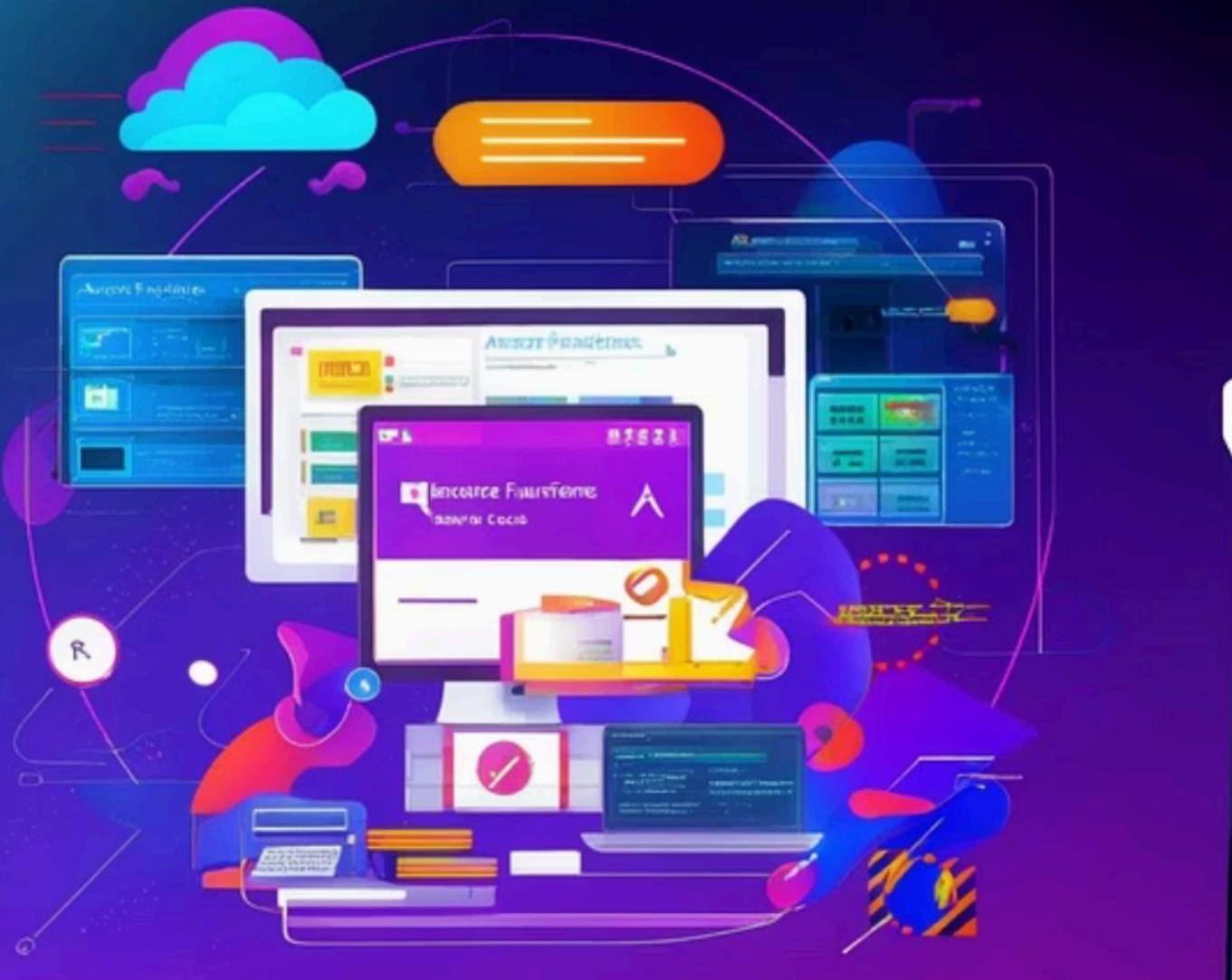
Average Savings

Typical savings for 1-year commitments

99.9%

Same SLA

No compromise on availability guarantees



Cost Optimization: Serverless Computing



No Idle Capacity

Pay only for function execution time



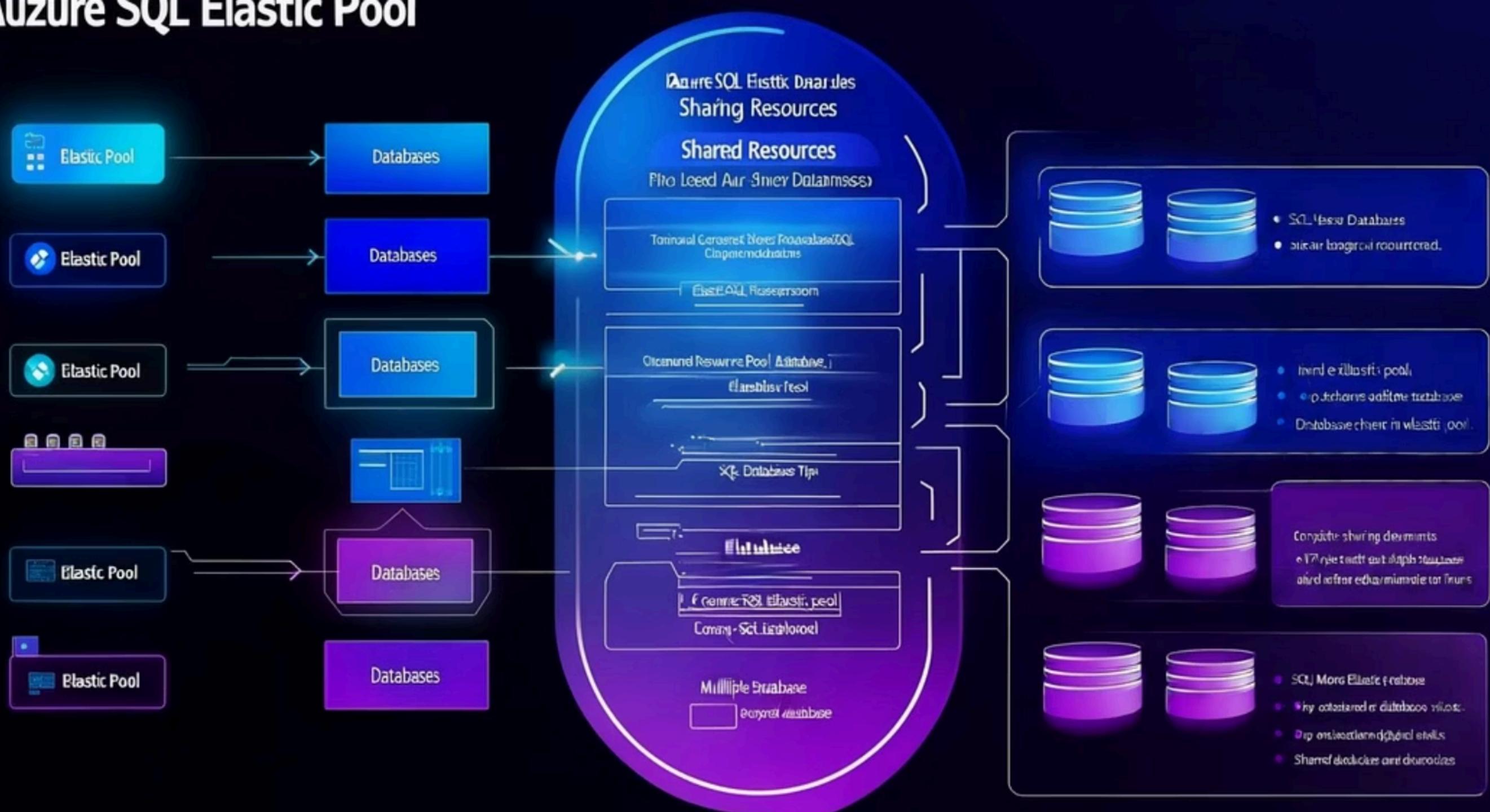
Auto-scaling

Handles variable workloads efficiently

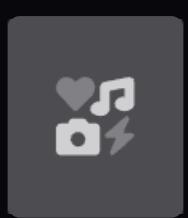


Consumption Plan

Best for sporadic, unpredictable workloads



Cost Optimization: Managed Databases



Shared DTUs

Pool resources across multiple databases



Automatic Scaling

Adjusts capacity based on actual usage



Cost Predictability

Fixed monthly cost for variable workloads

Spending Analytics

Budget Alert

48.9.99

20.136

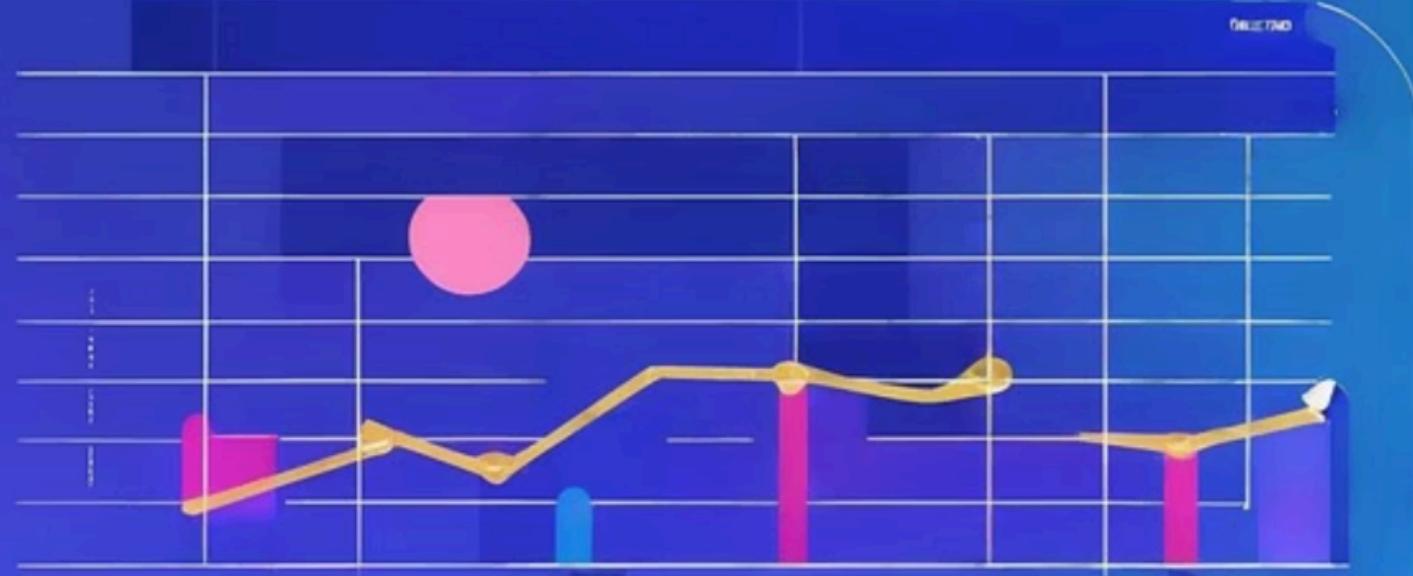
3.55**3.575 / 8.00**

Spent

3.41

Service Cost	Cost
Mergers	\$70
Supplies	\$60
Urgent	\$75
Coast	\$259
Total Cost	\$60

Budget Monitoring (M)



Cost Optimization: Monitoring & Budgets



Cost Analysis

Break down spending by resource, tags, and time periods



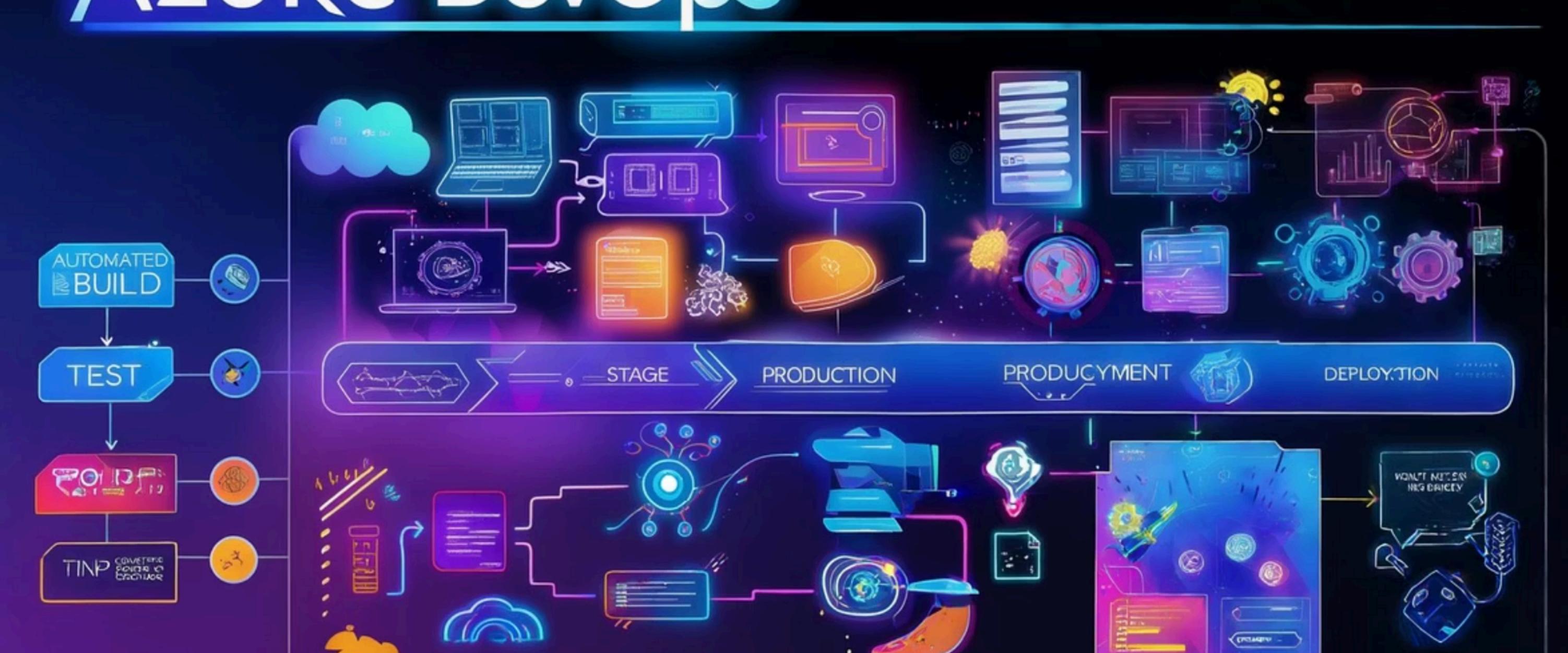
Budget Alerts

Receive notifications when spending approaches thresholds



Resource Tagging

Track costs by projects, departments, or environments



Operational Excellence Pillar: CI/CD Automation



Operational Excellence: Monitoring & Alerts

1 Collect

Gather metrics, logs and traces

Analyze

Process data with Log Analytics

Alert

Notify on thresholds or anomalies

Respond

Trigger automation or runbooks

Azure
Monito

DasG

MONITORING

MONITORING

MONITORING



CareerByteCode
Learning Made simple

Azure Bicep ARM Template



Operational Excellence: Infrastructure as Code

ARM Templates

JSON-based infrastructure definitions for consistent deployments

Bicep

Simplified domain-specific language that compiles to ARM

Terraform

Multi-cloud IaC with HCL syntax and state management

Policy-Based Sensitive Protection



Operational Excellence: Automated Backups



Scheduled Backups

Define frequency and retention policies



Multi-resource Protection

VMs, databases, file shares, and more



Point-in-time Recovery

Restore to specific moments for databases

Performance Efficiency Pillar: CDN Acceleration



Global Reach

100+ edge locations worldwide



Low Latency

Content served from nearest point of presence



DDoS Protection

Built-in security against distributed attacks



Performance Efficiency: Caching Strategies



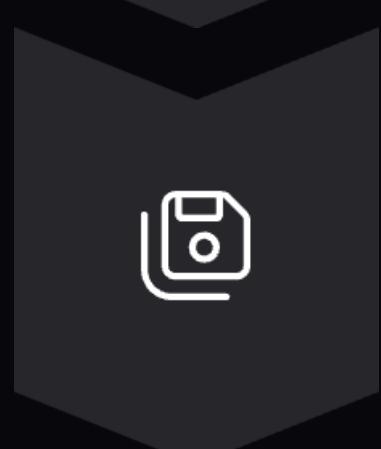
Check Cache First

Look for existing data in Redis



Fetch if Missing

Query database only when needed



Store in Cache

Save results with appropriate TTL



Performance Efficiency: Scalable Microservices



Container Orchestration

AKS manages Kubernetes clusters for you



Service Mesh

Istio/Linkerd for inter-service communication



Horizontal Pod Autoscaling

Add pods based on CPU or custom metrics

Azure Storage

- B2 points
- Bb points
- BO rawms

File Storage

- Nuna's Paterris
- Matad.0 items



Performance Efficiency: Choosing Right Storage

Blob Storage

Unstructured data like images, videos, backups

Table Storage

NoSQL data with schema-less design

Queue Storage

Message passing between application components

File Storage

SMB-based shared storage for migrations

Architecture Trade-offs Discussion



IaaS

Maximum control, higher management overhead



PaaS

Balance of control and managed services



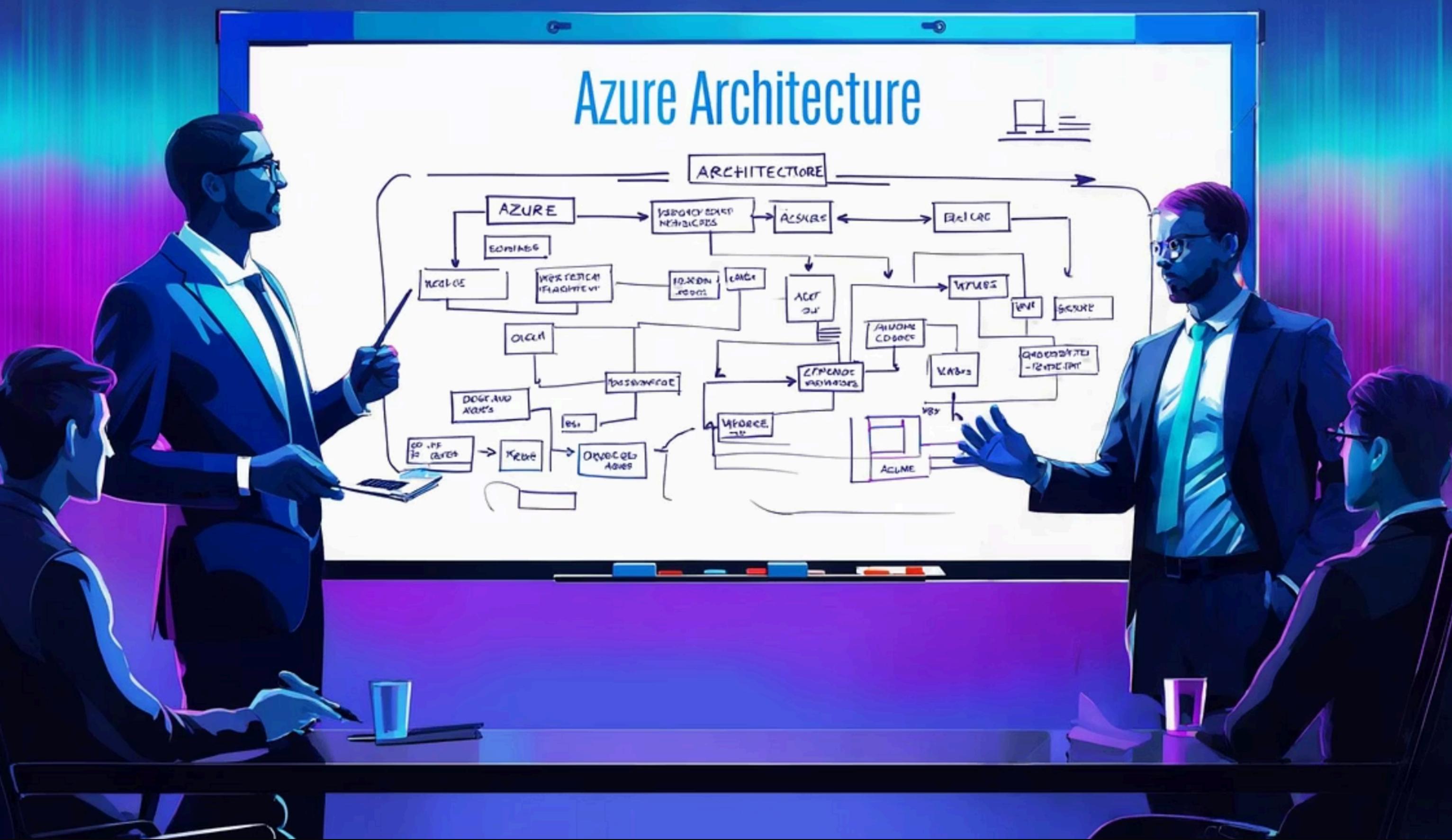
SaaS

Minimal management, less customization



Serverless

Event-driven, no infrastructure management



Take Action & Ace Your Interview!

Practice explaining these diagrams in your own words. Connect each to the Well-Architected pillars for a comprehensive response that will impress any interviewer. Tag a colleague who's preparing for their Azure architect interview!

We are Largest Platform - Real-Time Projects



700+ Hands-On Projects

Industry-aligned scenarios that
mirror actual workplace challenges

100% Practical Focus

Every project solves real business
problems

24/7 Access

Learn and practice at your own pace

700+ Real-Time Hands-On Projects

Extensive project library across multiple technologies and domains



Azure
146 Projects



AWS
87 Projects



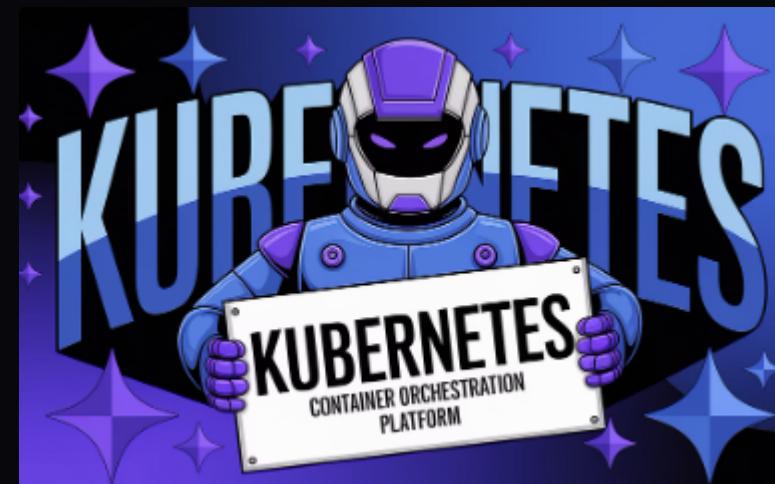
Ansible
67 Projects



Terraform
76 Projects



Docker
18 Projects



Kubernetes
47 Projects



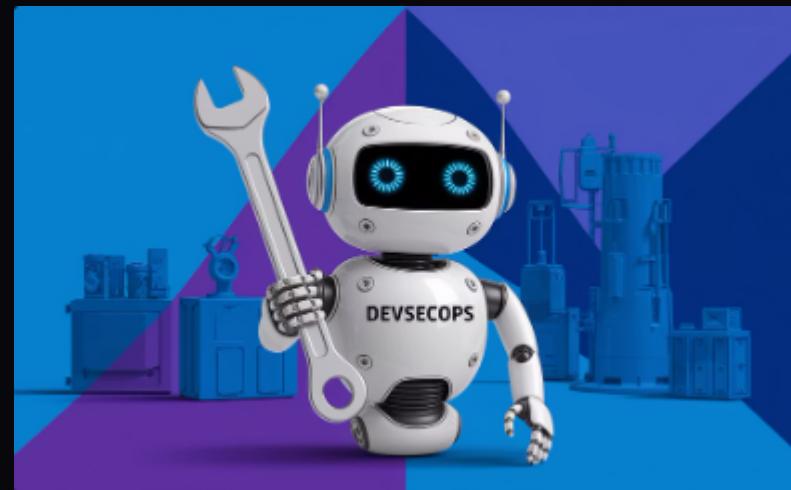
DevOps
42 Projects



DevOps Tools
56 Projects

700+ Real-Time Hands-On Projects

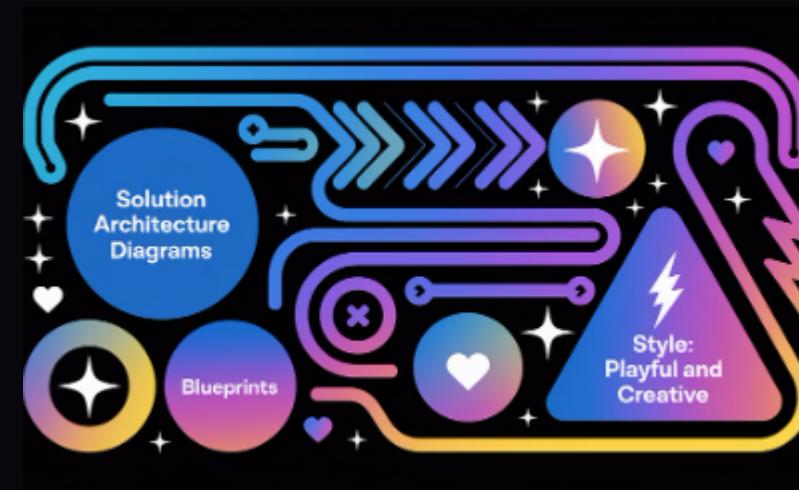
Extensive project library across multiple technologies and domains



DevSecOps
87 Projects



Google Cloud
14 Projects



Solution Architecture
9 Projects



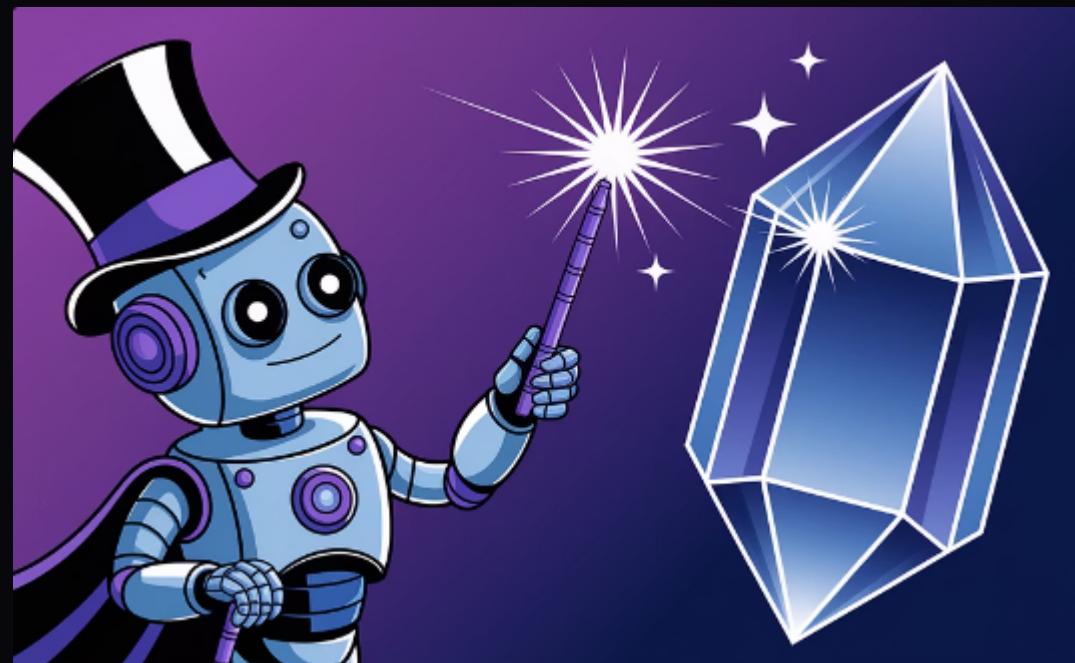
FullStack
9 Projects



Cloud Migration
9 Projects



Python
29 Projects



AI/ML/Data
14 Projects

FOLLOW



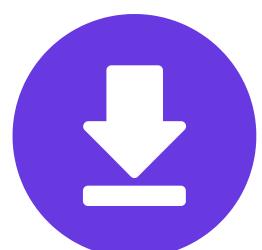
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