

Azure DevOps Demo Platform

Client-ready Proposal — Demonstration & Implementation Plan

Architecture Diagram (Mermaid)

```
graph TD
    subgraph Developer
        A1[Push Code] --> A2[GitHub Actions CI Pipeline]
    end
    A2 --> A3[Build Image → GHCR]
    subgraph Azure_Infrastructure [Azure Infrastructure]
        B1[Terragrunt] --> B2[Terraform Modules]
        B2 --> B3[(Azure Blob Storage Backend)]
        B2 --> AKS[AKS Cluster]
        AKS --> NP[Node Pools]
        AKS --> AGIC[Application Gateway Ingress]
    end
    subgraph GitOps
        G1[GitHub Repo - Manifests]
        G1 --> G2[ArgoCD Sync]
        G2 --> AKS
    end
    A3 --> G1
```

Key Talking Points

- AKS with managed identities
- Azure Storage backend for Terraform state
- ArgoCD GitOps automation
- Enterprise readiness and RBAC

Suggested Implementation Plan (High-level)

1. Bootstrap infra using Terragrunt (dev env)
2. Install ArgoCD and configure Applications for k8s-gitops
3. Wire GitHub Actions CI to build & publish images to GHCR
4. Run security scans (Trivy, Checkov) in CI
5. Add observability stack (Prometheus, Grafana, Loki)
6. Run demo and capture metrics & cost estimates