

Deployment Strategy

Zero-Downtime Deployment (Blue-Green)

1. Deploy new version to "Green" staging slot
2. Warm up Green slot (cache, DB connections)
3. Run automated smoke tests
4. Swap slots (instant traffic cutover)
5. Monitor for issues
6. Keep "Blue" slot for instant rollback

Azure Infrastructure

- **API:** Azure App Service
- **Integration Service:** Azure Container Instances or Functions
- **Database:** Azure SQL Database
- **Cache:** Azure Cache for Redis
- **Monitoring:** Application Insights

CI/CD Pipeline

Build Stage:

- Restore → Build → Test → Security Scan → Publish Artifacts

Deploy Stage:

- Deploy to Staging → Smoke Tests → Deploy to Production (approval)

Rollback

Instant: Swap back to Blue slot

Alternative: Redeploy previous version from artifacts