XORIANT

INFRASTRUCTURE AS CODE DELIVERS UNIFIED ANALYTICS CAPABILITIES ON AZURE PLATFORM FOR A CLOUD COMMUNICATIONS LEADER

Minimized deployment of unified analytics from 10 hours to 2 hours with Infrastructure as Code (IaC) and DevOps best practices. Automated and enhanced security with Security as Code (SaC).

Client Background

A leader in unified cloud communications and workstream collaboration needed to deliver unified analytics to its global customer base. However, the client wanted to avoid the time required to manually deploy multiple analytics environments while ensuring uniform DevOps policies, governance, and compliance. **Leveraging Xoriant cloud and DevOps expertise, a greenfield deployment project was devised to enable the client to provide Analytics as a Service (AaaS) in Azure cloud** to both internal users and customers, while enhancing its BI data and insights reporting capabilities.

Key Objectives

- Deploy IaC tools to automate the infrastructure build-out in Azure Cloud and ensure consistency and uniformity across the environments with best practices.
- Develop a configurable code that can be re-used for different environments to save significant development time.

Xoriant Solution

- Deployed Analytics service components in Azure DevOps through pipeline.
- Provided Azure Platform and automated deployment through Terraform and Azure Resource Manager (ARM) using Azure DevOps.
- Designed and implemented Azure Kubernetes Service (AKS) for the analytics application.
- Performed Horizontal Pod Autoscaling (HPA) of AKS.
- Set up network architecture for external connectivity, inclusive of data flow in hub and spoke environments and enabling DDoS for every property in the Azure Cloud.
- Integrated ISTIO service mesh with various monitoring tools.

KEY BENEFITS

- Reduced time to deploy from Dev to Prod by implementing one IaC for multiple environments using DevOps best practices. Eliminated manual intervention requirement for configuration and integration of applications.
- Delivered resource savings within the project and across the product release cycle.
- Increased Network, Perimeter, and Resource security through policy definitions using SaC. Also, provided additional security with Certificate Stores and Key Vault.
- Reduced production issues with multiple, ready-to-deploy isolated environments.
- Provided the ability to monitor and correlate all Azure resources and third-party tools.

- Enhanced security and scalability for secured external endpoints with Azure WAF-enabled Application gateway.
- Integrated MicroStrategy and Aiven Kafka deployment in Azure pipeline.
- Integrated Cloudflare through Azure Pipeline.
- Performed end-to-end automation for post installation of Microstrategy.
- Managed infrastructure upgrade, scaling, High Availability (HA) through Azure Pipeline.

Technology Transformation

CI /CD with Terraform using Azure DevOps (Pipelines, Boards) | Azure Relay hybrid connection | Azure Hyperscale (Citus) | Azure Active Directory | Azure App Service | Key Vault | Azure Resource Manager (ARM) | Azure Kubernetes Service (AKS) | Access Control Service (ACS) | Avien Kafka | Datadog | Microstrategy (Reporting) Single Server

Xoriant is a product engineering, software development and technology services company, serving technology startups as well as mid-size to large corporations. We offer a flexible blend of onsite, offsite and offshore services from our 17 global offices with over 5000 software professionals. Xoriant has deep client relationships spanning over 30 years with various clients ranging from startups to Fortune 100 companies.