MODERNIZATION OF ENTERPRISE JAVA APPLICATIONS AND AKS QUICK START

Motivation

The demand for short development cycles, massive scalability, and increased reliability is driving the cloud native revolution. This offering will introduce your organization to the Azure Kubernetes Service (AKS) by setting up a cloud native application development environment and migrating one of your existing Java based applications to a fully functional Kubernetes cluster in the Azure® Cloud.

What We Bring

20 years of experience with software architecture and custom software development projects for many of the world's largest enterprises have generated the expertise needed for PRODYNA to help you modernize and migrate applications to the Azure Cloud. We are a Kubernetes Certified Service Provider with recognized credentials from the Cloud Native Computing Foundation (CNCF). Our practical experience and daily use of DevOps and cloud native paradigms in multiple parallel customer development projects help us to efficiently transfer our know-how and agility to your application developer and operations teams. In addition to our cloud native working methodology, we will bring you our reference architecture and development environment to assist you with creating:

- ⟫ A fully configured and functioning Kubernetes cluster
- ⟫ A fully deployed app on the cluster
- ⟫ A configured CI/CD pipeline for fast and repeatable deployments
- ⟫ Your company specific cloud native development environment

What You Need

To make best use of this offer and permit a fast and efficient start, you will need:

- ⟫ An Azure® subscription
- ⟫ The source code for the applications
- ⟫ An open minded cross-functional team

Duration

15-20 person days

Benefits

- ⟫ **Decreased CapEx** by moving to a cloud-based service model
- ⟫ **Faster time to market** with a pay-as-you-use model
- ⟫ **Increased agility** through a continuous delivery model
- ⟫ **Increased scalability** with dynamic sizing and cluster scaling
- ⟫ **Increased reliability** with self-healing and multi-cluster options

Get started

To learn about pricing and how to get started, please contact info@prodyna.com

What You Get

Step	Actions	Deliverables
01 Kickoff	▶ Stakeholder management ▶ Introduction to cloud native design principles and key technologies ▶ Review of the existing application (e.g. architecture, components, dependencies) ▶ Design of the high-level target architecture ▶ Definition of tasks and responsibilities	▶ Target application and infrastructure design ▶ Task backlog
02 Target Platform	▶ Deployment of Azure Kubernetes Service (AKS) according to infrastructure-as-code best practices using Terraform ▶ Establish automated GitOps process for reviewing and rolling out infrastructure changes ▶ Integrate target platform into legacy infrastructure (e.g. VPN, data replication, etc.) ▶ Connect AKS to Azure AD for authentication and authorization ▶ Enable basic monitoring and logging	▶ Target environment ready for running the application
03 App Containerization	▶ Detailed analysis of application regarding cloud-readiness ▶ Adapt application if required ▶ Setup private image registry ▶ Enable containerized development ▶ Enhance application build process to package application into container images	▶ Container images for application ▶ Private image registry ▶ Cloud native ready developer workspace
04 App Deployment	▶ Create maintainable application deployment configurations for Kubernetes using state of the art tooling (e.g. Helm, Kustomize) ▶ Setup CI/CD pipeline to deploy application on target platform	▶ Application running on target platform ▶ CI/CD pipeline for quickly rolling out changes
05 Operational transparency	▶ Establish visibility into infrastructure and application by collecting metrics and logging data	▶ Centralized monitoring dashboards ▶ Centralized log analytics ▶ Alert management

About PRODYNA

PRODYNA is an innovative IT consultancy specializing in the creation of custom software solutions and serving the needs of corporate enterprises across the European continent. PRODYNA is a Kubernetes Certified Service Provider, Kubernetes Training Partner, and a member of the Cloud Native Computing Foundation.