

## CI/CD Enablement on Azure

Automate the deployment and updates of your cloud-native platform clusters. Push applications in a standardized and automated way. Apply techniques for zero downtime updates for the platform and applications



2 - 3 weeks



1 ALTOROS ARCHITECT +  
YOUR DEVELOPERS TEAM

### SERVICE FOCUS

K8s Enablement  
App Modernization  
Instructor-Led Training

### TARGET AUDIENCE

Developers  
Operators

### PLATFORM

Azure

ACTIVITIES	DELIVERABLES	OUTCOMES
<p>Assess and adapt existing or create new:</p> <ul style="list-style-type: none"><li>• Continuous delivery pipelines to provision and maintain AKS</li><li>• Continuous integration pipelines for container image creation and management.</li><li>• Continuous delivery pipelines to deploy applications to AKS</li></ul>	<ul style="list-style-type: none"><li>• Best practices, education/enablement</li><li>• Pipelines written for the customer's choice of CI/CD products</li><li>• Pipelines to automate end-to-end platform provisioning and management</li><li>• Platforms to automate creation of container images, including application testing and image vulnerability scanning</li><li>• Pipelines to automate the deployment, testing, and rollback of applications</li><li>• Documentation</li></ul>	<ul style="list-style-type: none"><li>• Faster and more consistent platform and application deployments</li><li>• Improved application reliability and security through automated testing</li><li>• Reduce errors introduced by manual processes</li><li>• Improve ability to reproduce the platform and services in the event of a disaster or when scaling to other regions</li><li>• Fewer people to maintain the platform</li></ul>

## PRACTICES



Whiteboard Sessions

Q&A Sessions

App Architecture Workshops

Standards  
and Guides

Training /  
Pairing

## Success with an industrial supply distributor

PROBLEM	SOLUTION	BENEFIT
<ul style="list-style-type: none"><li>• Spending a lot of money on the environment that was not fully utilized</li><li>• Many people involved in day-to-day operations management of the platform</li><li>• Security issues: anyone having access to the code would have access to the keys</li><li>• Lack of versioning and user management for application APIs</li></ul>	<ul style="list-style-type: none"><li>• CI/CD pipeline templates for deploying applications to containers and AKS</li><li>• Documentation on deployment and release management of applications to AKS using CI/CD blue/green</li><li>• Moving to Azure DevOps</li><li>• Architecture defined in Terraform through pipelines</li><li>• Azure API Management implementation to provide secure, versioned access to application APIs</li></ul>	<ul style="list-style-type: none"><li>• Secrets now stored in Azure Key Vault backed by Azure Active Directory for access control and utilizing AKS/Key Vault integration to manage application secrets in a more secure manner.</li><li>• A more common toolset for the infrastructure, changes are done through GitOps model</li><li>• Fewer people involved in platform maintenance</li><li>• More secure, streamlined way for business partners to consume application APIs</li></ul>

“Our developers have more time now to focus on larger problems and with the rapid feedback loop CI/CD allows us to steadily and continuously make our products better”



## Why Choose Altoros

- A CNCF-certified K8s service provider and training partner
- 32 K8s Engineers on staff, including 12 Certified Kubernetes Administrators
- 140+ engagements for Fortune 500 customers
- 392 employees, 85% engineering, zero outsourcing
- 9 K8s meetup groups founded with 2,258 total members
- 700+ professionals trained on Kubernetes in 2019-2020
- 100+ contributions to Free and Open-Source Software FOSS



**CLOUD NATIVE  
COMPUTING FOUNDATION**

**COMPANY TYPE:**  
Systems Integrator (SI)

**MARKETS SERVED:**  
North America  
EMEA  
APAC

