



# App Modernization & Cloud Native Solution Offerings

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## About **Canarys**

Over 30+ years in the industry, having offices in, New Jersey USA, Bangalore India Canarys is a comprehensive solution provider specializing in Azure DevOps, Azure Cloud Consulting, Dynamics 365 Business Central, Application Development ,Mobile Apps and Staffing across broad spectrum of domains.

# Canarys **Microsoft Partnership**



Canarys is **Microsoft** Gold-Certified Partner on **Azure and DevOps**, **GitHub Verified Partner** for India, APAC and USA

Microsoft Qualified Partner for **DevOps FastTrack** and **TFS to Azure DevOps Migration**

ALM and DevOps consulting services in India from 15+ years on Microsoft TFS, Azure DevOps (VSTS), Azure and Xamarin

Consulting services for Microsoft customers in APAC from 6 years on TFS, Azure DevOps (VSTS) and Azure

Professional services for **Microsoft Corp - USA** from 6+ years

Consulting services through **MCS** from 6+ years

Learning content creation for Microsoft IDC

Microsoft  
Partner



2018 Partner of the Year Finalist  
DevOps Award

Microsoft  
Partner



2017 Partner of the Year Finalist  
DevOps Award

2014  
Partner of the Year

Award Finalist  
Application Lifecycle Management

# Our Engagements with Microsoft



Primary clients are **Microsoft India, Microsoft R&D, Microsoft APAC and Microsoft Corp US.**

- ▶ **Microsoft R&D:** Providing technical learning content for Azure DevOps published on Microsoft learning portal
- ▶ **Microsoft APAC:** Azure and Azure DevOps Consulting and Workshops
- ▶ **Microsoft Corp:** Azure DevOps FastTrack in India and APAC  
Azure DevOps Demo Generator: <https://azuredevopsdemogenerator.azurewebsites.net/>  
Azure DevOps Labs: <https://azuredevopslabs.com/>

## ECIF engagements through Microsoft India:



## Staffing engagements through Microsoft Services India:



# Our Solution Offerings on App Modernization



We offer the following services:

## **1. App Modernization (.NET) POC**

- Modernizing traditional IaaS applications to PaaS models to keep up with the current speed of business
- Cloud Readiness Assessment of the applications
- Migration of both Apps and Infra to the Azure cloud
- Re-build, re-platform the applications and data to benefit from Azure App Services

## **2. App Modernization Workshop**

- Workshop is a two-day engagement that will cover the benefits of moving to Azure App Services to leverage the scalability, reliability and performance of Azure. We will be covering Azure App Services overview, Serverless, Functions, Logic Apps, Event Hubs etc.

# App Modernization (.NET)

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## App Modernization (.NET) on Microsoft Cloud (typically 4 - 6 weeks)

Migrating solutions to the Microsoft Azure platform can improve application performance and scalability thereby simultaneously lowering operational costs and downtime.

Whether you want to migrate applications to the cloud, improve user experience, re-architect for performance, or enhance your application with Azure capabilities, Canarys will work with your technical team to assess the identified application(s) and then design, plan and document key considerations for Application Modernization.

### Phase 1: Assessment and Discovery (1-2 days)

- Discussion on the scope of the engagement
- Identify the application(s) to be migrated to Azure
- Collect metrics about identified application(s) and assess using Azure Migration Assistant tool

### Phase 2: Application Modernization Roadmap (2-3 days)

- Design, plan and document key considerations for Application Modernization
- Define application migration strategy (Rehost, Refactor and other options) and roadmap
- Finalize Technology selection (Azure workloads)
- Provide high level Architecture Diagram, Azure Cost Recommendations and migration plan

### Phase 3: Application Migration / Re-engineering (1 - 5 weeks)

Based on the assessment and strategy, we will follow one of the approaches: Rehost, Refactor and Rebuild.

# App Modernization Workshop Overview

Quickly build, deploy and scale web apps and APIs on Azure App Services.

Azure App Services is a fully managed platform for building, deploying and scaling your web apps, with built-in infrastructure maintenance, security patching and scaling

In this Workshop you will learn the benefits of moving to Azure App Services to leverage the scalability, reliability and performance of Azure. We will be covering Azure App Services overview, Serverless, Functions, Logic Apps, Event Hubs etc..

**Duration :** 2 Days

**Workshop Style :** Guided learning

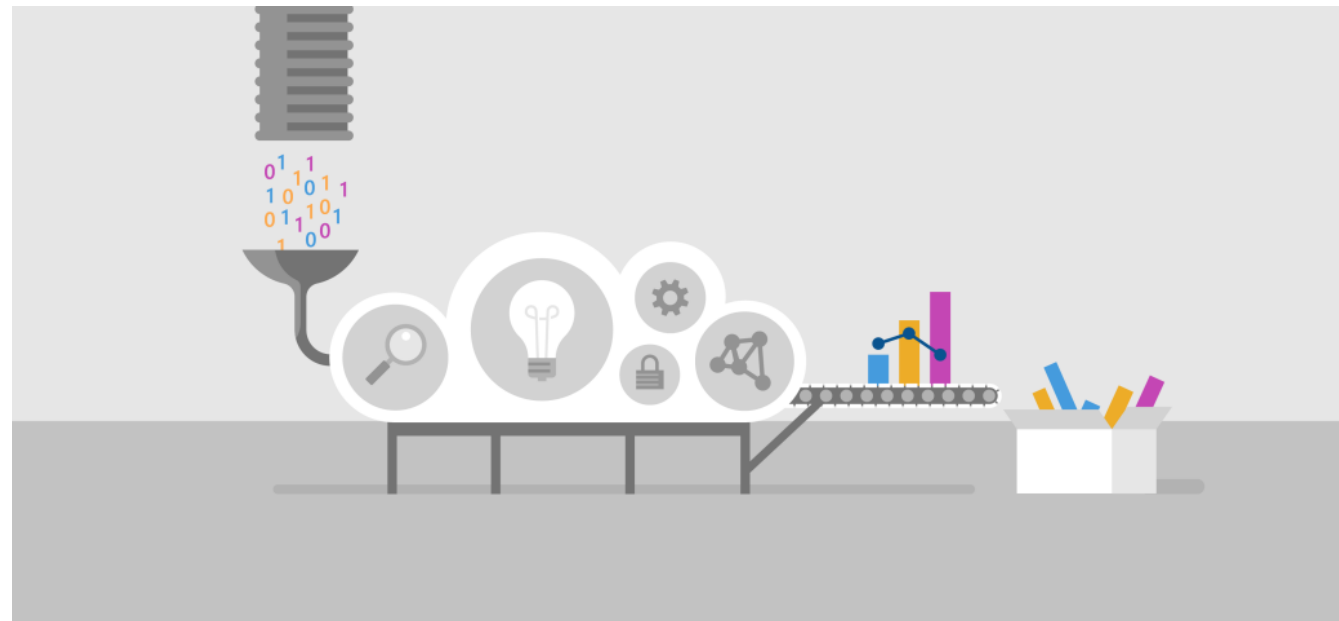
**Target Audience :** Developer, DevOps Engineer

**Prerequisites:**

- Microsoft Azure subscription
- Azure DevOps subscription

**Outcomes:**

At the end of this workshop, you will be learning benefits of App Services, will be able carry out deployment of web applications, Functions, Logic Apps to Azure Platform,



# App Modernization Workshop Agenda



## Day 1

- Introductions
- Microsoft App Dev Landscape/ Azure Benefits
- Introduction to App Service on Azure
- Demonstration of deploying web application and API to App Services
- Migrate the database to Azure SQL Database

## Day 2

- Demonstration of Blob Storage and Serverless Functions
- Demonstration of Azure Logic App process workflow
- Demonstration of modernizing the legacy application by using APIs, Logic Apps and Functions
- Wrap up and Questions



# Our Solution Offerings on AKS

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We offer the following services:

## 1. Cloud-native Technologies (AKS) Application Migration POC

- Assistance in the design & development of cloud native applications based on microservices and serverless functions
- Containerization of the Apps using Docker, Kubernetes and Azure Container Services
- Re-architect Legacy .NET Applications to Cloud Native Applications and leverage key cloud-native technologies including serverless computing, containers and microservices.

## 2. AKS Workshop

- Workshop on how to setup and configure Registry (ACR), AKS cluster and Azure DevOps Pipeline- to create Docker images for faster deployments and reliability using the continuous build option.

## Cloud-native Technologies (AKS) Application Migration POC (typically 6 - 10 weeks)

Implementation and management of Kubernetes and DevOps platform for more secure, agile and sustainable development of modern scalable application.

### Phase 1: Assessment and Discovery

- Discussion on the scope of the engagement
- Identify the application(s) to be migrated to Azure
- Assess using Azure Migration Assistant tool, review the current state and define the ideal state of modernization
- Finalize Technology selection (Azure workloads)
- Provide high level Architecture Diagram, Azure Cost Recommendations and migration plan

### Phase 2: Implementation

- Refactor the current application architecture and code
- DevOps assistance in reengineering and refactoring of existing application architecture to containers and actual migration to Kubernetes platform on Azure
- Assist teams to plan, prioritize and migrate application to a container-based architecture on Azure orchestrated using AKS.
- Configure Azure Pipelines for deploying application on AKS. Deploy and test various scenarios like horizontal scaling, self-healing, load balancing etc.

# AKS Workshop Overview

Kubernetes is a popular container orchestration platform for automating the management, scaling and routing of containers.

Azure Kubernetes Service (AKS) is a managed service offering on Azure by Microsoft. AKS provides a robust, hosted Kubernetes environment to easily deploy and manage your containerized applications without the need for deep container orchestration expertise.

At the end of the workshop, the participants will have the foundational functional knowledge on Docker, Kubernetes and AKS and will be able to implement simple AKS with Kubernetes infrastructure at their organizations.

**Duration :** 2 Days

**Workshop Style :** Guided learning and hands on labs

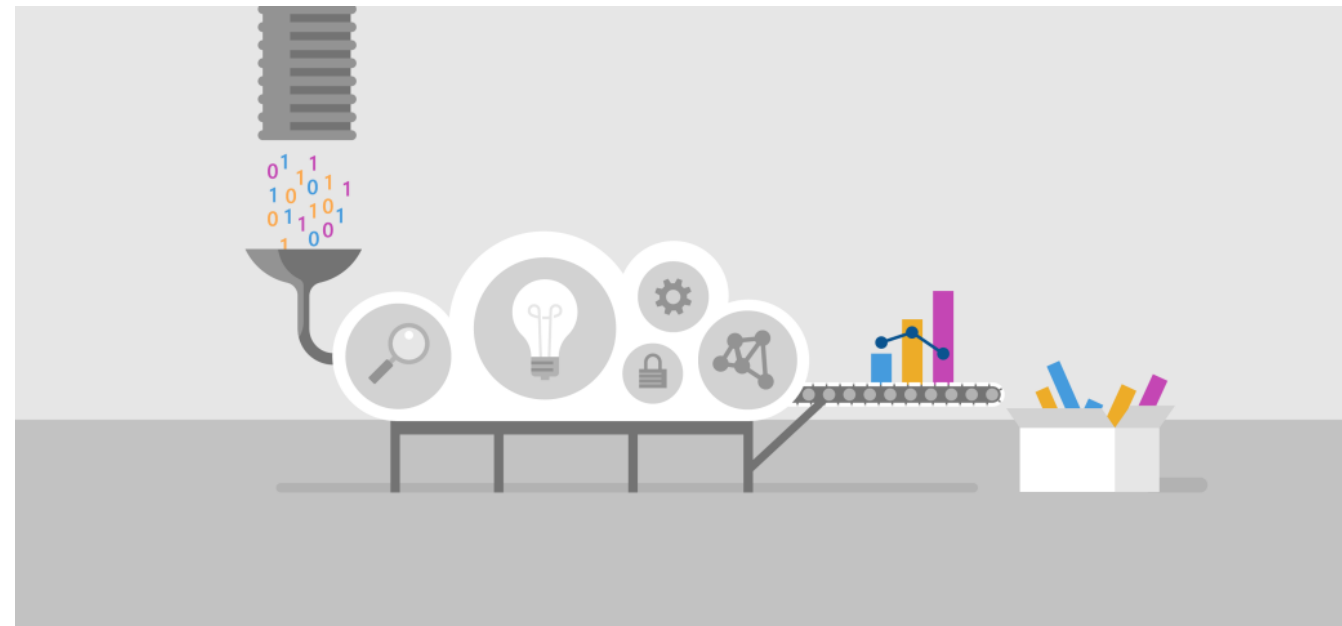
**Target Audience :** Project Manager, Developer + DevOps Engineer

**Prerequisites:**

- Basic knowledge of Containers
- Microsoft Azure subscription
- Azure DevOps subscription

**Outcomes:**

At the end of this workshop, you will be able to carry out Agile practices and also create pipelines to automate deployment of containerized apps to AKS cluster and reduce error-prone manual processes.



# AKS Workshop Agenda



## Day 1

- Introduction to Docker, Kubernetes and AKS
- Overview of Kubernetes concepts
- Configuration of AKS on Microsoft Azure
- Creation of Docker images from source code
- Configuration of DevOps
- Configuration of Azure Container Registry (ACR)

## Day 2

- Configuration of Kubernetes clusters
- Deployment of Docker images to ACR and Kubernetes (K8s)
- Deployment of micro-services and multi-container applications to AKS
- Configuration of rolling updates, rollbacks, and monitor pods
- Monitoring the Kubernetes clusters using Azure monitor for containers
- Introduction to Azure Dev Spaces for AKS

# App Modernization & AKS Activity Reference



## ☐ Mobitel, Sri Lanka (ECIF Engagement)

- Migrated web app from IIS deployment to Azure App Service
- Defined CI CD Azure pipelines to deploy applications to Azure App Service
- **Conducting ASO Workshops and Hackathon for customers in Indonesia, Sri Lanka and other APAC countries on App Modernization and Cloud Native Technology (AKS)**

## ☐ Mindtree (Logic App And Serverless Functions)

- Developed Azure Functions, Logic App for the Mindtree Rewards and Recognition (SharePoint) portal, to process the nominations by managers.
- Designed workflow for logic app to connect with Azure Service bus[Ques] and trigger workflow for each messages that are arrived in the queue. The workflow will generate pdf, images and send email.
- Logic apps will integrate with Azure Service bus, Azure functions, Blob storage and Outlook connectors.

## ☐ Evalueservice (AKS and DevOps)

- Containerized the Multi service APIs (.NET Core) to migrate from VM deployment to AKS
- Composed, built and pushed docker images to ACR using build pipeline
- Created AKS cluster to host multiple pods
- Deployed applications successfully to AKS cluster through Azure DevOps (CI/CD)

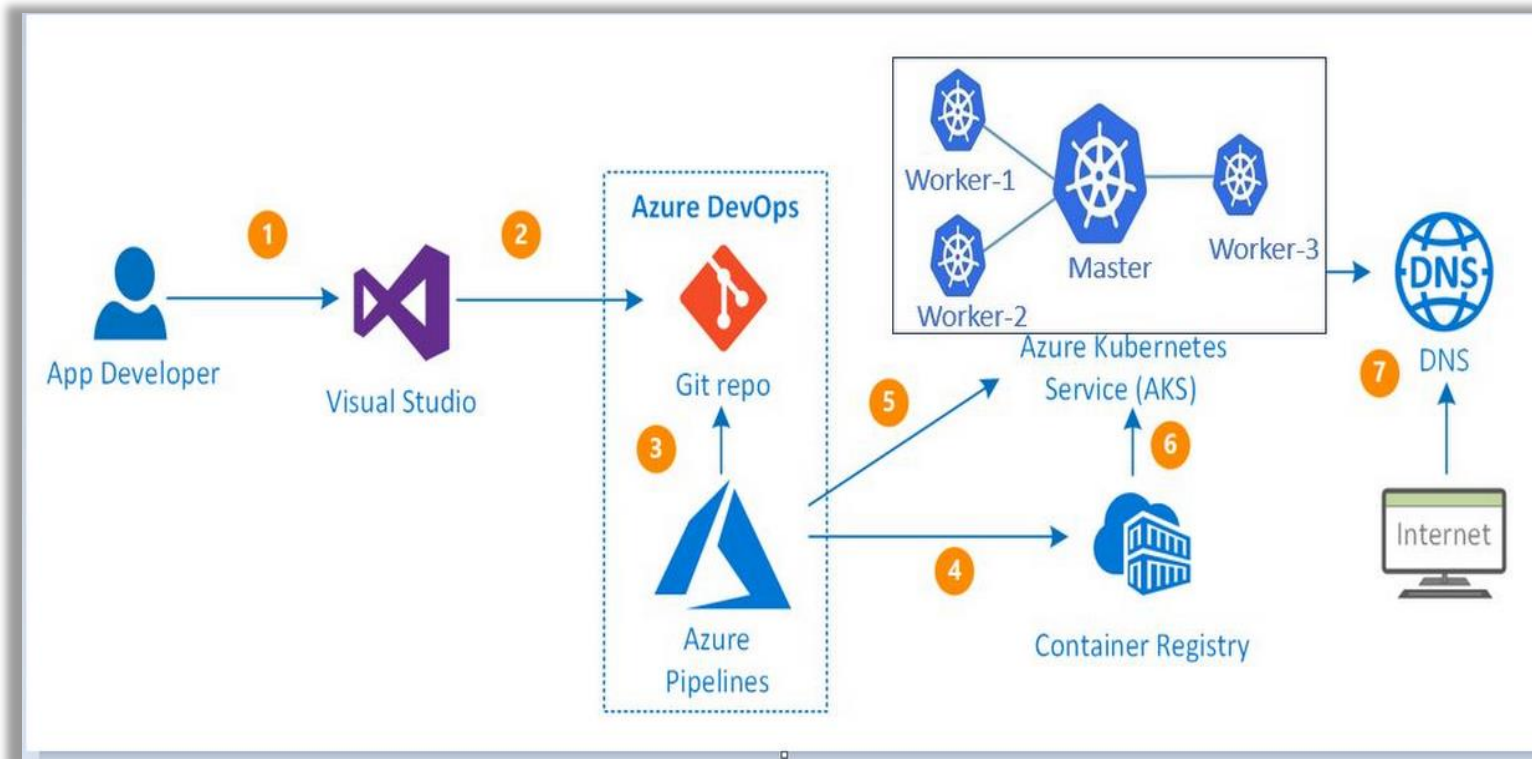
# Customer Reference

## ❑ Evalueserve

Implemented Azure Kubernetes Cluster for a .NET Core Microservices application


Composed, built and pushed docker images to ACR using build pipeline

Deployed the docker images to AKS cluster using release pipeline






# Canarys Contribution to Microsoft DevOps



**VSTS TeamProject Mo**  
Canarys Automation ⬇️ 1K

An extension to list all projects from VSTS account.

★★★★★ FREE



**VSTS RollUp**  
VSTS workitem effort rollup

**VSTS Rollup**  
Canarys Automation ⬇️ 2.8K

Rollup of efforts of Task Work Items to parent level items like PBI, Stories, Feature, Epi...

★★★★★ FREE




**VSTS Copy Dashboard**  
copy with ease

**VSTS Copy Dashboard**  
Canarys Automation ⬇️ 4K

Copying dashboards across multiple teams and projects across multiple VSTS account...


★★★★★ FREE



**VSTS on Mobile**  
Canarys Automation ⬇️ 4.3K

The best app for the executives on the move to stay informed about the...

★★★★★ FREE



**VSTS Area Uploader**  
to upload bulk area

**VSTS Area Uploader**  
Canarys Automation ⬇️ 195

Upload Areas with multiple levels from CSV to VSTS

★★★★★ FREE



**VSTS Copy Project**

**VSTS Copy Project**  
Canarys Automation ⬇️ 2.3K

Copies the source team project artifacts to a new team project

★★★★★ FREE



## GitHub Verified Partner

**Microsoft Partner**

2018 Partner of the Year Finalist  
DevOps Award



**Microsoft Partner**

2017 Partner of the Year Finalist  
DevOps Award



URS is a member of Registrar of Standards (Holdings) Ltd.

**Microsoft Partner**

Gold DevOps  
Gold Cloud Platform  
Gold Application Development





# Esteemed Clients



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Thank  
you!

 **Canarys**  
*Quality is our Mantra*