Azure Logic Apps & CI/CD Deployment – DevOps Reference Guide

# 1. What is Azure Logic App?

Azure Logic Apps is a workflow-based integration service in Azure that lets you automate tasks, orchestrate systems, and connect APIs using a no-code/low-code interface.

## Use Cases:

- Automate invoice processing from Outlook to SQL DB

- Trigger workflows when files are added to storage

- Integrate Microsoft Teams, SharePoint, Outlook, Service Bus, etc.

## Types:

• Standard (hosted on App Service Plan; ideal for CI/CD)

• Consumption (pay-per-use; harder to automate with pipelines)

# 2. Why DevOps is Involved

Although developers create workflows in VS Code, DevOps engineers are responsible for:

- CI/CD pipeline setup

- Secure deployments across Dev, UAT, Prod

- Managing Azure service connections, Key Vaults, and approvals

# 3. Prerequisites for CI/CD (DevOps Responsibilities)

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| --- | --- | --- |
| Component | Description | Who Provides |
| Code Repository | Logic App source code (workflow.json, etc.) | Developer |
| Branch to Deploy | Usually main or develop | Developer |
| Azure Subscription | Where resources are deployed | Cloud Team |
| Azure Tenant ID | For service connection authentication | Cloud Team |
| Azure Resource Group | Container for Logic App & infra | Cloud Team / DevOps |
| App Service Plan | Hosts the Logic App (Standard only) | Cloud Team |
| Logic App Name | Target app to deploy to | Developer / Cloud Team |
| API Connections Info | e.g., SQL, Outlook, Teams | Developer |
| Key Vault Details | For storing secrets securely | Cloud Team |
| Service Connection | Azure DevOps → Azure link | DevOps |
| CI/CD Environments | Dev, UAT, Prod + approvals | DevOps |

# 4. CI/CD Pipeline Flow

## CI (Build)

- Trigger: On commit to branch (e.g., main)

- Task:

• Zip Logic App folder

• Publish as build artifact

## CD (Deploy)

- Trigger: On approval or post-build

- Task: Use AzureCLI@2 task in YAML and deploy Logic App using:

az logicapp deployment source config-zip --name <logic-app-name> --resource-group <resource-group> --src logicapp.zip

# 5. Key Questions to Ask

## To Developers:

- Which branch contains the Logic App code?

- What API connections are used?

- Are secrets in Key Vault?

- Is HTTP trigger used (do we need to secure it)?

## To Cloud Team:

- Are Bicep templates used or only CLI?

- Is infrastructure (App Plan, RG, Logic App) pre-created?

- Are API connections managed manually or deployed via code?

- Which tenant/subscription should the service connection use?