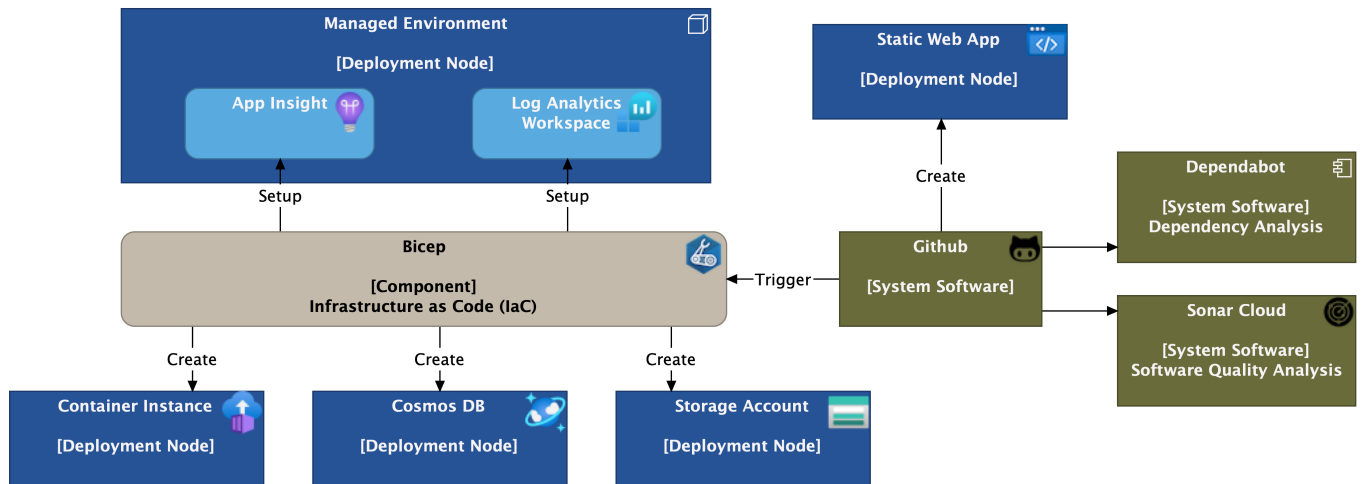


Infrastructure Diagram



- Introduction
- Container Instance (Node)
- Cosmos DB (Node)
- Storage Account (Node)
- Bicep (Application Function)
- Managed Environment (Node)
 - App Insight (Technology Service)
 - Log Analytics Workspace (Technology Service)
- Static Web App (Node)
- Github (Application Component)
- Sonar Cloud (Application Component)
- Dependabot (Application Component)

Introduction

Infrastructure diagram with an emphasis on infrastructure as code (IaC), automation, and quality assurance.

- Bicep (IaC Component) Automates the provisioning of infrastructure (Container Instances, Cosmos DB, Storage Account) within a Managed Environment. It ensures repeatability and consistency.
- Managed Environment Provides observability through App Insights and Log Analytics Workspace, addressing monitoring and operational concerns.
- GitHub Acts as the source code repository and orchestrates triggers for creating deployment nodes (e.g., Static Web App) and integrating automated quality and security checks.

DevSecOps Integrations:

- Dependabot Performs dependency analysis to identify outdated or vulnerable libraries.
- SonarCloud Conducts software quality analysis, ensuring code adheres to security and quality standards.

This architecture enforces secure, automated deployment practices while maintaining visibility, ensuring infrastructure consistency, and embedding security checks early in the CI/CD pipeline.

Container Instance (Node)

Properties

Stereotype
Deployment Node

Cosmos DB (Node)

Properties

Stereotype
Deployment Node

Storage Account (Node)

Properties

Stereotype
Deployment Node

Bicep (Application Function)

Properties

Stereotype
Component

Relationships

From	Relationship	To	Name/Label	Description
Bicep	Triggering Relationship	App Insight (Technology Service)	Setup	
Bicep	Triggering Relationship	Log Analytics Workspace (Technology Service)	Setup	
Bicep	Triggering Relationship	Container Instance (Node)	Create	
Bicep	Triggering Relationship	Cosmos DB (Node)	Create	

From	Relationship	To	Name/Label	Description
Bicep	Triggering Relationship	Storage Account (Node)	Create	

Infrastructure as Code (IaC)

<https://github.com/Azure-Samples/container-apps-store-api-microservice/blob/main/deploy/main.bicep>

Managed Environment (Node)

Properties

Stereotype
Deployment Node

Relationships

From	Relationship	To	Name/Label	Description
Managed Environment	Assignment Relationship	App Insight (Technology Service)		
Managed Environment	Assignment Relationship	Log Analytics Workspace (Technology Service)		

Managed environments are primarily designed for hosting Azure Functions, Web Apps, and other Azure App Services in a more controlled, secure, and scalable way.

App Insight (Technology Service)

Log Analytics Workspace (Technology Service)

Static Web App (Node)

Properties

Stereotype
Deployment Node

Managed platform for building and deploying static web applications.

Github (Application Component)

Properties

Stereotype	URL	Registry
System Software	https://github.com/mickael-royer	https://github.com/mickael-royer?tab=packages

Relationships

From	Relationship	To	Name/Label	Description
Github	Triggering Relationship	Sonar Cloud (Application Component)		
Github	Triggering Relationship	Dependabot (Application Component)		
Github	Triggering Relationship	Bicep (Application Function)	Trigger	
Github	Triggering Relationship	Static Web App (Node)	Create	

Code and Artefact repository with version control.

Sonar Cloud (Application Component)

Properties

Stereotype	Provider	URL
System Software	Sonarsource	https://sonarcloud.io/

Software Quality Analysis

Dependabot (Application Component)

Properties

Stereotype
System Software

Dependency Analysis