Microsoft

February 28, 2019 — 8:30 AM - 5:00 PM | Detroit, Michigan

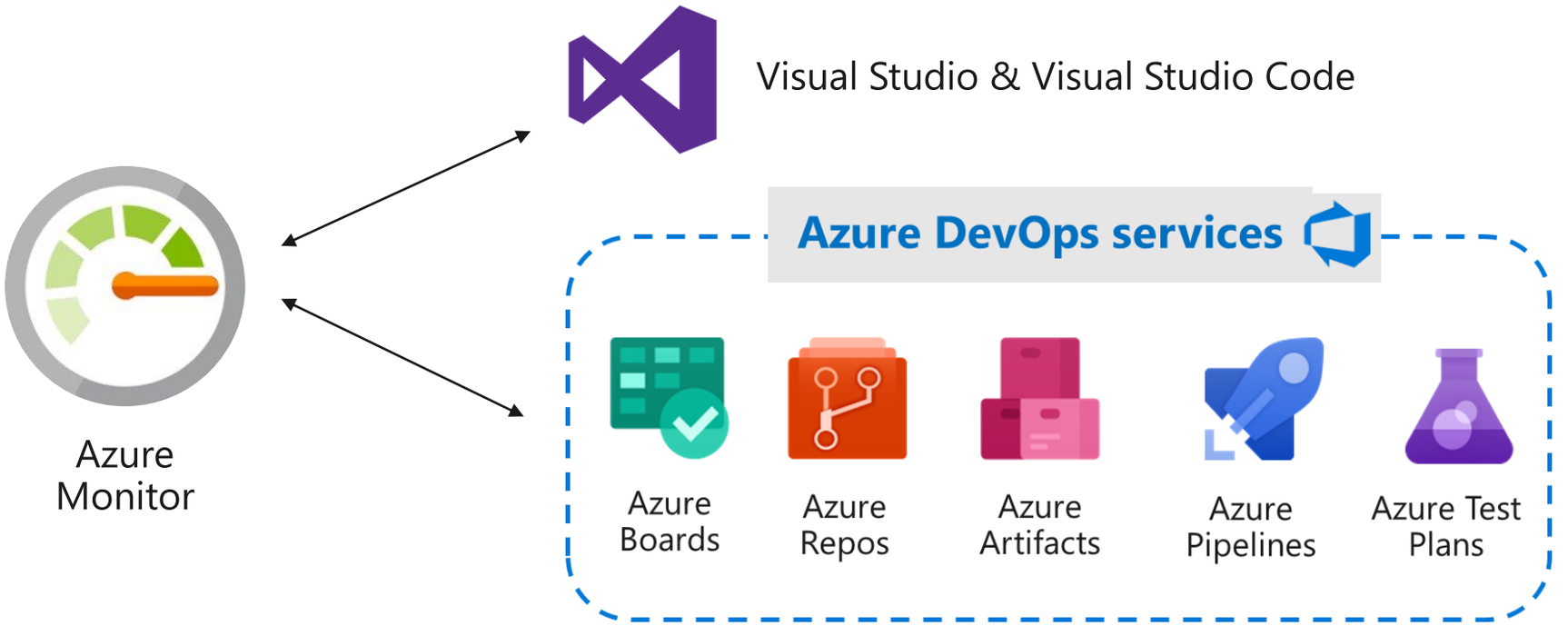
Continuous DevOps monitoring and learning

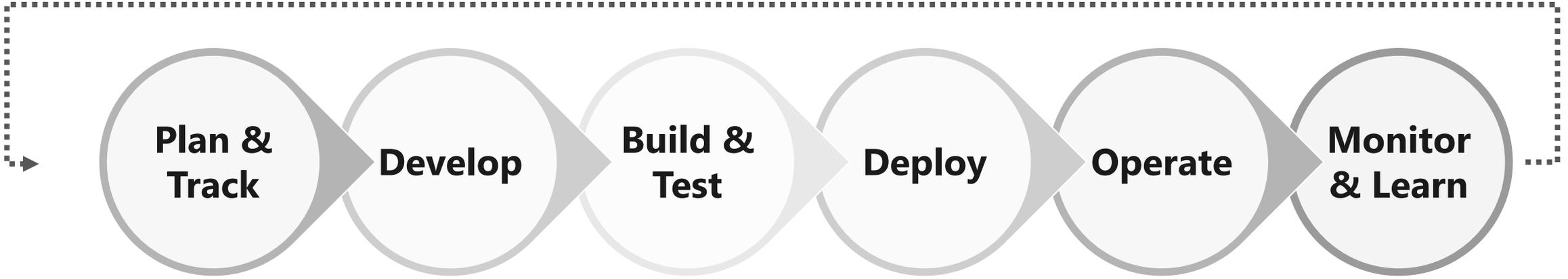
Learn.

Connect.

Explore.

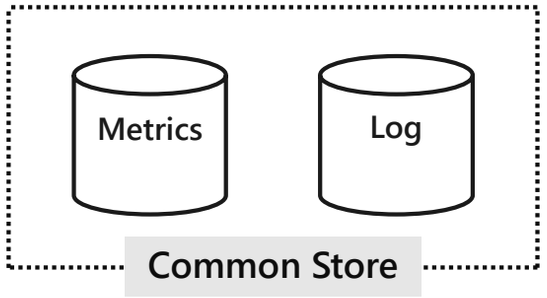
Continuous Monitoring (CM) for DevOps





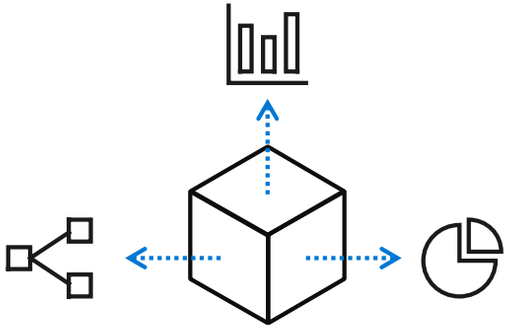
Azure Monitor

Full observability for your apps, infrastructure and network



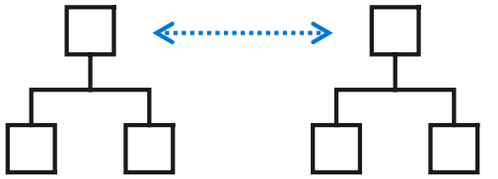
Unified Monitoring

A common platform for all metrics, logs and other monitoring telemetry



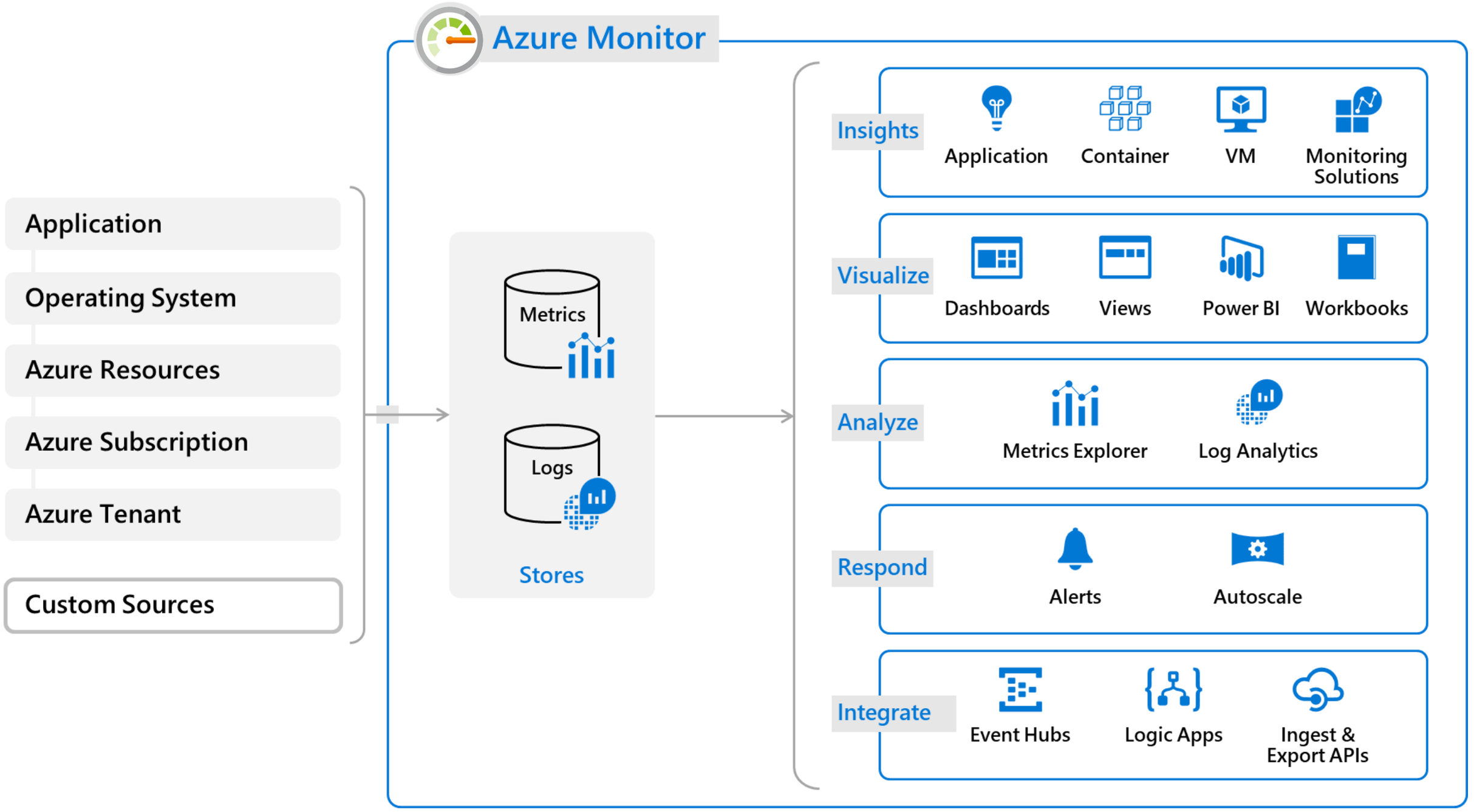
Data Driven Insights

Advanced diagnostics and analytics powered by machine learning capabilities



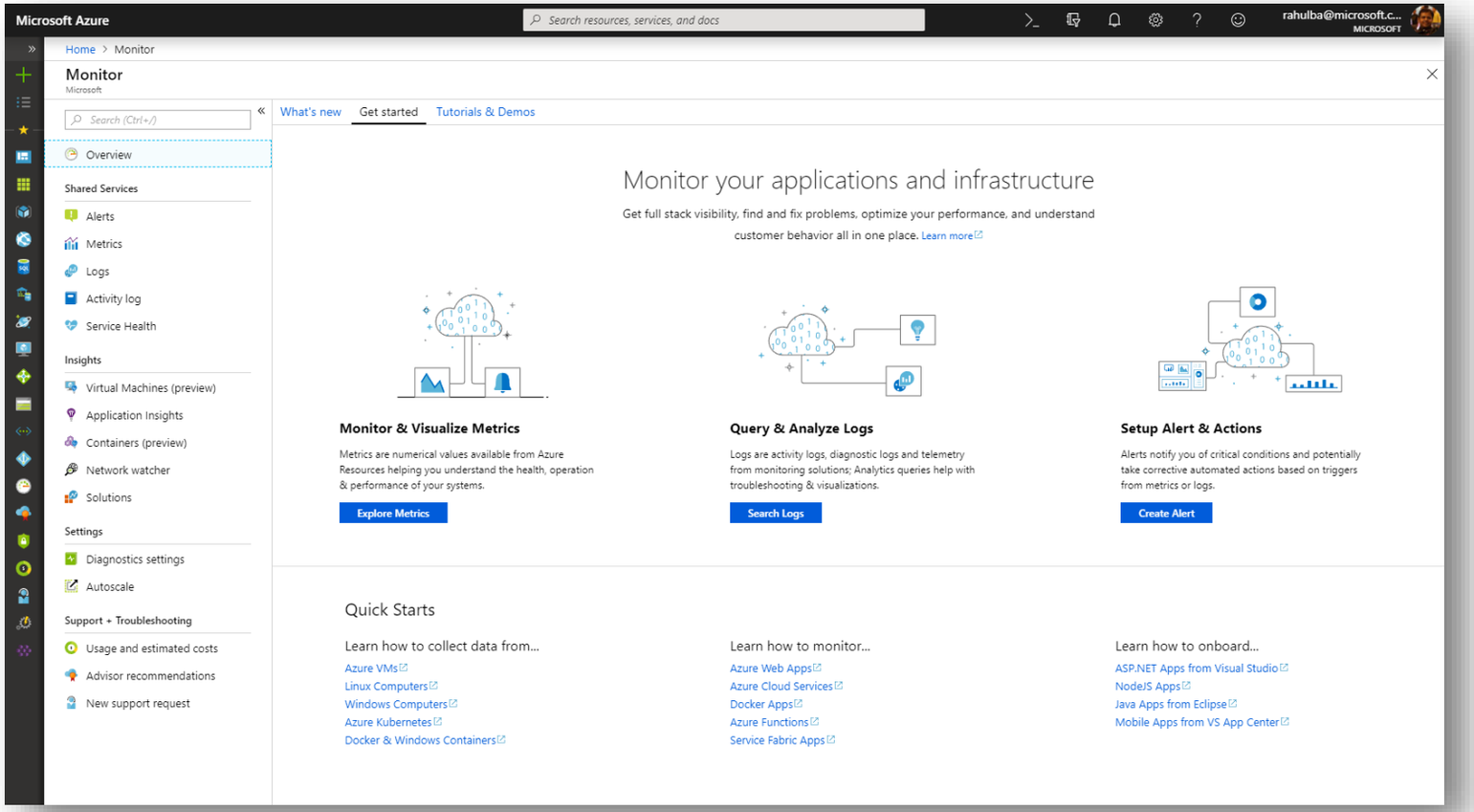
Workflow Integrations

Rich ecosystem of popular DevOps, issue management, SIEM, and ITSM tools


Azure Monitor
Application
Operating System
Azure Resources
Azure Subscription
Azure Tenant
Custom Sources
Metrics
Logs
Stores
Insights
Application
Container
VM
Monitoring Solutions
Visualize
Dashboards
Views
Power BI
Workbooks
Analyze
Metrics Explorer
Log Analytics
Respond
Alerts
Autoscale
Integrate
Event Hubs
Logic Apps
Ingest & Export APIs

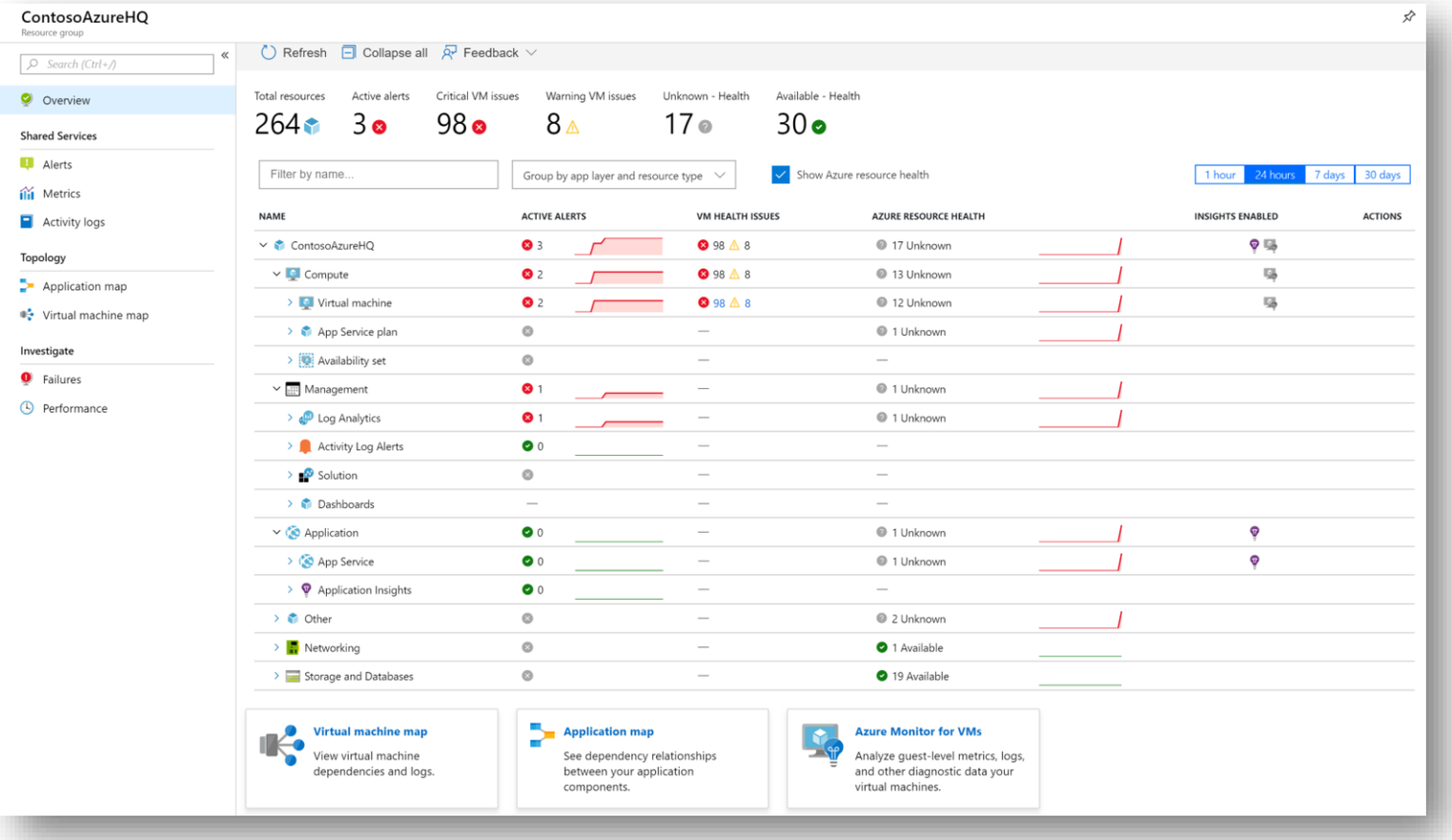
Unified Monitoring

- One Metrics, One Logs, One Alerts across Azure/on-prem resources
- Unified offering with App Insights & Log Analytics as integrated features
- Integration into native Azure resource blades
- Ability to send custom metrics & custom logs



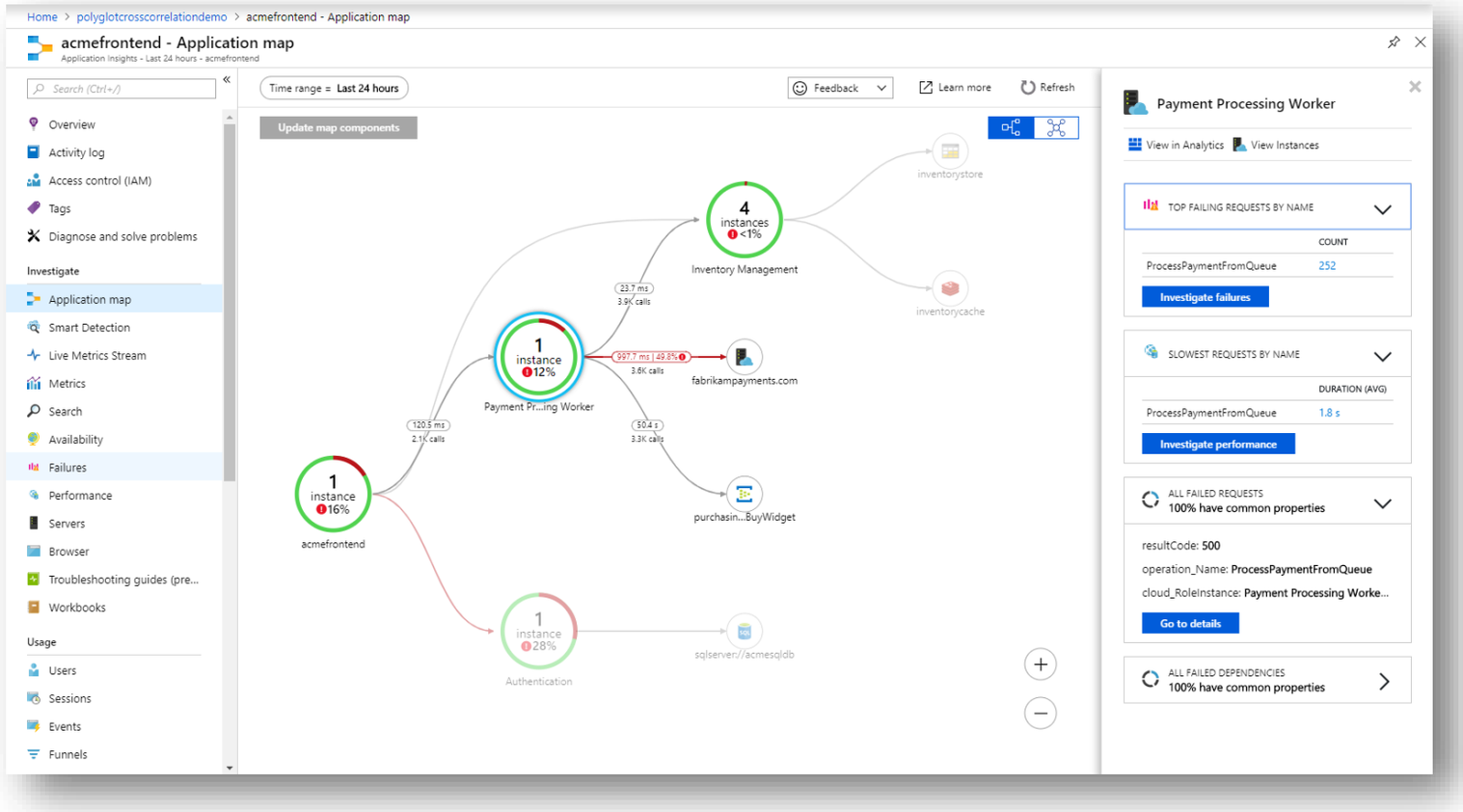
Full Stack Visibility in Resource Groups

- Monitor health state of all resources
- See alerts firing across app & infra
- Jump to Application Map or VM Map
- Drill down into failures or perf issues



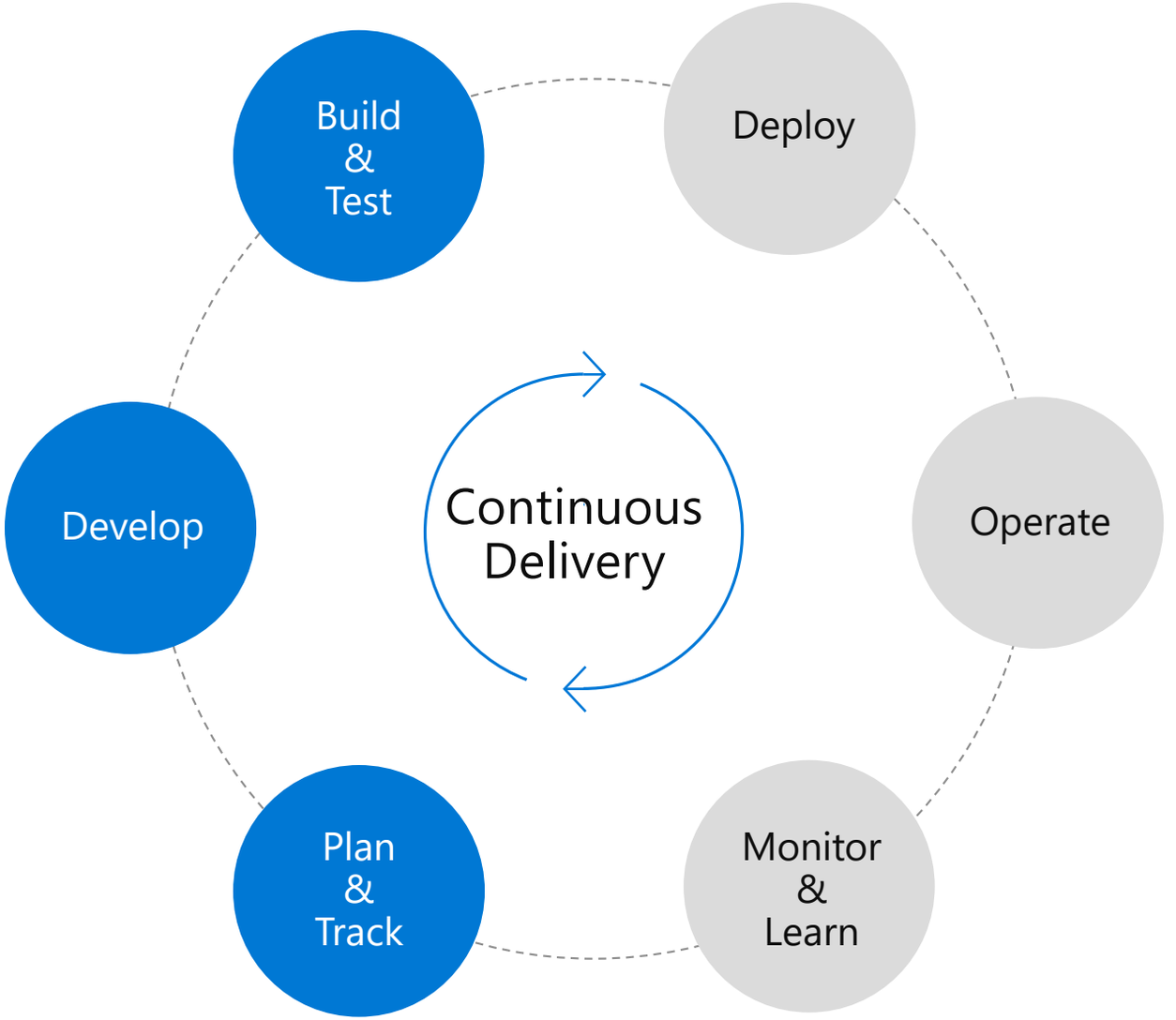
Diagnose E2E issues with Application Insights

- Monitor apps in .NET, JS, Java, Node.js or any language with OSS SDKs NEW!
- Visualize server/client connections & dependencies with App Map
- Track E2E distributed transactions (including for Python & Go) NEW!
- Drill down to code-level with Snapshot Debugging & Profiling
- Understand end-user cohorts, behavior & engagement for planning

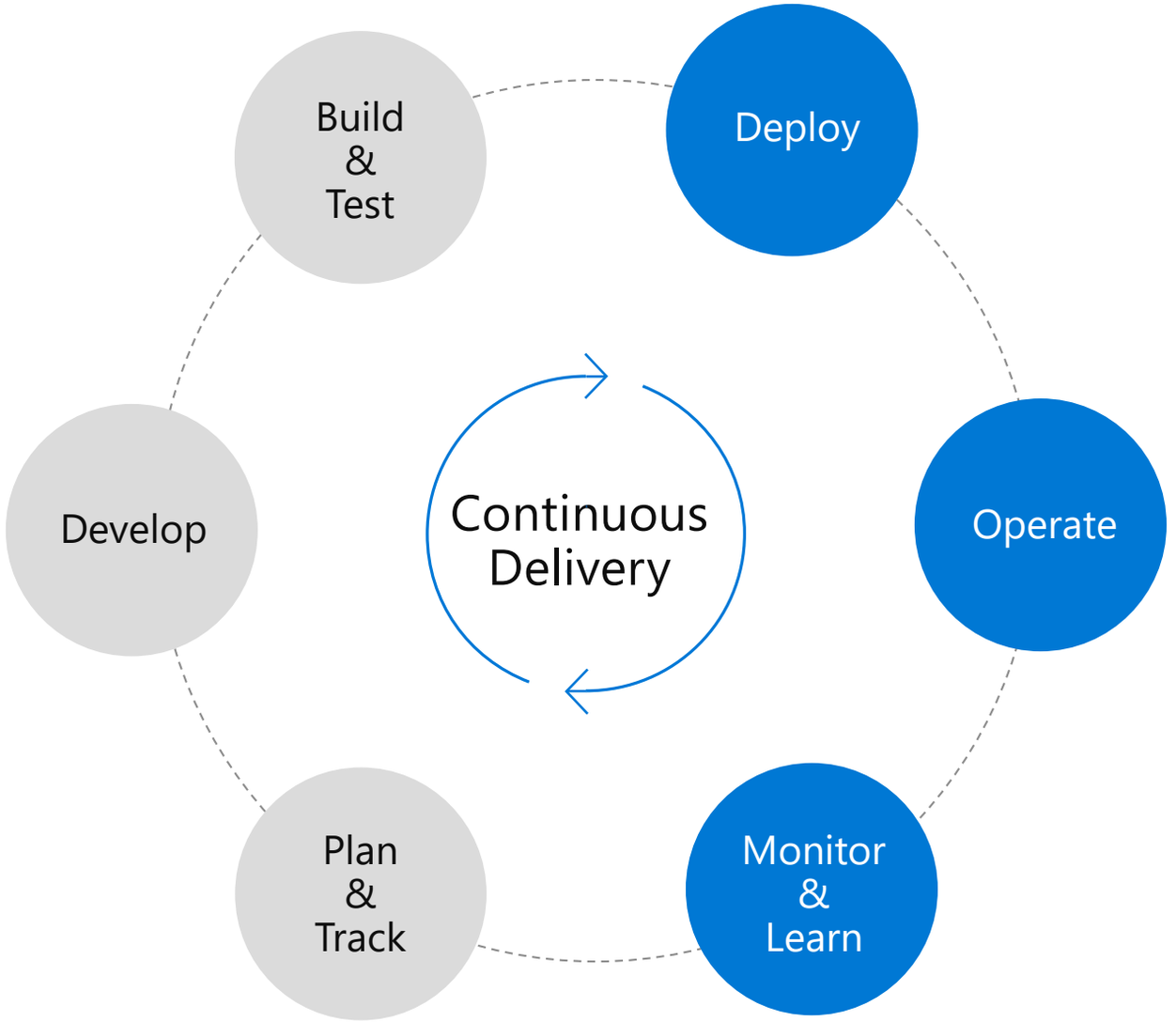


Continuous Monitoring – Development Phase

- Onboard through OSS SDKs, Packages or APIs
  Any App | Any Dev | Any Platform
- Native IDE integrations in VS (.NET) and VS Code (Node.js)
- Track production telemetry in VS through CodeLens integration
- Local debug session Diagnostics & Performance Monitoring in VS
- Run Load Tests from Azure Test Plans & VS Multi-Step Web Tests for Synthetic Monitoring
- File & track bugs/work items in Azure Boards from Azure Monitor



Continuous Monitoring – Operations Phase

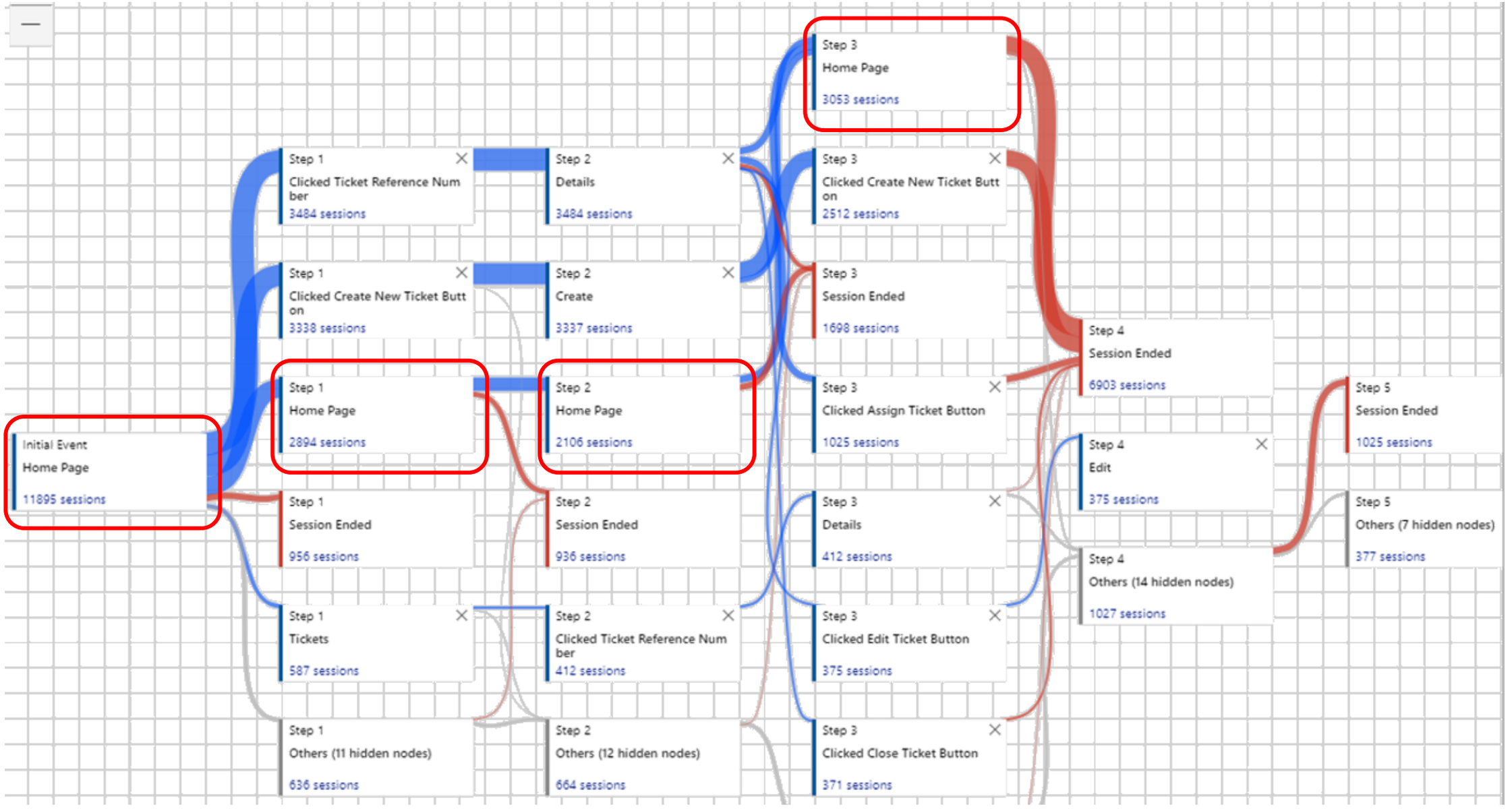


- Onboard through Azure Pipelines Release Management or DevOps Projects
- Setup Pre- or Post-Deployment Quality Gates with Azure Monitor Metrics/Alerts
- Monitor & Manage Health, Availability, Reliability & Performance of App & Infra
- Run code-level analyses in production with Snapshot Debugging & Profiling
- Setup Alerts & Notifications with automated actions & remediations
- Continuously optimize Perf & Usage metrics with "Build Measure Learn"

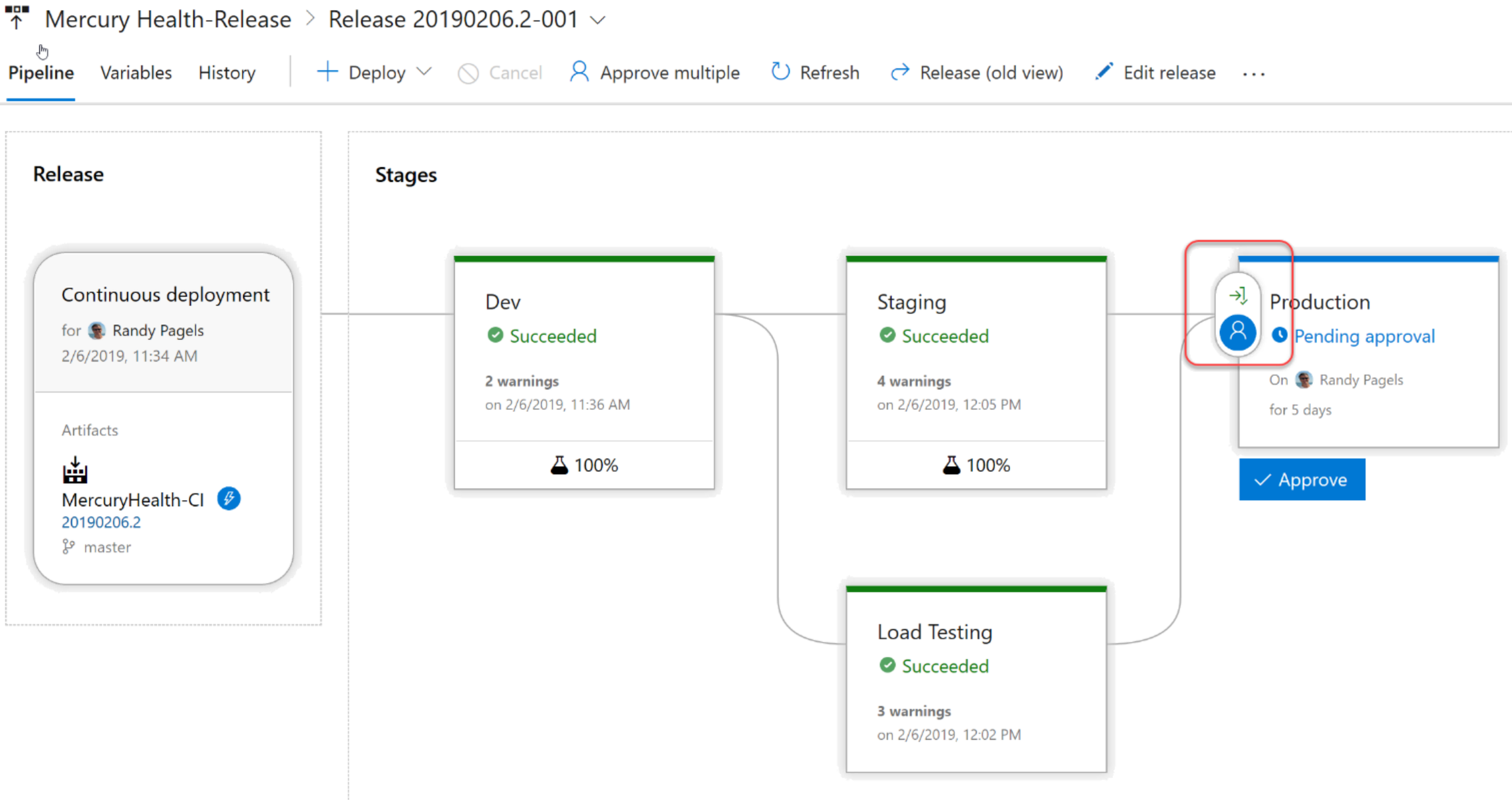
Demo
Continuous Monitoring

Visual Studio
Azure DevOps
Azure Monitor

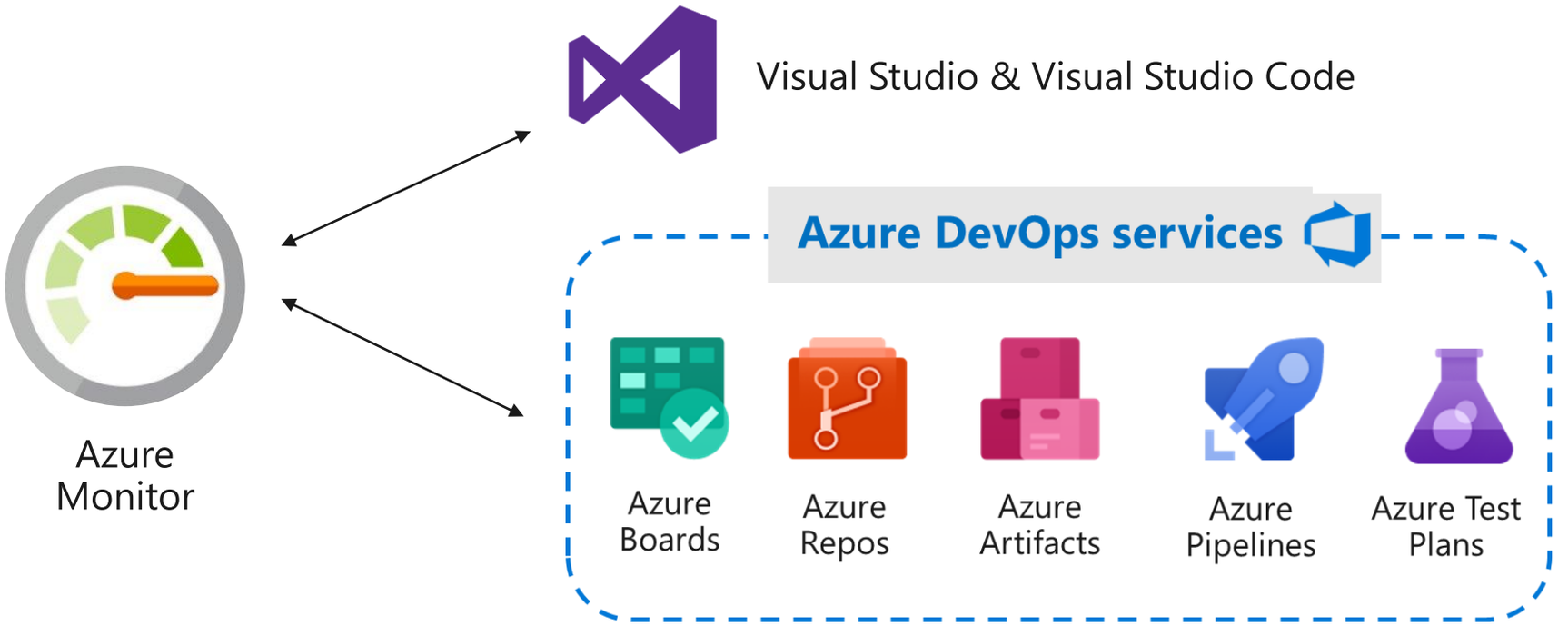
Application Insights – User Flows

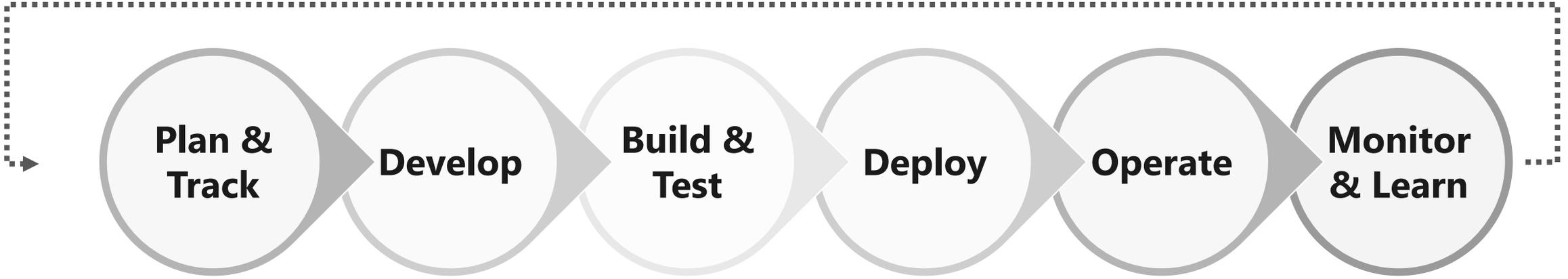


Application Insights – Quality Gates



Continuous Monitoring (CM) for DevOps





Better practices

- Ensure apps have monitoring enabled via SDKs, Azure Pipelines, DevOps Projects, or VM Extensions
- Ensure your infrastructure (VMs, Containers, Network) also has monitoring enabled with metrics & diagnostics logs
- Augment your release pipelines with continuous monitoring
- Bucket Azure resources in Resource Groups for full visibility
- Setup actionable alerts with notifications and/or remediations
- Shares dashboards & workbooks with RBAC
- Use ‘Infrastructure as Code’ to monitor/configure at scale
- Continuously optimize with ‘Build Measure Learn’

Learn More: http://aka.ms/AzMonOverview

Resources

The MTC Transformation Academy – https://aka.ms/mtcacademy

Download Visual Studio 2019 Preview

https://visualstudio.microsoft.com/vs/preview/

Learn more about Visual Studio – https://visualstudio.microsoft.com/

Learn more about Azure Monitor – https://aka.ms/AzureMonitor

Learn more about Azure DevOps – https://azure.com/DevOps

Monitoring Documentation – https://aka.ms/MonitoringDocs

Thank you!