Microsoft + vmware

Azure Spring Cloud on Learn TV

Azure Spring Cloud - fully managed service for Spring Boot apps

Asir Selvasingh
Principal PM Architect -- Java on Azure
@asirselvasingh

Agenda

Intro Azure Spring Cloud

Demo

How to get started?

Session Objectives

Azure Spring Cloud abstracts away the complexity of infrastructure management and Spring Cloud middleware management, so you can focus on building your business logic and let Azure take care of dynamic scaling, patches, security, compliance, and high availability. With a few steps, you can provision Azure Spring Cloud, create apps, deploy, and scale Spring Boot apps and start monitoring in minutes. Learn more about Azure Spring Cloud in this overview session and see how easy it is to get started today.

Asir Selvasingh

Principal PM Architect

Java on Microsoft Azure

On-point for everything developers need to build, migrate and scale Java applications on Azure.

Started software engineering career in the early days of Java, in 1995, and built enterprise products, applications and open source projects.

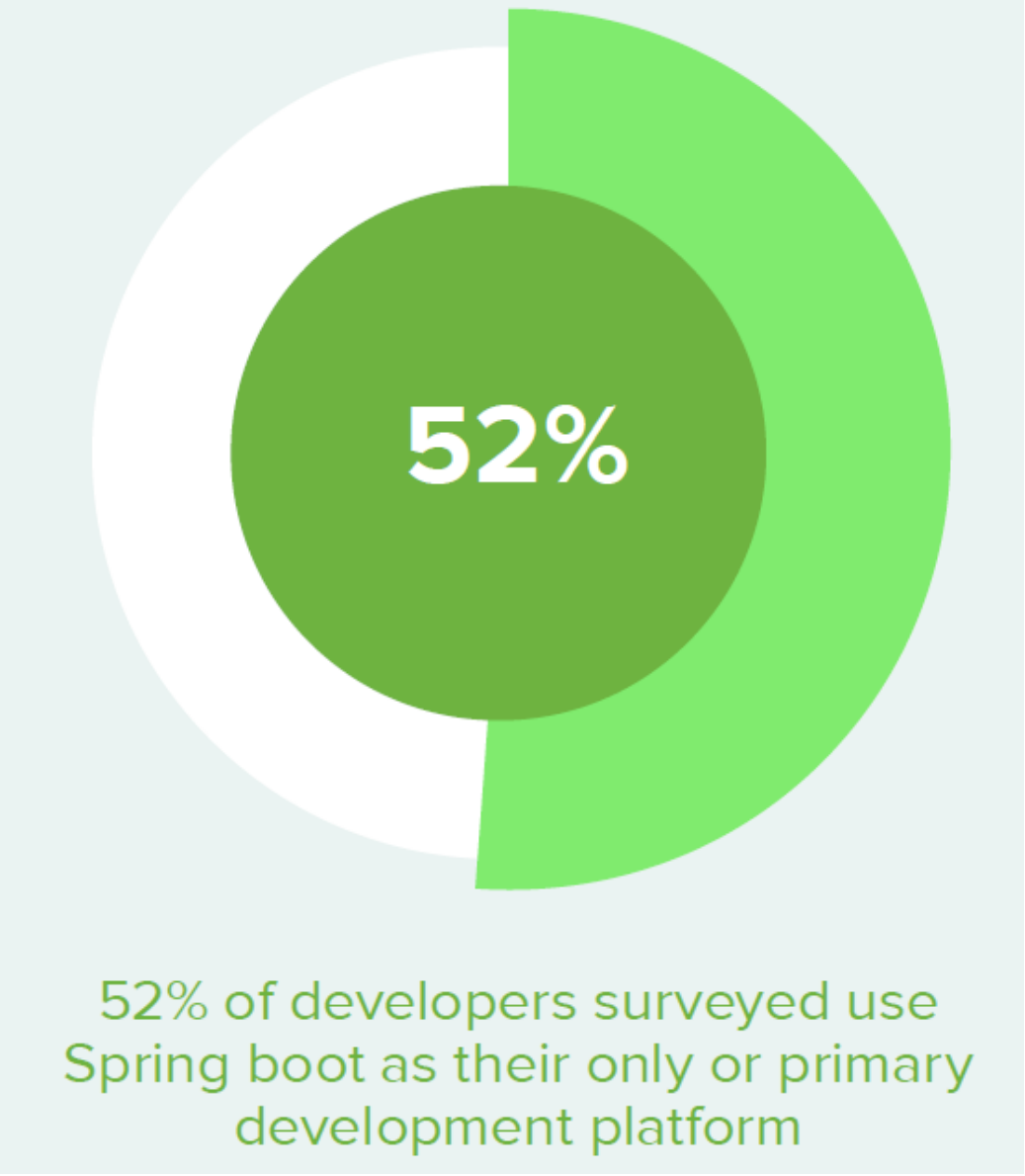
Microsoft Azure

Spring – trusted and growing

75%
of respondents expect Spring Boot usage to grow over the next 2 years

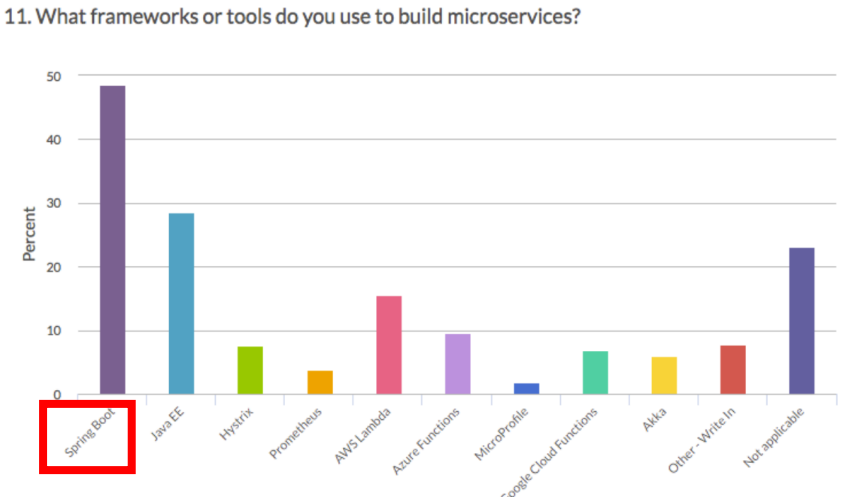
82%
of respondents say Spring Boot is growing because of new project starts

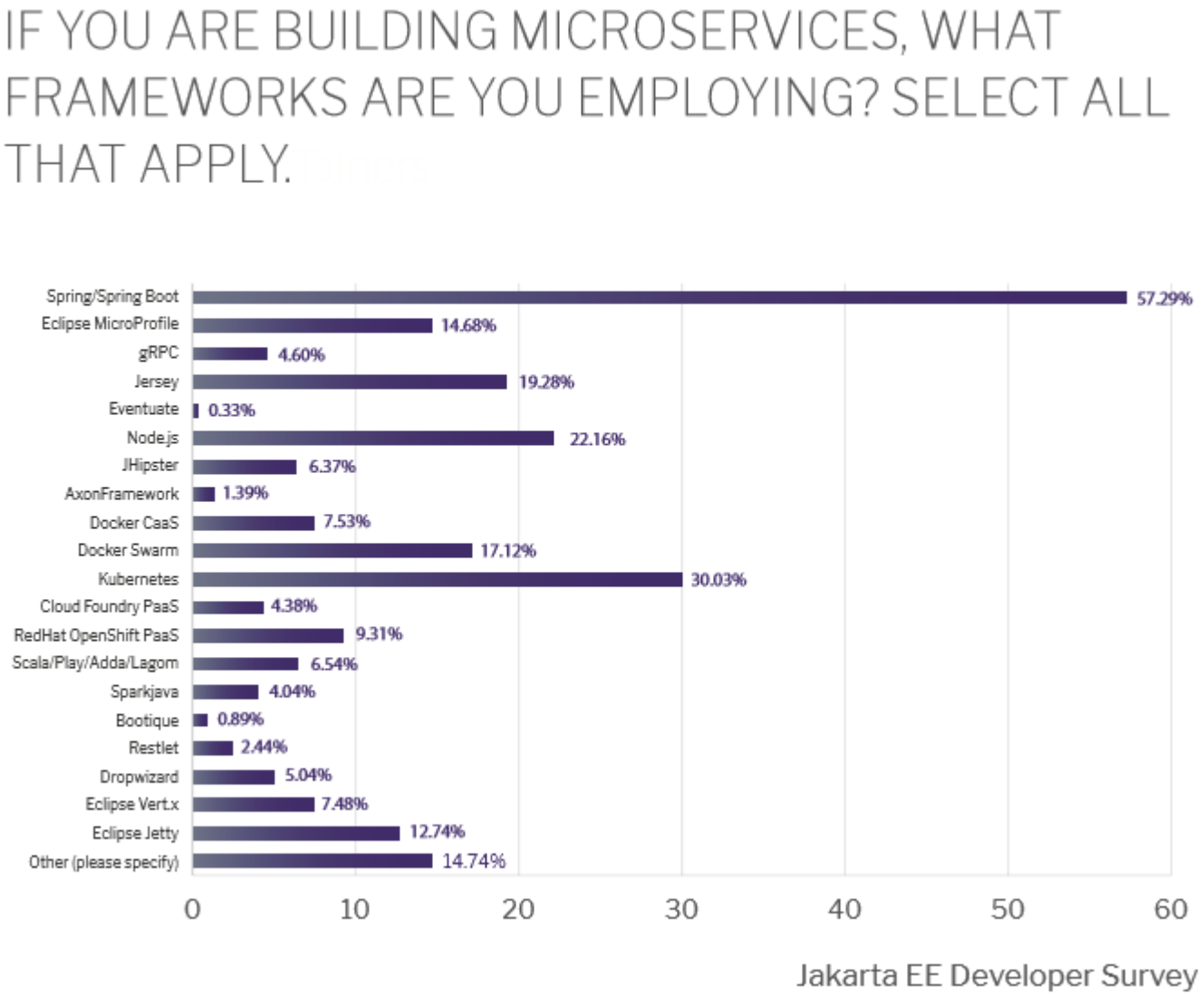
Nov 2018	Nov 2019
52.5 Million+ Spring Boot downloads per month	**95 Million+ Spring Boot downloads per month**



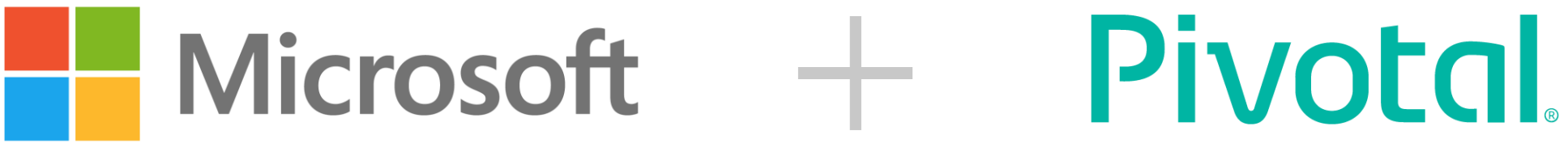
Source – [The State of Spring 2020]

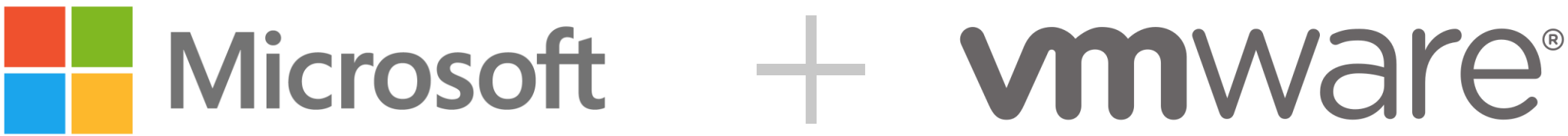
Why Spring and Spring Cloud Apps





"The Spring and Spring/Boot frameworks (57%) dominate today when it comes to building microservices " – Jakarta EE Developer Survey


Microsoft
Pivotal


Microsoft
vmware®

The world's leading brands run on Azure

Spring on Azure

cloud.spring.io/spring-cloud-azure/

Spring Cloud

- App Configuration
- Event Hubs
- Service Bus
- Storage
- Redis
- Functions

Spring Data

- SQL Database
- MySQL
- PostgreSQL
- Maria DB
- Cosmos DB
  - SQL
  - MongoDB
  - Cassandra
  - Gremlin

Spring Security

- Active Directory (AAD)
- AAD B2C

Spring Resource

- Storage

Spring Messaging

- Service Bus

R2DBC

- SQL Database
- PostgreSQL
- MySQL

Spring Cache

- Redis Cache

Micrometer

- Monitor (includes Log Analytics)

Spring-based Microservices

Spring Boot

Build anything

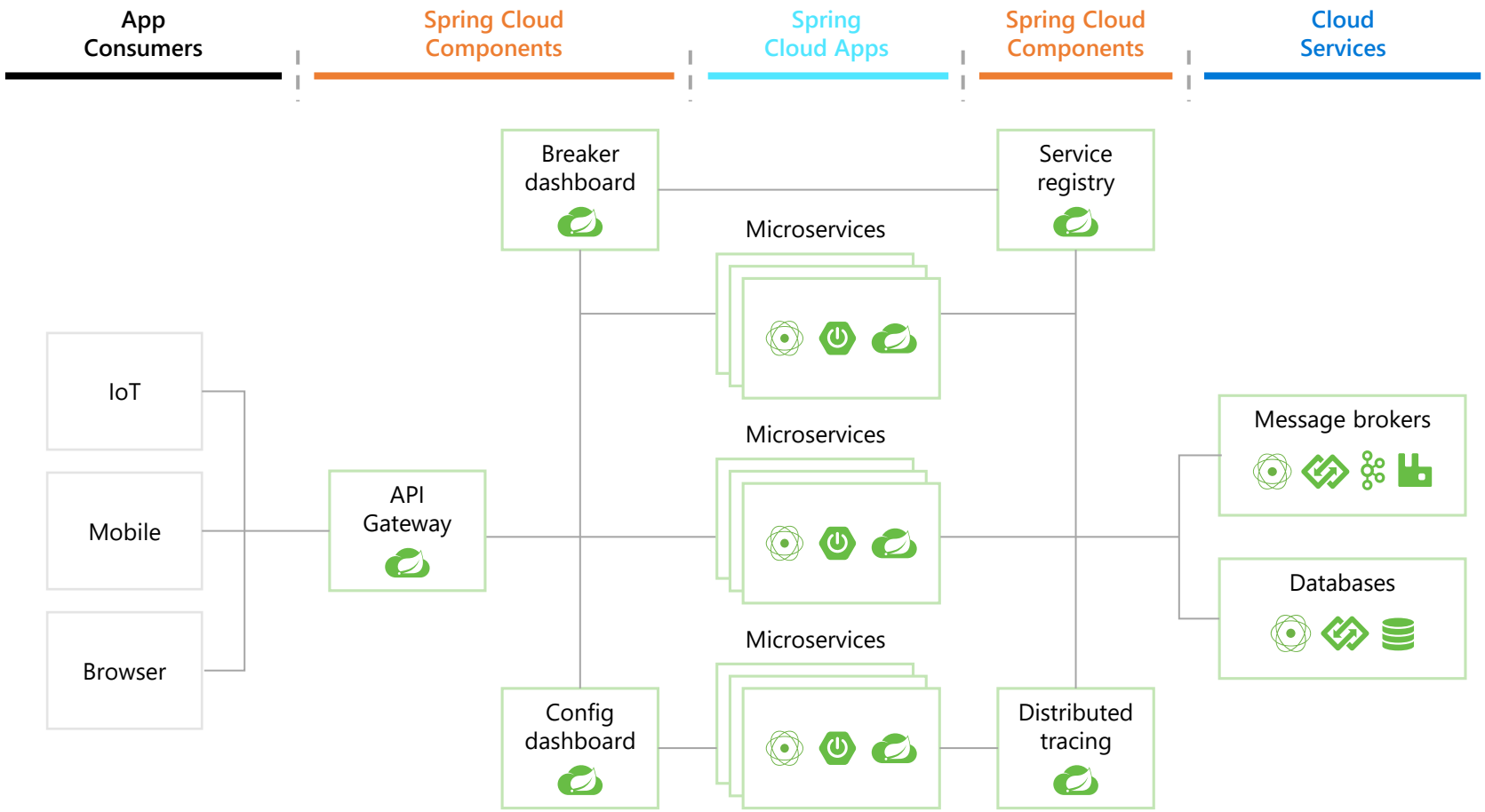
designed to get you up and running as quickly as possible, with minimal upfront configuration of Spring

Spring Cloud

Coordinate anything

provides a set of tools that makes communication between microservices easier

Spring-based Microservices

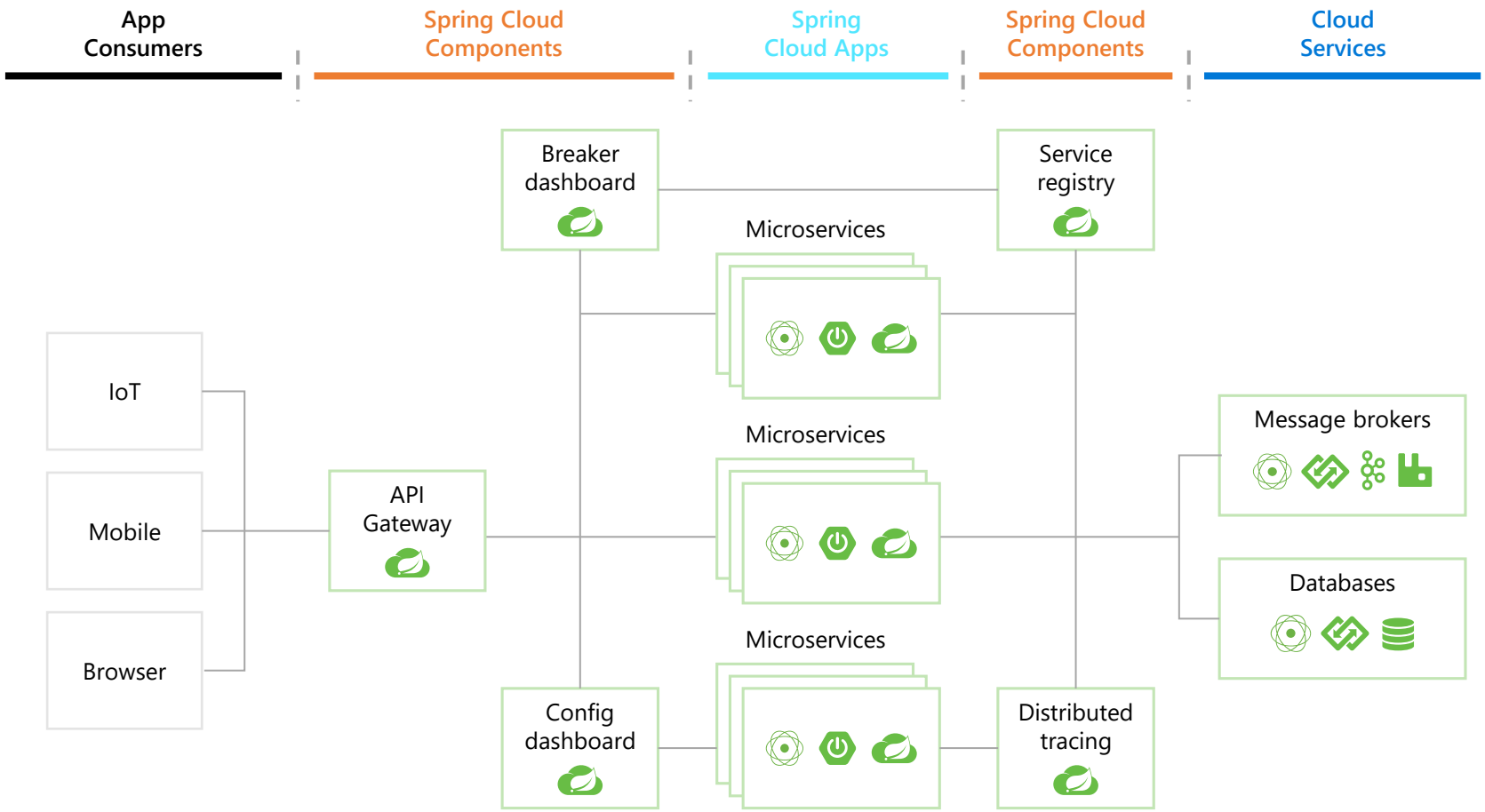


Common Impediments

High effort required to manage cloud infrastructure for Spring boot applications

Application lifecycle is difficult to manage

Painful to troubleshoot application issues



Azure Spring Cloud

Azure Spring Cloud

A fully managed service for Spring Boot microservices

More choices and full integration into Azure's ecosystem and services

Enterprise ready

Azure Spring Cloud

Jointly developed, operated, and supported

Microsoft vmware

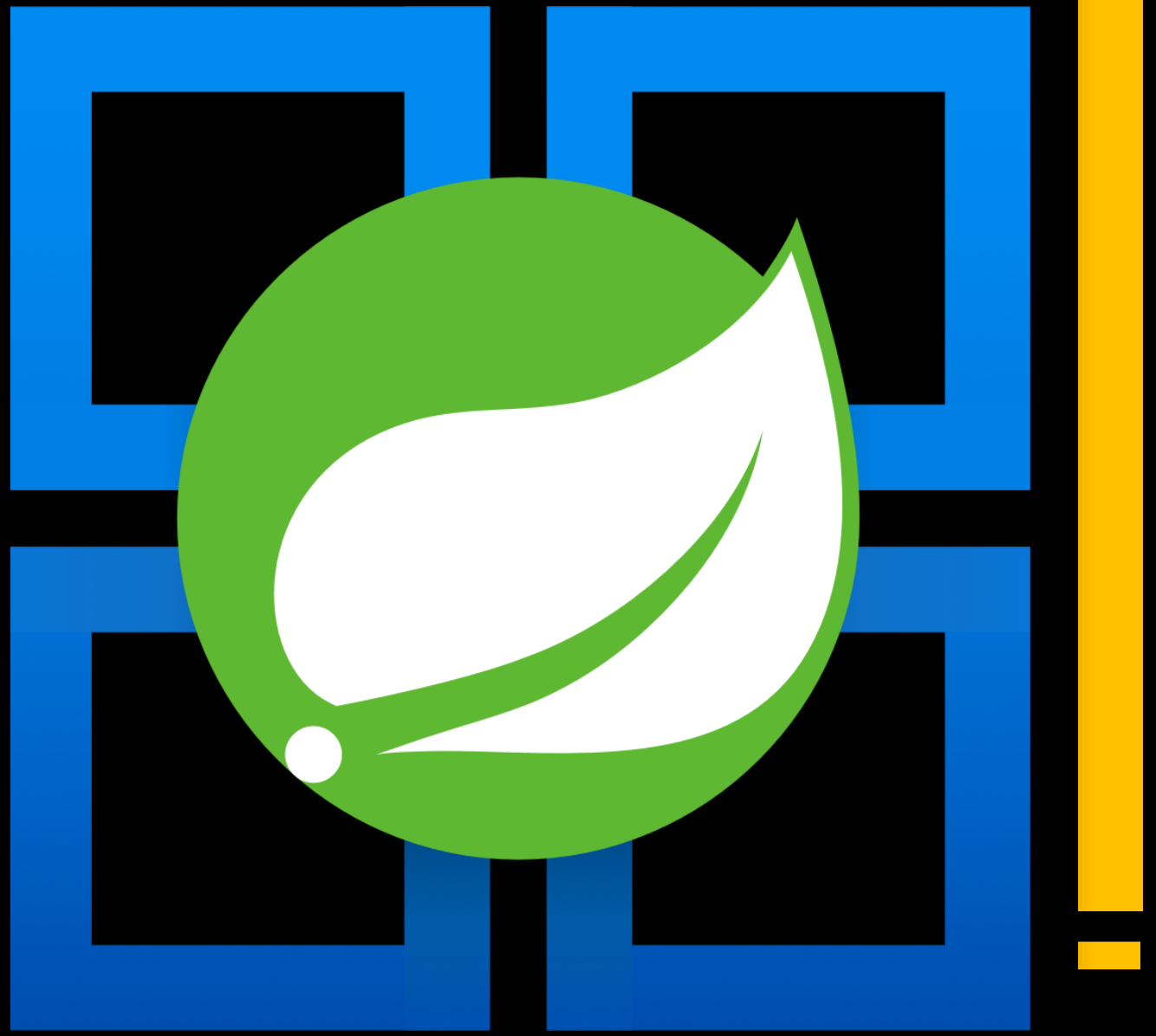
Managed service

Tanzu Build Service

Zero code changes

Out-of-the-box monitoring and tracing

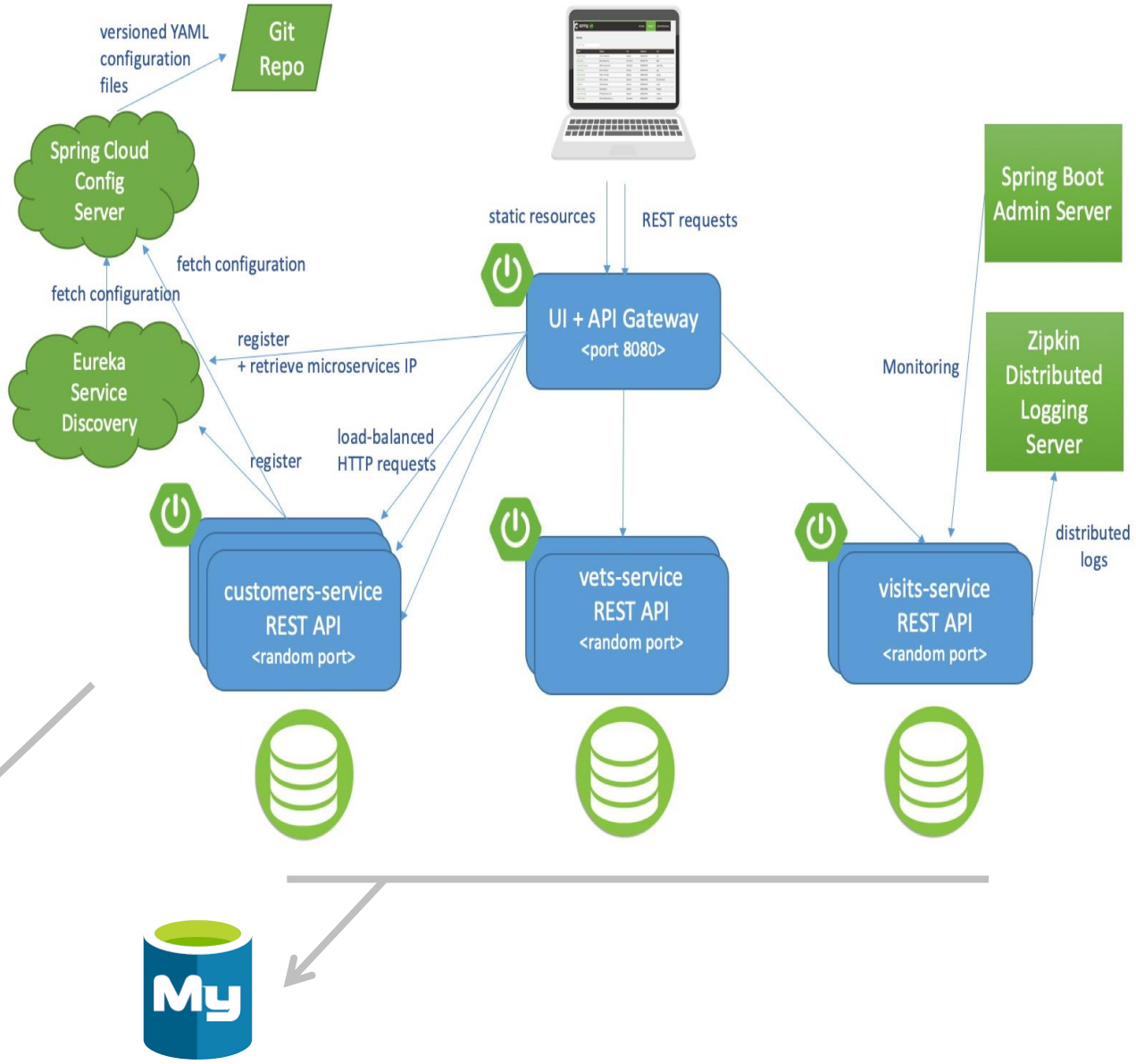
Demo – Azure Spring Cloud



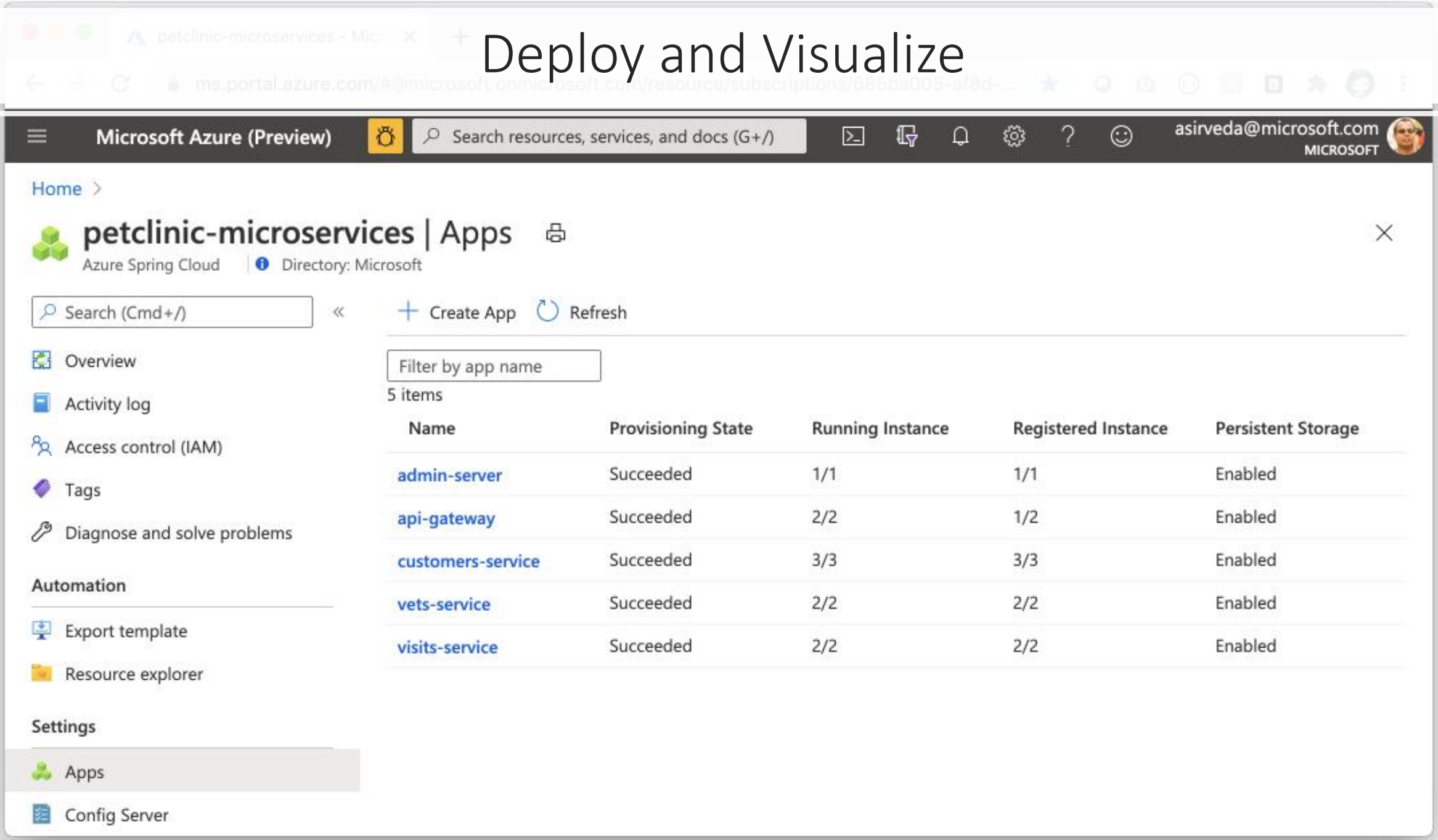
Demo

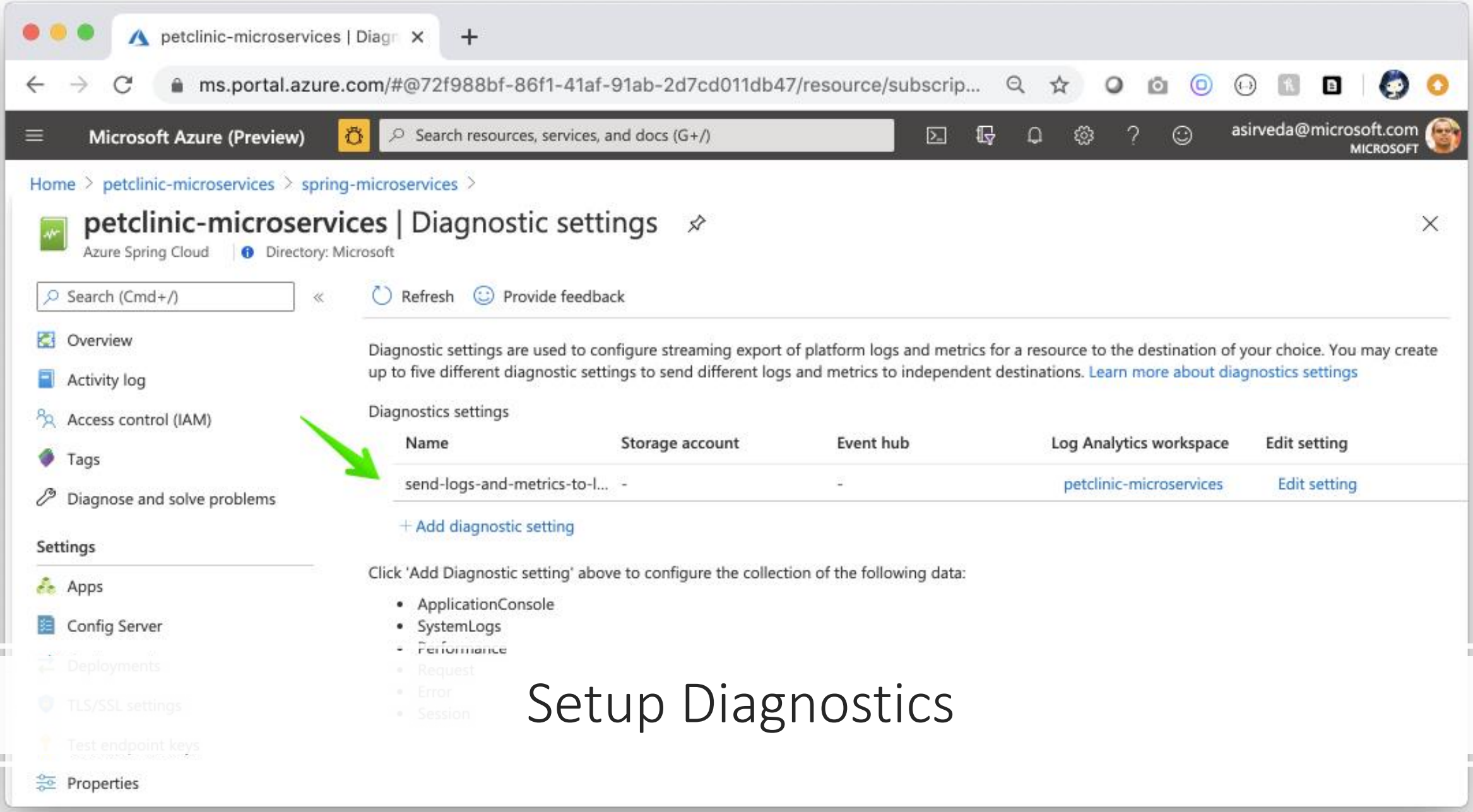
Deploy Spring Cloud apps
to Azure without worrying about:

- Infrastructure and scaling
- Spring Cloud middleware – config, registry, tracing and gateway, or
- Monitoring

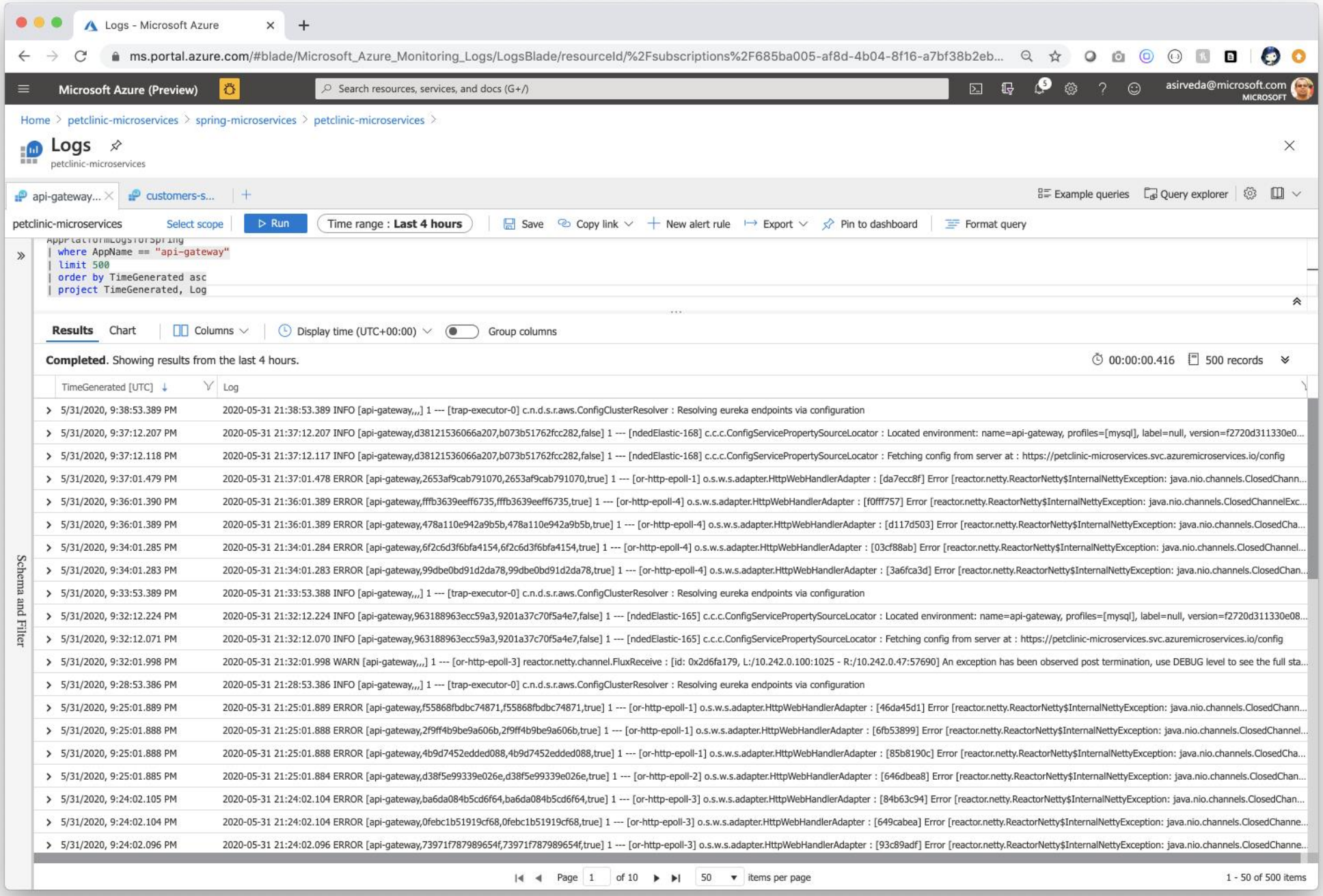


Deploy and Visualize

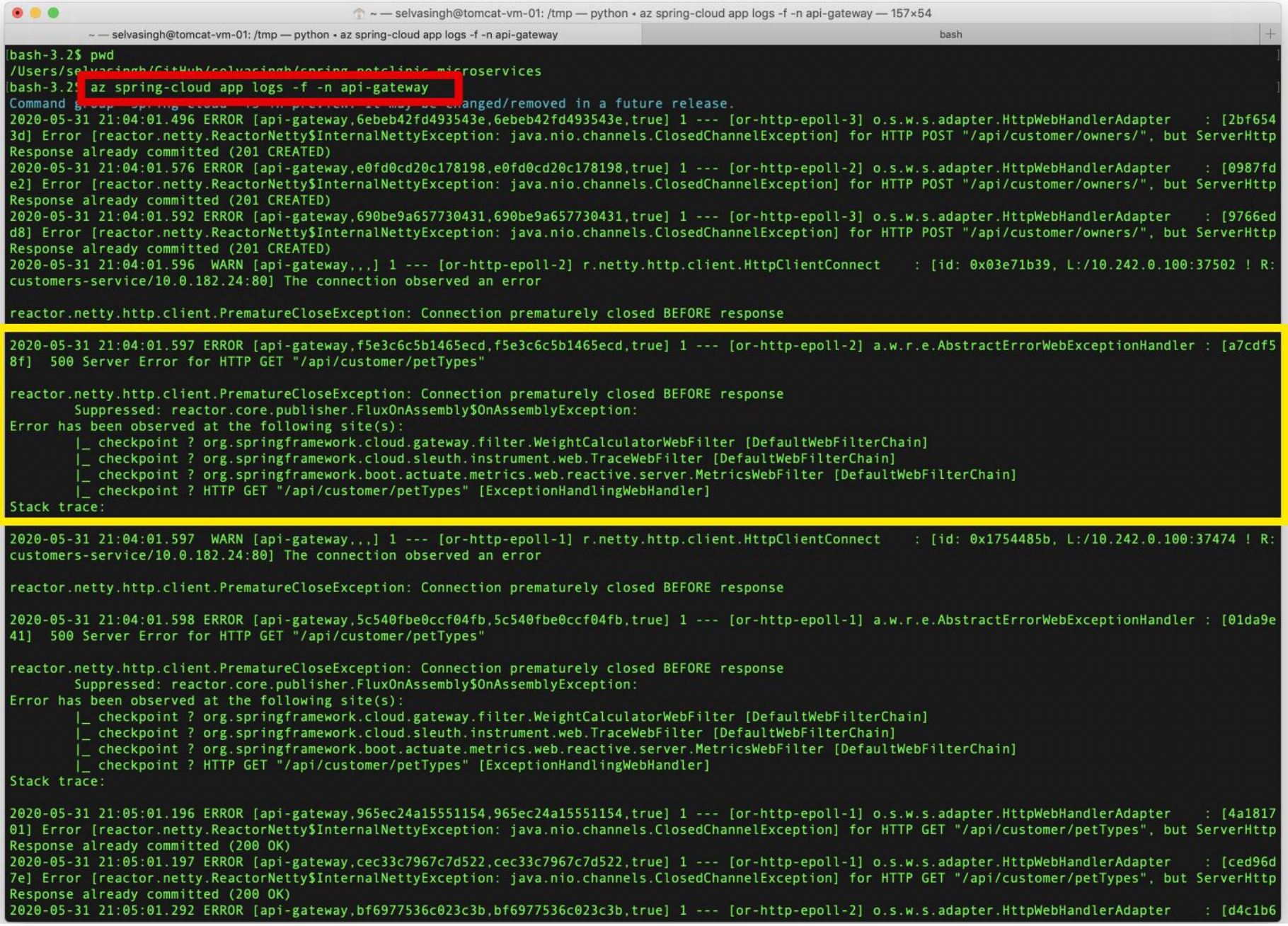




Setup Diagnostics

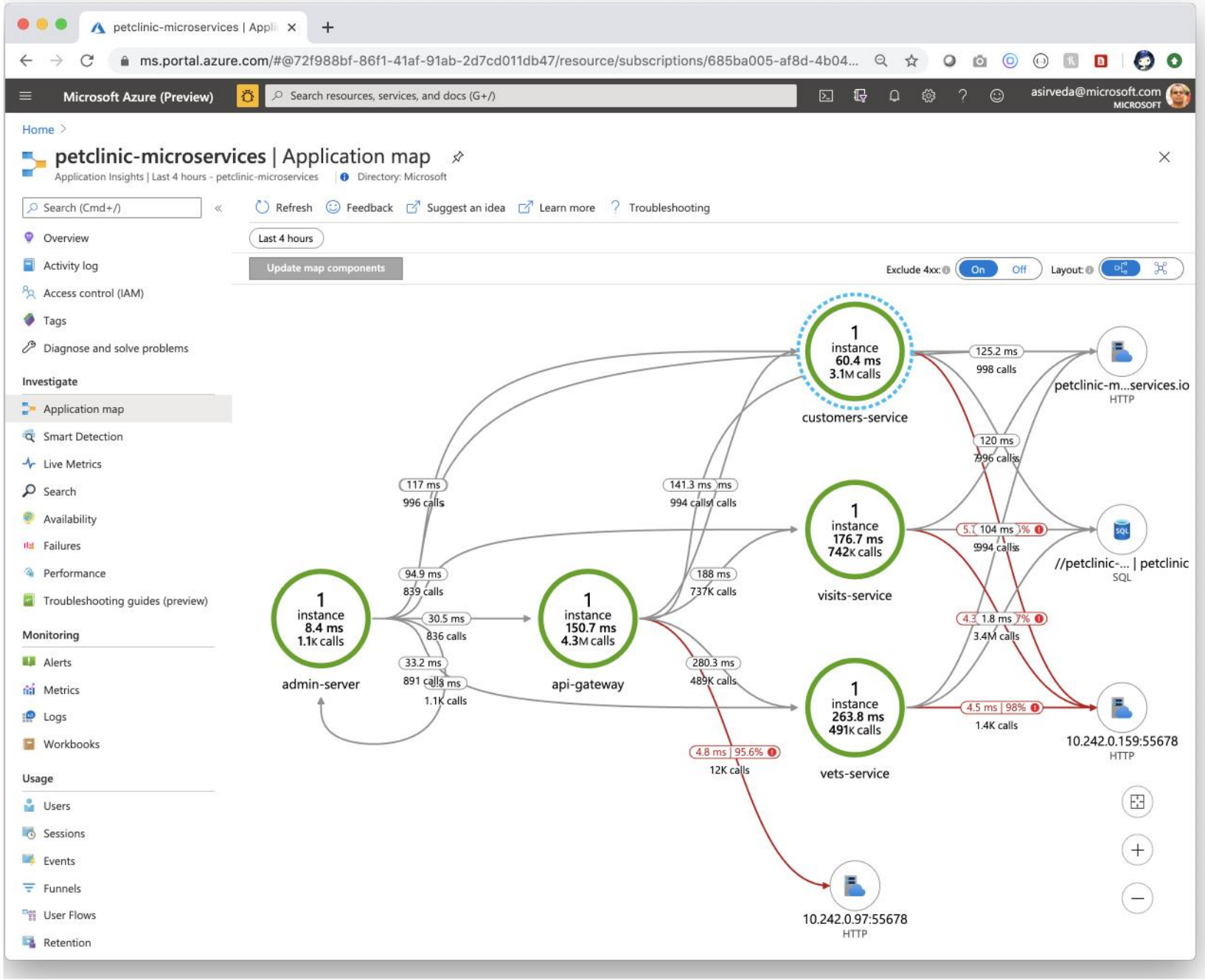


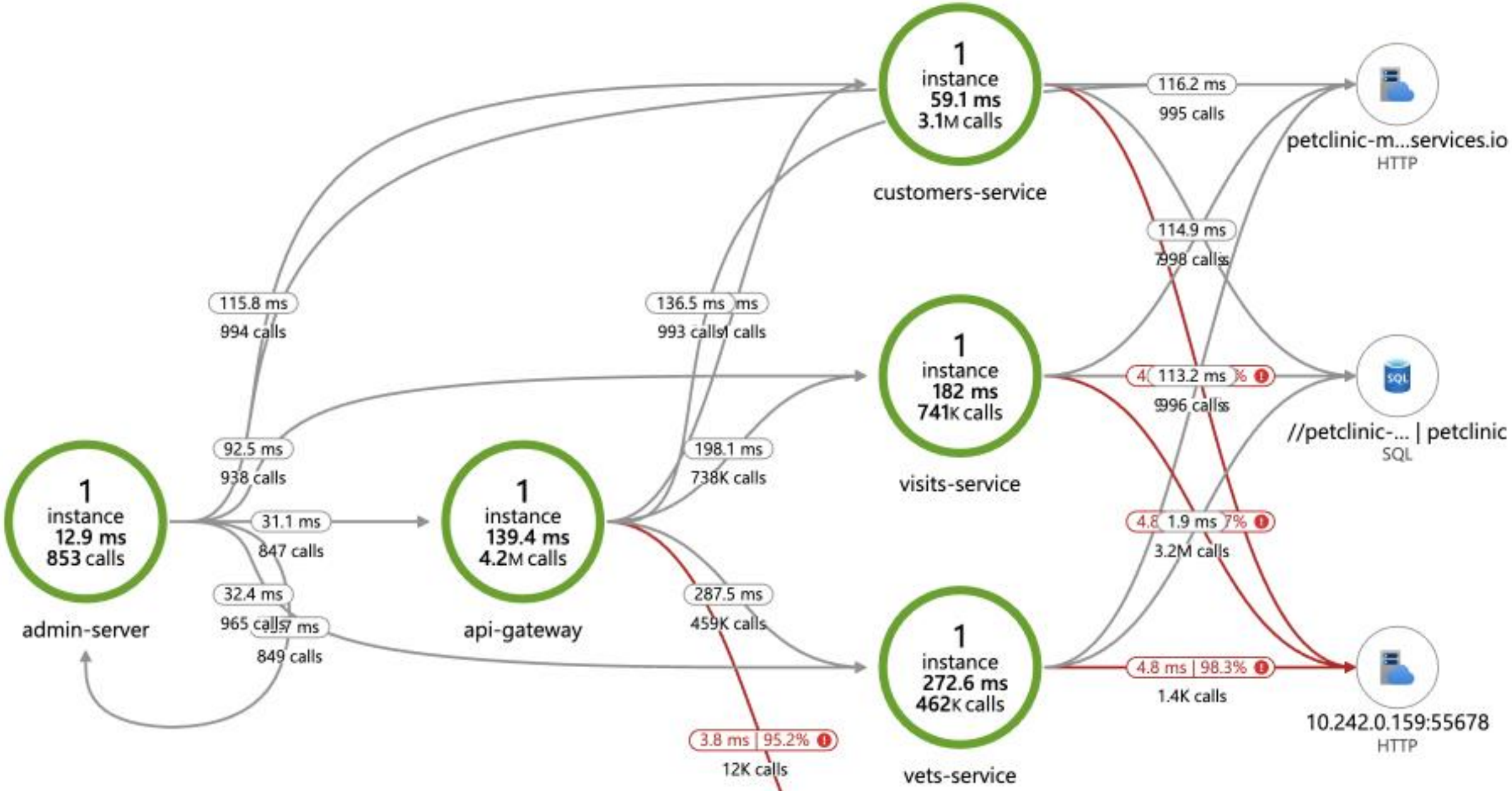
Troubleshoot



Troubleshoot

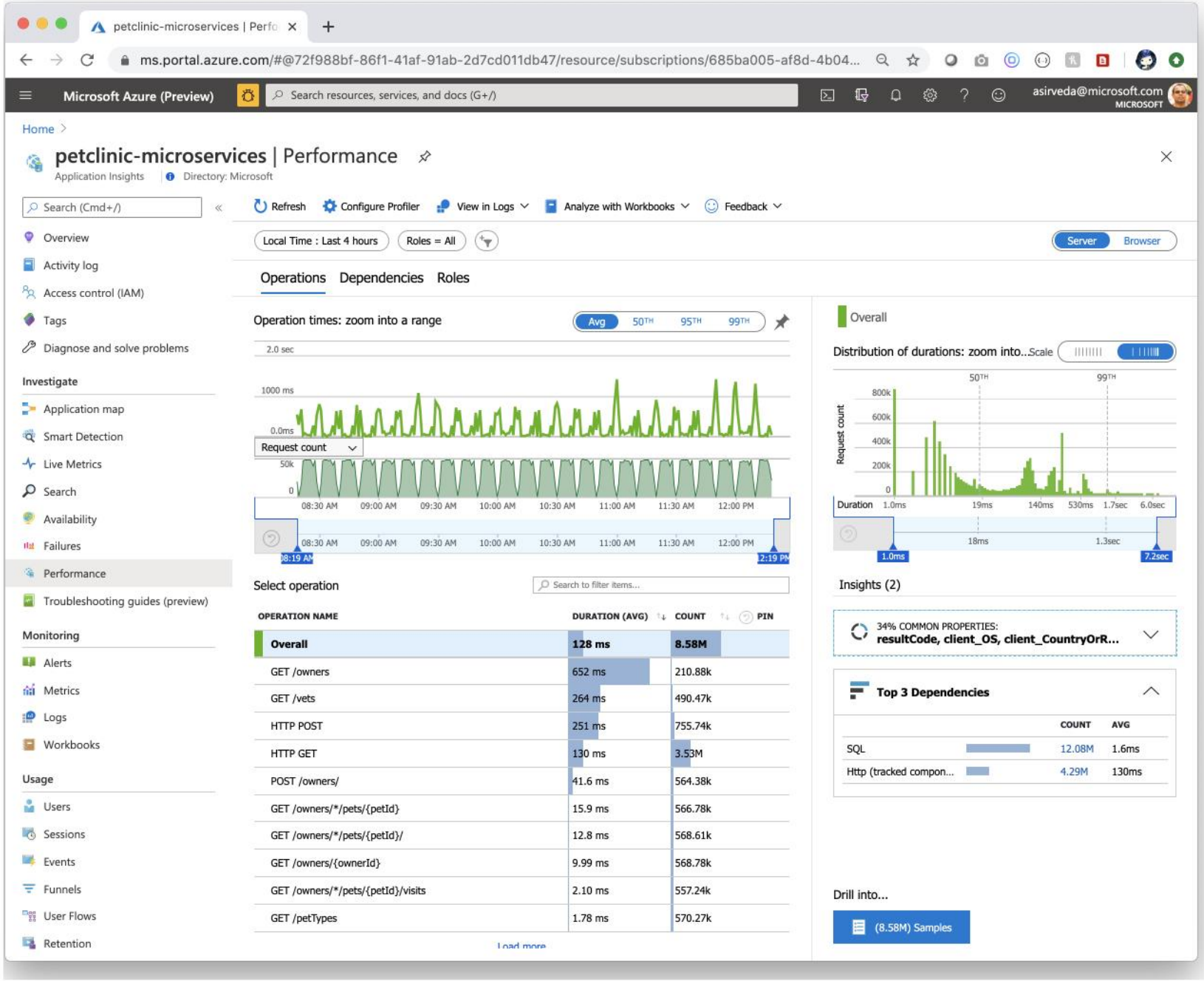
Which app instance is misbehaving | slow?

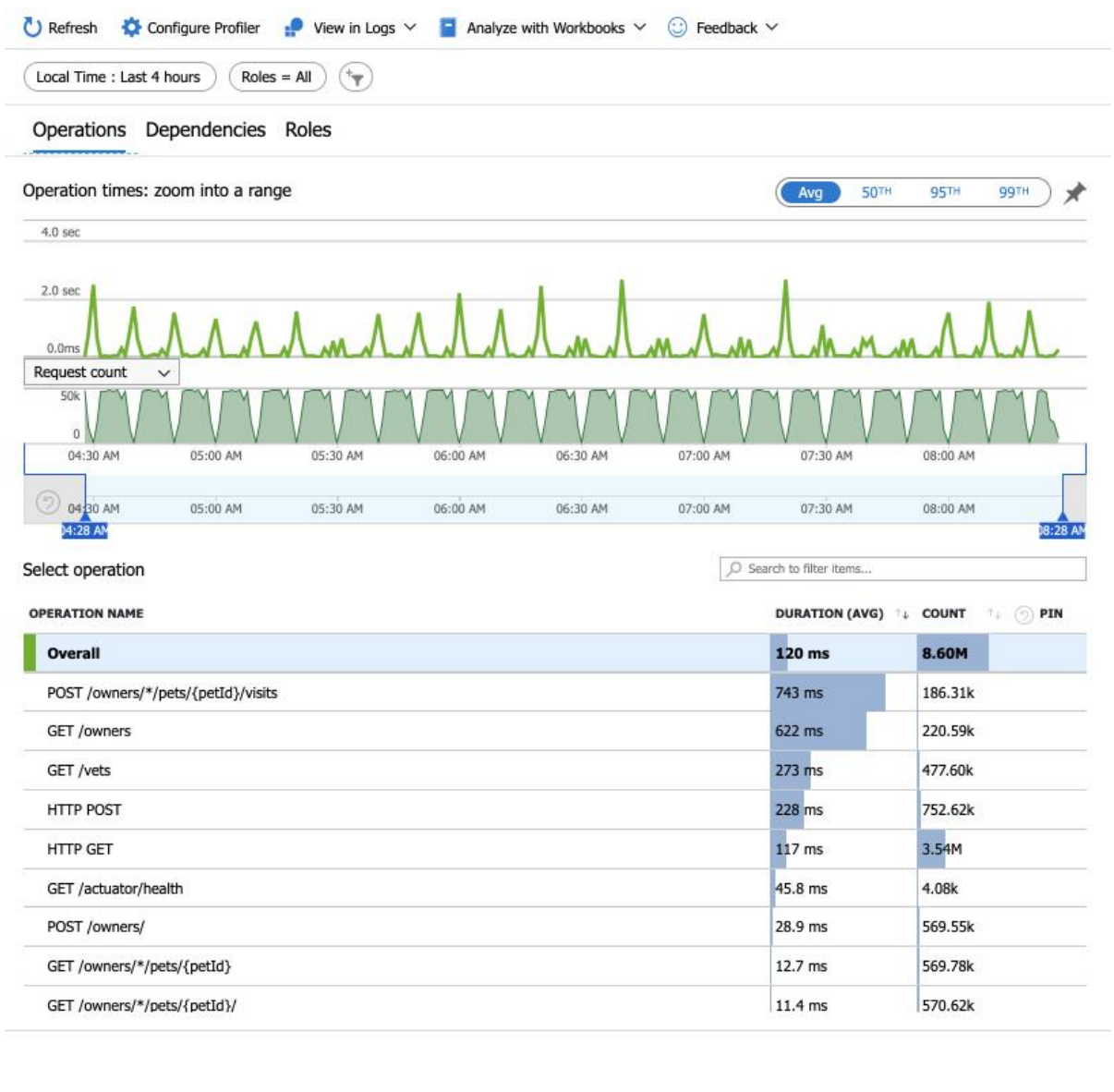


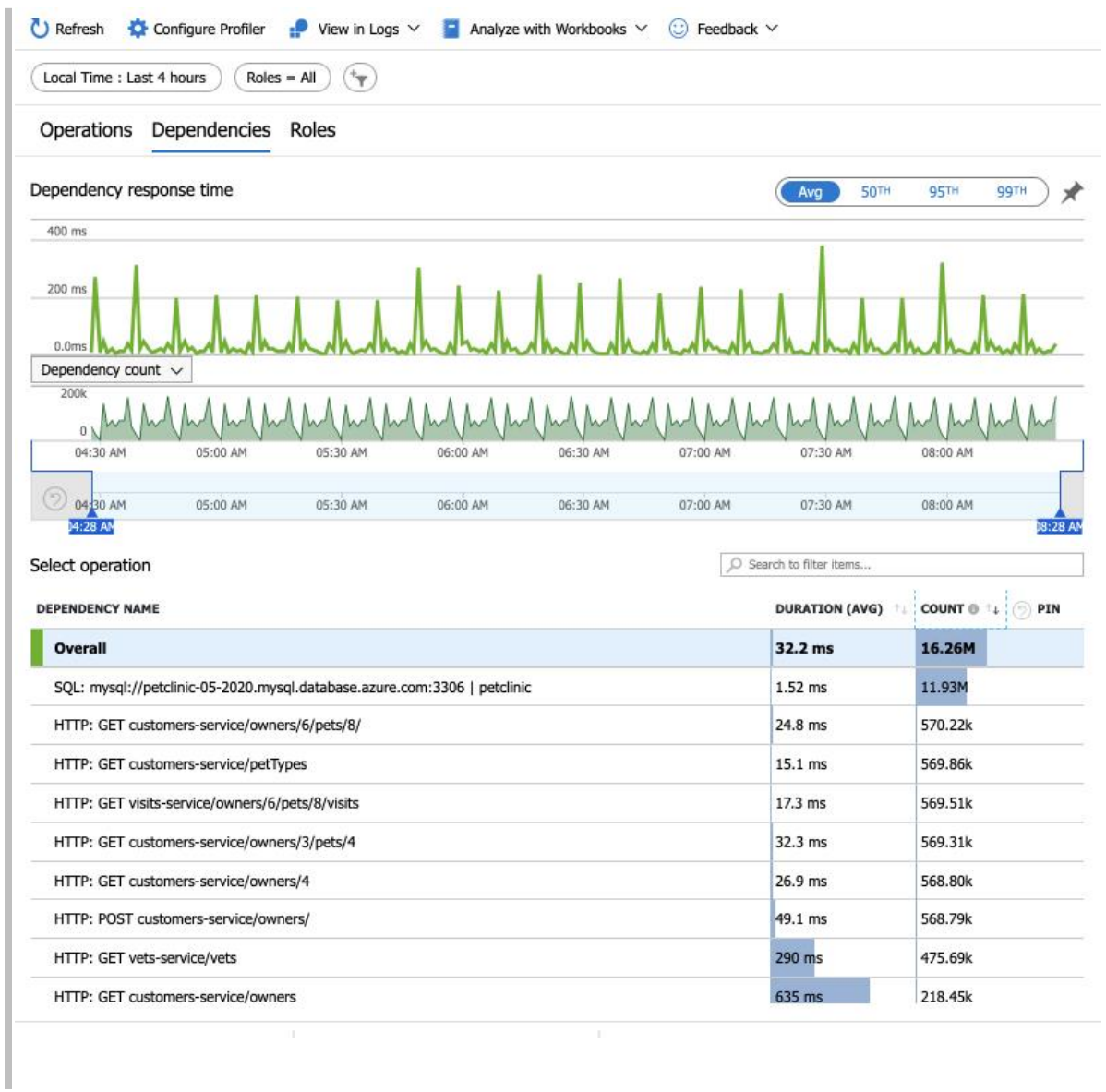


Which App Instance is misbehaving | slow?

Monitor Performance

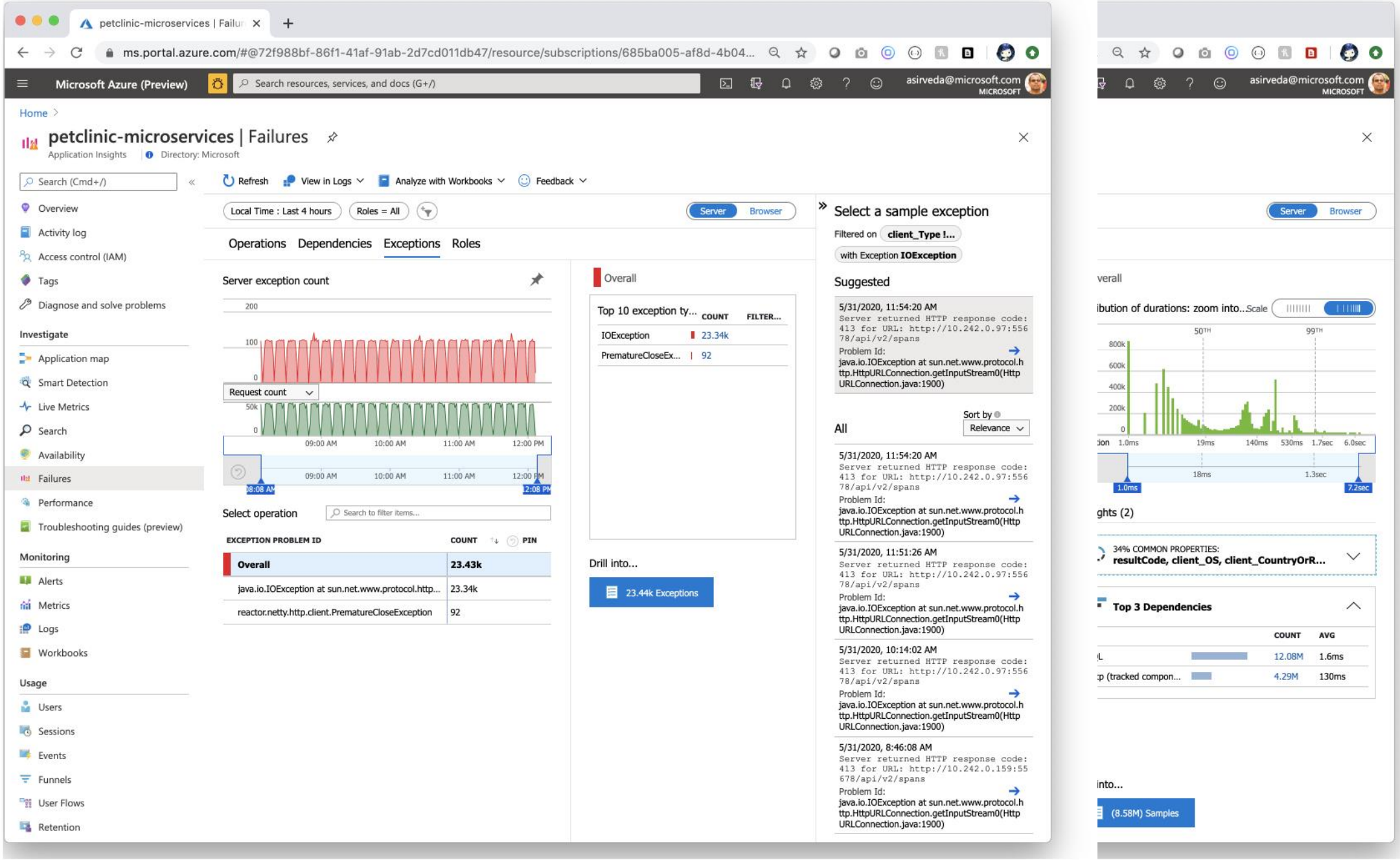






Monitor Performance

Monitor Failures



Azure Spring Cloud – Recap

Azure Spring Cloud - Benefits

Simplify infrastructure management

Run your Spring Boot apps

Scalable global infrastructure

Reduce downtime and deployment risk

Built-in application lifecycle management

Spring Cloud components

Deploy source code or build artifacts

Automatically wire your app with Spring Cloud infrastructure

Easily monitor your apps

Easily identify performance bottlenecks

Gain insight into app dependencies using Azure Monitor

Aggregate metrics

Spring Azure

cloud.spring.io/spring-cloud-azure/

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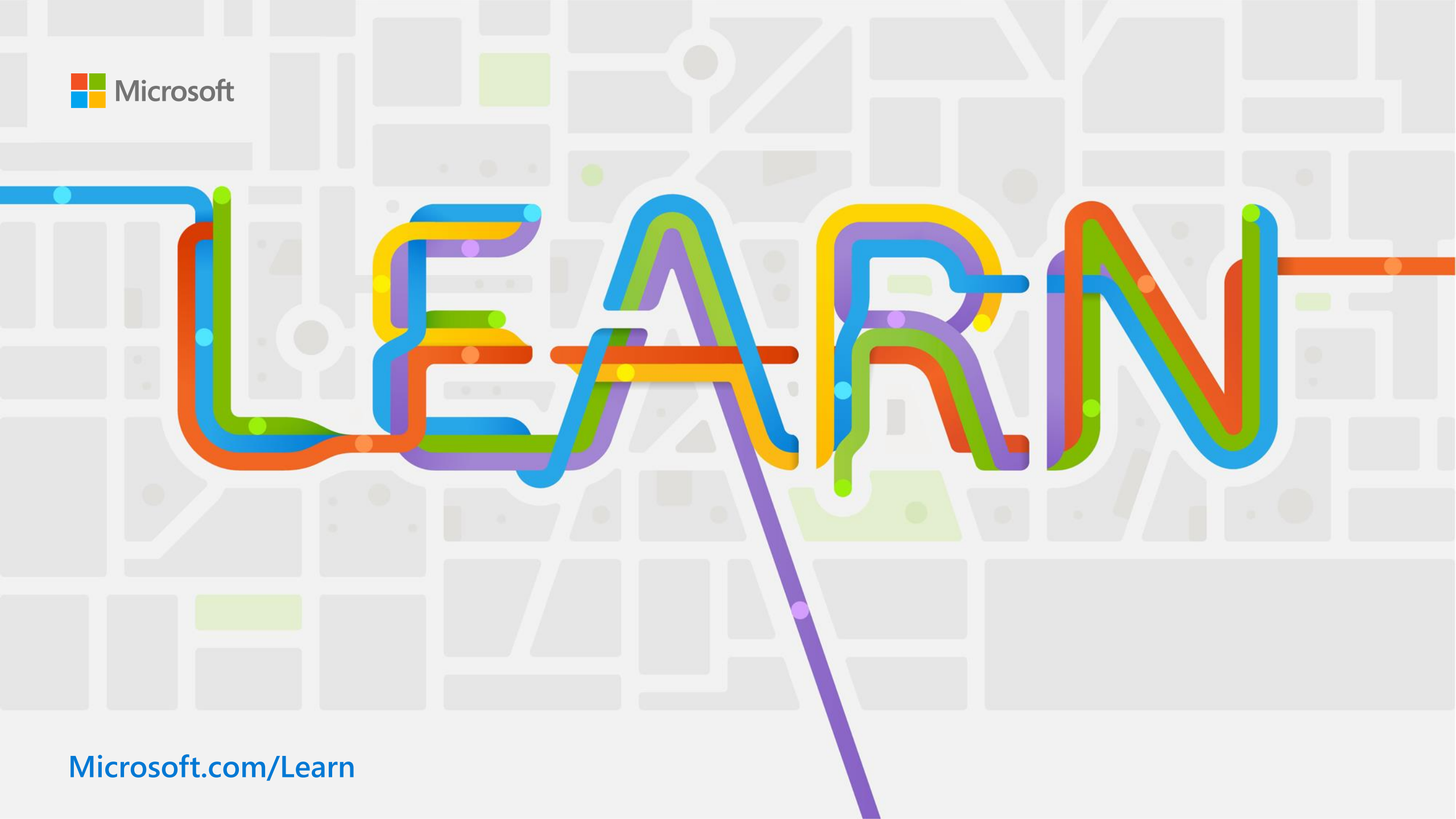
Get started – build your cloud-native solutions today!

- Get started with Azure Spring Cloud using quickstart: aka.ms/azure-spring-cloud-start
- Learn using a self-paced workshop on GitHub: aka.ms/azure-spring-cloud-github
- Learn about implementing solutions on Azure Spring Cloud: aka.ms/azure-spring-cloud-docs
- Migrate your apps to Azure Spring Cloud
  - Spring Boot: aka.ms/azure-spring-cloud-migrate-springboot
  - Spring Cloud: aka.ms/azure-spring-cloud-migrate-springcloud
  - Tomcat: aka.ms/azure-spring-cloud-migrate-tomcat
- Wire Spring apps to interact with Azure services: aka.ms/spring-integrations

- For feedback and questions, please reach out to spring-team@microsoft.com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