



Azure Spring Cloud on Learn TV

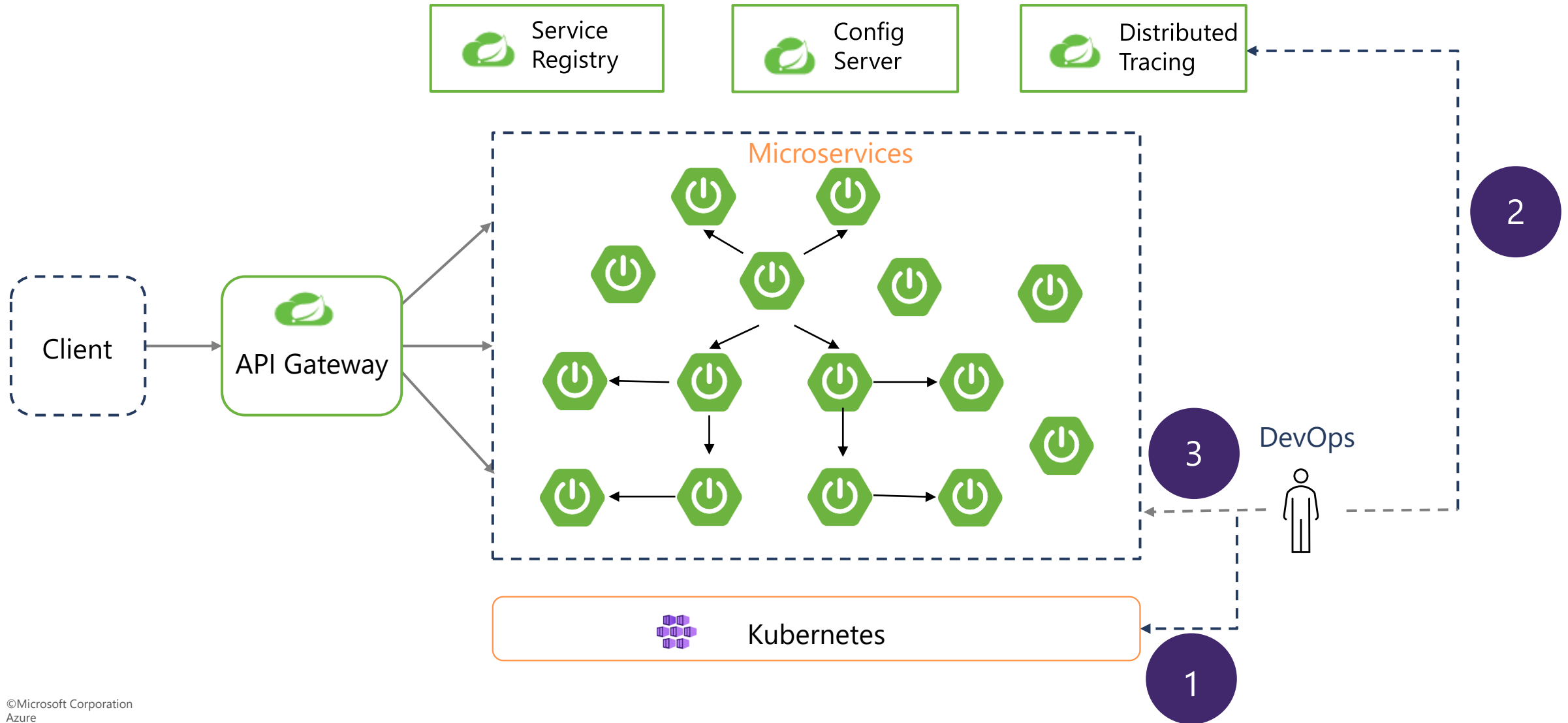
Drive Higher Utilization of Apps in Azure
Spring Cloud with Autoscale

@RoryPreddy

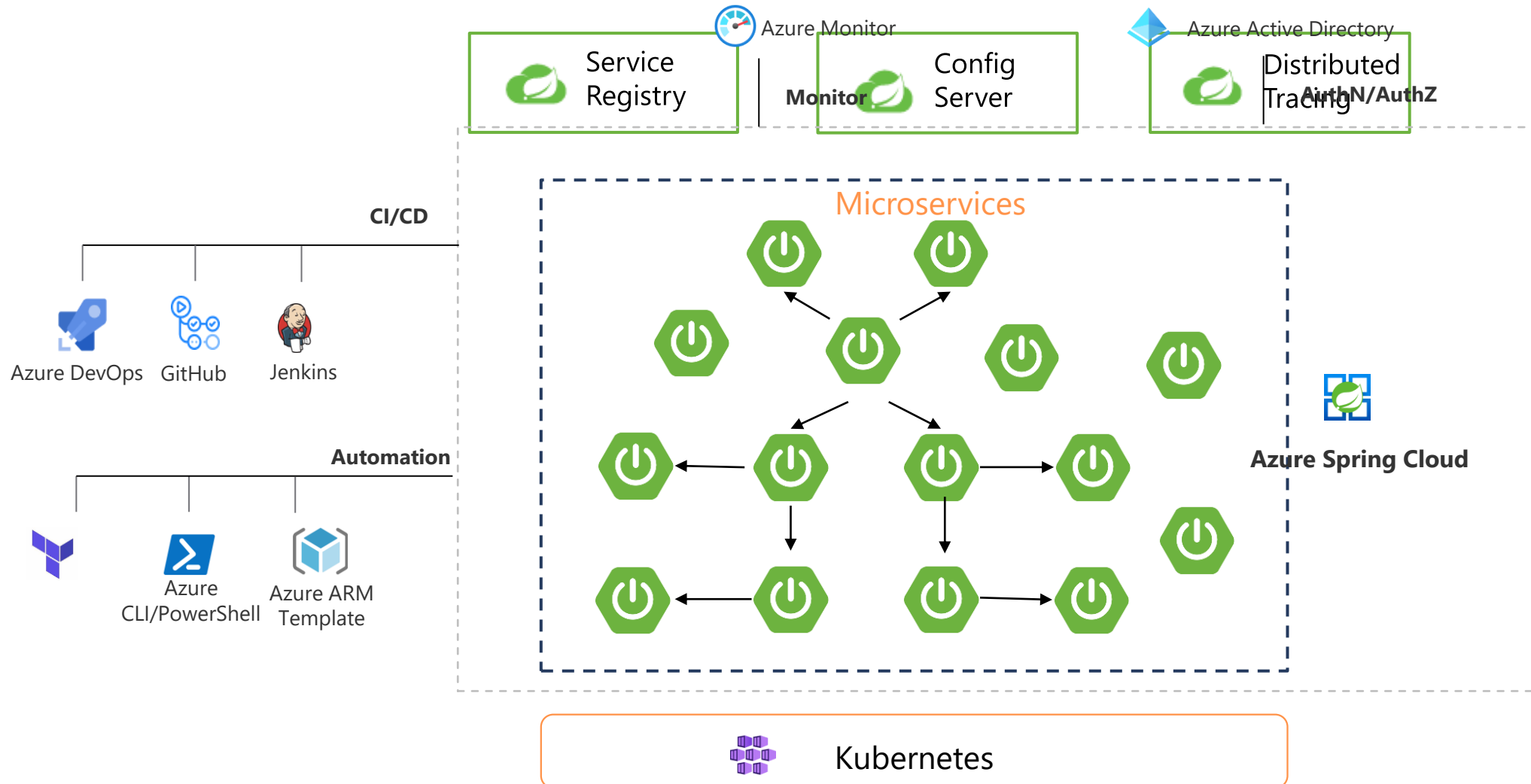
Agenda

-
- Azure Spring Cloud intro
 - Autoscaling
 - Demo
 - Next Steps

App Lifecycle Management

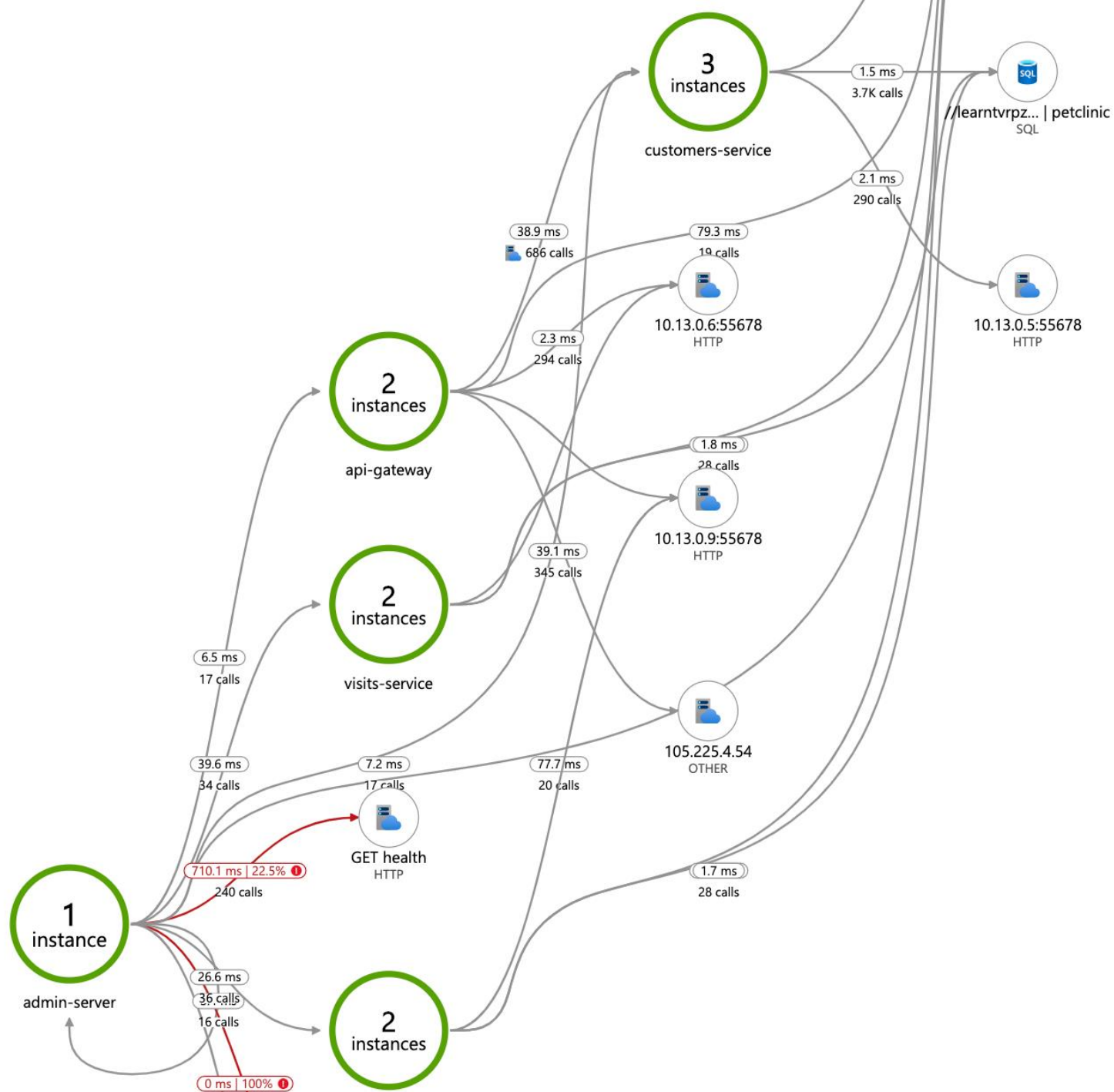


Go Azure Spring Cloud

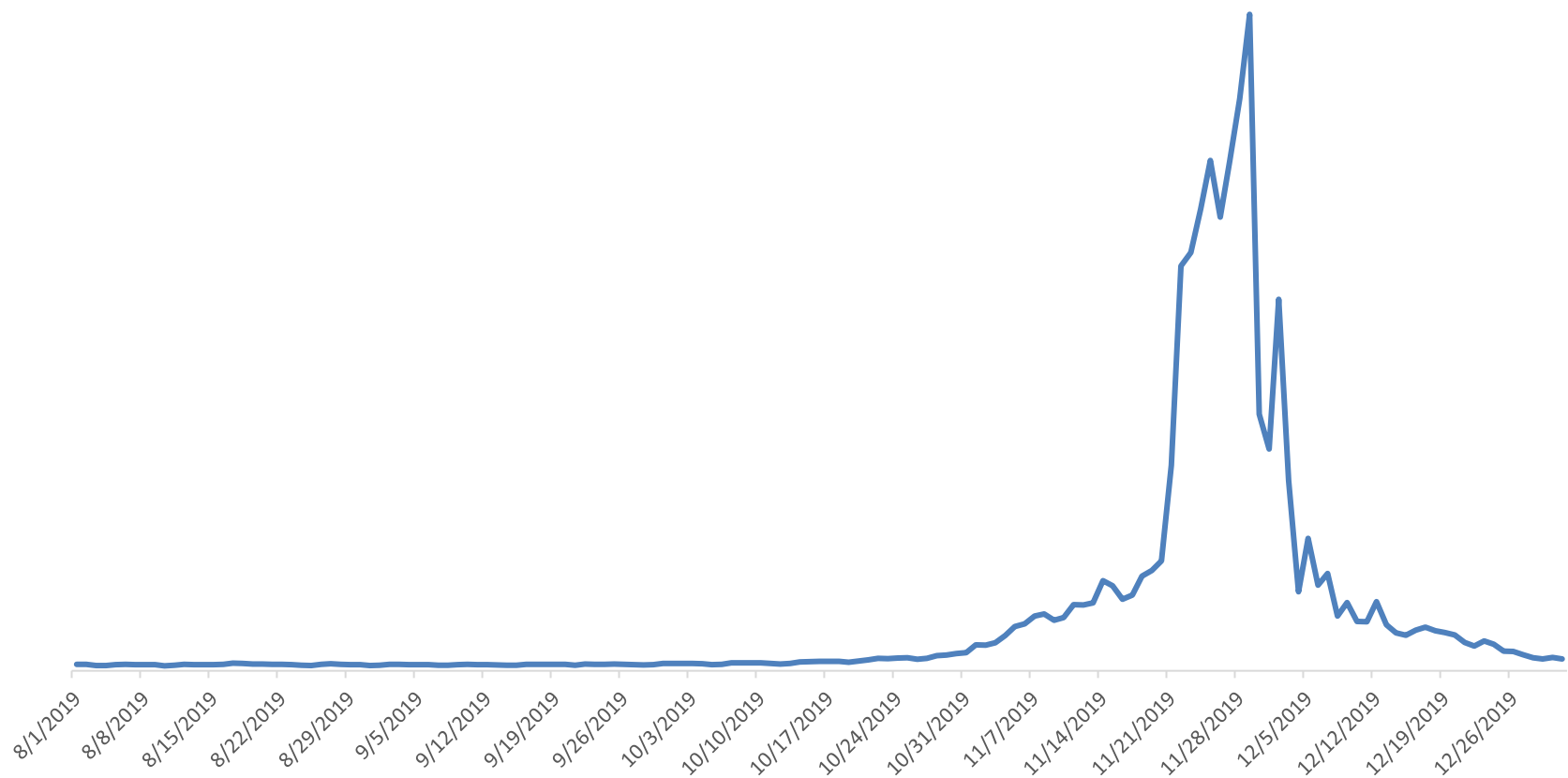


Ease of Monitoring

- System & JVM Metrics
- Log Analytics
- Real time log streaming
- Distributed Tracing
- Threshold Alerting



Black Friday



Source: Microsoft internal data, Dec. 2019 & May 2020



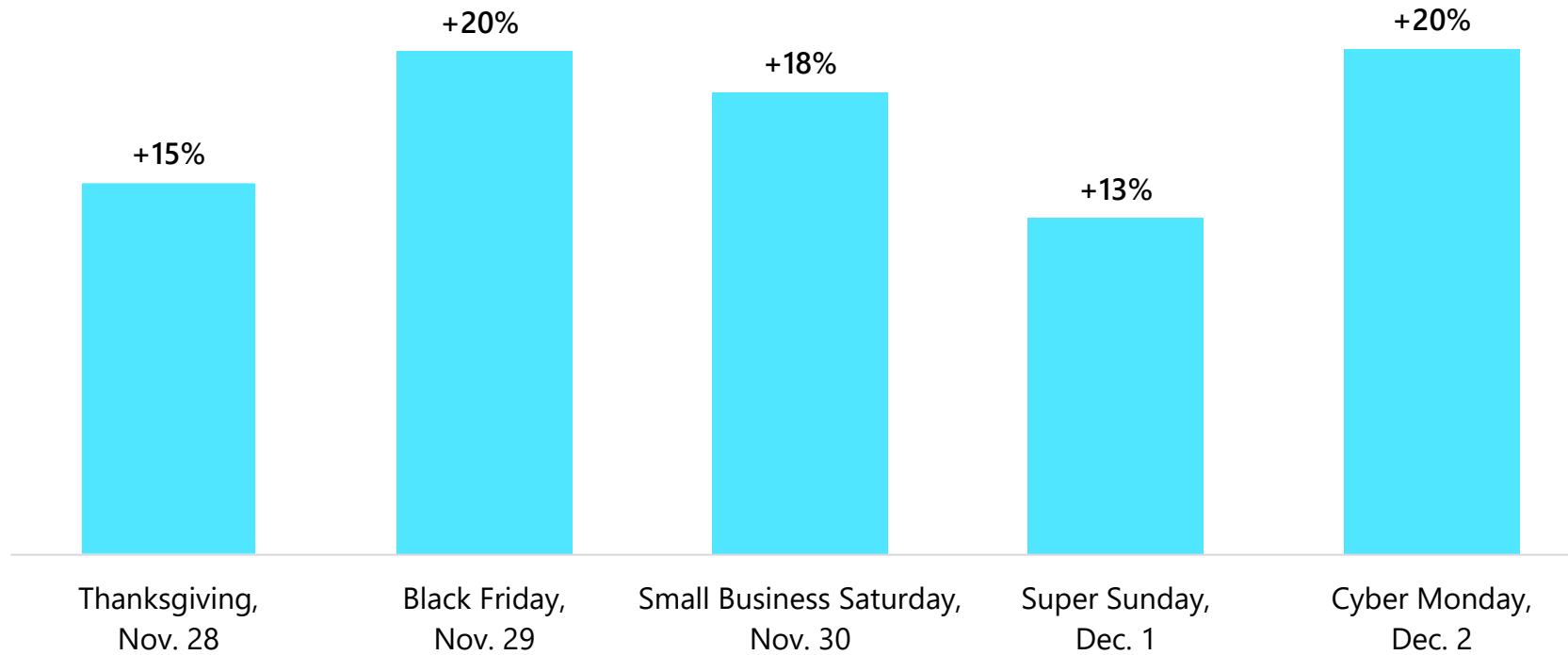
Holiday search volume change against August baseline:

September	-1%
October	62%
November	2,989%
December	949%



COVID-19 related eCommerce focus brings astronomical expectations for holiday's biggest weekend

Year-over-year (YoY) % revenue growth projection, eCommerce



Business Strategy

- Higher utilization of resources
- Elasticity without reserving capacity
- Upper limits and lower limits are under your control
- Pay-As-you-Go

Technical Approach


- I need to Scale specific apps
 - Scale the number of individual app instances
- Scale differently on weekends
 - Scale down to 1 instance on weekends.
- Scale differently during holidays
 - During holiday season, override the defaults and have more capacity at your disposal.
- Scale based on custom metrics
 - Scale an App based on CPU or memory


Autoscaling

Configure
Run history
JSON
Notify
Diagnostics settings

Autoscale is a built-in feature that helps applications perform their best when demand changes. You can choose to scale your resource manually to a specific instance count, or via a custom Autoscale policy that scales based on metric(s) thresholds, or scheduled instance count which scales during designated time windows. Autoscale enables your resource to be performant and cost effective by adding and removing instances based on demand. [Learn more about Azure Autoscale](#)

Choose how to scale your resource


Manual scale
Maintain a fixed instance count


Custom autoscale
Scale on any schedule, based on any metrics

Custom autoscale

Autoscale setting name	default-Autoscale-836
Resource group	learntvpclinic
Instance count	1

Default*

Auto created scale condition

Delete warning

The very last or default recurrence rule cannot be deleted. Instead, you can disable autoscale to turn off autoscale.

Scale mode

☒ Scale based on a metric
☐ Scale to a specific instance count

Rules

Scale out

When
learntvpclinic
(Average) tomcat.global.reques...
Increase count to 3

Scale in

When
learntvpclinic
(Average) tomcat.global.reques...
Decrease count to 1

+ Add a rule

Instance limits

Minimum ⓘ

1

✓

Maximum ⓘ

3

✓

Default ⓘ

1

✓

Schedule

This scale condition is executed when none of the other scale condition(s) match

+ Add a scale condition

Autoscale

- Metric driven
- Scale Instance Count
- Can be Scheduled
- Executed in Workflow of matching conditions

Autoscale setting name	default-Autoscale-836
Resource group	learntvpclinic
Instance count	1

Default* Auto created scale condition

Scale mode

☒ Scale based on a metric ☐ Scale to a specific instance count

Rules

Scale out

When learntvpclinic (Average) tomcat.global.reqes... Increase count to 3

Scale in

When learntvpclinic (Average) tomcat.global.reqes... Decrease count to 1

+ Add a rule

Instance limits

Minimum ⓘ

Maximum ⓘ

Default ⓘ

1 ✓

3 ✓

1 ✓

Schedule

This scale condition is executed when none of the other scale condition(s) match

Auto created scale condition 1

Scale mode

☐ Scale based on a metric ☒ Scale to a specific instance count

Instance count*

1

Schedule

☒ Specify start/end dates ☐ Repeat specific days

Timezone

(UTC+02:00) E. Europe

Start date

09/18/2020

12:00:00 AM

End date

09/20/2020

11:59:00 PM

Autoscale Settings

- Run history
- Activity log
- Tracing
- Notifications and Webhooks

Microsoft Azure (Preview)

Search resources, services, and docs (G+)

[Home](#) > [customers-service](#) >

Autoscale setting

learnrtpetclinic/customers-service/default (microsoft.appplatform/spring/apps/deployments)

Save

Discard

Refresh

Provide feedback

Configure

Run history

JSON

Notify

Diagnostics settings

Observed instance count - this chart plots the instance count as observed by the auto scale engine. If the chart is empty it either means auto scale is in cool down period or auto scale was disabled over a period of time or auto scale was not configured.

Show data for last

1 hour

6 hours

12 hours

1 day

7 days

Custom

Pin to dashboard

Observed Capacity (Max)
default-autoscale-836

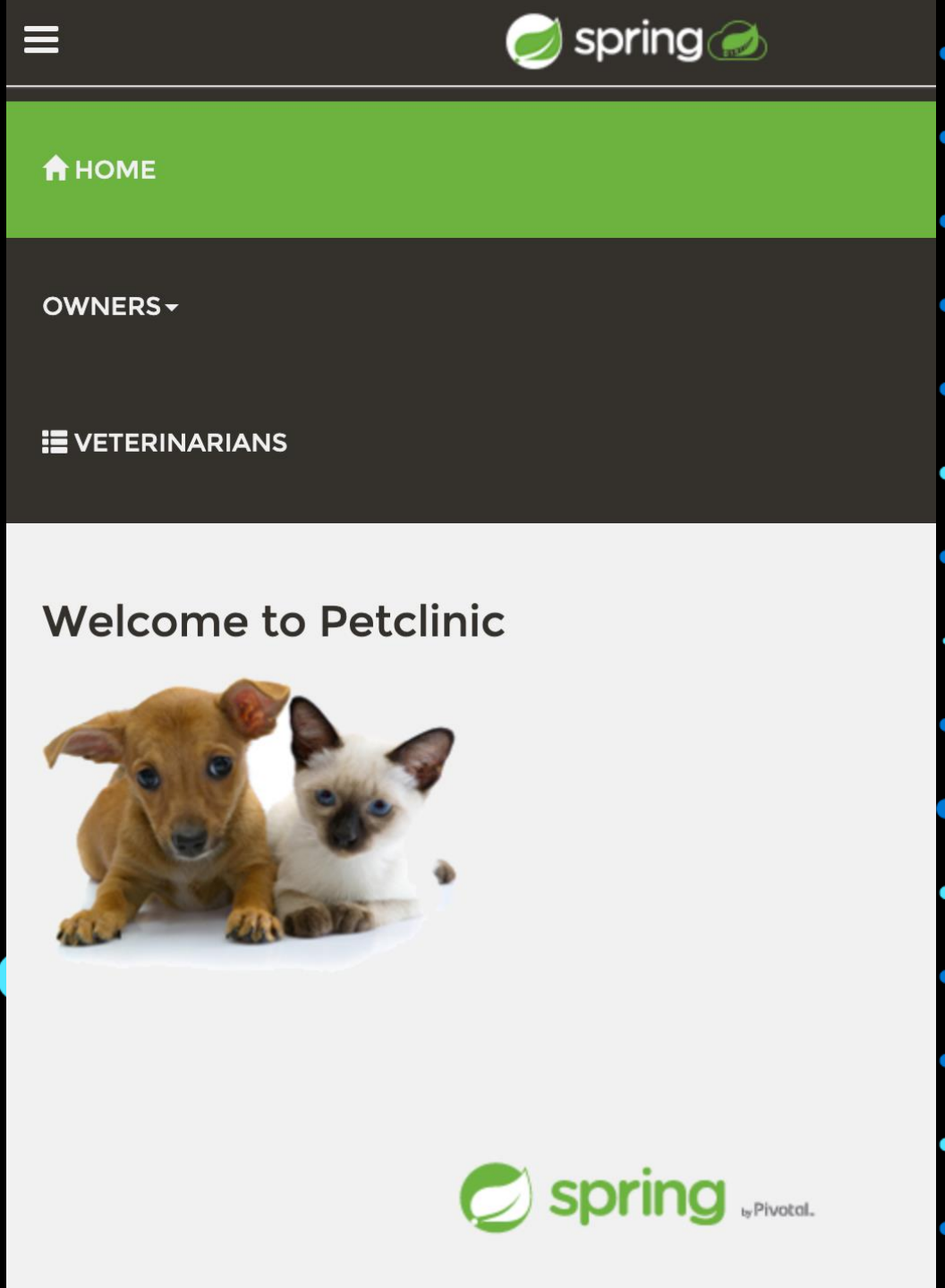
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Autoscale events for this time range

View more details in the Activity Log

Operation name	Status	Time	Time stamp
> <div></div> Autoscale scale down completed	Succeeded	6 minutes a...	Mon Sep 14 2020 19:35:48 ...
> <div></div> Autoscale scale up completed	Succeeded	11 minutes ...	Mon Sep 14 2020 19:31:13 ...
> <div></div> Autoscale scale down completed	Succeeded	28 minutes ...	Mon Sep 14 2020 19:14:17 ...
> <div></div> Autoscale scale up completed	Succeeded	31 minutes ...	Mon Sep 14 2020 19:11:15 ...
> <div></div> Autoscale scale down completed	Succeeded	38 minutes ...	Mon Sep 14 2020 19:04:15 ...
<div></div> Flapping	Succeeded	40 minutes ...	Mon Sep 14 2020 19:02:43 ...

Demo



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 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