Who tests their cloud code anyway?
@larsklint

YOW!

Hi I'm Lars

A CLOUD GURU

Train~~ing~~ Architect

Microsoft® MVP Most Valuable Professional

#yowseptember

ON THE FARM WITH LLAMA LARS

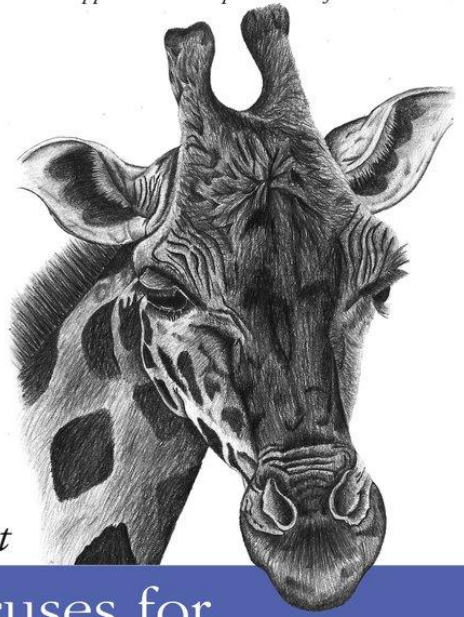
AZURE SENTINEL, INTELLIGENT SECURITY

YOW!

@larsklint

NOW, ARE THERE
ANY QUESTIONS?

Your application is a special snowflake



Expert

Excuses for Not Writing Unit Tests

O RLY?

@ThePracticalDev

Solutions that might fix the problem without breaking anything

Essential

Hoping This Works

O RLY?

@ThePracticalDev

It worked fine three months ago

Practical Testing

Just click around and see if anything breaks

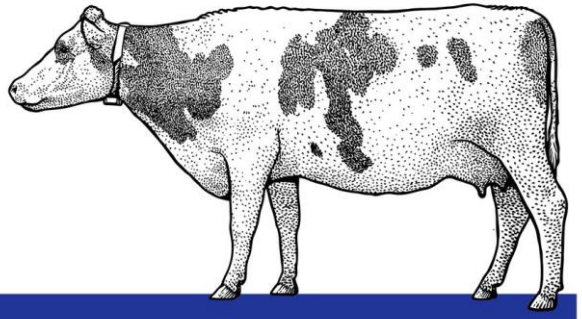
O' RLY

Noah Tomation

:P orly.coloncapitalp.com

YOW!

Nuisance-free software development



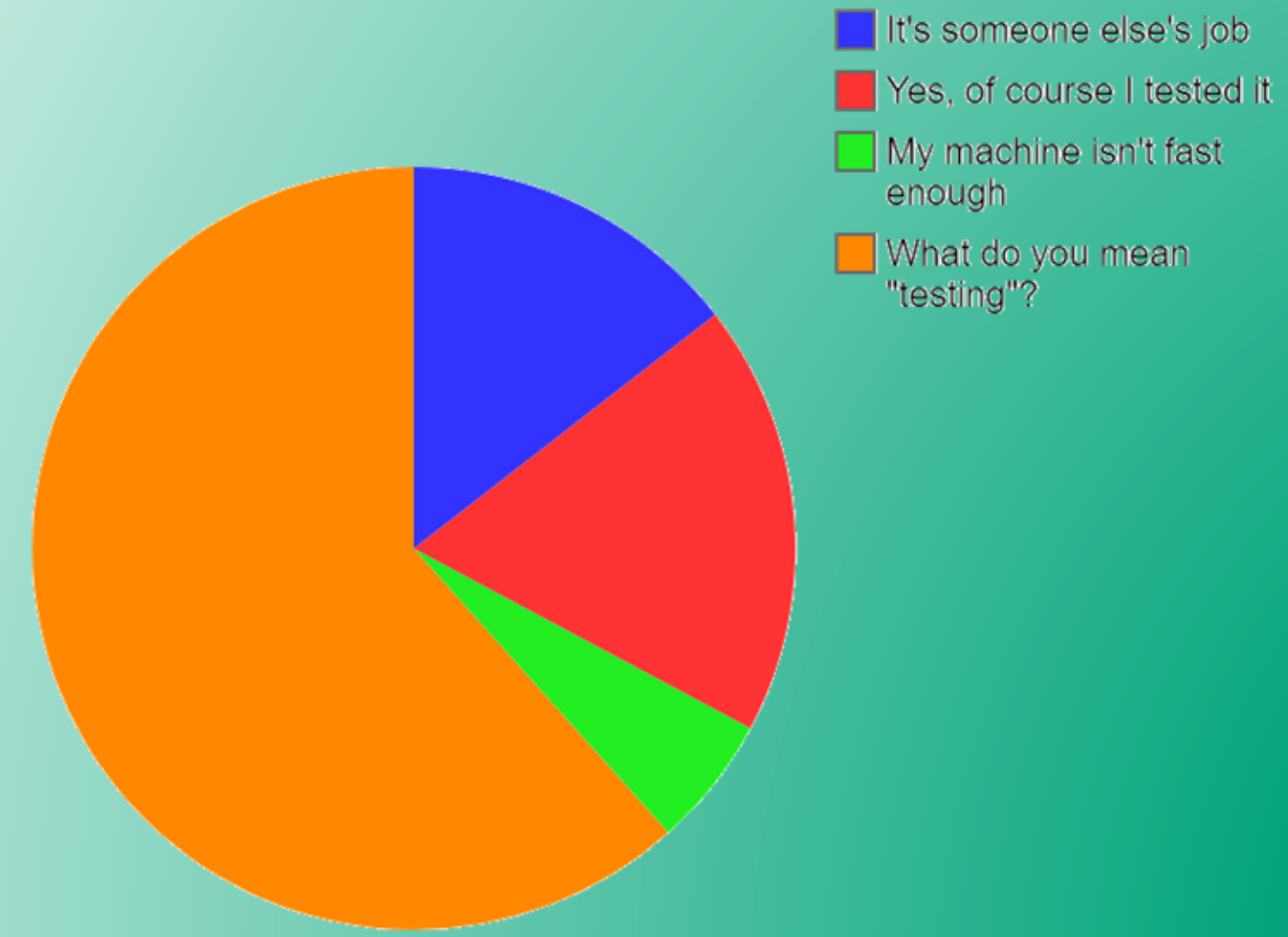
Commenting Out Failed Tests

A Fragile Primer

O RLY?

@ThePracticalDev

Developer Testing Approach



@larsklint

Who tests PaaS anyway?

YOW!

App Services

Staging
A/B Testing

Home - Microsoft Azure

portal.azure.com/#home

Microsoft Azure

Search resources, services, and docs (G+/)

me@larsklint.com
DEFAULT DIRECTORY (LARSKLINT...

Azure services

Create a resource

DevTest Labs

Resource groups

Azure Cosmos DB

App Services

All resources

Azure Active Directory

IoT Central Applications

IoT Hub

More services

Recent resources

Name	Type	Last Viewed
azConfDevTest	DevTest Lab	13 hours ago
azConf	Resource group	13 hours ago
cloud-shell-storage-southeastasia	Resource group	2 weeks ago
ms-ignite-2020 (larsklint/ms-ignite-2020)	App Service (Slot)	2 months ago
Default1	App Service plan	2 months ago
larsklint	Application Insights	2 months ago
larsklint	App Service	2 months ago
llamacamwp	App Service	3 months ago
teamthrive4lifeinfo	App Service	4 months ago
Default-Web-NorthEurope	Resource group	6 months ago
SendGrid	SendGrid Account	10 months ago
cs1a56098fe3baex4f0ax94e	Storage account	a year ago

Navigate

Subscriptions

Resource groups

All resources

Dashboard

Tools

Microsoft Learn

Learn Azure with free online training from Microsoft

Azure Monitor

Monitor your apps and infrastructure

Security Center

Secure your apps and infrastructure

Cost Management

Analyze and optimize your cloud spend for free

If it fails,
rebuild it
@larsklint

YOW!

DevTest Labs

Quickly provision of environments

Quotas and policies

Automate shutdown

Windows and Linux

Home - Microsoft Azure

portal.azure.com/#home

Microsoft Azure

Search resources, services, and docs (G+/)

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Azure services

Create a resource | Resource groups | DevTest Labs | Azure Cosmos DB | App Services | All resources | Azure Active Directory | IoT Central Applications | IoT Hub | More services

Recent resources

Name	Type	Last Viewed
cloud-shell-storage-southeastasia	Resource group	2 weeks ago
ms-ignite-2020 (larsklint/ms-ignite-2020)	App Service (Slot)	2 months ago
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larsklint	Application Insights	2 months ago
larsklint	App Service	2 months ago
llamacamwp	App Service	3 months ago
teamthrive4lifeinfo	App Service	4 months ago
Default-Web-NorthEurope	Resource group	6 months ago
SendGrid	SendGrid Account	10 months ago
cs1a56098fe3baex4f0ax94e	Storage account	a year ago
diamondlifestyle4lifeinfo	App Service	a year ago
Visual Studio Ultimate with MSDN	Subscription	a year ago

Navigate

Subscriptions | Resource groups | All resources | Dashboard

Tools

Microsoft Learn
Learn Azure with free online training from Microsoft

Azure Monitor
Monitor your apps and infrastructure

Security Center
Secure your apps and infrastructure

Cost Management
Analyze and optimize your cloud spend for free

It is just a YAML file
@larsklint

YOW!

Azure Test Plans

Planned and Exploratory Testing
Capture Rich Data
Web and Desktop
End-to-end Traceability

staging (llamacamwp/staging) - | Test plans - Test Plans

dev.azure.com/klint/azConf-test/_testPlans/define?planId=352&suiteId=353

Azure DevOps | klint / azConf-test / Test Plans / azConf Test Plan | Search

azConf-test

- Overview
- Boards
- Repos
- Pipelines
- Test Plans
- Test plans
- Progress report
- Parameters
- Configurations
- Runs
- Load test
- Artifacts

Project settings

azConf Test Plan

Nov 13 - Nov 20 Current

Test Suites

azConf Test Plan

azConf Test Plan (ID: 353)

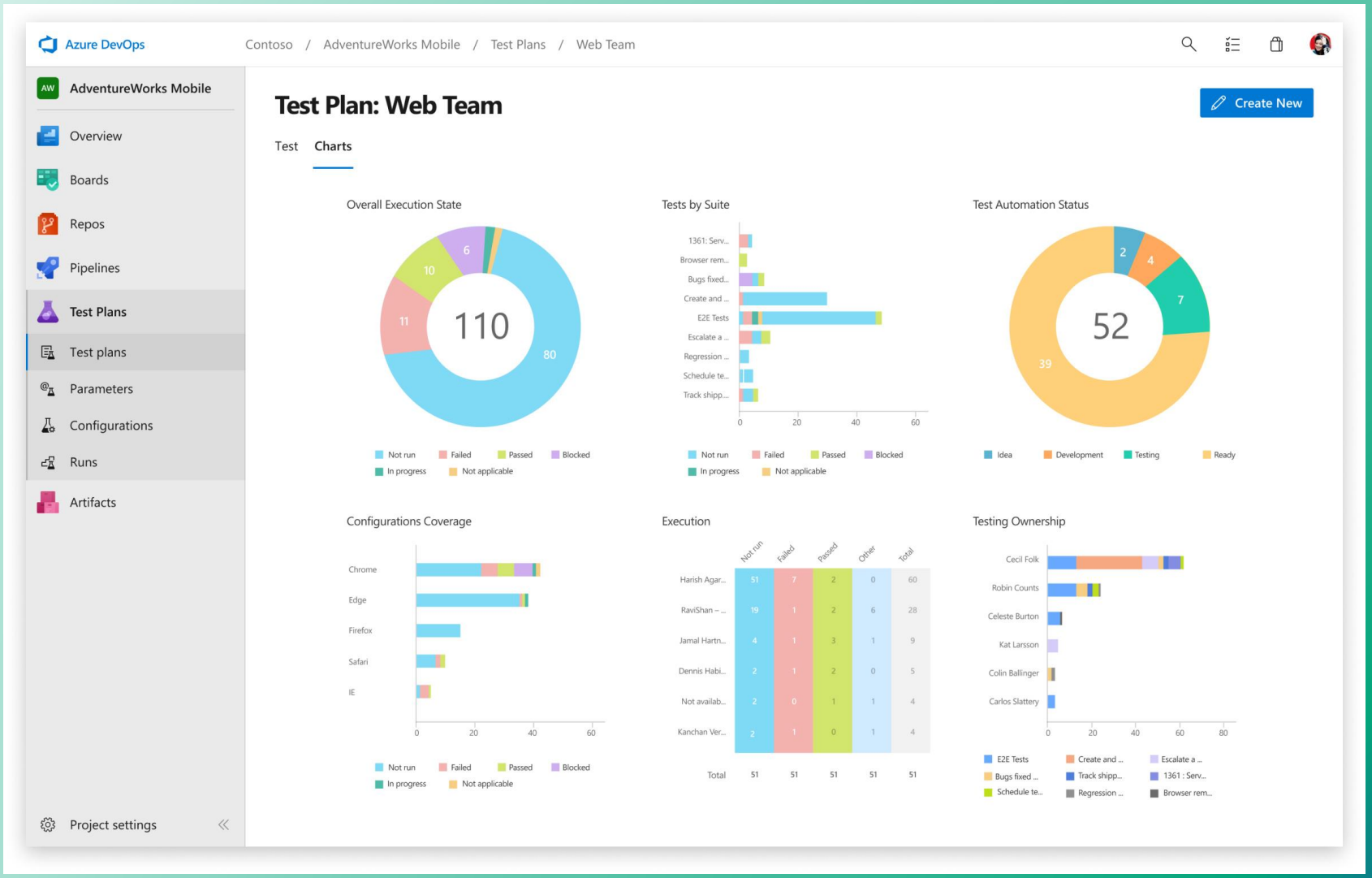
Help

Define Execute Chart

Add a test case

Use this tab to collate, add and manage test cases

New Test Case



https://azuredevopsdemogenerator.azurewebsites.net/

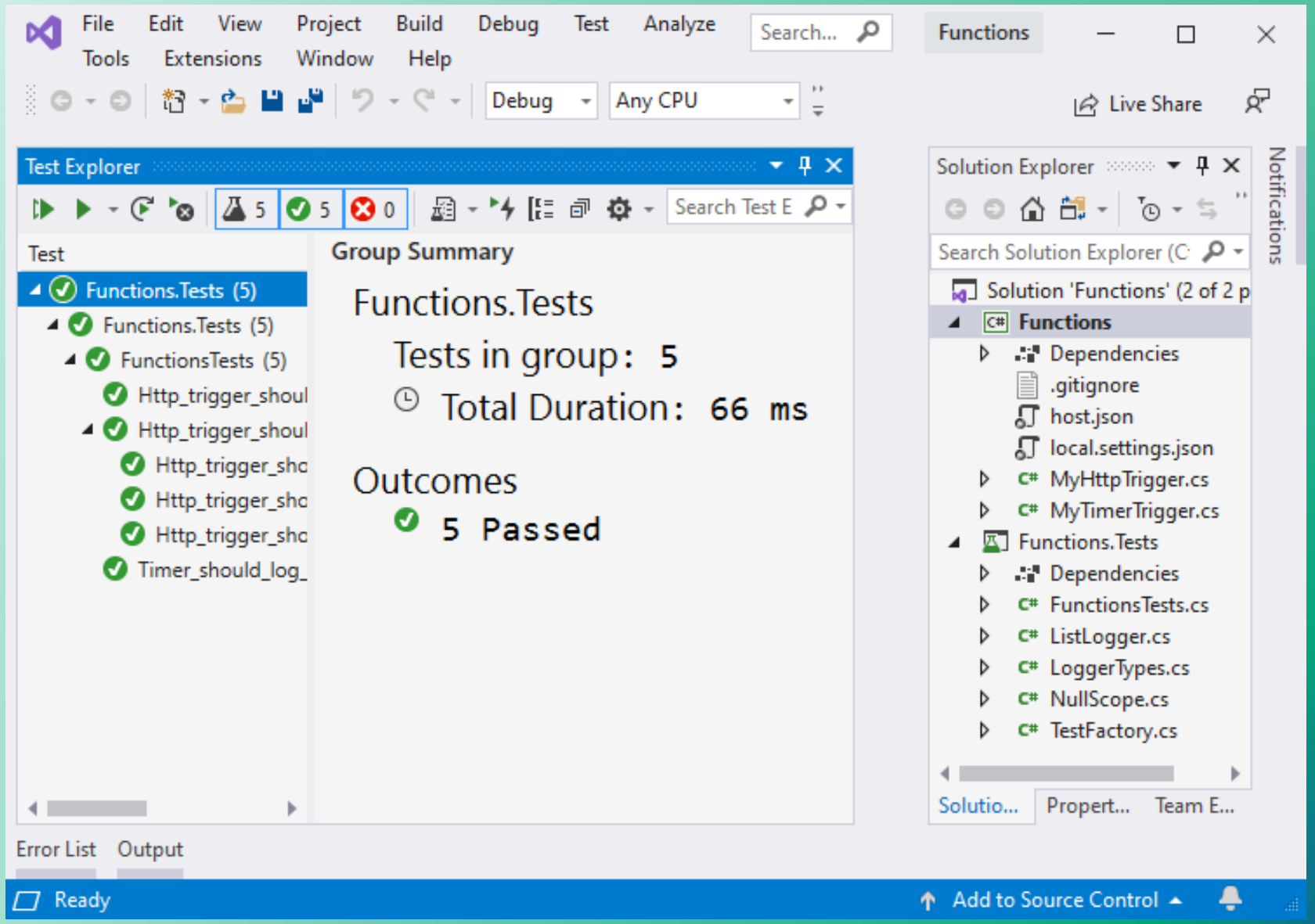
#yowseptember

There is no
server in
serverless
@larsklint

YOW!

Azure Functions

Serverless
Rapid Development
What the Cool Kids are Doing



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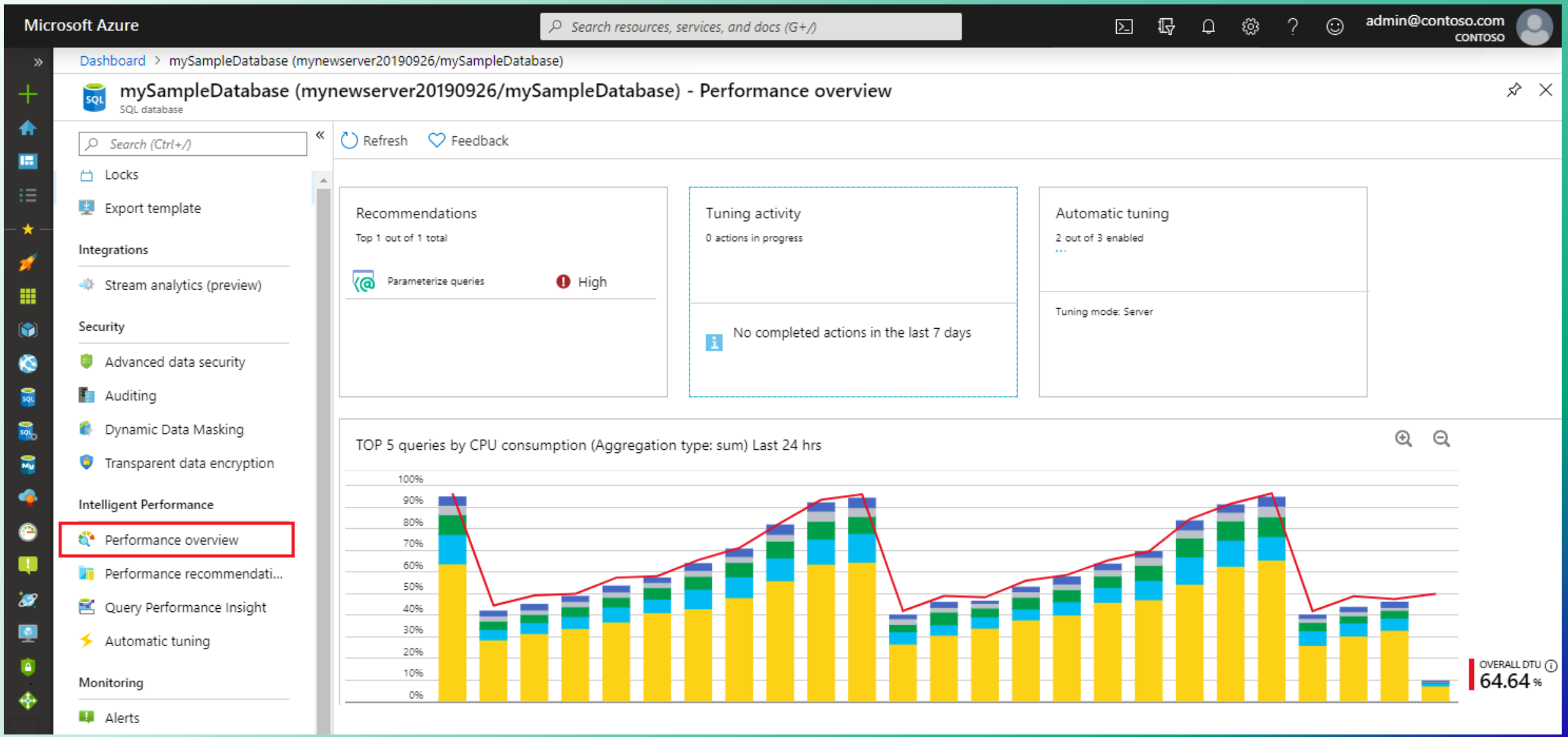
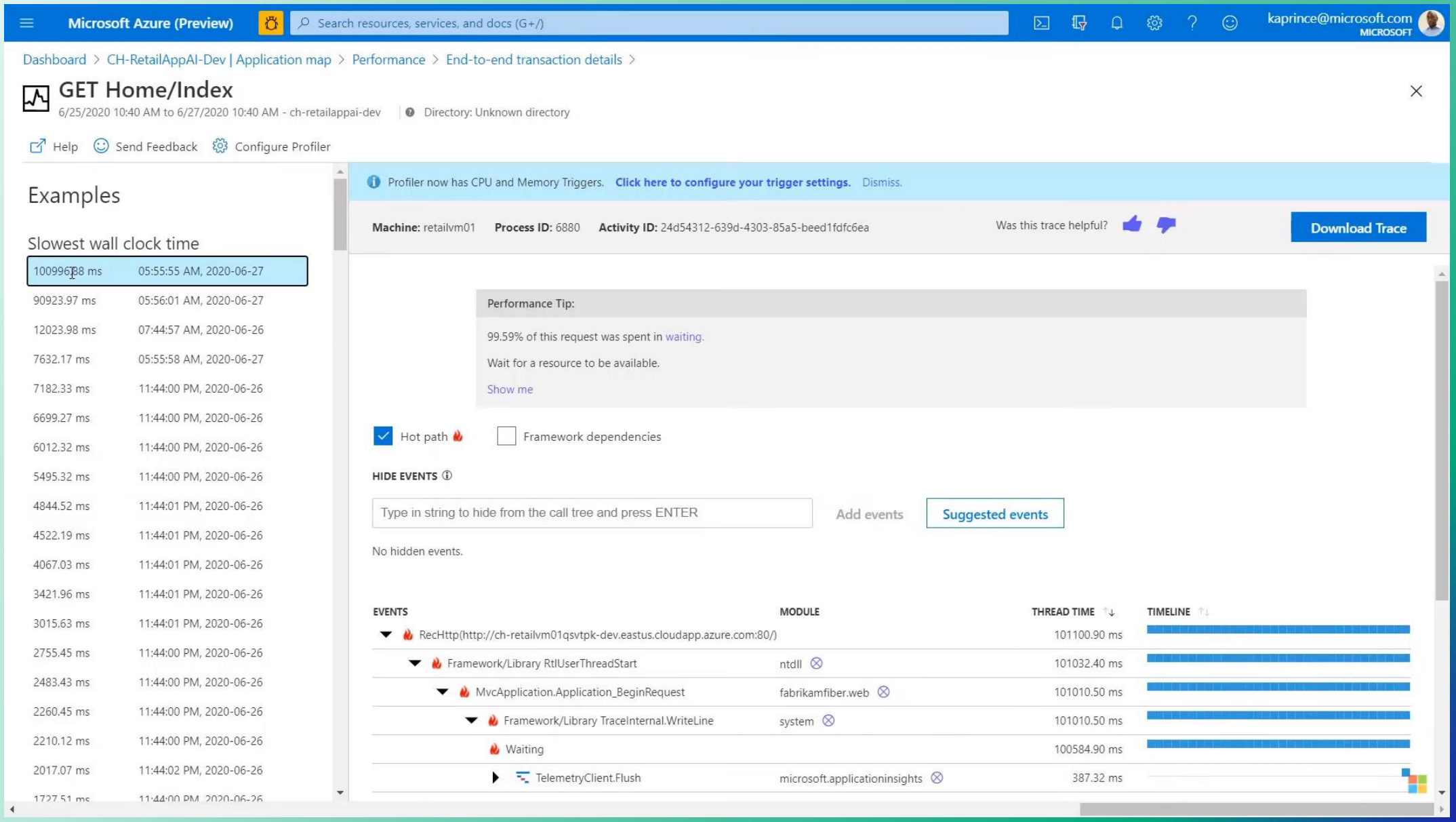
It is someone else’s computer

YOW!

Performance Tuning

Database
Application Insights


Microsoft Azure
Search resources, services, and docs (G+/)
admin@contoso.com
CONTOSO
Dashboard > mySampleDatabase (mynewserver20190926/mySampleDatabase)
mySampleDatabase (mynewserver20190926/mySampleDatabase) - Performance overview
SQL database
Search (Ctrl+/)
Refresh
Feedback
Locks
Export template
Integrations
Stream analytics (preview)
Security
Advanced data security
Auditing
Dynamic Data Masking
Transparent data encryption
Intelligent Performance
Performance overview
Performance recommendati...
Query Performance Insight
Automatic tuning
Monitoring
Alerts
Recommendations
Top 1 out of 1 total
Parameterize queries
High
Tuning activity
0 actions in progress
No completed actions in the last 7 days
Automatic tuning
2 out of 3 enabled
Tuning mode: Server
TOP 5 queries by CPU consumption (Aggregation type: sum) Last 24 hrs
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
OVERALL DTU
64.64 %



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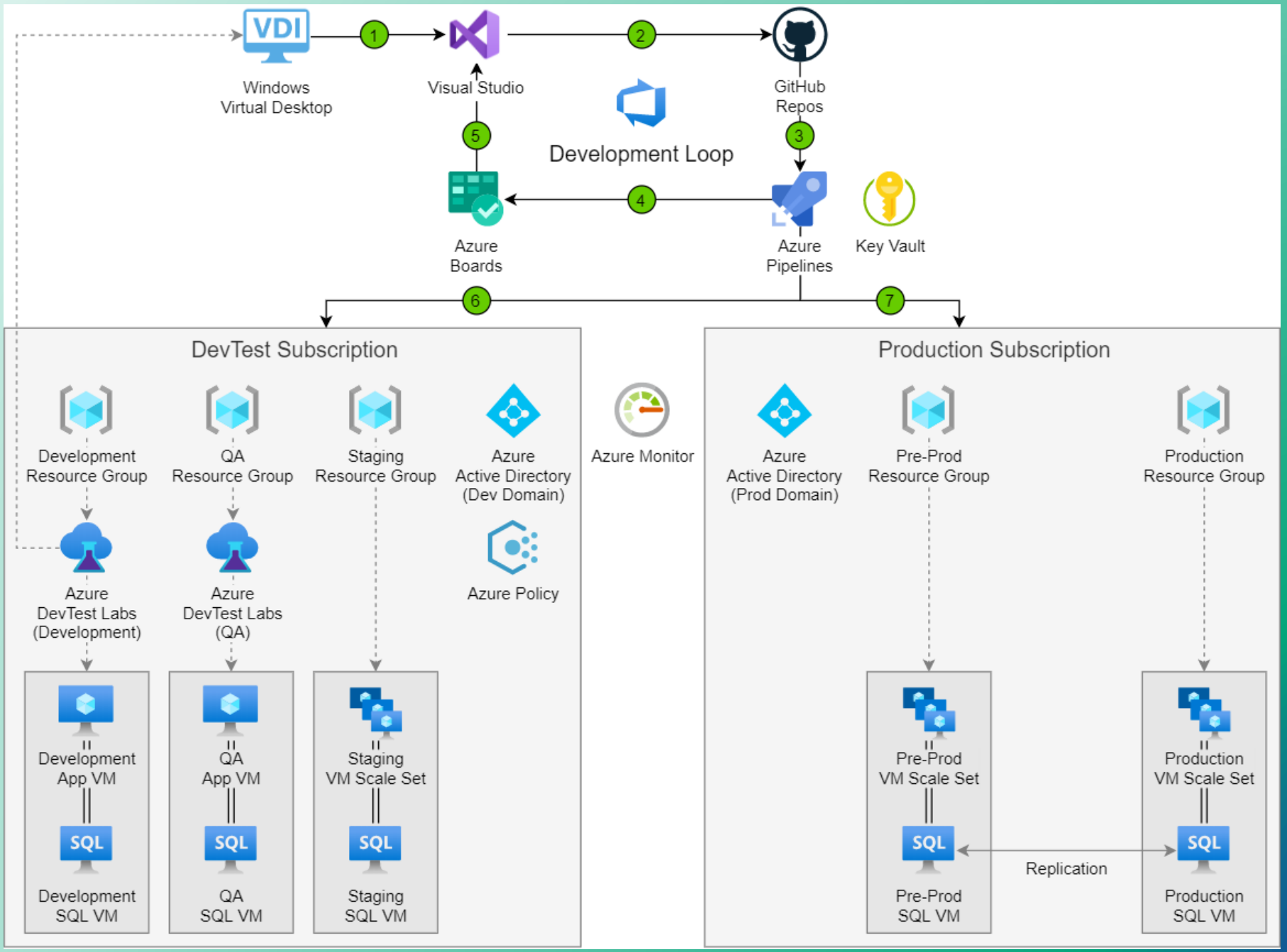
Microsoft Does the Testing

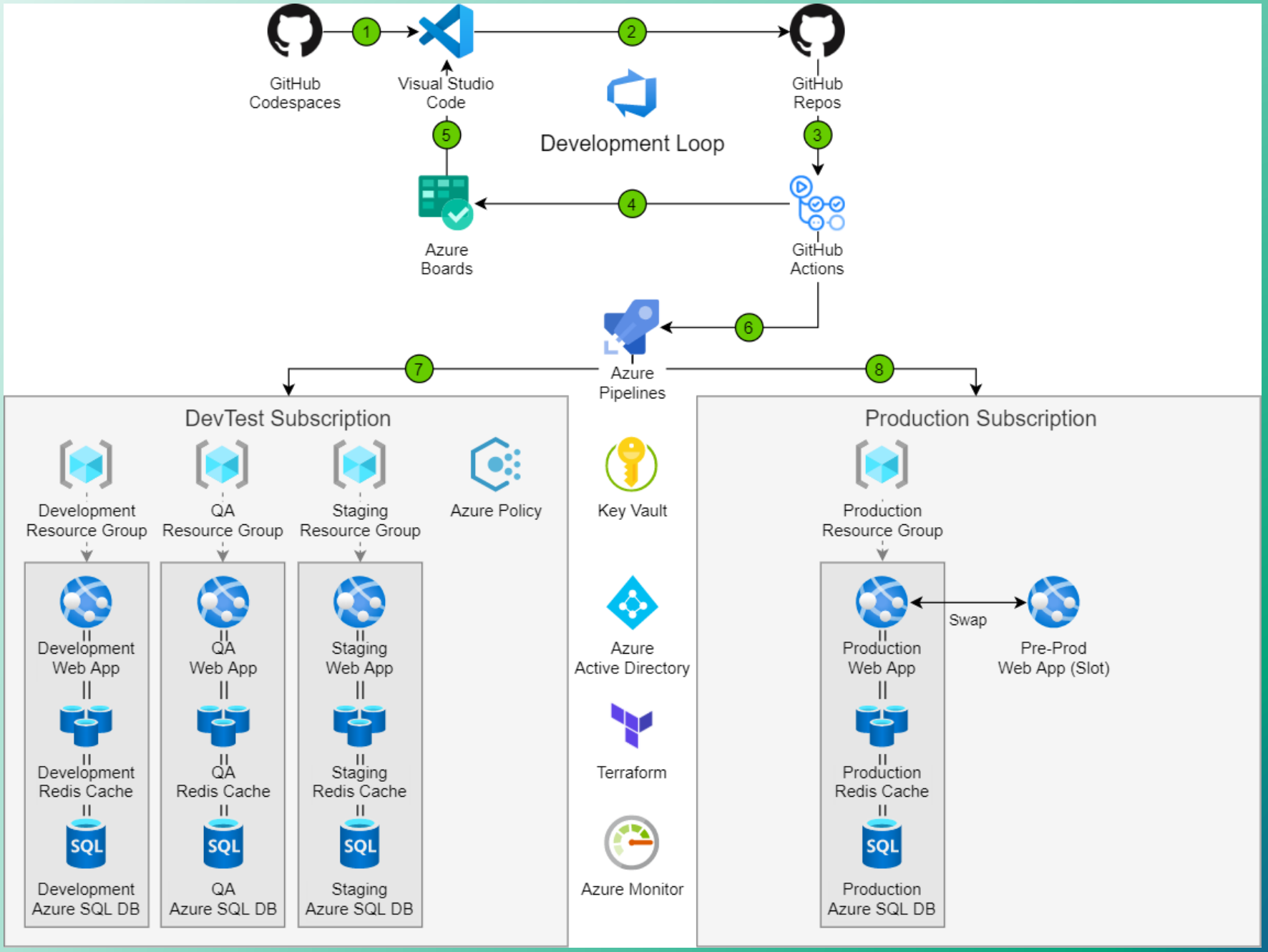
YOW!

Testing Architecture

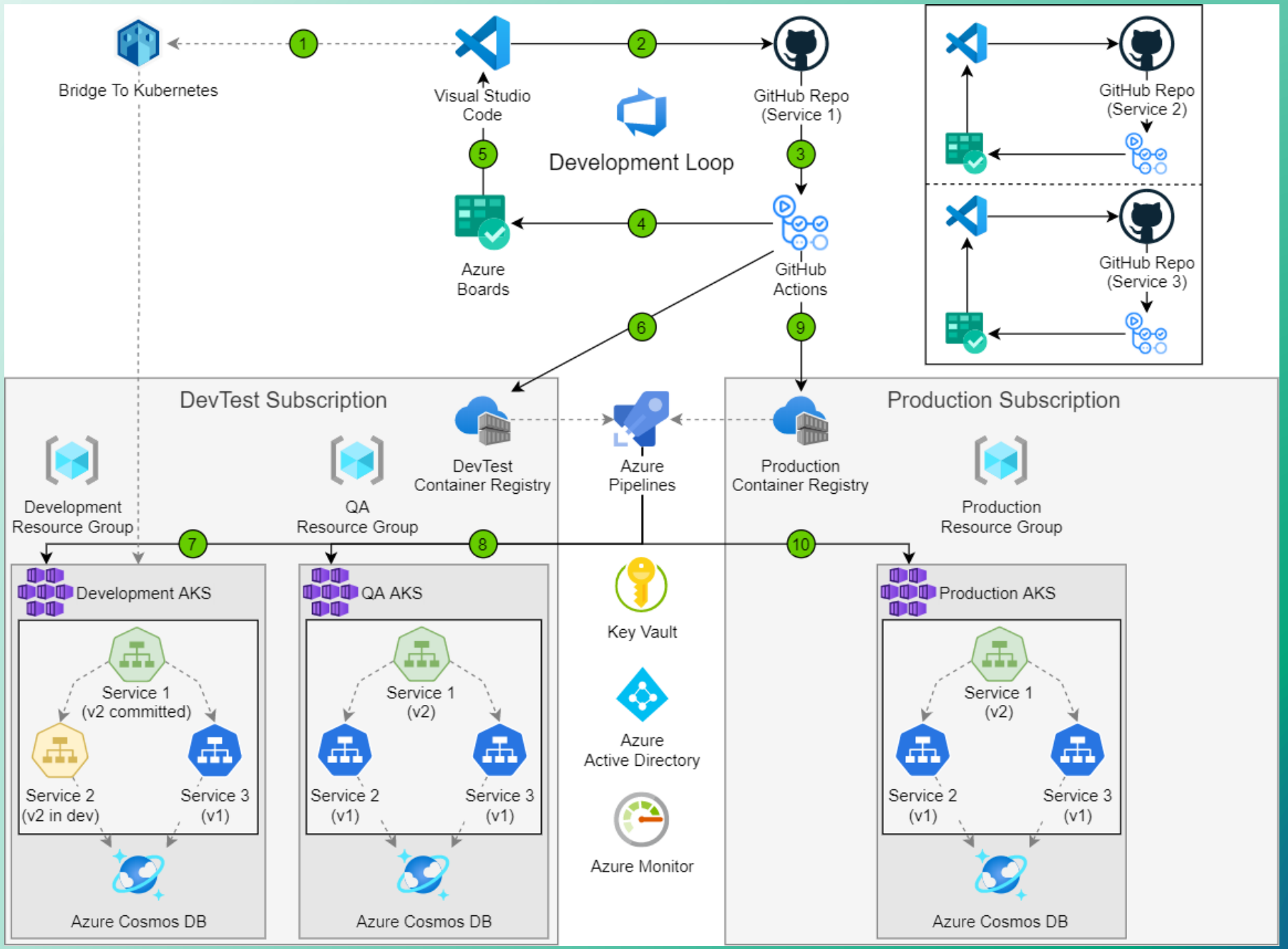
Recommended Dev/Test Approach



https://azure.microsoft.com/en-au/solutions/architecture/dev-test-iaas/



https://azure.microsoft.com/en-au/solutions/architecture/dev-test-paas/



https://azure.microsoft.com/en-au/solutions/architecture/dev-test-microservice/

Stop with the excuses...seriously
@larsklint

Thank You