Azure App Service Platform

The cloud platform for app development , hosting and monitoring

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Microsoft

Agenda

Azure Platform Overview

IaaS, PaaS, Web apps, Mobile apps, API apps, Logic apps, Functions

App Service

Application Service Environment, Scaling, Staging Slots, Cert & Custom Domains, Authentication (AAD)

Visual Studio Team Services

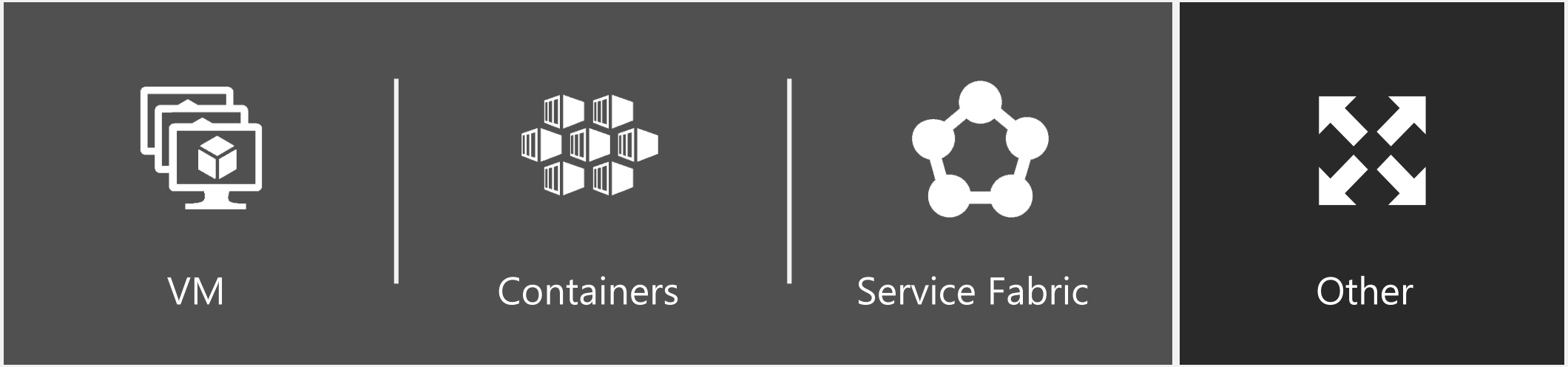
Source control, build plans, deployments, load testing

Monitoring

Azure Portal, App Insights and OMS

Build apps faster and easier - IAAS

App innovation



Legacy applications, no change	Efficiency and speed	Always-on, scalable, distributed applications	Cloud Foundry, OpenShift, Apprenda, Jelastic, etc.
Lift and shift	Improved DevOps	Hyperscale (e.g. IOT)	Third-party frameworks

Build apps faster and easier - PAAS

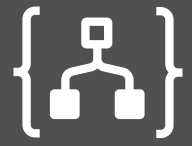
App innovation

< DEVELOPERS

NON-DEVELOPERS >

App service

Functions



Logic apps

Power apps

Web, mobile, and API apps	Serverless compute	Workflow & Integration	Self-service
Web and mobile	Event-driven microservices	LOB integration and hybrid apps	No-code apps

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Azure App Service

A cloud app platform for delivering modern enterprise apps across cloud and mobile devices.

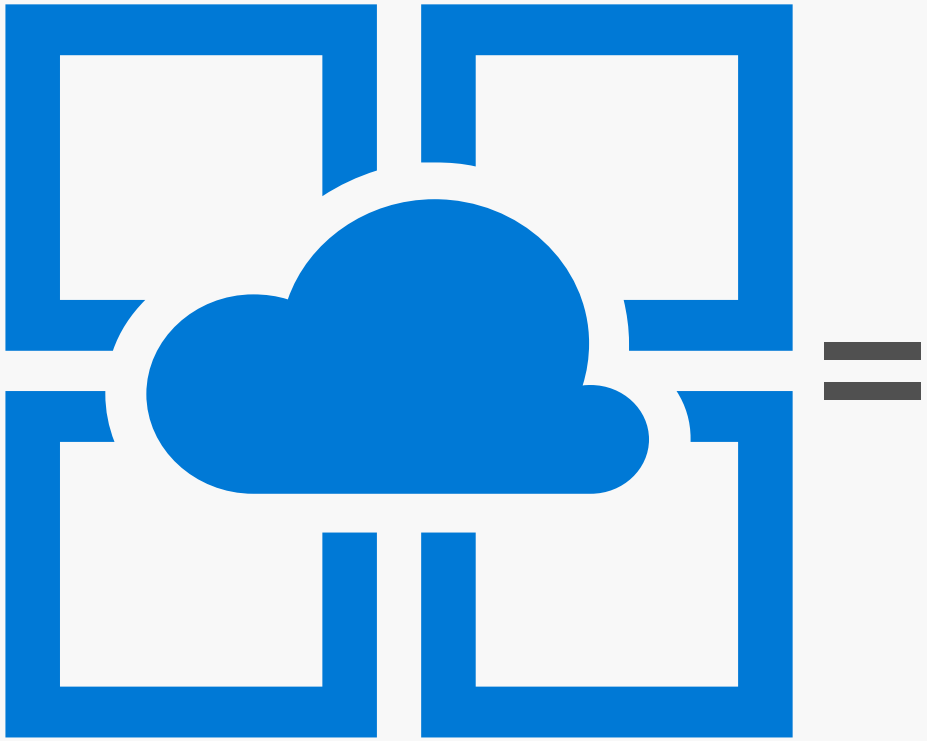
An integrated offering that delivers features and capabilities from a number of existing Azure services

Enterprise Grade Apps

Fully Managed Platform

High Productivity Development

Azure App Service



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Web apps

Web apps that scale with your business

API apps

Easily build and consume APIs in the cloud

Mobile apps

Build mobile apps for any device

Functions

Serverless event based development accelerator

Logic apps

Automate business processes across SaaS and on-premises

Why use App Service?

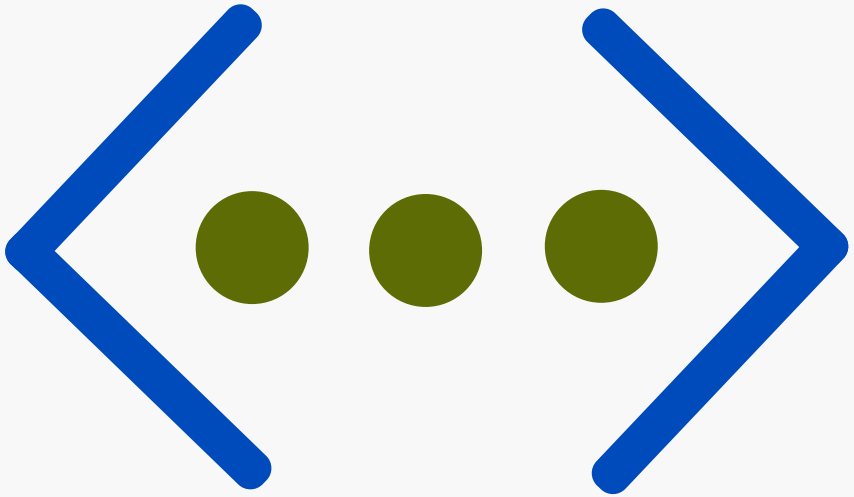
- ✓ Multiple languages and frameworks
- ✓ DevOps optimization
- ✓ Global scale with high availability
- ✓ Connections to SaaS platforms and on-premises data
- ✓ Security and compliance
- ✓ Application templates
- ✓ Visual Studio integration

App Service Plans

App Service Plan Defines:

- Region (West US, East US, etc.)
- Scale count (one, two, three instances, etc.)
- Instance size (Small, Medium, Large)
- SKU (Free, Shared, Basic, Standard, Premium)

Azure Virtual Network (VNet)

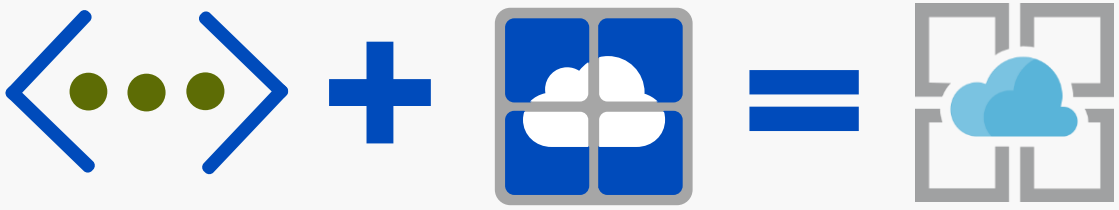


Private network in the Azure cloud

Enables network based security and isolation

Can be used with VPNs to create hybrid cloud apps

App Service Environment (ASE)



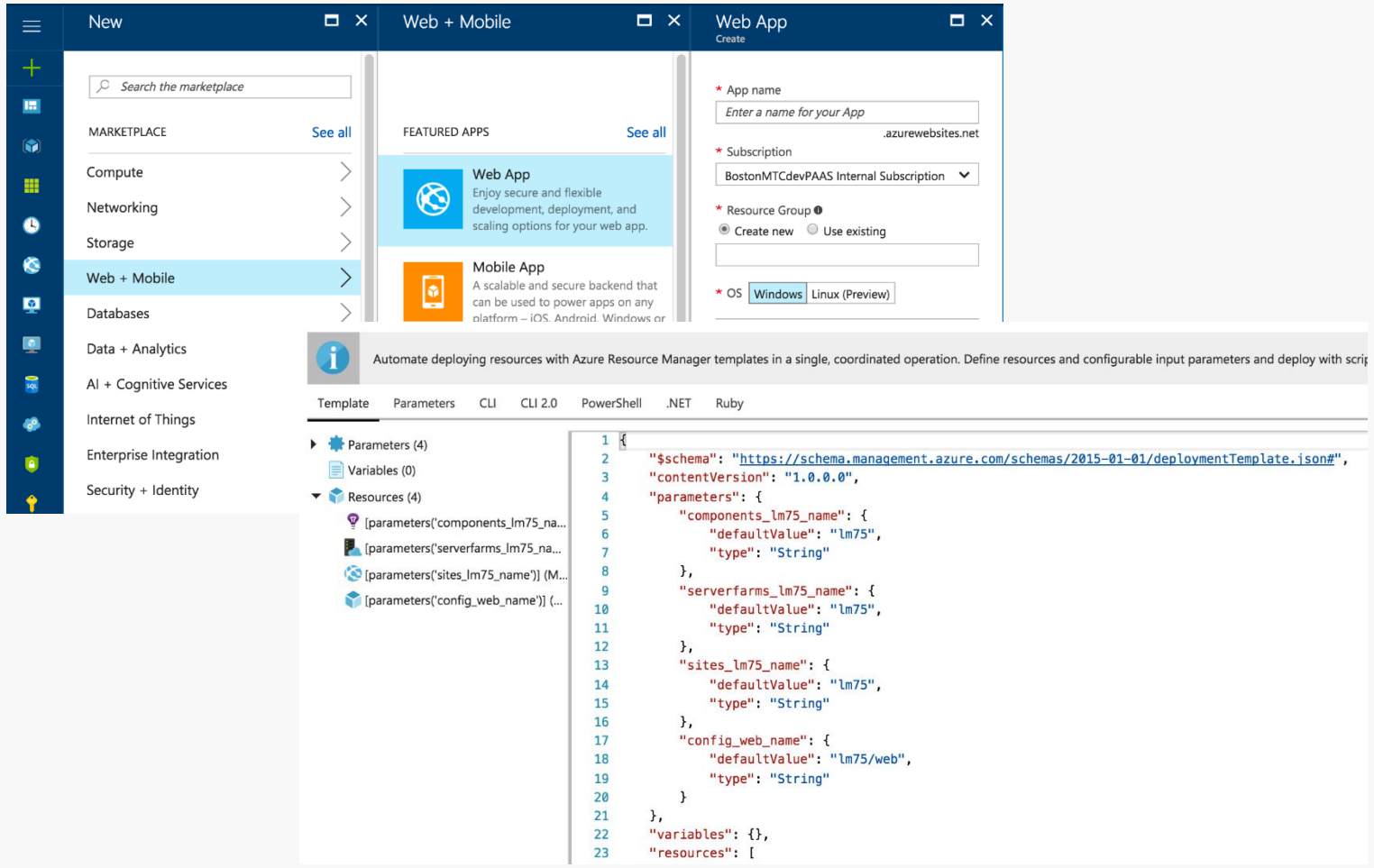
Network isolation for apps

Larger scale then multi-tenant

Ability to work with all VPN types

More powerful hosts

Azure Resource Provisioning



Azure Portal

GUI experience & wizards

CLI / PowerShell

Command line tool & scripting

.NET / Ruby

SDK based

Demo 1

Azure App Service: Web App (Windows/Linux)

- http://tryAppService.azure.com
- http://portal.azure.com

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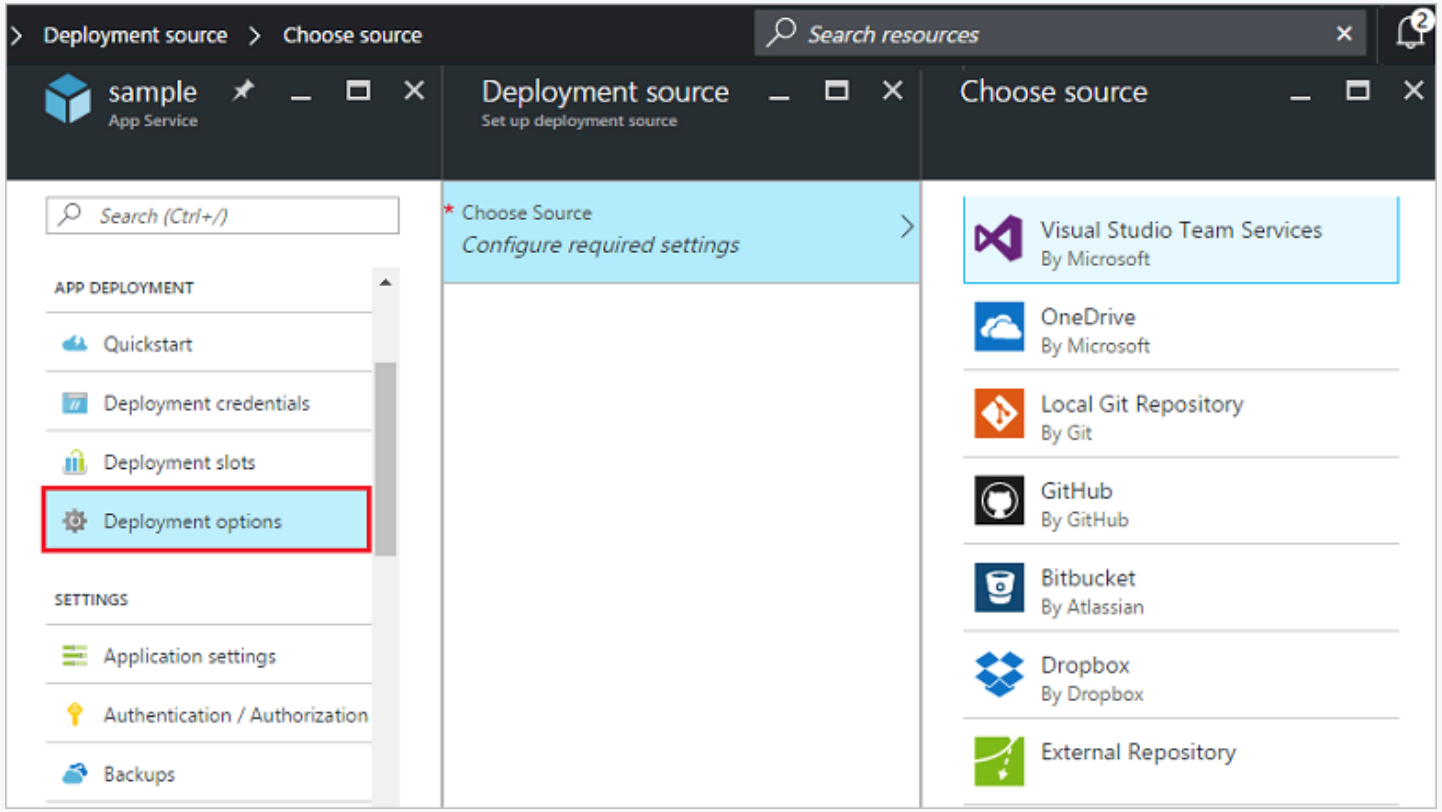
App Service Deployment



FTP or FTPs

File upload only

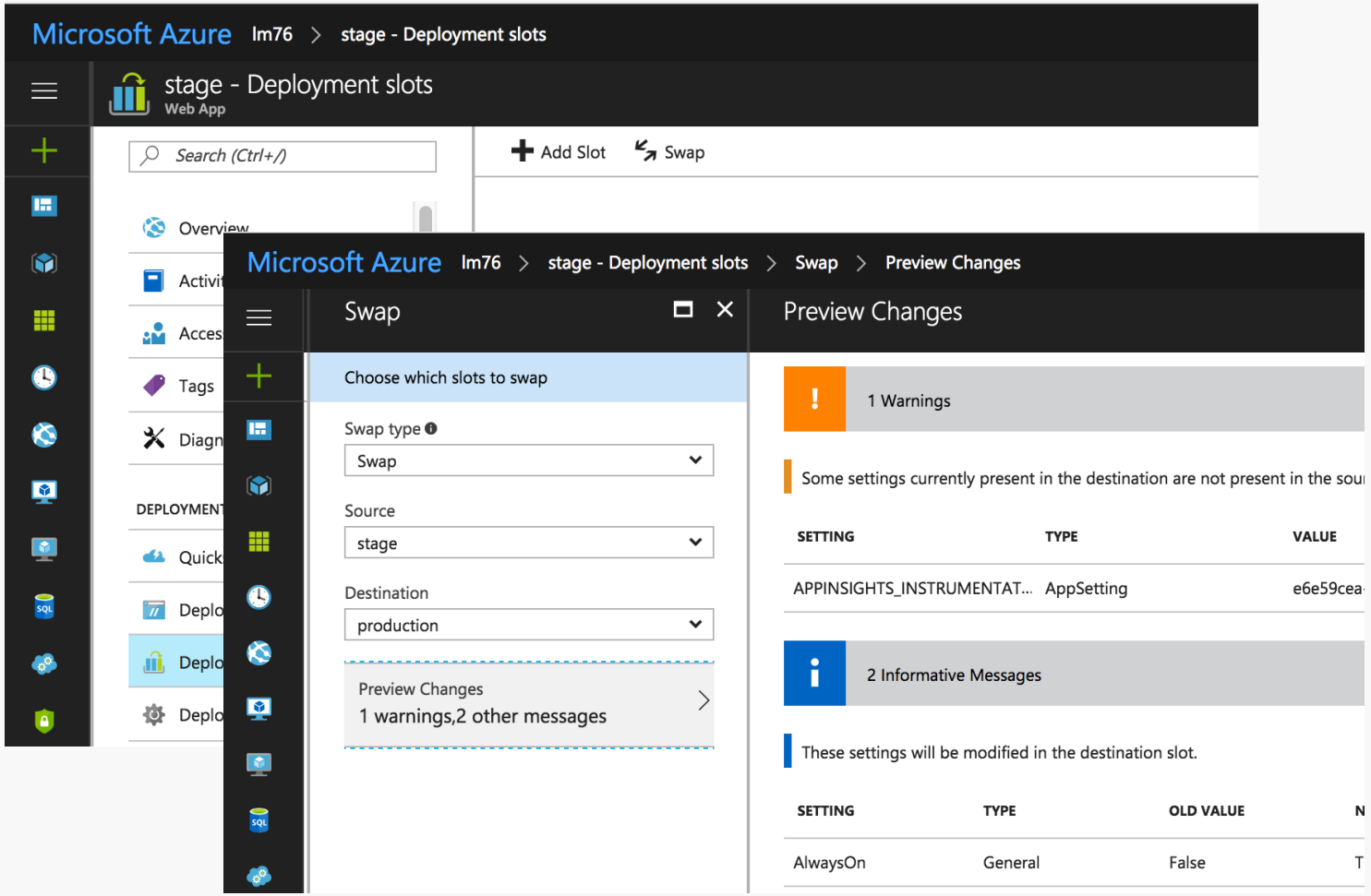
Kudu

App Service Deployment Engine

Web Deploy

Deploy from VS

Staging Environments: Slots and Swap

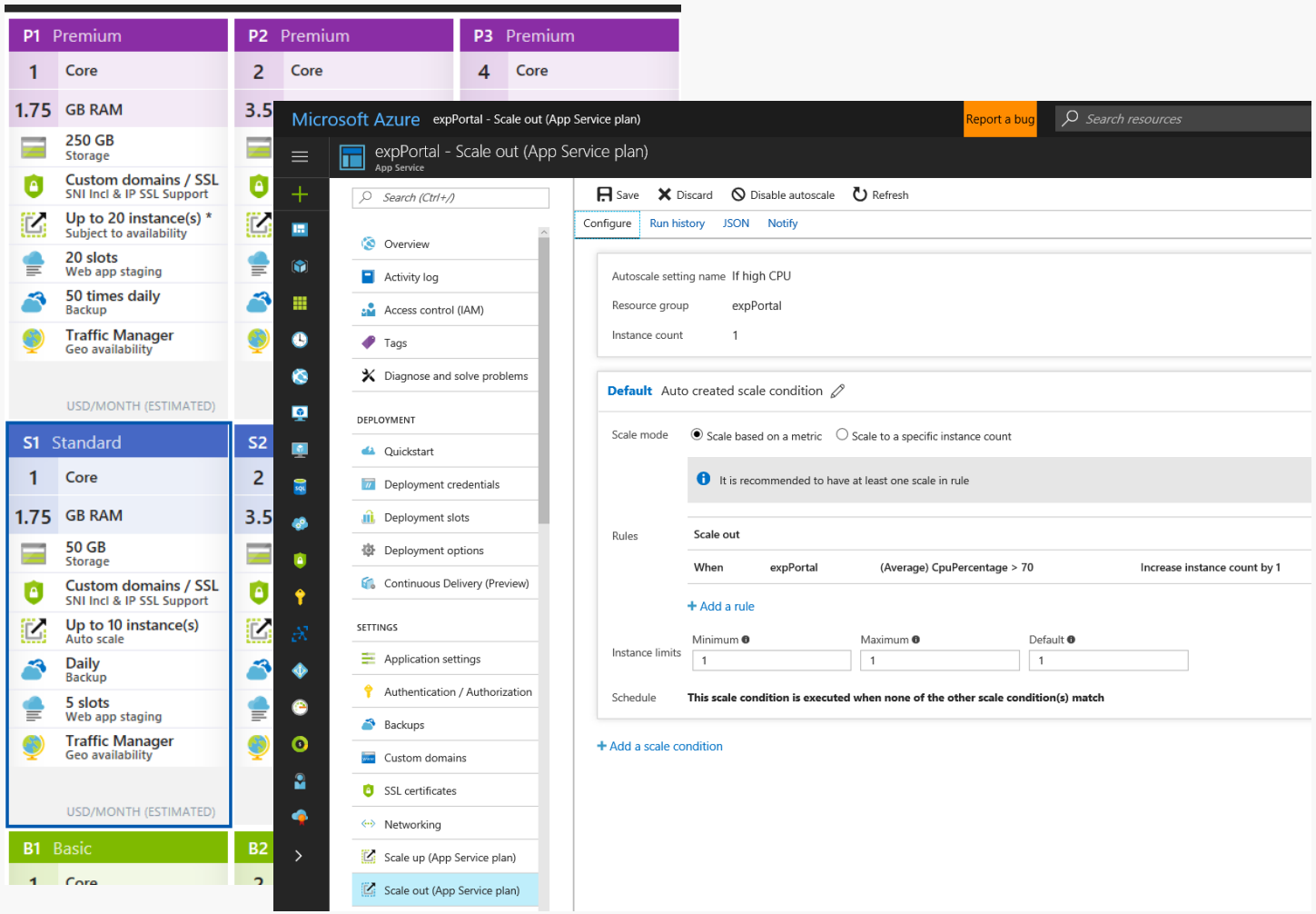


Validate app changes

Eliminate application downtime

Rollback capability

App Scaling



Scale up

More CPU, memory, disk, etc…

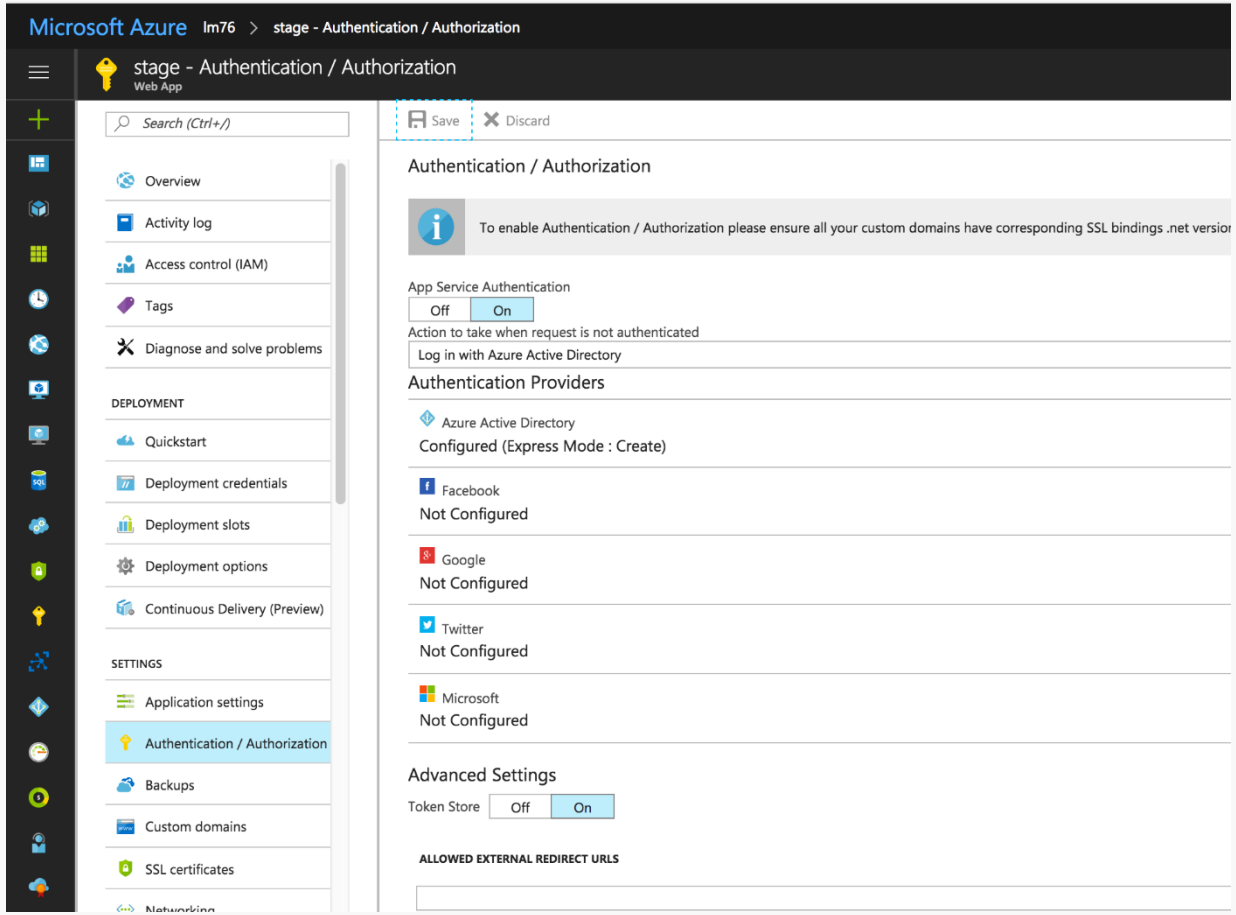
Scale out

Increase number of VM instances

Load Balancing

Failover, Round Robin, Performance

Authentication / Authorization



Enable Social Login

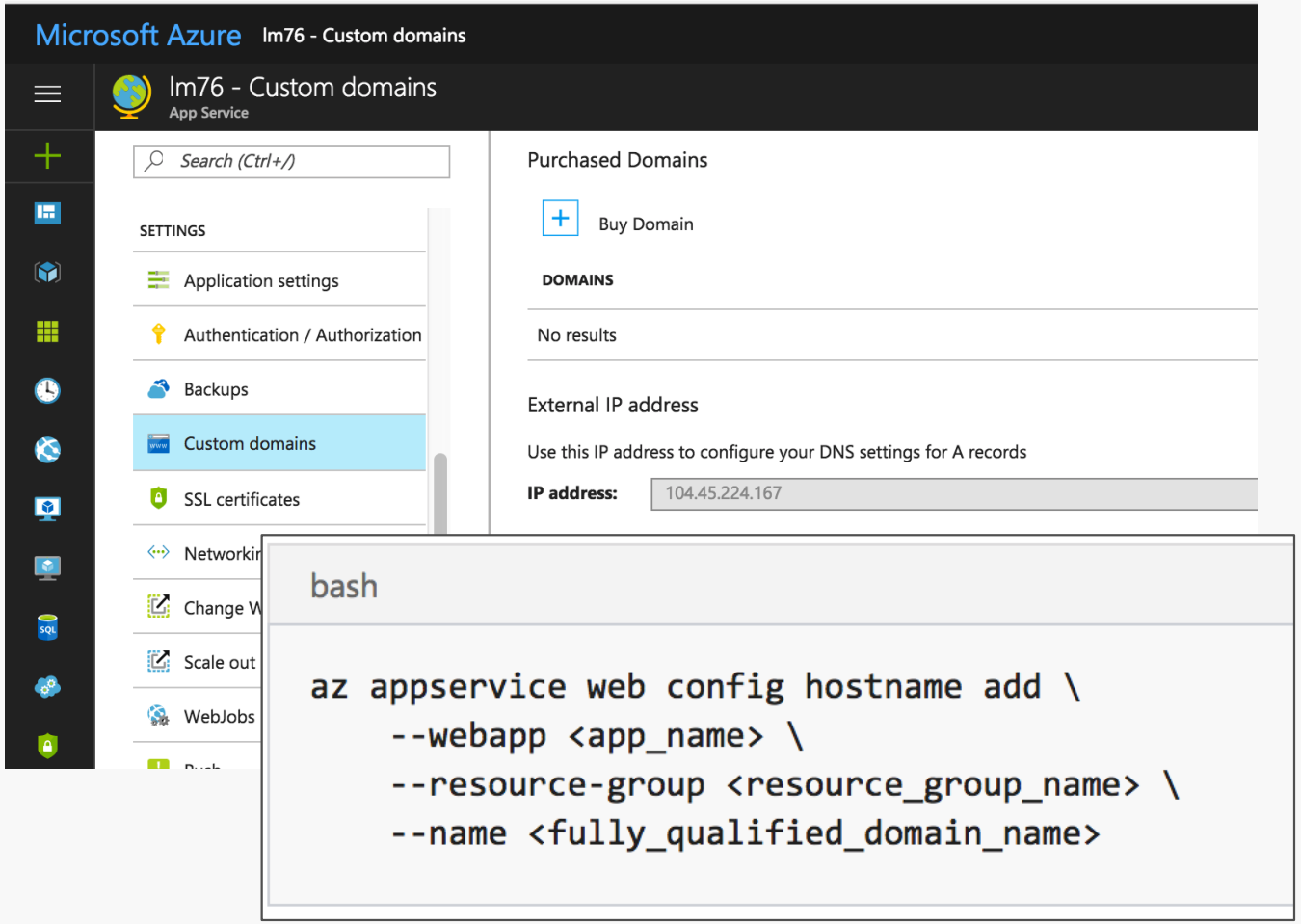
Enable multiple login options

No code changes

Demo 2

Azure App Service Deployment

Custom Domains



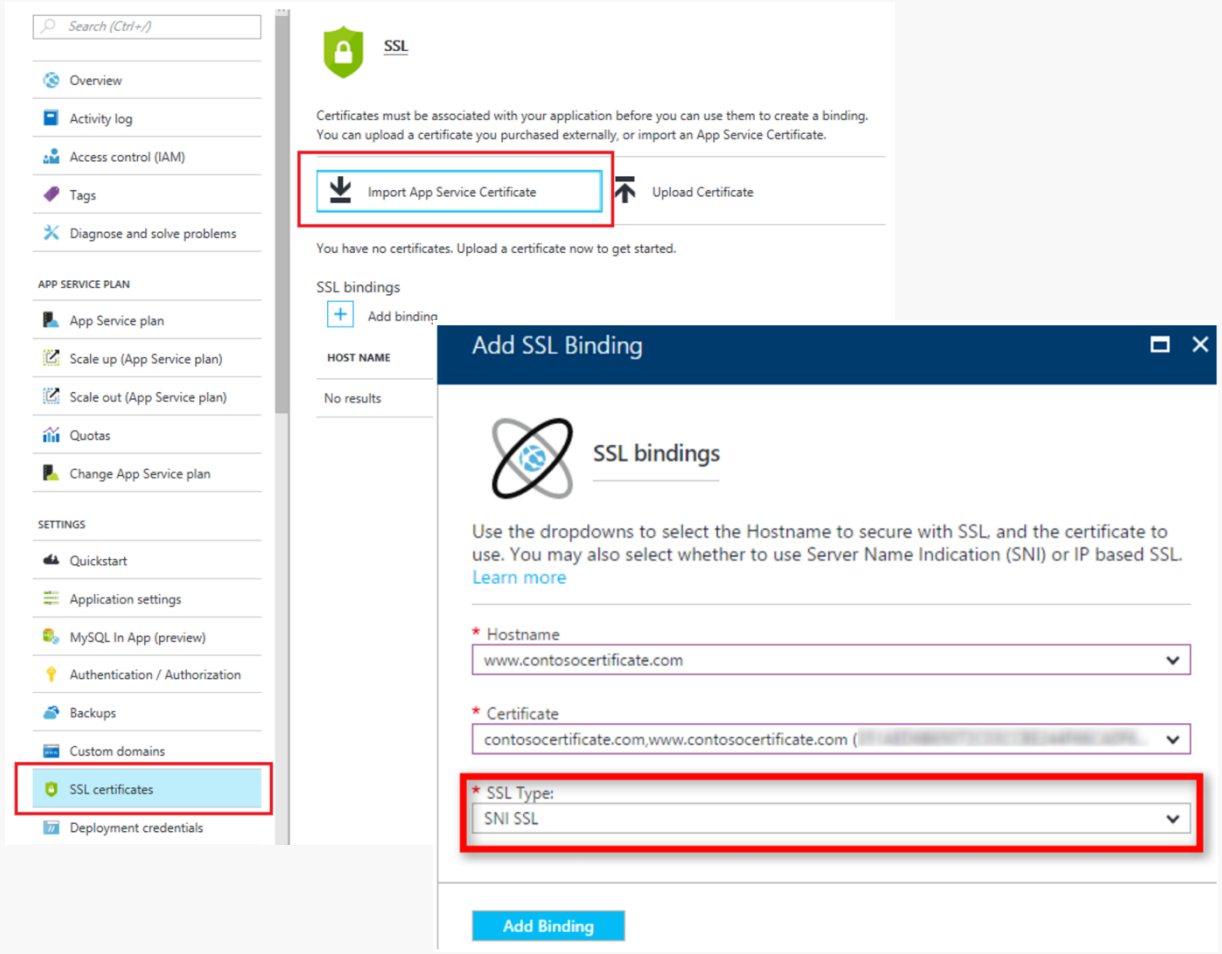
Map a subdomain
using CNAME record

Map a root domain
using A record

Map a wildcard domain
using CNAME record

Automate mapping
using a script

SSL Certificate



App Service Certificate

Order the certificate in the Azure portal

Azure Key Vault

Store the certificate

Verify Domain Ownership

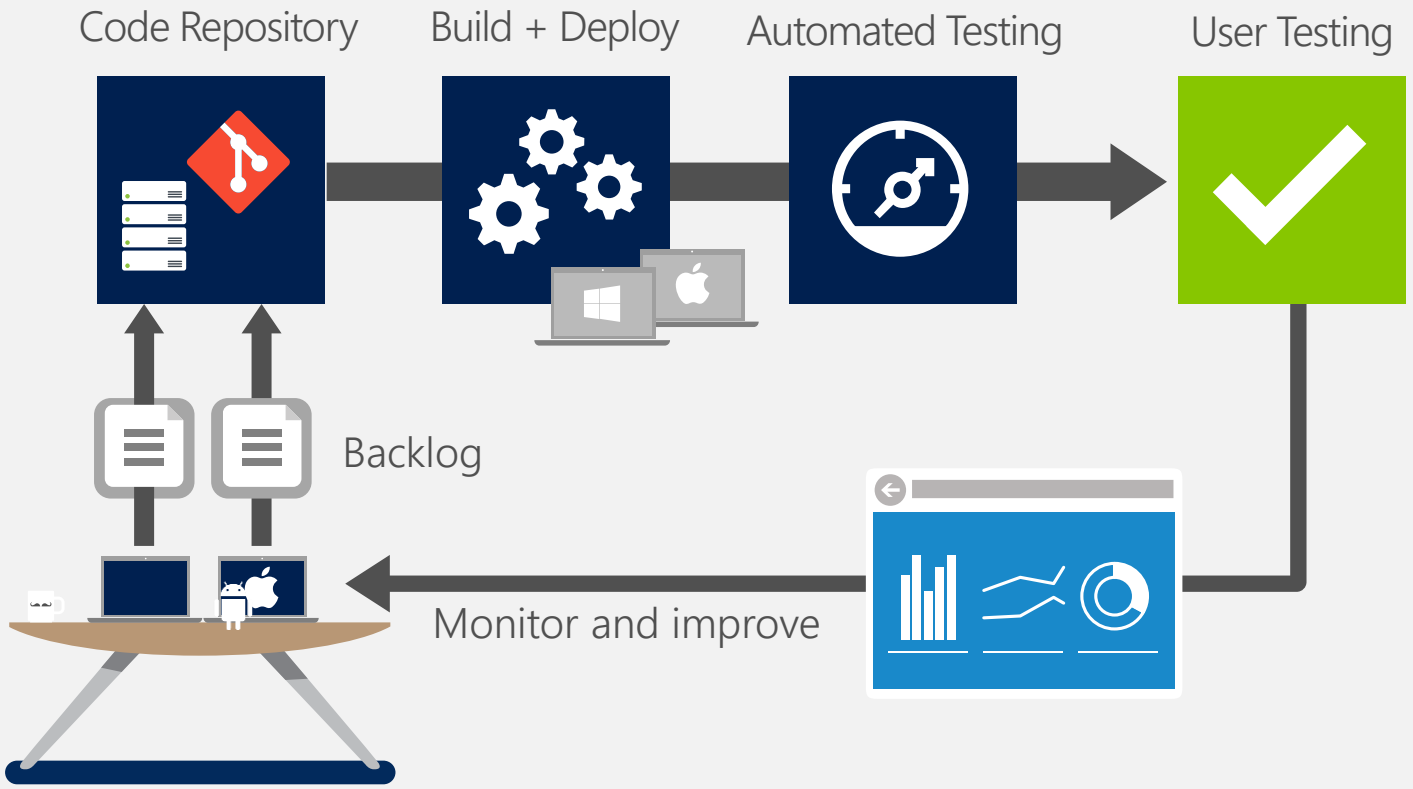
Domain, Mail, Manual Verification

Certificate Assignment

Import and Assign certificate in App Service

Deliver apps seamlessly

DevOps Workflow



Web Back-end Services

Auto Scale,
Load Balancing

User
Authentication

Windows or
Linux

Demo 3

VSTS CI/CD Pipeline

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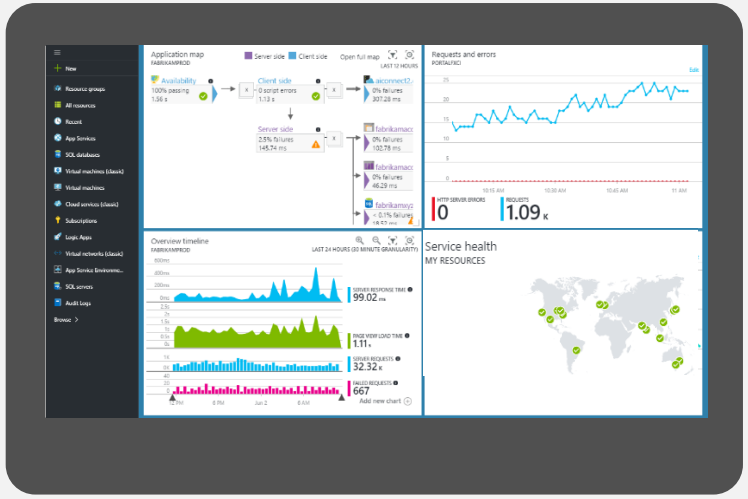
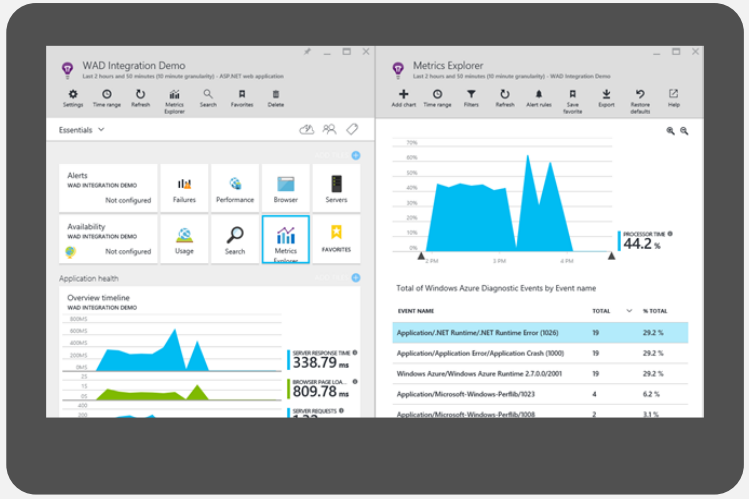
Application monitoring

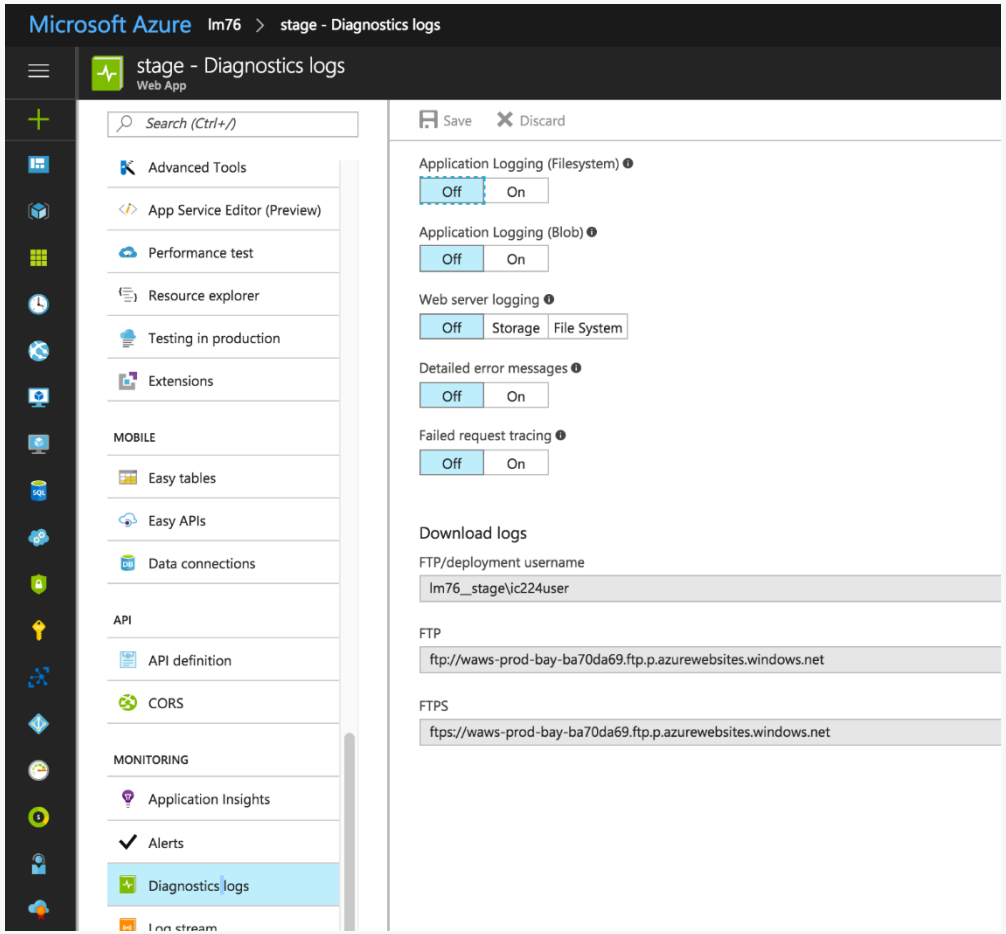
Azure Portal



Application Insights



Diagnostics Logs



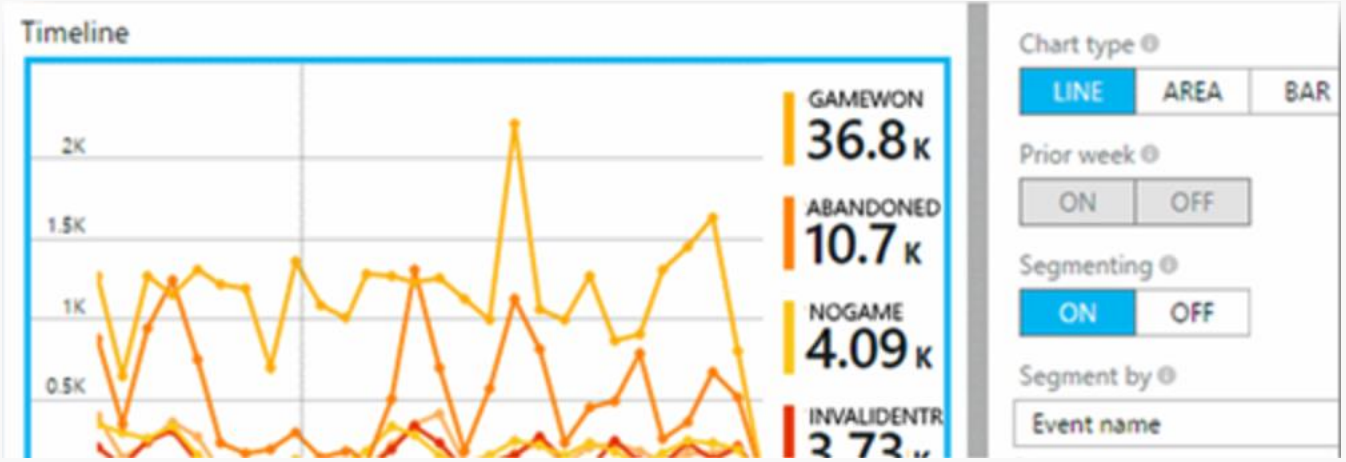
Web Server Logs:

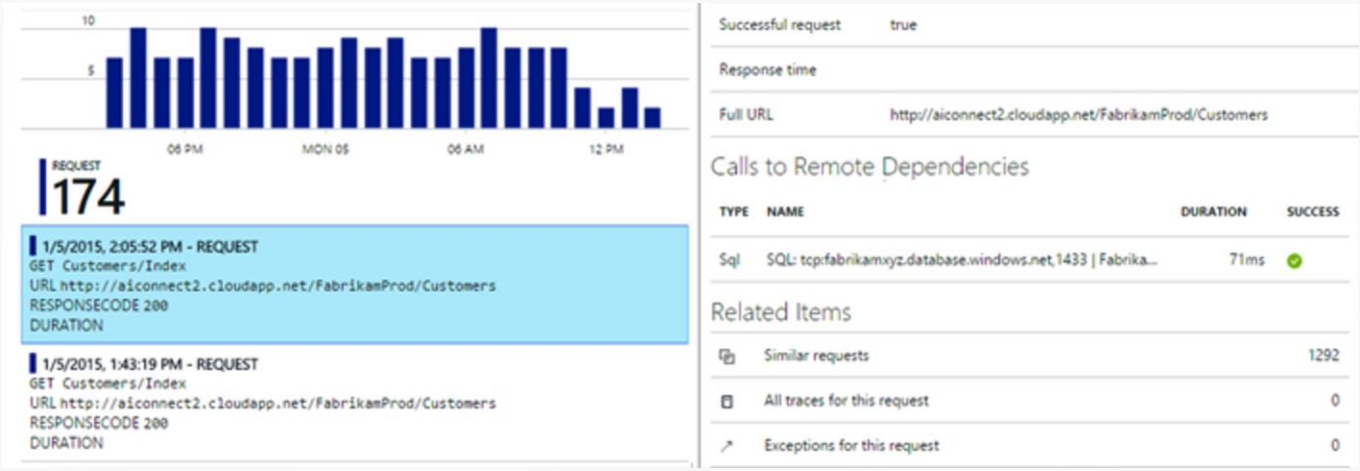
- ✓ Detail Error Logging
- ✓ Failed Request Tracking
- ✓ Web Server Logging

Application Diagnostics:

- ✓ App produced logging
- ✓ Specific Level (Info, Warn, Error, etc)

Application Insights (APM)

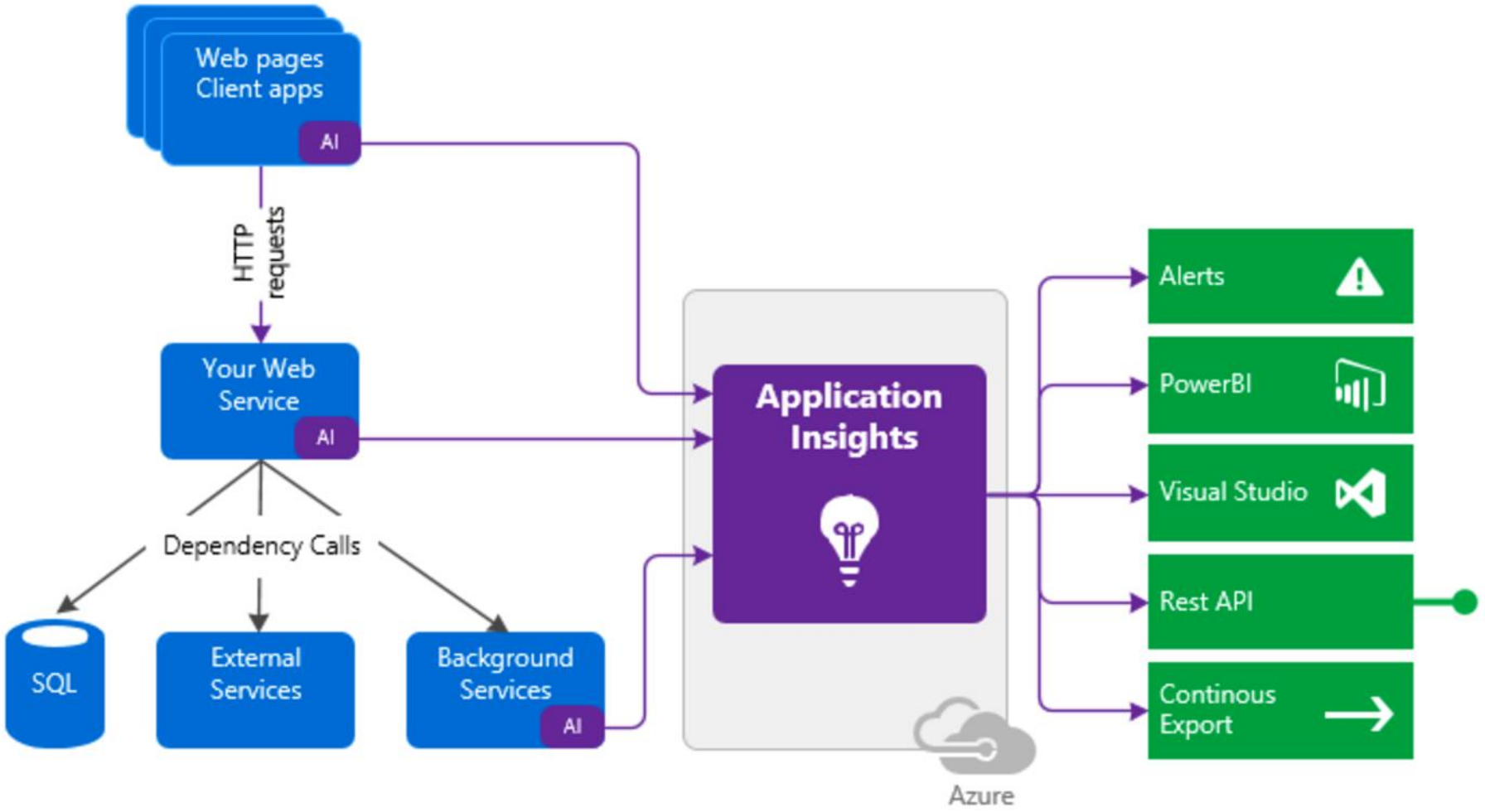




Monitor:

- ✓ Request rates, response times, failure rates
- ✓ Exceptions
- ✓ Page views & load performance
- ✓ User & session counts
- ✓ Performance counters
- ✓ Host diagnostics
- ✓ Diagnostic trace logs
- ✓ Custom events and metrics

How App Insights work?



Demo 4

App Insights

Azure platform cheat sheet:

http://aka.ms/azure-platform

Azure news blog:

http://aka.ms/azure-blog

Azure roadmap:

http://aka.ms/azure-platform-roadmap

Microsoft