Hosting Web Applications with Web Apps



Barry Luijbregts
SOFTWARE ARCHITECT

@AzureBarry

www.blog.waardedoorit.nl

Introduction



What are Web Apps?

Deployment slots

WebJobs

Scaling up and out



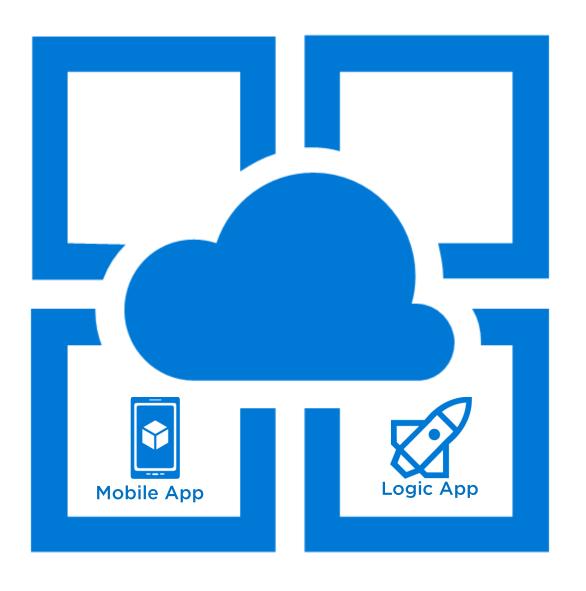




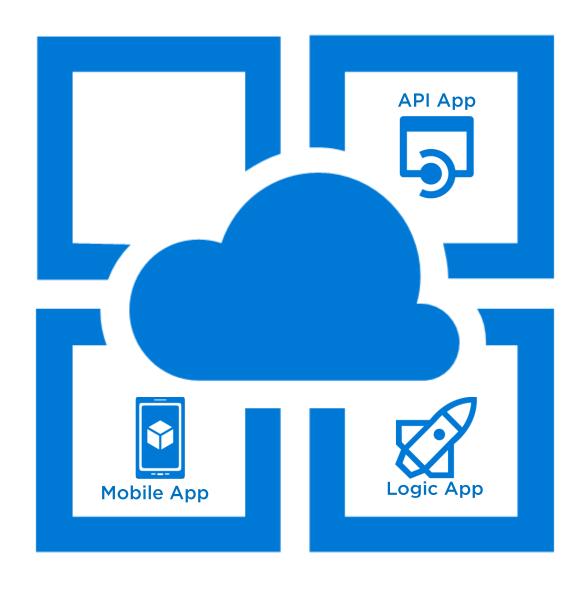




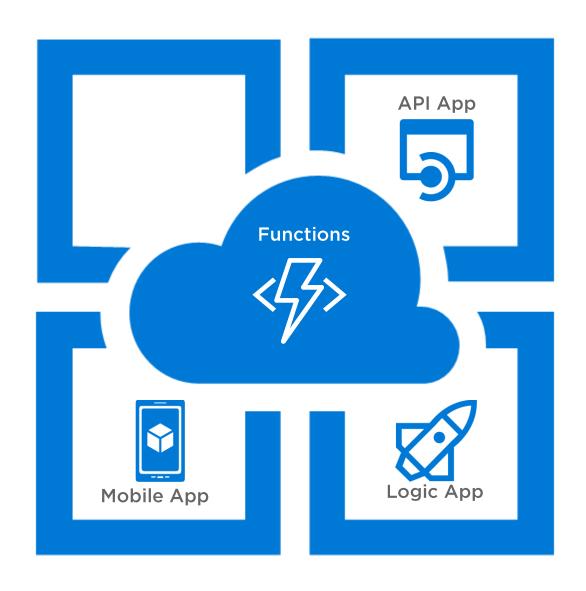




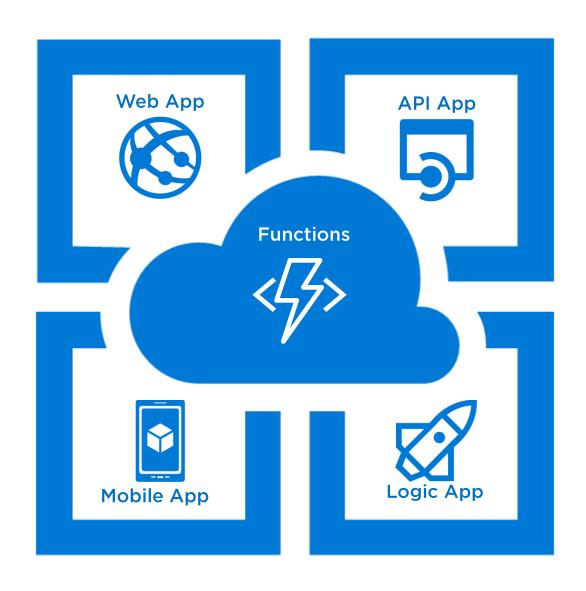




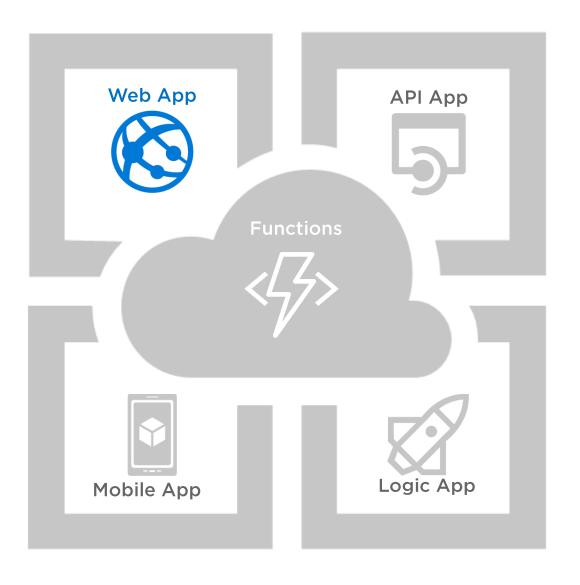










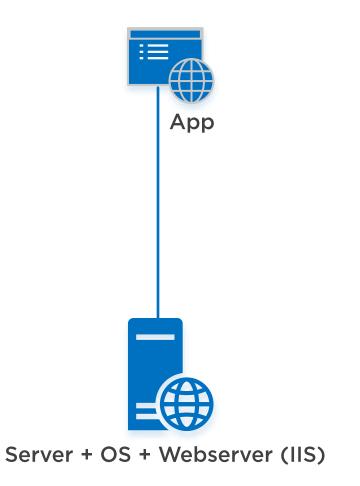




Traditional Webhosting

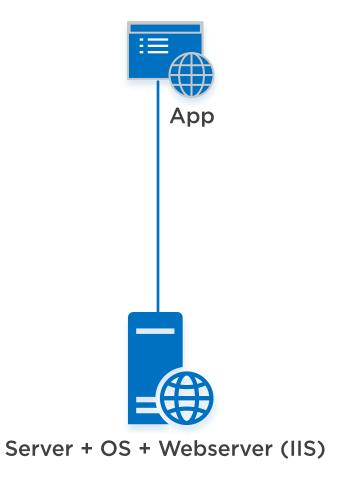


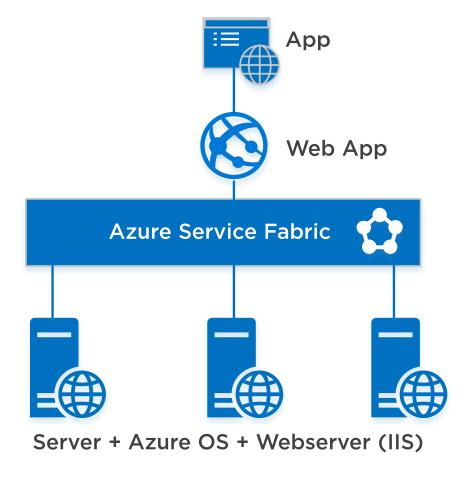
Traditional Webhosting





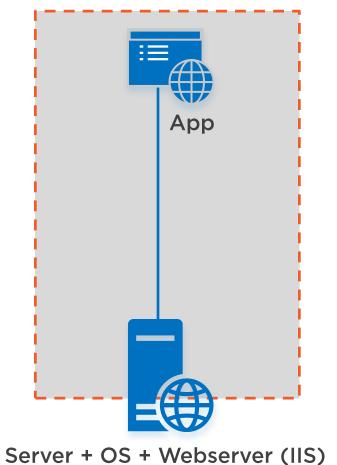
Traditional Webhosting

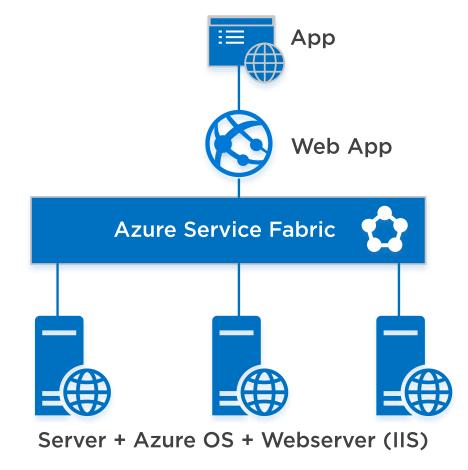






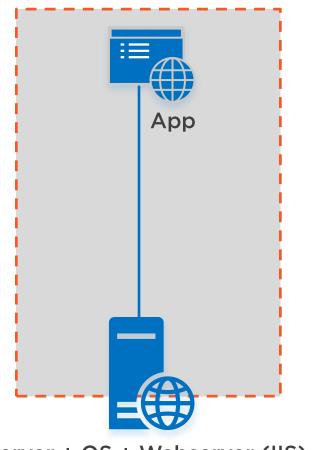
Traditional Webhosting



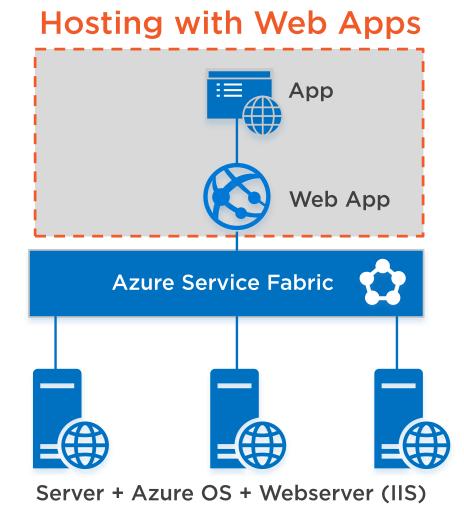




Traditional Webhosting



Server + OS + Webserver (IIS)







Host web applications

.NET, Node.js, Python, Java, PHP

SLA 99.95%

Custom domains

Deployment slots

Continuous deployment

(Auto) scaling

Authentication / Authorization

Traffic Management

Access on-premises data



Demo



Basic functionality

Deploy a web application

Visual Studio



Deployment Slots



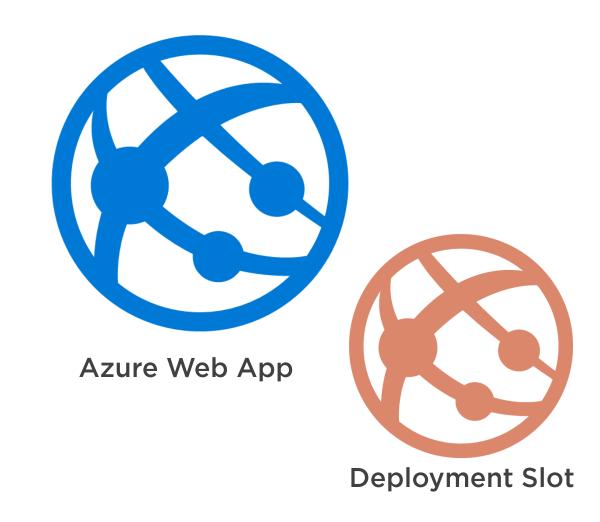
Why Use Deployment Slots?

Confirm in pre-production

Test in production

Deploy with no downtime

Revert deployments





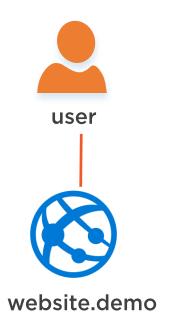










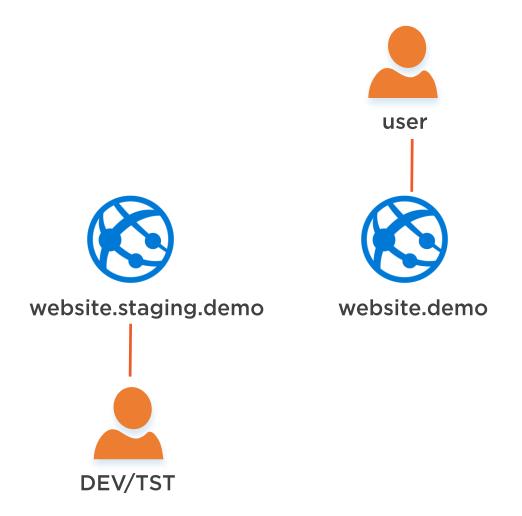




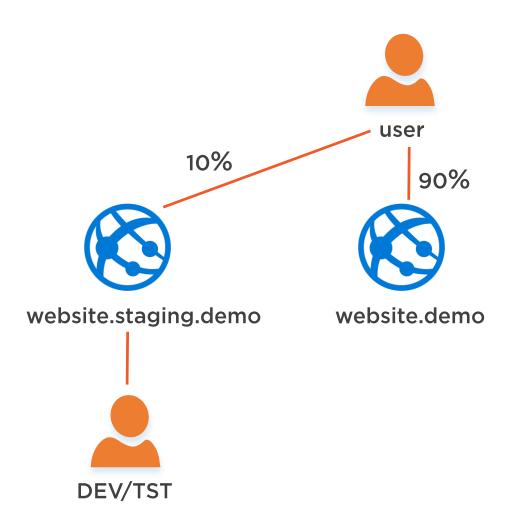




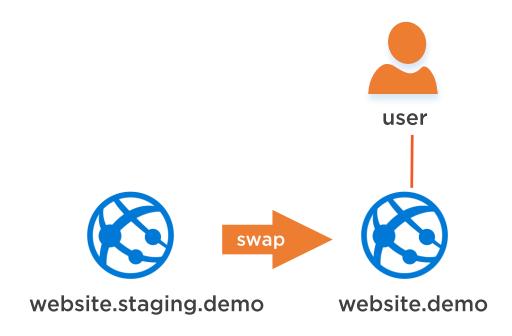




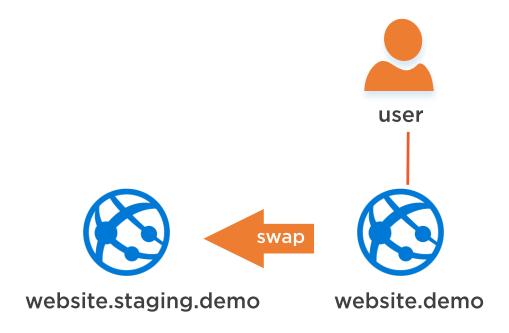




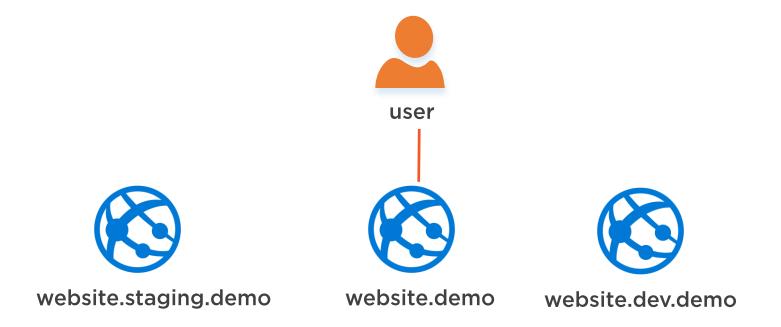




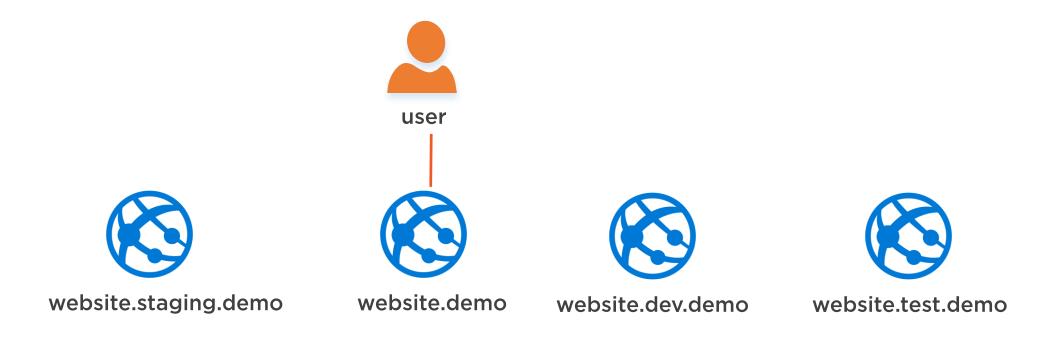














About Deployment Slots



A deployment slot is a full Web App
Scaling is only possible in production slot
Swapping swaps the VIP



Demo



Publish to a new staging slot

Swap slots

Visual Studio



WebJobs



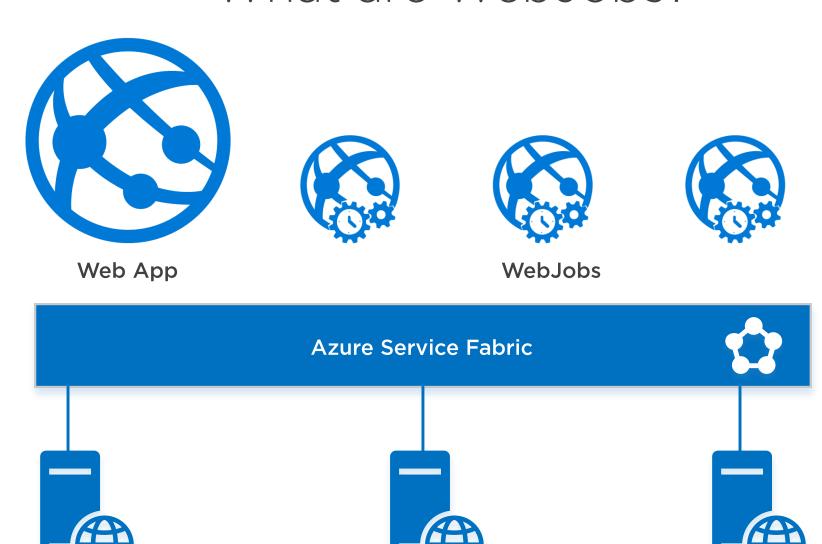
Why use WebJobs?



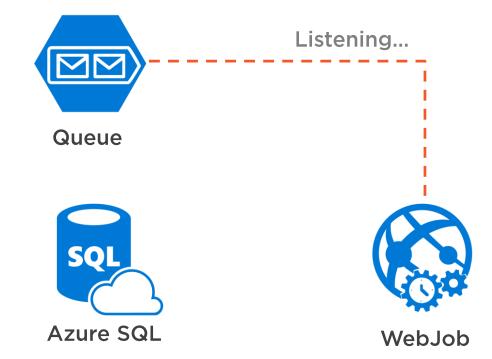
Background Service-as-a-Service Reliable Can be triggered by outside sources Queue, Blob, Table, SQL, WebHooks... OR Can be triggered manually or scheduled Can process triggers in parallel Are part of your Web App



What are WebJobs?



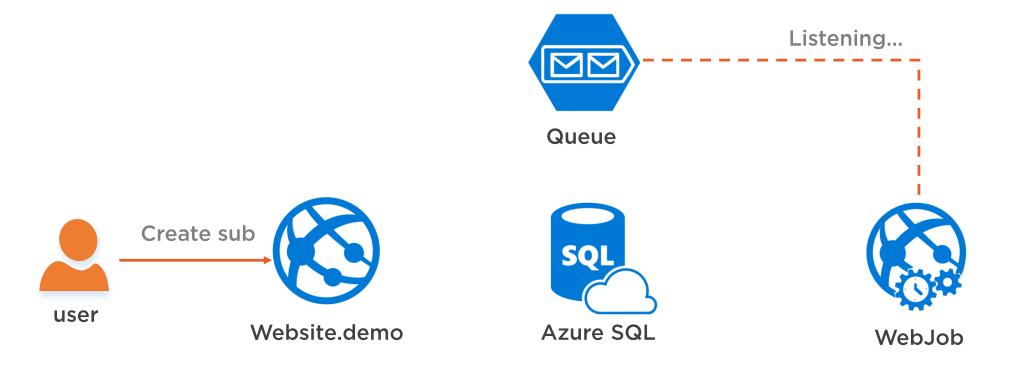




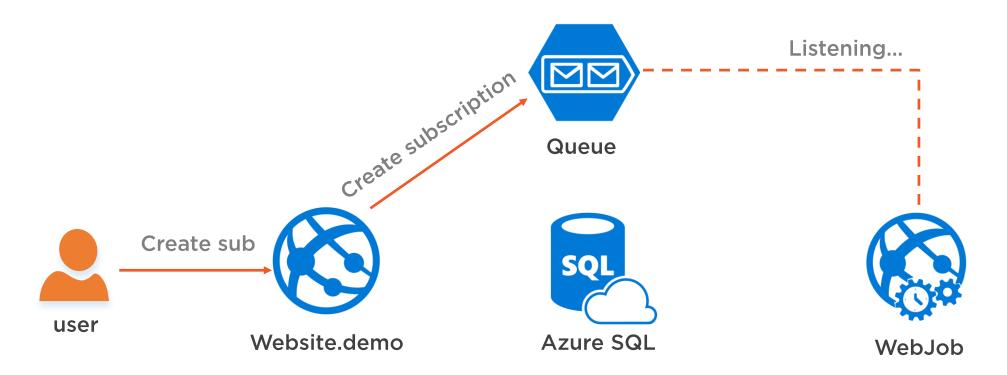




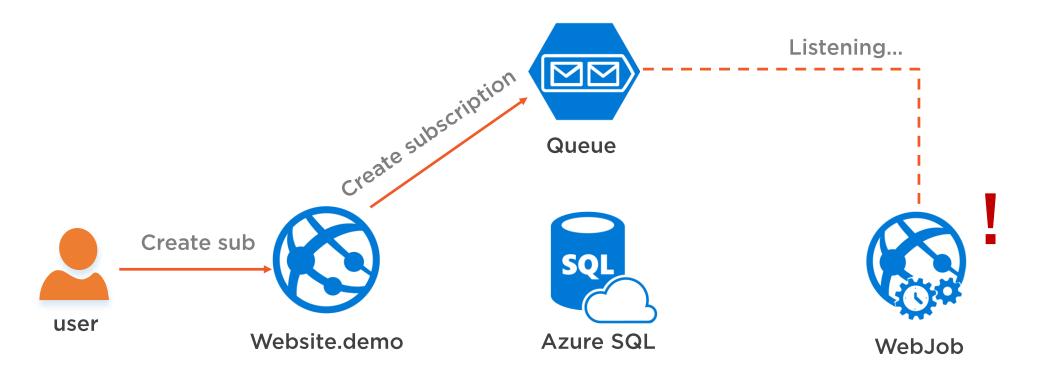




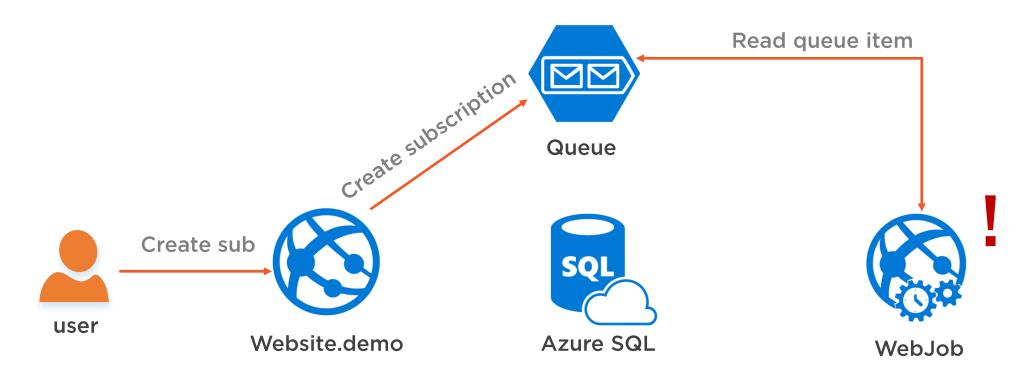




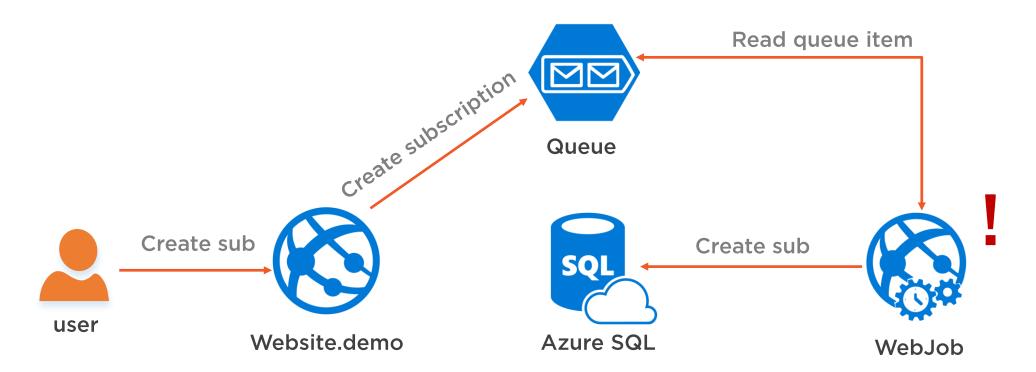




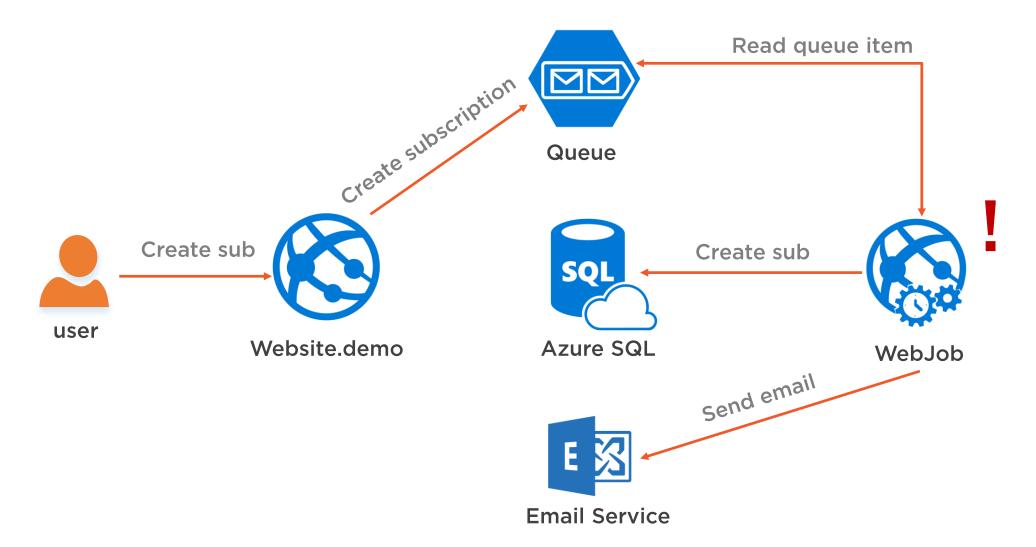




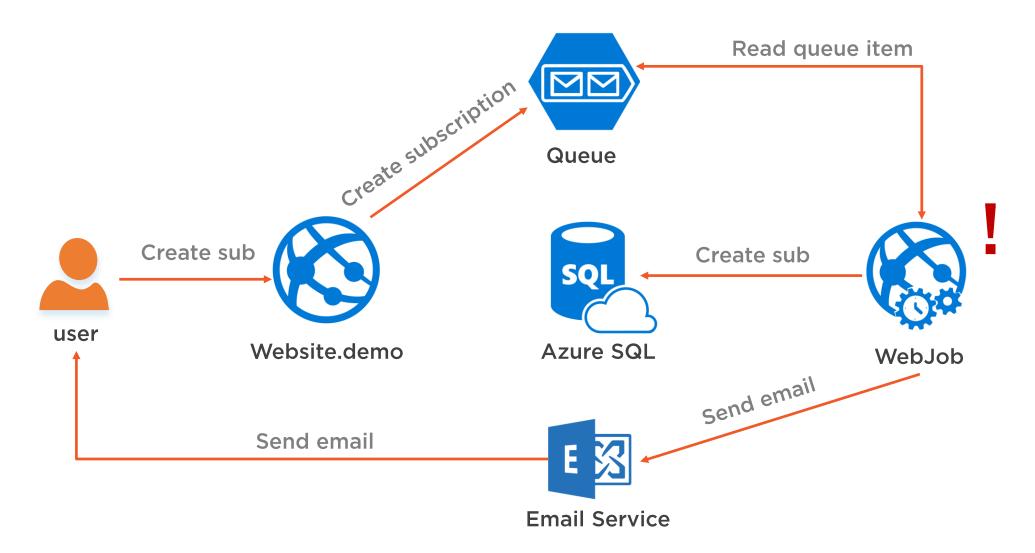




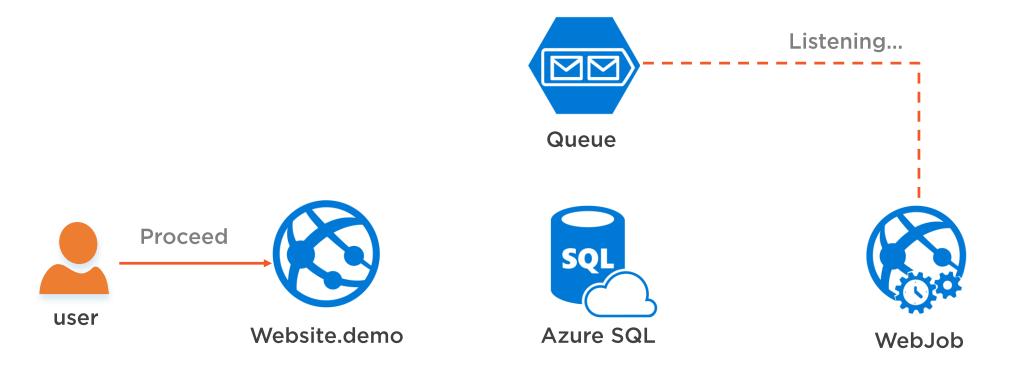




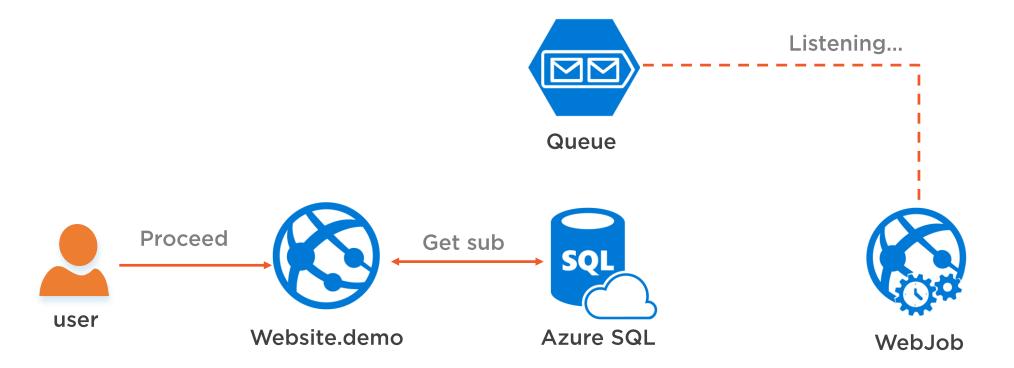














About WebJobs



You can deploy a batch job to be a WebJob .exe, .cmd, .bat, .sh, .php, .py, .js, jar, ps1
WebJobs use resources from the Web App



Demo



Change the WebJob to run continuously

Publish the WebJob

Debug the WebJob

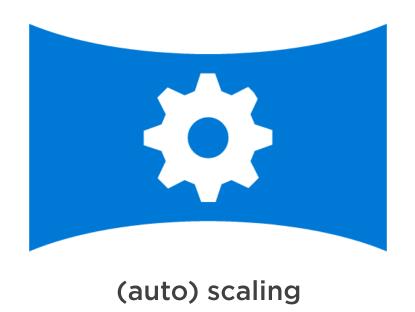
Visual Studio



Scaling up and Out



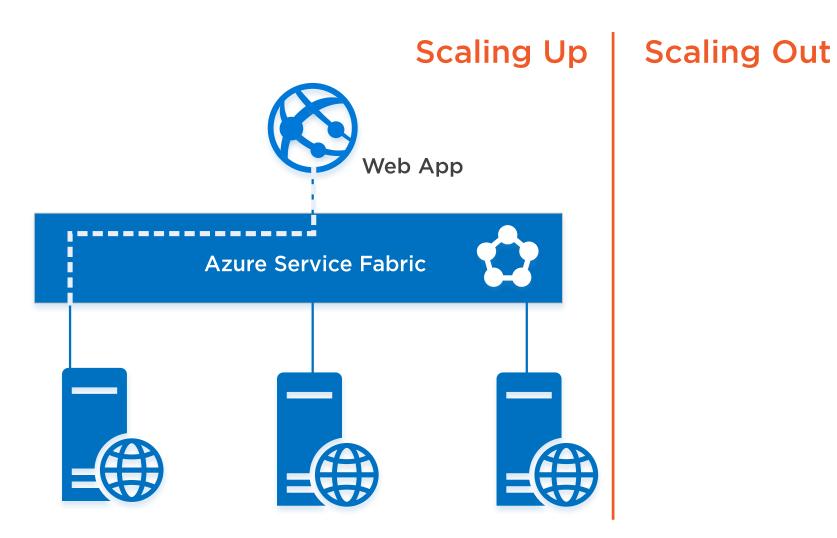
Why Scale?



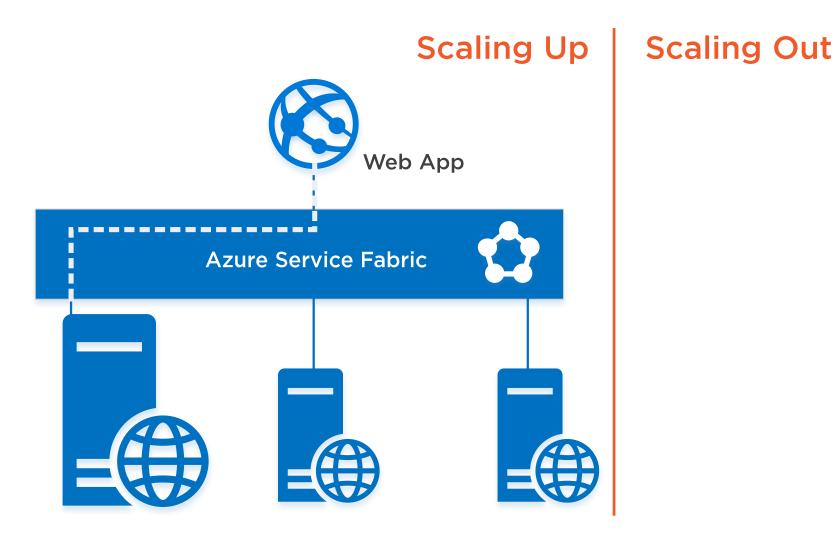
You want to always serve your users
You want to pay for what you use

Scaling Up | Scaling Out

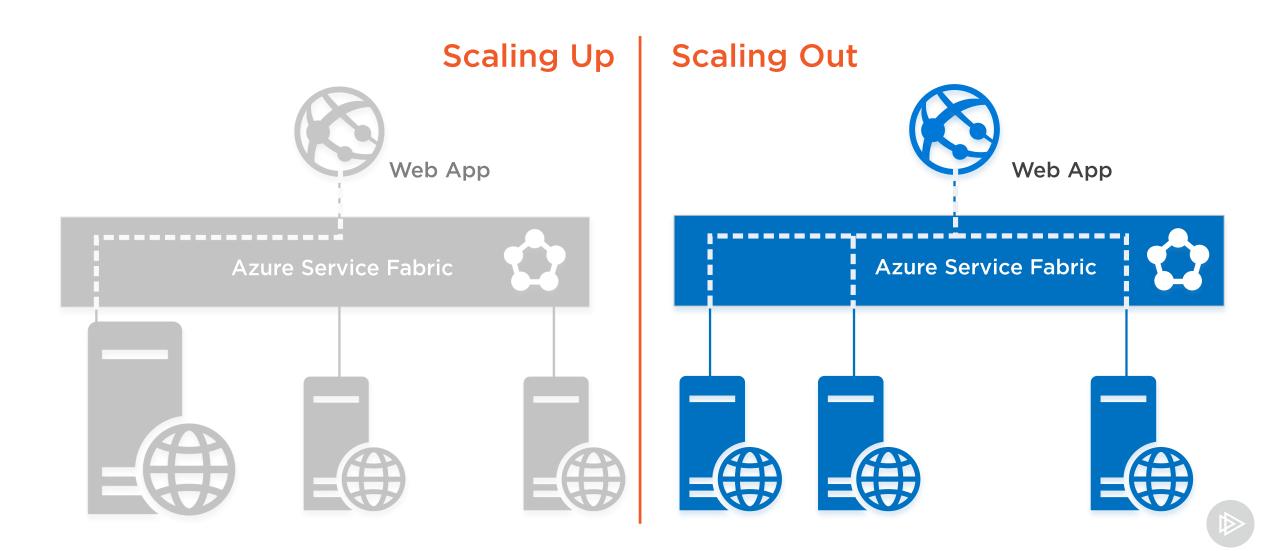












About Scaling in Web Apps



Scale up, down, out and in

Manually OR

Automatically, based on:

- Schedule
- Metric (CPU, RAM, Disk or HTTP queue...)
- Combination of both

Scaling takes time!



Demo



Scale out

Azure Portal



Summary



Web Apps

Deployment Slots

WebJobs

Scaling up and Out

