



Becoming a Microsoft Azure Administrator

Get Up to Speed with Azure PaaS



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Agenda



<https://timw.info/admin>

Plan, deploy, and maintain Azure App Service web apps

Differentiate the major Azure-hosted database platforms

Describe the use cases for serverless computing in Azure



Seminar Series Overview



Shifting Your
Paradigm



Sprinkle Some Azure
DevOps on It



Get Up to Speed with
Azure IaaS



Skills Development:
Theory and Practice



Get Up to Speed with
Azure PaaS



Skills Development:
Certification



Session Materials

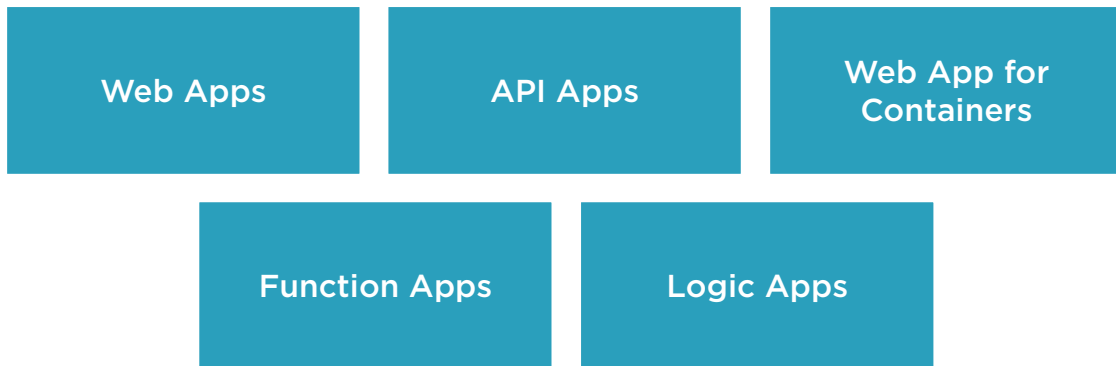
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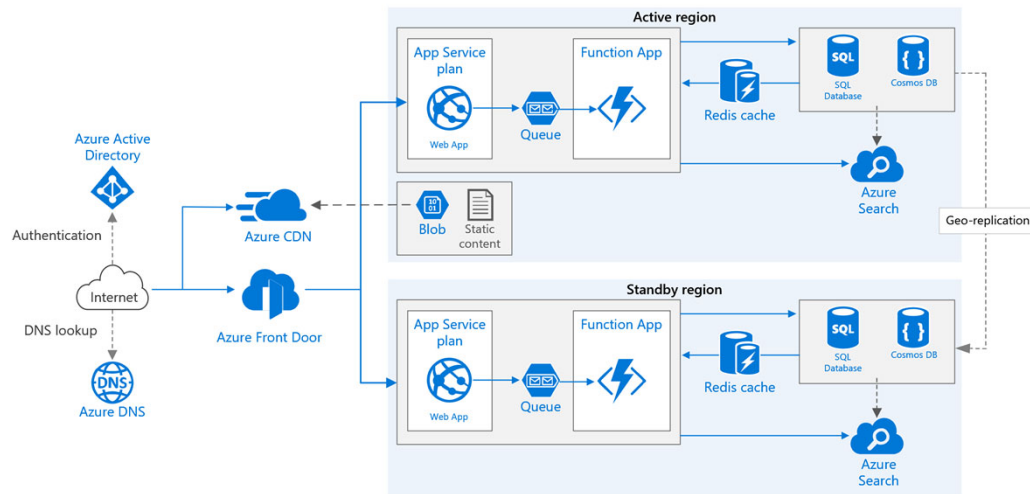


Azure App Service

Azure App Service App Types



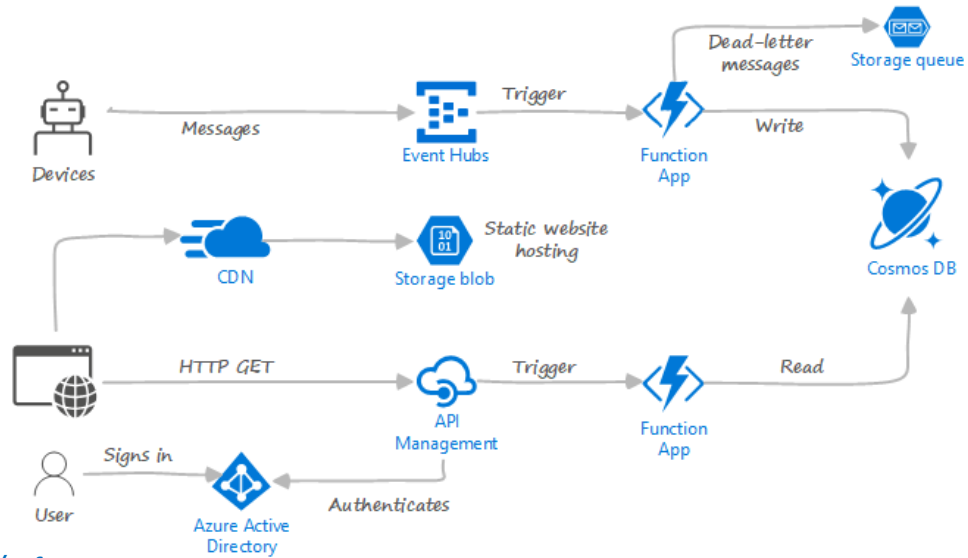
Geo-distributed, Autoscaling Web App



timw.info/fd1



Serverless Computing App Architecture



Azure App Service Pros and Cons

Pros

- You can focus exclusively on your code
- Integration with Azure Pipelines
- Little worry about availability or backup
- Autoscaling
- Automatic intra-region load balancing
- Can easily be managed with Application Gateway, Traffic Manager, or Front Door

Cons

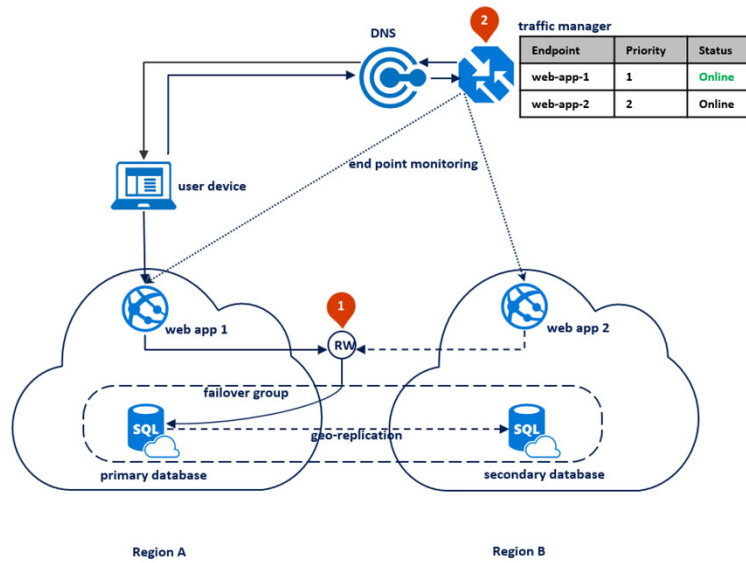
- Not all application frameworks / runtimes are supported
- .NET, .NET Core, Node.js, Java, PHP, Ruby, Python
- You surrender full access to the underlying VM
- Web apps incur cost even when they are stopped





Azure Hosted Databases

Geo-replicated Azure SQL Database



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Microsoft Azure: Relational Database Options

Azure SQL Database

- Hyper-scalable and highly available; high feature parity with SQL Server

Azure SQL Database Managed Instance

- You get much more control over the underlying SQL Server VM

Azure Synapse Analytics

- Formerly called Azure SQL Data Warehouse

Azure Database for MySQL

- Hosted, managed Oracle MySQL

Azure Database for MariaDB

- Open-source MySQL fork

Azure Database for PostgreSQL

- Hosted, managed PostgreSQL

Any Database in a Virtual Machine

- If you run an unsupported database/version, you can always use a VM



Microsoft Azure: Non-Relational Database Options

**Azure
Cosmos
DB**

Core (SQL)

JSON document

MongoDB

JSON document

Cassandra

Wide-column store

Azure Table

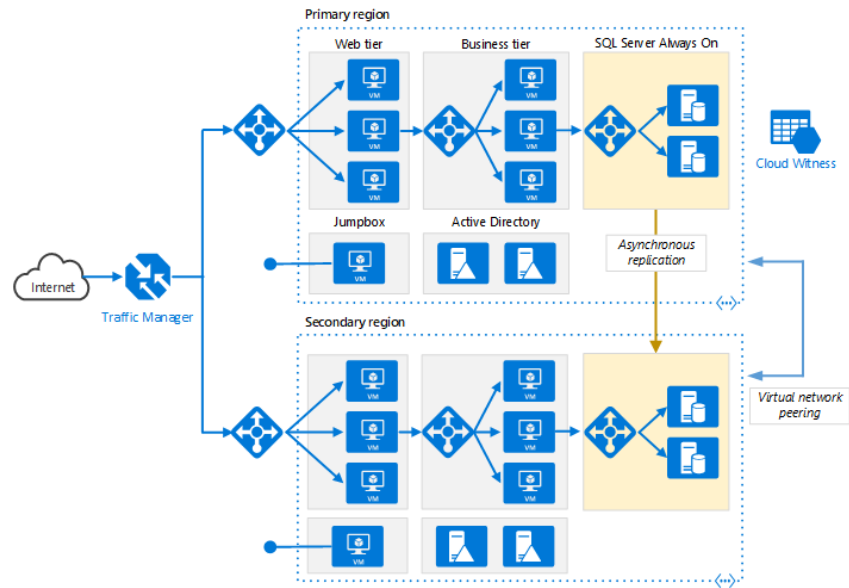
Key-value

Gremlin

Graph



What, Back to IaaS Again?!



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Demo



1

Using Mike Pfeiffer's Express demo app:

- <https://github.com/mikepfeiffer/node-express-azure>
- Deploy to Azure
- Set up source control
- Backup
- Autoscaling
- Domain / SSL





Azure PaaS Skill Development

Pluralsight Cloud Labs



Microsoft Azure



Amazon Web Services (AWS)



Microsoft Learn Sandbox

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Learn Learning Paths Certifications FAQ & Help

Docs / Learn / Browse / Create a Windows virtual machine in Azure / Exercise - Create a Windows virtual machine

< Previous Unit 3 of 7 Next >

Exercise - Create a Windows virtual machine 100 XP

10 minutes

This module requires a sandbox to complete. A **sandbox** gives you access to Azure resources. Your Azure subscription will not be charged. The sandbox may only be used to complete training on Microsoft Learn. Use for any other reason is prohibited, and may result in permanent loss of access to the sandbox.

Due to the impact of the global health pandemic, Azure resources are being prioritized towards health and safety organizations. You may experience some issues when you deploy resources used in the exercises. Please try again or choose a different region. For more information, see Azure blog post - [March 28: Update #2 on Microsoft cloud services continuity](#).

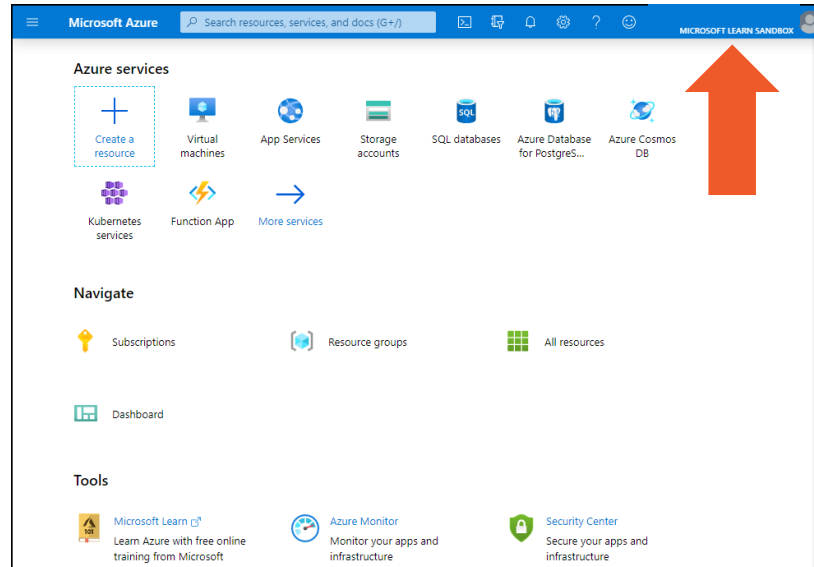
[Activate sandbox](#)

Recall that our company processes video content on Windows VMs. A new city has contracted us to process their traffic cameras, but it's a model we've not worked with before. We need to create a new Windows VM and install some proprietary codecs so we can begin processing and analyzing their images.

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learn



Microsoft Learn Sandbox



Demo



2

<if there's time>

Demonstrate MS Learn's sandbox

Demonstrate PS Kaplan IT practice exams



Questions?



What's Next



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Session 3 Homework



Work through some Microsoft Learn hands-on labs focusing on App Service apps and PaaS databases (timw.info/aas)



Watch Barry Luijbregts' course Building a Global App with Azure PaaS (timw.info/barry)



Poke around in the reference architecture section of the Azure Architecture Center (timw.info/arch)





Thanks so much!



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