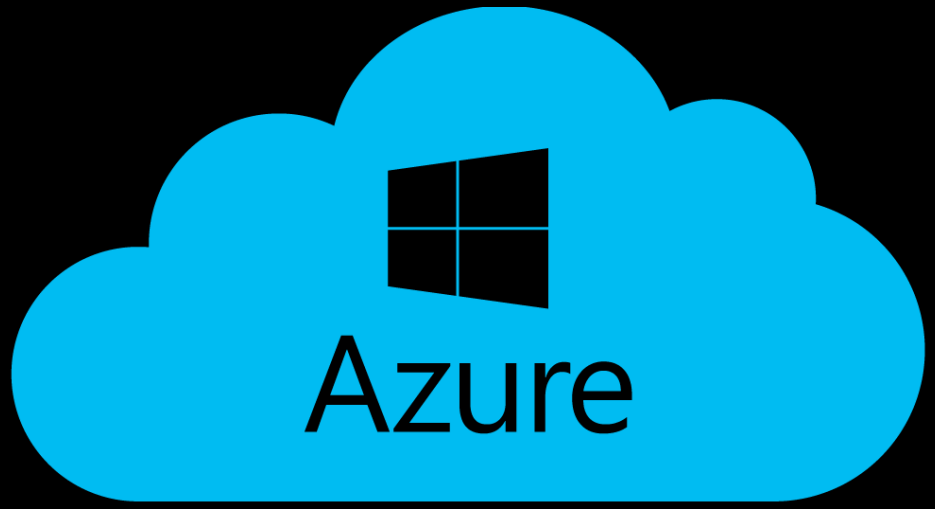
Course Structure

Important

- We will cover lot of Azure Services at the introductory level
- Content in the slides
- Please provide your review on the course


Azure

Types of Website

Dynamic Website

A dynamic website is a website that not only uses HTML and CSS, but includes website scripting as well.

Static Website

A static site is one that is usually written in HTML and CSS only, with no scripting. A static website is the simplest kind of website you can build.

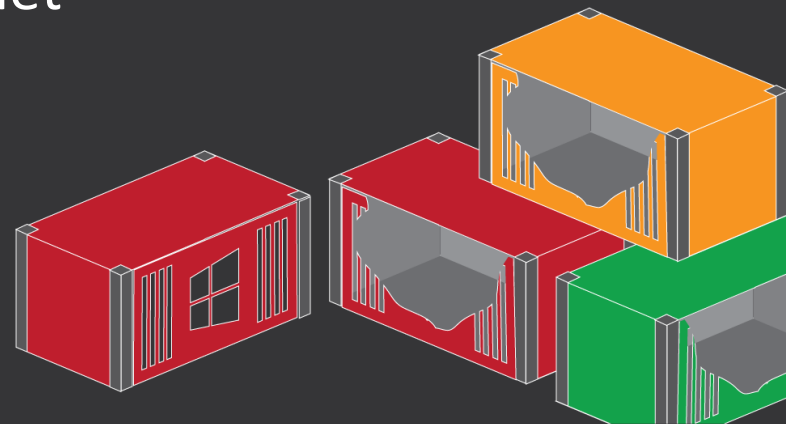
Project : Host a Static Website in Azure

Requirement:

a) Deploy a static website in Azure

b) User should be able to navigate to other pages within website

c) Website should be publicly accessible over the Internet



Project : Host a Static Website in Azure

Implementation Details:

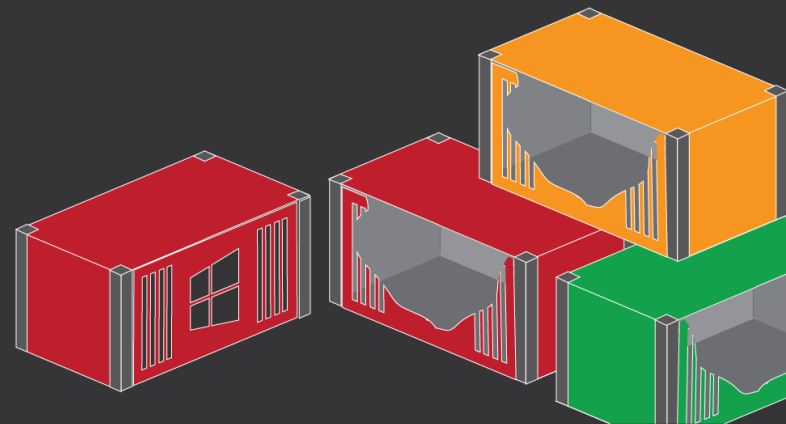
a) Create a resource group

b) Create a storage account inside the resource group

c) Create a blob container inside storage account

d) Upload Source HTML Files

e) Change permission on files to allow public access



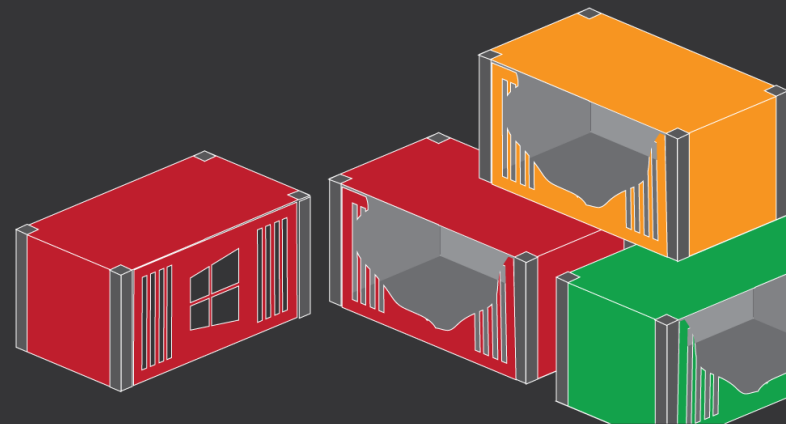
Resource Group

Container that holds related resources for an Azure solution.

Following naming convention for resource group is a good practice.

Example:

- test-custname-eus2-rg
- app-dev-prodname-rg



Data Type and Azure Service to Help

- Structured data

SQL Database

Sr. Number	Emplyee Name	Monthly Salary
1	Vijay	$30,000
2	Pooja	$30,000
3	Mark	$50,000
4	James	$15,000

- Semi-Structured data

Table

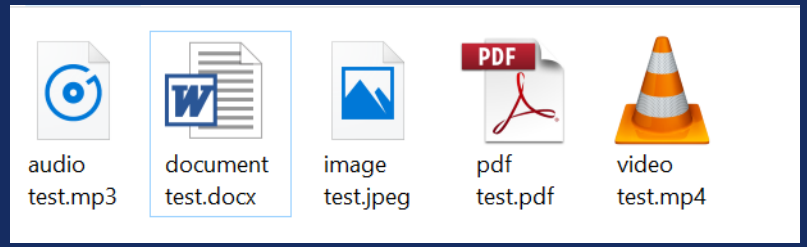
```
student_certifications = @{
                "Student1" = @("AZ-900", "AZ-103");

                "Student2" = @("ITIL 4 Foundation", "AZ-900");

                "Student3" = @("AWS Solution Architect");

                "Student4" = @("AZ-900", "AZ-103", "AZ-200", "AZ-300")
            }
```

- Un-Structured data



Blob, File Share

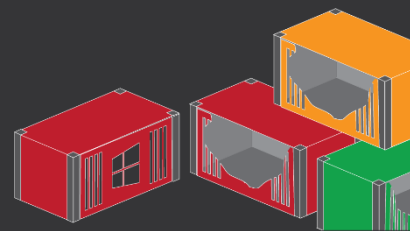
Azure Storage

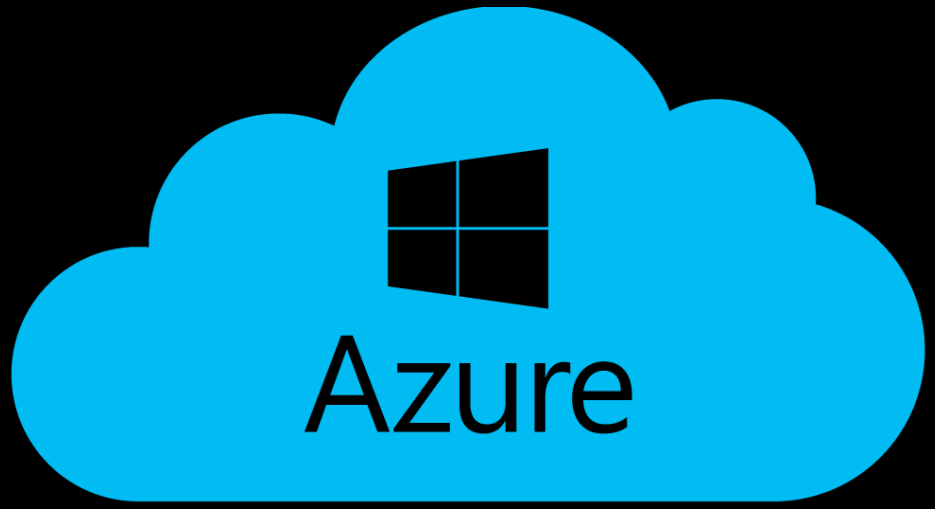
Azure Blob Storage is a service for storing large amounts of unstructured object data, such as text or binary data.

Azure Files offers fully managed file shares in the cloud that are accessible via the industry standard Server Message Block (SMB) protocol.

Azure Table Storage is a service that stores structured NoSQL data in the cloud, providing a key/attribute store with a schema less design.

Azure Queue Storage is a service for storing large numbers of messages. You access messages from anywhere in the world via authenticated calls using HTTP or HTTPS.

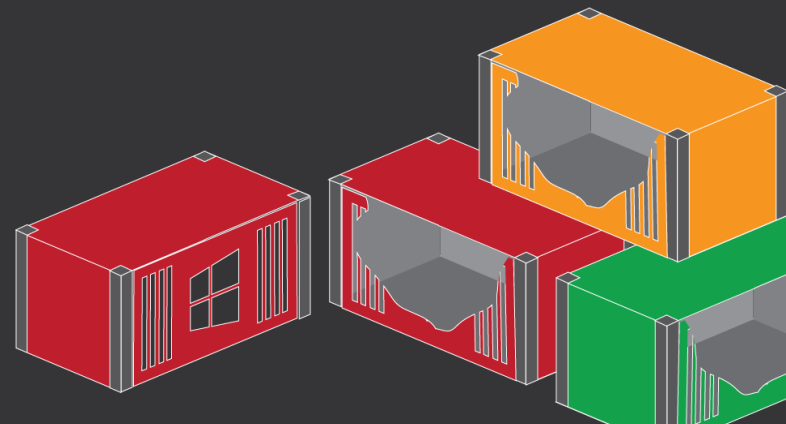



Azure

Project : Deploy Website on IIS Server

Requirement:

- Deploy a website on IIS webserver running on a Windows Virtual Machine
- Website should be publicly accessible over the Internet



Project : Deploy Website on IIS Server

Implementation Details:

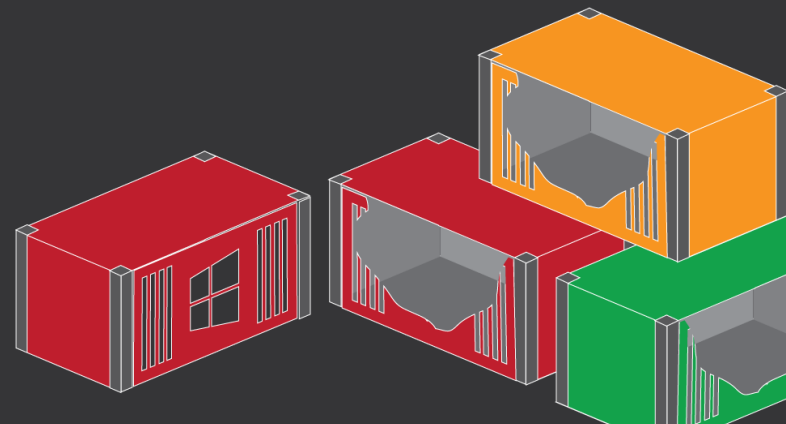
a) Create a new Resource Group for the project

b) Create a Virtual Machine inside Resource Group

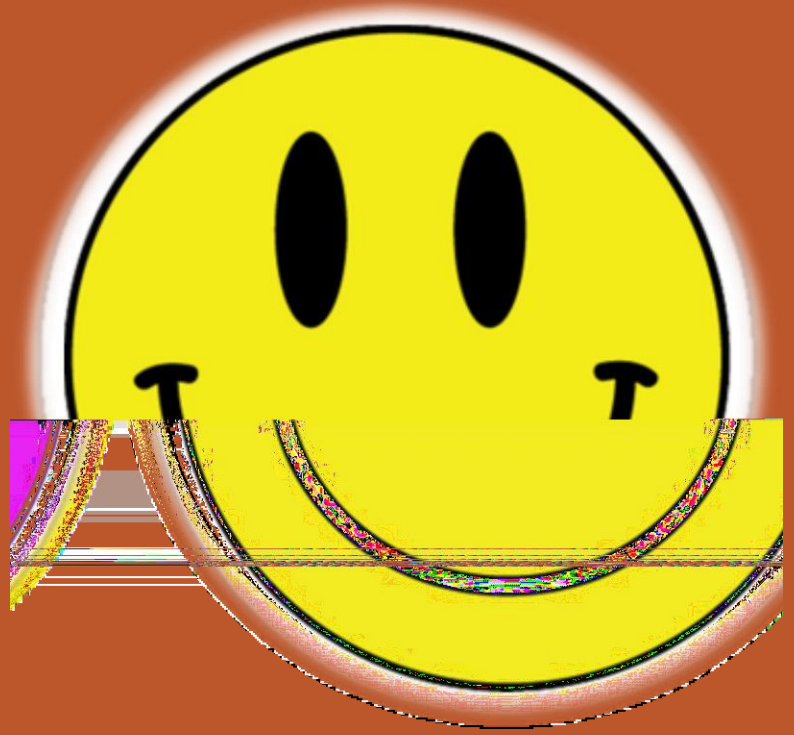
c) Log in to VM, install IIS Server

d) Deploy a static website on IIS running inside VM

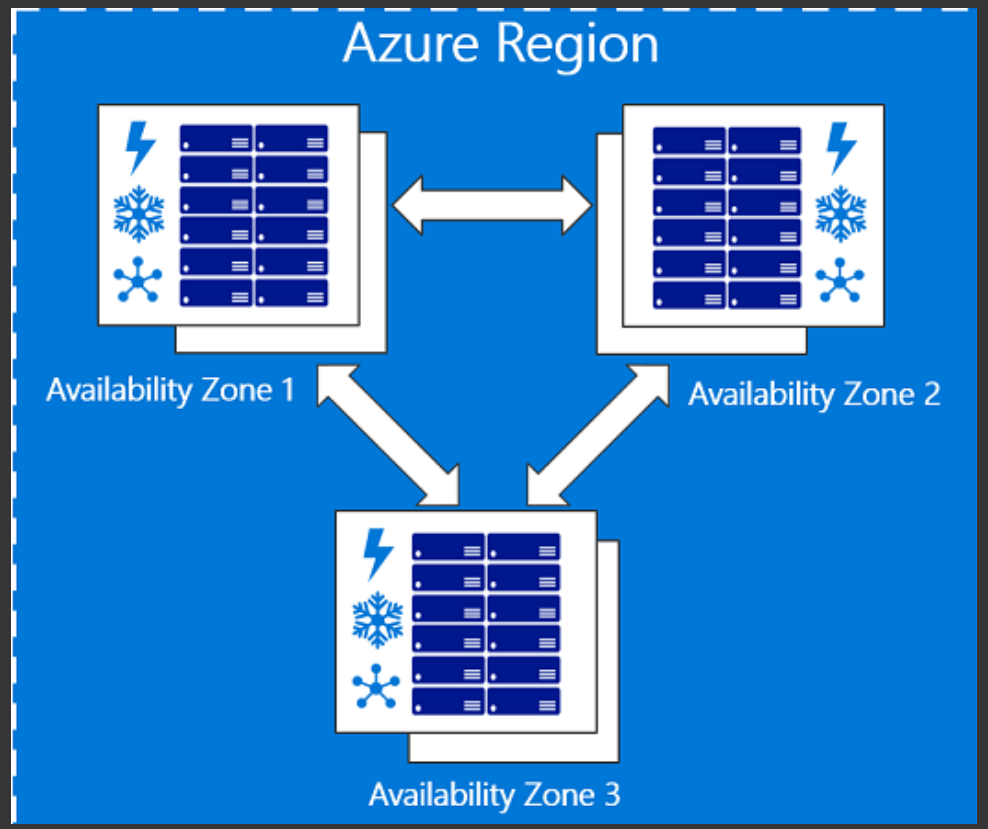
e) Enable/disable ports to understand the effect of NSG



Thank You



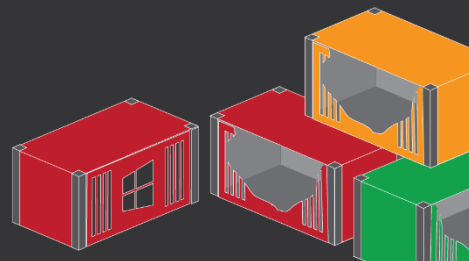
Availability Zone



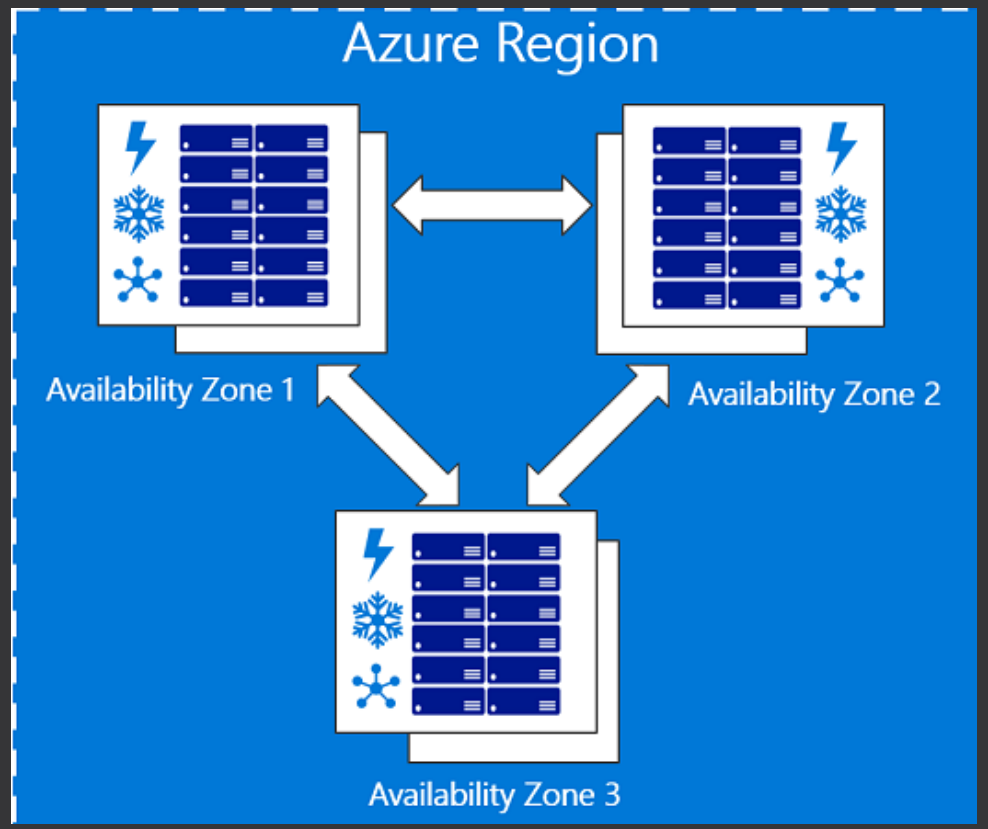
Availability Zones is a high-availability offering that protects your applications and data from datacenter failures.

To ensure resiliency, there's a minimum of three separate zones in all enabled regions. The physical separation of Availability Zones within a region protects applications and data from datacenter failures.

https://docs.microsoft.com/en-us/azure/availability-zones/az-overview



Availability Zone



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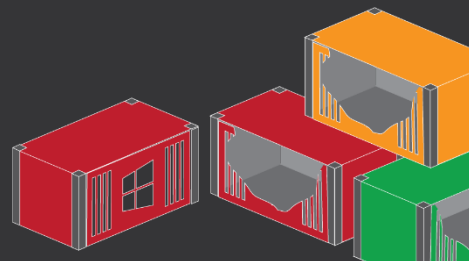
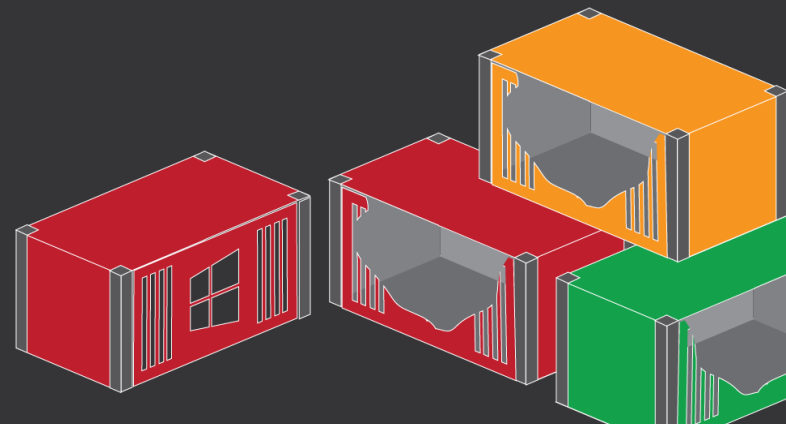
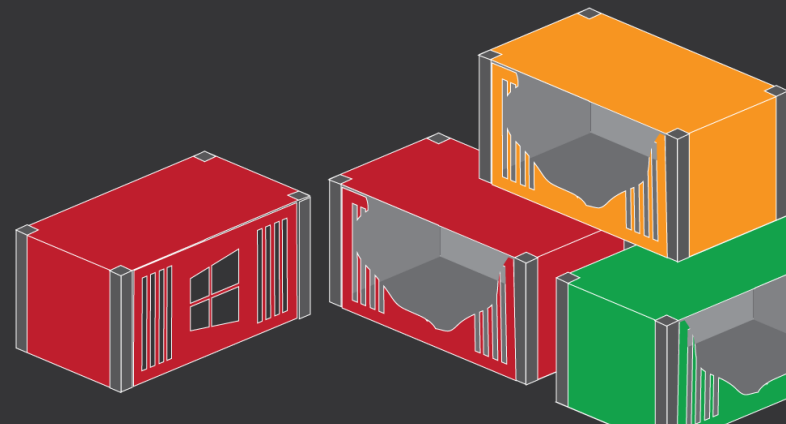


Azure Data Center

Availability Set

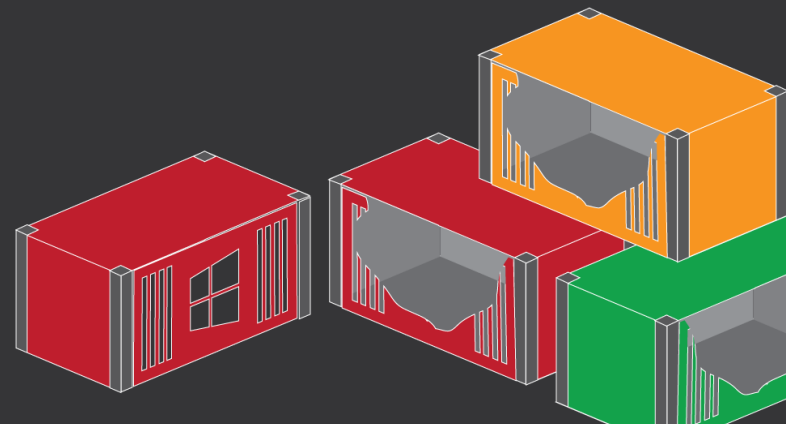


VMSS



VM Size:

https://docs.microsoft.com/en-us/azure/virtual-machines/windows/sizes



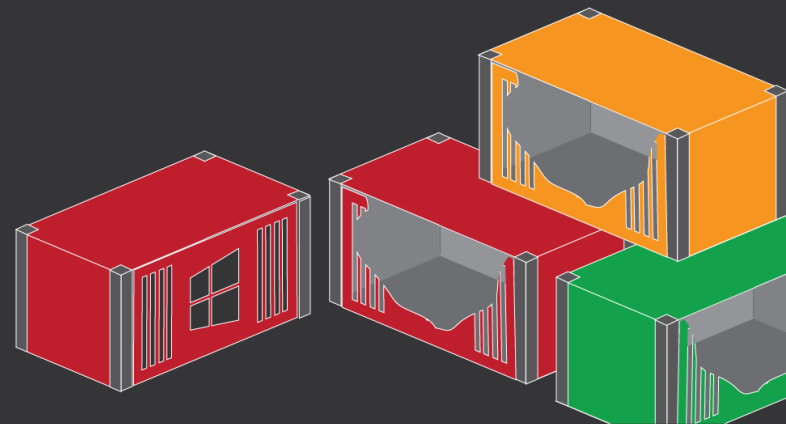
Project : Deploy Website on IIS Server

Requirement:

a) Create two Virtual Machines

b) Deploy a static website on them

c) Add the VM to a load balancer for balancing the incoming traffic



Project : Deploy Website on IIS Server

Implementation Details:

a) Create a Resource Group

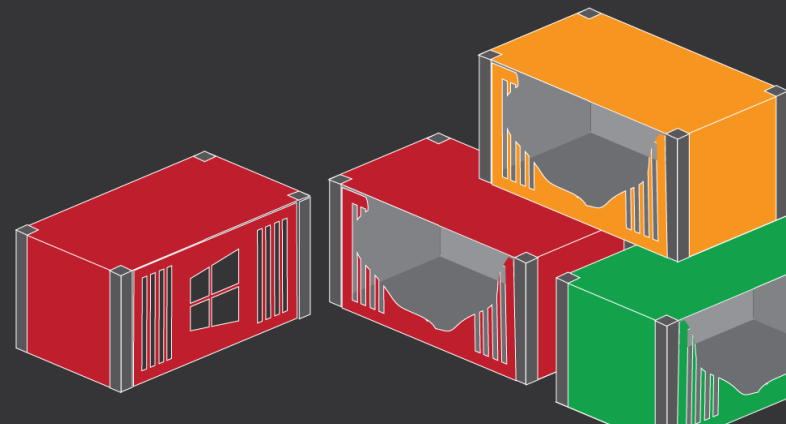
b) Deploy 2 Virtual Machines(WebServer1 and WebServer2)

c) Install IIS on server and deploy the websites

d) Deploy an Azure Load Balancer(ALB)

e) Configure Load Balancer to send traffic to the web servers

f) Add a DNS name to the Load Balancer IP address

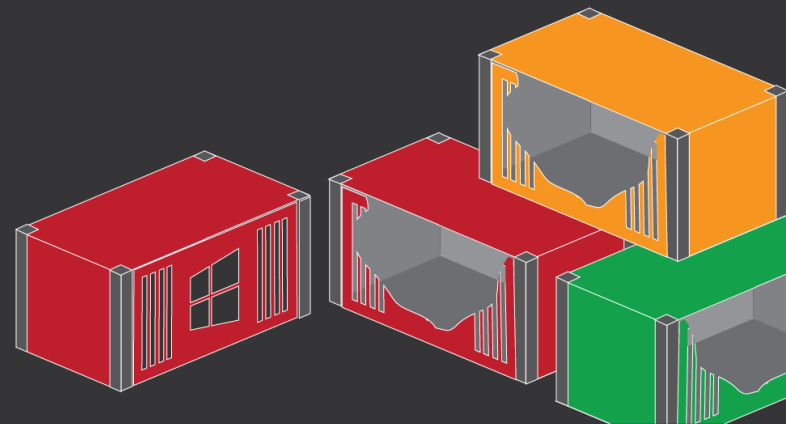


Project: Create Your Own Cloud Backup Solution

Requirement:

a) Take a backup of my local directory and upload it to cloud

b) Folder should be zipped before uploading



Project : Deploy Website on IIS Server

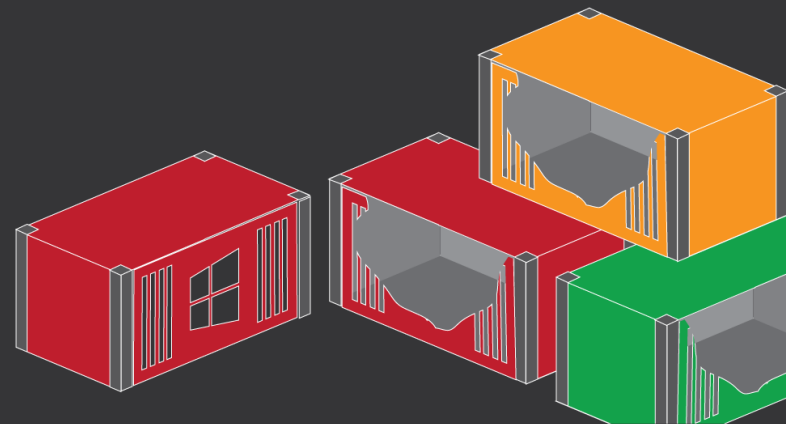
Implementation Details:

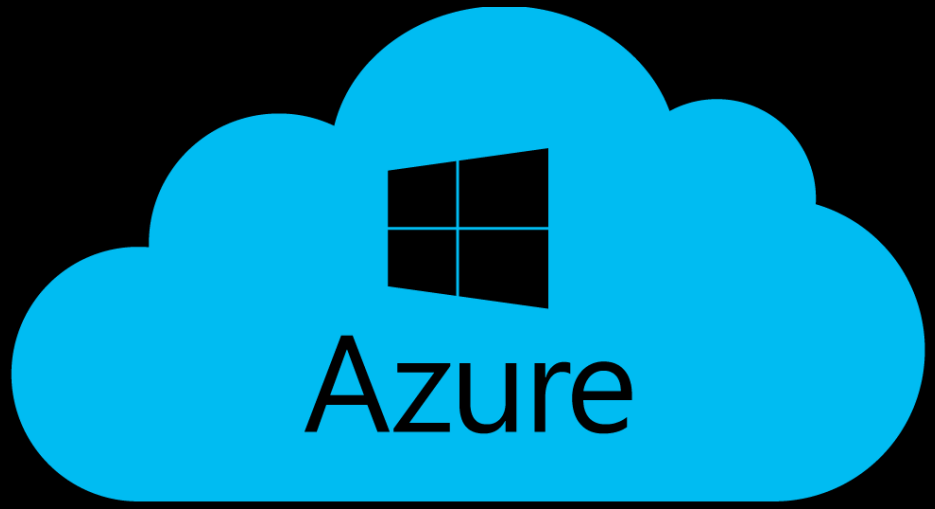
a) Create a Storage in Azure Cloud

b) Write a PowerShell script to upload the files in the cloud storage

c) Enhance the PowerShell script to add zipping logic

d) Schedule the task in Task Scheduler to take backup regularly




Azure