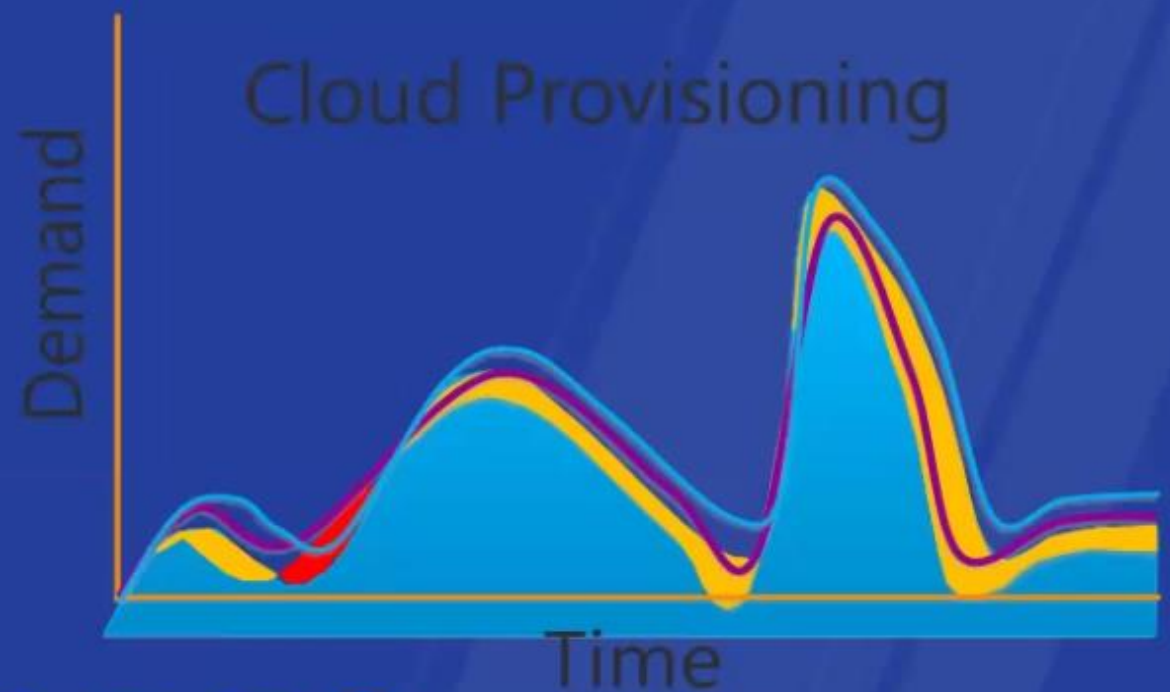
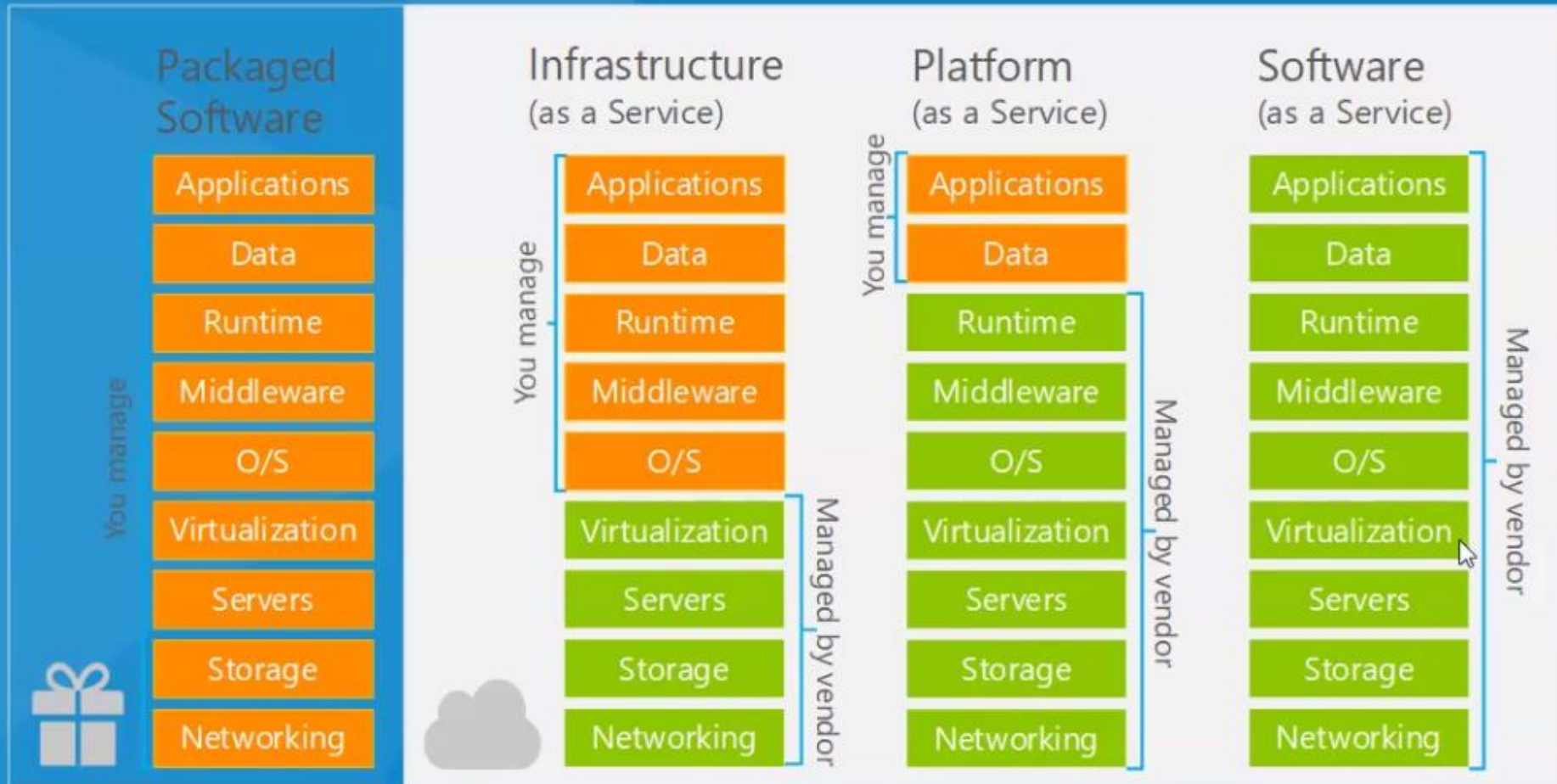


# Windows Azure

# What is a "Cloud"?

- Cloud: on-demand, scalable, multi-tenant, self-service compute and storage resources







Viewing venkatadamodar... 's screen

> Spending 100k on AWS - an anecdotal

# Why we need Windows Azure







# Windows Azure



## Move Faster



## Save Money

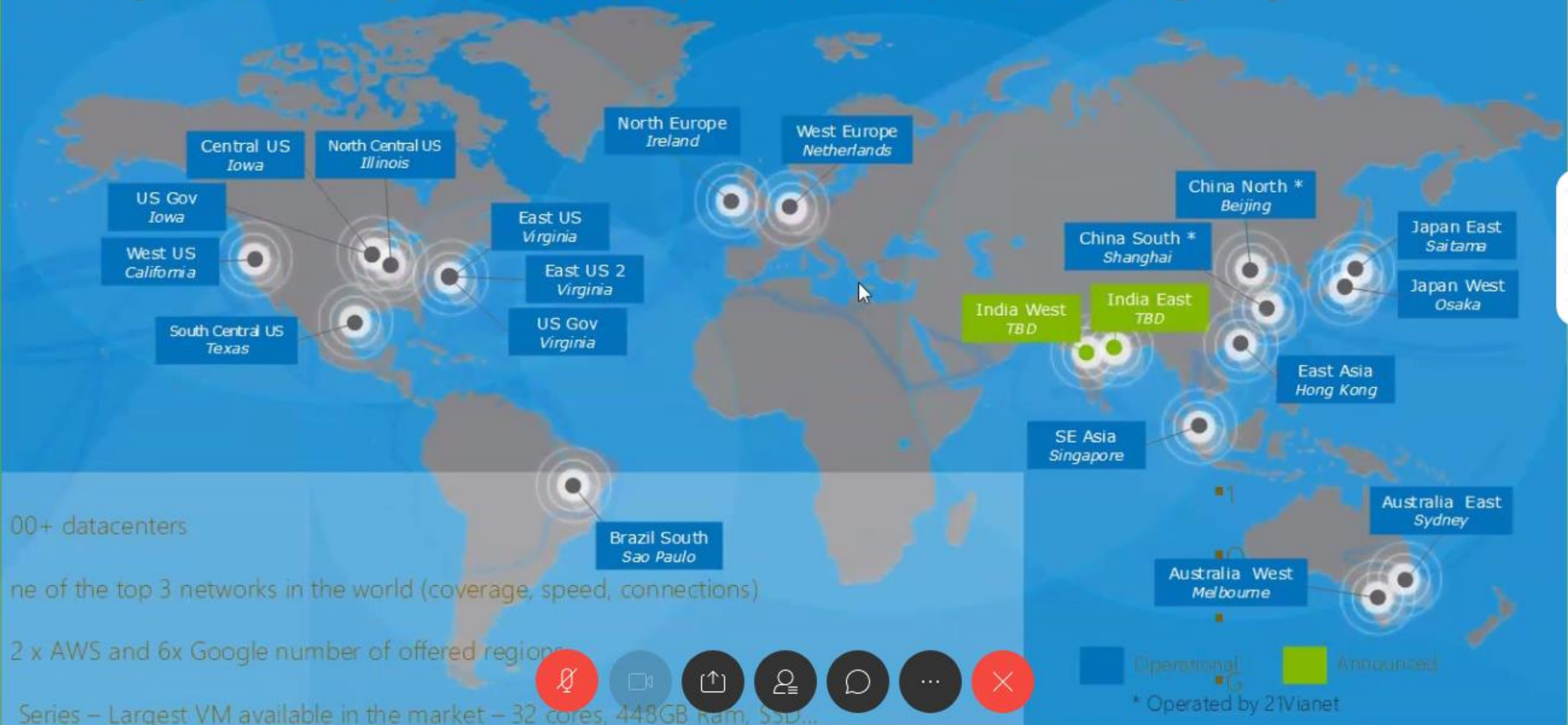


## Hybrid Consistency

# Huge infrastructure scale is the enabler

> Speaking: venkatadamodar... (unreadable)

19 Regions ONLINE...huge datacenter capacity around the world...and Azure was growing



100+ datacenters

one of the top 3 networks in the world (coverage, speed, connections)

2 x AWS and 6x Google number of offered regions

Series – Largest VM available in the market – 32 cores, 448GB Ram, SSD...

Navigation icons: a red circle with a white 'X', a black circle with a white camera icon, a black circle with a white share icon, a black circle with a white user icon, a black circle with a white speech bubble icon, a black circle with a white ellipsis icon, and a red circle with a white 'X'.



# Microsoft Azure (Mid 2015)

More than

> Speaking: venkatadamodar vemula(Host)

> 80%

Fortune 500 using Azure

> 300k

Active websites

> 1,000,000  
1.6

> 1.6  
QL Databases in Azure

> 30 TRILLION  
storage objects

> 500 MILLION  
AAD users

5

> 3 MILLION  
requests/sec

> 13 BILLION  
authentication/wk

MILLION  
Developers registered with  
Visual Studio Online







# Virtual Machines

- ← Windows Server and Linux Virtual Machines
- ← Flexible Workload Support
- ← Virtual Private Networking



# Windows Azure Virtual Networks

## Build virtual networks that scale

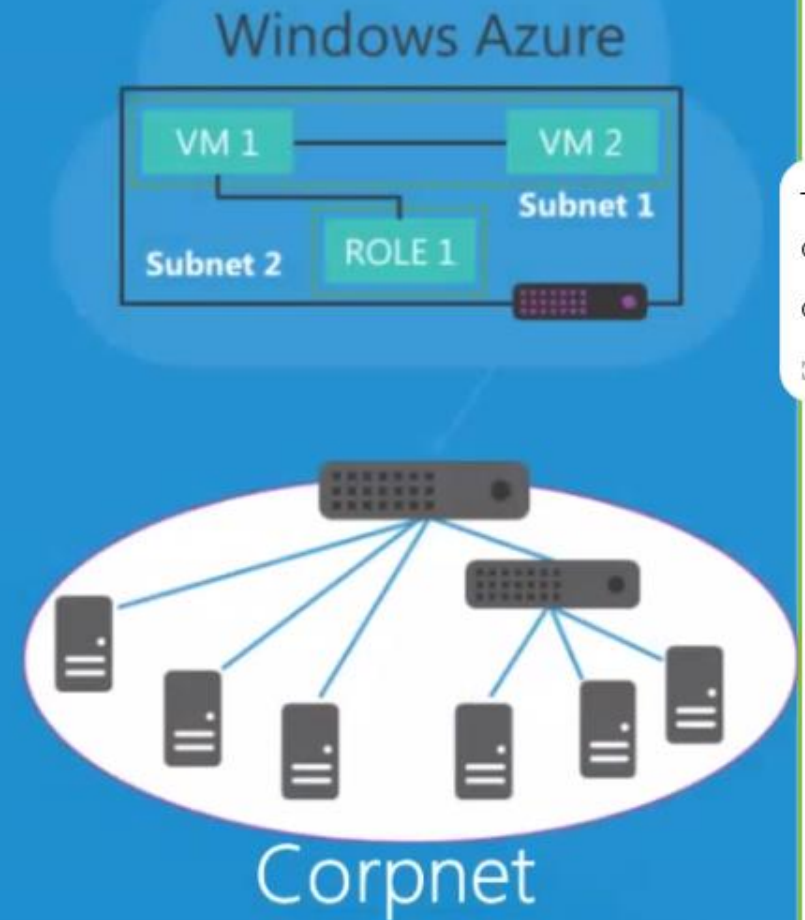
- Traditional, familiar approach to build extension to datacenter
- Scalable approach to building virtual networks

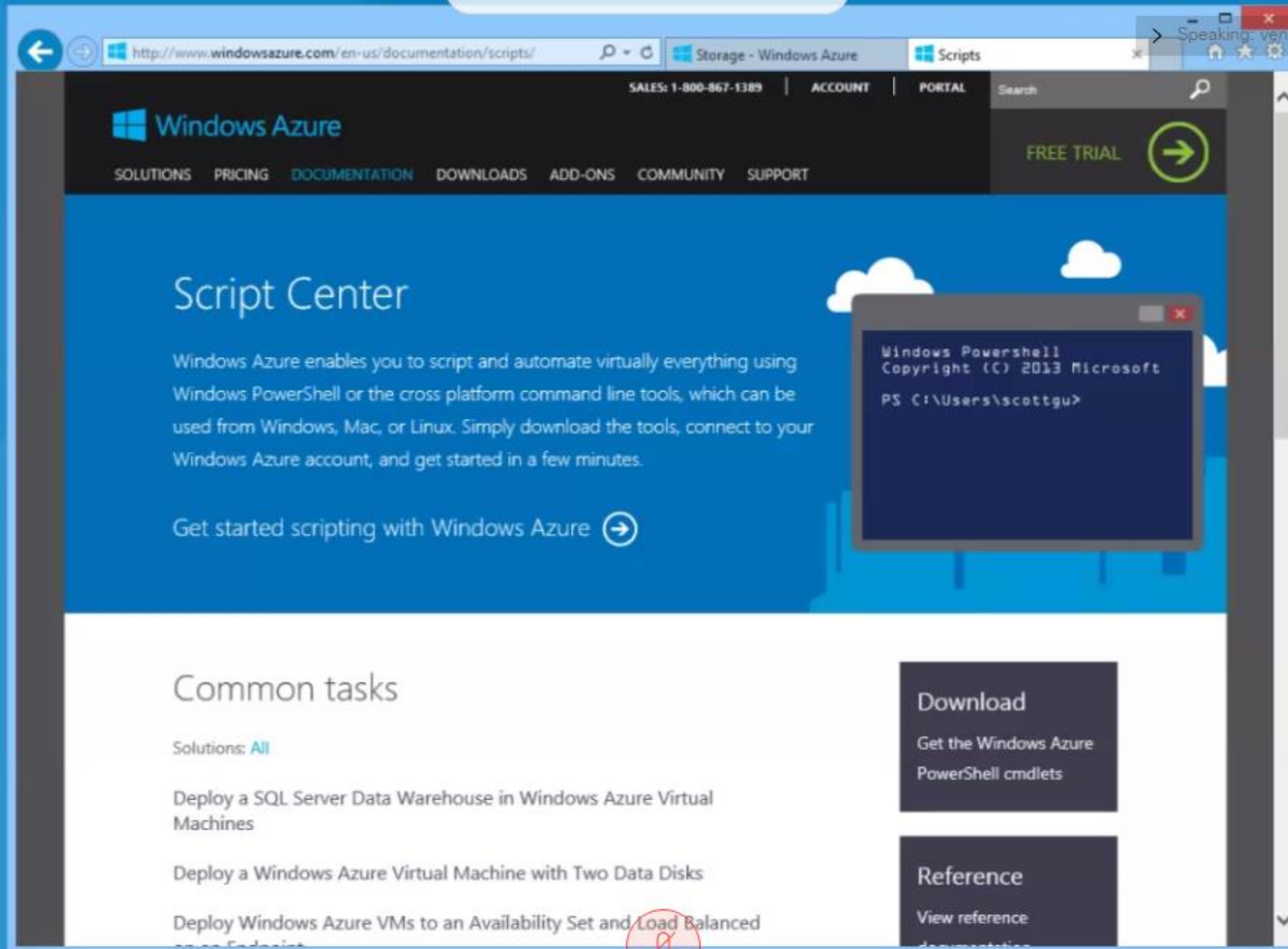
## Control over network configuration

- Define your own IP address ranges
- Be compliant with corporate IT security policy

## Enables rich hybrid scenarios

- Hybrid apps can reach all or portion of the on-premise network
- Works with both Windows and non-Windows systems





http://www.windowsazure.com/en-us/documentation/scripts/ | Storage - Windows Azure | Scripts

SALES: 1-800-867-1389 | ACCOUNT | PORTAL | Search

# Windows Azure


SOLUTIONS | PRICING | DOCUMENTATION | DOWNLOADS | ADD-ONS | COMMUNITY | SUPPORT

FREE TRIAL →

## Script Center

Windows Azure enables you to script and automate virtually everything using Windows PowerShell or the cross platform command line tools, which can be used from Windows, Mac, or Linux. Simply download the tools, connect to your Windows Azure account, and get started in a few minutes.

Get started scripting with Windows Azure →



### Common tasks

Solutions: [All](#)

- Deploy a SQL Server Data Warehouse in Windows Azure Virtual Machines
- Deploy a Windows Azure Virtual Machine with Two Data Disks
- Deploy Windows Azure VMs to an Availability Set and Load Balanced

#### Download

Get the Windows Azure PowerShell cmdlets

#### Reference

View reference documentation





Viewing venkatadamodar...'s screen

> Speaking: venkatadamodar\_venkata(Host)



HDInsight



SQL DB



Storage



Traffic Mgr



Cloud services

application  
building



Cache



CDN



Active  
Directory



Web Sites



Mobile



media



Service Bus



BizTalk



Windows Azure



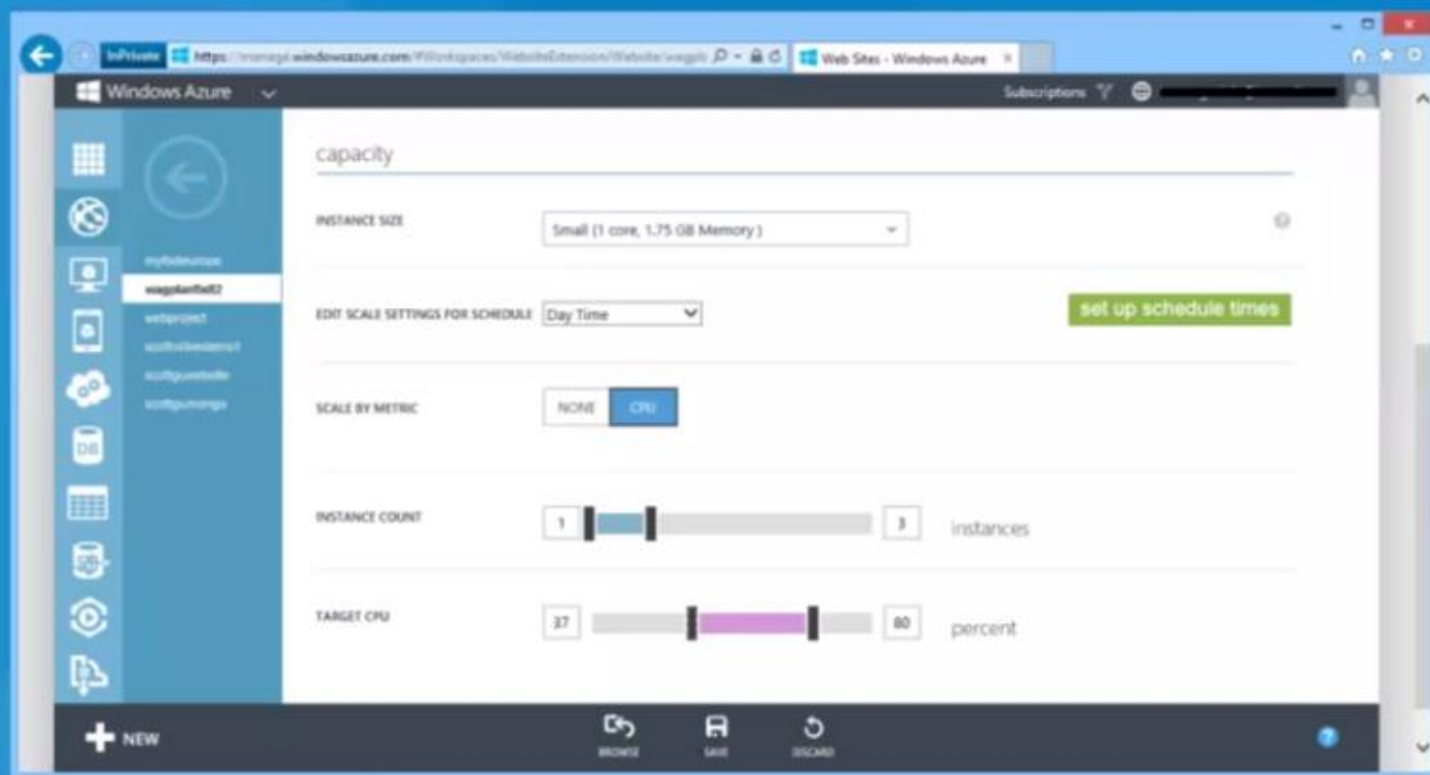


# SQL Database

- ← Relational SQL Server Engine in the Cloud
- ← Clustered for high availability
- ← Fully Managed Service

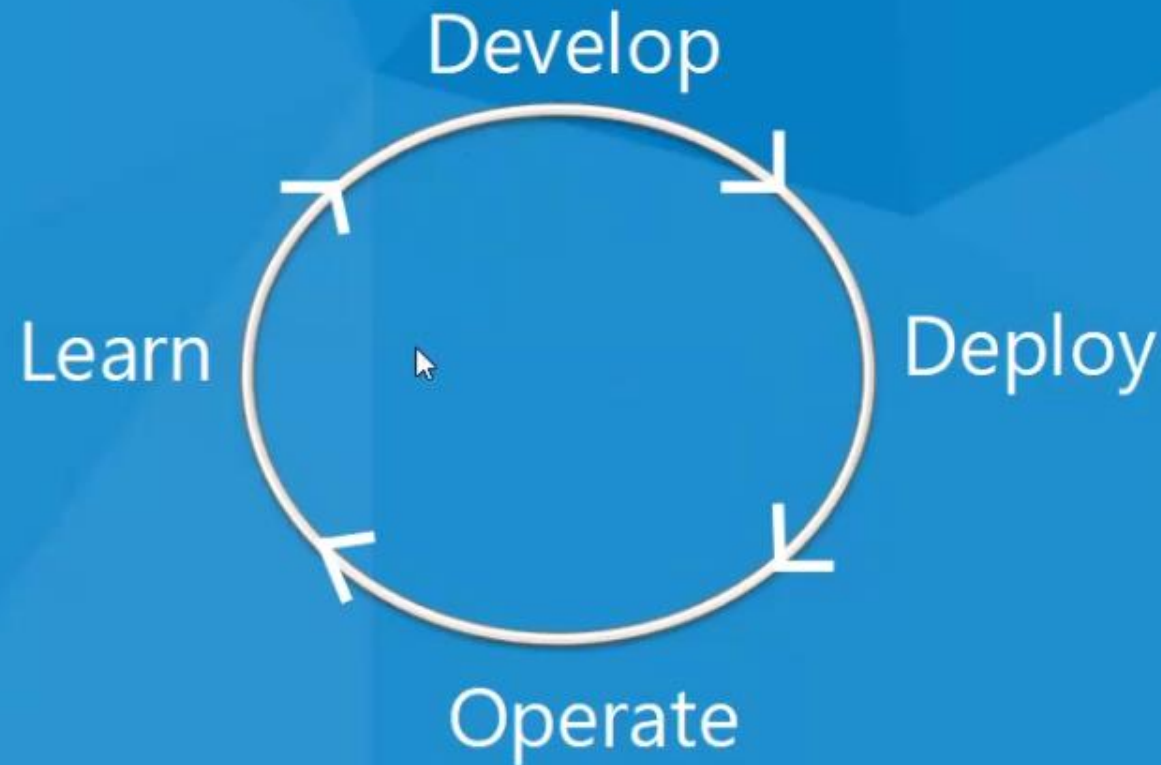


# AutoScale – Built-into Windows Azure



- AutoScale based on real usage
- CPU % thresholds
- Queue Depth
- Supports schedule times

# Dev/Ops Workflow



- ✓ Repeatable
- ✓ Reliable
- ✓ Predictable
- ✓ Low Cycle Time



# Storage

- ← Highly scalable, durable, available storage system
- ← Blobs can be exposed over http (JSON + CORS)
- ← Optionally enable client apps short term access

← Import Export Service with Physical Drives



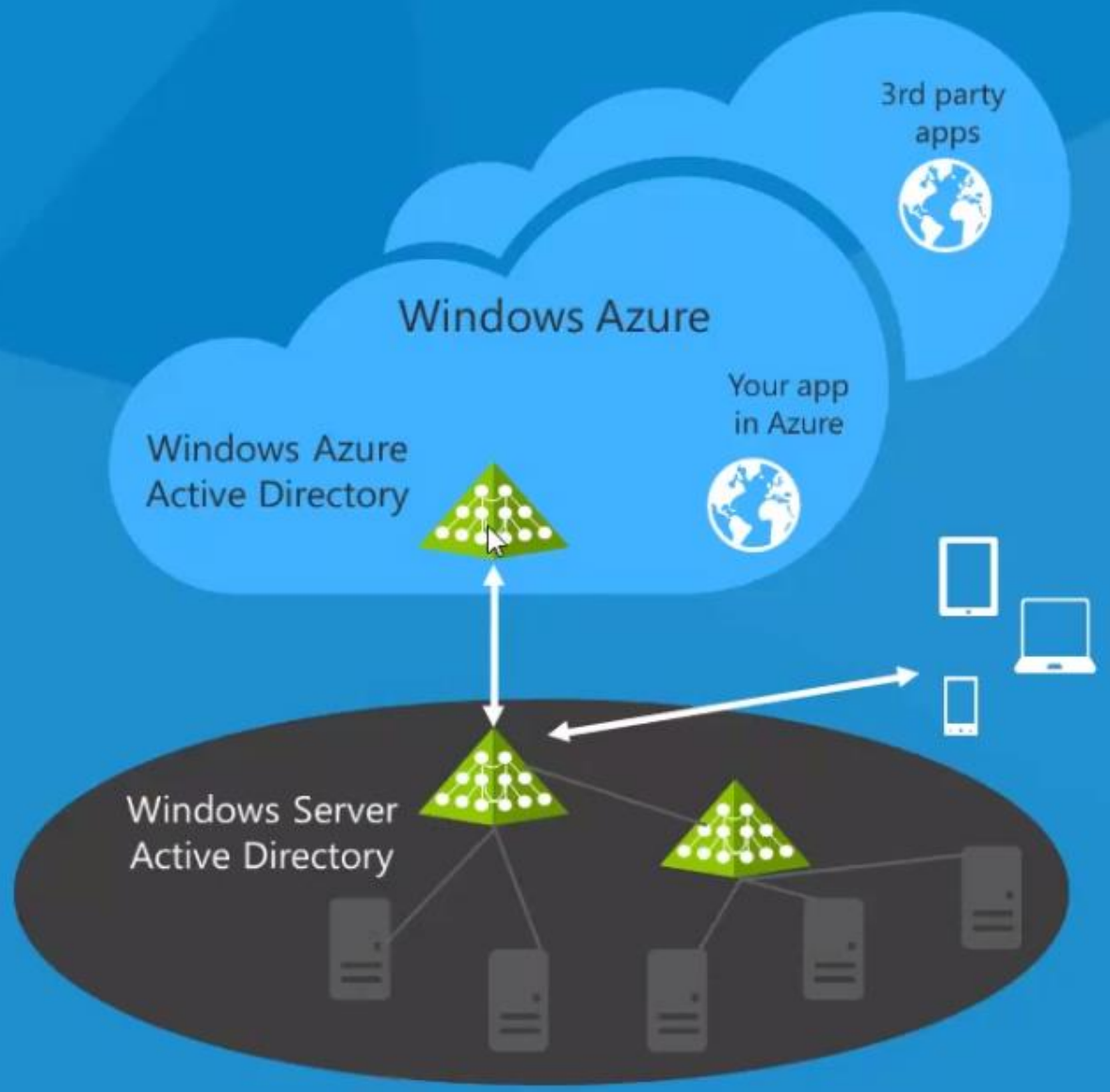




# Active Directory

- ← Active Directory in the Cloud
- ← Integrate with on-premises Active Directory
- ← Enable single sign-on within your apps
- ← Supports SAML, WS-Fed, and OAuth 2.0







Viewing venkatadamodar...'s screen

> [Settings](#)

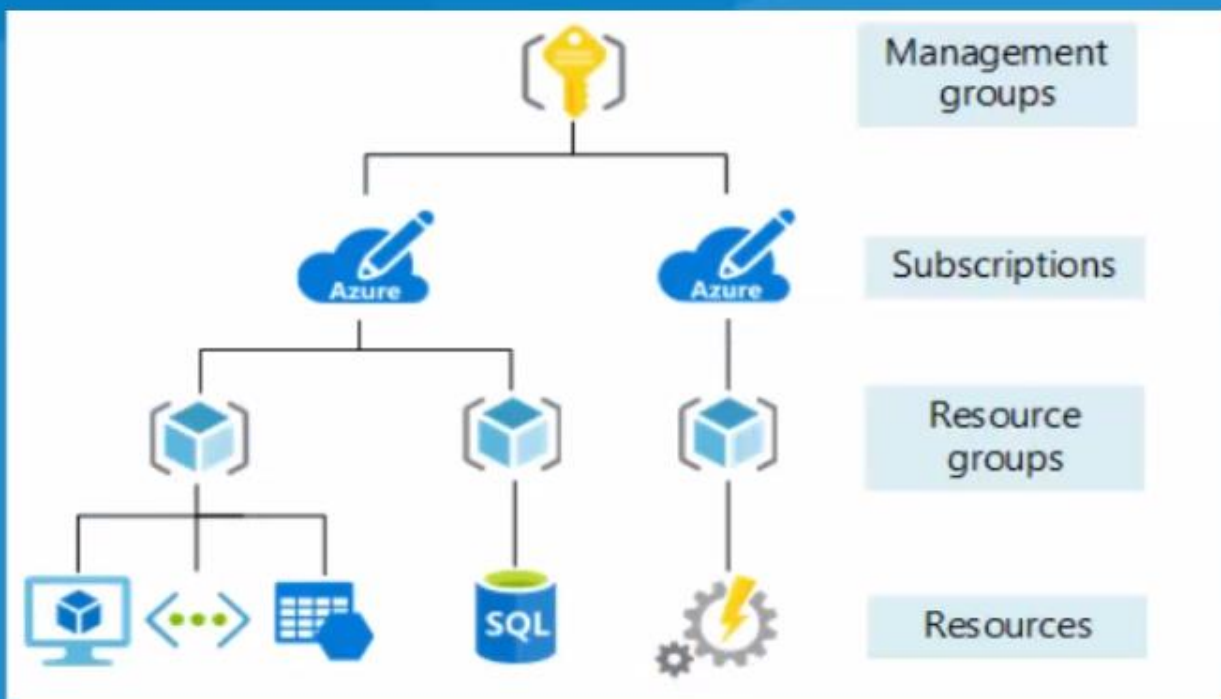


# Azure Resources



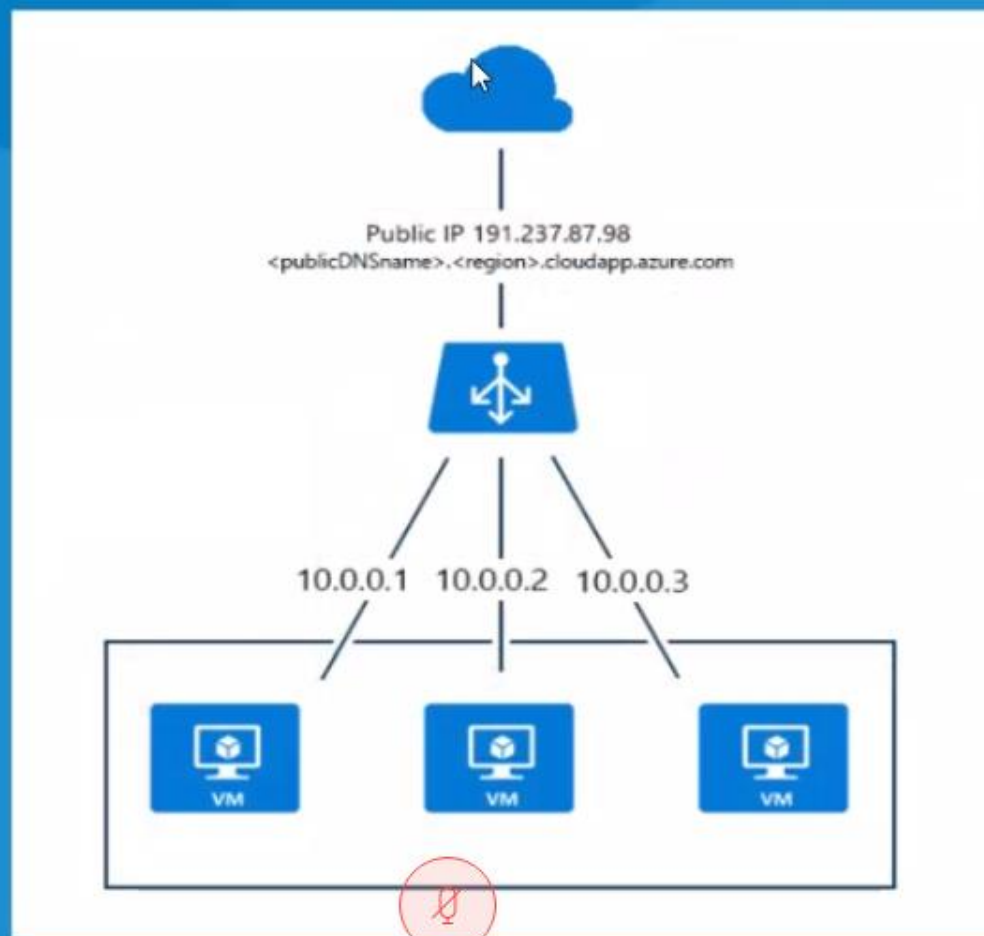
 Windows Azure

# Resource Group

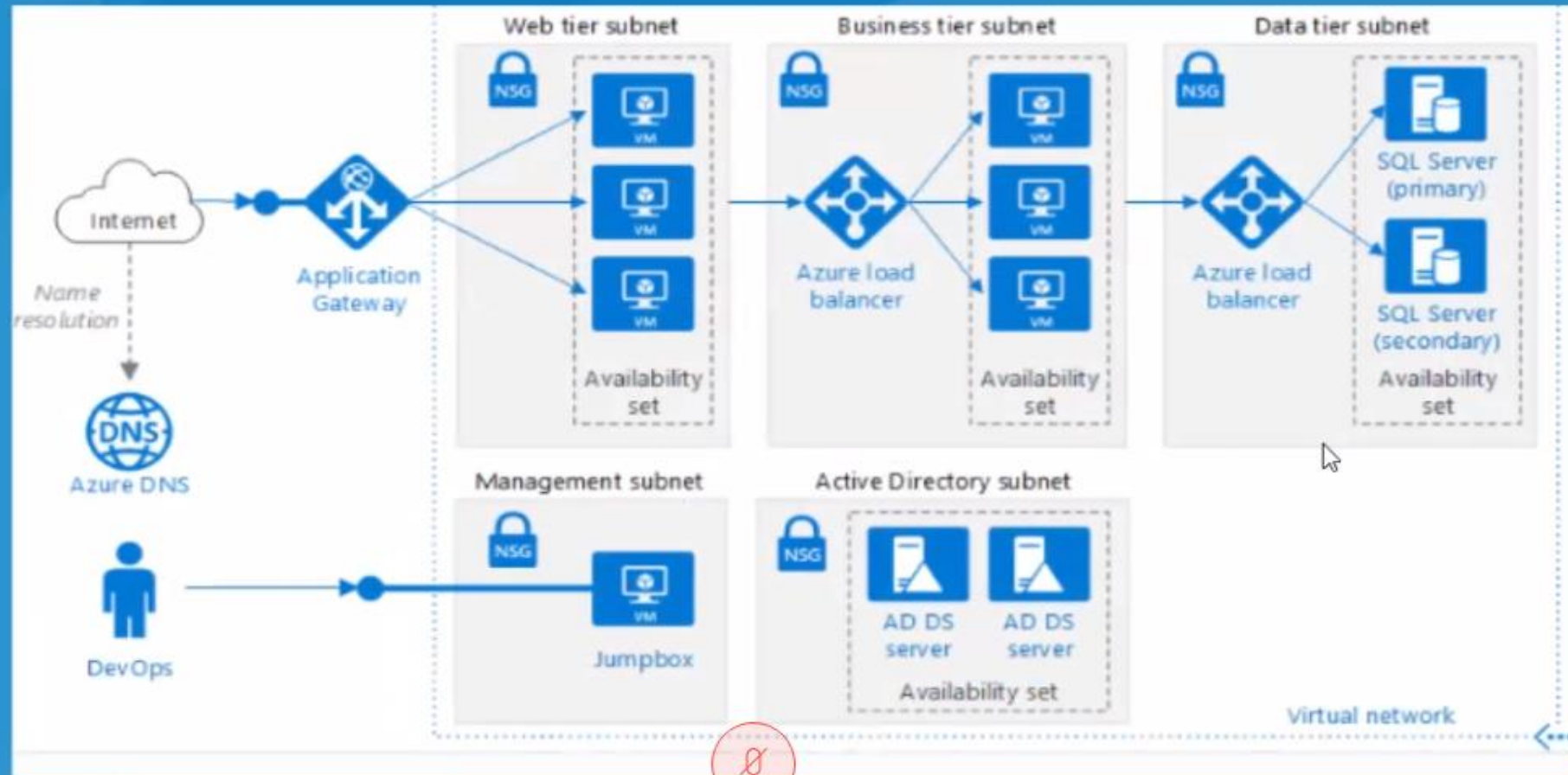




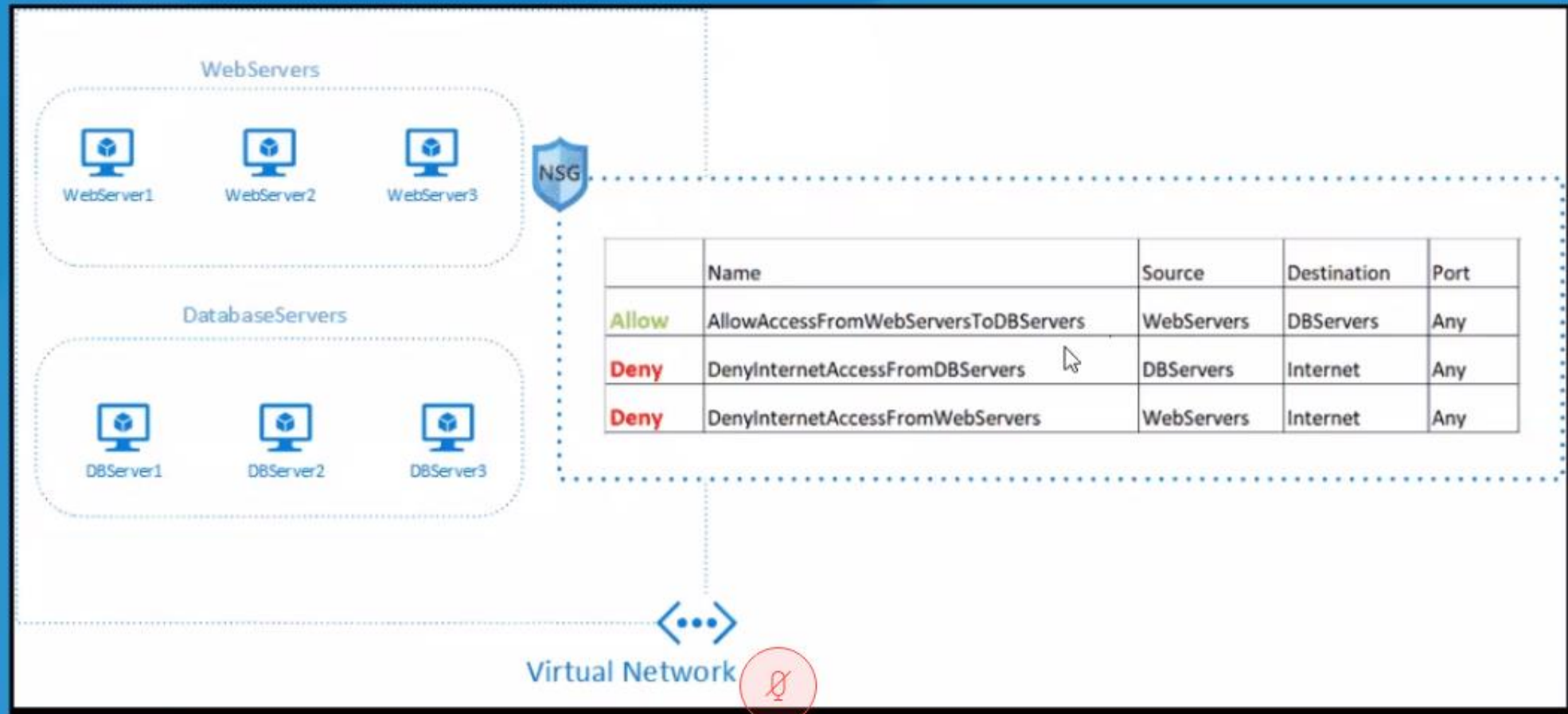
# Azure Public and Private IP Address



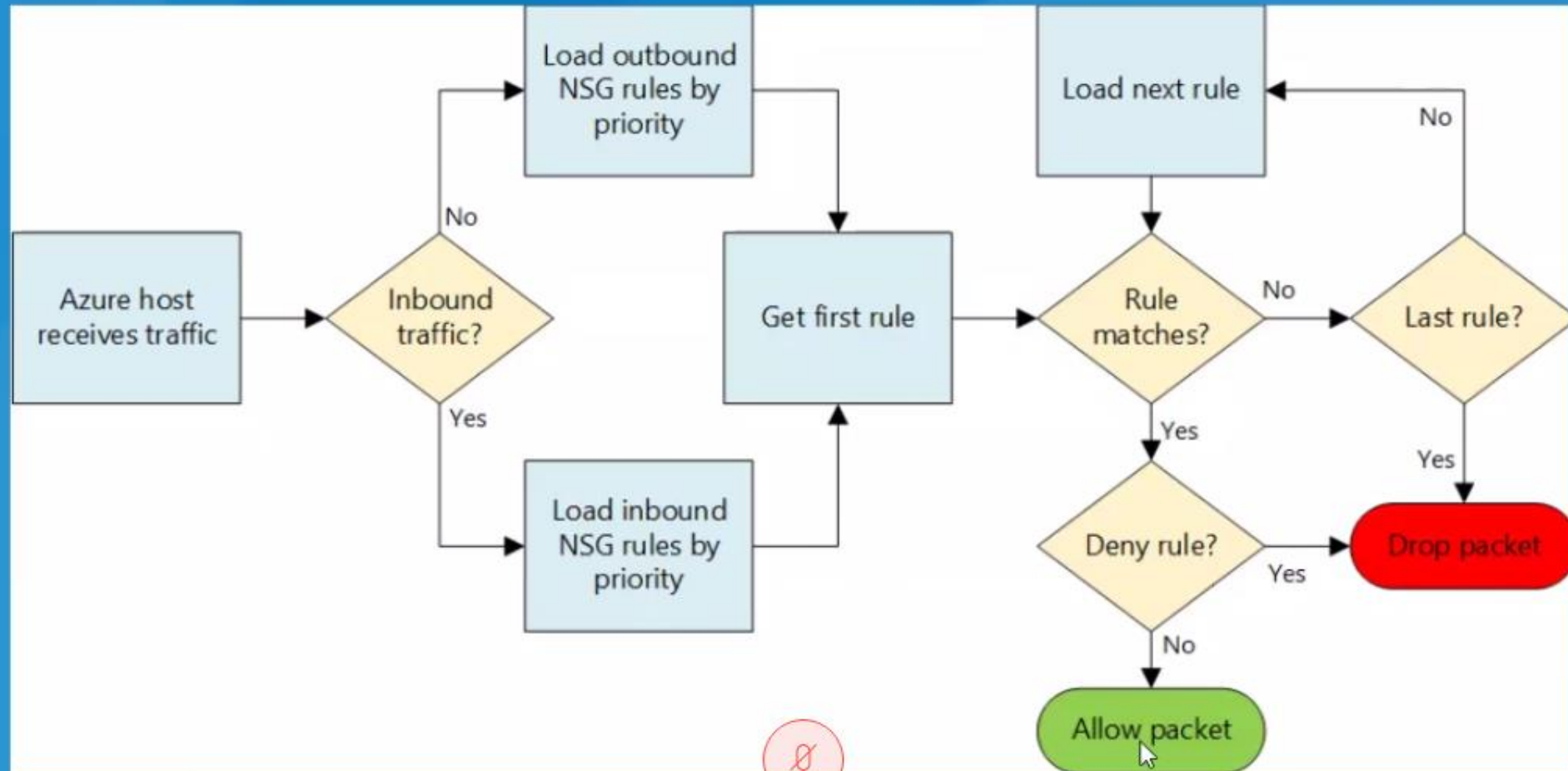
# Virtual Network and Sub Net



# Network Security Group

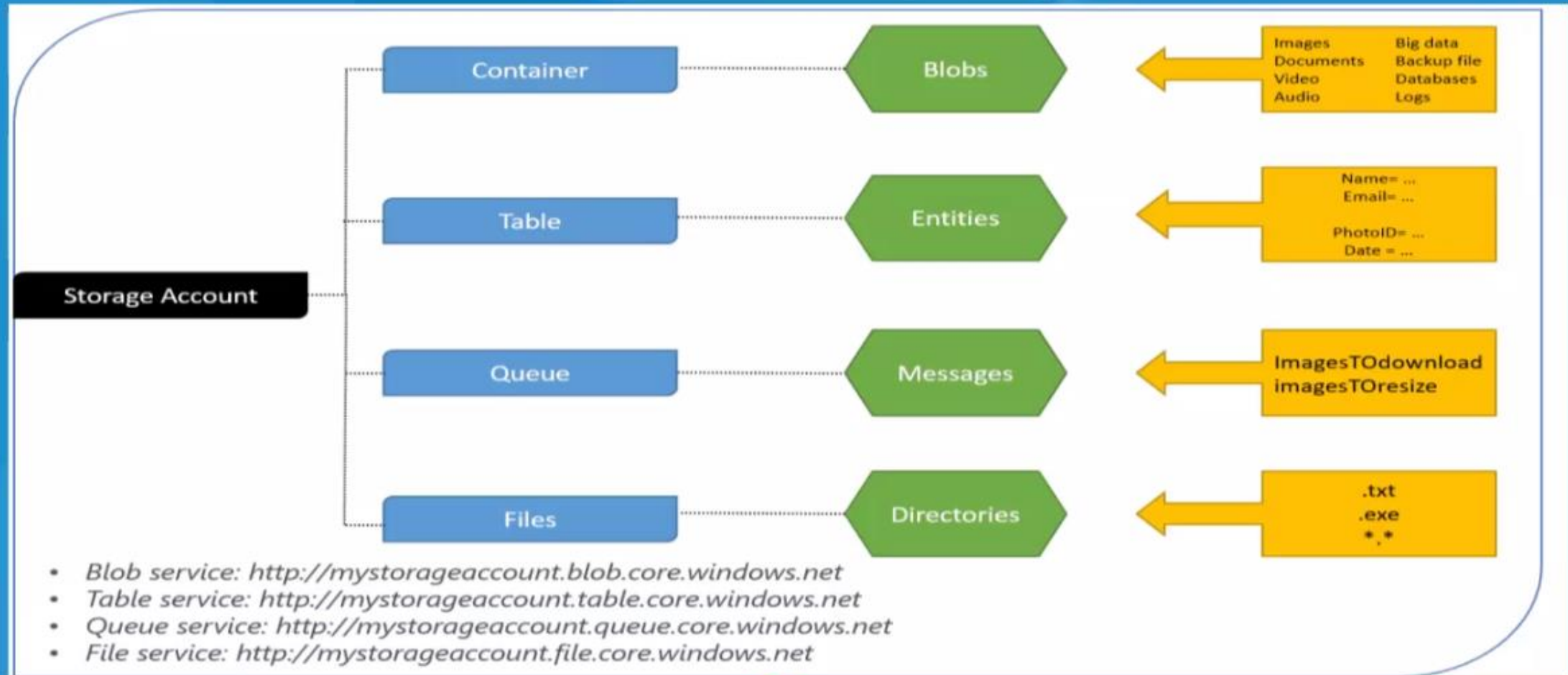


# Azure Inbound and Outbound Rules

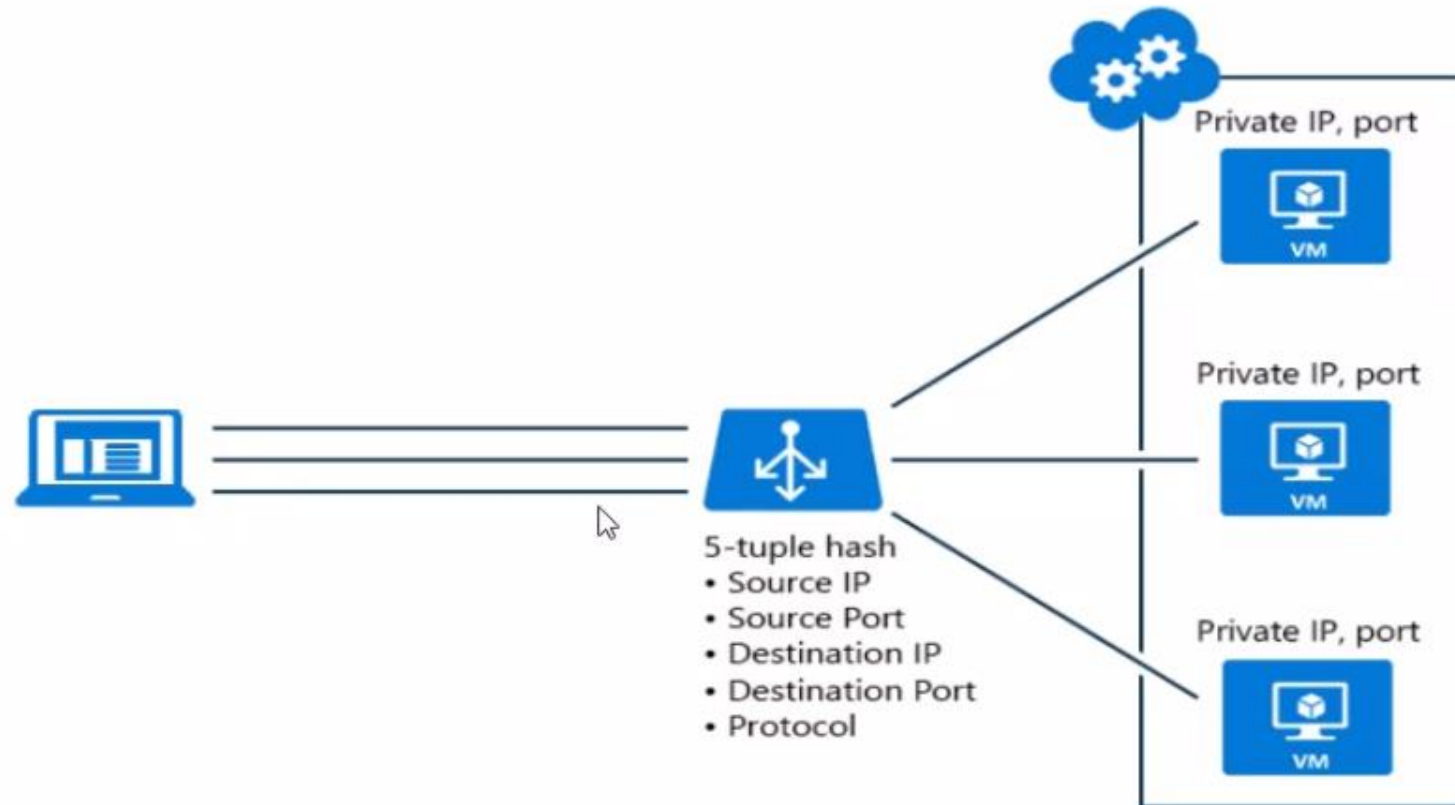




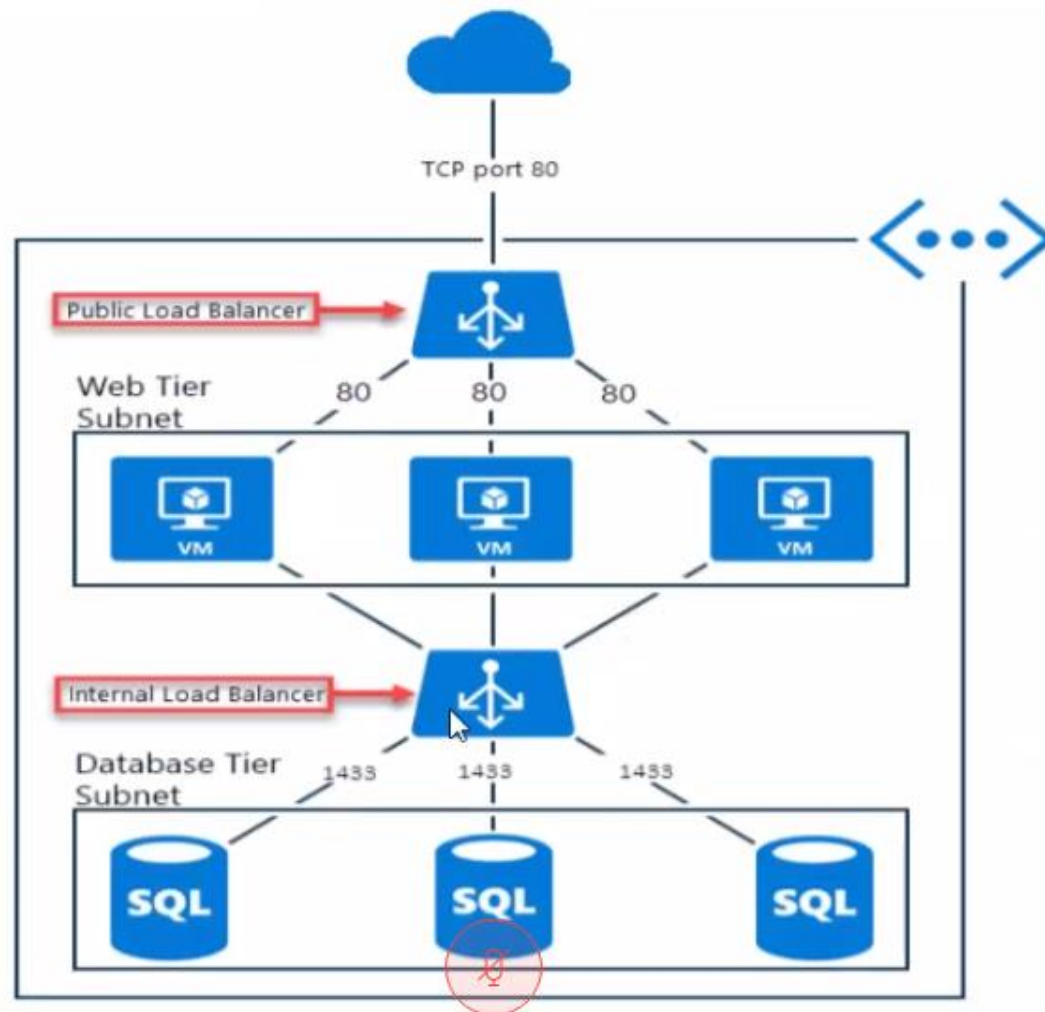
# Azure Storage Account



# Azure Load Balancer



# Azure Load Balancer





# Azure Application Gateway

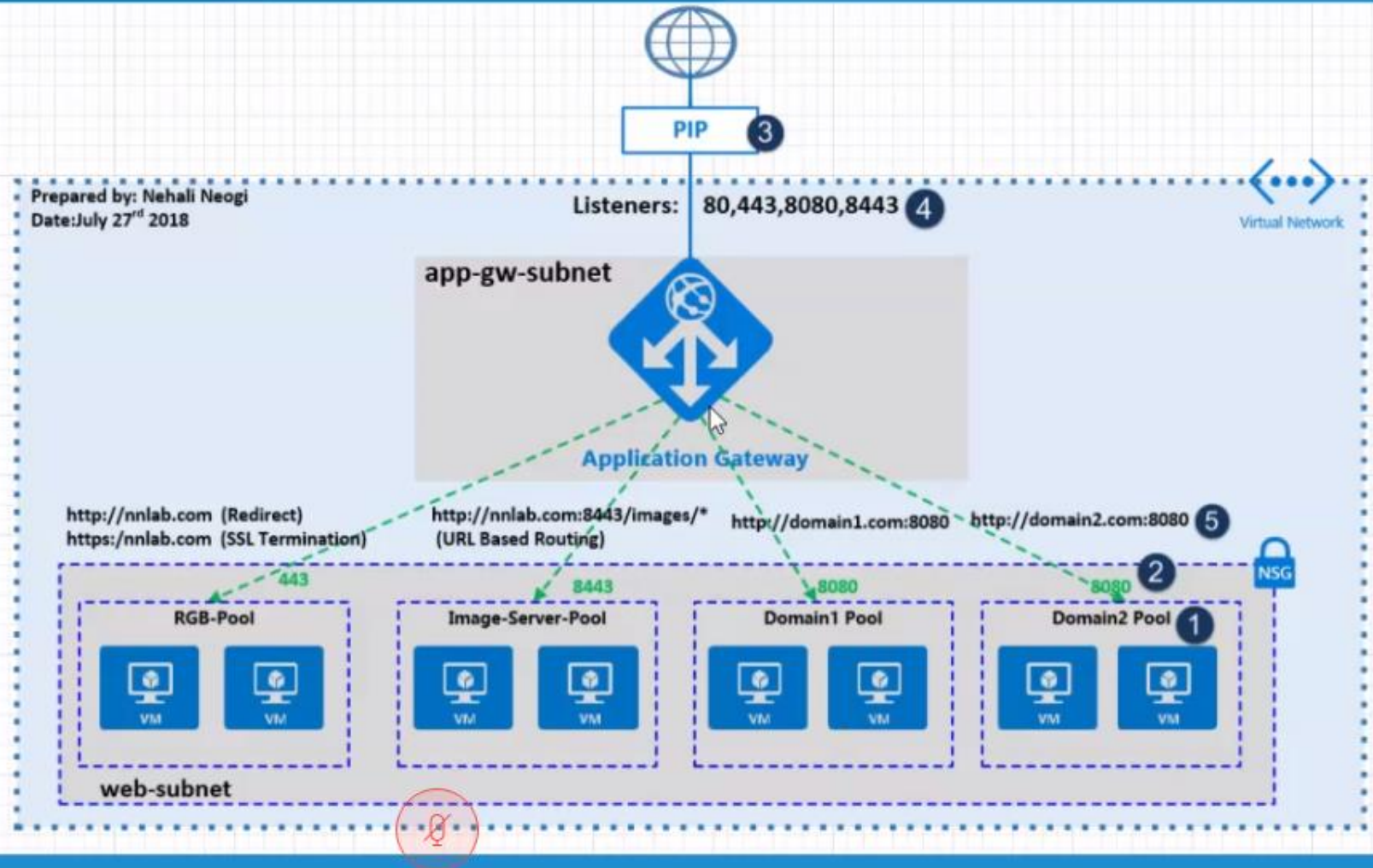
## Azure Application Gateway

### Features

- ✓ SSL Offloading
- ✓ URL Based Routing
- ✓ HTTP to HTTPS Redirection
- ✓ Multiple-Site hosting
- ✓ Cookie Based Session affinity

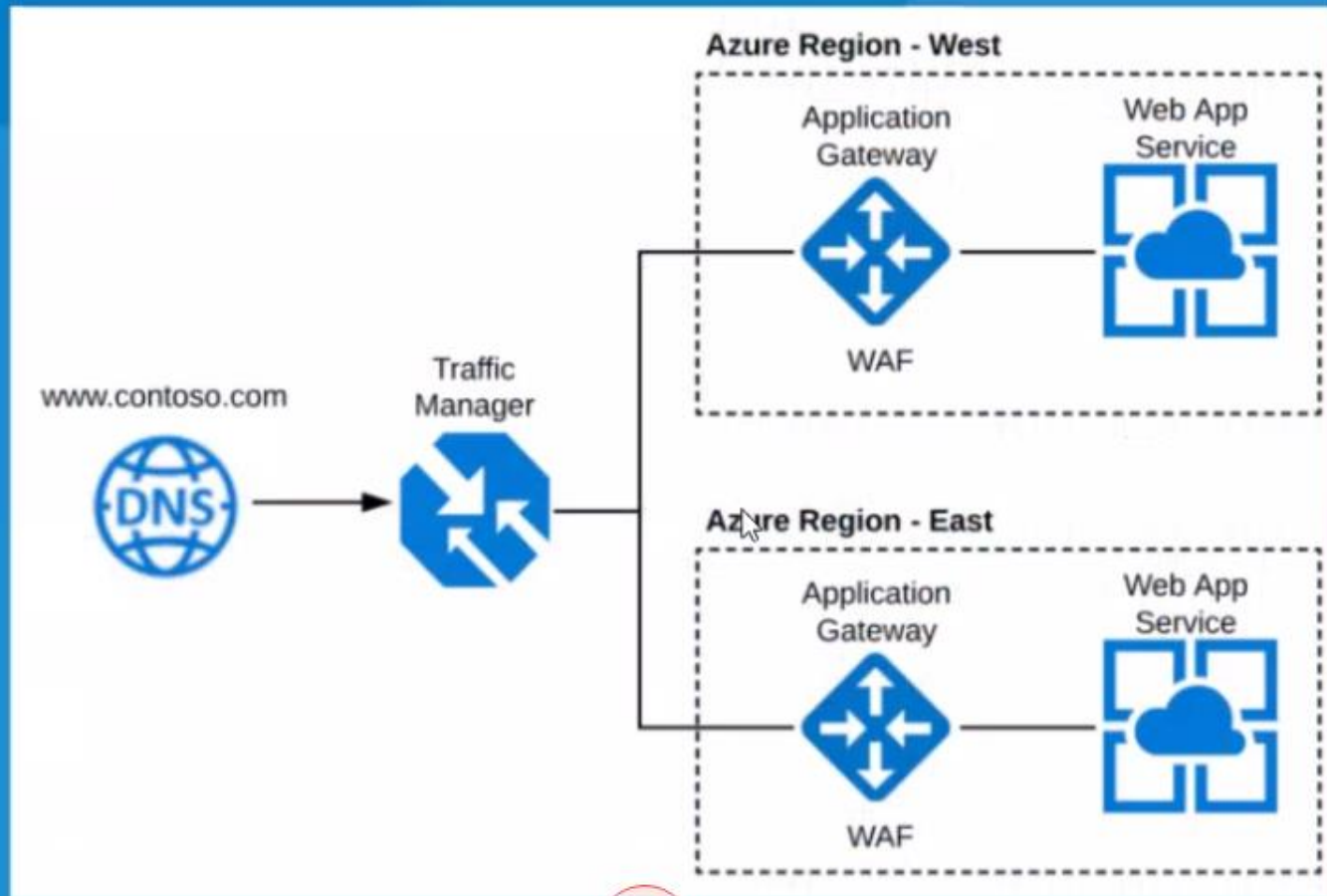
### Steps

- 1 Create BackendPool
- 2 Create HttpSettings
- 3 Create FrontEnd Public IP
- 4 Create HttpListener
- 5 Create HttpRule





# Azure Traffic Manager



# Azure DNS Zone

