

About Rahul Joshi:

22 Years exp, 15th year as Microsoft certified trainer & AWS Authorized instructor

- Helping customers add Application Modernization capabilities by Replatforming ASP.NET sites to Azure App Services, Rearchitecting of monolithic applications to microservices or containers.
- Reengineering of legacy applications to cloud-native apps with improved user experience.
- Designing cloud strategy, solution design, cloud adoption frameworks, app modernization and cloud migration.
- Develop Proof of Concept by working closely with Microsoft and Amazon Web Services and design frameworks for cloud adoption and Enterprise Architecture, Cloud Infrastructure/ Migrations.
- Responsible for Migration to Microsoft Azure (Brownfield and Greenfield Projects). In-Premise To Cloud Migration and Storage Migration.
- Perform Application Readiness Assessment, an investigation at application level in preparation for cloud deployment, to look at issues that will either block or detract from the application's abilities to fully utilize the cloud, then act on this report to ensure cloud readiness.
- Designing applications for scalability
- Migrating to PaaS & Container Architecture, Migrating from Traditional .NET Application Web Apps

"Executed more than 580+ Trainings engagements on Microsoft Azure for more than 220+ clients"

Google Drive Link:

https://drive.google.com/drive/folders/181ebdbVLk5xpLu5ArR_BFWeM9b3N2x3?usp=sharing

Recording:

Please Note, Post Session Completes Zoom Recording Link will be shared on WhatsApp, Download it from Zoom Directly. It will not be uploaded on Google Drive

One Note Documentation:

<https://1drv.ms/u/s!Aht-oGFG3XwWgagy2dnZHvXQmk0wkg>

Case Study:

The customer was very excited when the professionals demonstrated the concept of Load Balancer and it was using GUI as well as Command Line method. The customer now has a unique requirement in short (2 requirements). The earlier load balancer as a Local Load Balancer where Virtual Machines and their NIC was used. This time, the customer wants to go global, they have customer and partners across the world and load balancer has to be used for these customers so that "Performance", "High Availability" is maintained at highest level. The customer wants a POC of how global load balance can be effectively used.

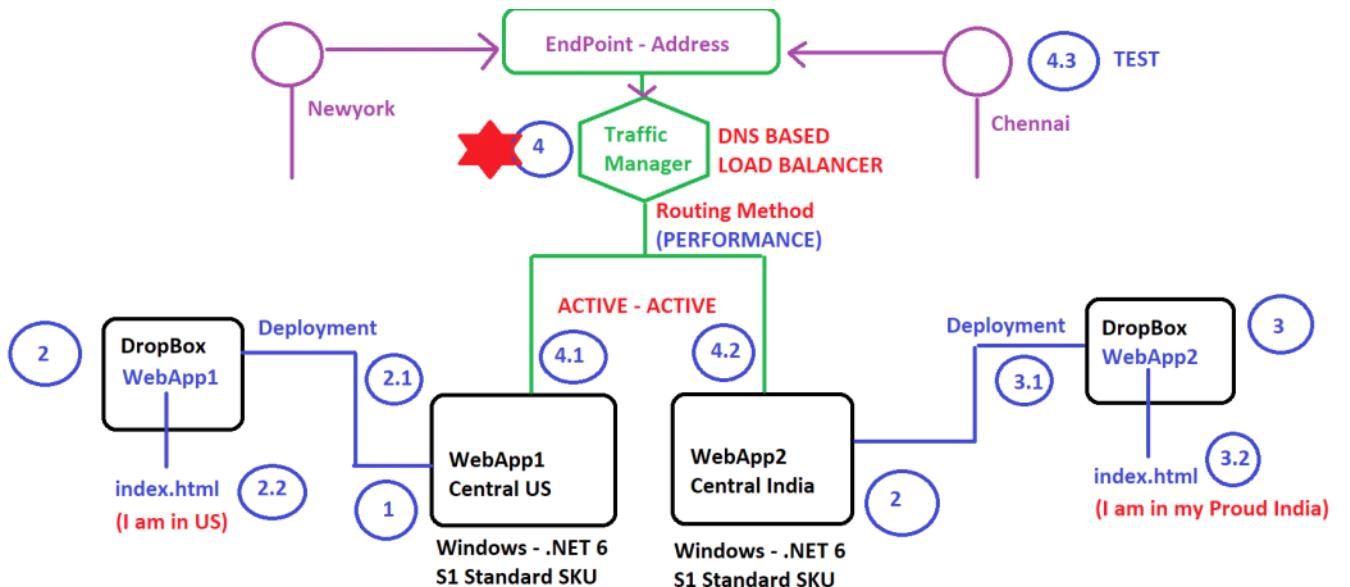
STAR

Situation = Case Study

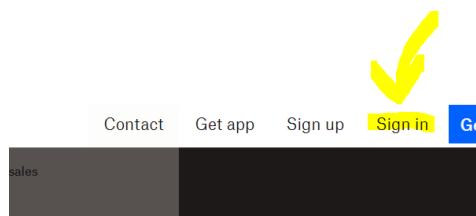
Task:

1. Two WebApps (Code - .NET 6, Windows, SKU - S1 Standard - NO GIT, NO NETWORK, NO MONITORING)
 - a. 1st WebApp in Central US
 - b. 2nd WebApp in Central India
2. Deploy Code (HTML) on these WebApps (DropBox - www.dropbox.com)
3. Load Balance - **Traffic Manager - DNS Based Load Balancer**
 - a. **Routing Method (EXAM Question)**
 - i. Priority
 - ii. Weight
 - iii. **Performance - Latency (Taking to the closest WebApp)**
 - iv. Subnet
 - v. Name / Value
4. Test the Load Balancer

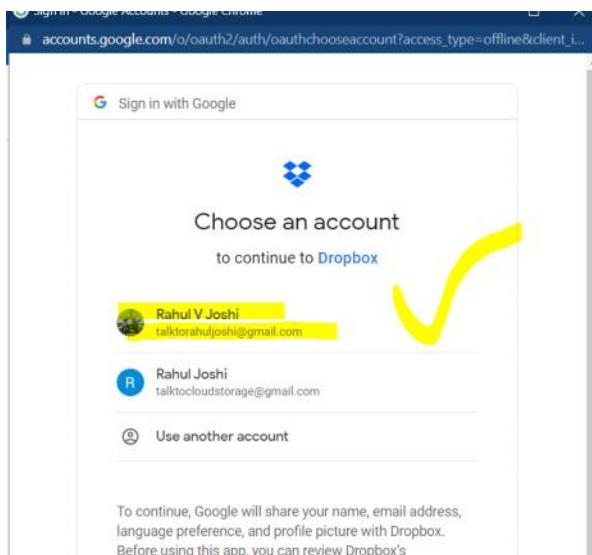
Action:



<https://www.dropbox.com/>



A screenshot of the Dropbox sign-in page. It includes fields for "Email" and "Password", both with placeholder text. Below the "Email" field is a "Remember me" checkbox. To the right of the "Email" field is a "Sign in" button. At the bottom, there is a link for "Forgot your password?".



If you are creating DropBox for 1st time, then it can ask 2 questions.

Don't download any software

1. Which Plan - Scroll down and select **(Basic - FREE)**
2. Purpose of using DropBox - **Select any purpose**

Action: Creating WebApp in Central US and in Central India

Create Web App ...

Subscription * MSDN Platforms

Resource Group * (New) rg-trafficmanager-remove Create new 

Instance Details

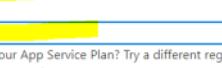
Need a database? Try the new Web + Database experience. 

Name * webappcentralusrahul .azurewebsites.net

Publish * Code Docker Container Static Web App

Runtime stack * .NET 6 (LTS)

Operating System * Linux Windows 

Region * Central US 
Not finding your App Service Plan? Try a different region or select your App Service Environment.

In the name of the webapp we are using "CentralUS" word, as going forward we will use nslookup to query the DNS record and we will see this name, which will prove, the request is handled by central us webapp

App Service Plan

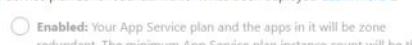
App Service plan pricing tier determines the location, features, cost and compute resources associated with your app.
[Learn more](#)

Windows Plan (Central US) * (New) ASP-rgtrafficmanagerremove-a2fe Create new 

Sku and size * Standard S1 
100 total ACU, 1.75 GB memory
[Change size](#)

Zone redundancy

An App Service plan can be deployed as a zone redundant service in the regions that support it. This is a deployment time only decision. You can't make an App Service plan zone redundant after it has been deployed. [Learn more](#)

Zone redundancy 

Enabled: Your App Service plan and the apps in it will be zone redundant. The minimum App Service plan instance count will be three.

Disabled: Your App Service Plan and the apps in it will not be zone redundant. The minimum App Service plan instance count will be one.

[Review + create](#) [< Previous](#) [Next : Deployment >](#)

Create Web App ...

Basics Deployment Networking Monitoring Tags Review + create

Enable GitHub Actions to continuously deploy your app. GitHub Actions is an automation framework that can build, test, and deploy your app whenever a new commit is made in your repository. If your code is in GitHub, choose your repository here and we will add a workflow file to automatically deploy your app to App Service. If your code is not in GitHub, go to the Deployment Center once the web app is created to set up your deployment. [Learn more](#)

GitHub Actions settings

Continuous deployment Disable Enable 

GitHub Actions details

Select your GitHub details, so Azure Web Apps can access your repository.

GitHub account Authorize

Organization Select organization

Repository Select repository

Branch Select branch

Workflow configuration

File with the GitHub Actions workflow configuration.

[Review + create](#) [< Previous](#) [Next : Networking >](#)

Create Web App

Basics Deployment Networking Monitoring Tags Review + create

Web Apps can be provisioned with the inbound address being public to the internet or isolated to an Azure virtual network. Web Apps can also be provisioned with outbound traffic able to reach endpoints in a virtual network, be governed by network security groups or affected by virtual network routes. By default, your app is open to the internet and cannot reach into a virtual network. These aspects can also be changed after the app is provisioned. [Learn more](#)

Enable network injection *

On Off

Create Web App

Basics Deployment Networking **Monitoring** Tags Review + create

Azure Monitor application insights is an Application Performance Management (APM) service for developers and DevOps professionals. Enable it below to automatically monitor your application. It will detect performance anomalies, and includes powerful analytics tools to help you diagnose issues and to understand what users actually do with your app. [Learn more](#)

Application Insights

Enable Application Insights *

No Yes

Create Web App

Basics Deployment Networking Monitoring Tags **Review + create**

Summary

 **Web App**
by Microsoft

Standard (S1) sku
Estimated price ~ **3155.50 INR/Month**

Details

Subscription	ee7bab70-0709-4f4f-9829-790225dc5be4
Resource Group	rg-trafficmanager-remove
Name	webappcentralusrahul
Publish	Code
Runtime stack	.NET 6 (LTS)

App Service Plan (New)

Name	ASP-rgtrafficmanagerremove-a2fe
Operating System	Windows
Region	Central US
SKU	Standard
Size	Small
ACU	100 total ACU
Memory	1.75 GB memory

Create

< Previous

Next >

[Download a template for automation](#)



Microsoft.Web-WebApp-Portal-9ba44518-a2eb | Overview

Deployment

Search     

We'd love your feedback! →

*** Deployment is in progress

 Deployment name: Microsoft.Web-WebApp-Portal-9b...
Subscription: [MSDN Platforms](#)
Resource group: rg-trafficmanager-remove

Start time: 9/17/2022, 10:42:35 AM

Correlation ID: 2876d513-7318-446a-a145-6ebcb

Deployment details

Resource	Type	Status	Operation details
No results.			

Now, we create WebApp for Central India

Home >

App Services

Default Directory (talktorahuljoshioutlook.onmicrosoft.com)

[Create](#) [Manage view](#) [Refresh](#) [Export to CSV](#)

Filter for any field... Subscription equals all Resources

Name ↑↓	Status ↑↓	Location ↑↓
...

Create Web App

platform to perform infrastructure maintenance. [Learn more](#)

Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *	MSDN Platforms
Resource Group *	rg-trafficmanager-remove

[Create new](#)

Instance Details

Need a database? Try the new Web + Database experience. [Learn more](#)

Name *	webappcentralindiarahul
Publish *	<input checked="" type="radio"/> Code <input type="radio"/> Docker Container <input type="radio"/> Static Web App
Runtime stack *	.NET 6 (LTS)
Operating System *	<input type="radio"/> Linux <input checked="" type="radio"/> Windows
Region *	Central India

[Not finding your App Service Plan? Try a different region or select your App Service Environment.](#)

App Service Plan

App Service plan pricing tier determines the location, features, cost and compute resources associated with your app.
[Learn more](#)

Windows Plan (Central India) *	(New) ASP-rgtrafficmanagerremove-bc55
Sku and size *	Standard S1 100 total ACU, 1.75 GB memory Change size

Zone redundancy

An App Service plan can be deployed as a zone redundant service in the regions that support it. This is a deployment time only decision. You can't make an App Service plan zone redundant after it has been deployed. [Learn more](#)

Zone redundancy	<input type="radio"/> Enabled: Your App Service plan and the apps in it will be zone redundant. The minimum App Service plan instance count will be three.
	<input checked="" type="radio"/> Disabled: Your App Service Plan and the apps in it will not be zone redundant. The minimum App Service plan instance count will be one.

[Review + create](#)

[< Previous](#)

[Next : Deployment >](#)

All remaining steps, as before

Create Web App

Basics Deployment Networking Monitoring Tags Review + create

Summary

Web App by Microsoft

Standard (S1) sku
Estimated price - 3471.14 INR/Month

Details

Subscription	ee7bab70-0709-4f4f-9829-790225dc5be4
Resource Group	rg-trafficmanager-remove
Name	webappcentralindiarahul
Publish	Code
Runtime stack	.NET 6 (LTS)

App Service Plan (New)

Name	ASP-rgtrafficmanagerremove-bc55
Operating System	Windows
Region	Central India
SKU	Standard
Size	Small
ACU	100 total ACU
Memory	1.75 GB memory

Create < Previous Next > Download a template for automation

Home > Microsoft.Web-WebApp-Portal-be877c59-8e5d | Overview

Deployment

Search Delete Cancel Redeploy Download Refresh

We'd love your feedback! →

Deployment is in progress

Deployment name: Microsoft.Web-WebApp-Portal-be... Start time: 9/17/2022, 10:45:37 AM
Subscription: MSDN Platforms Correlation ID: 3ac0fb26-d837-485c-b

Deployment details

Resource	Type	Status	Operation
ASP-rgtrafficmanagerremove-bc55	Microsoft.Web/serverfarm	OK	Operation

App Services

Default Directory (talktorahuljoshioutlook.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Start Restart Stop Delete

Filter for any field... Subscription equals all Resource group equals all Location equals all Add filter

No grouping List view

Name	Status	Location	Pricing Tier	App Service Plan	Subscription	App Type
webappcentralindiarahul	Running	Central India	Standard	ASP-rgtrafficmanagerremove-bc55	MSDN Platforms	Web App
webappcentralusrahul	Running	Central US	Standard	ASP-rgtrafficmanagerremove-a2fe	MSDN Platforms	Web App

Name	Owner
Point To Site	me
Central US	me
Central India	me
WebApp & Storage With Git.txt	me
Vnet To Vnet.txt	me
Load Balancer Script Master.txt	me
IP Address Range - Web Server and DB Server.xlsx	me
IP Address Range.xlsx	me

Download both the folders, as they contain "index.html" which we will upload to DROPBOX LATER

Action - This is the part of "Deployment", please note we will be using "DropBox" as Deployment and not CI-CD OR GIT

Central US WebApp

Home >

App Services ⚡ ...

Default Directory (talktorahuljoshioutlook.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Start Restart Stop Delete

Filter for any field... Subscription equals all Resource group equals all Location equals all Add filter

Name	Status	Location	Pricing Tier	App Service Plan
webappcentralindiarahul	Running	Central India	Standard	ASP-rgtrafficmanagerremove-bc5!
webappcentralusrahul	Running	Central US	Standard	ASP-rgtrafficmanagerremove-a2fe

Home > App Services > webappcentralusrahul

webappcentralusrahul | Deployment Center ⭐ ...

Save Discard Browse Manage publish profile Sync Leave Feedback

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots Deployment Center

Settings Logs FTPS credentials

You're now in the production slot, which is not recommended for setting up CI/CD. Learn more

Deploy and build code from your preferred source and build provider. Learn more

Source* Select code source

Continuous Deployment (CI/CD)

GitHub Bitbucket Local Git Azure Repos

Manual Deployment (Push)

External Git OneDrive Dropbox



webappcentralusrahul | Deployment Center

App Service

Search Save Discard Browse Manage publish profile Sync Leave Feedback

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots Deployment Center

Settings Configuration

Settings Logs FTPS credentials

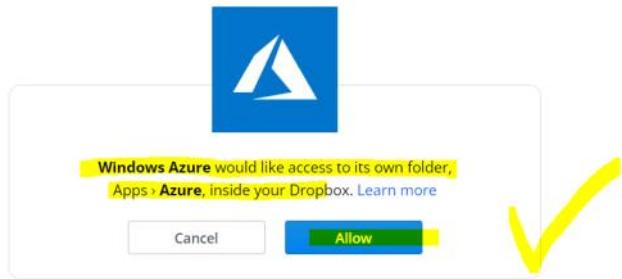
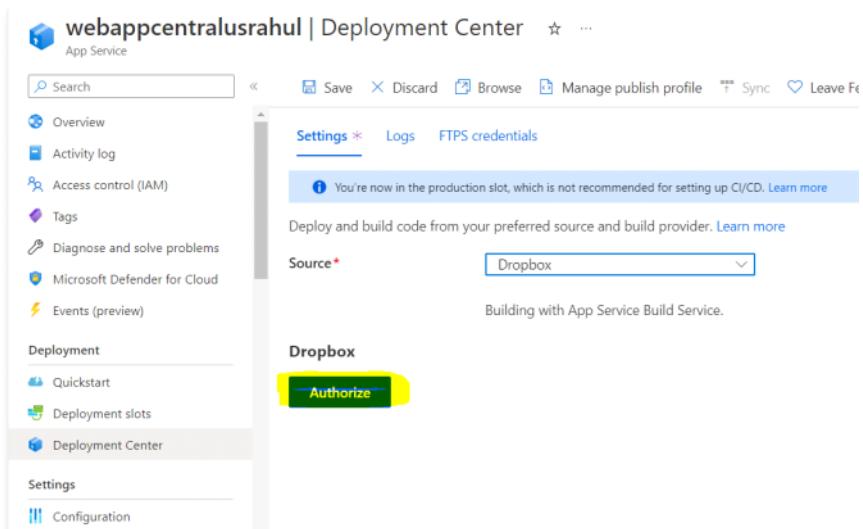
You're now in the production slot, which is not recommended for setting up CI/CD. Learn more

Deploy and build code from your preferred source and build provider. Learn more

Source* Dropbox

Building with App Service Build Service.

Dropbox Authorize



webappcentralusrahul | Deployment Center

Rahul Joshi

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Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots Deployment Center

Settings Configuration Authentication

Settings Logs FTPS credentials

You're now in the production slot, which is not recommended for setting up CI/CD. Learn more

Deploy and build code from your preferred source and build provider. Learn more

Source* Dropbox

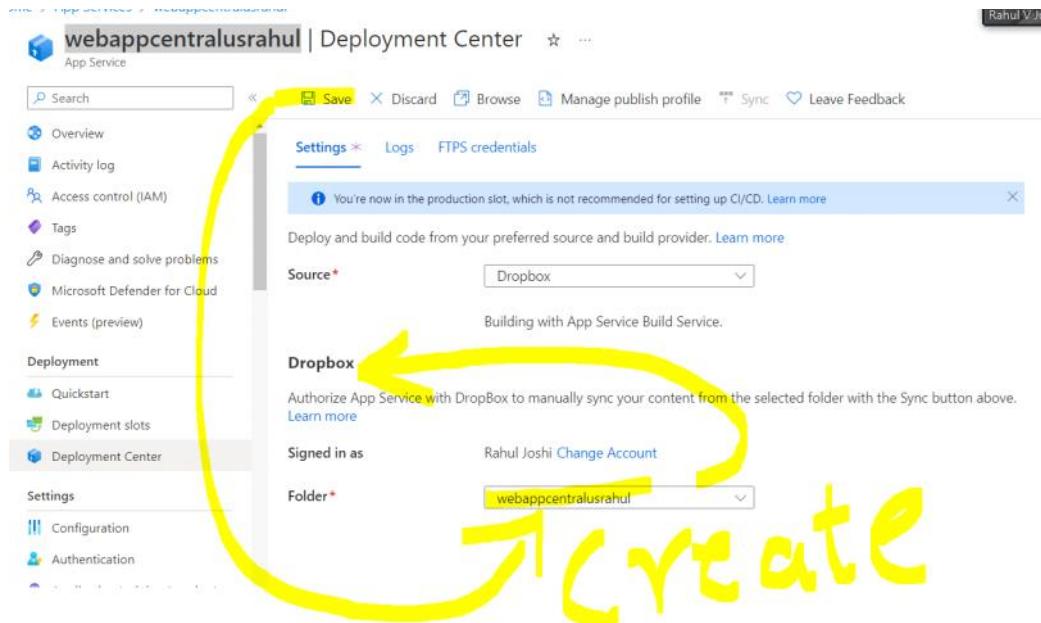
Building with App Service Build Service.

Dropbox

Authorize App Service with DropBox to manually sync your content from the selected folder with the Sync button above. Learn more

Signed in as Rahul Joshi Change Account

Folder* webappcentralusrahul



webappcentralusrahul | Deployment Center

App Service

Search

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Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots Deployment Center

Settings Configuration Authentication Application Insights (preview)

Settings Logs FTPS credentials

Deploy and build code from your preferred source and build provider. [Learn more](#)

Source Dropbox [Disconnect](#)

Dropbox

Signed in as Rahul Joshi

Folder /webappcentralusrahul

Build

Build provider App Service Build Service

Runtime stack .NET

Version v6.0



Now, go to DropBox

① Upgrade your Dropbox for the best way to store, share and work from anywhere. [Compare plans](#)

Dropbox

Home

- All files
- Apps

Recents

Starred

Photos

Dropbox

Upload Create ...

Name ↑

Apps



Dropbox

Home

- All files
- Apps
- Azure

Recents

Starred

Photos

Dropbox / Apps

Upload Create Organize ...

Name ↑

Azure



Dropbox

Home

- All files
- Apps
- Azure
- webappcentral...

Recents

Starred

Dropbox / Apps / Azure

Upload Create Organize ...

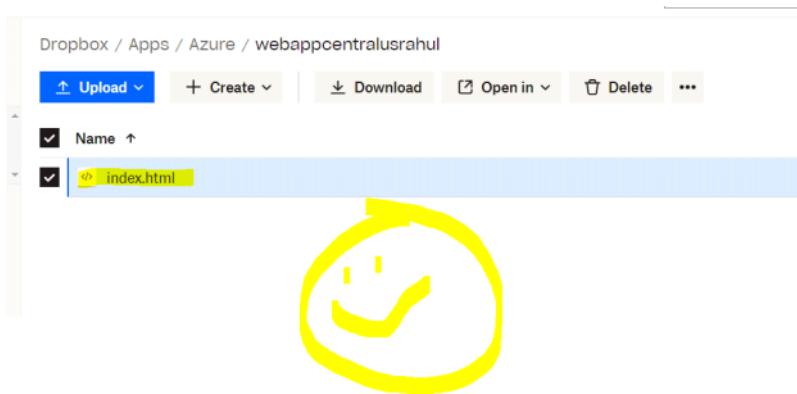
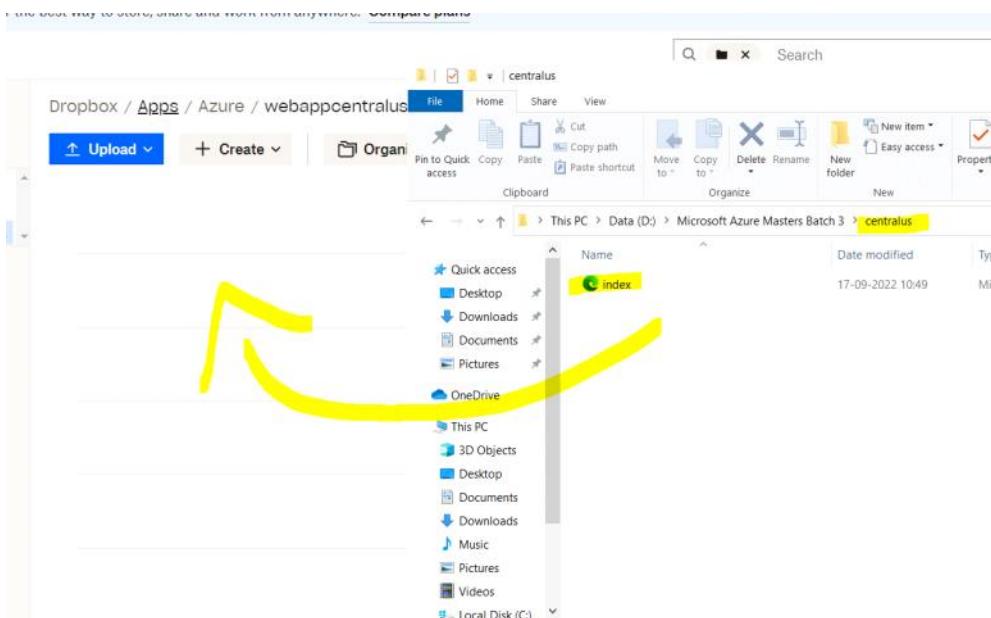
Name ↑

webappcentralusrahul



Once you go this WebApp folder, upload the index.html of central us in this folder.

PLEASE NOTE, DO NOT UPLOAD A FOLDER, DIRECTLY UPLOAD THE INDEX.HTML, SOME PEOPLE MAKE MISTAKE, THEY UPLOAD A FOLDER IN THE ABOVE FOLDER AND THEN THEIR WEBSITE WORK.



WHEN YOU UPLOAD THE FILE TO DROPBOX, MICROSOFT AZURE DOES NOT KNOW IT, AS THIS DEPLOYMENT IS "MANUAL DEPLOYMENT" AND NOT CI-CD, SO WE HAVE TO GO BACK TO AZURE - WEBAPP - DEPLOYMENT AND CLICK THE BUTTON SYNC, WHEN YOU CLICK SYNC, AZURE CONTACTS DROPBOX AND GETS NEW DATA UPLOADED IN THE WEBAPP.

[View the Website](#)

webappcentralusrahul App Service

Search

Browse Stop Swap Restart Delete Refresh Get publish profile Reset publish profile Share to mobile ...

Overview Essentials

Resource group (move) rg-trafficmanager-remove

Status Running

Location Central US

Subscription (move) MSDN Platforms

Subscription ID ee7bab70-0709-4f4f-9829-790225dc5be4

URL <https://webappcentralusrahul.azurewebsites.net>

Health Check Not Configured

App Service Plan ASP-rgtrafficmanagerr-a2fe (S1: 1)

Dropbox Project <https://www.dropbox.com/home/Apps/Azure/webappcentralusrahul>

JSON View

This is US WebApp, I am in Central US

Repeat the same steps for Central India

Microsoft Azure

Search resources, services, and docs (G+/-)

Home > App Services

Default Directory (talktorahuljoshioutlook.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Start Restart Stop

Filter for any field... Subscription equals all Resource group equals all Location equals all Add filter

Name	Status	Location	Pricing Tier	App Service Plan
webappcentralindiarahul	Running	Central India	Standard	ASP-rgtrafficmanagerr
webappcentralusrahul	Running	Central US	Standard	ASP-rgtrafficmanagerr

webappcentralindiarahul | Deployment Center

Search Save Discard Browse Manage publish profile Sync

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots Deployment Center

Settings Logs FTPS credentials

You're now in the production slot, which is not recommended for setting up CI/CD. Learn more

Deploy and build code from your preferred source and build provider. Learn more

Source*

Select code source

Continuous Deployment (CI/CD)

- GitHub
- Bitbucket
- Local Git
- Azure Repos

Manual Deployment (Push)

- External Git
- OneDrive
- Dropbox**

webappcentralindiarahul | Deployment Center

Save Discard Browse Manage publish profile Sync Leave Feedback

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots Deployment Center

Settings Configuration Authentication Application Insights (preview) Identity

Source* Dropbox

Dropbox Building with App Service Build Service.

Authorize App Service with DropBox to manually sync your content from the selected folder with the Sync button at Learn more

Signed in as Rahul Joshi Change Account

Folder* /webappcentralindiarahul

Create

webappcentralindiarahul | Deployment Center

Save Discard Browse Manage publish profile Sync Leave Feedback

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots Deployment Center

Settings Configuration Authentication Application Insights (preview) Identity

Source Dropbox

Dropbox

Signed in as Rahul Joshi

Folder /webappcentralindiarahul

Build

Build provider App Service Build Service

Runtime stack .NET

Version v6.0

[Go To DropBox](#)

Upgrading your Dropbox account will give you more storage, faster speeds, and better security. [Compare plans](#)

Dropbox / Apps / Azure / webappcentralindiarahul

Upload Create Download Open in Delete ...

Name index.html

Dropbox / Apps / Azure

Upload + Create Organize ...

Name ↑

- webappcentralindiarahul
- webappcentralusrahul

ropbox

Dropbox / Apps / Azure / webappcentralindiarahul

Upload + Create Organize

File Home Share View

Clipboard

india

Desktop Downloads Documents Pictures OneDrive

This PC 3D Objects Desktop Documents Downloads Music Pictures Videos Local Disk (C): Data (D):

Dropbox

Home

All files

Apps Azure

webappcentralindiarahul

Recents

Starred

Upload Create Download Open in Delete ...

Name ↑

index.html

Sync is required, do not forget

webappcentralindiarahul | Deployment Center

Save Discard Browse Manage publish profile Sync Leave Feedback

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Microsoft Defender for Cloud Events (preview)

Deployment Quickstart Deployment slots

Settings Logs FTPS credentials

Deploy and build code from your preferred source and build provider. Learn more

Source Dropbox Disconnect

Dropbox

Signed in as Rahul Joshi

Folder /webappcentralindiarahul

Build

Verify the Website

webappcentralindiarahul App Service

Search | Browse | Stop | Swap | Restart | Delete | Refresh | Get publish profile | Reset publish profile | Share to mobile | ...

Overview

Click here to access our Quickstart guide for deploying code to your app →

Essentials

Resource group ([move](#)) rg-trafficmanager-remove

Status: Running

Location: Central India

Subscription ([move](#))

URL: <https://webappcentralindiarahul.azurewebsites.net>

Health Check: Not Configured

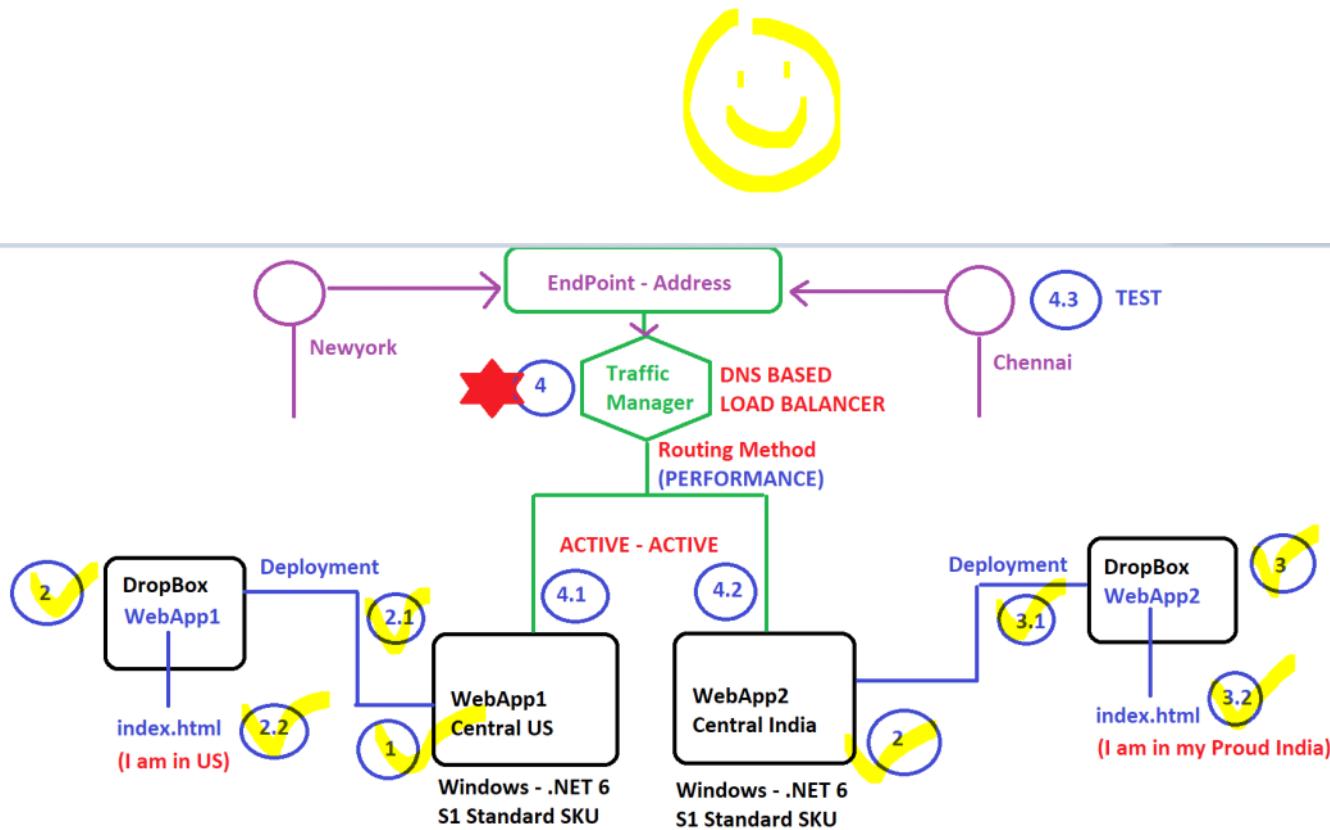
App Service Plan: ASP-rgtrafficmanagerremove-bc55 (\$1: 1)

Dropbox Project

JSON View



This is Central India WebApp, I am in my proud country INDIA



Traffic Manager

Azure Architect Center:

<https://learn.microsoft.com/en-us/azure/architecture/>

How to Choose Load Balancing Service: - EXAM Point of View and Interviews

<https://learn.microsoft.com/en-us/azure/architecture/guide/technology-choices/load-balancing-overview>

Global versus regional

- Global load-balancing services distribute traffic across regional backends, clouds, or hybrid on-premises services. These services route end-user traffic to the closest available backend. They also react to changes in service reliability or performance, in order to maximize availability and performance. You can think of them as systems that load balance between application stamps, endpoints, or scale-units hosted across different regions/geographies.
- Regional load-balancing services distribute traffic within virtual networks across virtual machines (VMs) or zonal and zone-redundant service endpoints within a region. You can think of them as systems that load balance between VMs, containers, or clusters within a region in a virtual network.

HTTP(S) versus non-HTTP(S)

- HTTP(S) load-balancing services are Layer 7² load balancers that only accept HTTP(S) traffic. They are intended for web applications or other HTTP(S) endpoints. They include features such as SSL offload, web application firewall, path-based load balancing, and session affinity.
- Non-HTTP/S load-balancing services can handle non-HTTP(S) traffic and are recommended for non-web workloads.

The following table summarizes the Azure load balancing services by these categories:

Service	Global/regional	Recommended traffic
Azure Front Door	Global	HTTP(S)
Traffic Manager	Global	non-HTTP(S)
Application Gateway	Regional	HTTP(S)
Azure Load Balancer	Regional	non-HTTP(S)



Official Website of Traffic Manager

<https://learn.microsoft.com/en-us/azure/traffic-manager/traffic-manager-overview>

Azure Traffic Manager is a DNS-based traffic load balancer.

This service allows you to distribute traffic to your public facing applications across the global Azure regions.

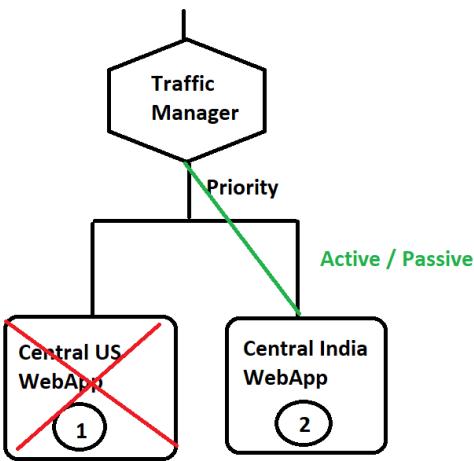
Traffic Manager uses DNS to direct the client requests to the appropriate service endpoint based on a traffic-routing method.

EXAM & Interview Website - Administration, Development, Architect

<https://learn.microsoft.com/en-us/azure/traffic-manager/traffic-manager-routing-methods>

- **Priority:** Select Priority routing when you want to have a primary service endpoint for all traffic. You can provide multiple backup endpoints in case the primary or one of the backup endpoints is unavailable.
- **Weighted:** Select Weighted routing when you want to distribute traffic across a set of endpoints based on their weight. Set the weight the same to distribute evenly across all endpoints.
- **Performance:** Select Performance routing when you have endpoints in different geographic locations and you want end users to use the "closest" endpoint for the lowest network latency.
- **Geographic:** Select Geographic routing to direct users to specific endpoints (Azure, External, or Nested) based on where their DNS queries originate from geographically. With this routing method, it enables you to be in compliance with scenarios such as data sovereignty mandates, localization of content & user experience and measuring traffic from different regions.
- **Multivalue:** Select MultiValue for Traffic Manager profiles that can only have IPv4/IPv6 addresses as endpoints. When a query is received for this profile, all healthy endpoints are returned.
- **Subnet:** Select Subnet traffic-routing method to map sets of end-user IP address ranges to a specific endpoint. When a request is received, the endpoint returned will be the one mapped for that request's source IP address.

Priority

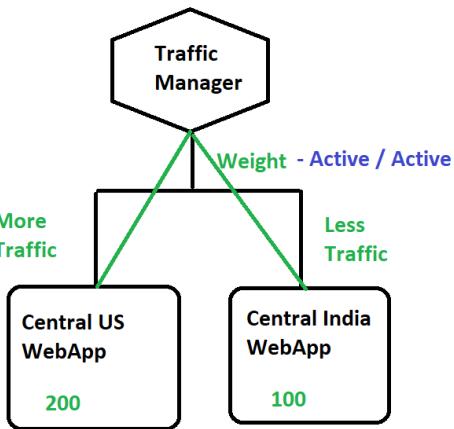


By Default, the traffic always goes to Active WebApp (Endpoint), when active goes down, the traffic is routed to next in Priority

Weight

In the Weighted traffic-routing method, you assign a weight to each endpoint in the Traffic Manager profile configuration. The weight is an integer from 1 to 1000. This parameter is optional. If omitted, Traffic Managers uses a default weight of '1'. The higher weight, the higher the priority.

For each DNS query received, Traffic Manager randomly chooses an available endpoint. The probability of choosing an endpoint is based on the weights assigned to all available endpoints. Using the same weight across all endpoints results in an even traffic distribution. Using higher or lower weights on specific endpoints causes those endpoints to be returned more or less frequently in the DNS responses.



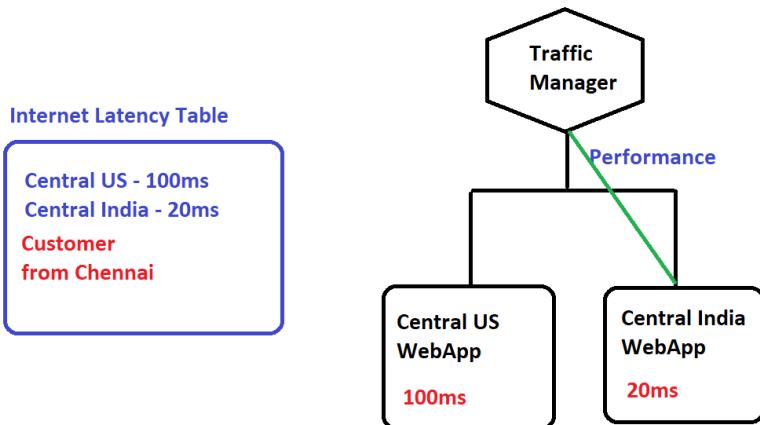
Performance - (Performance does not mean CPU, Memory, Disk) - HERE PERFORMANCE MEANS "LATENCY IN ROUND TRIP"

The 'closest' endpoint isn't necessarily closest as measured by geographic distance

Instead, the 'Performance' traffic-routing method determines the closest endpoint by measuring network latency.

Secret:

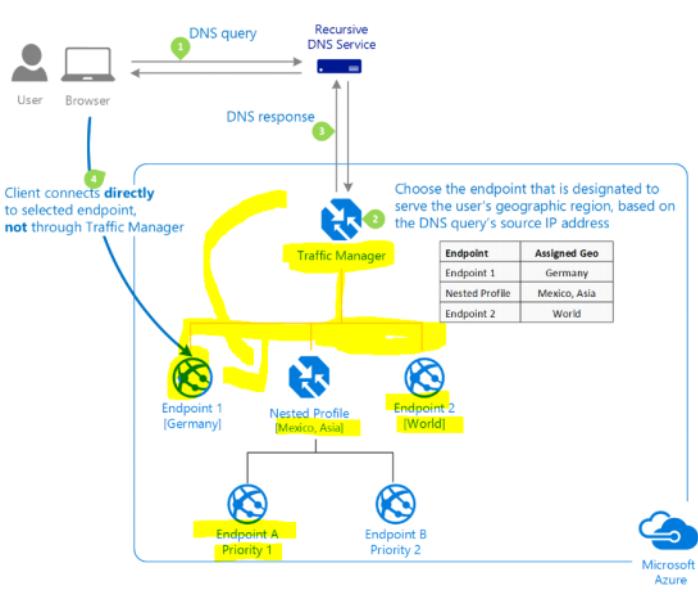
Traffic Manager maintains an Internet Latency Table to track the round-trip time between IP address ranges and each Azure datacenter.



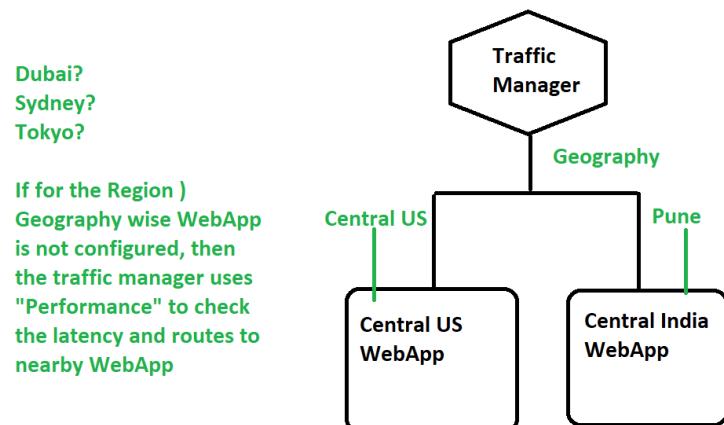
Geography

Traffic Manager profiles can be configured to use the Geographic routing method so that users get directed to specific endpoints (Azure, External, or Nested) based on the geographic location their DNS query **originates from**

With this routing method, it enables you to be in **compliance with data sovereignty mandates**, **localization of content** & user experience and measuring traffic from different regions.



Outer Traffic Manager uses "Performance" and Inner Traffic Manager uses "Priority". One Traffic Manager can also call Another Traffic Manager



Multi-Value

The Multivalue traffic-routing method allows you to get multiple healthy endpoints in a single DNS query response. This configuration enables the caller to do client-side retries with other endpoints in case a returned endpoint being unresponsive.

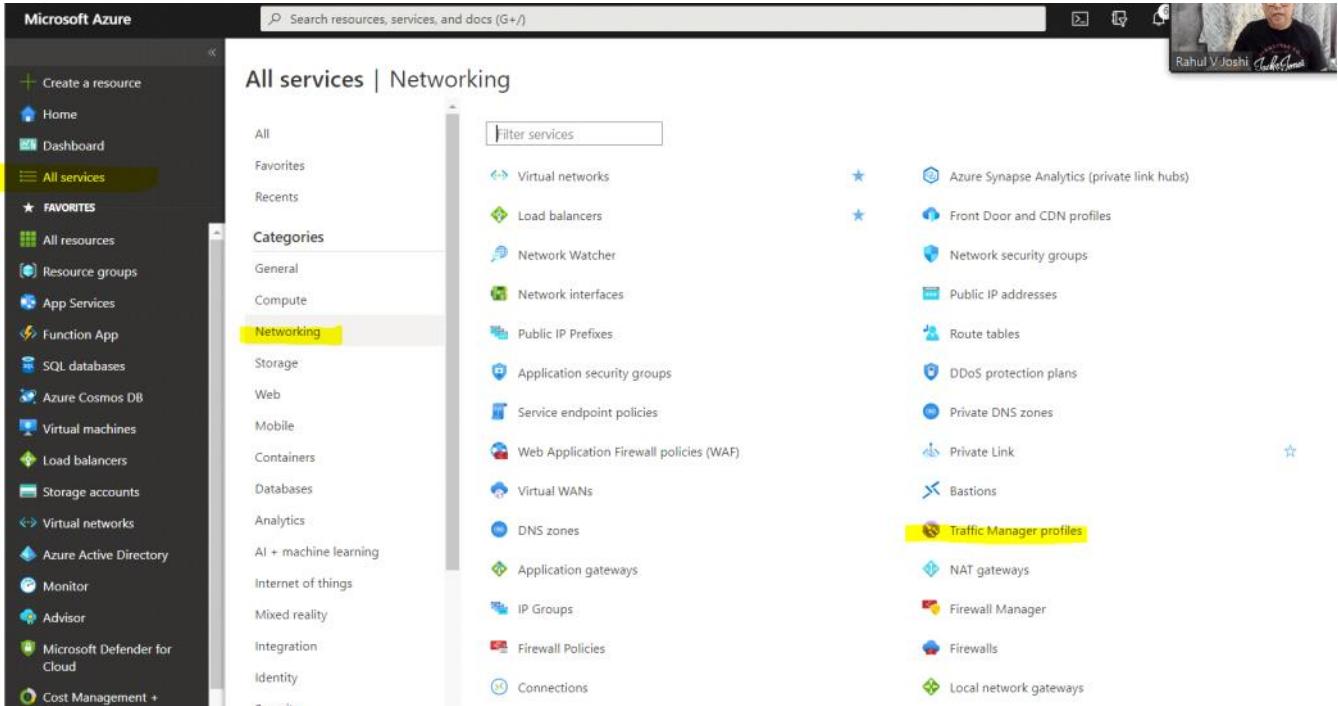
MultiValue routing returns multiple healthy endpoints in a single query response. The main advantage of this is that, if an endpoint is unhealthy, the client has more options to retry without making another DNS call (which might return the same value from an upstream cache).

Subnet

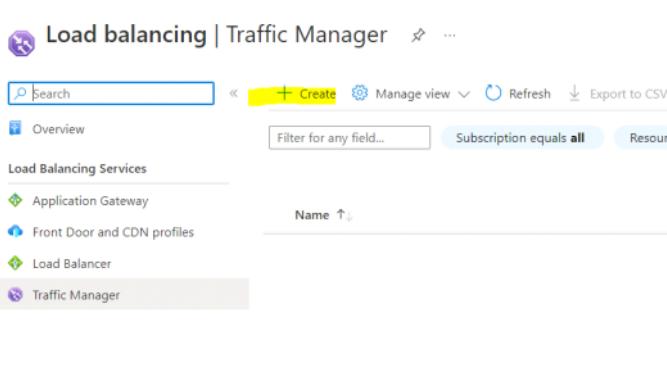
The Subnet traffic-routing method allows you to map a set of end-user IP address ranges to specific endpoints in a profile.

The IP address to be mapped to an endpoint can be specified as CIDR ranges (for example, 1.2.3.0/24) or as an address range (for example, 1.2.3.4-5.6.7.8). The IP ranges associated with an endpoint need to be unique within that profile

Activity: Configuring Traffic Manager

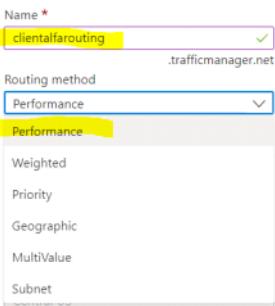


The screenshot shows the Microsoft Azure portal interface. The left sidebar is titled 'All services' and includes categories like Favorites, All resources, Resource groups, App Services, Function App, SQL databases, Azure Cosmos DB, Virtual machines, Load balancers, Storage accounts, Virtual networks, Azure Active Directory, Monitor, Advisor, Microsoft Defender for Cloud, and Cost Management. The 'Networking' category is currently selected. The main content area is titled 'All services | Networking' and lists various networking components: Virtual networks, Load balancers, Network Watcher, Network interfaces, Public IP Prefixes, Application security groups, Service endpoint policies, Web Application Firewall policies (WAF), Virtual WANs, DNS zones, Application gateways, IP Groups, Firewall Policies, and Connections. A 'Traffic Manager profiles' item is highlighted with a yellow box. The top right corner shows a user profile picture of 'Rahul V Joshi'.



The screenshot shows the 'Load balancing | Traffic Manager' page. The left sidebar lists 'Load Balancing Services' with items: Application Gateway, Front Door and CDN profiles, Load Balancer, and Traffic Manager. The 'Traffic Manager' item is highlighted with a yellow box. The main content area shows a table with a single row for 'clientfarouting'. The 'Create' button at the top left is highlighted with a yellow box.

Create Traffic Manager profile



The screenshot shows the 'Create Traffic Manager profile' form. The 'Name' field is filled with 'clientfarouting'. The 'Routing method' dropdown is set to 'Performance'. Other options shown in the dropdown include Weighted, Priority, Geographic, MultiValue, and Subnet. The entire form is enclosed in a light gray border.

Create Traffic Manager profile ...

Name * .trafficmanager.net

Routing method

Subscription *

Resource group * Create new

Resource group location

[Create](#) [Automation options](#)

Resource Group is asked, because "JSON" configuration of Traffic Manager is saved in this Resource Group (JSON File)

TABLE KEY: Generally Available In Preview In Preview (hover to view expected timeframe) Future availability (hover to view expected timeframe)

		AUSTRALIA	INDIA	UNITED STATES
Products	Non-regional			
Traffic Manager				

So, when you configure Traffic Manager, Region is ignored as Traffic Manager is "Non-Regional" Service

Create Traffic Manager profile ...

Name * .trafficmanager.net

Routing method

Subscription *

Resource group * Create new

Resource group location

[Create](#) [Automation options](#)

Load balancing | Traffic Manager

Search Create Manage view Refresh Export to CSV Open query Assign

Overview Filter for any field... Subscription equals all Resource group equals all Loca

Load Balancing Services

- Application Gateway
- Front Door and CDN profiles
- Load Balancer
- Traffic Manager

Name ↑ Status ↑ Routin... ↑

clientalfarouting Enabled Performance

All services > Load balancing | Traffic Manager > clientalfarouting

clientalfarouting | Endpoints

Traffic Manager profile

Search Add Refresh

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Endpoints

Configuration Real user measurements Traffic view Properties

Search endpoints

Name ↑	Status ↑	Monitor status ↑	Tj
No results.			

Add endpoint

clientalfarouting

Type * ⓘ

Azure endpoint This means Services in Azure

Azure endpoint Outside Azure or a Public IP

External endpoint

Nested endpoint

Calling Another Traffic Manager

Add endpoint

clientalfarouting

Type * ⓘ

Azure endpoint

Name *

centralusendpoint

Target resource type

Cloud service

Cloud service

App Service

App Service slot

Public IP address

Add as disabled

Add endpoint

Azure endpoint

Name * centralusendpoint

Target resource type App Service

Target resource * webappcentralusrahul (Central US)

Custom Header settings

Add as disabled

Add

clientalfarouting | Endpoints

Traffic Manager profile

+ Add Refresh

Name ↑↓	Status ↑↓	Monitor status ↑↓
centralusendpoint	Enabled	Checking endpoint

Search endpoints

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Configuration

Real user measurements

Traffic view

Endpoints

Properties

Add endpoint

Azure endpoint

Name * centralindiaendpoint

Target resource type App Service

Target resource * webappcentralindiarahul (Central India)

Custom Header settings

Add as disabled

Add

clientalfarouting | Endpoints

Name ↑	Status ↑↓	Monitor status ↑↓	Type ↑↓	Location ↑↓
centraluseendpoint	Enabled	Checking endpoint	Azure endpoint	Central US
centralindiaendpoint	Enabled	Checking endpoint	Azure endpoint	Central India

Verify:

clientalfarouting | Overview

Resource group (move) : rg-trafficmanager-remove
Status : Enabled
Subscription (move) : MSDN Platforms
Subscription ID : ee7bab70-0709-4f4f-9829-790225dc5be4
Tags (edit) : Click here to add tags

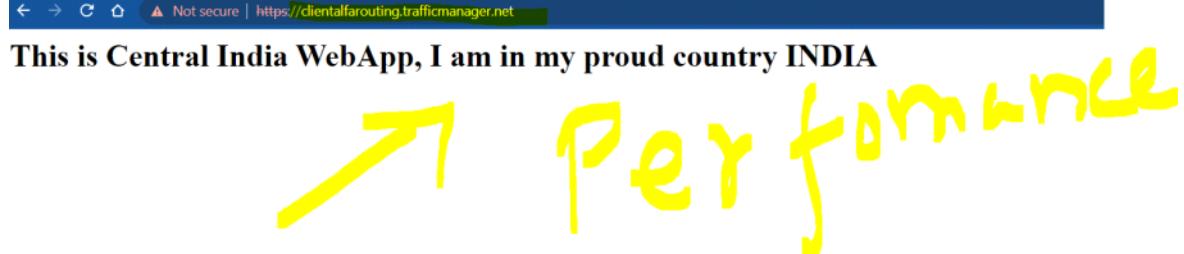
DNS name : http://clientalfarouting.trafficmanager.net
Monitor status : Unknown
Routing method : Performance

nslookup <DNS of traffic manager> without http

```
C:\Users\RAHUL>nslookup clientalfarouting.trafficmanager.net
Server: UnKnown
Address: 192.168.0.1

Non-authoritative answer:
Name:    waws-prod-pn1-021-f6b3.centralindia.cloudapp.azure.com
Address: 20.192.170.9
Aliases: clientalfarouting.trafficmanager.net
          webappcentralindiarahul.azurewebsites.net
          waws-prod-pn1-021.sip.azurewebsites.windows.net

C:\Users\RAHUL>
```



Let's Test the failover, we will stop the WebApp of Central India and we will check, if the Traffic Manager routes to Central US, as that was next in the latency table.

All services > App Services >

App Services

Default Directory (talktorahuljoshioutlook.onmicrosoft.com)

+ Create Manage view ...

Filter for any field...

Name ↑

- webappcentralindiarahul
- webappcentralusrahul

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Browse Stop Swap Restart Delete Refresh Get

Resource group (move) rg-trafficmanager-remove

Status Running

Location Central India

URL https://webappcentralindiarahul

Health Check Not Configured

App Service Plan ASP-rgtrafficmanagerremove

Mute Stop Video Security Participants Chat New Share Pause Share You are screen sharing Stop Share

Error 403 - This web app is stopped.

The web app you have attempted to reach is currently stopped and does not accept any requests. Please try to reload the page or visit it again soon.

If you are the web app administrator, please find the common 403 error scenarios and resolution [here](#). For further troubleshooting tools and recommendations, please visit [Azure Portal](#).

You can also disable it in Traffic Manager, so traffic is not routed there

All services > clientfarouting >

centralindiaendpoint

clientfarouting

Save Discard Delete

Status

Disabled Enabled

Monitor status

Degraded

Type

Azure endpoint

Target resource type

App Service

*Target resource

webappcentralindiarahul

Custom Header settings

```
C:\Users\RAHUL>nslookup clientalfarouting.trafficmanager.net
Server: Unknown
Address: 192.168.0.1

Non-authoritative answer:
Name: waws-prod-pn1-021-f6b3.centralindia.cloudapp.azure.com
Address: 20.192.170.9
Aliases: clientalfarouting.trafficmanager.net
webappcentralindiarahul.azurewebsites.net
waws-prod-pn1-021.sip.azurewebsites.windows.net

C:\Users\RAHUL>nslookup clientalfarouting.trafficmanager.net
Server: Unknown
Address: 192.168.0.1

Non-authoritative answer:
Name: waws-prod-dm1-315-6360.centralus.cloudapp.azure.com
Address: 20.118.56.9
Aliases: clientalfarouting.trafficmanager.net
webappcentralusrahul.azurewebsites.net
waws-prod-dm1-315.sip.azurewebsites.windows.net

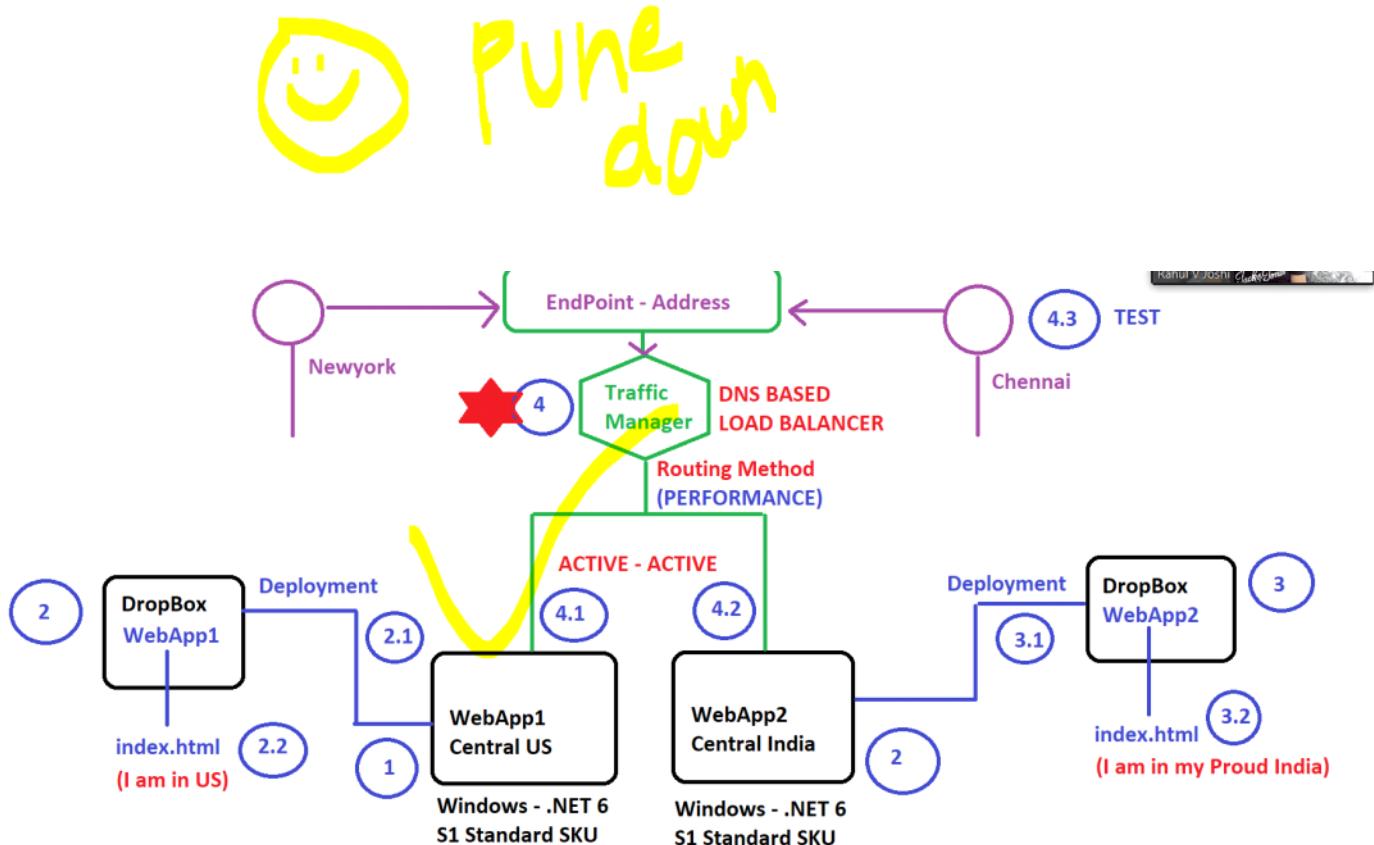
C:\Users\RAHUL>
```

High Availability is Proved.

What we proved as per case study (Performance + High Availability)



This is US WebApp, I am in Central US



WebApp + Deployment + Traffic Manager (Load Balancer)

DO NOT DELETE THE RESOURCE GROUP - ONLY DELETE THE TRAFFIC MANAGER

WE WILL USE WEBAPPS IN FRONT DOOR EXAMPLE, SO DO NOT DELETE COMPLETE RESOURCE GROUP

All resources ...

Default Directory (talktorahuljoshioutlook.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags Delete

Filter for any field... Subscription equals all Resource group equals all Type equals all Location equals all

Unsecure resources Recommendations

Name ↑	Type ↑↓	Resource group ↑↓
ASP-rgtrafficmanagerremove-a2fe	App Service plan	rg-trafficmanager-rem...
ASP-rgtrafficmanagerremove-bc55	App Service plan	rg-trafficmanager-rem...
clientalfarouting	Traffic Manager profile	rg-trafficmanager-rem...
webappcentralindiarahul	App Service	rg-trafficmanager-rem...
webappcentralusrahul	App Service	rg-trafficmanager-rem...

clientalfarouting Traffic Manager profile

Search Enable profile Disable profile Refresh Move Delete profile JSON View

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Settings Configuration Real user measurements Traffic view Endpoints Properties Locks Monitoring Alerts

Essentials

Resource group (move) rg-trafficmanager-rem...	DNS name http://clientalfarouting.trafficmanager.net
Status Enabled	Monitor status Degraded
Subscription (move) MSDN Platforms	Routing method Performance
Subscription ID ee7bab70-0709-4f4f-9829-790225dc5be4	
Tags (edit) Click here to add tags	

Search endpoints

Name ↑↓	Status ↑↓	Monitor status ↑↓	Type ↑↓	Location ↑↓
centralusendpoint	Enabled	Degraded	Azure endpoint	Central US
centralindiaendpoint	Enabled	Stopped	Azure endpoint	Central India

Case Study:

The customer was very happy to see how Traffic Manager was used to route traffic. The customer now wants to have a "Static Website" - Static Website means NO JAVA, NO .NET, NO SERVER SIDE CODE, BUT PURE "HTML, CLIENT SIDE JAVASCRIPT, CSS, IMAGES, MP4"

WebApp is an expensive Solution for S1 Standard we have to pay Rs.4000 per month, but for Static Website, this amount too much. So, the customer is looking for a low cost solution to host website which will be a Static web Site and the contents of the website will be around **50GB**.

STAR

Situation = Case Study

Task:

1. Create Storage Account
 - a. Option to Create Static Website

So, Storage Account will act like a "Hosting Solution" without WebApp

Action: Create Storage Account (Japan East)

All services >

Storage accounts ...

Default Directory (talktorahuljoshioutlook.onmicrosoft.com)

+ Create Restore Manage view Refresh Export

Filter for any field... Subscription equals all Resource gro...

Name ↑↓	Type ↑↓
---------	---------

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Manage your storage account logically with other resources.

Subscription *

Resource group * Create new

Instance details

If you need to create a legacy storage account type, please click [here](#).

Storage account name ⓘ *

Region ⓘ *

Performance ⓘ * Standard: Recommended for most scenarios (general-purpose v2 account)
 Premium: Recommended for scenarios that require low latency.

Redundancy ⓘ *

Low cost

Review < Previous Next : Advanced >

Create a storage account ...

Basics **Advanced** Networking Data protection Encryption Tags Review

Require secure transfer for REST API operations

Allow enabling public access on containers

Enable storage account key access

Default to Azure Active Directory authorization in the Azure portal

Minimum TLS version ⓘ

Permitted scope for copy operations (preview) ⓘ

Data Lake Storage Gen2

The Data Lake Storage Gen2 hierarchical namespace accelerates big data analytics workloads and enables file-level access control lists (ACLs). [Learn more](#)

Enable hierarchical namespace

Review < Previous Next : Networking >

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Network connectivity

You can connect to your storage account either publicly, via public IP addresses or service endpoints, or privately, using a private endpoint.

Network access *

- Enable public access from all networks
- Enable public access from selected virtual networks and IP addresses
- Disable public access and use private access
- Enabling public access from all networks might make this resource available publicly. Unless public access is required, we recommend using a more restricted access type. [Learn more](#)



Network routing

Determine how to route your traffic as it travels from the source to its Azure endpoint. Microsoft network routing is recommended for most customers.

Routing preference *

- Microsoft network routing

Review

< Previous

Next : Data protection >

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

- Enable point-in-time restore for containers
Use point-in-time restore to restore one or more containers to an earlier state. If point-in-time restore is enabled, then versioning, change feed, and blob soft delete must also be enabled. [Learn more](#)
- Enable soft delete for blobs
Soft delete enables you to recover blobs that were previously marked for deletion, including blobs that were overwritten. [Learn more](#)
- Enable soft delete for containers
Soft delete enables you to recover containers that were previously marked for deletion. [Learn more](#)
- Enable soft delete for file shares
Soft delete enables you to recover file shares that were previously marked for deletion. [Learn more](#)

Tracking

Manage versions and keep track of changes made to your blob data.

- Enable versioning for blobs
Use versioning to automatically maintain previous versions of your blobs. [Learn more](#)

Consider your workloads, their impact on the number of versions created, and the resulting costs. Optimize costs by automatically managing the data lifecycle. [Learn more](#)

- Enable blob change feed

Review

< Previous

Next : Encryption >

For Real World, versioning of Website pages and soft delete is important

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Encryption type *

- Microsoft-managed keys (MMK)
- Customer-managed keys (CMK)



Enable support for customer-managed keys *

- Blobs and files only
- All service types (blobs, files, tables, and queues)
- This option cannot be changed after this storage account is created.

Enable infrastructure encryption *

-

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Basics

Subscription	MSDN Platforms
Resource Group	rg-trafficmanager-remove
Location	japaneast
Storage account name	stjapanastrahul
Deployment model	Resource manager
Performance	Standard
Replication	Locally-redundant storage (LRS)

Advanced

Secure transfer	Enabled
Allow storage account key access	Enabled
Allow cross-tenant replication	Enabled
Default to Azure Active Directory authorization in the Azure portal	Disabled
Blob public access	Enabled
Minimum TLS version	Version 1.2

Create

< Previous

Next >

Download a template for automation

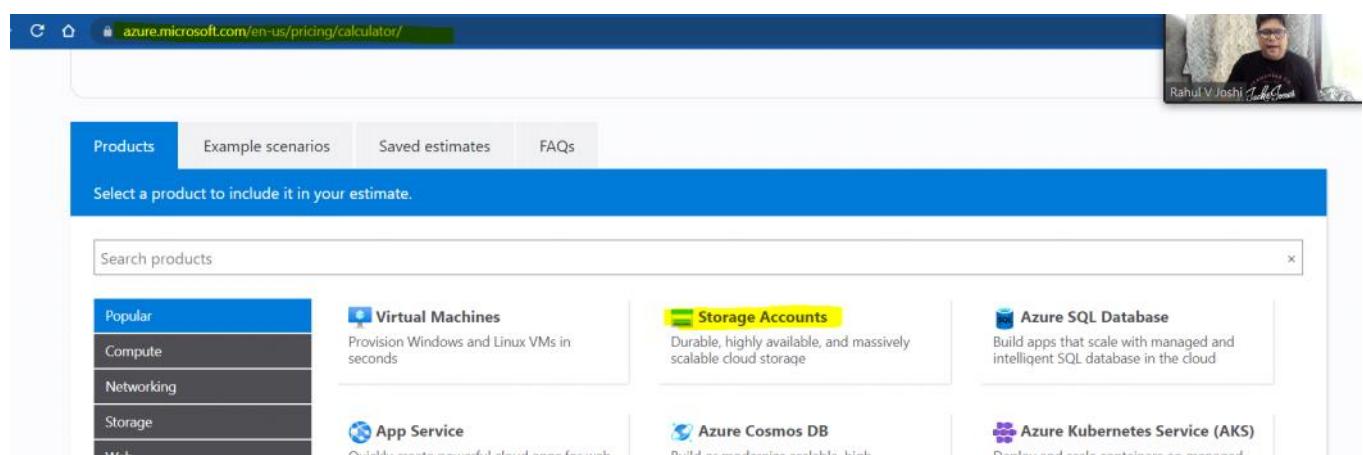
Action:

Index.html
Error.html



My Drive > Microsoft Azure Master Batch 3 > Data > Japan ~ Static Website

Name	Owner	Last modified
index.html	me	12:45 PM me
error.html	me	12:45 PM me



azure.microsoft.com/en-us/pricing/calculator/

Rahul V Joshi

Products Example scenarios Saved estimates FAQs

Select a product to include it in your estimate.

Search products

Popular	Virtual Machines	Storage Accounts	Azure SQL Database
Compute	Provision Windows and Linux VMs in seconds	Durable, highly available, and massively scalable cloud storage	Build apps that scale with managed and intelligent SQL database in the cloud
Networking			
Storage			

App Service

Azure Cosmos DB

Azure Kubernetes Service (AKS)

Storage Accounts

REGION: Japan East TYPE: Block Blob Storage TIER: Standard STORAGE ACCOUNT TYPE: General Purpose V2

ACCESS TIER: Hot REDUNDANCY: LRS

Capacity

50 GB

Savings Options

Save up to 38% on pay-as-you-go prices with 1-year or 3-year Azure Storage Reserved Capacity. [Learn more about Azure Storage Reserved Capacity pricing.](#)

Pay as you go
 1 year reserved
 3 year reserved

\$1.00
Average per month
(\$0.00 charged upfront)

78 Rs.

= \$1.00
Average per month
(\$0.00 charged upfront)

ACCESS TIER: Cool REDUNDANCY: LRS

Capacity

50 GB

i Early deletion fees may apply and are not included. [Learn more about early deletion fees.](#)

Savings Options

Save up to 38% on pay-as-you-go prices with 1-year or 3-year Azure Storage Reserved Capacity. [Learn more about Azure Storage Reserved Capacity pricing.](#)

Pay as you go
 1 year reserved
 3 year reserved

\$0.55
Average per month
(\$0.00 charged upfront)

= \$0.55
Average per month
(\$0.00 charged upfront)

This is what customer wants, Rs.4000 per month is expensive, for 50GB, in Hot it is \$1 and in Cool it is \$0.55

All services > stjapanearstrahul_166398818860 | Overview > stjapanearstrahul

stjapanearstrahul | Static website ...

Storage account

Search Save Discard

Encryption Microsoft Defender for Cloud

Data management

Redundancy Data protection Object replication Blob inventory

Static website Enabled

Lifecycle management Azure search

Settings Configuration

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is not supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with file primary endpoint. [Learn more](#)

Rahul V. Joshi

stjapanastrahul | Static website

Storage account

Save Discard

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available at the primary endpoint. [Learn more](#)

Static website

Disabled Enabled

Index document name: index.html

Error document path: error.html

Data management

- Encryption
- Microsoft Defender for Cloud
- Redundancy
- Data protection
- Object replication
- Blob inventory
- Static website**
- Lifecycle management
- Azure search

Settings

- Configuration
- Data Lake Gen2 upgrade
- Resource sharing (CORS)

stjapanastrahul | Static website

Storage account

Save Discard

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with the primary endpoint. [Learn more](#)

Static website

Disabled Enabled

An Azure Storage container has been created to host your static website.

\$web

Primary endpoint: <https://stjapanastrahul.z11.web.core.windows.net/>

Address of your Website, if you put this website name in browser, index.html is called

Index document name: index.html

Error document path: error.html

Data management

- Encryption
- Microsoft Defender for Cloud
- Redundancy
- Data protection
- Object replication
- Blob inventory
- Static website**
- Lifecycle management
- Azure search

Settings

- Configuration

stjapanastrahul | Static website

Storage account

Save Discard

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with the primary endpoint. [Learn more](#)

Static website

Disabled Enabled

An Azure Storage container has been created to host your static website.

\$web

Primary endpoint:

\$web

Container

Search

Upload Change access level Refresh Delete Change tier A

Authentication method: Access key (Switch to Azure AD User Account)

Location: \$web

Search blobs by prefix (case-sensitive)

Add filter

Name	Modified	A
No results		

Overview

Diagnose and solve problems

Access Control (IAM)

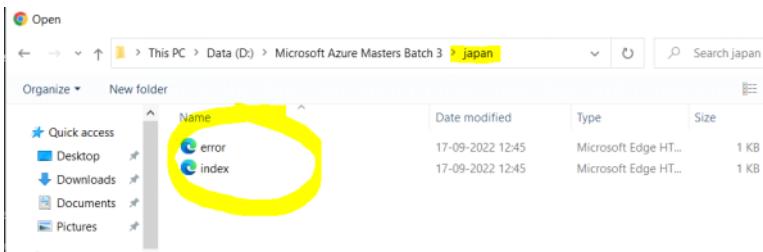
Settings

Shared access tokens

Access policy

Properties

Metadata



All services > stjapanastrahul_1663398818860 | Overview > stjapanastrahul | Static website > Rahul V.

\$web Container

Search

Upload Change access level Refresh Delete Change tier Acquire lease Break lease View

Authentication method: Access key (Switch to Azure AD User Account)
Location: \$web

Search blobs by prefix (case-sensitive)

Add filter

Name	Modified	Access tier	Archive status
error.html	9/17/2022, 12:53:48 P...	Hot (Inferred)	
index.html	9/17/2022, 12:53:48 P...	Hot (Inferred)	

Verify, Browse the Website

stjapanastrahul | Static website

Storage account

Search Save Discard

Enabling static websites on the blob service allows you to host static content. Webpages may include static content and client-side scripts. Server-side scripting is not supported. As data is replicated asynchronously from primary to secondary regions, files at the secondary endpoint may not be immediately available or in sync with primary endpoint. [Learn more](#)

Static website

Disabled Enabled

An Azure Storage container has been created to host your static website.
\$web

Primary endpoint: https://stjapanastrahul.z11.web.core.windows.net/

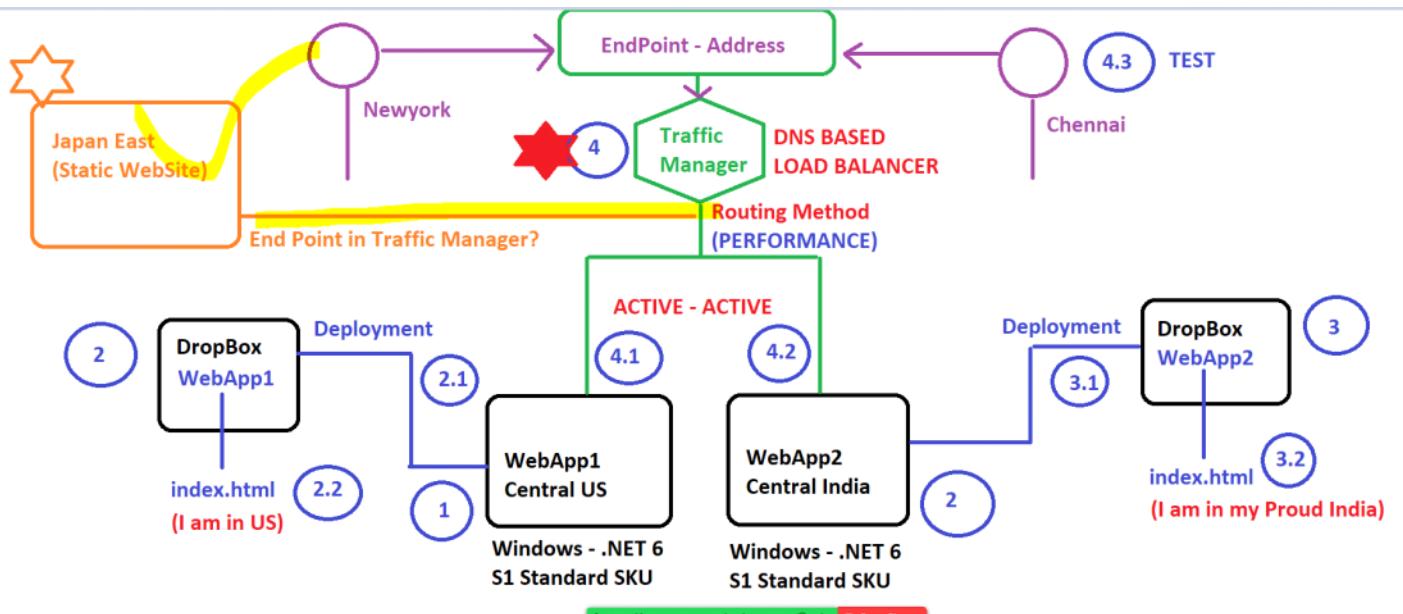
Index document name: index.html

Error document path: error.html

← → C ⌂ stjapanastrahul.z11.web.core.windows.net

This is Japan Website, We are in Tokyo!!!





BIG QUESTION?

Can the Storage Account URL of Static Website be added as "Endpoint"

If any traffic is coming from Japan East will it be routed to Japan East's Storage (Static Website)

All services > trafficmanagerclientalpha

trafficmanagerclientalpha | Endpoints

Traffic Manager profile

Search Add Refresh

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Settings Configuration Real user measurements

Search endpoints

Name ↑↓	Status ↑↓	Monitor status ↑↓	Type ↑↓	Location ↑↓
Centralusendpoint	Enabled	Checking endpoint	Azure endpoint	Central US
centralindiaendpoint	Enabled	Checking endpoint	Azure endpoint	Central India

Befoye

So, now we try to add the Storage Static Website Endpoint

The screenshot shows the Azure Storage account 'stjapanearastrahul' with the 'Static website' tab selected. The URL `https://stjapanearastrahul.z11.web.core.windows.net/` is highlighted with a large yellow circle. The page content indicates that an Azure Storage container has been created to host the static website.

trafficmanagerclientalfa | Endpoints

Traffic Manager profile

Search + Add Refresh

Overview Activity log Access control (IAM) Tags Diagnose and solve problems

Settings Configuration Real user measurements Traffic view Endpoints Properties

Name ↑↓	Status ↑↓	Monitor status ↑↓
Centralusendpoint	Enabled	Checking endpoint
centralindiaendpoint	Enabled	Checking endpoint

Add endpoint

Type * External endpoint

Name * japaneaststaticwebsite

Fully-qualified domain name (FQDN) or IP * https://stjapaneastrahul211.web.core.windows.net/ ✖ This value is neither an IP address nor a fully qualified domain name (FQDN).

Location East Asia

Custom Header settings

Add as disabled

Add endpoint

Type * External endpoint

Name * japaneaststaticwebsite

Fully-qualified domain name (FQDN) or IP * stjapaneastrahul211.web.core.windows.net/ ✖ This value is neither an IP address nor a fully qualified domain name (FQDN).

Location Japan East 

Custom Header settings

Add as disabled

Add

icmanagerclientalfa | Endpoints

Snaker profile

Name ↑↓	Status ↑↓	Monitor status ↑↓	Type ↑↓	Location ↑↓
Centralusendpoint	Enabled	Degraded	Azure endpoint	Central US
centralindiaendpoint	Enabled	Degraded	Azure endpoint	Central India
japaneaststaticwebsite	Enabled	Checking endpoint	External endpoint	Japan East

trafficmanagerclientalfa

Traffic Manager profile

Search

Enable profile Disable profile Refresh Move Delete profile

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Essentials

Resource group (move) : rg-trafficmanager-remove

Status : Enabled

Subscription (move) : MSDN Platforms

Subscription ID : ee7bab70-0709-4f4f-9829-790225dc5be4

Tags (edit) : Click here to add tags

DNS name : http://trafficmanagerclientalfa.trafficmanager.net

Monitor status : Degraded

Routing method : Performance

Search endpoints

Both Endpoint - Central US & Central India - Degraded - not active yet in Traffic Manager

```
All Ping statistics for 20.60.172.129:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Res AprC:\Users\RAHUL>nslookup trafficmanagerclientalfa.trafficmanager.net
Server: UnKnown
Address: 192.168.0.1
SQ[1]
AzNon-authoritative answer:
Name:   web.tyo22prdstr09a.store.core.windows.net
Address: 20.60.172.129
Lo Aliases: trafficmanagerclientalfa.trafficmanager.net
St[2] stjapanearahul.z11.web.core.windows.net
Virt
```

Why does Traffic Manager not route the request to Japan East?

Traffic Manager is DNS Based Load Balancer = HTTPS Address (This does not work)

How to use Traffic Manager with Azure Storage Static Webs

Asked 3 years, 3 months ago Modified 6 months ago Viewed 2k times

I have a Traffic Manager with an endpoint in Azure Storage Static Website. Static website with index.html is up and running on both http and https. Endpoint in traffic manager has status Online

But when try to reach static website through traffic manager DNS name <http://-.trafficmanager.net> get 400 Bad Request error.

It looks like the error comes from Storage website:

The request URI is invalid.
HttpStatusCode: 400
ErrorCode: InvalidUri

Why? How to fix this?

azure-traffic-manager

Case Study:

The Customer was very happy with the way, we demonstrated how Traffic Manager, a DNS based load balancer can help route traffic using different routing mention. The customer was also very happy to see "Low Cost Hosting Solution" using Storage Static Web Site feature, this helps customer host static website and there by save on cost of WebApps

The customer now is looking for another "Global LoadBalancer" as their customer are in various parts of the world. Traffic Manager been a DNS Based Load Balancer, has a lot of limitations. The customer wants a load balancer which very fast, quick in routing requests.

The customer is also worried, as now days the presence of hacking and sniffing attacks are increasing, so protecting the website from

such attacks is very important

Finally, the customer is looking for a load balancer which is fast, has protection and also from security point of view the load balancer has plenty of options to configure.

Objective: Performance + Availability + Security

STAR

Situation = Case Study

Task:

1. Create 2 WebApps (One in Central US and one is Central India) - If you configured Traffic Manager, then we already have this.
2. Create WAF - Web Application Firewall - Exam & Interviews
3. Creating Front Door - Exam & Interviews

Front Door

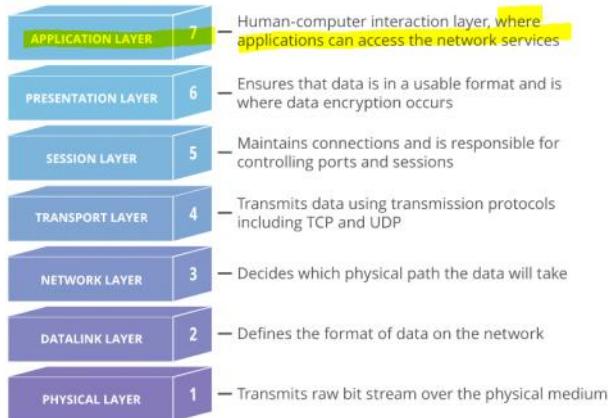
The following table summarizes the Azure load balancing services by these categories:

Service	Global/regional	Recommended traffic
Azure Front Door	Global	HTTP(S)
Traffic Manager	Global	non-HTTP(S)
Application Gateway	Regional	HTTP(S)
Azure Load Balancer	Regional	non-HTTP(S)



EXAM question

Front Door is an application delivery network that provides global load balancing and site acceleration service for web applications. It offers **Layer 7 capabilities** for your application like **SSL offload**, **path-based routing**, **fast failover**, **caching**, etc. to **improve performance and high-availability** of your applications.



Official Website of FrontDoor

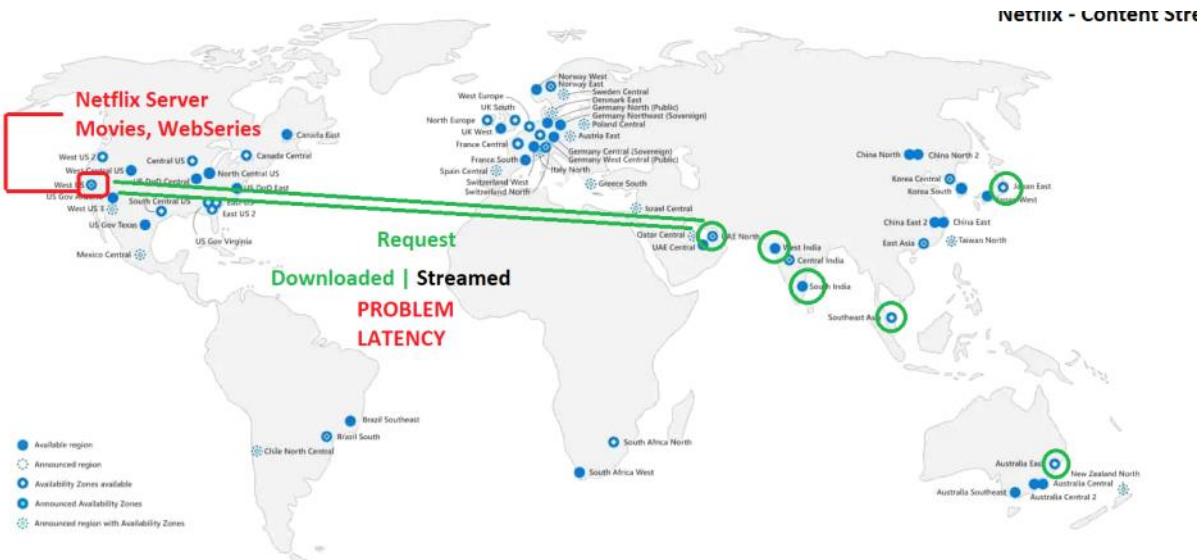
<https://learn.microsoft.com/en-us/azure/frontdoor/front-door-overview>

What is the difference between FrontDoor and Traffic Manager

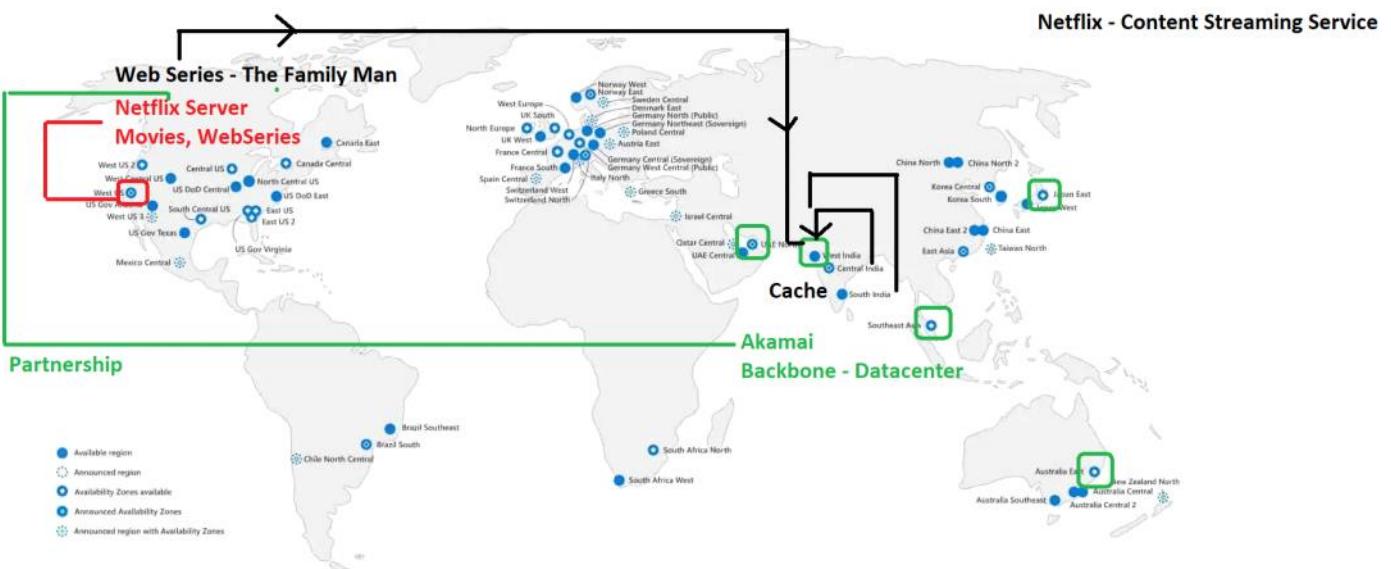
Front Door is Modern CDN, whereas Traffic Manager is Not

Azure Front Door is Microsoft's modern cloud Content Delivery Network (CDN) that provides fast, reliable, and secure access between your users and your applications' static and dynamic web content across the globe.

Latency Problem:



If the ORIGIN, WHERE THE CONTENT IS STORED IS FAR AWAY FROM THE PEOPLE REQUESTING THE CONTENT, THIS CAN CAUSE PERFORMANCE AND LATENCY ISSUES AS THE CONTENT IS FAR AWAY FROM THE USER, **THE CONTENT WILL TAKE MULTIPLE HOPS**, TO REACH THE END USER, NETWORK TRAFFIC AND **MANY HOPS CAN CAUSE PACKET LOSS** AND ALSO RESULT IN PERFORMANCE ISSUES. THIS WAS A SERIOUS PROBLEM WHEN DATA IS KEPT AT ONE PLACE AND THAT DATA IS STREAMED ACROSS THE WORLD.



Akamai started "Caching" the data for its customers. The data was always for the 1st time brought from the Origin and then later it was processed from the Cache.

Azure Front Door is Microsoft's **modern cloud Content Delivery Network (CDN)** that provides fast, reliable, and secure access between your users and your applications' static and dynamic web content across the globe

FrontDoor = Load Balance + CDN Features

Azure Front Door delivers your content using the Microsoft's global edge network with **hundreds of global and local POPs** distributed around the world close to both your enterprise and consumer end users

List of Global and Local Edge Location:

<https://learn.microsoft.com/en-us/azure/frontdoor/edge-locations-by-region>

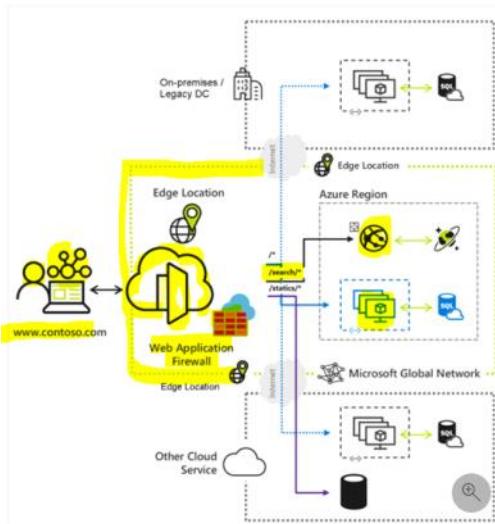


AWS Edge Locations

Edge locations - Bangalore, India; Bangkok, Thailand; Chennai, India; Beijing, China; Shanghai, China; Ningxia, China; Shenzhen, China; Hong Kong SAR, China; **Hyderabad, India**; Jakarta, Indonesia; **Kolkata, India**; Kuala Lumpur, Malaysia; Manila, The Philippines; **Mumbai, India**; **New Delhi, India**; Osaka, Japan; Seoul, Korea; Singapore; Taipei, Taiwan; Tokyo, Japan; Zhongwei, China

What is the difference between FrontDoor and Traffic Manager

Front Door - Attach a WAF



EXAM question? Why is Front Door FAST?

Accelerate application performance by using [Front Door's anycast](#) network and [split TCP](#) connections.

What is the difference between FrontDoor and Traffic Manager

Traffic routed to the Azure Front Door edge locations uses [Anycast](#) for **both DNS (Domain Name System) and HTTP (Hypertext Transfer Protocol) traffic**.

Anycast allows for user requests to **reach the closest edge location** in the **fewest network hops**.

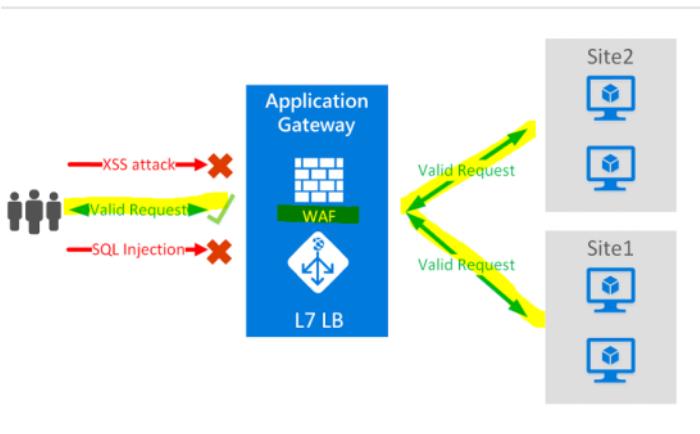
Split TCP - [Split TCP](#) is a technique to reduce latencies and TCP problems **by breaking a connection that would incur a high round-trip time into smaller pieces**.

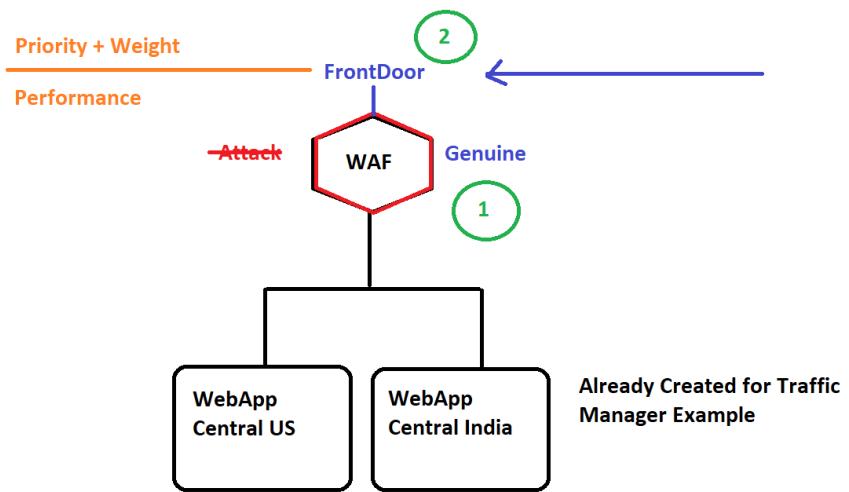
WAF - Web Application Firewall - EXAM and Interviews

<https://learn.microsoft.com/en-us/azure/web-application-firewall/ag/ag-overview>

Azure Web Application Firewall (WAF) on Azure Application Gateway provides centralized protection of your web applications from **common exploits and vulnerabilities**.

Web applications are increasingly targeted by **malicious attacks that exploit commonly known vulnerabilities**. SQL injection and cross-site scripting are among the most common attacks.





Stop Both the WebApp, In Tomorrow's Session we will use both the WebApp

Best Website to know, new things coming in Azure

<https://azure.microsoft.com/en-in/updates/>

Azure updates

Get the latest updates on Azure products and features to meet your cloud investment needs. Subscribe to notifications to stay informed.

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Keyword Search

Status:

- NOW AVAILABLE
- IN PREVIEW
- IN DEVELOPMENT

Product category: Networking

Update type: Features

Filter Results Reset Filter

April 2019

17 Apr Azure Front Door Service is now available

NOW AVAILABLE

Azure Front Door Service has entered general availability and is now fully supported with a 99.99 percent SLA.

Azure Front Door Services Security



September 2018

24 Sep Azure Frontdoor Service in preview

IN PREVIEW

Azure Frontdoor is your one secure entry point for delivering globally performant, highly scalable apps. Now in preview, Azure Frontdoor is a scalable and secure entry point for fast delivery of your global, microservice based web applications. Control and monitor your service's traffic and global backends from one central control plane and dashboard.

