

## Project-2: Web Application which Is Highly Available In Multiple Region

The image displays two screenshots of the Azure portal interface, showing the configuration of two web applications, webapp411 and webapp412.

**webapp411 Configuration:**

- Overview:** Activity log, Access control (IAM), Tags, Diagnose and solve problems, Microsoft Defender for Cloud, Events (preview), Better Together (preview), Log stream, Deployment, Deployment slots, Deployment Center, Settings, Environment variables, Configuration, Authentication, Identity, Backups, Custom domains, Certificates.
- Essentials:**
  - Resource group: abhi
  - Status: Running
  - Location: Central India
  - Subscription: Azure subscription 1
  - Subscription ID: c4498e5c-6513-4872-b5f1-0db5f82228cf
  - Default domain: webapp411.azurewebsites.net
  - App Service Plan: ASP-Abhi-8315 (B1: 1)
  - Operating System: Windows
  - Health Check: Cannot fetch health check data. Please try again later.
- Properties:**
  - Web app:**
    - Name: webapp411
    - Publishing model: Code
    - Runtime Stack: Dotnet - v4.0
  - Domains:**
    - Default domain: webapp411.azurewebsites.net
    - Custom domain: Add custom domain
  - Hosting:**
    - Plan Type: App Service plan
    - Plan Name: ASP-Abhi-8315

**webapp412 Configuration:**

- Overview:** Activity log, Access control (IAM), Tags, Diagnose and solve problems, Microsoft Defender for Cloud, Events (preview), Better Together (preview), Log stream, Deployment, Deployment slots, Deployment Center, Settings, Environment variables, Configuration, Authentication, Identity, Backups, Custom domains, Certificates.
- Essentials:**
  - Resource group: abhi
  - Status: Running
  - Location: South India
  - Subscription: Azure subscription 1
  - Subscription ID: c4498e5c-6513-4872-b5f1-0db5f82228cf
  - Default domain: webapp412.azurewebsites.net
  - App Service Plan: ASP-Abhi-aebc (B1: 1)
  - Operating System: Windows
  - Health Check: Cannot fetch health check data. Please try again later.
- Properties:**
  - Web app:**
    - Name: webapp412
    - Publishing model: Code
    - Runtime Stack: Dotnet - v4.0
  - Domains:**
    - Default domain: webapp412.azurewebsites.net
    - Custom domain: Add custom domain
  - Hosting:**
    - Plan Type: App Service plan
    - Plan Name: ASP-Abhi-aebc

- Create two web app in two different region
- In this I had created two web app one at Central India and the next one at South India

Home > Load balancing | Traffic Manager >

**trafficmanager411** Traffic Manager profile

Search Enable profile Disable profile Refresh Move Delete profile

**Overview** Essentials JSON View

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Monitoring

Automation

Help

Resource group (move) : [Abhi](#) DNS name : http://trafficmanager411.trafficmanager.net

Status : Enabled Monitor status : Inactive

Subscription (move) : [Azure subscription 1](#) Routing method : Priority

Subscription ID : c4498e5c-6513-4872-b5f1-0db5f82228cf

Tags (edit) : [Add tags](#)

Search endpoints

Name	↑↓	Status	↑↓	Monitor status	↑↓	Type	↑↓	Priority	↑↓
No results.									

- We need to purchase domain name from DNS for example : godaddy, opendns, developers etc

**webapp411** | Custom domains Web App

Search Refresh Troubleshoot

Log stream

Deployment

Deployment slots

Deployment Center

Settings

Environment variables

Configuration

Authentication

Identity

Backups

**Custom domains**

Certificates

Networking

Scale up (App Service plan)

Scale out (App Service plan)

Configure and manage custom domains assigned to your app. [Learn more](#)

IP address: 20.192.170.9

Custom Domain Verification ID: D4310529E6DF8CBCEB634FEC2094550967ABF24D03876E...

Filter by keywords Add

2 items

+ Add custom domain + Buy App Service domain Delete

Custom domains	Status	Solution	Binding type	Certificate used	Acti...
<input type="checkbox"/> www.azure-web-app.xyz	Secured	-	SNI SSL	www.azure-web-app-xyz-webapp4...	...
<input type="checkbox"/> webapp411.azurewebsites.net	Secured	-	-	-	-

- In the web app we need to create the custom domains

webapp411 | Custom domains

Web App

Search

Refresh Troubleshoot

Log stream

Deployment

Deployment slots

Deployment Center

Settings

Environment variables

Configuration

Authentication

Identity

Backups

Custom domains

Certificates

Networking

Scale up (App Service plan)

Scale out (App Service plan)

WebJobs

Configure and manage custom domains assigned to your app. [Learn more](#)

IP address: 20.192.170.9

Custom Domain Verification ID: D4310529E6DF8C8CEB634FEC2094550967A

Filter by keywords Add

1 items

Add custom domain Buy App Service domain Delete

Custom domains	Status	Solution
webapp411.azurewebsites.net	Secured	

Add custom domain

TLS/SSL certificate \* App Service Managed Certificate Add certificate later

TLS/SSL type \* SNI SSL IP based SSL

Enter your custom domain. We'll give you hostname records to register with your domain provider, and we can validate and add your custom domain here. [Learn more](#)

Domain \* www.azure-web-app.xyz

Hostname record type \* CNAME (www.example.com or any subd...)

Domain validation

To validate your domain ownership, copy the hostname records below and enter them with your domain provider. [Learn more](#)

Export to CSV

Type	Host	Value	Status
CNAME	www	webapp411.azurewebsites.net	
TXT	asuid.www	D4310529E6DF8C8CEB634FEC2094550967A8F24D03B76E6E9E2A4266CBAF6F5F	

No matching CNAME Record was found. You may still add the custom domain to your

Add custom domain

TLS/SSL certificate \* App Service Managed Certificate Add certificate later

TLS/SSL type \* SNI SSL IP based SSL

Enter your custom domain. We'll give you hostname records to register with your domain provider, and we can validate and add your custom domain here. [Learn more](#)

Domain \* www.azure-web-app.xyz

Hostname record type \* CNAME (www.example.com or any subd...)

Domain validation

To validate your domain ownership, copy the hostname records below and enter them with your domain provider. [Learn more](#)

Export to CSV


Type	Host	Value	Status
CNAME	www	webapp412.azurewebsites.net	
TXT	asuid.www	D4310529E6DF8C8CEB634FEC2094550967A8F24D03B76E6E9E2A4266CBAF6F5F	

Validation passed. Select Add to finish up.

App Service Managed Certificate only supports alphanumeric, dash, and period


- In both the web app we need to create the custom dome
- For that select add custom domain option
- Then select the TLS/SSL type as SNI SSL
- Add the domain ([www.azure-web-app.xyz](http://www.azure-web-app.xyz))
- Then validate it and then add that domain
- After creation check the website


←↻🏠🔒https://www.azure-web-app.xyz☆🔍

Microsoft Azure

## Your web app is running and waiting for your content

Your web app is live, but we don't have your content yet. If you've already deployed, it could take up to 5 minutes for your content to show up, so come back soon.



 Supporting Node.js, Java, .NET and more

Haven't deployed yet?

Use the deployment center to publish code or set up continuous deployment.

Starting a new web site?

Follow our Quickstart guide to get a web app ready quickly.

00:23

Microsoft Azure

🔍 Search resources, services, and docs (G+)

Copilot

Home > Web Application Firewall policies (WAF) >

## Create a WAF policy

Basics

Managed rules

Policy settings

Custom rules

Association

Tags

Review + create

on your resources.

Policy for \*

☐ Global WAF (Front Door)

☒ Regional WAF (Application Gateway)

Subscription \*

Azure subscription 1

Resource Group \*

Abhi

Create new

Instance details

Name \*

WAFPolicy1

Location \*

(US) East US

Enable policy

☒

Policy mode

☒ Prevention

Prevention mode takes the corresponding WAF action if a request matches a rule.

☐ Detection

Detection mode monitors and logs all threat alerts to a log file.

Previous

Next

Review + create

Microsoft Azure

Home > Web Application Firewall policies (WAF) >

## Create a WAF policy

Basics **Managed rules** Policy settings Custom rules Association Tags Review + create

A pre-configured rule set is enabled by default. This rule set protects your web application from common threats defined in the top-ten OWASP categories. The default rule set is managed by the Azure WAF service. Rules are updated as needed for new attack signatures. [Learn more](#)

Default ruleset \*

Additional ruleset

☒ Enable ☐ Disable

Rule group: (All) Status: (All) Action: (All)

Showing all 200 items

<input type="checkbox"/>	Rule Id	Description	Action	Status	Rule group	Rule set
<input checked="" type="checkbox"/>	Microsoft_BotManagerRuleSet_1.0 (11)					
<input type="checkbox"/>	100100	Malicious bots detected by threat inte...	Block	Enabled	BadBots	Microsoft_BotManagerR...
<input type="checkbox"/>	100200	Malicious bots that have falsified their...	Block	Enabled	BadBots	Microsoft_BotManagerR...
<input type="checkbox"/>	200100	Search engine crawlers	Allow	Enabled	GoodBots	Microsoft_BotManagerR...
<input type="checkbox"/>	200200	Unverified search engine crawlers	Log	Enabled	GoodBots	Microsoft_BotManagerR...
<input type="checkbox"/>	300100	Unspecified identity	Log	Enabled	UnknownBots	Microsoft_BotManagerR...
<input type="checkbox"/>	300200	Tools and frameworks for web crawlin...	Log	Enabled	UnknownBots	Microsoft_BotManagerR...

Microsoft Azure

Home > WafPolicy/CreateBlade-20241013223006-90 | Overview >

## WAFPolicy1

Application Gateway WAF policy

**Overview**

- Activity log
- Access control (IAM)
- Tags
- Settings
- Monitoring
- Automation
- Help

**Essentials**

Resource group (move) : [Abhj](#)

Location : East US

Subscription (move) : [Azure subscription 1](#)

Subscription ID : c4498e5c-6513-4872-b5f1-0db5f82228cf

Tags (edit) : [Add tags](#)

Policy state : ☒ Enabled

Policy mode : Prevention

Associated application g... : 0

**Policy settings**

Configure multiple settings that apply to all rules within the policy.

**Managed rules**

Configure Azure managed rule sets that protect your web application from common threats.

**Associated application gateways**

Associate this WAF policy to one or more application gateways for protection.

**Custom rules**

Author custom rules to protect your web application from specifically identified threats.

**Log scrubbing rules**

Add log scrubbing rules to scrub sensitive data in the logs within this policy.

- We need to create the WAF policy
- Add the resource group policy mode etc
- The in the manage rules select as default
- And then review and create the WAF policy

```
> www.azure-web-app.xyz
Server: dns.google
Address: 8.8.8.8

Non-authoritative answer:
Name: waws-prod-pn1-021-f6b3.centralindia.cloudapp.azure.com
Address: 20.192.170.9
Aliases: www.azure-web-app.xyz
          trafficmanager411.trafficmanager.net
          webapp411.azurewebsites.net
          waws-prod-pn1-021.sip.azurewebsites.windows.net

> www.azure-web-app.xyz
Server: dns.google
Address: 8.8.8.8

Non-authoritative answer:
Name: waws-prod-ma1-001.southindia.cloudapp.azure.com
Address: 104.211.224.252
Aliases: www.azure-web-app.xyz
          trafficmanager411.trafficmanager.net
          webapp412.azurewebsites.net
          waws-prod-ma1-001.sip.azurewebsites.windows.net
```

- After the creation we need to check the domain name from the CMD
- Then the current website will get displayed
- After the web attack or any server issue occurs it will change in the next region web app
- That is what shown in the next line as the web app is changed in the next region