

Azure Front Door

Modern cloud CDN that delivers optimized experiences to users anywhere



Navigating a shifting world

Conventional security
tools have not kept pace



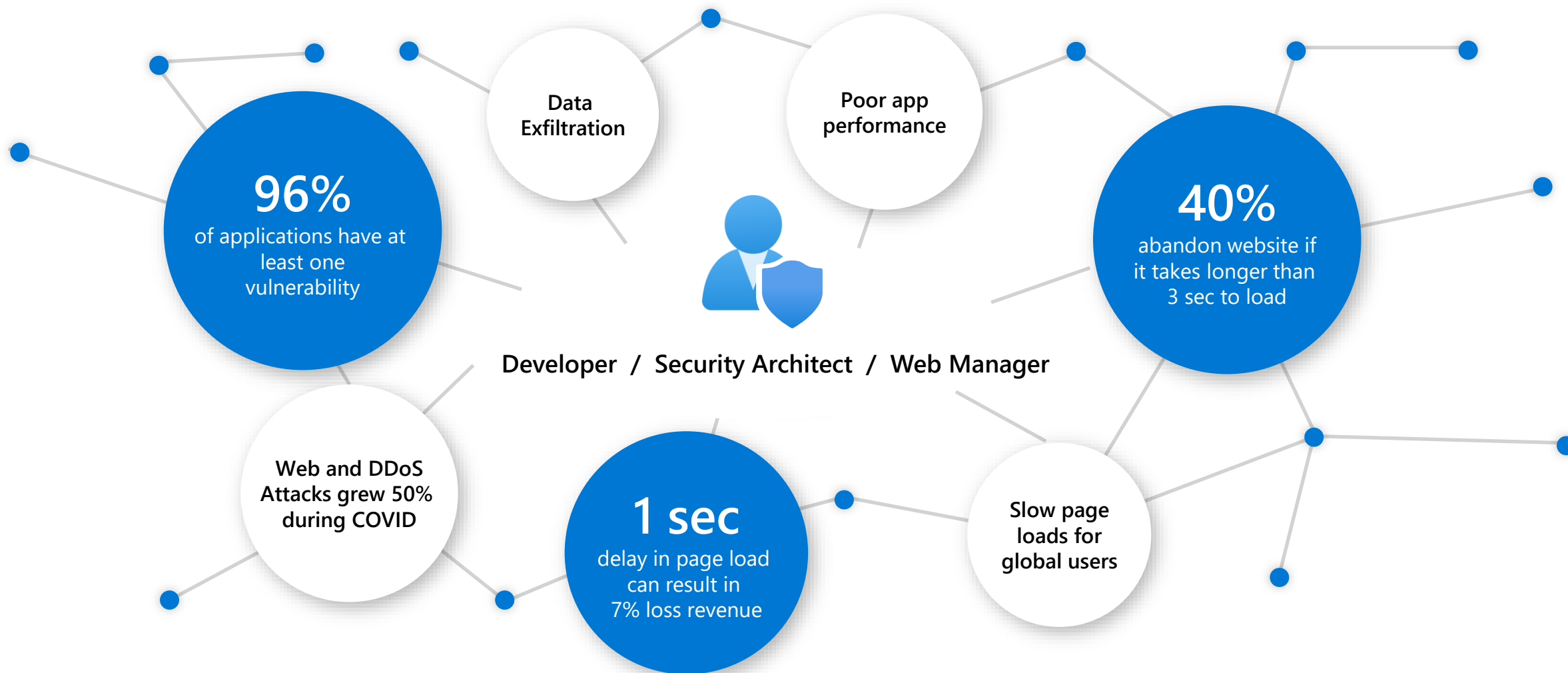
The nature of business
and work have changed



Cost of breaches and
regulations are increasing



Digital transformation brings about new challenges



Enterprises need a modern cloud CDN to protect, optimize and scale their applications

Azure Front Door

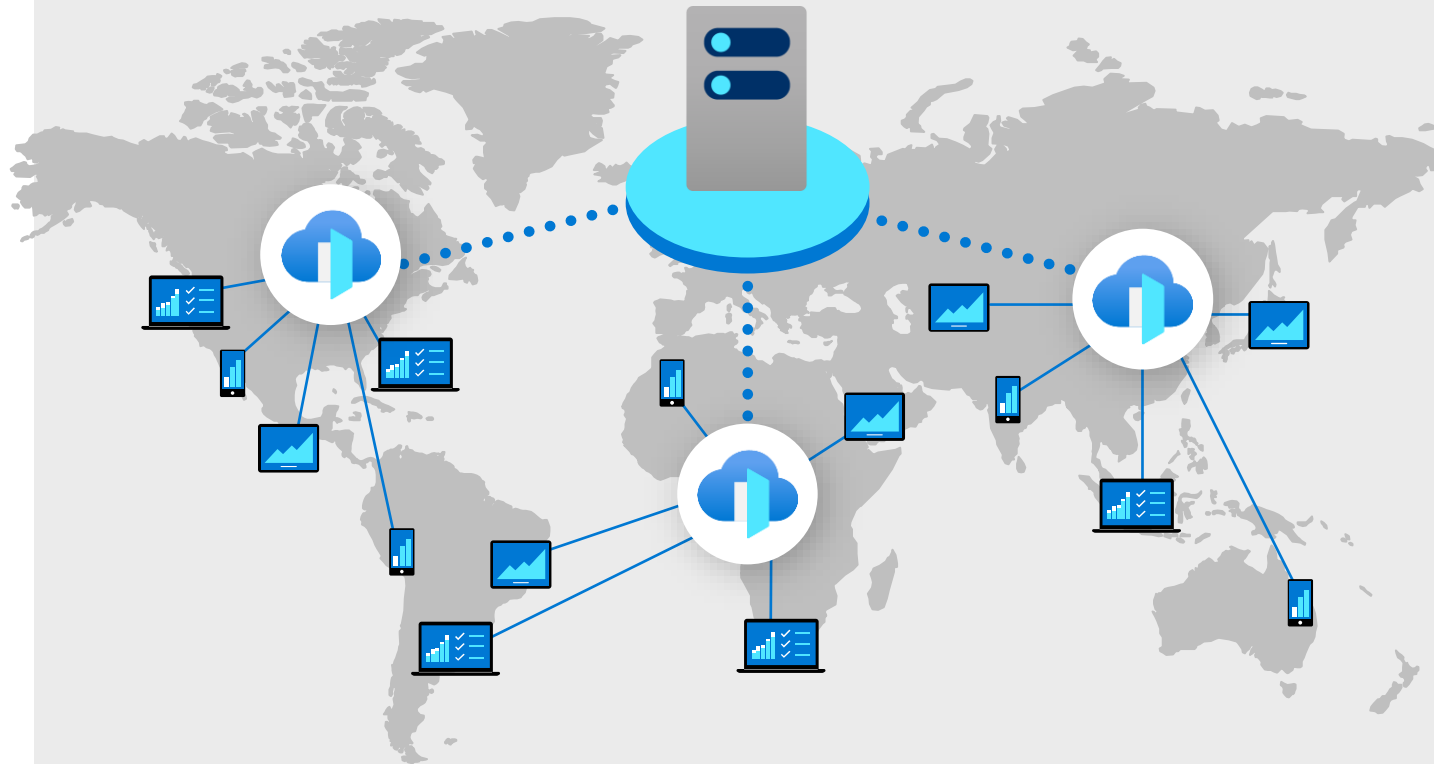
Modern cloud content delivery network (CDN)

What is a modern CDN?

A configurable, easy-to-use content delivery network architected for today's internet-facing services that enables you to deliver more dynamic and secure experiences for your content, files, and applications at scale.

Azure Front Door

- Provides higher performance, better scale and more secure experiences for your content and global applications
- Combines modern CDN technology and intelligent threat protection in a tightly integrated service
- Is easy to setup, deploy and manage



Azure Front Door Use Cases



Static object/ file delivery

Deliver large or small file assets to devices, browsers with minimized cost and max performance

- Manufacturing / Electronics
- Retail and Commerce
- Enterprise File Delivery
- Automotive and IoT



Dynamic content delivery

Optimize application performance and scale without caching content

- Retail and Commerce
- Mobile Apps and Services
- SaaS API Platforms
- IoT Services, Data



Modern microservices

Enable fault-tolerant and agile application architectures through edge load balancing

- Mobile Applications
- Commerce Services
- Media Distribution Apps
- ISV / Solution Providers



Secure global internet services

Secure applications at the edge to optimize app reliability, cost and reputation

- Commerce Platforms
- Financial Services
- Healthcare
- Enterprise LOB Apps

Use Azure CDN for streaming scenarios like OTT and video on-demand

Azure Front Door

Modern cloud CDN that delivers optimized experiences to users anywhere



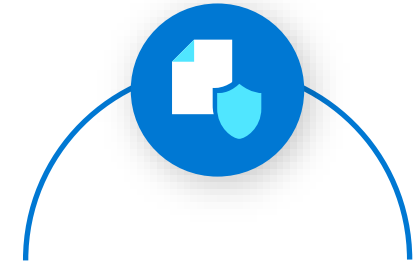
Modern Architecture

Transform any app from any origin into internet-first architecture



Fast Global Delivery

Accelerate dynamic and static content with a simplified cost model



Intelligent Security

Seamlessly attached security protection and analytics



Fully Configurable DevOps Tools & APIs



Microsoft Global Network

Enterprise-grade global private network operated by Microsoft supporting Azure, Office 365, Xbox, Bing and more



Modern Architecture

Transform any app from any origin into internet- first architecture



Build modern internet applications
that scale with a deeply integrated experience



Simplify application architectures
with a single, secure global entry point

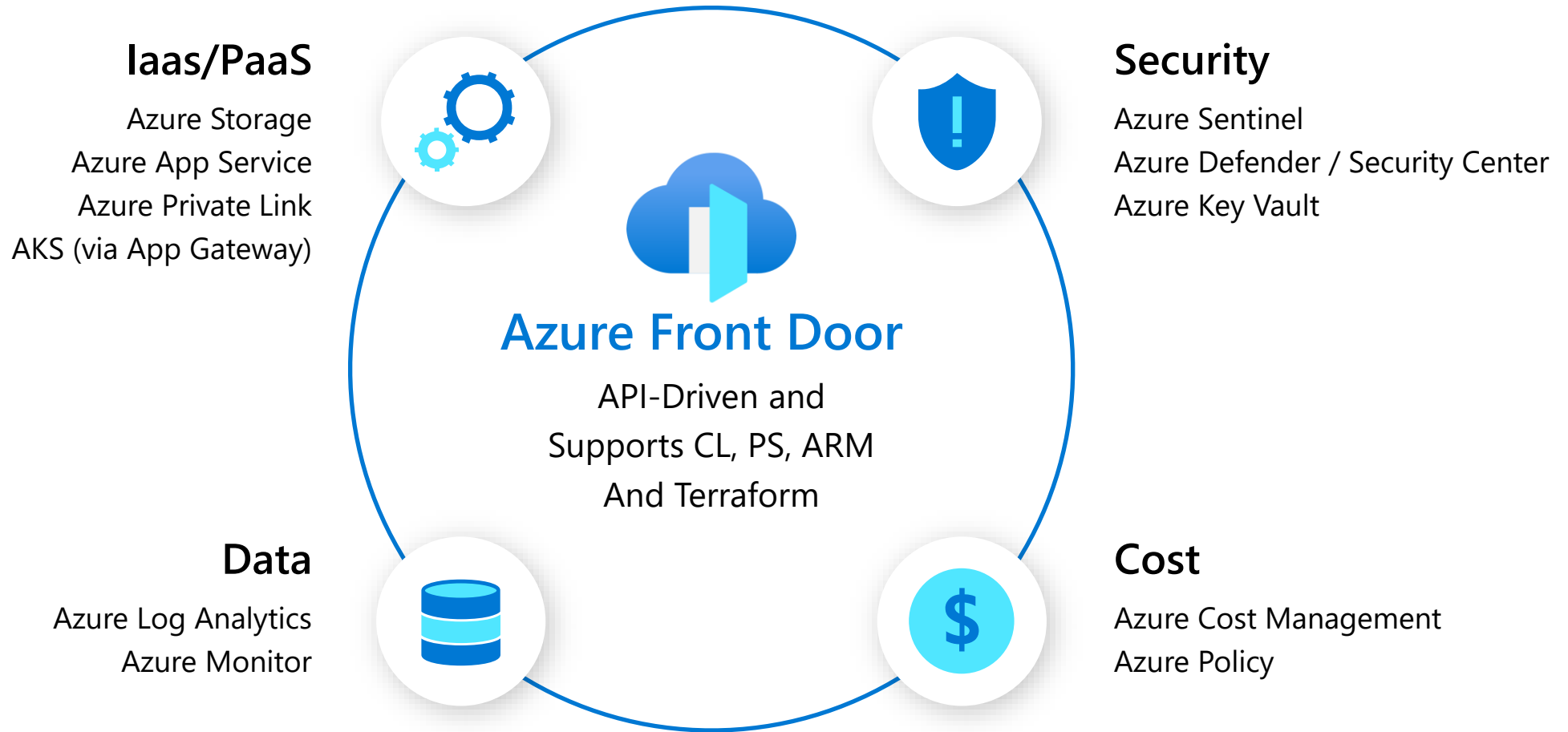


Automate and streamline deployment
with cloud-native, developer friendly tools



Improve visibility and manageability
with a single pane of glass and global control

Azure Front Door native integrations with Azure Services



Simplified deployment and full automation

Guided steps and automation to scale and secure your apps quickly and easily

Dashboard > Front Door and CDN profiles > Compare offerings >

Create a front door profile

Microsoft Azure

Azure Front Door is a modern application delivery network platform providing a secure, scalable CDN, dynamic site acceleration, and global HTTP(S) load balancing for your global web applications. [Learn more](#)

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

Subscription *

CDN-Dogfood-RPV2

Resource group *

(New) contoso-afd-quickcreate

Create new

Resource group location *

East US

Profile details

Name *

contoso-afd-quickcreate

Tier *

Standard

Content delivery optimized

Premium

Security optimized

Endpoint settings

Endpoint name *

contoso-appservice

Endpoint hostname

contoso-appservice-fuhbekbtdtff5aw.z01.azurefd-test.net

Origin type *

Origin host name *

Private link

☐ Enable private link service

The origin type or host name does not support private link.

Learn more

Caching

☐ Enable caching

WAF policy

Create new

Review + create

< Previous

Next: Tags >

Automation options

Quick Create

Home > Front Door and CDN profiles > Compare offerings >

Create a front door profile

Microsoft Azure

* Basics

Secrets

* Endpoint

Tags

Review + create

Add an endpoint to get started. Add domains and create origin groups, then define routes to connect your domains and origin groups. Add security rules to complete your front door configuration. Later, you will be able to add endpoints and reuse your domains, origin groups, rule sets and WAF policies across endpoints in your front door profile. [Learn more](#)

contoso-appservice.z01.azurefd.net

Routes

Routes	Domains	Origin group	Status	Provisioning state
myRoute	1 selected	myOriginGroup	Enabled	
contoso-appservice.z01....				

Security policy

Name	Domain state
contoso-waf	-
contoso-afd	-
1 association	-
contoso-a...	Enabled

Review + create

< Previous

Next: Tags >

Automation options

Full Create

Enhanced customization at the edge

The custom logic you need to deliver content how and where you need

Microsoft Azure

Search resources, services and docs

Breadcrumb > Breadcrumb > Breadcrumb > Breadcrumb > Breadcrumb > Breadcrumb > Breadcrumb > Breadcrumb > Breadcrumb > Breadcrumb >

Add a ruleset | Rule set

Front door

+ Add a rule

Refresh

Expand all

Collapse all

Ruleset name *

AFD-Ruleset-1

Rules

MyAwesomeRule-1

Move to top

Move up

Move down

IF

Condition

Request cookies

Cookies name

Operator

Operator

Cookies value

Cookies value

Case transformation

Case transformation

AND IF

Condition

Remote address

Operator

Operator

Value

Value

+ Add a condition

THEN

Action

Modify request header

Action

Action

HTTP header name

Protocol

HTTP header value

Host name

AND THEN

Action

URL redirect

Type

Type

Protocol

Protocol

Host name

Host name

Path

Path

Query string

Query string

+ Add an action

Stop evaluating rules

Save

Discard

Rules

+ Add rule

Expand all

Collapse all

Rule name

Move to top

Move up

Move down

Move to bottom

Delete rule

+ Add a condition

THEN

Action

Route configuration override

Override origin group

Yes

Origin group *

afddemo

Forwarding protocol *

Match incoming request

Caching

Enabled

Query string caching behavior *

Use Query String

Compression *

Enabled

Cache behavior *

Override always

Days

0

Hours

3

Minutes

0

Seconds

0

+ Add an action

Associate a route

URLredirect

1 Associate a route

2 Change rule set orders

Rule sets are executed in the order shown. You can change the order by moving rule sets up or down in this list.

Move to top

Move up

Move down

Move to bottom

#.

Rule set

1

te

2

rulesethuaiyiz1

3

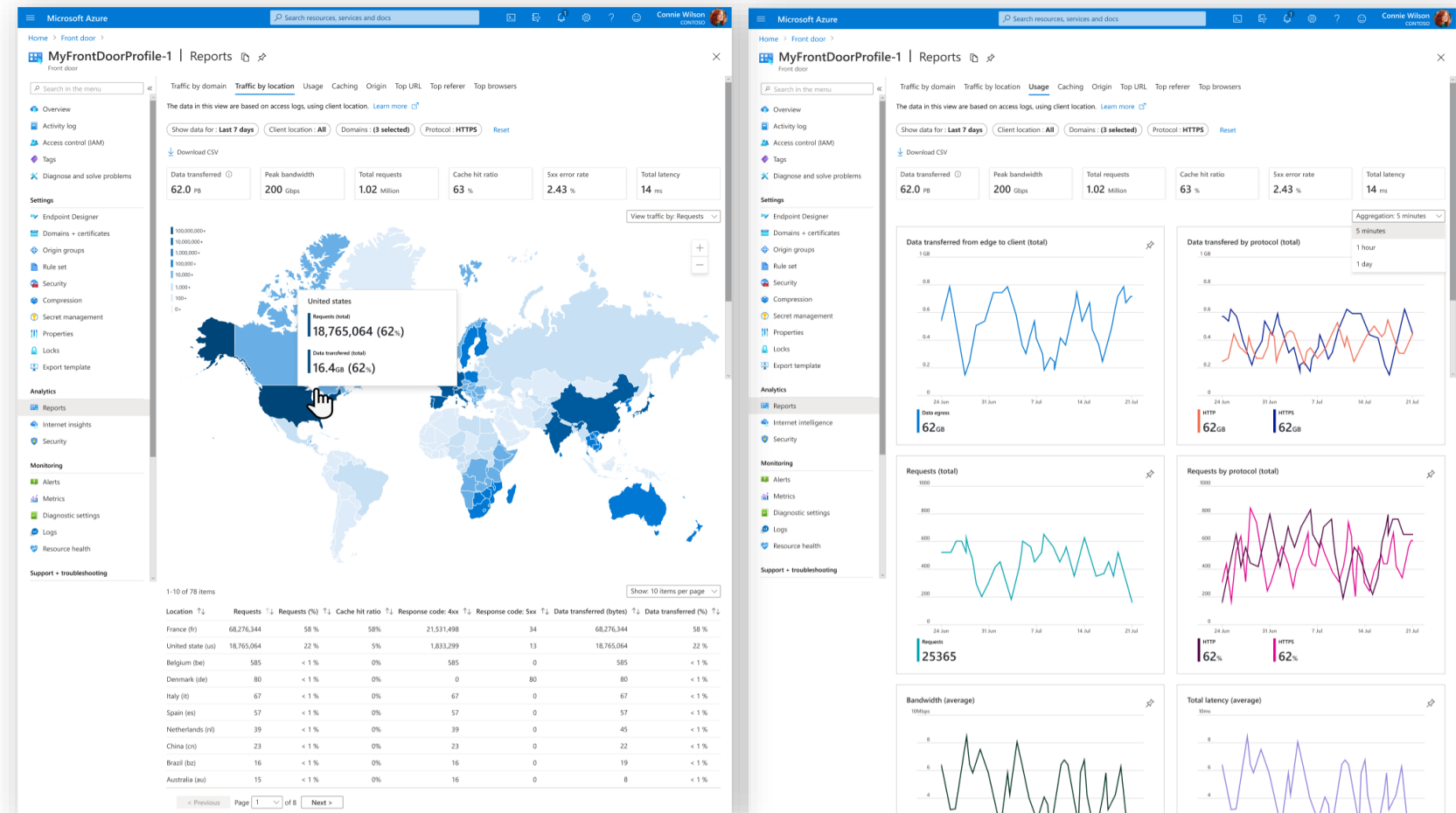
URLredirect

Please go to Route in Front Door manager for more configurations.

Create more complex and dynamic routing between your user and backends with regular expressions and server variables.

Advanced Analytics

A single pane of glass for real-time & granular data – understand everything from your security policies to how customers are experiencing your service.



Monitor and troubleshoot your traffic and security with real-time, advanced analytics capabilities such as access logs, health probe logs, pre-built reports, and additional metrics



Fast Global Delivery

Accelerate dynamic and static content with a simplified cost model



Accelerate apps and content to users wherever they are



Improve app reliability and scale by leveraging a global, private network



Optimize forecasting and costs with simple and predictable pricing model

Global scale private dedicated CDN network

60+ Azure regions

165k+ miles of fiber + subsea cables

185+ Network Edge sites

500+ Network partners

20k+ Peering connections



Azure Front Door first party adoption

80% of Microsoft 1st Party SaaS runs on Front Door

Build on the proven platform used to power reliable and fast global services at Microsoft that instantly scale on demand

Azure's content delivery network enables Bing to operate at scale with competitive performance while also scaling agile development across many independent microservices.

Azure's massive capacity, an expansive network backbone, rich peering and strong stance on security improved LinkedIn's availability, reduced median page load times by over 25%



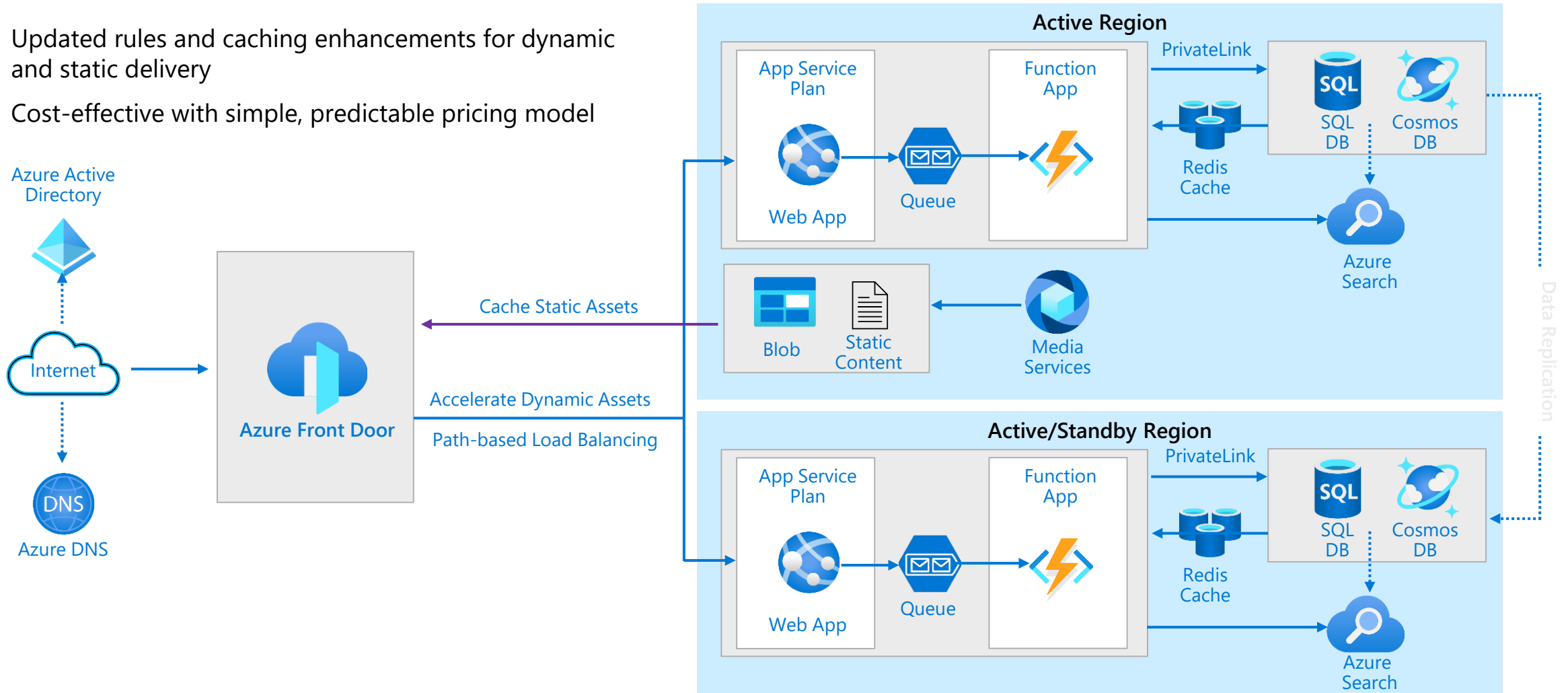
[Read about LinkedIn's story migrating to Azure Front Door](#)



Unified static and dynamic delivery

Optimized static and dynamic content acceleration for a single domain

- Updated rules and caching enhancements for dynamic and static delivery
- Cost-effective with simple, predictable pricing model



Transparent, simple and easy to consume pricing

Standard and Premium tiers

- Four meters:
 - Base (billed on per hour used)
 - Egress (\$/GB)
 - Ingress
 - Request (RPS)
- Further discounts with larger commitment levels

Bundle Composition includes:

- Low entry /fixed price– Includes level of usage (egress / requests)
- Egress Fee - Tiered egress rates. Seven tiers suggested
- Request / DTI Fee – Secondary meters (Requests and Ingress)

Azure to Front Door data transfer out now included in Azure Front Door Standard & Premium tiers

Check out [Azure Front Door pricing page](#) for more details

Min Entry Commit

~\$35 per month **Standard tier**

~\$330 per month **Premium tier**

Primary meter

Egress Fee:

Example N. America

(same price for Standard and Premium)

Tier	\$/GB
First 10TB	\$0.0825
Next 40TB	\$0.0650
Next 100 TB	\$0.0560

Secondary meter

RPS and DTI:

- Price protection for non-standard use cases
- Request fees captures dynamic heavy traffic
- Ingress fee for reverse CDN use cases

RPS – Request per second, DTI – Data Transfer Ingress



Intelligent Security

Seamlessly attached security protection and analytics



Embrace a zero-trust model
by accessing your origins privately

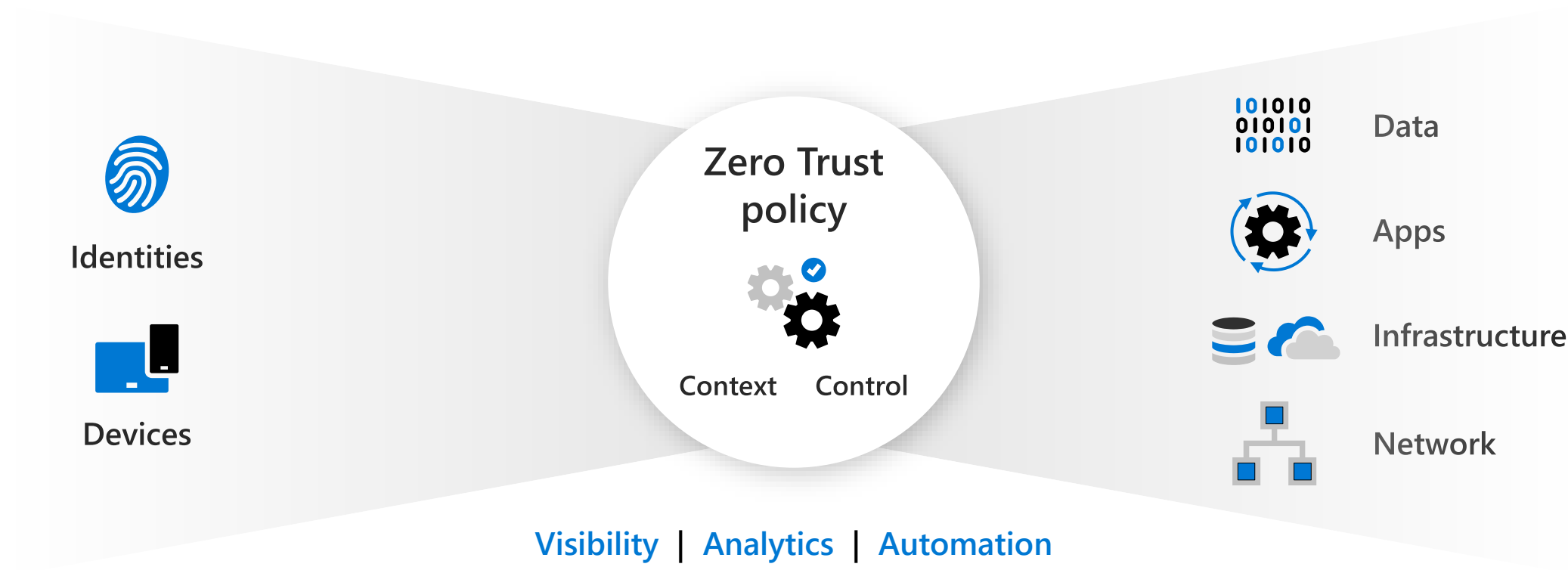


Boost detection and response
with threat intelligence from Microsoft



Integrate seamlessly
with Azure Security services

Securing your organization with Zero Trust

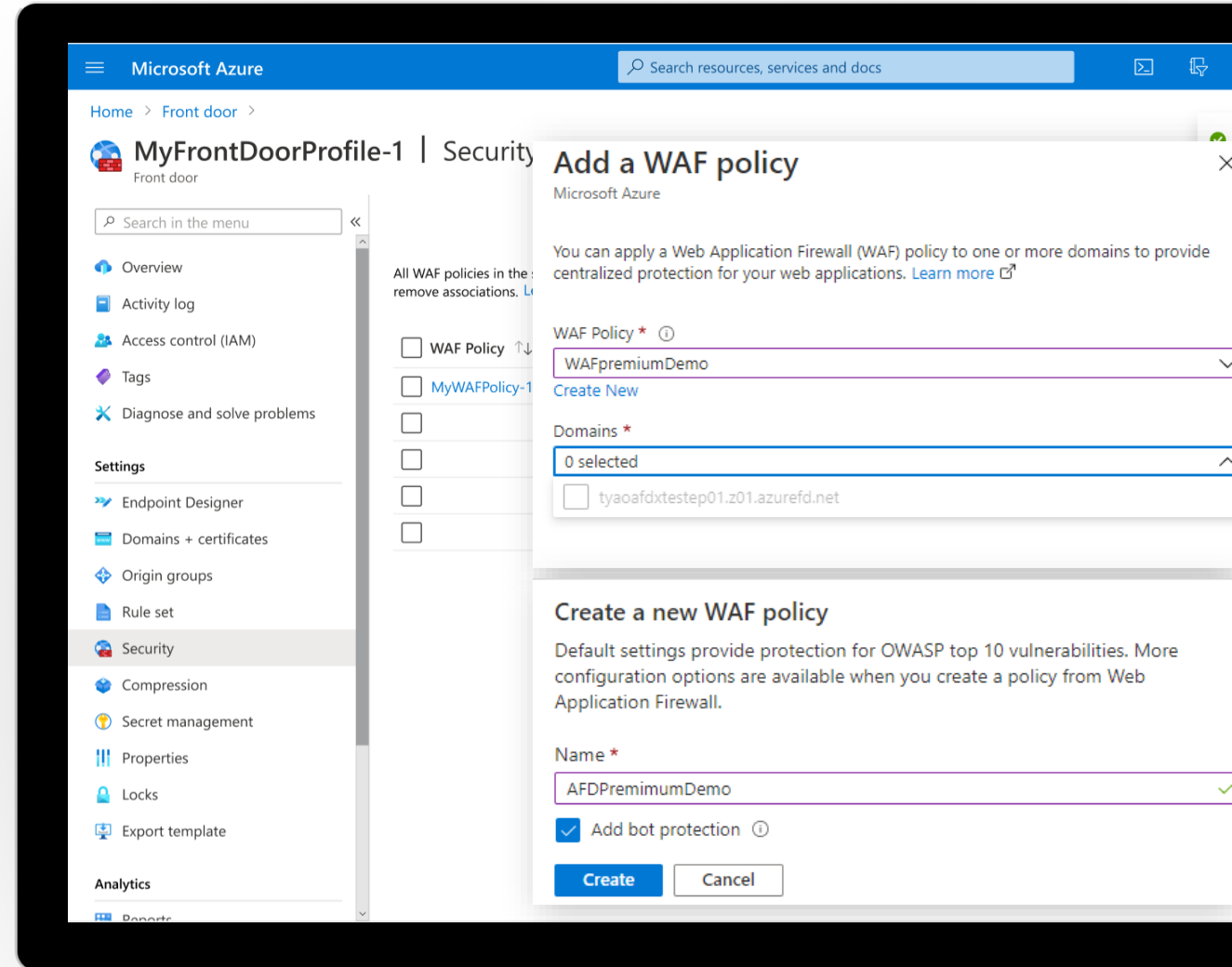


Best-in-class security seamlessly attached




Protect your digital estate in a few clicks with WAF, Bot, and DDoS protection

- WAF managed rulesets to protect applications against OWASP top 10 vulnerabilities with DRS 2.0 ruleset
- Custom WAF rules for application specific protection
- Bot rules (Bad/Good) sourced from Microsoft Threat Intelligence
- Built-in DDoS protection
- Advanced security reports, metrics, and logs




Easily create a new WAF policy or apply an existing one to a domain



Leverage Microsoft Threat Intelligence to protect applications

 **AFDpremiumWAFdemo**  

Front Door WAF policy

<<  Disable  Delete  Refresh

Overview

Activity log

Access control (IAM)

Tags

Settings

Policy settings

Managed rules

Custom rules

Associations

Properties

Locks

Automation

Tasks (preview)


Export template

Support + troubleshooting

New support request

Essentials

Resource group (change) : [afdx-bugbash](#)

Status :  Enabled

Subscription (change) : [AZURE-CDN-TEST](#)

Subscription ID : 27cafca8-b9a4-4264-b399-45d0c9cca1ab











Tags (change) : [Click here to add tags](#)

Custom rules : 2













Associations : 4

SKU : Front Door Premium (preview)

Microsoft_BotManagerRuleSet_1.0

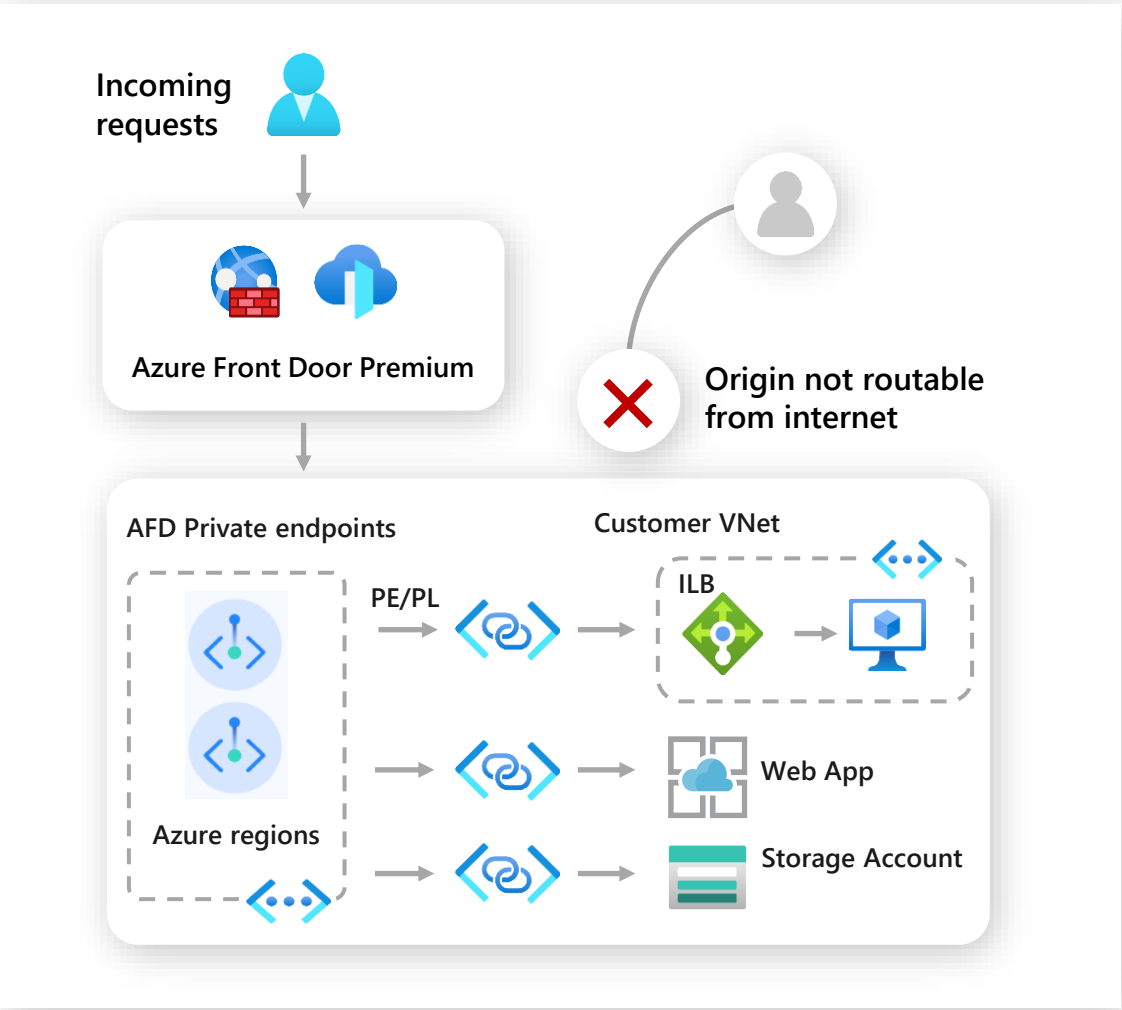
<input type="checkbox"/>	Bot100100	Malicious bots detected by threat intelligence	 Block	 Enabled	BadBots	Microsoft_BotManagerRuleSet_1.0
<input type="checkbox"/>	Bot100200	Malicious bots that have falsified their identity	 Block	 Enabled	BadBots	Microsoft_BotManagerRuleSet_1.0
<input type="checkbox"/>	Bot200100	Search engine crawlers	 Allow	 Enabled	GoodBots	Microsoft_BotManagerRuleSet_1.0
<input type="checkbox"/>	Bot200200	Unverified search engine crawlers	 Log	 Enabled	GoodBots	Microsoft_BotManagerRuleSet_1.0
<input type="checkbox"/>	Bot300100	Unspecified identity	 Log	 Enabled	UnknownBots	Microsoft_BotManagerRuleSet_1.0

Microsoft_DefaultRuleSet_1.1

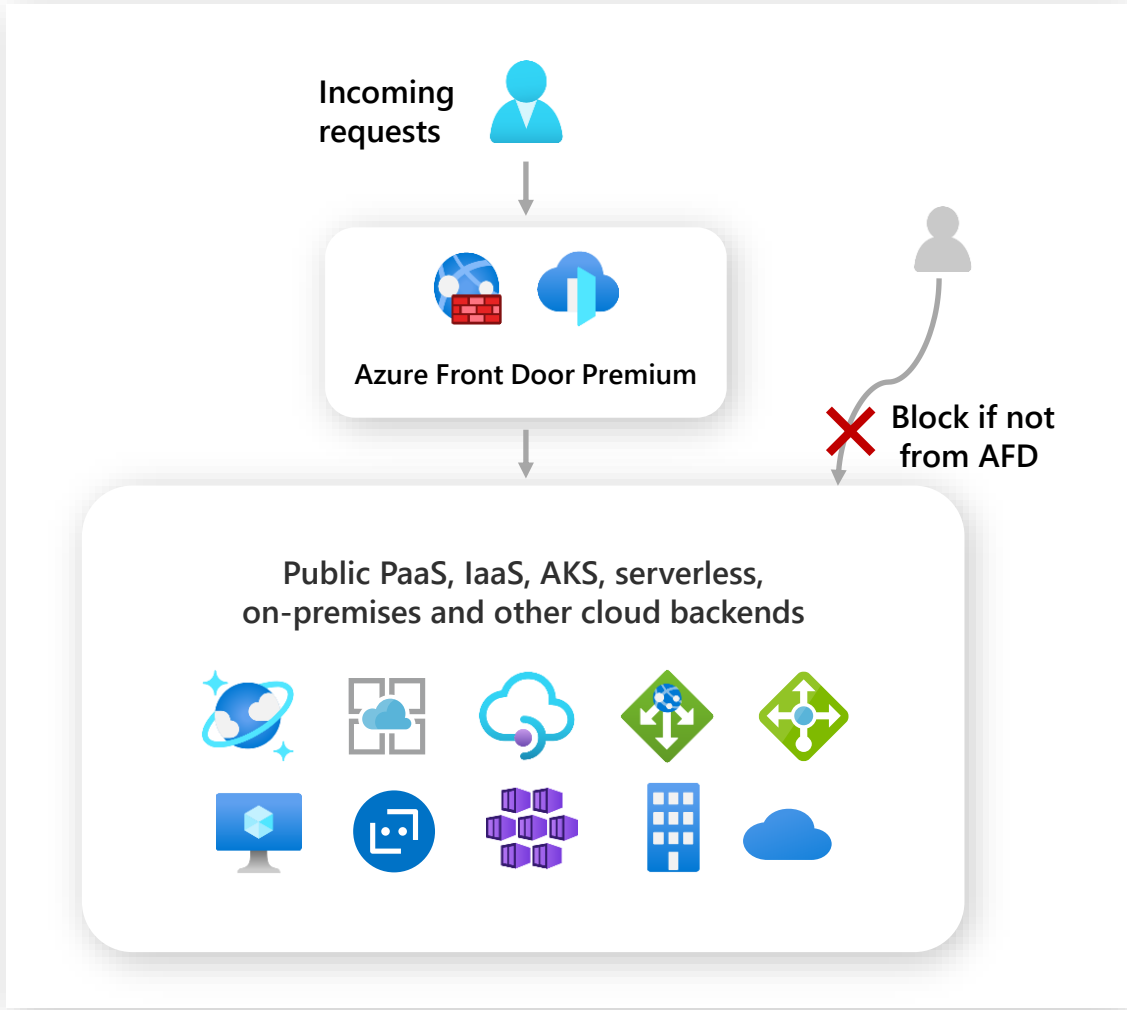
<input type="checkbox"/>	99005002	Web Shell Interaction Attempt (POST)	 Block	 Enabled	MS-ThreatIntel-WebS...	Microsoft_DefaultRuleSet_1.1
<input type="checkbox"/>	99005003	Web Shell Upload Attempt (POST) - CHOPPER PHP	 Block	 Enabled	MS-ThreatIntel-WebS...	Microsoft_DefaultRuleSet_1.1
<input type="checkbox"/>	99005004	Web Shell Upload Attempt (POST) - CHOPPER AS...	 Block	 Enabled	MS-ThreatIntel-WebS...	Microsoft_DefaultRuleSet_1.1
<input type="checkbox"/>	99030001	Path Traversal Evasion in Headers (.././../)	 Block	 Enabled	MS-ThreatIntel-AppSec	Microsoft_DefaultRuleSet_1.1
<input type="checkbox"/>	99030002	Path Traversal Evasion in Request Body (.././../)	 Block	 Enabled	MS-ThreatIntel-AppSec	Microsoft_DefaultRuleSet_1.1
<input type="checkbox"/>	99031001	SQL Injection Attack: Common Injection Testing ...	 Block	 Enabled	MS-ThreatIntel-SQLI	Microsoft_DefaultRuleSet_1.1

Azure Front Door Premium Origin Protection

Private origins in Azure via Private Link service



Public origins via IP and header restriction



Azure Front Door

Modern Cloud CDN with Intelligent Threat Protection



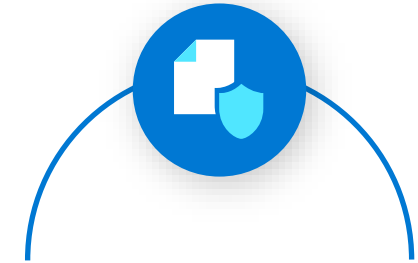
Modern Architecture

- Fully REST API driven to automate and streamline deployment
- Tight integration with Azure services including App Service, Storage, API Manager, App Gateway and Azure Sentinel
- Customizable rules for advanced routing
- Advanced analytics to monitor traffic and security in real time



Fast Global Delivery

- Low latency, high throughput content delivery from cloud or on-prem to global users
- Built on Microsoft massively-scaled private global network
- Supports static/dynamic content caching, file, OTT and video on-demand
- SSL offload and dynamic app acceleration at the edge close to user
- Simplified cost model with fewer meters to plan for



Intelligent Security

- WAF, DDoS and Bot Manager protection
- Azure Private Link support to access resources securely
- Powered by Microsoft Threat Intelligence

Get started today



Use Azure Front Door to accelerate content delivery securely and at scale



Use Azure Front Door as part of a Zero-Trust approach to security



Learn more about Azure Front Door
aka.ms/azurefrontdoor

Thank you.

