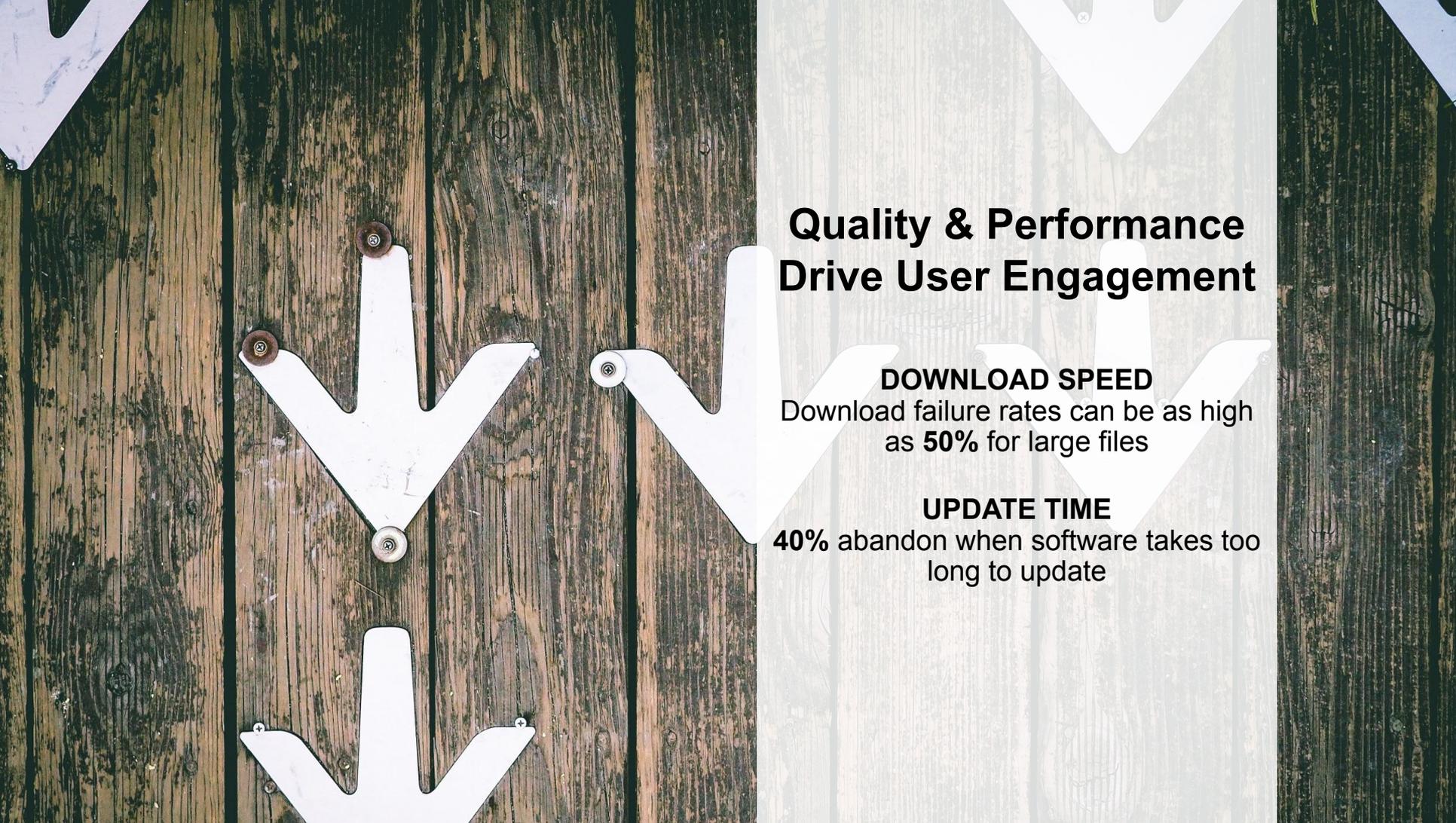




**AKAMAI SOLUTIONS**  
**Download Delivery**



## Quality & Performance Drive User Engagement

### **DOWNLOAD SPEED**

Download failure rates can be as high as **50%** for large files

### **UPDATE TIME**

**40%** abandon when software takes too long to update

# | Akamai Media Delivery Products

## Adaptive Media Delivery

Delivery of Pre-segmented HTTP based streaming media including **video and music**

## Download Delivery

Delivery of large files and other downloads including **online games and software**

## Object Delivery

Delivery of static embedded objects including **mobile downloads, social, images, etc.**

## Use Case Specific Features

Designed to deliver high performance, security, usability and transparency, APIs

**AKAMAI  
INTELLIGENT  
PLATFORM™**

Reliability, Capacity and Scale



## DOWNLOAD DELIVERY

FLV/MP4

(Large progressively downloaded videos)

>100MB Files

(Software, Games, Patches, Firmware, etc.)

## WHY DOWNLOAD DELIVERY?

**35%**

origin offload  
improvement

**25%**

throughput  
performance  
improvement

**66%**

reduction in cloud  
egress costs

- Improved total cost of ownership
- Enhanced ease of use, reporting & insight

# Download Delivery Features

## RELIABILITY & SCALE

- Akamai Intelligent Platform
- 100% Availability SLA
- Site Failover

## PERFORMANCE

- Advanced Cache Control
- Tiered Distribution
- QUIC Support
- HTTP/2
- IPV6

## SECURITY

- TLS: Shared Cert
- Standard TLS
- Access Control
- Token Authentication

## UI & SELF SERVICEABILITY

- Property Manager
- Log Delivery
- Media Reports
- Luna Control Center

## APIs & "OTHER"

- Open APIs
- Beta Channel
- Rate Limiting
- Jump Point Navigation
- Cloud Interconnects
- 3rd Party Origin Support
- Cloud Authentication

## ADD ONS

- Foreground Download
- TLS: Custom Cert
- Edge IP Binding
- Content Targeting
- Protocol Downgrade
- China CDN

# PERFORMANCE & SCALE



A hand is shown holding a glowing globe of the Earth. The globe is covered in a network of green and blue lines, representing data or network connections. The background is dark, making the glowing globe and the hand stand out.

# Akamai Today

## A GLOBAL PLATFORM

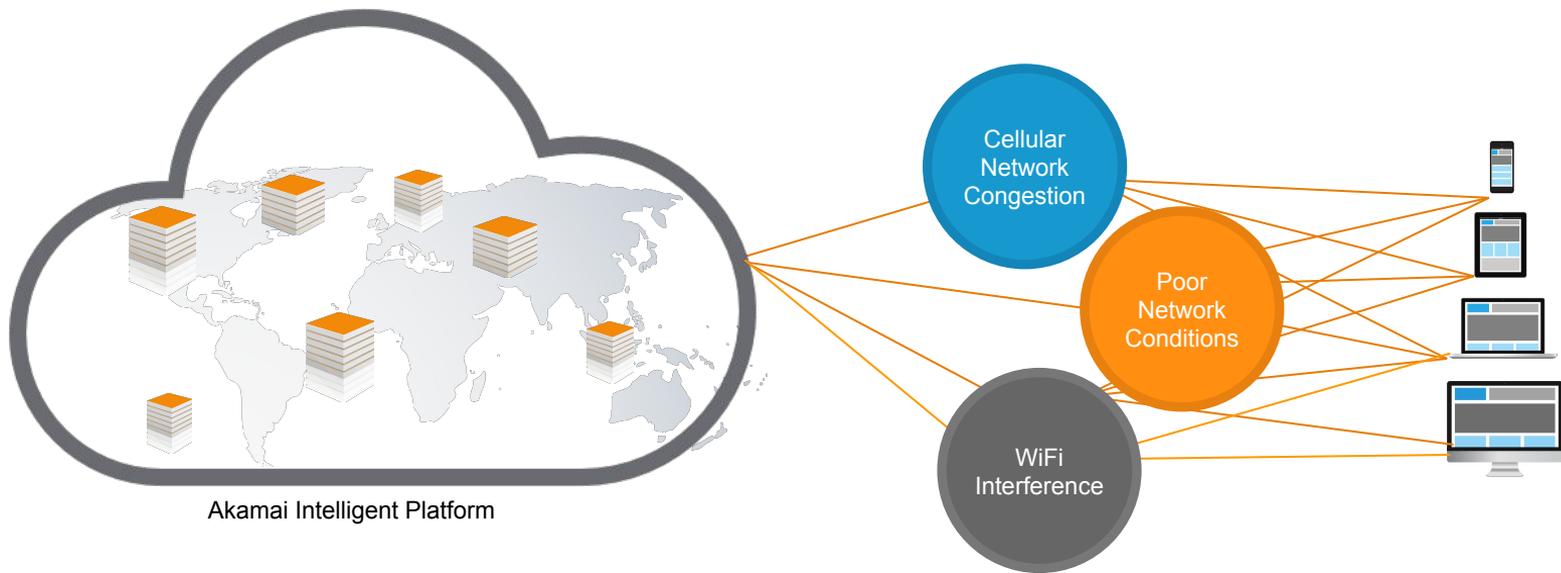
240,000+ servers  
1,700+ networks  
3,600 locations  
650+ cities  
130+ countries  
100+ million clients

## TRUSTED BY THE WORLD'S LEADING BRANDS

All top 20 global eCommerce  
Over 150 leading world banks  
All top 30 media & entertainment companies  
All branches of the U.S. military  
All top 10 automotive companies

## ACCELERATING DAILY TRAFFIC OF

40+ million hits per second  
2+ trillion deliveries per day  
40+ terabits per second



## Native Platform QUIC Support

Enhances the performance of media delivered over the internet to deliver great online experiences

**Higher Throughput | Faster Download Times | Longer Engagement**

# Foreground Download

Applies advanced caching and prefetching to reduce turnaround times and improve origin offload



# Performance Improvements: Results

## Foreground Download

~25% throughput improvement in US

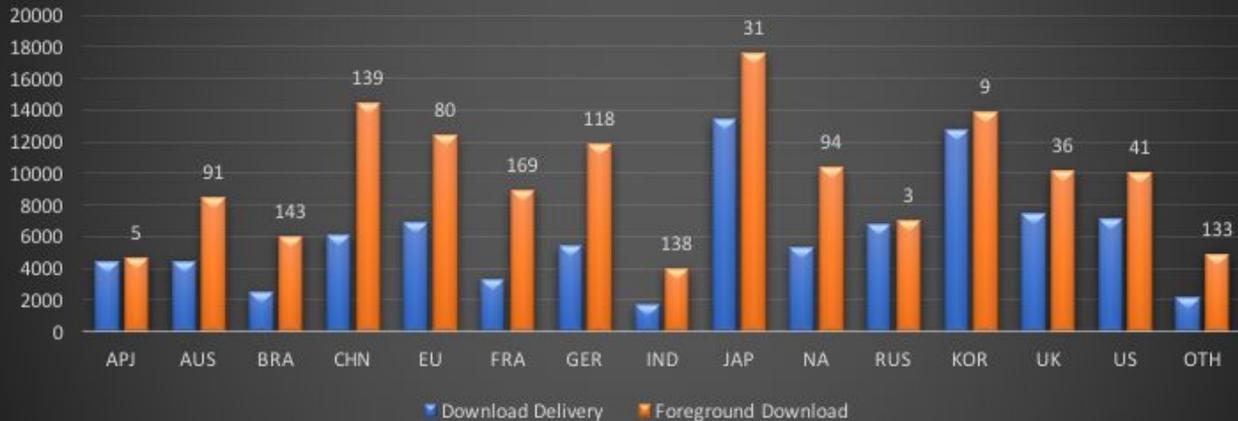
## QUIC vs. TCP



Faster Throughput

12.5%

DD vs FD



# SECURITY





# Standard TLS

## **COST EFFICIENT**

Included feature and traffic rates remain the same

## **PERFORMANCE AT SCALE**

Delivers HTTPS traffic with the same offload, throughput and latency performance Akamai customers expect

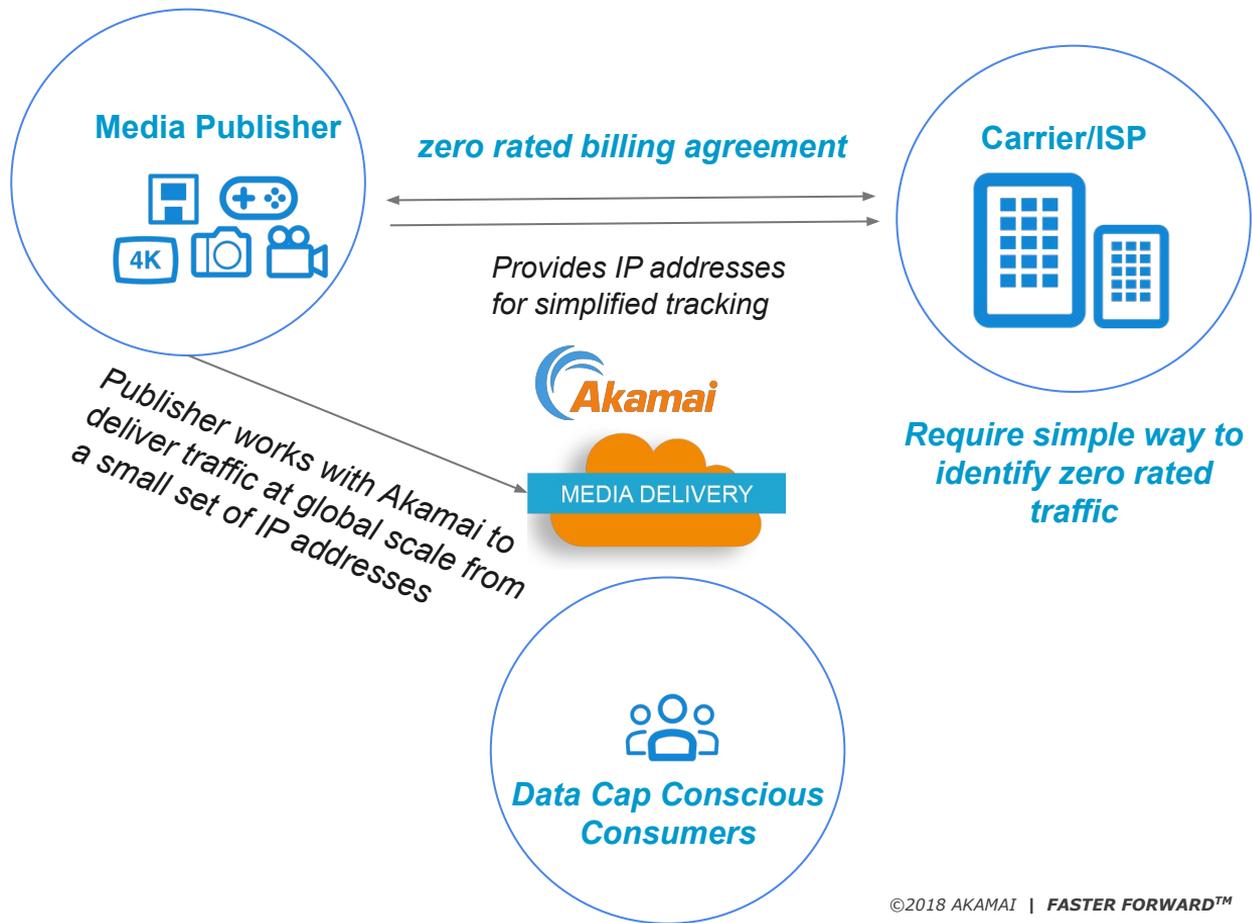
## **FLEXIBILITY**

Provides large scale HTTPS delivery with custom domain support (DV SNI Cert)

# Zero Rated Billing



# The Need for Edge IP Binding

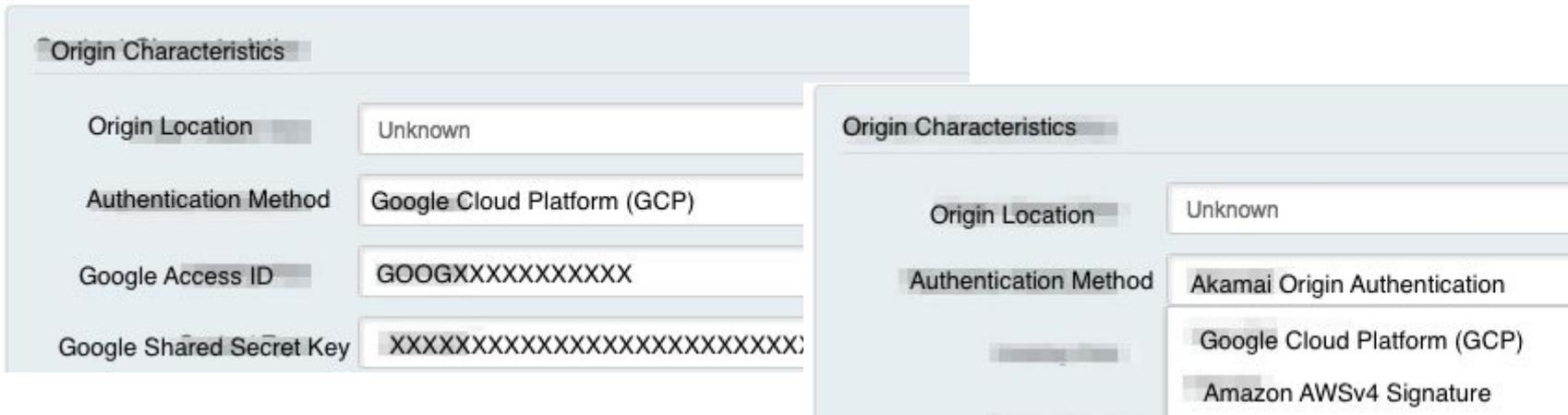


# APIs & “OTHER”



# Public Cloud Authentication

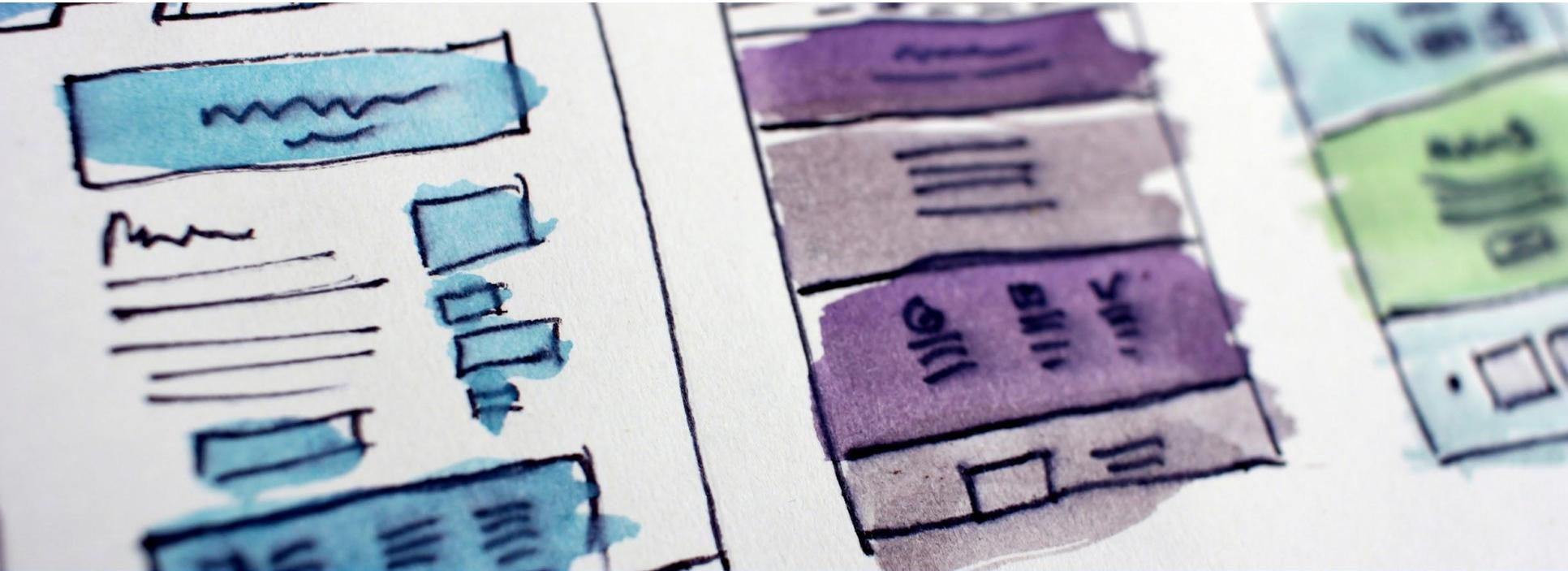
Customers are currently using their origins to proxy the requests to the cloud providers to be able to compute the request signature and send the authorization headers to the cloud providers. However, during peak traffic or flash traffic days, the origins can get saturated with the requests.



With the Cloud Authentication solution,

- Requests are routed from Akamai directly to the cloud providers instead of proxying through the origin.
- Customers can configure signature auth for these cloud providers.
- Akamai can sign the requests and tunnel directly to the following cloud providers,
  - Google Cloud Platform
  - Amazon AWS (v4 signature)

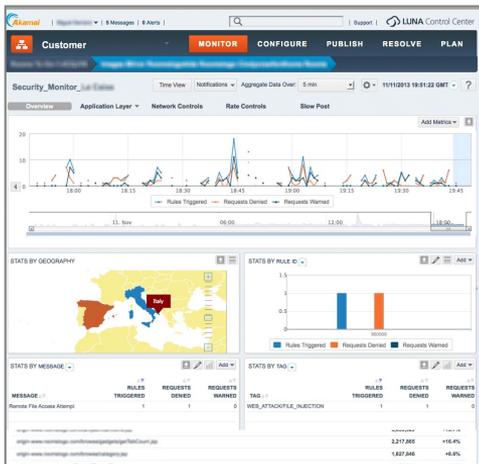
# UI & SELF SERVICEABILITY



# Performance Optimizations For Gaming or Software

## Property Manager

- Improved ease of use
- Manage and configure Akamai products
- Self service product configuration



*Example: Online Game Distributor Provider Y needs to deliver a large content catalog to a European customer base...*

## Behaviors

Add Behavior

### Origin Characteristics



Tiered Distribution has been enabled for your property in order to apply default Origin-related optimizations. You can choose to disable Tiered Distribution by using the Tiered Distribution Behavior.

Origin Location

Europe

### Content Characteristics

Content Size

Greater than 100 MB

Popularity Distribution

Popular

Catalog Size

Large

Content Type

Game

Optimize for Foreground Download

No

### Client Characteristics

Client Location

Germany

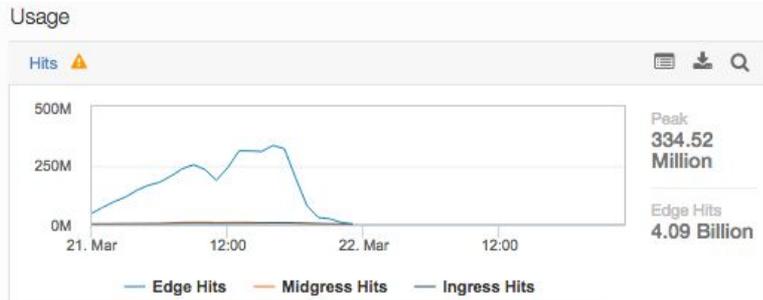
Content Type

Game

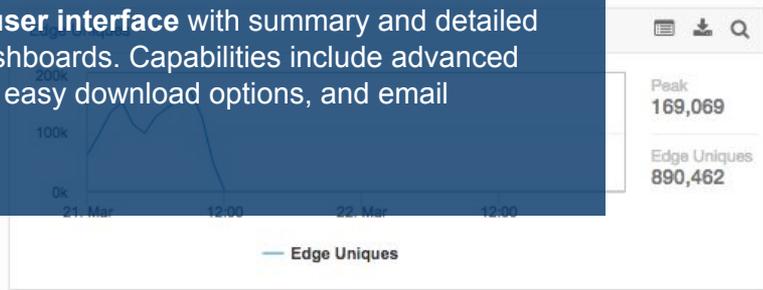
Optimize for Foreground Download

Yes

# Media Reports



- Near real-time insights (Q2) into delivery, download and first-mile performance.
- Customizable reports for views into metrics and dimensions that matter to you. Easily view, analyze and manage this data in other applications via Akamai's robust APIs.
- An intuitive user interface with summary and detailed views into dashboards. Capabilities include advanced filtering code, easy download options, and email delivery.



Server-side metrics include:

- Throughput
- Edge hits
- Origin responses
- Offload volume
- Download performance

# Download Delivery Roadmap



**QUIC Enablement** – Global rollout of QUIC protocol enhances the performance of media delivered over the Internet and create more engaging experiences for online audiences.

**Cloud Interconnect** – Customer access to direct network interconnections between Akamai and major cloud providers such as Amazon, Google and Microsoft.

**Geo Pricing** – Adds support for “served from” geographic pricing models.

**Edge IP Binding Self Serviceability** – Enhances onboarding and serviceability experience for customers using the existing feature to deliver zero-rated traffic.