

Akamai Solution Overview for Thai PBS



@Akamai

The digital economy is transforming faster than ever,
creating a world where **everything is connected.**

THIS CALLS FOR A COMPLETE RETHINK OF HOW YOU ENGAGE YOUR CUSTOMERS





AKAMAI IS TRUSTED BY THE WORLD'S LEADING BRANDS.



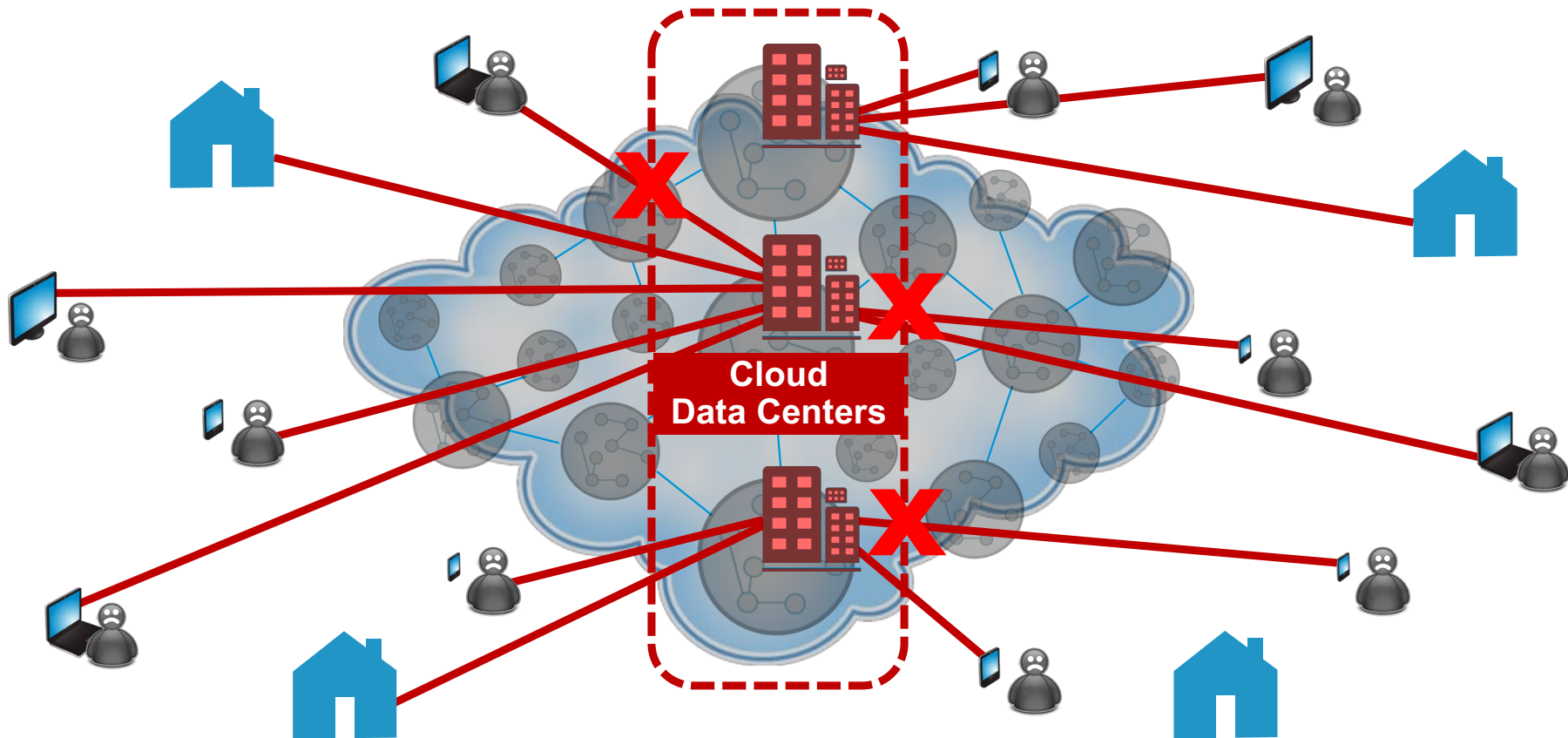
WHY AKAMAI:

The World's Largest and Most Trusted Edge Platform

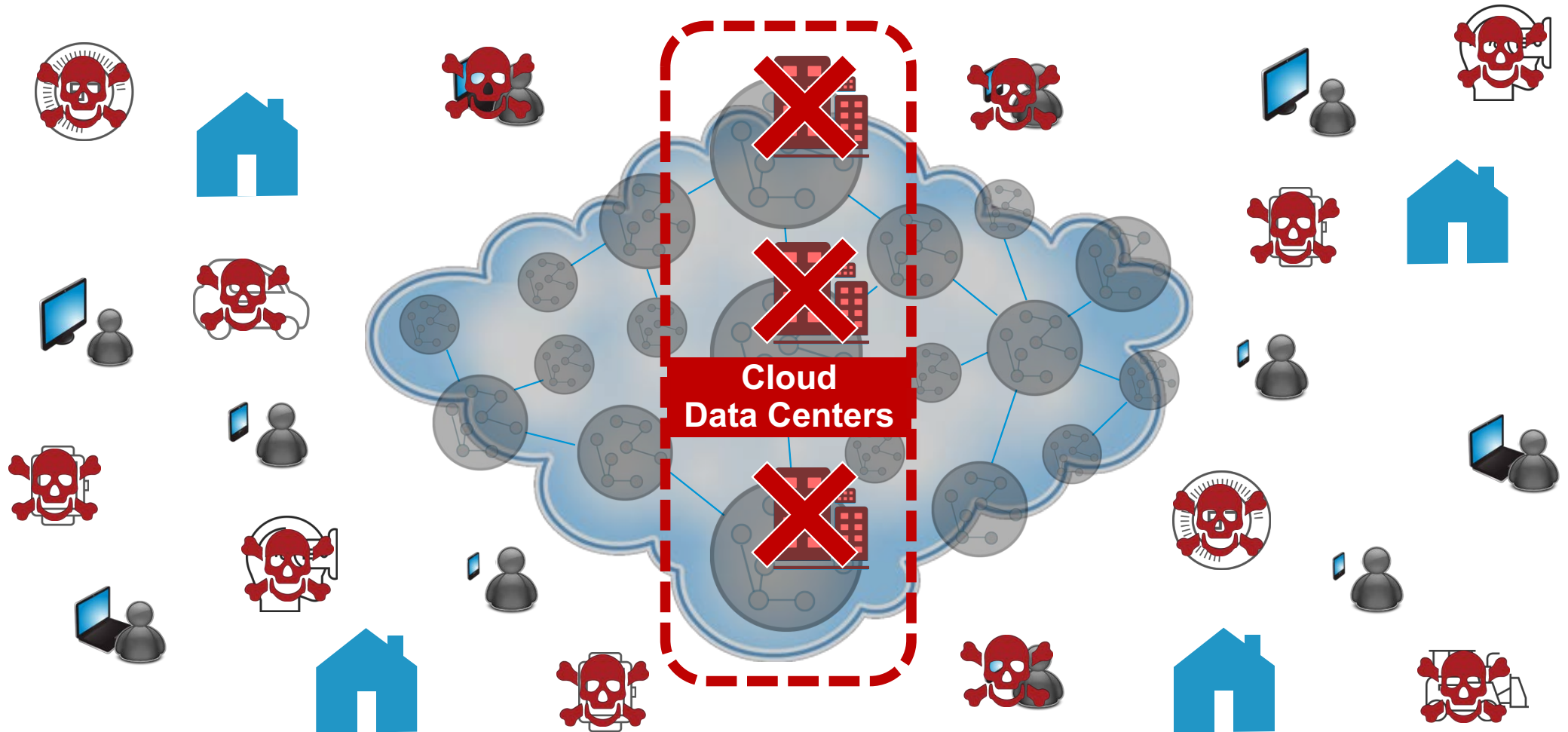


@Akamai

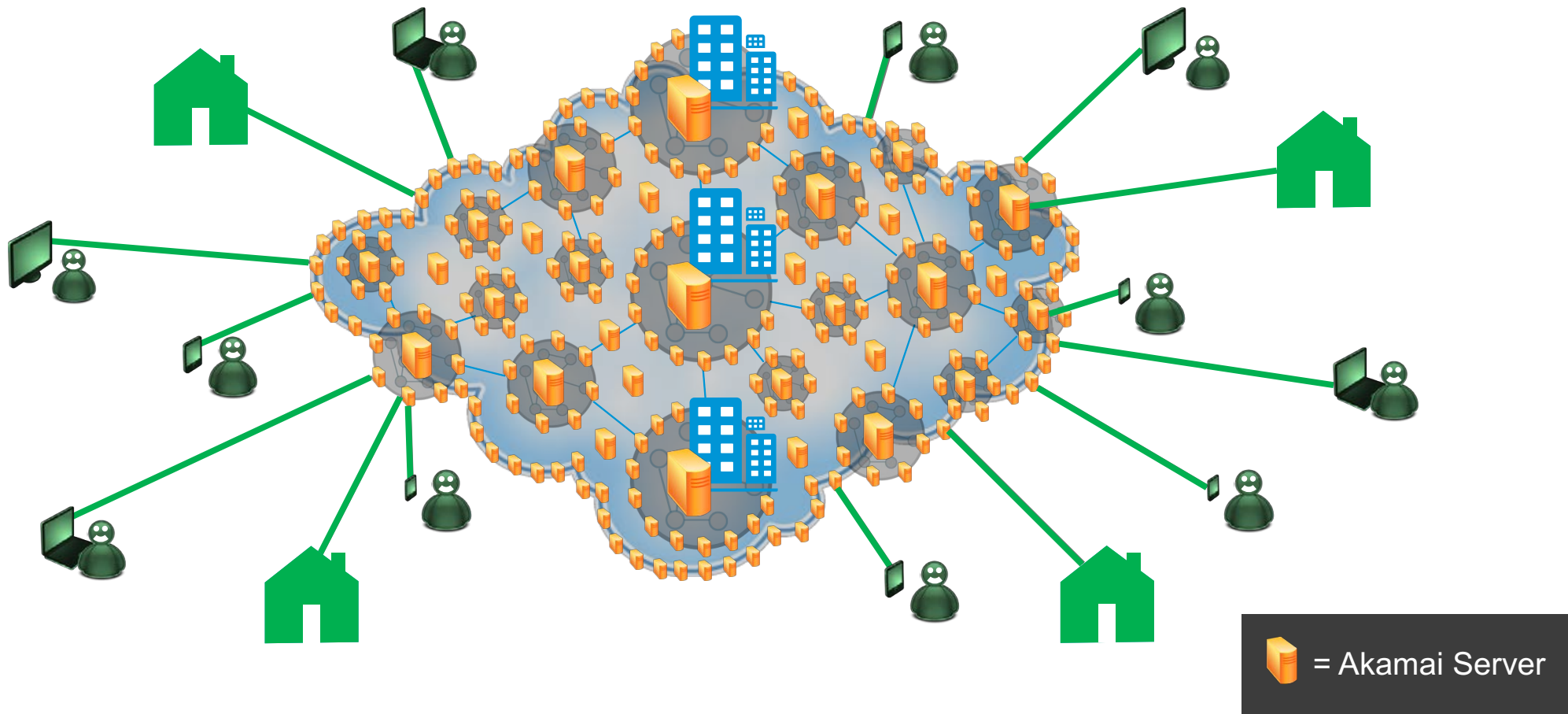
Scalability Challenge - The core gets congested



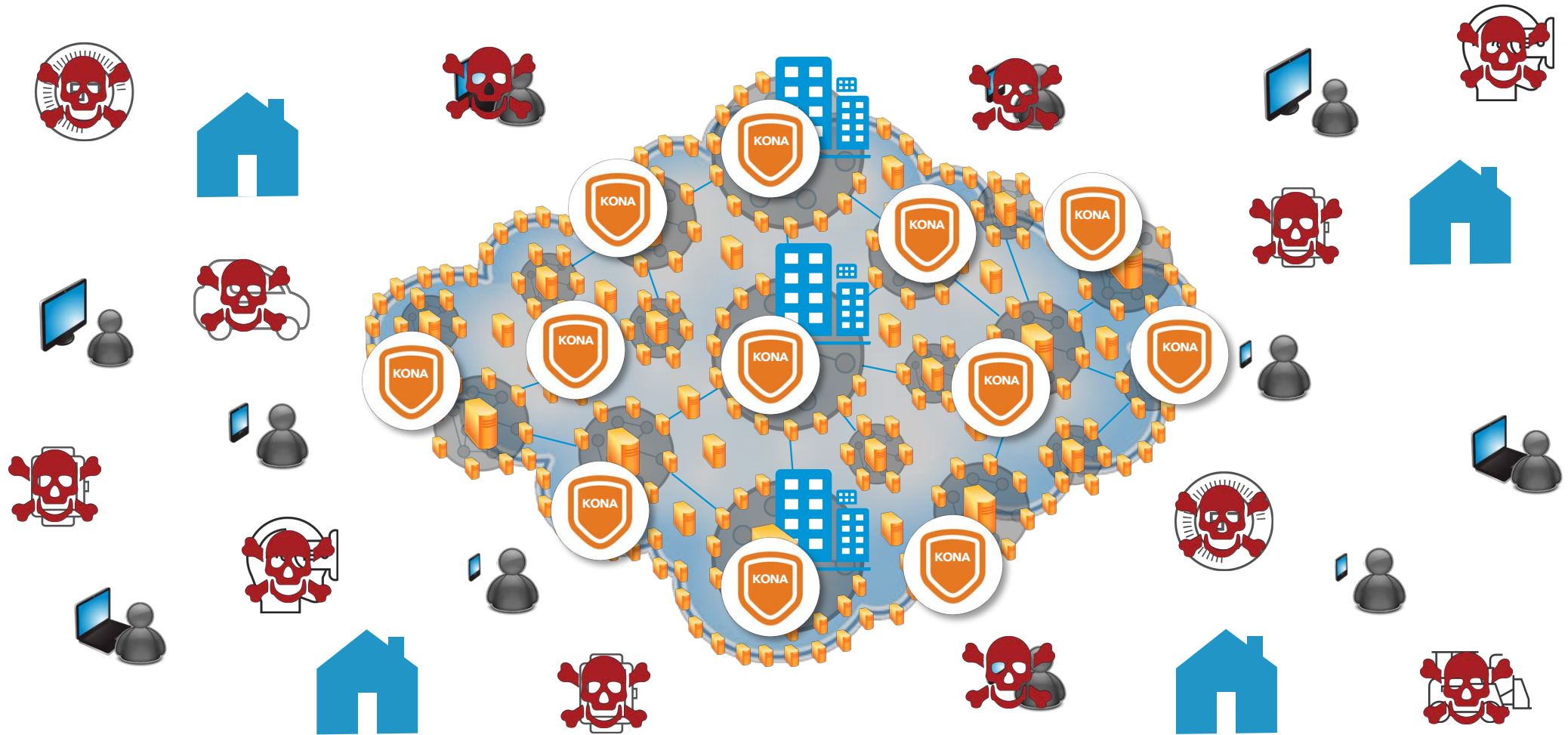
Security Challenge



Akamai's platform relieves the burden



Akamai uses a **defensive shield** to absorb attack traffic at the edge...
and block application-layer attacks



A hand holding a globe with glowing data lines. The globe is centered on the Atlantic Ocean, with North and South America visible. Numerous green and blue lines radiate from the globe, representing data flow. The background is dark with a faint world map.

Akamai Today

A GLOBAL PLATFORM

240,000 servers
1,700 networks
3,900 locations
133 countries

ACCELERATING DAILY TRAFFIC OF

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

TRUSTED BY THE WORLD'S LEADING BRANDS

Over half of all Fortune 500 companies
All top 15 U.S. and Canada retailers
All top 50 global Carriers
All top 25 U.S. banks
All branches of the U.S. military
9 of the top 10 global auto manufacturers

Cloud infrastructure

Optimized for high availability



Edge platform

Optimized for security, high accessibility and performance



AKAMAI INTELLIGENT EDGE

The world's largest and most trusted cloud delivery platform

DELIVERY

High bitrate streaming, adaptive media delivery, and fast downloads for flawless multi-channel digital experiences at scale.



PERFORMANCE

Website and mobile app acceleration, with script management and powerful policies to power dynamic, engaging digital experiences.



SECURITY

Defense in depth to protect against advanced threats, DDoS, malware, phishing, and data exfiltration, with bot management.



EXPERTISE

1,900+ experts ready to support you with strategic expertise, 24/7 proactive monitoring and responsive troubleshooting.



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Partnership with Hotstar – IPL 2018

10.39M

Peak Concurrent
Viewers

Global Streaming Record on May 27

230 PB

Data
Streamed

+38B

Minutes
Streamed

97%

From
Mobile



"We are delighted that Akamai has been a partner that has always walked in step with our ambitions and delivered the scale that we seek."

– Ajit Mohan, CEO, Hotstar

World Cup 2018

9.7M

Peak Concurrent
Audience

23.8 Tbps+

Peak Traffic
Per One Game

55

Number of
Broadcasters

100+

Number of
Countries

36 Mbps

Highest
resolution stream
during the event

For professional video, the key challenge is delivering the best viewer experience at scale on any device, cost effectively.

FORTNITE

A group of eight Fortnite characters standing in a row against a blue grid background. From left to right: a female character with a green tank top and goggles; a male character with a blue jacket and a large gun; a male character with a plaid shirt and a large gun; a male character with a green tank top and goggles; a female character with a red mohawk and a blue scarf; a female character with blonde hair and a black top; a female character with a black top and a red belt; and a female character in a black hooded outfit with a large gun. Various weapons are visible, including a large gun, a rocket launcher, a pickaxe, and a shield.

125M
Players
Worldwide

40M
Monthly
Players

80%
Reduction in
Download Errors

Akamai Delivery Products

High Performance Delivery with Full Visibility

Delivery

Adaptive Media
Delivery

Download
Delivery

Origin
Services

NetStorage

Media Services
Live

Cloud Wrapper

Visibility &
Data

Media Analytics

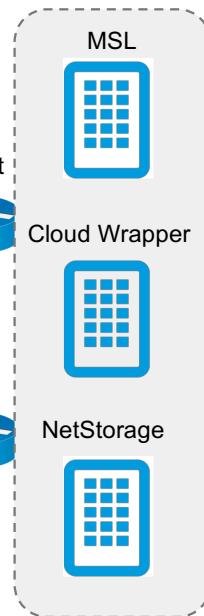
BOSS/BOCC

Akamai Media Product Portfolio: Overview

Customer



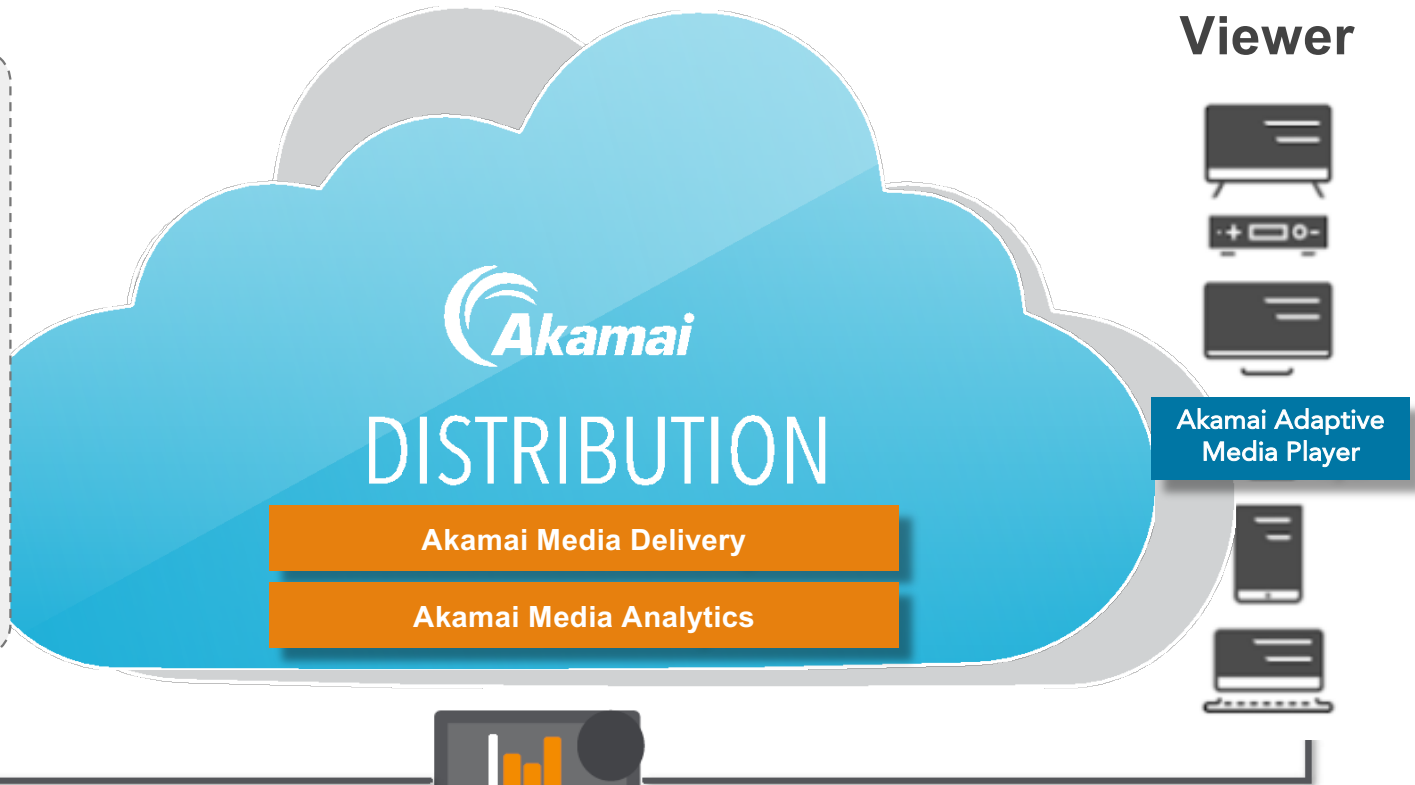
Origin Services



Cloud Interconnect



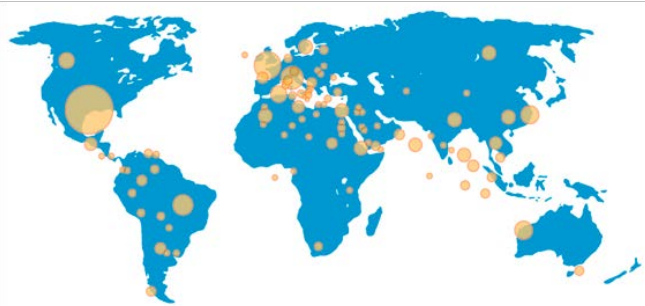
Direct Connect



Viewer

Akamai Delivery Products

Reliable, Scalable, Secure Delivery



Akamai's media delivery products solve the problem of ensuring the highest quality streaming or download experience at scale to viewers and gamers on any device.



Adaptive Media Delivery

Delivery of HTTP based streaming media video streaming, music streaming -



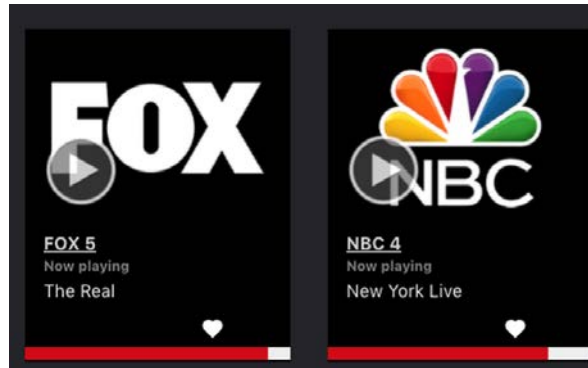
Download Delivery

Delivery of large files and other downloads
Online Games and Software



Adaptive Media Delivery Solutions

Ensure high-quality streaming to viewers anytime, anywhere on any device



Live Streaming

Live streaming refers to online streaming media simultaneously recorded and broadcast in real time to the viewer

Live Linear or Simulcast

Video streaming that has been programmed to start and end at a pre-scheduled time.

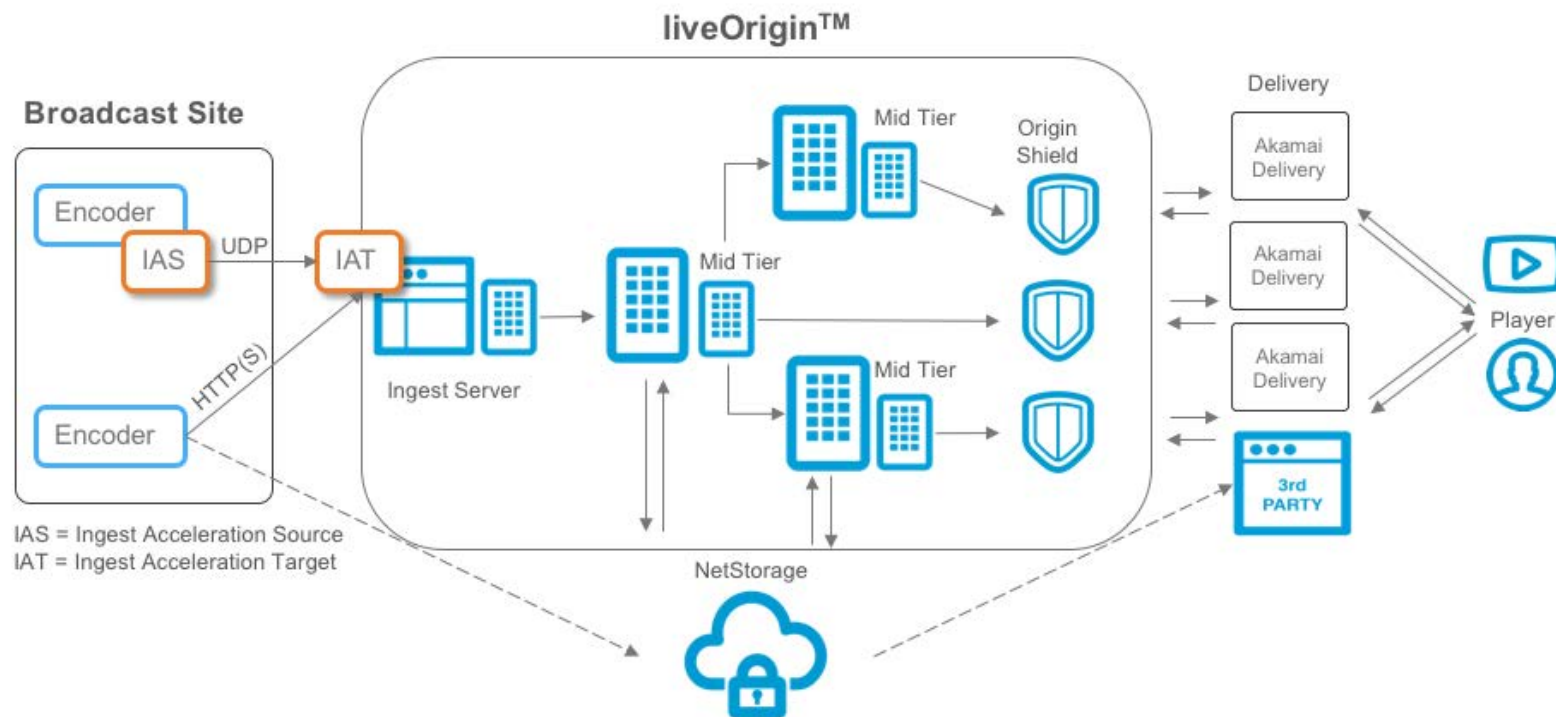
“Passive” viewing experience, meaning viewers don’t “search and click”, programming is sent viewer’s way

Video On Demand

Video on demand (VoD) allows users to select and watch video content of their choice. Users have a catalog of available videos to choose from.

Media Services Live

Bringing the TV experience online with liveOrigin™



~10s for all HTTP(S) Ingested Formats

NetStorage

Distributed, robust, high performance on-demand origin



Globally
Distributed

Media storage that supports a high quality streaming experience for viewers across the globe



Multi-way
Replication

Replication of content geographically dispersed extends resilience against regional outages



Flexibility
in Upload

Includes supporting standard upload methods as well as Aspera Accelerated Uploads.



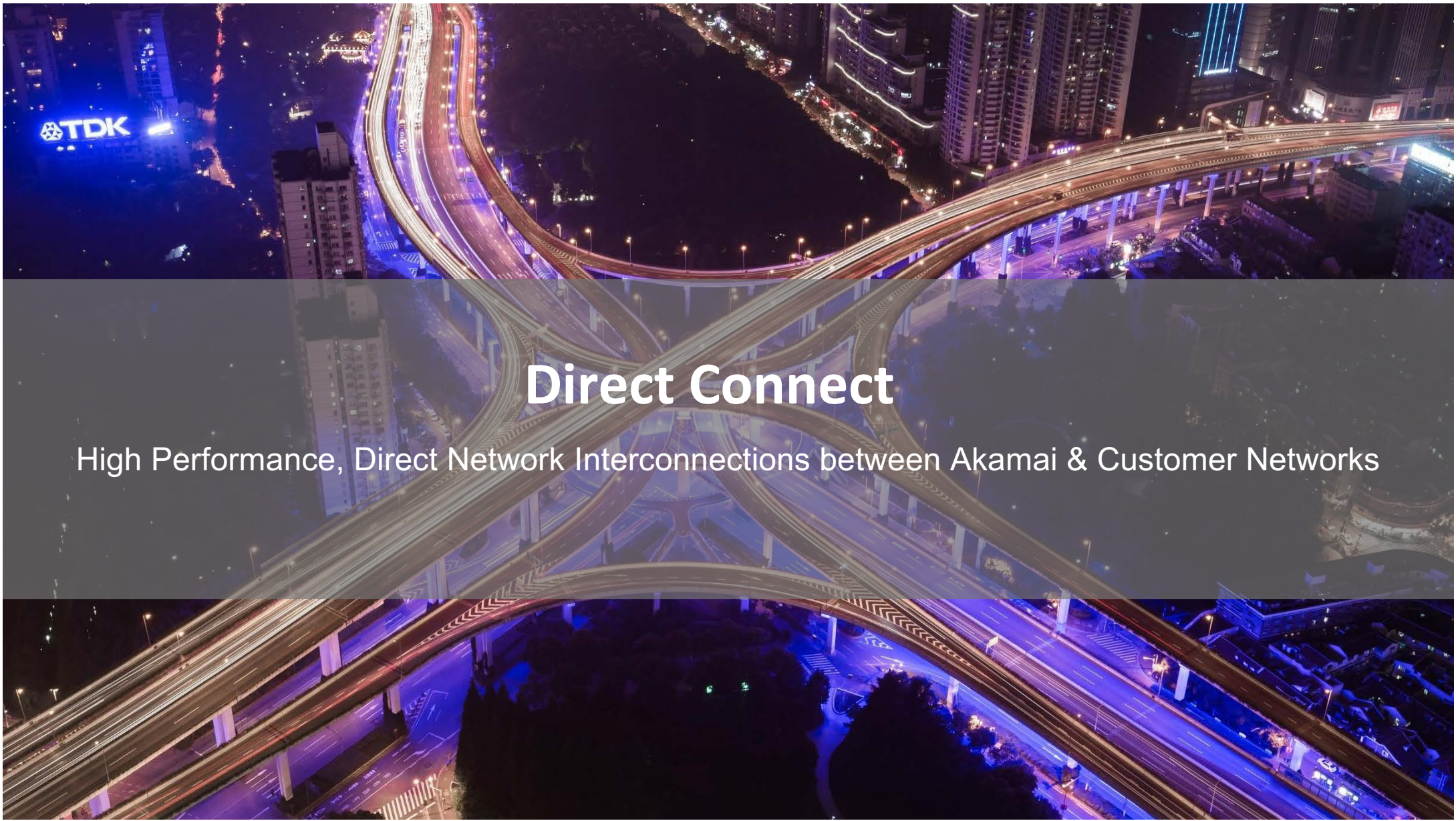
Reliability &
Availability

Optimal locations closest to viewers allowing for enhanced delivery performance. Consistency in performance vs. S3



Infrastructure
Scalability

Removes the complexity of storage capacity planning, and enabling rapid on-demand increases with built-in scalability



Direct Connect

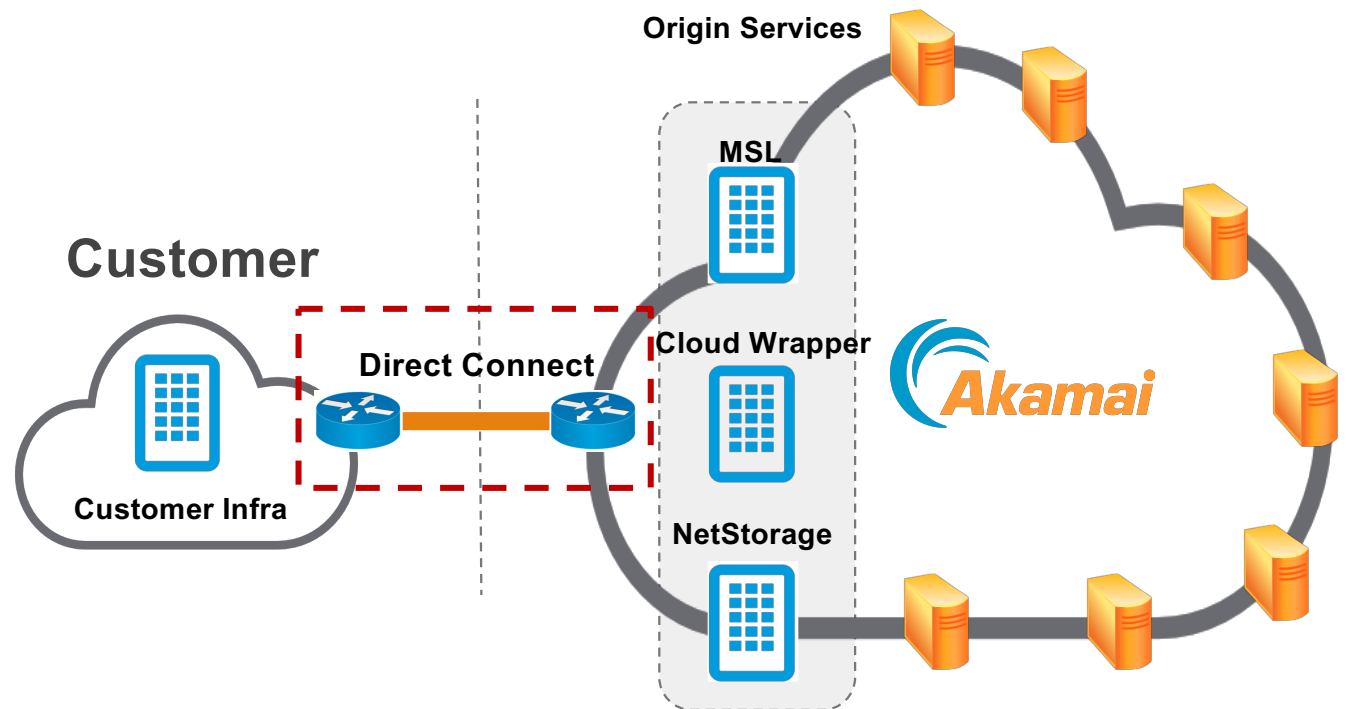
High Performance, Direct Network Interconnections between Akamai & Customer Networks

Common First Mile Transit Issues For Customer Managed Origins ...

Transit Guarantee for Video

Reduce Transit Costs

Common Architecture

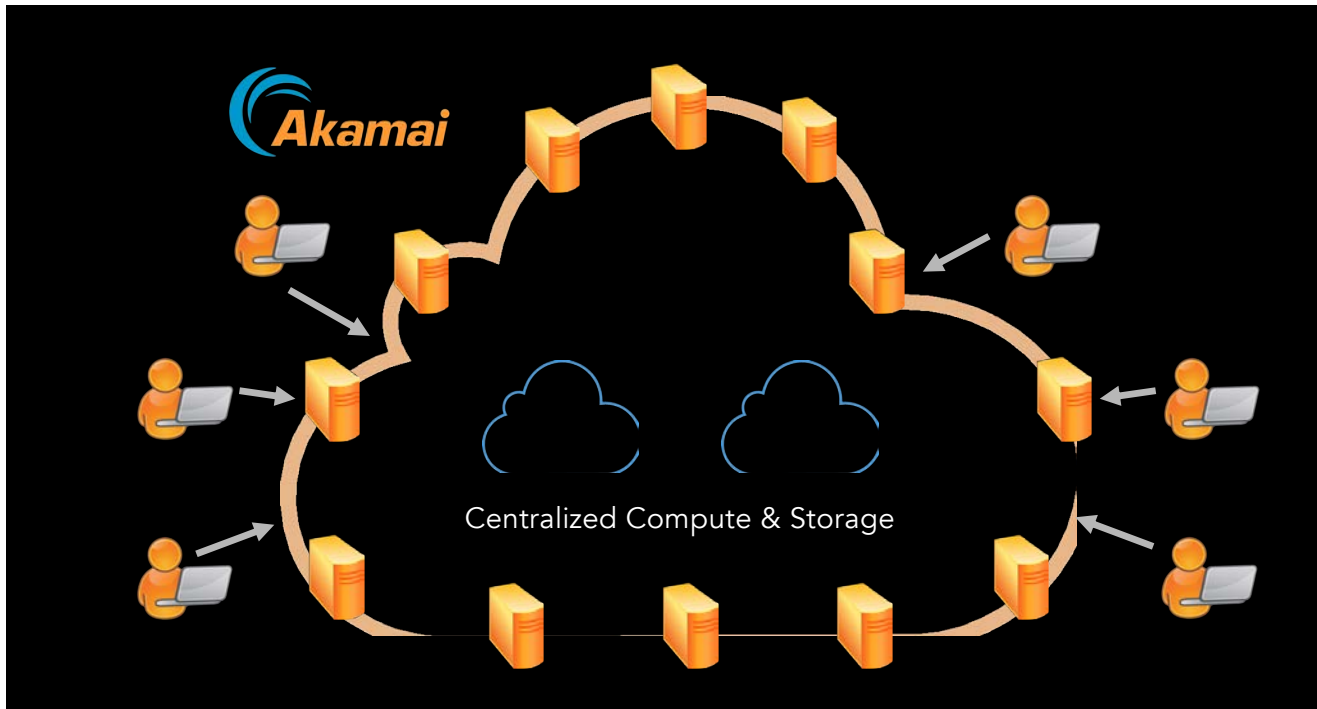


Cloud Wrapper

Bringing the TV experience online with liveOrigin™

Akamai's distributed network takes on even more importance as customers move to centralized public clouds for compute and storage.

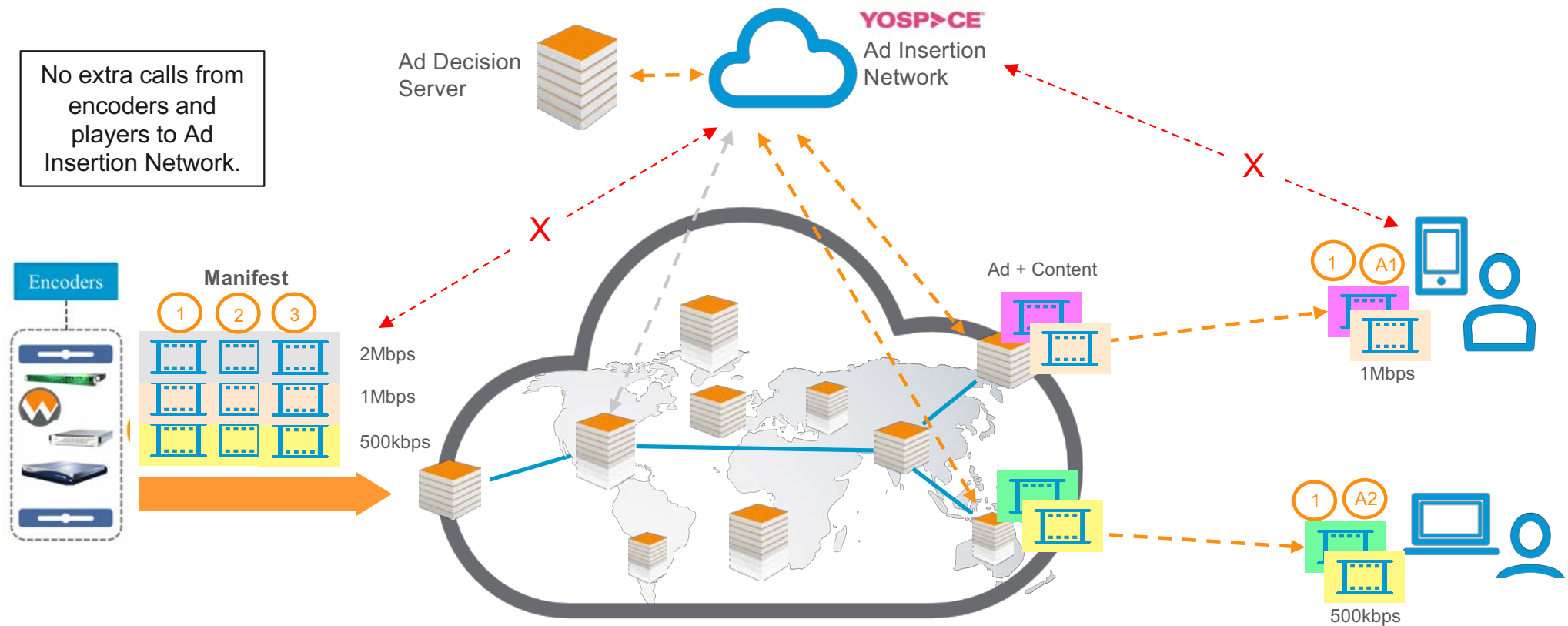
Cloud Wrapper is an innovative new offering for these customers.



- Maximized offload
- Direct connectivity
- Origin guard
- Advanced authentication
- Balancing between centralized cloud providers for improved reliability and performance

Dynamic Ad Insertion

Engaging viewer experiences with dynamically targeted, high quality ads



Real-Time Analytics

Visibility and insight into video performance and audience experiences.

Media Reports

Visibility into the quality of download, delivery and first-mile performance via server-side monitoring and reporting.

What's New? Updates for real-time monitoring capabilities and new metrics for Adaptive Media Delivery and Download Delivery (Q2 Release)

Media Analytics

Real-time Quality of Service metrics complemented by business summary dashboards for visibility into stream health and video performance.

What's New? An updated user interface and new reporting functionalities for Quality of Service Monitor (Q2 Release)

BOCC

A dedicated team of experts for 24/7 real-time, end-to-end, proactive monitoring for live event and 24/7 live linear use cases.

What's New? Q2 2018: Improved Media Services Live support for BOCC customers (Q2 Release)

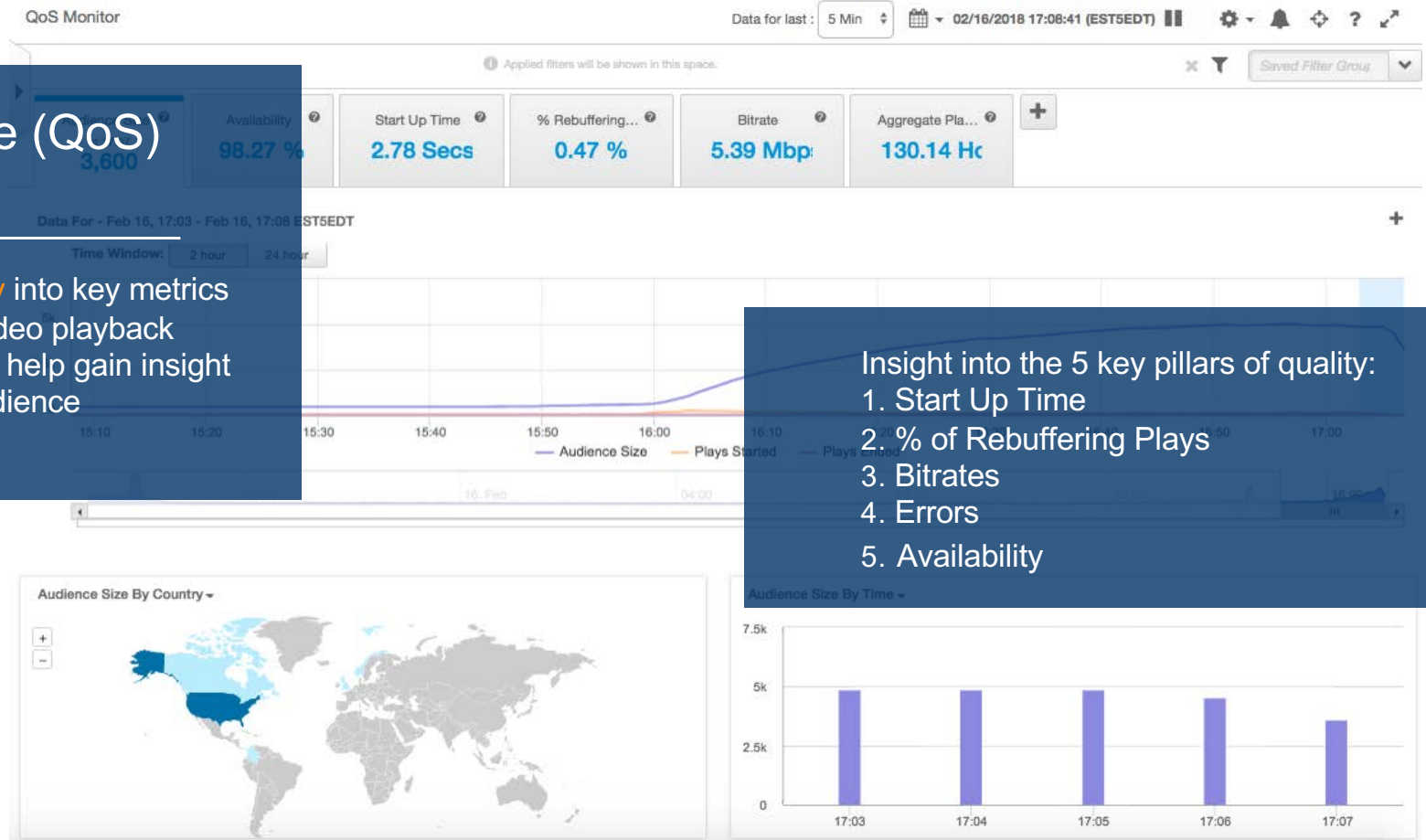


Media Analytics

Visibility and Insight

Quality of Service (QoS) Monitor

Provides **real-time visibility** into key metrics that affect the quality of video playback and viewing experience to help gain insight into stream health and audience engagement.



Broadcast Operations Control Center (BOCC)

Service Offering Facility, Expertise and Tools for Monitoring and Mitigation

A 24/7 service comprised of a globally distributed team of media experts armed with support tools that provide end-to-end visibility into your live & live linear workflows.

The BOCC proactively monitors SLAs for rapid response, troubleshooting, and mitigation of broadcast quality and availability issues.



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PERFORMANCE IS INCREASINGLY Challenging.

Rich, engaging content

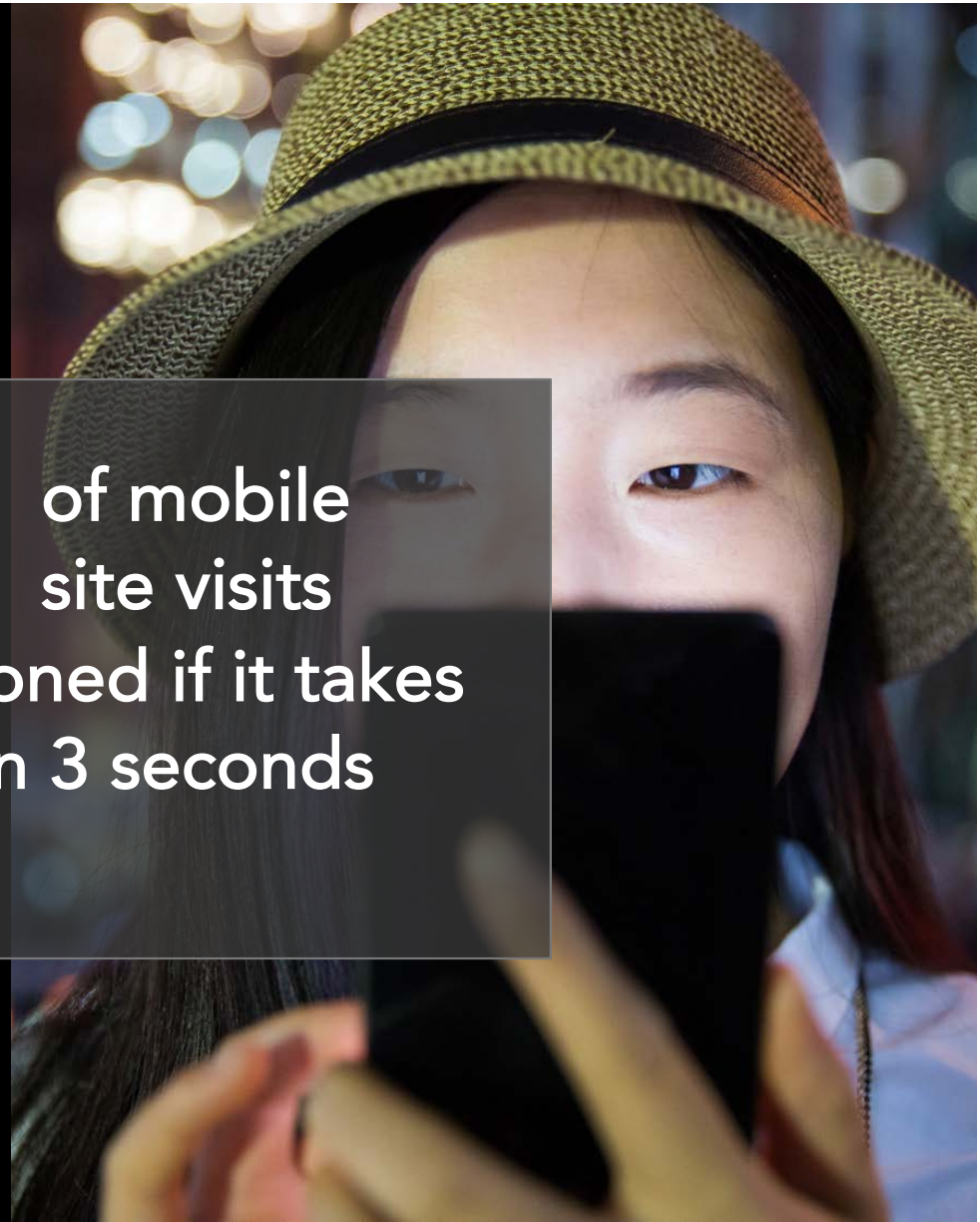
Interactive elements

1st and 3rd party scripts

Cellular congestion

Reporting and analytics

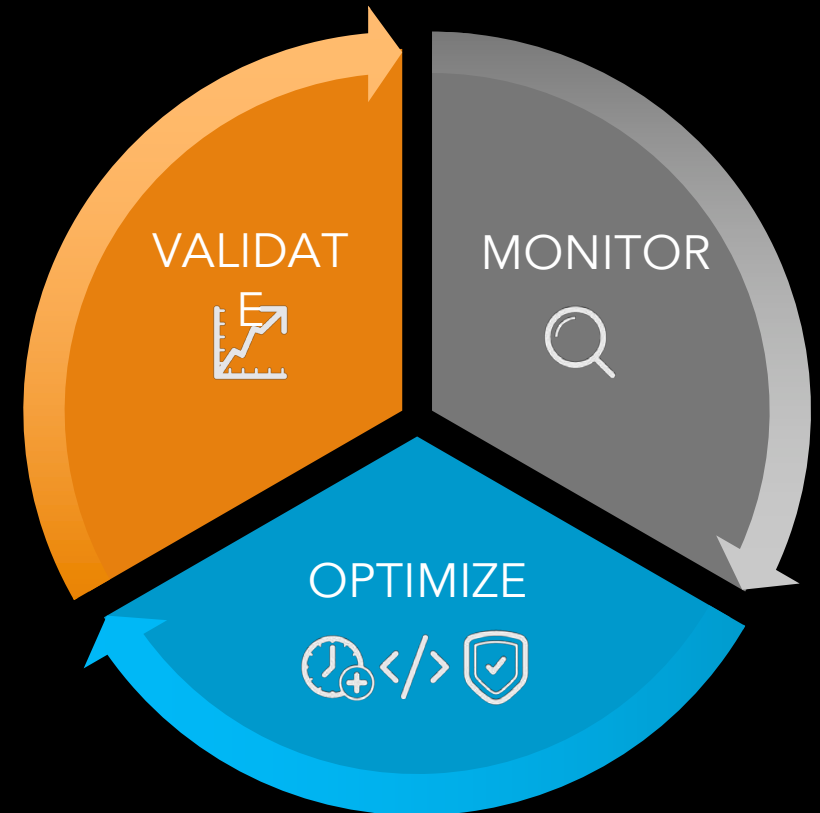
53% of mobile
site visits
are abandoned if it takes
longer than 3 seconds
to load



Tools to tackle the most **demanding digital platforms.**

Key product themes

- Insight into content, website and mobile app performance
- Technology to maximize performance and optimize content
- Tools to validate scalability and business impact



Akamai Edge Performance

Adaptive solutions accelerate modern apps.

Edge
Computing

Application Acceleration

IoT Edge Cloud

High speed, bi-directional global
messaging and compute

Application
Optimization

Image Manager

Dynamic optimization and
transformation of images

API Gateway

Manage access, authentication
and quota protection for APIs

Ion

Automated Acceleration for
Websites, Mobile Apps and APIs

Content
Delivery

Cloudlets

Smart, scalable apps maximize
efficiency and integrity

**Dynamic Site
Accelerator**

Caching, reliability, and offload
for web content

Performance
Management

CloudTest

Scalable, global load testing

mPulse

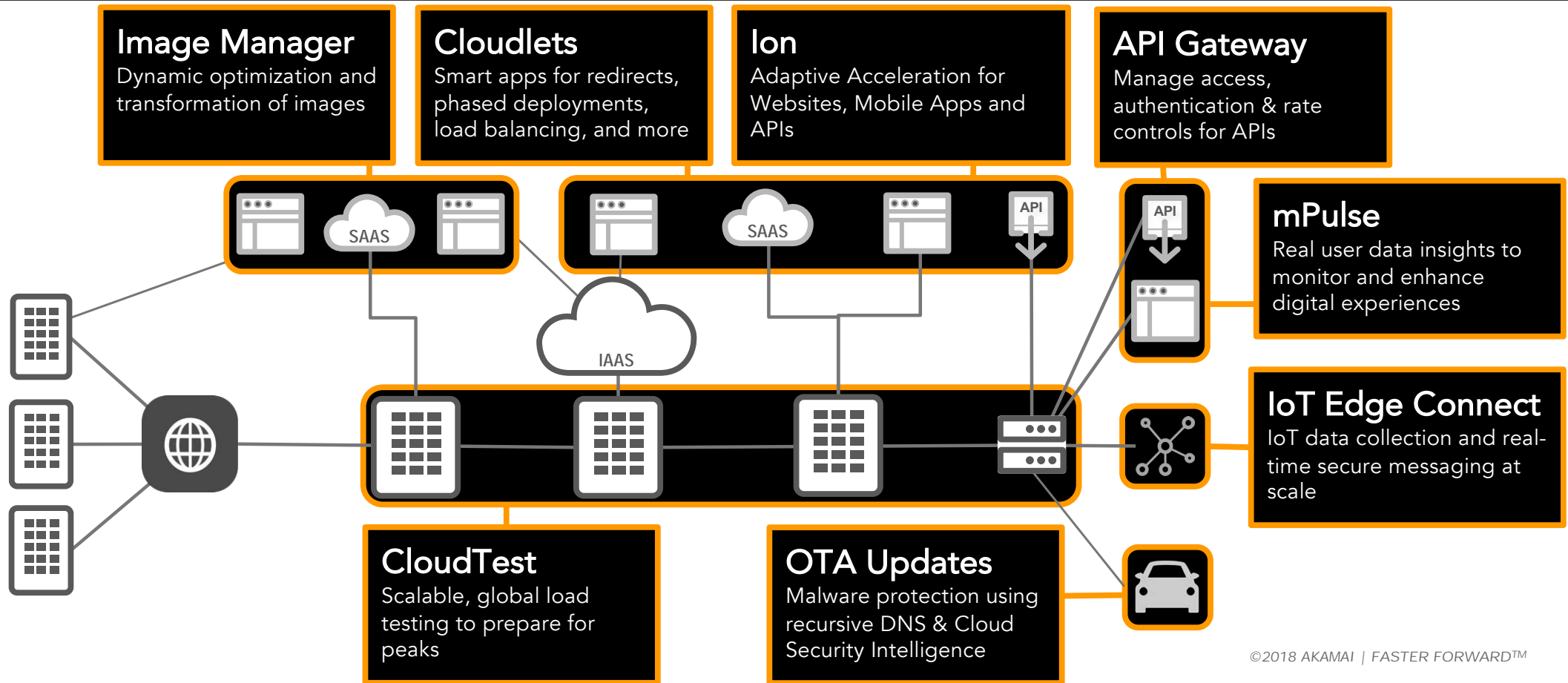
Measure what matters to
prioritize optimizations

Software Quality

DEVOPS

AKAMAI EDGE PERFORMANCE

Gain a competitive edge by measuring, optimizing, and validating what matters



Focus on Customer Experience

Mobility, personalization, and social engagement.



Mobile Speed Index

Page rank impacted by how quickly the mobile page displays content



Request Count

Personalization and 3rd party integrations dramatically increase complexity



Page Weight Bytes

Engaging content and rich imagery increase page weight and slow response times



mPulse

Measure what matters to prioritize business impacting optimizations



Ion: Script Management

Control how JavaScript content loads to mitigate user experience challenges



Image Manager

Simplify and accelerate media management workflows

HOW FAST AM I?



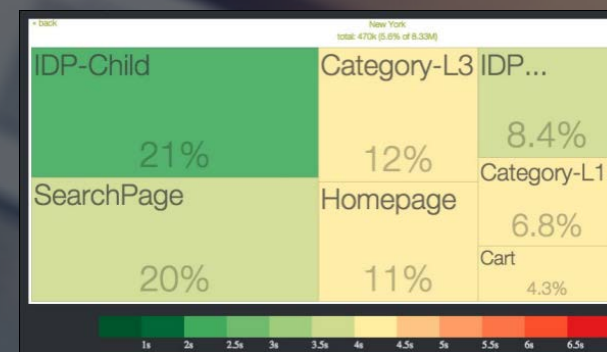
Identify what's slowing you down

HOW FAST DO I NEED TO BE?



Calculate the business impact

HOW DO I GET THERE?



Diagnose and prioritize the fix



mPulseTM
Measure what matters

Web and Mobile Performance

Intelligent automation and controls to maximize user experiences

Maximize Performance
Automatically

Deliver superior web and mobile app experiences

Adaptive Acceleration automatically adapts to user behavior and real-time network conditions



Control Content
Easily

Maximize the impact of personalized web & mobile apps

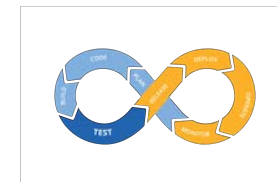
Script Management and Advanced Client Cache enable policy-based control over scripts and content to eliminate delays and errors



Increase Agility
Seamlessly

Improve developer agility and accelerate time to market

DevOps tools provide programmable interfaces and controls to enable automation and improve software quality



Akamai Image Manager

Rich and engaging experiences that are also fast.

Link



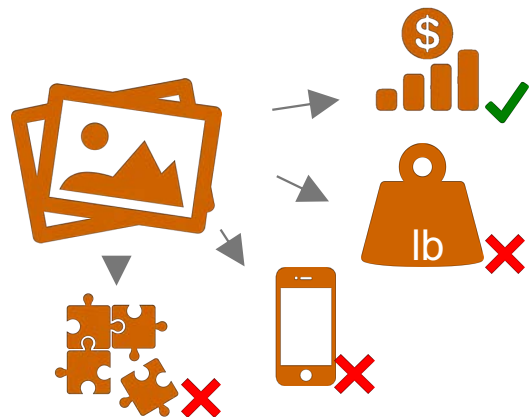
Transform



Optimize



Deliver



Reduce Cost & Effort

to create and transform images for every device

Automatically Optimize

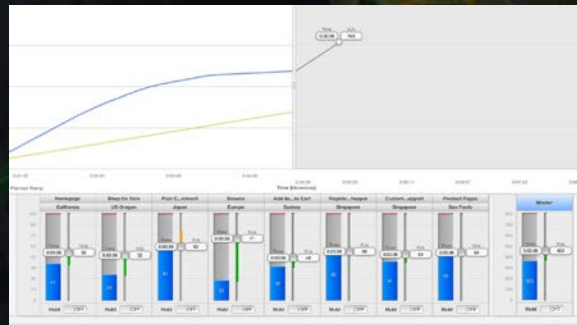
images for maximum visual quality and performance

WHAT WILL HAPPEN IN
THE REAL WORLD?



Perform Realistic
Tests from the
Cloud

CAN I SCALE TO REACH
MY GOALS?

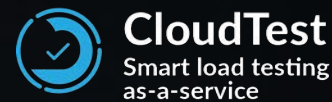


Verify your apps can
scale with user
demand

WHAT'S THE BUSINESS
IMPACT?

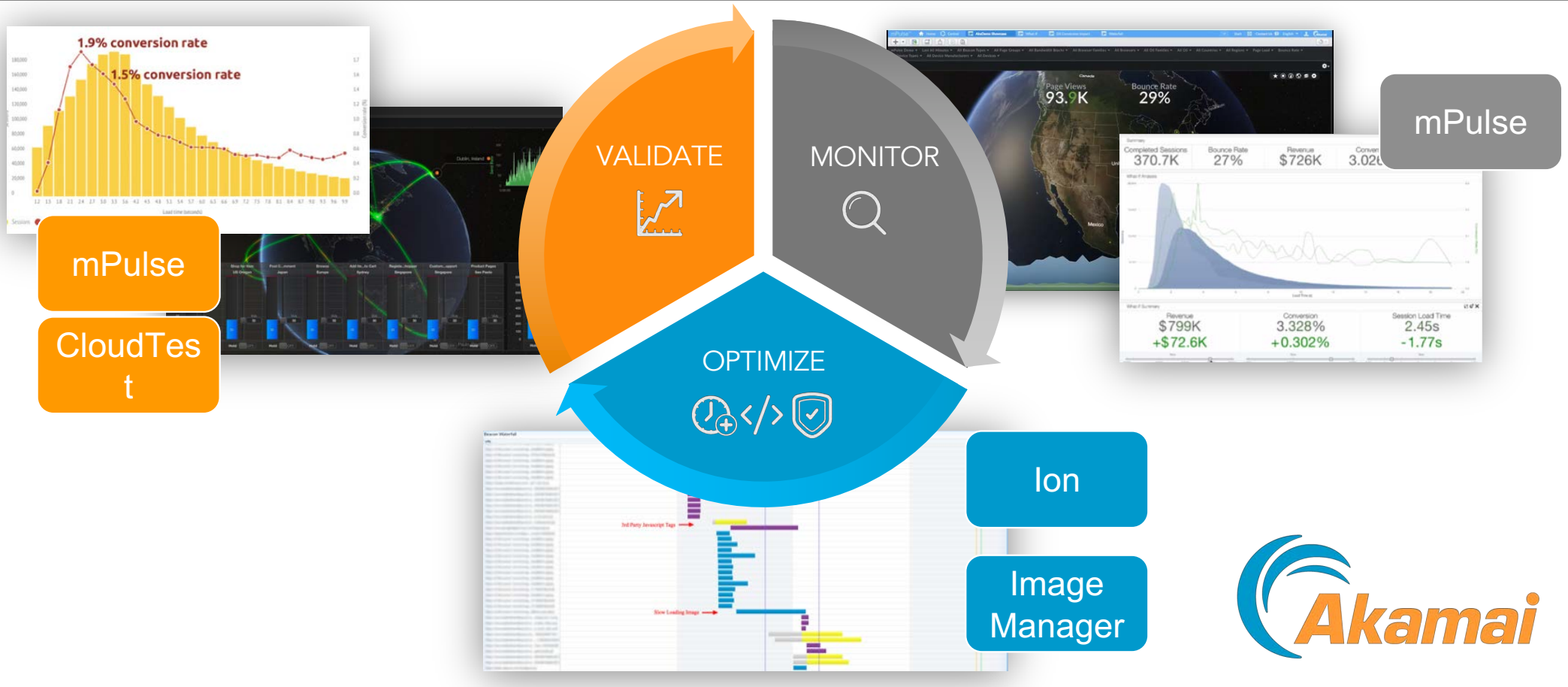


Validate
optimizations &
maximize revenue



Continuous Improvement Strategy

Monitor Optimize Validate.



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EXPERTISE

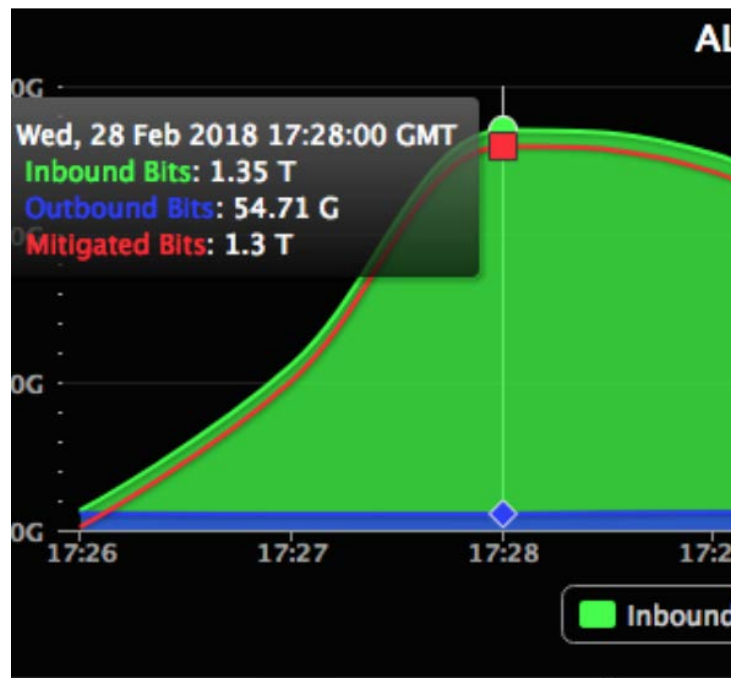
1,900+ experts ready to support you with strategic expertise, 24/7 proactive monitoring and responsive troubleshooting.



Most Organizations' Security Reality Today

No surprises really...

Massive Attacks

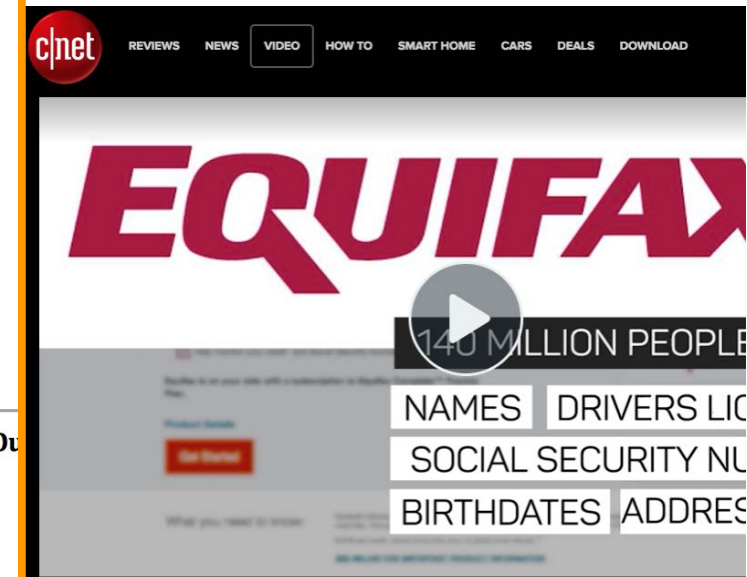


Persistent Attackers



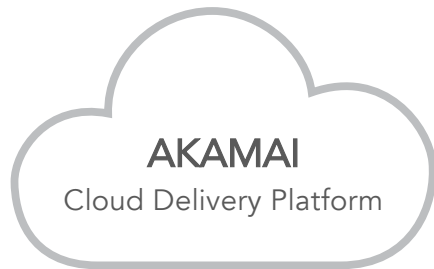
the OPM Data Breach: How the Government Jeopardized Our National Security for More than a Generation

Growing Attack Surface



Akamai Edge Security

Key product themes



Better architecture
for adaptive threat &
access protection



Web Application
Firewall



DDoS
Mitigation

Protect apps, APIs & infrastructure
from DDoS, exploits & misuse



Bot
Management

Safeguard against credential abuse
& inventory grabbing from bots



Malware
Protection



Secure App
Access

Move beyond perimeter security by
stopping malware & controlling
access to corporate apps

Cloud Security Solutions

Adaptive threat protection as a service.

DDoS Mitigation

FastDNS

Scalable authoritative DNS service with DDoS protection

Prolexic

Managed volumetric DDoS protection

Application Security

Web App Protector

Automated, blanket protection for web applications

Kona Site Defender

Customizable, advanced app and API protection, *managed option*

Client Reputation

Machine learning service to adaptively manage traffic

Bot Management

Bot Manager Std

Manage automated visitor traffic to protect revenue

Bot Manager Premier

Machine learning to protect against credential abuse & account takeover

API Management

API Gateway

Manage access, authentication and rate controls for APIs

Enterprise Access

Enterprise Access

Simple, unified & secure enterprise application access

Ent Threat Protector

Malware protection using recursive DNS & Cloud Security Intelligence



EDGE SECURITY

Layered security services provide
adaptive threat protection.



Fast DNS >20 clouds for perf & scale, drops attack traffic at the edge

Kona / WAP >Application with auto-mitigation + management

Prolexic /24 protection with managed SOC's



Memcached 1.3 Tbps DDoS attack in February 2018

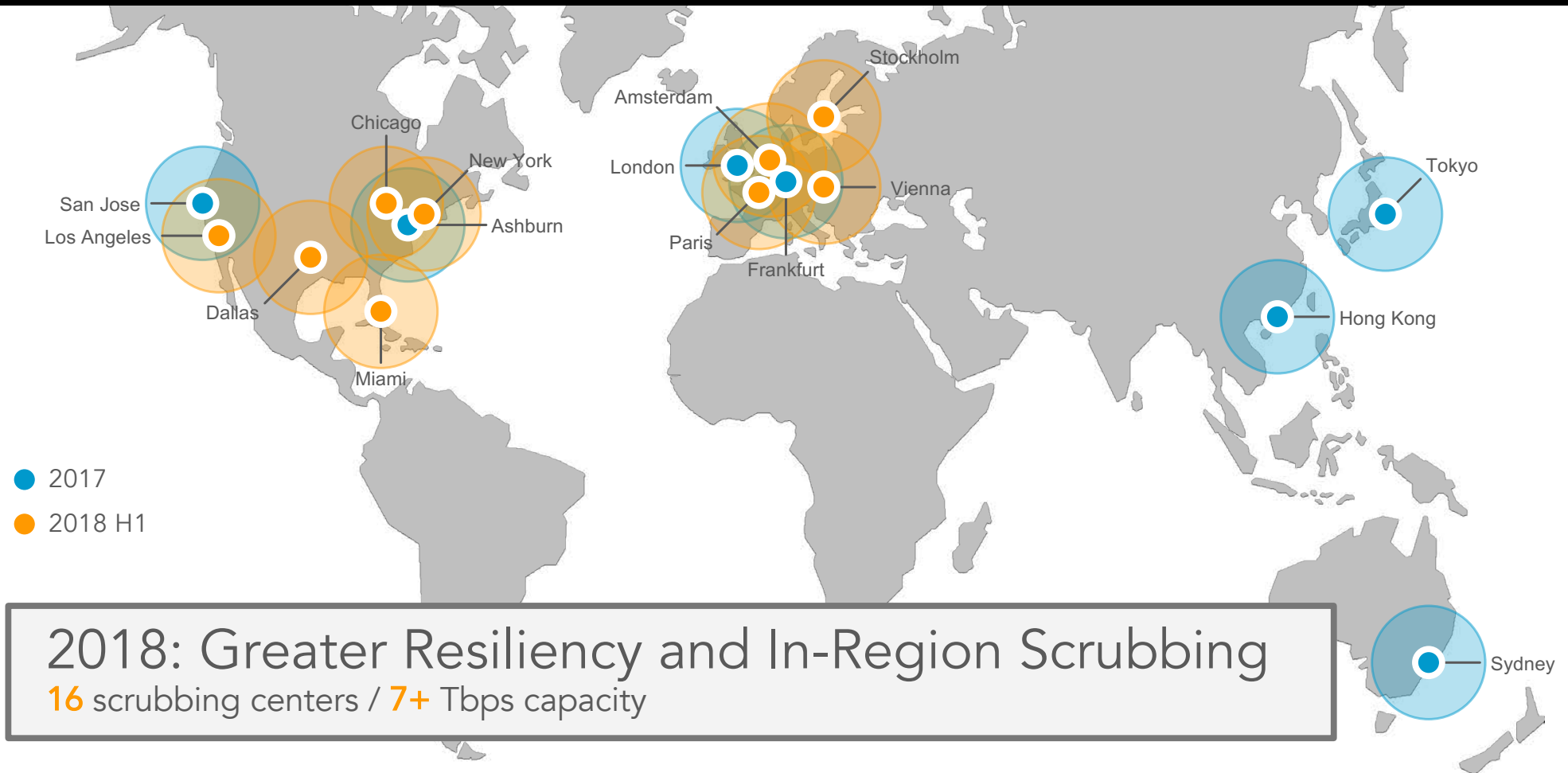


Mirai 620 Gbps botnet attack in September 2016



WireX >127,000 participating IP Addresses

Prolexic Platform Expansion



Intelligent threat protection provides defense in depth

Intelligent threat protection provides defense in depth



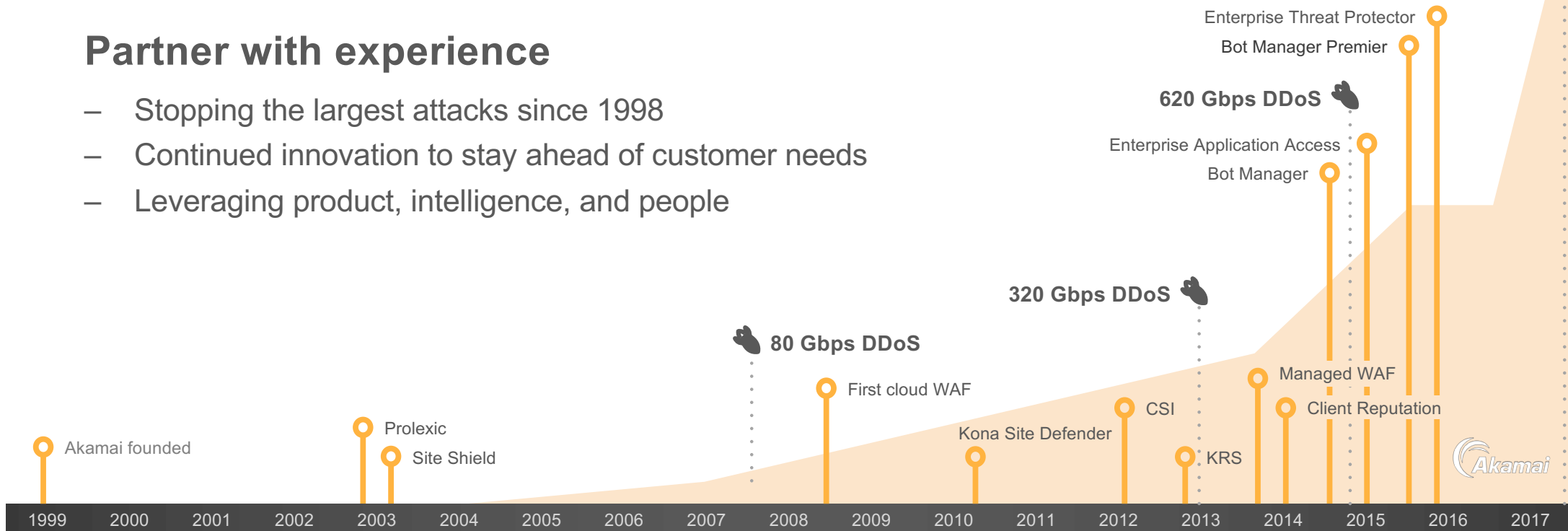
Layered Security-as-a-Service

Protection from growing online threats.

1.3 Tbps DDoS

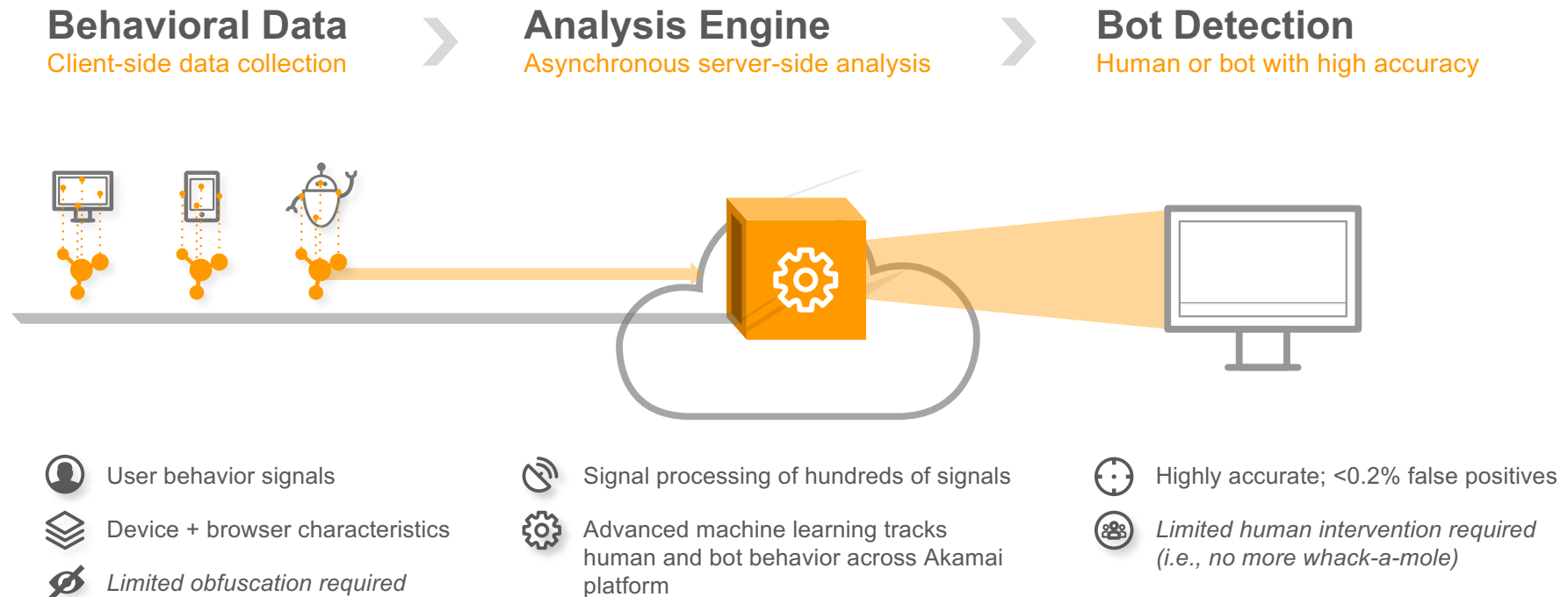
Partner with experience

- Stopping the largest attacks since 1998
- Continued innovation to stay ahead of customer needs
- Leveraging product, intelligence, and people



Detecting Sophisticated Bots

Behavioral anomaly protection and response.

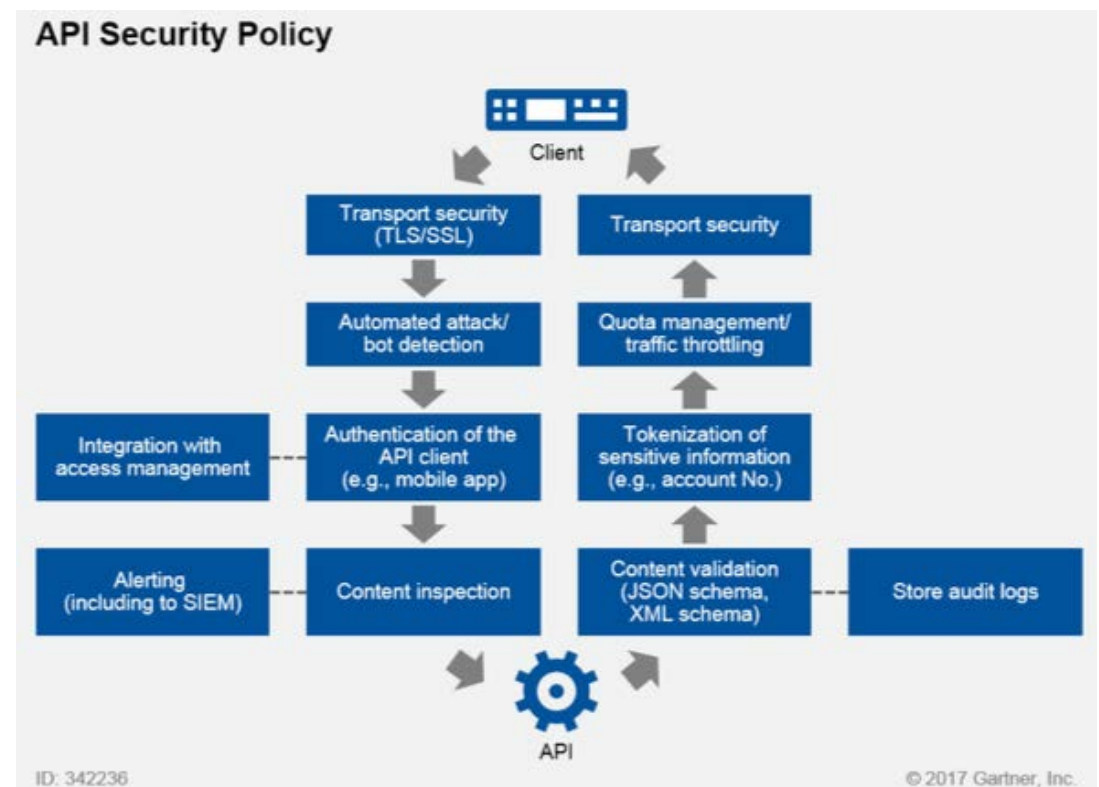


APIs also represent a significant vulnerability

You need a cloud security platform to secure your data.



Dedicated to enabling organizations to develop, purchase, and maintain **applications and APIs** that can be trusted.



Akamai API Gateway

Scale access & simplify policy controls for APIs

Scalable Access Control

- Offload validation from origin to the edge
- API key-based authentication and JWT authorization
- Filter out unauthorized requests before they reach your origin



Developer-Friendly

- Simplify API onboarding via Swagger, RAML
- Automate management with rich set of administrative APIs
- Define caching and delivery rules down to the resource level



User Quota Enforcement

- Control API requests over longer intervals
- Enforce business SLAs
- Enable tiered access for data-as-a-service APIs



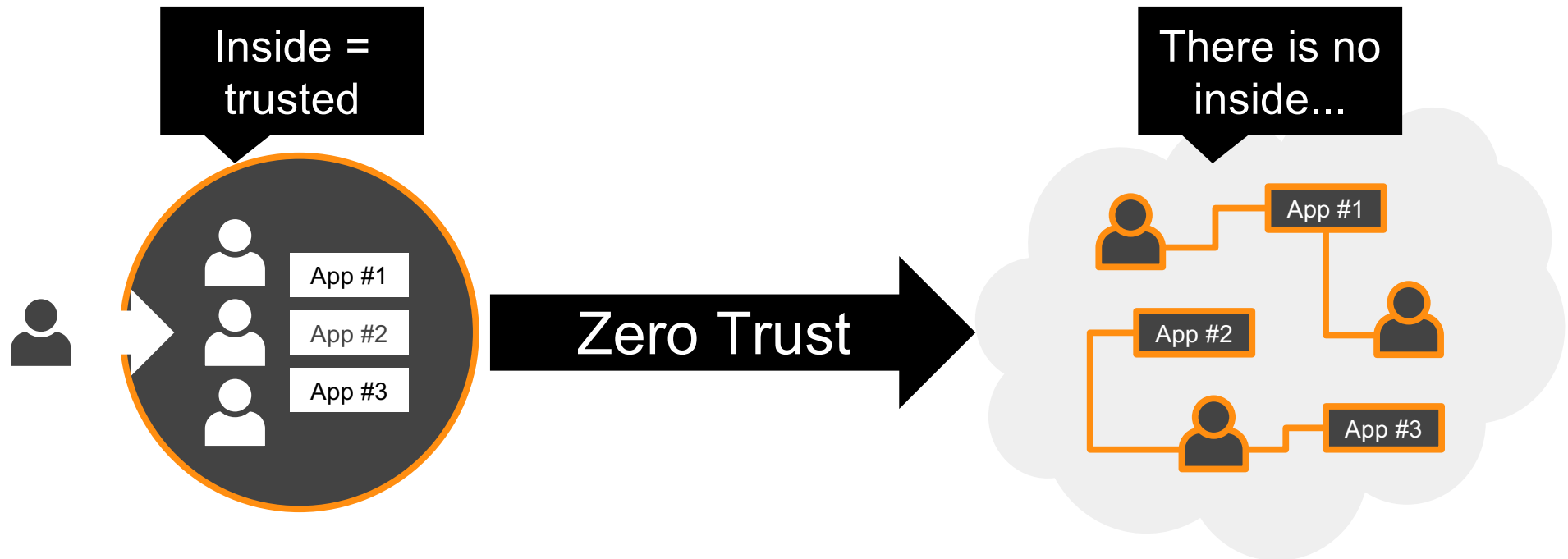
Seamless Platform Integration

- Protect APIs from malicious traffic with Kona and Bot Manager
- Equip APIs with routing and protocol optimizations
- Improve reliability with traffic management



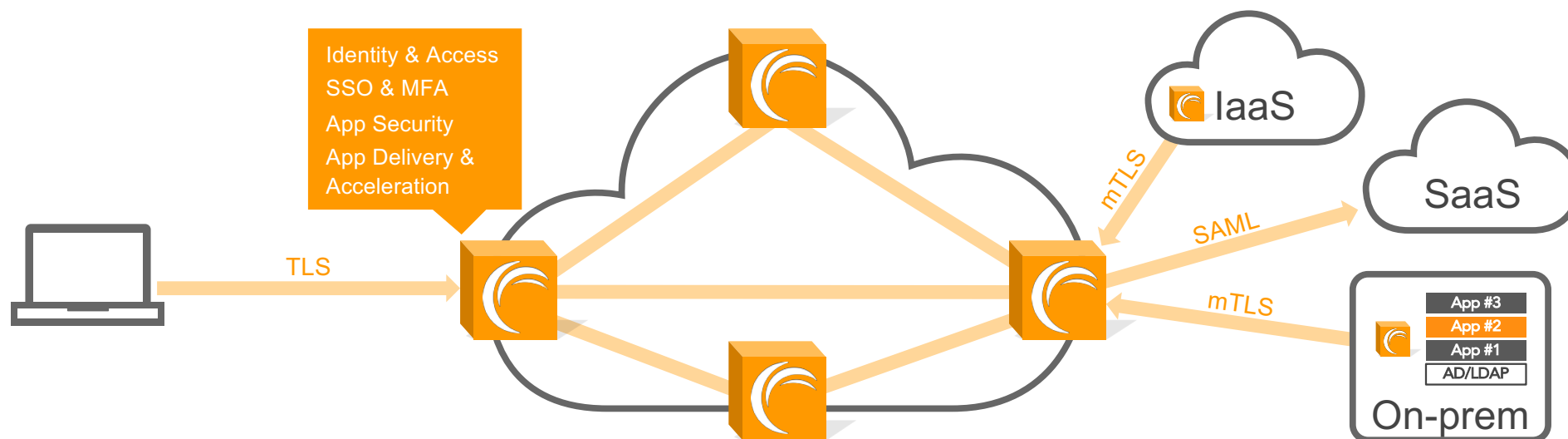
Perimeter Based Security Belongs In The Past

Why cloud & mobile require enterprise transformation



Simplify Secure App Access

And reduce the attack surface



Centralize security & access controls

For specific apps across I/SaaS and on-prem



Keep users off the corporate network

Make your infrastructure invisible on the Internet



Single sign-on for all enterprise apps

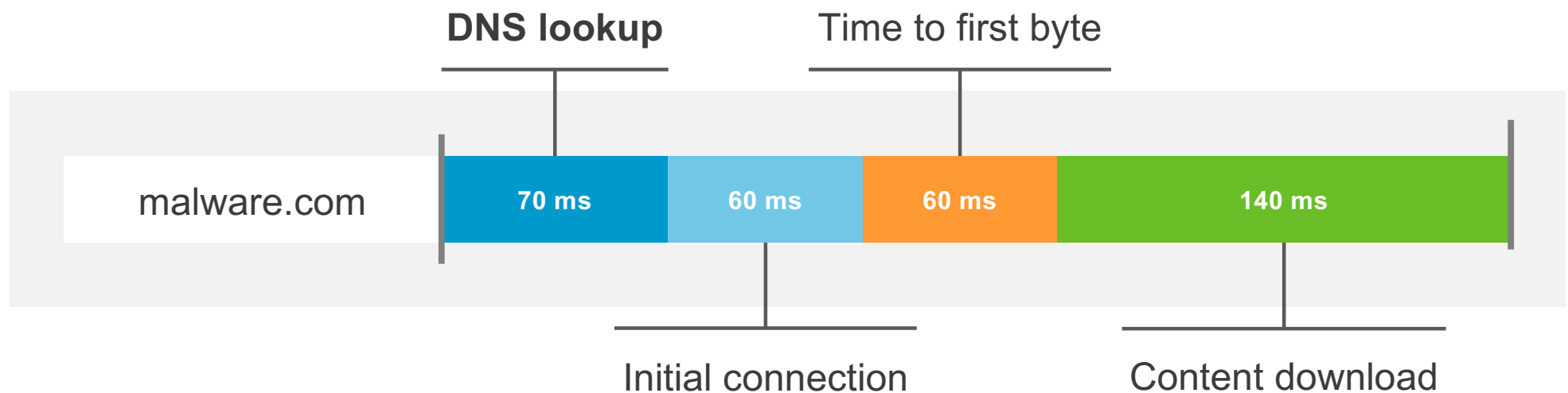
Across I/SaaS and on-prem



Multi-factor auth for enterprise apps

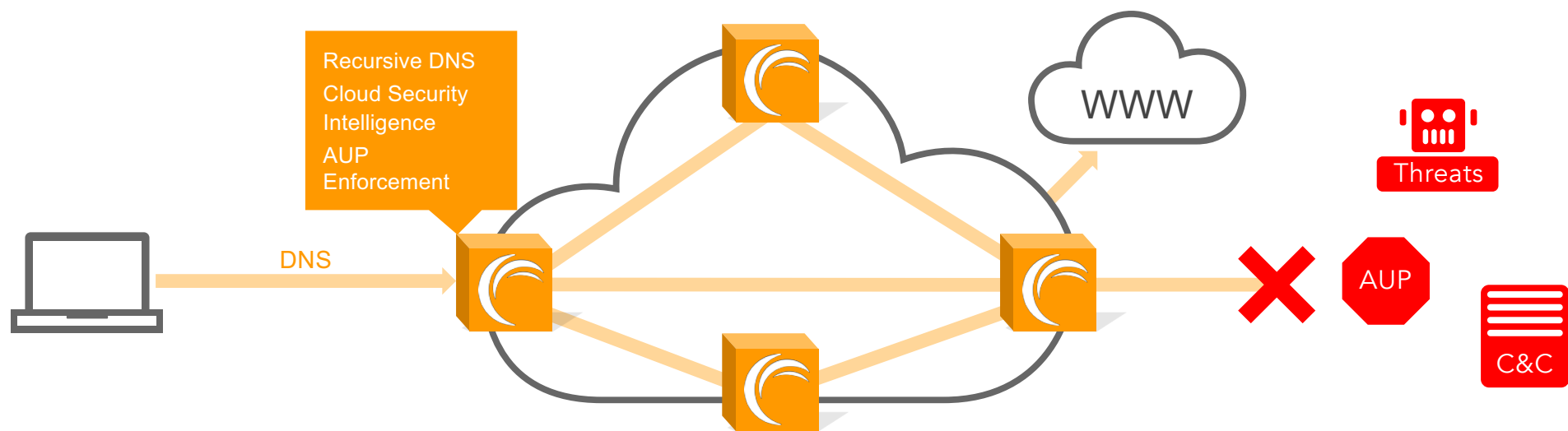
Supports email, SMS, TOTP or Duo

Majority Of Advanced Threats Leverage DNS



91.3% of known bad malware uses DNS

Proactive Malware Protection Using DNS



Identify and block access to malicious domains - everywhere

Refuse requests to or communication with malicious domains known to host sites used to deliver malware or for phishing



Prevent access to inappropriate content

Easily enforce an enterprise's acceptable Internet usage policy effectively and consistently



Disrupt communications from compromised devices

Severs existing connections from infected devices to malicious actors' command & control infrastructure



Prevent DNS-based data exfiltration

Stops malicious actors from using the DNS protocol to extract enterprise data

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EXPERTISE

Unmatched global service and support

1,900+ experts ready to support you with strategic expertise, 24/7 proactive monitoring and responsive troubleshooting.



Our core capabilities

Technical Advisory

Deliver on business outcomes and maximize efficiency to adopt and innovate with Akamai.



Professional Services

Execute your day-to-day with ease, create, test and deploy with experts by your side.



Problem Prevention

Create more confidence in your operations, prevent issue recurrence, and protect from sophisticated threats.



Technical Support

24/7 global support to troubleshoot issues and maintain availability and performance.



Training & Education

Courses and training programs to help users and admins learn all things Akamai.



Navigate the digital journey

With experts by your side



Reduce Overhead

Rethink staff and talent investments to focus investments in innovation.



Drive Decisions

Provide expert guidance and facilitate architecture design.



De-risk the Business

Protect from new threats and ensure fast and secure access to online experiences.



Increase Productivity

Close operations gaps, coordinate projects, and get centralized visibility.



Develop Strategy

Apply deep industry insight to key customer success metrics.



Innovate with Akamai

Advance digital innovation and stay competitive with help from our experts.

Guiding Customers Through Their Digital Journey

Ongoing access to product, industry, and tech expertise

Manage and Measure

Premium Service and Support

Tailored engagement that deeply roots Akamai experts in day-to-day operations

Managed Kona Site Defender

Fully managed DDoS management and monitoring with 24/7 SOCC coverage

Support and Scale

Technical Advisory Service

Technical insights and best practices from product and industry experts

Readiness and Response Service

Close operational gaps, augment staff and access Akamai SOCC 24/7

Named Enhanced Support

Problem prevention and fast-track support to prevent issue recurrence

Adopt

Service Management Package

Expert assistance to maintain product and account health

Security Optimization Assistance

Expert assistance to maintain a healthy security posture



Akamai fits into your DevOps pipeline



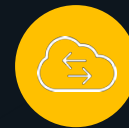
Automate

TOOLS TO INTEGRATE INTO
YOUR CI/CD WORKFLOWS



Monitor

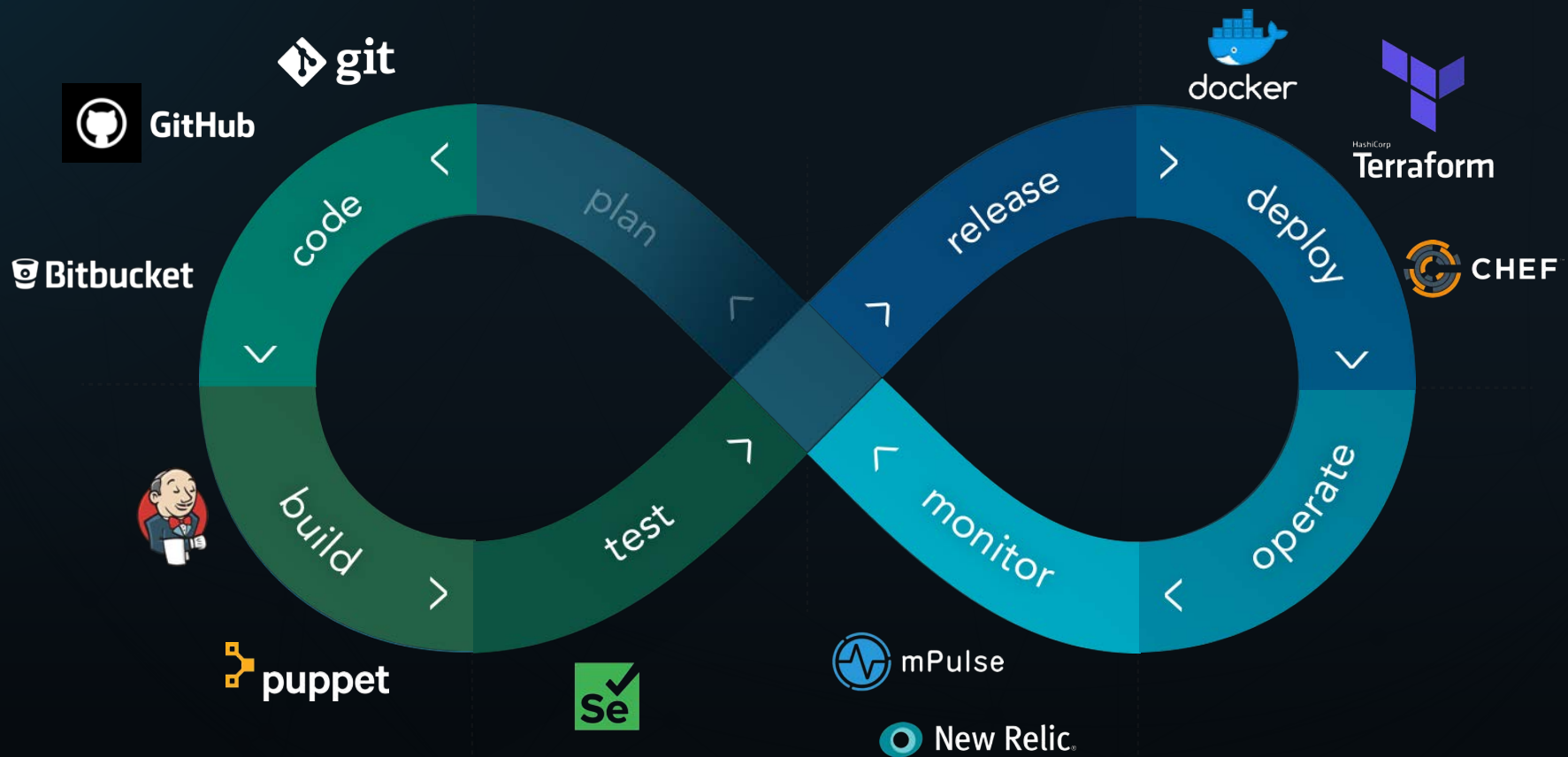
GAIN FULL VISIBILITY INTO
HEALTH AND PERFORMANCE



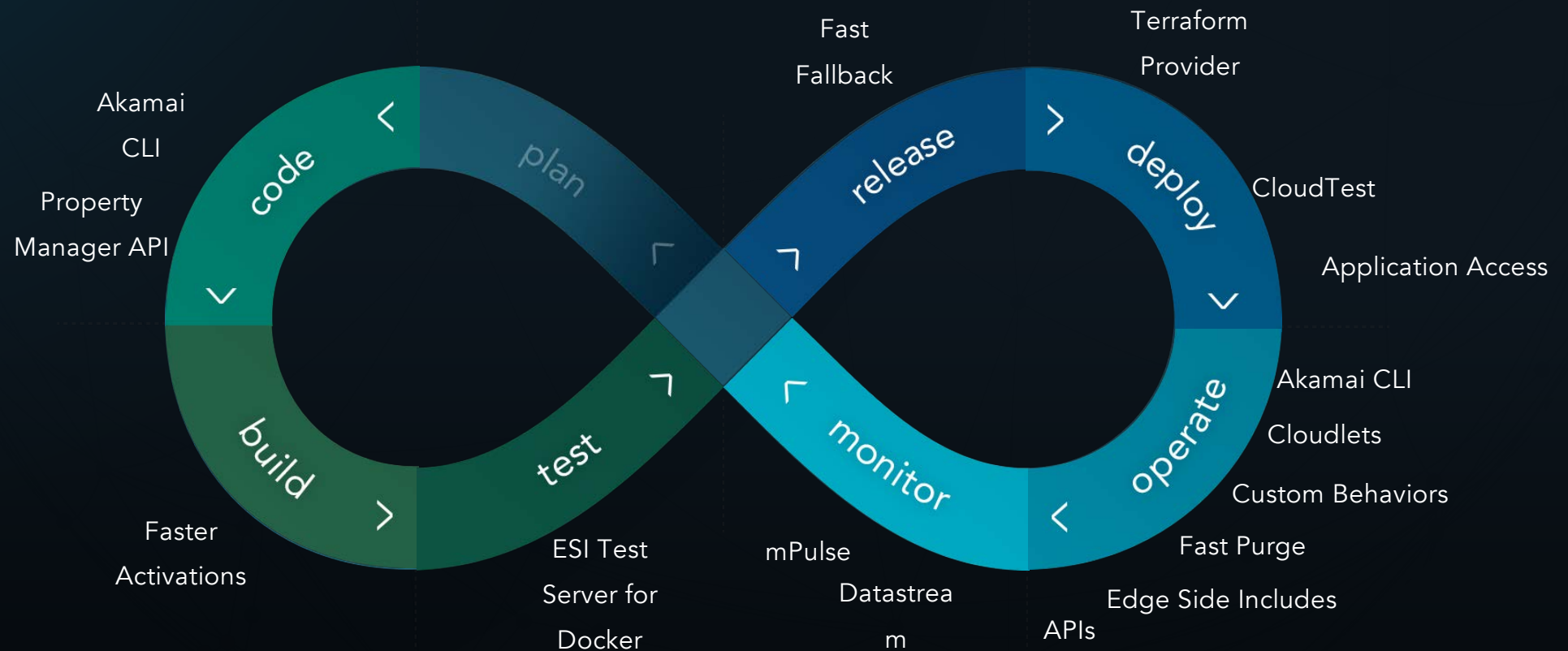
Operate


STREAMLINE AND SIMPLIFY
MANAGING AT THE EDGE

The traditional DevOps pipeline



Akamai fits into your DevOps pipeline





The Internet is the backbone
of your digital business

AKAMAI — THE **ENTERPRISE-CLASS INTERNET** THAT ELEVATES YOUR BUSINESS ABOVE THE
UNPREDICTABILITY AND INSECURITY OF CLOUD-BASED EXPERIENCE DELIVERY

Akamai adds customer identity management
to enhance digital trust by acquiring Janrain

janrain®

Janrain enables enterprises to
enhance digital trust by offloading
login and registration workloads.

AKAMAI IDENTITY CLOUD

Customer identity & access management

What is CIAM?

CIAM allows businesses to directly engage with their audience, gain a 360° view of the customer journey and protect their consumers' privacy and data from threats

CIAM consists of three key functions delivered as a service

Manage your online customer identities

*Constantly **changing**, **detailed** profile data*

Secure your customer identities & protect against identity fraud

***Millions** of users with **billions** of consumer IDs*

Optimize user experience & marketing efforts

*Users require **self-management** for convenience and compliance*

IDENTITY AS A SERVICE

Akamai's CIAM solution

