# **BOT MANAGER**

## **Product Overview**

Sr. Product Marketing Manager

# **Renny Shen**

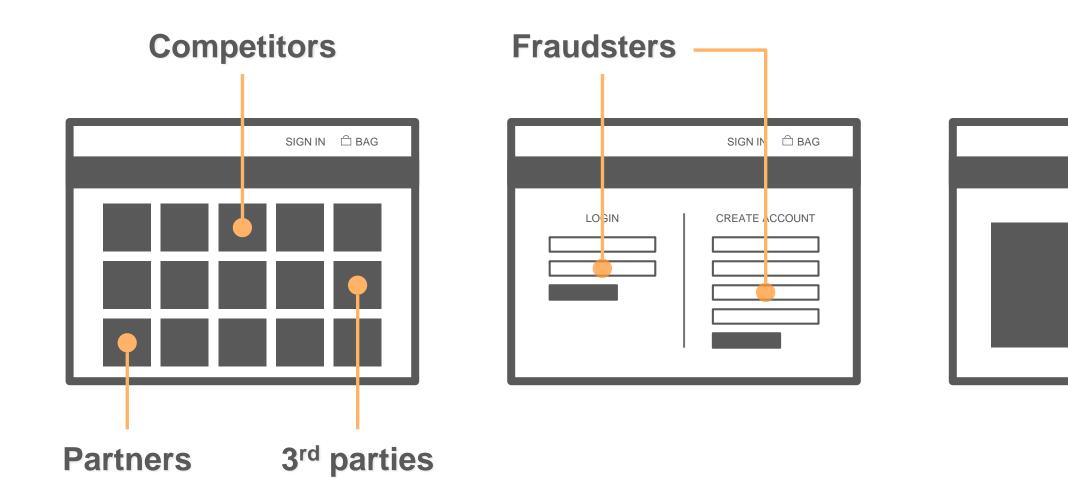
## What do bots mean to you? WHAT WE HEARD

## What we hear from others THE BOT PROBLEM

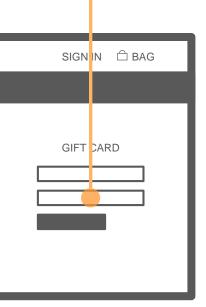


**Business impacts** 

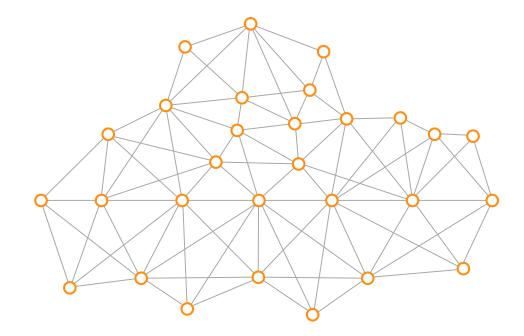
## A different way to think about THE BOT PROBLEM



### Fraudsters



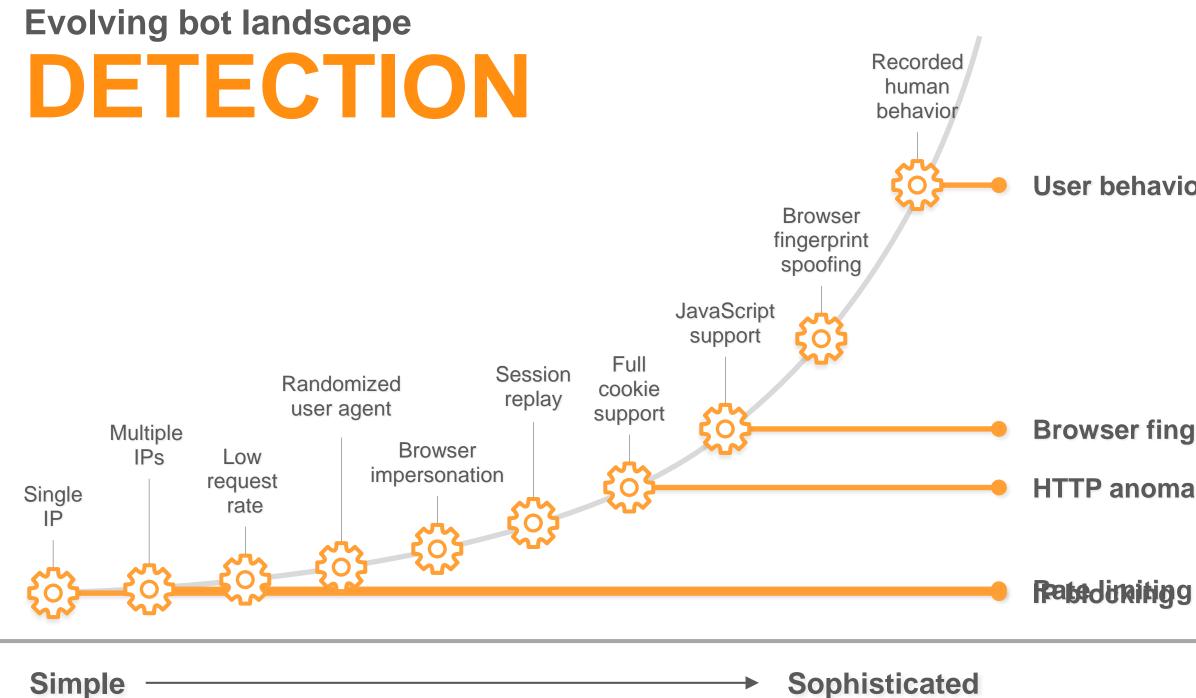
## **Bot management requires A FRAMEWORK**



Better manage **BUSINESS and IT IMPACTS** of bots as a cloud-based service

## To manage bots WHAT YOU NEED





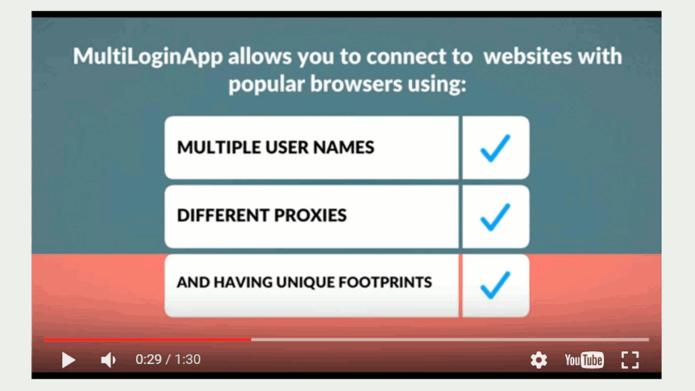
### User behavior analysis

### **Browser fingerprinting HTTP** anomaly detection



Multiloginapp Blog **Browser Solutions** Resources Contact Us

### Looking for the easiest way to run multiple accounts?



LOWNLOAD MULTILOGINAPP FOR FREE



	Multiloginapp	Browser Solutions	Resources	Blog	Contact Us
M	1ultiloginapp	Multilo		١	Multiloginapp
	vs. MultiFox	Frauc			vs. Antidetect

## Multiloginapp vs. FraudFox

FraudFox is advertised on Evolution as a way to spoof browser fingerprints and commit fraud. Multiloginapp also allows you to spoof browser fingerprints, but the intended usage is to control multiple online accounts, and not to hijack the fingerprint of an individual user. If you are looking at FraudFox for its spoofing capabilities, you may want to consider Multiloginapp instead. Continue on to learn about the similarities and differences between the two.



💐 FraudFox		
OS Settings	Browser Settings	Adv



vanced Settings

## **Bots defy easy** CATEGORIZATION

Most solutions approach the bot problem as a **SECURITY** problem

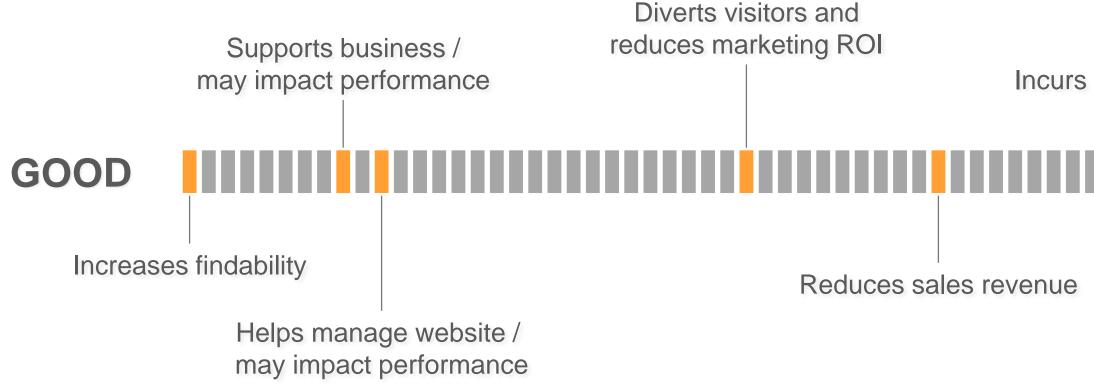




**Bad bot** (Block)

## Bots defy easy CATEGORIZATION

A more flexible approach manages bots based on their **IMPACT** on you

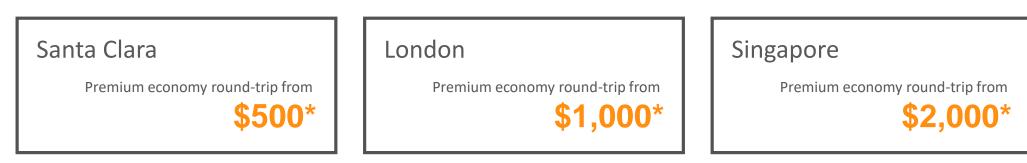


## Incurs financial loss BAD

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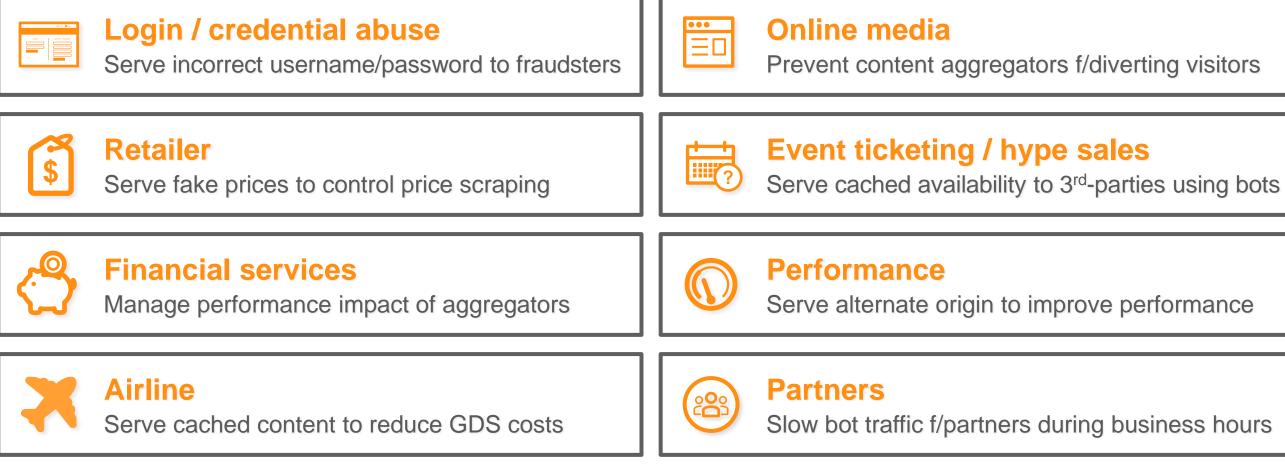
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### Latest flight deals from Cambridge





## How other organizations implemented MANAGEMENT



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## **U.S. News and World Report CASE STUDY**



ganic search traffic into our website where we can monetize those views. - Matt Kupferman, Senior Director of Engineering, U.S. News & World Report

### The Situatio

Founded in 1933 LLS. News & World Renort is a multi-platform publisher of news and information which includes www.usnews.com and annual print and e-book versions of its authoritative rankings of Best Colleges, Best Graduate Schools and Best Hospitals. In 2012, U.S. News launched a onference division focusing on important national conversations and solutions in STEM Education and Healthcare of Tomorrow, U.S. News has earned a reputation as the leading provider of service news and information that improves the quality of life of its readers by focusing on health, personal finance, education, travel, cars, news and opinion. U.S. News & World Report's signature franchises include its Consumer Advice and "Best" series of consumer guides that include rankings of colleges graduate schools, high schools, hospitals, nursing homes, mutual funds, health plans, diets and more

### The Challenge

As a digital-centric media organization, U.S. News & World Report relies on its unique and compelling content to attract visitors to its website. It currently reaches more than 30 million decision makers every month, with 160 million page views representing a 20 percent year-ove year (YoY) increase 1U.S. News monetizes this content by selling advertisements and sponsorship opportunities to businesses seeking to reach its audience of educated professionals, business leaders and policy makers.

U.S. News' intellectual property includes highly anticipated rankings in an increasing number of areas. For U.S. News, having this content freely available online makes it easier for its audience to find and helps improve its organic search rankings. However, it also makes it easier for unaffiliated third-parties to scrape and repurpose that same content on their sites using automated bots. This diverts visitors and can potentially impact advertising revenue. According to Matt Kupferman, Senior Director of Engineering, "U.S. News & World Report has actually seen independent parties taking our data, publishing it themselves and appearing higher in the search rankings."

### The Goals

- U.S. News & World Report needed to meet several requirements to support its business objectives Revenue protection. U.S. News wanted to detect and prevent third parties from scraping its website and repurposing its rankings data elsewhere.
- · Reduced overhead with greater bot visibility. Without a solution in place, U.S. News had to manually sift through and analyze logs to identify and block bots that were scraping its site. · Performance at scale. With 20% YoY growth, U.S. News wanted to ensure that the origin
- load did not compromise performance for legitimate users. · Comprehensive bot management. U.S. News wanted granular visibility into bot traffic
- to better understand who was coming to its site and drive its bot management strategy

### Akamai

AKAMAI CASE STUDY

**US.News** COMPANY

### U.S. News & World Repo Washington, D.C. www.usnews.con

INDUSTRY Media SOLUTIONS

### Akamai Bot Manager

- KEY IMPACTS Protects digital advertising revenue b preventing web scraping
- Enables acquisition of more sensit data to enhance the value of their

health care rankings Ensures visibility and simple man of bots

### Reduces management overhead by 25% with integrated, turnkey solution

Scales to support substantial YoY growth by offloading origin infrastructure by at least 20%



### Challenge

3<sup>rd</sup>-parties scraping and repurposing rankings content \_\_\_\_ from <u>www.usnews.com</u>, diverting potential visitors to 3<sup>rd</sup>-party sites and impacting ad revenue

### **Benefits**

- Prevent scraping to protect digital advertising revenue
- Gain visibility into bot traffic and reduce overhead
- Manage bots without sacrificing caching or requiring infrastructure changes



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# How to think about VISIBILITY

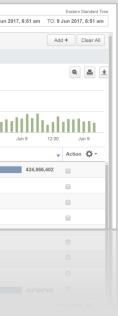
### Visibility needs to support your **STRATEGY**

### **Example 1:**



### Example 2:

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► FILTER(S): ▼ OF	F		
Statistics View	Sample Log View		
472,490,481	Rules Triggered		
29 2k 1k 1k 1k 12:00	Jun 3 1200 Jun 4 1200	Jun 5 12:00 Jun 6 12:00 Jun 7 12	00
Dimensions	Bot Category	Bot Type     Rules Triggered	
Bot Category	Unknown Bots (Request Anomaly)	Unknown	
Botnet ID	Web Search Engine Bots	Akamai 26,599,215	
IP Address IP Subnet	Additional search engine bots	Customer 15,622,322	
Country AS Number	Online Advertising Bots	Akamai 1,431,617	
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	Additional search engine bots	Customer 15,622,322	



# How to think about VISIBILITY

### Black box

- Easy to configure
- Reports actions taken but no ability to verify

### **High-level statistics**

- Good for identifying infrastructure and network requirements
- Responding to security events or implementing strategy requires greater granularity

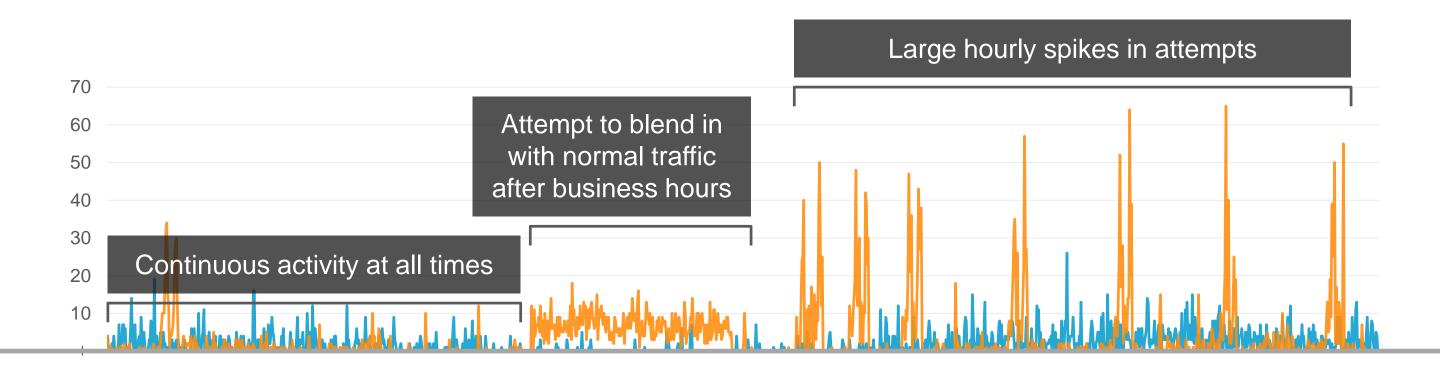


Statistics View		Sample Log View					
500 Events	0	This is not all the requests but a sampling of the	requests				
Time		Botnet ID	IP Address	÷	Hostname	\$	URL Path
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+ - V Client Info	ormatio	n					
Botnet ID:		Bot_1420AA6A848595F7C61E27B2FAE7	FDF0				
Client IP:		104.239.230.42					
Country:		US					
Region:		VA					
City:		HERNDON					
ASNUM:		27357					
Company Name:		Cloud_Servers_Cell_0001-0003_IAD3					
Domain Name:		lakeridgewinery.com					
▼ Request I	nforma	ation					
Protocol:		HTTP/1.1					
HTTP Method:		GET					
HTTP Version:		1.1					
Referer:		http://www.jachilery.com/pressors//768-0	Collinson's gauging	-	opti-LO-CLASSING	- keine	Cataljate (unblerge anges
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Path:		preserv.					
Query:		He-SEX-States of Con-phototic route-	And the second second second		A start of the second se		

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	# of Req Header

## Online retailer CASE STUDY

Challenge: fraud-related losses from bots checking gift card balances



— Humans — Bots

### Achieving desired outcomes

## **AKAMAI DIFFERENCE**



The latest technologies that can **detect the most sophisticated bots** today even as they evolve to avoid detection



**Real-time intelligence** from visibility into bot traffic interacting with many of the largest web presences around the world



Ability to manage wide array of both good and bad bots and **customize response based on your business and IT goals** 



Ability to manage bot traffic on the Akamai CDN before it reaches your website, offloading your origin infrastructure

**Granular visibility / reporting** allows you to analyze your bot traffic and implement your bot strategy without being a black box



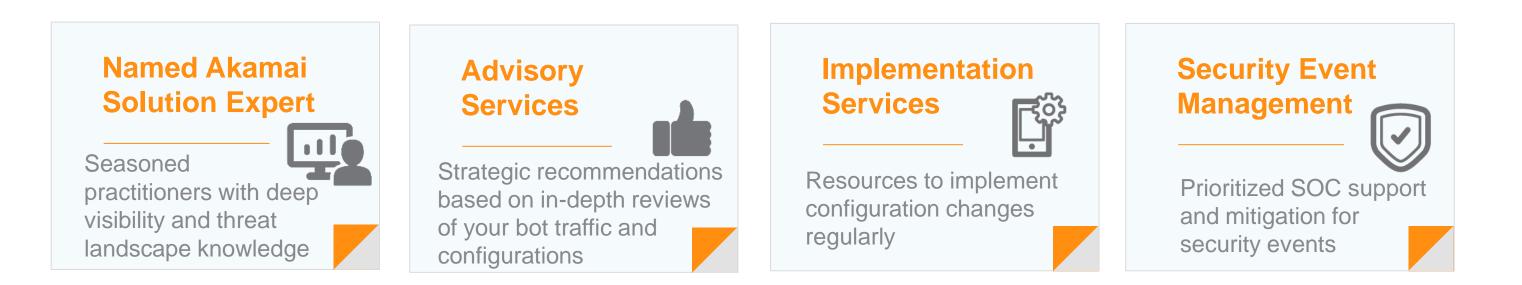
**Security experts** who can help implement and tune your bot management strategy and respond to security events

## **THANK YOU**



### Introducing **READINESS AND RESPONSE SERVICE**

Designed for organizations that want guidance on their bot strategy, to close security operation gaps, and have peace of mind they're covered to efficiently manage incidents and focus on their business.





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## SERVICE ENTITLEMENTS

### **Advisory Services**

Security Service Review	3x/year included
Implementation Services	
Non-emergency configuration assistance (9-5 M-F)	24 hours/quarter
Named Akamai Solution Expert	
Named expert with knowledge of the threat landscape and your security and business challenges	Included
Security Event Management	
Emergency response line (24x365)	Included for observed bot related se
Emergency configuration assistance (24x365)	Included for observed bot related se
Security event recap	Included, sent via e-mail after obser related security events

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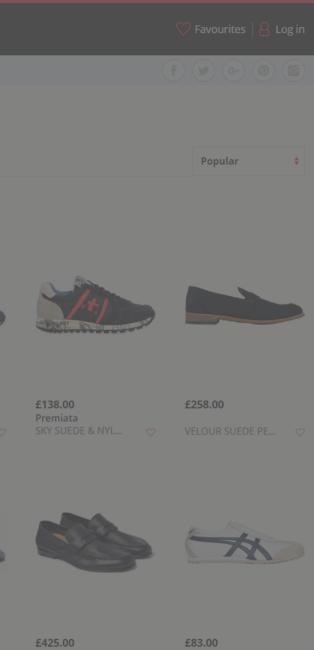
### erved bot

### ecurity events

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### FASHIOLA.

CATEGORY								
Clothing Shoes		Clothing > 2.000 product						
Sport & Swimv Accessories			×					-
DEPARTME	NT					al ci	m c	×
Women					😟 Sale Alert	📽 Share	♡ Save	
Men Kids		000000			Bottega Vene Intrecciato Sue	<b>eta</b> ede Slippers		
Plus Size					Housed in a restored 19th of over 100 expert artisan	n century villa, Bottega Veneta 's Monteb Is. These slippers are hand-woven from l to design. They're lined with leather for t	butter-soft petrol suede in the	
BRAND						nder T-shirt, Valentino trousers. This item		
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					Payment methods	Credit Card • PayPal		34
					Delivery time Delivery charges	Within 2 working days £5.00. same day delivery available f	or some parts of the UK	
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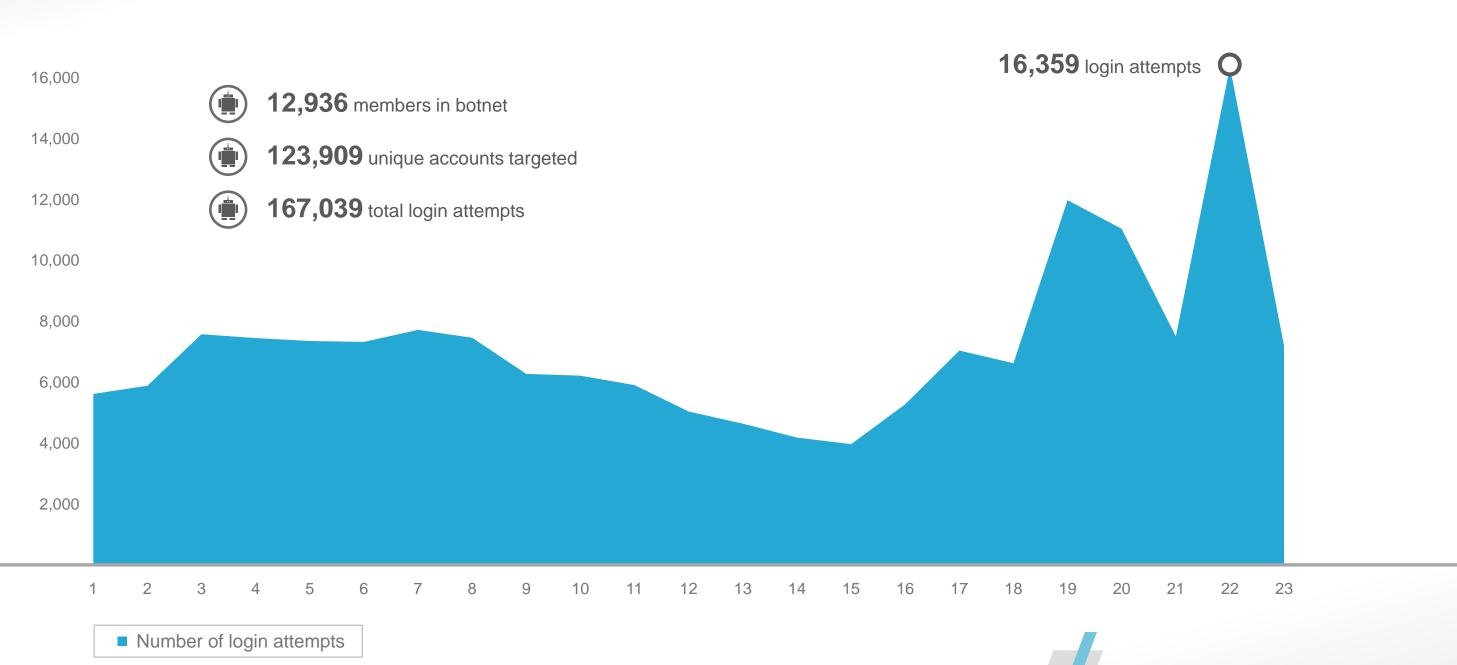




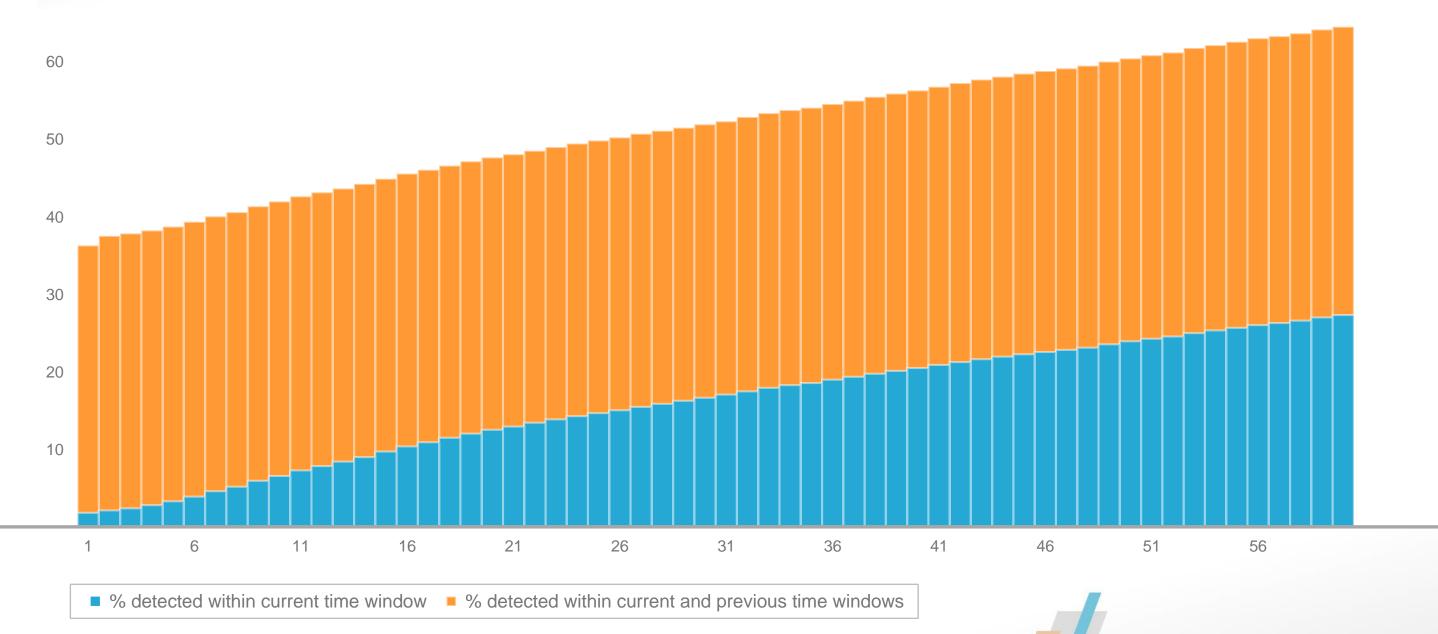


SALE

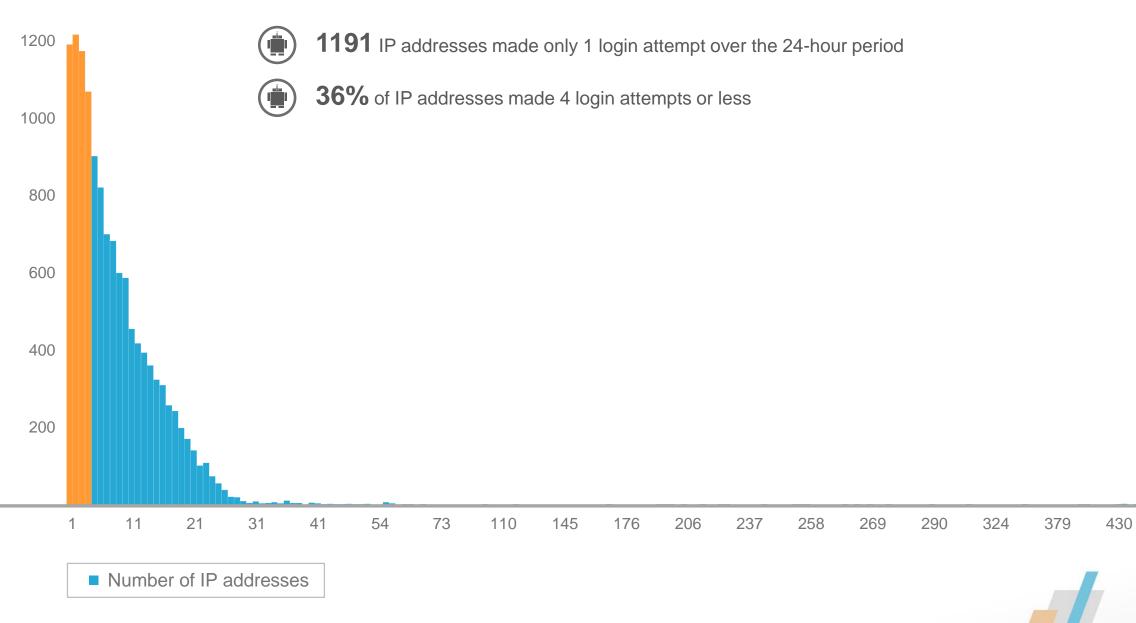
### **ATTACK CAMPAIGN**



### LOGINS ATTEMPTS, LOW & SLOW



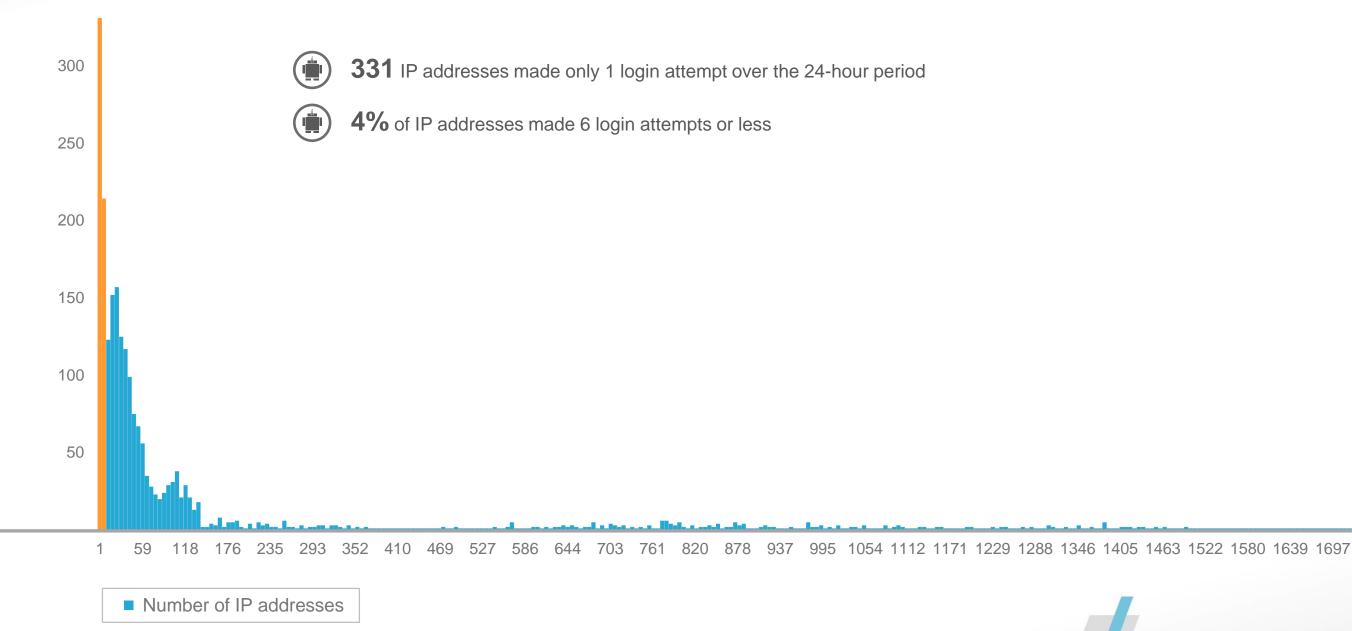
### **DETECTING BOTS – SINGLE SITE**



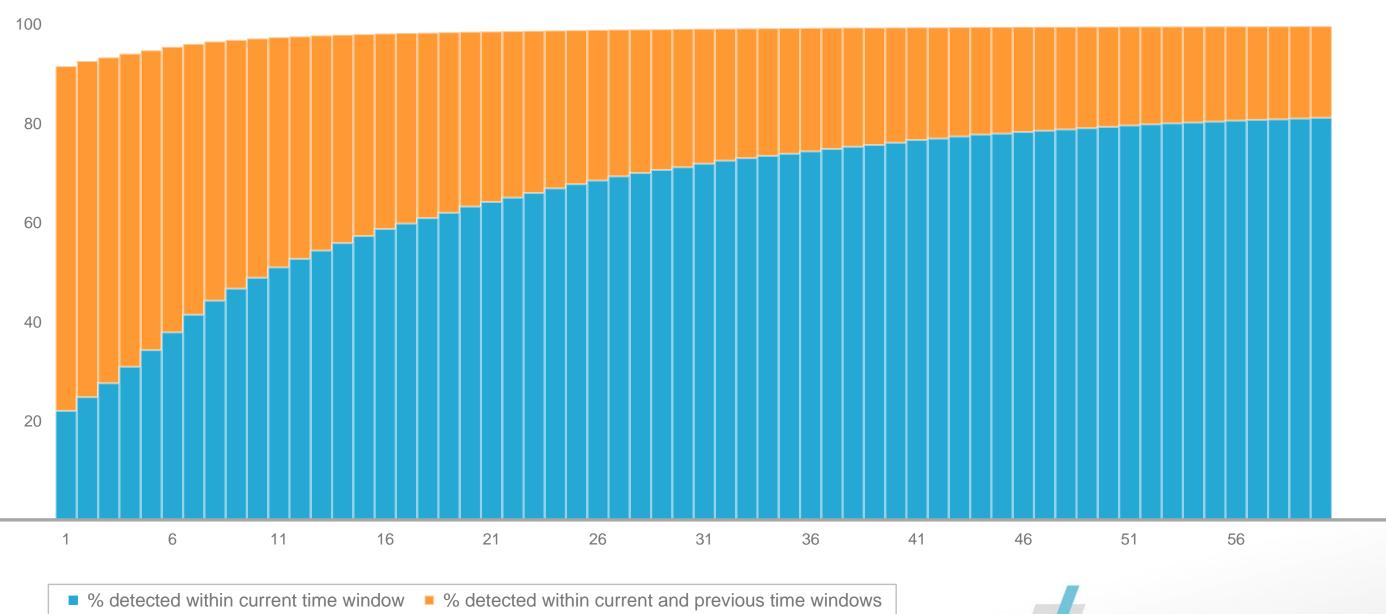
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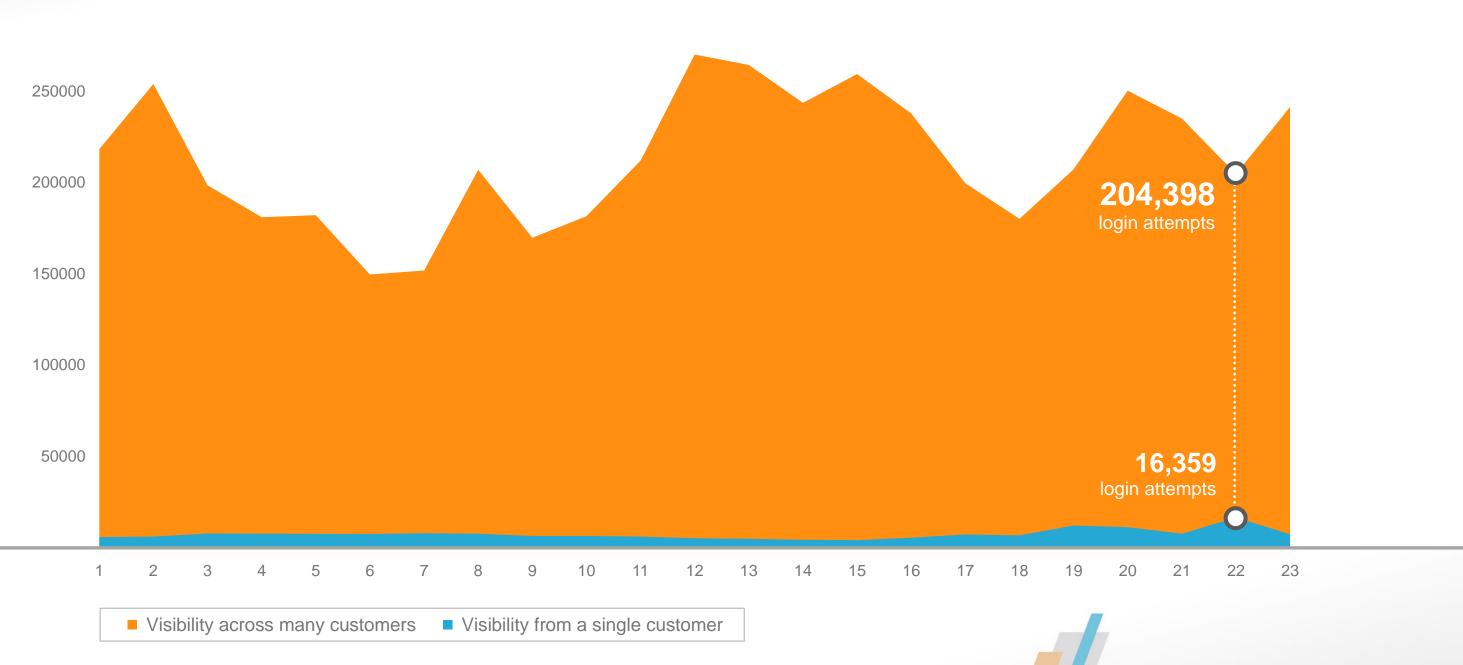
### **DETECTING BOTS – MANY SITES**



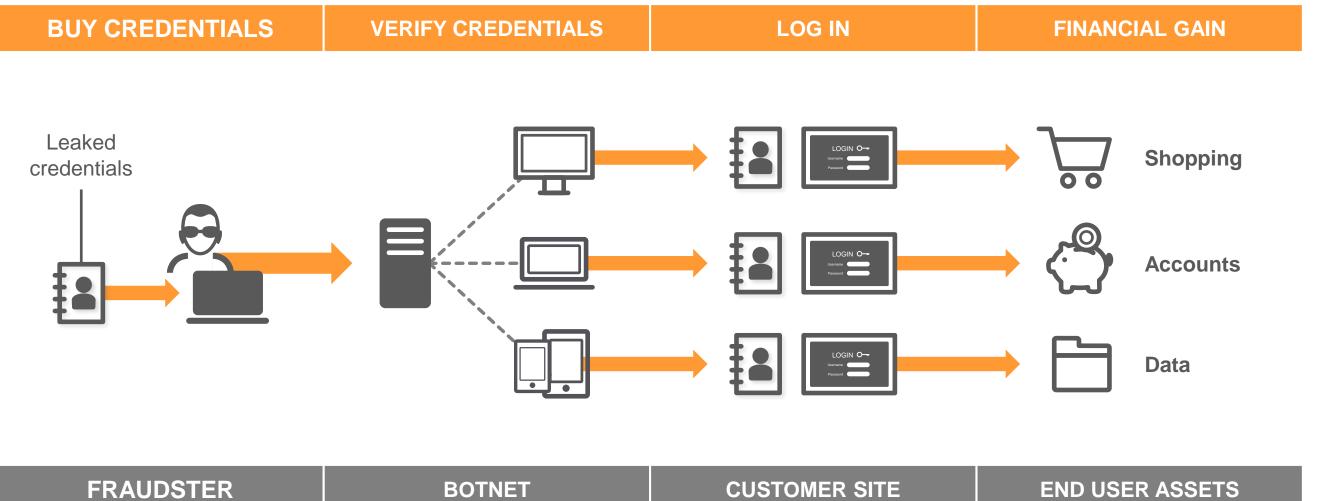
### **LOGINS ATTEMPTS, LOW & SLOW**



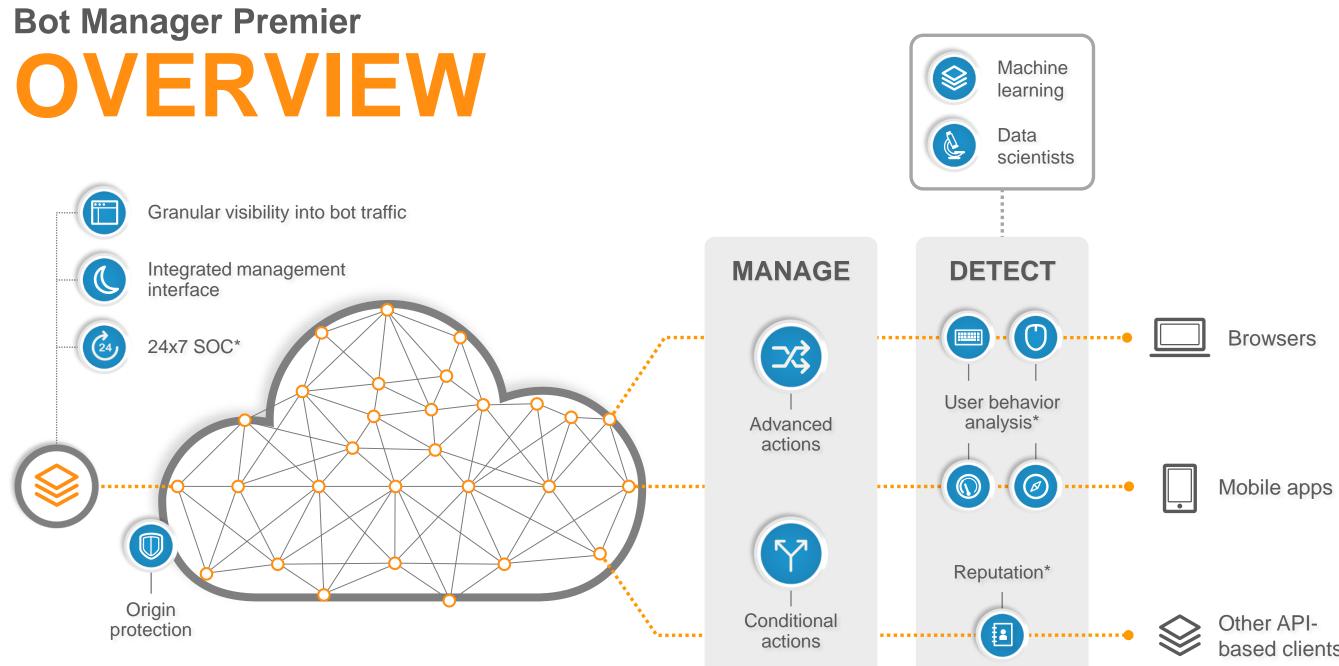
### **ATTACK CAMPAIGN**

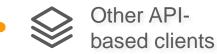


### **CREDENTIAL ABUSE**



**ACCOUNT TAKEOVER CREDENTIAL ABUSE** 





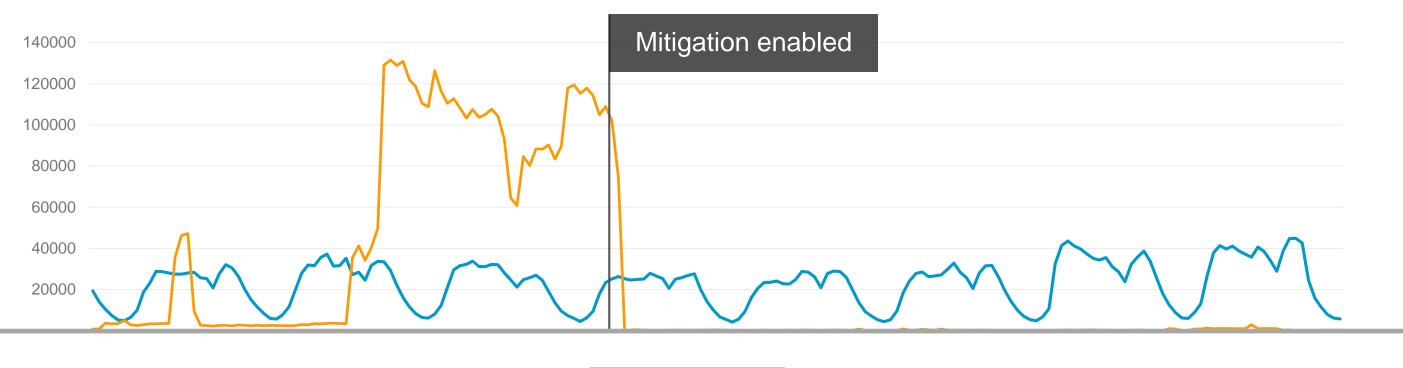
# Premier vs. Standard IMPROVED DETECTION



	Eastern Standard Time	
12:00	0 am TO: 14 Apr 2017, 12:00 am	+
	Events	ß
Apr	Config Events (1)	Conte
	Traffic & Activity	
	TRAFFIC	
	Edge Hits v	
	<ul> <li>All Traffic (238M)</li> <li>Attack Traffic (29M) 12.18 %</li> </ul>	
Apr	ATTACK TRAFFIC  Reputation Activity (0) <b>0.00</b> %  App Protection (19.9K) <b>0.06</b> %  Custom Rules (16.1M) <b>49.55</b> %  Bot Traffic (15.9M) <b>48.90</b> %  DoS Protection (485.6K) <b>1.49</b> %	
<u>ן</u>	ACTIVITY SUMMARY	

## Online retailer CASE STUDY

Challenge: credential abuse attack peaking at 130k requests per hour



## Protecting against credential abuse AKAMAI DIFFERENCE



The latest technologies that can **detect the most sophisticated bots** today even as they evolve to avoid detection



**Real-time intelligence** from visibility into bot traffic interacting with many of the largest web presences around the world



Ability to manage wide array of both good and bad bots and **customize response based on your business and IT goals** 



Ability to manage bot traffic at the Akamai edge to offload your website infrastructure and application development team



Machine learning tailored to credential abuse to better **identify human behavior from bot** and **minimize false positives** (under 0.3%)



**Granular visibility / reporting** allows you to analyze your bot traffic and implement your bot strategy without being a black box