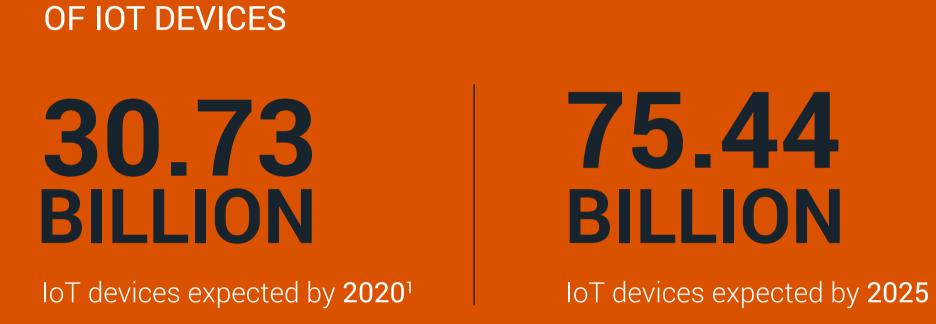
THE NEW THREAT: THE

THE GAME HAS CHANGED.

Attackers are weaponizing connected devices to launch destructive DDoS attacks



THE EXPLOSION



EVERYTHING IS CONNECTED!



لرك ليرك

22 Million Amazon Echos sold in 2017²



1 Per Second

how often Google says it has sold a Google Home device since October 2017³

\$310.4 Million wearable devices sales in 2017⁴

THE WEAPONIZATION OF THE IOT

OF THE IOT

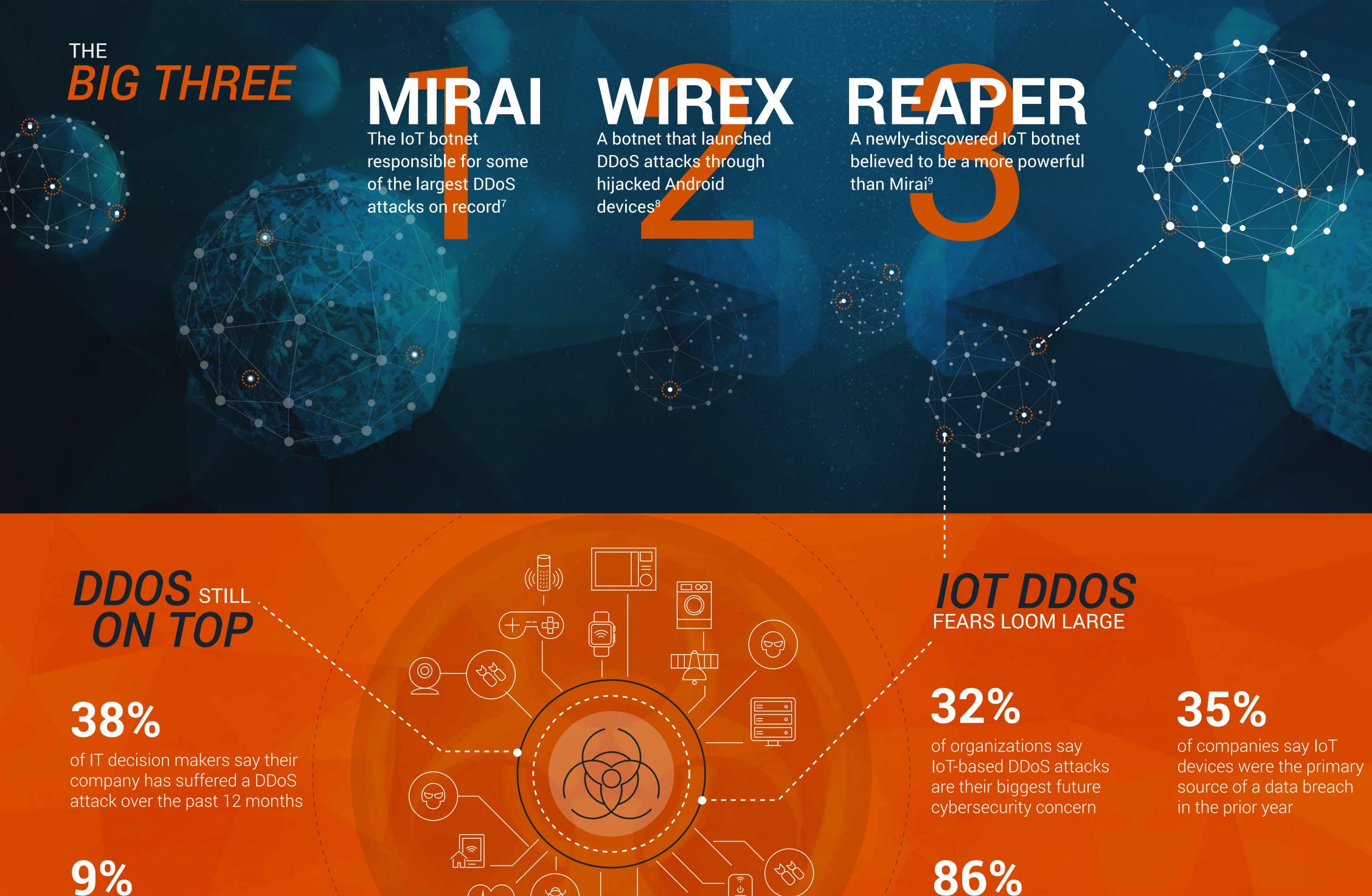
15 Million 1 Tbps

The number of webcams compromised to build a massive DDoS-launching botnet in 2016⁵

The largest DDoS attack on record, launched against a French hosting provider using 150,000 hacked IoT devices⁶

NEW THREATS BREED FEAR

 $\bigcirc \bigcirc$



9% of IT decision makers don't know

AN EASY

AKGE

IoT devices are inherently vulnerable

up to the owner

security in mind

They're leaving security

They're not regularly patched

They're not designed with

They're not running security software

and relatively easy to hijack. Why?

((

((

whether they've been attacked¹¹

THE CURRENCY OF DDOS

DDOS ATTACKS ARE **BIG BUSINESS**

\$25 PER HOUR the average cost of an attack through a DDoS-for-hire service¹²

\$5 FOR 300 SECONDS **\$400 for 24 hours** the range of cost to pay for a DDoS-for-hire attack

TICK TOCK

215 HOURS

the longest DDoS attack

recorded in Q3 2017

95.6%

attacks lasted <50 hours¹⁴

≤4 HOURS

The length of time the majority of attacks (**76.09%**) lasted

THE COST OF DOWNTIME

\$300,000 the average hourly cost of downtime for 81% of enterprises

33% of enterprises say an hour of downtime exceeds \$1 Million an hour¹³

THU

17.5[%]

of organizations say they expect IoT threats to increase

in the coming year¹⁰

ADDOSADAY

HACKERS DON'T STOP FOR THE WEEKEND

FRI

13.3%

What day of the week do DDoS attacks happen most? • SUN TUE WED • MON 14.8% 10.4% 14.9% **13.5**[%]

SAT

15.6%

WHO'S BEING ATTACKED, AND WHERE?



MULTI-VECTOR ATTACKS ARE THE NORM

88% of attacks involved

multiple vectors¹⁷ 2.5 Gbps/2.3 Mpps

<1 Gbps

average attack size

Attack peak size in Q3 2017

MOST COMMON ATTACK TYPES MITIGATED 27% 17% 56% UDP floods **TCP-based IP** fragment



Protection from multi-vector attacks







of IT admins plan to increase security spending because of multi-vector attacks¹⁸





Internal barriers to DDoS protection

73%	
Cost	

64% Lack of flexibility 58% Undefined responsibility for dealing with attacks

57% False positives impacting user experience

52% Inadequate attack response process

52% Bandwidth 34% Insufficient staff expertise



DDoS attacks damage your revenue, brand and user experience. Fight back, and defend your network and applications against DDoS.

A10 DDoS Protection Cloud gives our customers an on-demand cloud DDoS scrubbing solution that, when combined with the precise, surgical defense of our on-premise A10 Thunder TPS® solutions, delivers the world's highest performance full spectrum **DDoS protection.**

Defend your network against attacks of any size and any type, including IoT-fueled and multi-vector DDoS attacks. With A10 DDoS Protection Cloud and A10 Thunder TPS, you can eradicate megabit to terabit DDoS attacks before they wreak havoc.¹⁸

DEFEND AGAINST DDOS NOW.

VISIT A10NETWORKS.COM/DDOS

1 https://www.statista.com/statistics/471264/iot-number-of-connected-devices-worldwide/

MITIGATION UP TO

BOGbps

or i O

2 https://www.forbes.com/sites/gilpress/2017/10/29/22-million-amazon-echo-smart-speakers-to-be-sold-in-2017-driving-us-smart-home-adoption/#442bb3e1481a

3 https://techcrunch.com/2018/01/05/google-says-it-sold-a-google-home-device-every-second-since-october-19/

4 https://techcrunch.com/2017/08/24/global-wearables-market-to-grow-17-in-2017-310m-devices-sold-30-5bn-revenue-gartner/

Tbps

5 https://motherboard.vice.com/en_us/article/8q8dab/15-million-connected-cameras-ddos-botnet-brian-krebs

6 https://thehackernews.com/2016/09/ddos-attack-iot.html

7 https://www.a10networks.com/blog/investigating-mirai-inside-malware-powers-iot-botnets

- 8 https://www.a10networks.com/blog/wirex-botnet-ddos-attacks
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