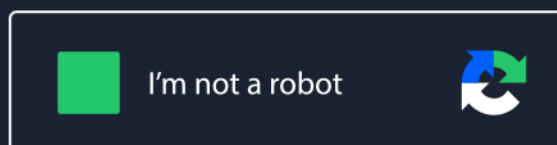


# How Adversaries Outsmart CAPTCHAS



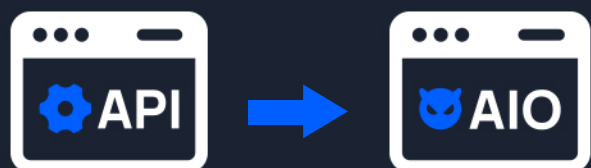
## 1 Motivation

Fraudsters set their sights on the biggest rewards - targeting logins, checkouts, and gift card pages.



## 2 CAPTCHA presented

The targeted site attempts to identify and block bots using various human visual/audio challenges.



## 3 API call to AIO platform

Adversary uses an All-In-One (AIO) platform that integrates with 3rd-party services that “solve” CAPTCHAs by using humans or AI and ML.



## 4 CAPTCHA fails

An authorized token is generated by the 3rd-party service and the bot is able to slip past audio or visual challenges.



## 5 Disguising as human

To avoid detection, the adversary will program the bot to impersonate human behavior (clicks, mouse movements, etc.) or traffic patterns.

6

## Outcome

Criminals monetize attacks by committing online fraud or selling accounts and gift cards to other cybercriminals