

BOTS IN VIDEO GAMES

AND HOW TO FIGHT THEM

DENUVO
by ir:deto

If you're a game developer, you're likely losing 10% or more of your revenue to malicious bots according to our internal research.

How come?

Cheaters are using bots to advance through your titles, get rewarded and build their in-game character increasing its value. This makes your in-game rewards far less valuable, spoils the experience for legitimate players and ruins your business model. Your games enjoy fewer in-app purchases, experience a larger churn and suffer from a damaged reputation.

In short: when bots play, games lose.

But you're not defenseless. There are proven ways of tackling these fraudulent attacks. In this guide we offer a deep dive into the problem, explain its ramifications and suggest a solution.

Happy reading!





TABLE OF CONTENTS

What are (gaming) bots?	4
How do bots affect the video gaming industry?	5
How to fight back bots?	6
Stop bots in your game today!	7

WHAT ARE (GAMING) BOTS?

Bot traffic made up 42.3% of all internet activity in 2021, up from 40.8% the year before. Indeed, bots perform a broad range of legitimate functions, including scraping metadata, indexing, analyzing performance and generating automated responses. However, their key strength is the ability to perform repetitive tasks effortlessly. This makes them popular among fraudsters and is why a large part of the bot activity on the internet is harmful. Bad actors are able to employ bots to perform attacks or increase the magnitude of their damage.

A single bot can simulate user behavior with such accuracy that it slips past traditional detection methods. In most cases, fraudsters follow the money, performing, e.g., Distributed Denial of Service – or DDoS – attacks that disrupt sites by the sheer force of traffic. Disrupting a competitor or attacking services in the name of a political agenda can also be their objective.

In this publication, however, we're examining their impact on video gaming, where they're being used to advance through a title and build in-game progression and experience with no effort.



HOW DO BOTS AFFECT THE VIDEO GAMING INDUSTRY?

Bots in video games take a variety of forms, from aimbots that give players pinpoint accuracy, to farming bots that generate materials in strategy games. Here are what they can do to affect the industry.

All of these lead to your brand reputation being weakened in the gaming community, your sources of revenue impacted and your future titles affected.

- 1 They claim rewards unfairly.** Cheaters are using bots to advance through a title and build their in-game characters without spending long hours gaming like other honest players. Bots can easily help cheaters with daily tasks, such as collecting daily user rewards – which requires hourly log-ins – or watching in-game ads to gain more advantages.
- 2 They make (crypto)money unfairly.** If progressing in a game also involves being rewarded with real money or crypto currency, it then becomes theirs easily. And farming in-game items themselves allows for selling them under the current market price – taking away the legitimate profit from their authorized sellers. Additionally, a well-built in-game character or fleshed out player-account with multiple cosmetics can be sold to other players, turning a virtual character into real money impacting the in-game economy.
- 3 They undermine the game's business model.** If players can simply advance through the game with unfair advantages provided by bots, they may not see the need to pay for additional features such as extra lives, bonus health or power-ups. This significantly reduces revenue from in-app purchases. Furthermore, in-game advertising revenue is also at stake, as no advertiser wants to invest in games where their ads are seen by bots rather than real humans.
- 4 They make the game less engaging.** The increase in fraudsters who utilize bots makes the competition harder for legitimate players and therefore demotivates them. When in-game rewards or a higher-valued character are obtained through automation, their actual value diminishes. Players will be more likely to leave your game behind and move on to another fair gaming environment.

— HOW TO FIGHT BACK BOTS?

The biggest challenge faced by today's solutions trying to detect bot fraud is a lack of data that effectively identifies and differentiates human and non-human activity. Gaining such an understanding requires years of research, sophisticated data sets and machine learning combined into one solution.

Out-of-date methods tend to focus on so-called 'server interactions', which refers to the requests bots make to your server. This typically doesn't contain a lot of information, making it difficult to distinguish between humans and bots. Fraudsters know this well and have learnt how to spoof various Application Programming Interface (API) calls to the servers, circumventing many forms of fraud detection and prevention.

This is why a more sophisticated approach is required. One that uses sensor data – information that is extremely difficult to fake.

Sensor data uses info on touch pressure and position, accelerometer, gyroscope, light sensors etc. to track everything that happens to a device or its peripherals. By leveraging sensor data, a baseline of authentic user behavior on specific flows within your app is built. The technology then monitors all the interactions with the game through several elements: number of clicks, how fast the clicks happen and where they are taking place on the screen, as well as – in the case of the mobile devices – what is the angle of the touch, device's position and movement. It then compares those interactions with what is considered normal for that specific game, highlighting players that are operating outside the parameters through anomaly detection.

Fraudsters have an incredibly hard time trying to spoof this and if they do, the technology is able to catch them with ease. And once a cheater is detected, you can decide the course of action for his or her account.

STOP BOTS IN YOUR GAME TODAY!

Bots are going to stay with us for some time to come and their sophistication will keep increasing. The question isn't whether to get bot cheats protection at all, but how much longer you can afford to go without it.

Whether you're releasing mobile games in free-to-play or premium models, you can fix your bot problem once and for all.

[Contact us now!](#)

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