BOT-PROOF YOUR MOBILE APPS WITH FAST, SIMPLE, 360° PROTECTION FROM APPROOV AND PT APPLICATION FIREWALL

Mobile apps have transformed the way the world interacts. It's estimated the annual number of apps down-loaded to connected devices will top 352 billion in 2021.* Most apps communicate directly with a publisher's servers via a rich API. But when malicious actors bypass genuine apps to make their own API calls, it can cost businesses millions.

HAS YOUR MOBILE API BECOME YOUR WEAKEST LINK?

Our customer data shows illegitimate sources generate 10–15 percent of traffic to the average mobile API. It may be scraping data for the competition, committing fraud, creating fake accounts for use in phishing or spamming, or attempting to take over genuine accounts via credential stuffing.
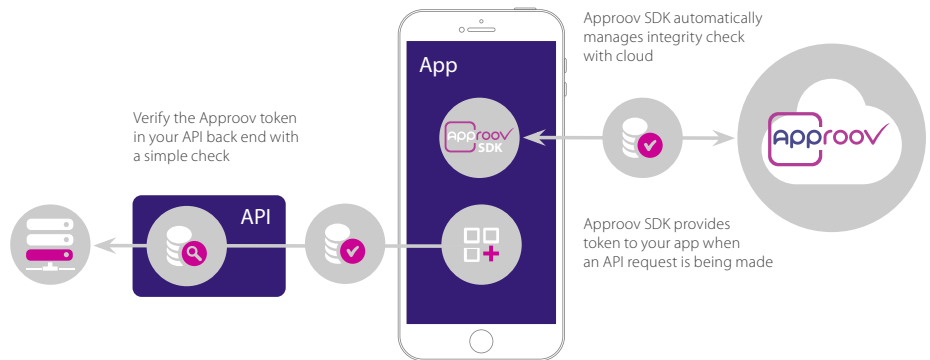
Such traffic typically comes from automated scripts or "bots," or from modified or fake mobile apps. And you may not even be aware of it. WAFs and API gateways don't identify it as "bad" because the bots use correct API protocols, keys, and even user credentials. But the impact may be huge:

+ **Revenue loss** as a result of competitive data scraping, personal data leakage, or unauthorized access to back-end assets
+ **Potential brand or reputation damage** from breached or fake accounts and poor user experience
+ **Increased cloud costs or higher back-end server utilization** as you process fake traffic

BANISH THE BOTS WITH APPROOV

Approov is the antibot solution for mobile from dynamic software analysis experts CriticalBlue. It protects the profitability and reputation of leading businesses by authenticating the software calling their mobile APIs, helping them to:

1. Block traffic generated without a mobile app present (by bots)
2. Block traffic from fake or tampered apps

Verify the Approov token in your API back end with a simple check

Approov SDK automatically manages integrity check with cloud

Approov SDK provides token to your app when an API request is being made

HOW IT WORKS

Approov is easy to deploy and has no impact on the end user experience. Simply download the SDK, inte-grate it with your app code, and register each app release with Approov before publishing to app stores.

A shared "token secret" is downloaded from Approov and you'll need to add a suitable token check for this se-cret in your server code. Or, you can skip this integration effort by deploying the pre-integrated PT Application Firewall (PT AF) solution to perform this check for you. Note that the secret is never present in the app, so it can't be stolen from there, nor is there anything which the app could use to know if it has passed authentication.

The Approov cloud service challenges each downloaded app to confirm it is a genuine copy. Challenges are initiated automatically by the SDK, which triggers the cloud service to generate a unique time-limited token based on the shared secret. This token is passed to the app by the SDK for use in API calls. By checking this token against the shared secret, your servers (or PT AF) can easily identify "good" traffic from genuine apps and block illegitimate traffic that fails the check.

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* statista.com/statistics/271644/worldwide-free-and-paid-mobile-app-store-downloads/

THE BENEFITS OF APPROOV

+ **Limit revenue loss.** Keep your valuable data safe from competitors so they can't steal your business. Keep your customers' personal data safe to limit user churn and regulatory fines.

+ **Protect your brand and customers.** User experience and trust levels suffer as customers suffer phishing, spam, or even data theft.

+ **Increase visibility.** Discover WHAT is communicating with your servers, not just WHO.

+ **Reduce costs.** Blocking fake traffic reduces the load on your local or cloud-hosted servers.

Approov
Authenticating Mobile Apps

Approov
*Authenticating Mobile Apps*

THE BENEFITS OF APPROOV WITH PT AF

+ Deploy quickly. Avoid any back-end integration effort by using PT Application Firewall to perform token verification as well as protecting against attacks.

+ Extend protection. Block a vast range of automated attacks on your servers as well as your mobile APIs. PT AF prevents attacks on API servers using malicious data (e.g., injection attacks). Your microservices-based mobile APIs may be vulnerable to such attacks due to limited input validation.

+ Instantly block web app attacks. PT AF's advanced machine learning proactively and accurately detects and blocks both known and unknown attacks on your web applications, including 0-days.

LOOKING BEYOND THE MOBILE THREAT

But of course, there's far more to Application Security than just giving your mobile apps great defenses against bots and scripts. Your web applications also deserve the same level of smart protection from automated attacks. And that's where the combination of Approov and PT Application Firewall really delivers on the promise of 360° protection.

Although automated scripts have many legitimate uses, hackers have enthusiastically harnessed bots to do their dirty work across the web. In fact, the majority of internet traffic is now generated automatically. And bots aren't just increasing in number, they're also getting smarter and increasingly hard to identify. From simple, automated scripts that were easy to spot by their lack of user cookies or JavaScript, they've evolved to act like browsers and even to mimic human behavior or hide beneath genuine user sessions.

To block this malicious traffic without hindering real consumers, you need sophisticated finger-print-based tools and behavioral analysis. In short, your entire application environment needs intelligent protection from a web application firewall (WAF) that can identify and block malicious traffic of all kinds.
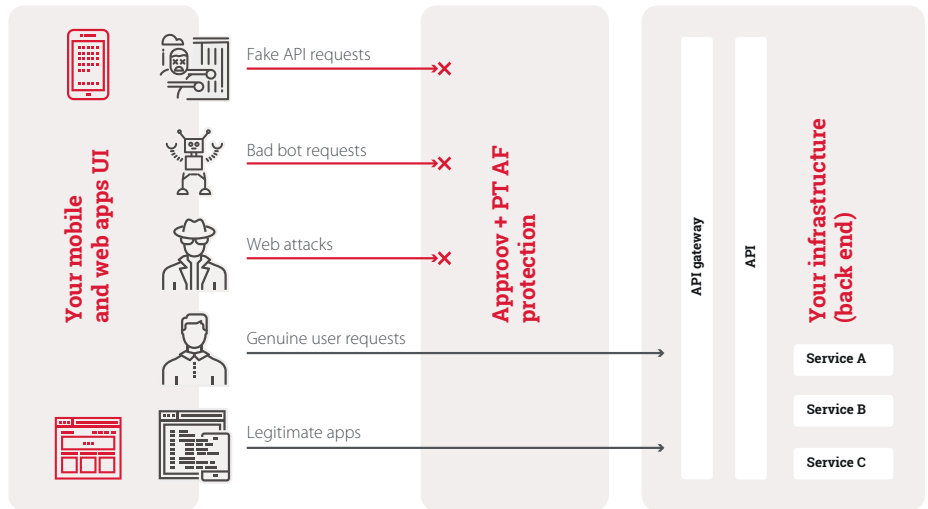
Comprehensive intelligent protection of your web and mobile channels

+ Only genuine users and apps
+ No impact on real users and legal apps

+ Constant learning on real traffic and app context awareness for highest detection rate

PT APPLICATION FIREWALL: SMARTER THAN THE SMARTEST BOTS

As well as offering a rapid, pre-integrated way to deploy Approov, PT AF is a modern response to the evolving challenges of securing all kinds of applications—from web portals to ERP systems and mobile apps.

PT AF is equipped with a smart combination of signature-based and heuristic analysis, which enables it to block all kinds of attacks on your apps and associated web technologies, without impacting on the activities of good bots. In fact, Positive Technologies has been positioned as a Visionary in Gartner Magic Quadrant 2017 for Web Application Firewalls—the third year running it's been rated visionary.

PT AF can be deployed as a hardware or virtual appliance and is fully cloud-ready, including public cloud through Microsoft Azure.

For more details on its features and benefits, download the solution overview.

Approov is a CriticalBlue product. More details on Approov can be found here: approov.io

Positive Technologies is a leading global provider of enterprise security solutions for vulnerability and compliance management, incident and threat analysis, and application protection. Commitment to clients and research has earned Positive Technologies a reputation as one of the foremost authorities on Industrial Control System, Banking, Telecom, Web Application, and ERP security, supported by recognition from the analyst community. Learn more about Positive Technologies at ptsecurity.com.

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POSITIVE TECHNOLOGIES