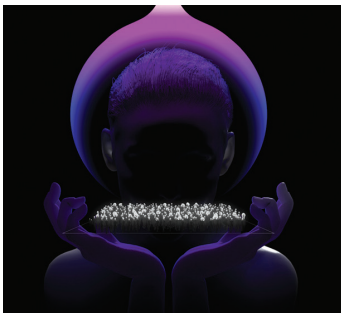
approov
MOBILE APP PROTECTION

CASE STUDY

NIMSES

Social Engagement Platform Battles Bots and Fake Accounts



"Approov provided a nearly immediate solution out of the box...we went from initial contact to a deployed solution in only 8 days."

— Andrii Sirchenko, CMO Nimses

Nimses, a global social platform that launched in 2017, grew to two million users within two weeks. This rapid growth also attracted the attention of hackers and bots who created fake accounts which negatively affected the user experience.

Approov Mobile App Protection was quickly deployed to ensure that only the Nimses app can be used to create and interact with user accounts. By integrating an SDK into the app and implementing a simple, industry-standard token check mechanism, the API back-end server access was secured.

The Client

Nimses has created an algorithm which digitizes the lived time of every registered user. After the user registers with Nimses, each minute of that person's life is transformed into an indestructible digital unit — a Nim — which remains on the Internet forever. The total number of Nims produced and gained by one person is accumulated into their individual account balance, called the Nim. All Nims stored in the account of a specific user, both created by this user and received from other users, are considered their property and can't be retrieved by the system or other users. It's comparable to a person's patent over time itself. Every Nim owner has the right to use their Nims at their own discretion through the free, location-based Nimses App.

Challenges

With the Nimses beta launch in June 2017, the platform gained two million users in just two weeks. Unfortunately, with visibility also comes the attention of those who want to exploit the platform. In this case, there were early signs that fake accounts and bots were being used to generate Nims that didn't represent any person's time and threatened to devalue Nims for every user.

So Nimses reached out to find out more about Approov.

"When the Nimses platform launched, the growth of new users was very rapid, exactly as we hoped. However, we soon began to see a few automated attacks against our API which threatened to pollute our environment and negatively impact our users' experience." explained Andrii Sirchenko, CMO Nimses.

"Our backend API was not secured, and we realized that this could lead to high amounts of scripting. Tens of thousands of bot accounts could have been created, and they might have generated tons of spamming activity."

Despite robust verification mechanisms and active detection of suspicious activity, Nimses was worried about their ability to contain misuse of their platform. They needed a solution to prevent the automated registration of fake accounts by bots which could be sold to those who wanted to pollute the experience for legitimate users or simply wanted to collect Nims for multiple accounts, thus devaluing the entire concept.

Yegor Okhotnikov, VP Business Development added, *"It is mission-critical for our service to ensure that one person has a single account, and securing our API was the first step in achieving this goal. Nimses needs to ensure that only genuine users can access the platform."*

How Approov Mobile App Protection Helped

By providing the ability to authenticate only legitimate apps using their API, Approov prevented automated abuse of the environment, but it needed to be deployed quickly to ensure that the fledgling bot issue did not spiral out of control and overwhelm their platform. This was achieved by integrating Approov's SDK into their app and implementing a simple, industry-standard token check mechanism for the API back-end server to process.

After initial deployment and while monitoring the platform, other suspicious activities were noted that seemed to be tests of mimicking human behavior through automated UI events via the real app. Fortunately, Approov also reports when app instances are running on emulators, and simply turning on emulator blocking prevented further activity.

By providing a basis for trust, along with additional information about the device, Nimses has since enhanced their existing account registration and usage monitoring capabilities to become far more effective in blocking sophisticated automation attacks coming from the app running on real devices.

The Results

According to Yegor the ease of integration and time-to-market were key drivers for them to make Approov their choice.

"We looked at addressing it in-house, but evaluated that focusing on developing core features of our platform would be a much better use of our limited internal resources."

"Of course, there is no magic pill for full system security. But now that Approov is in place we like to think we've built a comprehensive package for securing mobile APIs. We were somewhat skeptical in the beginning, but results were very good."

Yegor added, *"We believe the problem is solved since our fraud monitoring activities do not find successful attacks anymore."*

Nimses is well on the way to establishing the Nim as a well-recognized, widely usable currency with more acceptance for it as payment for goods and services ranging from meals, coffee and flowers, to entrance fees for art galleries and haircuts.

After launching in Russia and Ukraine, they continue to gain the trust of merchants and increase their user base and plan a worldwide launch. Future plans include a blockchain based exchange, so that users will be able to buy or sell Nims and expand worldwide creating a full-cycle ecosystem based on the Nim.

Summary

Approov is a perfect fit for Nimses. They understood that API security mattered to their platform and needed to be integrated from an early stage to allow scalability and the integrity of the user experience.

According to Nimses, these are major benefits they got with Approov:

- Allowing allocation of resources to development rather than on fighting fraud so that we can focus on addressing genuine user requests for more features, better scalability, and continual improvements to the core platform.
- Access to a knowledgeable, proactive tech team that focused on resolving our needs and implementing an overall solution quickly.
- A smooth upgrade process with detailed stats around emulators, rooted/jail-broken devices, and instrumentation frameworks.