

CASE STUDY

How NT Global is Protecting Their Hybrid App Using Jscrambler



*"We had to protect our mobile app, which was susceptible to tampering and many other client-side threats. **Jscrambler was the perfect solution.**"*

Alex Yeoh, IT Infrastructure Manager at NT Global

Overview

Building a Global Rewards Community

NT Global believes **consumption is a key driver of growth**. With this in mind, the company seeks to change lives by creating a platform that encourages the growth of a **community of both consumers and merchants for mutual benefit**. Through this community, merchants can gain more business opportunities and consumers receive more value and rewards.

This community provides a **consumer rewards program** for participating merchants and consumers who use the NT Global reward system. Consumers earn rebates in Reward Points. Merchants place their products or services in the NT Global platform at no cost to them.

“Customers tend to spend more money, more often at those businesses who offer rewards.”

Innovative Rewards System

NT Global gives businesses a simple and easy way to offer their customers **rewards and rebates in reward points**. Not only that, but reward points can be collected across a broad range of participating merchants. They can also be utilized with any participating merchant, regardless of which business they earned them from. And the final benefit, customers tend to spend more money, more often at those businesses that offer rewards.

CHALLENGES

- Prevent attackers from digging through their source code and disrupting the system
- Protect their innovative code and prevent copycat apps
- Prevent code tampering and hijacking of their app
- Protect their revenue streams

SOLUTION

Jscrambler Code Integrity:

- Polymorphic JavaScript obfuscation
- Built-in protection against reverse-engineering tools
- Self-defensive capabilities to stop tampering and debugging attempts

RESULTS

- Simple implementation with straightforward docs
- Seamless integration with Ionic's build process using the CLI
- Excellent technical support
- Successfully protecting the source code and preventing tampering
- Attack reports lowered after implementing Jscrambler

CHALLENGES

When planning the architecture of its applications, NT Global decided to go with **Ionic**, a popular **cross-platform JavaScript framework**. Like many other companies, NT Global saw value in using a shared codebase.

While developing the threat model of its app, the company understood some specific security needs linked to using JavaScript. Specifically, every piece of **client-side JavaScript code is exposed** and can be retrieved by attackers.

This is precisely what NT Global detected: ill-intentioned users started digging through the source code of the company's apps, **disrupting the whole system**, and making illegitimate use of the integrated APIs.

Plus, NT Global understood that the innovative logic behind its consumer rewards program could be **retrieved by competitors** or attackers that could then monetize this code on their own—especially since the platform is widely known across Southeast Asia.

*“If we continued to leave the code unprotected, our application would be **taken down** quickly, and this would have a **huge impact on our business.**”*

While searching for a security solution that met the company’s specific needs, NT Global came across several options, but these failed to provide the tools they needed. Several of these only provided code minification—but **minifiers only reduce the code size** by removing useless characters like whitespaces; they don’t protect the source code in any way.

Then, the company’s own developers found out about Jscrambler and understood that it offers a **suite of code protection features** that make it extremely hard for attackers to access the Developer Console and debug or tamper with the source code.

*“By protecting the code with Jscrambler, **attackers don’t stand a chance** of obtaining new data from us.”*

One of these key features is Jscrambler’s **polymorphic JavaScript Obfuscation**, which includes several different techniques that transform the original source code into a new version that is extremely hard to understand and reverse-engineer, while keeping its original functionality. This security layer includes Jscrambler’s **Code Hardening** feature, which provides up-to-date protection against all reverse-engineering tools and techniques.

Then, NT Global uses the Jscrambler **Self-Defending** feature, which adds **integrity checks** and other **runtime defenses** to **prevent attackers from debugging or tampering with the code**. As such, if anyone tries to debug NT Global's platform at runtime, the app will immediately break. Similarly, if an attacker tries to modify the code logic dynamically at runtime, the app breaks to halt the attack.

*"It greatly **benefits us from competitors**, as we do not have to constantly worry about security measures and have more time to continue our R&D."*

The combination of these layers greatly **reduces the attack surface** of NT Global's hybrid mobile app, making it much harder for attackers to understand how the software works and plan/automate these attacks.

*"The support teams are **excellent**. They would constantly contact us to ensure our **satisfaction** and goals are met."*

Results

NT Global's team had no trouble getting started with Jscrambler, especially due to the **straightforward documentation**. Since Jscrambler provides so many different transformations, this documentation was key for NT Global to understand which transformations best suit their use case.

The company's team also saw the value of using the Jscrambler CLI to **integrate Jscrambler seamlessly into their app's build process**. This integration with the Ionic build process is straightforward and can be achieved effortlessly thanks to Jscrambler's detailed Ionic guide.

*“Since implementing Jscrambler, we have received **less feedback about our system getting attacked.**”*

All of the specific concerns that NT Global brought forward were addressed by Jscrambler and the company also provided valuable feedback on new features that would bring added value to their development workflow.

With Jscrambler in place, NT Global can now double down on its R&D efforts with the increased peace of mind that **their source code is now protected**.

Contact Us

If you want to know more about how Jscrambler can help you secure your hybrid mobile apps, don't hesitate to contact us

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and in Gartner's **Market Guide for In-App Protection**

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Broadcasting, Software Development, E-Commerce, and Healthcare.**