



vs



## Open Source Java/Kotlin Optimization Tool

An open source solution, ProGuard can be used free of charge to optimize your Java/Kotlin bytecode. ProGuard makes Java, Kotlin and Android applications up to 90% smaller and up to 20% faster.

ProGuard also provides minimal protection against reverse engineering by obfuscating the names of classes, fields, and methods. However, most Android developers find they need additional security protection beyond the basics ProGuard provides. That's where DexGuard comes in.

## Advanced Android App Protection

Developed by the creators of ProGuard, DexGuard includes all ProGuard features plus advanced protection against reverse engineering and hacking.

Android applications and SDKs are easy to reverse engineer, which opens up opportunities for various forms of abuse, including intellectual property theft, credential harvesting, tampering, and cloning.

DexGuard hardens both Android (Java, Kotlin) and cross-platform (Cordova, Ionic, React Native, Unity, and other JavaScript-based) code, and enables applications to defend themselves at runtime. It is backward compatible with ProGuard rules and configurations, making upgrades simple.

## Choose proactive **Android app security**

More than 80% of organizations said they are at risk from mobile security threats, and 69% said those risks increased in the last year (Verizon Mobile Security Index 2019). Get proactive about advanced mobile app protection with DexGuard.

Get in touch with **one of our experts**.

[Request a Demo](#)

# Quick comparison of ProGuard vs. DexGuard

Choose the right Android app optimization and security solution to fit your needs.

## ProGuard

- Free, open source command-line tool with optional GUI
- Reduces application size via shrinking/optimization
- Obfuscates names of:
  - Classes
  - Fields
  - Methods
- Supports desktop, mobile, and embedded applications
- Self-service product, with online support manual available
- Exclusively processes bytecode

## DexGuard

- Includes all ProGuard features
- PLUS:
  - Obfuscates and encrypts names of:
    - Classes
    - Fields
    - Methods
    - Resources
    - Resource files
    - Asset files
    - Native libraries
    - & more
  - Provides code virtualization
  - Protects against dynamic attacks with Runtime Application Self-Protection (RASP)
  - Specifically designed for Android apps
  - Provides protection to native and cross-platform apps
  - Full-service product support included, with additional Gold support option available
  - Processes the entire application, including bytecode, manifest files, native libraries, resources, resource files, and asset files

## Common app threats and their consequences

DexGuard defends against Android app threats that can cause unexpected negative consequences, including:

- Customer loss
- Revenue loss
- Reputational damage
- Loss of competitive advantage
- Fines and retribution
- Incident handling costs
- Investor mistrust

**Guardsquare** offers the most complete approach to mobile application security on the market. Built on the open source **ProGuard**® technology, Guardsquare's software integrates seamlessly across the development cycle. From app security testing to code hardening to real-time visibility into the threat landscape, Guardsquare solutions provide enhanced mobile application security from early in the development process through publication. More than 900 customers worldwide across all major industries rely on Guardsquare to help them identify security risks and protect their mobile applications against reverse engineering and tampering.

 **GUARDSQUARE**  
Mobile application protection