ios security

code obfuscation https://github.com/rockbruno/swiftshield

- Requirements & Limitations
- example:XiaoiceiOSLibrary,xeva,island
- Error1: xeva:ld: (UMSocialGlobal.o), building for iOS Simulator, but linking in object file built for iOS https://stackoverflow.com/questions/63607158/xcode-12-building-for-ios-simulator-but-linking-in-an-object-file-built-for-io
- ExtensionTarget忽略，然后对着映射表修改
- package 忽略
- typealias 不能用
- storyboard中对应class未修改,手动修改
- 必须实现的重写方法被混淆@resultBuilder，buildBlock方法
- 文件名未被混淆
- ignore-public问题，重写父类的方法，子类public方法名字未混淆
- symbol(s) not found for architecture x86_64

```
#if TARGET_IPHONE_SIMULATOR
#else
#endif
```

- https://stackoverflow.com/questions/63267897/building-for-ios-simulator-but-the-linked-framework-framework-was-built

string obfuscation

- 字符串常量混淆，防止被窃取 https://medium.com/swift2go/increase-the-security-of-your-ios-app-by-obfuscating-sensitive-strings-swift-c915896711e6
- 代码中的字符串字面量混淆,防止搜索到关键代码位置 https://syrion.me/blog/ios-strings-obfuscation-in-swift/

IOSSecuritySuite https://github.com/securing/IOSSecuritySuite

JailbreakChecker(amIJailbroken)

- 检查是否安装越狱工具，系统文件权限等

DebuggerChecker(denyDebugger)

- PT_DENY_ATTACH ptrace 禁止依附进程

EmulatorChecker(amIRunInEmulator)

- 检查processinfo,enviroment

ReverseEngineeringToolsChecker(amIReverseEngineered)

- 检查是否安装逆向工具

IntegrityChecker(amITampered)

- 检查bundleID,mobileProvision,machO

ProxyChecker(amIProxied)

- CFNetworkCopySystemProxySettings

RuntimeHookChecker(amIRuntimeHook)

- 检查某个类的函数是否被hook

performance

- 20几毫秒

数据保护

- https://medium.com/@ankurvekariya/ios-app-security-tips-and-tricks-42cdf9301181
- https://quickbirdstudios.com/blog/ios-app-security-best-practices/

网络数据

- 取消代理，防止中间人

存储数据

- 不重要的数据userdefault里面
- 重要数据 Keychain 加密存储

其他

- https://developer.apple.com/security/
- https://wwdcbysundell.com/2021/security-and-privacy-at-wwdc21/#application-security-101-for-app-developers