

Hybrid Obfuscation Technique for Reverse Engineering Problem

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Abstract : Obfuscation is a practice to make something difficult and complicated. Programming code is ordinarily obfuscated to protect the intellectual property (IP) and prevent the attacker from reverse engineering (RE) a copyrighted software program. Obfuscation may involve encrypting some or all the code, transforming out potentially revealing data, renaming useful classes and variables (identifiers) names to meaningless labels, or adding unused or meaningless code to an application binary. Obfuscation techniques were not performing effectively recently as the reversing tools are able to break the obfuscated code. We propose in this paper a hybrid obfuscation technique that contains three approaches of renaming. Experimentation was conducted to test the effectiveness of the proposed technique. The experimentation has presented a promising result, where the reversing tools were not able to read the code.

Keywords : intellectual property, obfuscation, software security, reverse engineering

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