Abstract

Mobile Phones have become an important need of today. The term mobile phone and smartphone are almost identical nowadays. Smartphone market is booming with very high speed. Smartphones have gained such a huge popularity due to wide range of capabilities they offer. Currently android platform is leading the smartphone market. Android has gained an overnight popularity and became the top OS among its competitor OS. This eminence attracted malware authors as well. As android is an open source platform, it seems quite easy for malware authors to fulfill their illicit intentions. In this paper a new technique will be introduced to detect malware. This technique detects malware in android applications through machine learning classifier by using both static and dynamic analysis. This technique does not rely on malware signatures for static analysis but instead android permission model is used. Under dynamic analysis, system call tracing is performed. Using both static and dynamic techniques along with machine learning provides all in one solution for malware detection. The technique used by us is tested on various benign samples collected from official android market (Google Play Store) and on various malicious applications.
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Index Terms
Malware Detection Techniques in Android

Keywords
Android  Dynamic Analysis  Machine learning  Malware  Malware detection
Static Analysis.