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1. ApkCombiner: Combining multiple android apps to support inter-app analysis (*Open Access*)

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Abstract: Android apps are made of components which can leak information between one another using the ICC mechanism. With the growing momentum of Android, a number of research contributions have led to tools for the intra-app analysis of Android apps. Unfortunately, these state-of-the-art approaches, and the associated tools, have long left out the security flaws that arise across the boundaries of single apps, in the interaction between several apps. In this paper, we present a tool called ApkCombiner which aims at reducing an inter-app communication problem to an intra-app inter-component communication problem. In practice, ApkCombiner combines different apps into a single apk on which existing tools can indirectly perform inter-app analysis. We have evaluated ApkCombiner on a dataset of 3,000 real-world Android apps, to demonstrate its capability to support static context-aware inter-app analysis scenarios. © IFIP International Federation for Information Processing 2015. (22 refs)

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