

Smartphone Memory Forensics

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Abstract—We will emulate a Android environment, we choose this approach instead of extracting the memory from a real device to reduce the complexity of the task, and literature shows that there is not a big difference between the dumped memory from a real device, and a emulator.

We will analyse the dumped memory, and focus our efforts on analysing the memory of the Dalvik JVM. We hope to develop a tool that can be used to analyse the different userland applications, such as mail/sms/cloud.

- Use emulator (Android SDK), pmemsave to get memory.
- Look into Dalvik, how can this be analyzed? Tool?
- x86 vs ARM emulator.

I. INTRODUCTION

II. RELATED WORK

III. METHOD

IV. RESULTS

V. MEMORY ANALYSIS

VI. CONCLUSION