

Investigation of Smartphone Residual Data in Secondary Markets

Information Systems &
Technology / SoC

RELEVANCE / OBJECTIVES

Relevance

- Mobile devices are prolific
 - Identify residual data trends
 - Examine industry tool-kit performance capabilities
- Residual Data Impact
 - Intellectual property leakage,
 - Residual data retention from apps,
 - Residual GPS data,
 - Effectiveness of intentional deletion activities

Objectives

- Quantify mobile device residual data
 - Evaluation performance capabilities of tool-kits
 - Evaluation performance of hard rests & remote deletion apps

APPROACH / TECHNIQUES

- Purchase smartphones
- Extract data using forensic tools.
- Hard-rest acquired devices.
- Extract data with forensic tools.
- Download the top three remote data deletion apps
- Insert a defined dataset
- Conduct state manipulation
- Run the remote data deletion app
- Extract data.



MILESTONES / DELIVERABLES

Deliverables

Report:

- General categories, data types and apps
- Logical & physical tool extraction performance
- Hard reset impact on data extraction & tool performance
- Deletion app impact on data extraction & tool performance

Milestones

- 4 m: Configure test environments, acquire smartphones & extract data
- 8 m: Executive hard rests & extract data
Develop the data sets & execute remote data deletion
- 12 m: Compare results & investigate tool performance
Compile report

INDUSTRY BENEFITS

Economics

- Identification of residual data resident on devices
- Identify limitations of mobile device forensics toolkits.
- Increased understanding of remote deletion applications
- Increased understanding of hard-rest activities.

Potential Member Benefits

- Insight into residual data risk on smartphones
- Defined approach for validating existing mitigation solutions