Android Acquisition Logical File System And Physical

e-discovery.uk, Computer Forensics Lab. Published 2026-09-02.
https://e-discovery.uk/library/android-acquisition-logical-file-system-and-physical

ANDROIDACQUISITION · A GUIDE FOR UK LAWYERSAndroid Acquisition: Logical, File System andPhysicalThree Depths of Extraction, and Why the Method Chosen Decides What theCourt Will Ever SeeCOMPUTER FORENSICS LAB§ ABOUT THE AUTHORPREPARED BY COMPUTER FORENSICS LAB E-DISCOVERY TEAM§ CONTENTSIn this guide01 Executive summary02 The problem in plain English: the method decides the evidence03 The three depths and what each reaches04 How the device decides which is possible05 Integrity, verification and the record of method06 Reading a report in the light of its method07 Deployment: choosing, obtaining and defending the depth08 Source architecture: where else the evidence lives09 Worked examples10 Common mistakes and technical limitations11 Questions to ask · Suggested wording12 Checklist and red flags · When to involve a digital forensic expert13 Frequently asked questions14 Glossary · References · Disclaimer · How a specialist laboratory can assist§ 01 · ORIENTATIONExecutive summaryThe headline point: on Android the acquisition method decides the evidence, a logical extraction takes onlywhat the device hands over, a file-system extraction reaches the storage and app databases including deletednot degree, so the depth must be asked about for every device and every report.§ 02 · FIRST PRINCIPLESThe problem in plain English: the method decides the evidence§ 03 · THETHREEDEPTHSThe three depths and what each reachesLOGICAL FILE SYSTEM PHYSICAL DELETED DATA VERIFIED§ 04 · WHATTHEDEVICEDECIDESHow the device decides which is possible§ 05 · INTEGRITY AND METHODIntegrity, verification and the record of method§ 06 · READINGAREPORTReading a report in the light of its method§ 07 · DEPLOYMENTDeployment: choosing, obtaining and defending the depth§ 08 · THEWIDERMAPSource architecture: where else the evidence livesEVIDENCE ACCOUNT /LOGICAL FILE-SYSTEM PHYSICAL COUNTERPART /EXTRACTION EXTRACTION EXTRACTION PROVIDERGOOGLEBACKUPS§ 09 · IN THE WILDWorked examplesEXAMPLE1 · THEREPORTTHATWASSILENTABOUTWHATITCOULDNOTSEEEXAMPLE2 · THEDEVICEWHOSECEILINGWASLOW, ANDTHEESTATETHATWASNOTEXAMPLE3 · THEMETHODTHATWASRECORDED, ANDTHECHALLENGETHATFAILED§ 10 · WHEREITGOESWRONGCommon mistakes and technical limitationsCommon mistakesTechnical limitations§ 11 · INTERROGATORIES & DRAFTING AIDSQuestions to ask · Suggested wordingAsk your clientAsk your opponentAsk your e Discovery / forensic providerSUGGESTED WORDING · INSTRUCTIONFORANANDROID AC QUISITION§ 12 · QUICK CONTROLChecklist and red flags · When to involve a digital forensicexpertThe Android acquisition checklistRed flagsWhen to involve a digital forensic expert§ 13 · COMMON QUESTIONSFrequently asked questionsWhat is the difference between logical, file-system and physical extraction?Why does the acquisition method matter so much for the evidence?Can the examiner just choose the deepest method?The other side's report says nothing was found. Should we accept that?How is an extraction made defensible?What if the device only permits a

shallow extraction?§ 14 · REFERENCEGlossarySources and authoritative referencesDISCLAIMER§ HOW A SPECIALIST LABORATORY CAN ASSISTWorking with Computer Forensics LabSpeak to a forensic examiner, not a salesperson.INSTRUCTTHELABNEWENQUIRIESEMAILE - DISCOVERY

Questions and answers

Why does the acquisition method matter so much for the evidence?

Because a shallow extraction cannot see what a deep one holds (