1. Record Nr. UNINA9910453751403321 Autore Gupta Aditya Titolo Learning pentesting for Android devices: a practical guide to learning penetration testing for Android devices and applications / / Aditya Gupta; foreword by Elad Shapira; cover Image by Michal Jasej Birmingham, England:,: Packt Publishing,, 2014 Pubbl/distr/stampa ©2014 ISBN 1-78328-899-X Descrizione fisica 1 online resource (154 p.) Collana Community Experience Distilled Disciplina 005.3 Soggetti Application software - Design Application software - Development Computer networks - Security measures Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Cover; Copyright; Credits; Foreword; About the Author; Nota di contenuto Acknowledgments; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Getting Started with Android Security; Introduction to Android; Digging deeper into Android; Sandboxing and the permission model: Application signing: Android startup process: Summary; Chapter 2: Preparing the Battlefield; Setting up the development environment; Creating an Android virtual device; Useful utilities for Android Pentest; Android Debug Bridge; Burp Suite; APKTool; Summary; Chapter 3: Reversing and Auditing Android Apps Android application teardownReversing an Android application; Using Apktool to reverse an Android application; Auditing Android applications; Content provider leakage; Insecure file storage; Path traversal vulnerability/local file inclusion; Client-side injection attacks;

OWASP top 10 for mobile; Summary; Chapter 4: Traffic Analysis for Android Devices; Android traffic interception; Ways of Android traffic analysis; Passive analysis; Active analysis; HTTPS Proxy interception; Other ways for SSL Traffic interception; Extracting sensitive files from

packet capture; Summary

Chapter 5: Android ForensicsTypes of forensics; Filesystems; Android filesystem partitions: Using dd to extract data; Using a custom recovery image: Using Andriller to extract an application's data: Using AFLogical to extract contacts, calls, and text messages; Dumping application databases manually; Logging the logcat; Using backup to extract an application's data; Summary; Chapter 6: Playing with SQLite; Understanding SQLite in depth; Analyzing a simple application using SQLite; Security vulnerability; Summary; Chapter 7: Lesser-known Android Attacks: Android WebView vulnerability Using WebView in the applicationIdentifying the vulnerability; Infecting legitimate APKs; Vulnerabilities in ad libraries; Cross Application Scripting in Android (XAS); Summary; Chapter 8: ARM Exploitation; Introduction to ARM architecture; Execution modes; Setting up the environment; Simple stack-based buffer overflow; Return-oriented programming; Android root exploits; Summary; Chapter 9: Writing the Pentest Report: Basics of a penetration testing report: Writing the pentest report; Executive summary; Vulnerabilities; Scope of the work; Tools used: Testing methodologies followed RecommendationsConclusion; Appendix; Summary; Index

Sommario/riassunto

This is an easy-to-follow guide, full of hands-on and real-world examples of applications. Each of the vulnerabilities discussed in the book is accompanied with the practical approach to the vulnerability, and the underlying security issue. This book is intended for all those who are looking to get started in Android security or Android application penetration testing. You don't need to be an Android developer to learn from this book, but it is highly recommended that developers have some experience in order to learn how to create secure applications for Android.