

# Kali Linux Cookbook

Over 70 recipes to help you master Kali Linux for effective penetration security testing



## Kali Linux Cookbook

Over 70 recipes to help you master Kali Linux for effective penetration security testing

Willie L. Pritchett

**David De Smet** 



**BIRMINGHAM - MUMBAI** 

#### Kali Linux Cookbook

Copyright © 2013 Packt Publishing

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the prior written permission of the publisher, except in the case of brief quotations embedded in critical articles or reviews.

Every effort has been made in the preparation of this book to ensure the accuracy of the information presented. However, the information contained in this book is sold without warranty, either express or implied. Neither the authors, nor Packt Publishing, and its dealers and distributors will be held liable for any damages caused or alleged to be caused directly or indirectly by this book.

Packt Publishing has endeavored to provide trademark information about all of the companies and products mentioned in this book by the appropriate use of capitals. However, Packt Publishing cannot guarantee the accuracy of this information.

First published: October 2013

Production Reference: 1081013

Published by Packt Publishing Ltd. Livery Place 35 Livery Street Birmingham B3 2PB, UK.

ISBN 978-1-78328-959-2

www.packtpub.com

Cover Image by Prashant Timappa Shetty (sparkling.spectrum.123@gmail.com)

## **Credits**

**Authors** 

Willie L. Pritchett
David De Smet

Reviewers

Daniel W. Dieterle

Silvio Cesar Roxo Giavaroto

Adriano Gregório

Javier Pérez Quezada

Ahmad Muammar WK

**Acquisition Editor** 

Usha Iyer

**Lead Technical Editor** 

Balaji Naidu

**Technical Editors** 

Proshonjit Mitra

Sonali S. Vernekar

**Project Coordinator** 

Wendell Palmer

**Proofreaders** 

Maria Gould

Paul Hindle

Indexer

Priya Subramani

**Production Coordinator** 

Melwyn D'sa

**Cover Work** 

Melwyn D'sa

## **About the Authors**

**Willie L. Pritchett** has a Master's in Business Administration. He is a seasoned developer and security enthusiast who has over 20 years of experience in the IT field. He is currently the Chief Executive at Mega Input Data Services, Inc., a full service database management firm specializing in secure, data-driven, application development, and staffing services. He has worked with state and local government agencies as well as helping many small businesses reach their goals through technology. Willie has several industry certifications and currently trains students on various topics including ethical hacking and penetration testing.

I would like to thank my wife Shavon for being by my side and supporting me as I undertook this endeavor. To my children, Sierra and Josiah, for helping me to understand the meaning of quality time. To my parents, Willie and Sarah, I thank you for providing a work ethic and core set of values that guide me through the roughest days. A special thanks to all of my colleagues, associates, and business partners who gave me a chance when I first started in the IT field; through you a vision of business ownership wasn't destroyed, but allowed to flourish. Finally, I would like to thank all of the reviewers and technical consultants who provided exceptional insight and feedback throughout the course of writing this book.

**David De Smet** has worked in the software industry since 2007 and is the founder and CEO of iSoftDev Co., where he is responsible for many varying tasks, including but not limited to consultant, customer requirements specification analysis, software design, software implementation, software testing, software maintenance, database development, and web design. He is so passionate about what he does that he spends inordinate amounts of time in the software development area. He also has a keen interest in the hacking and network security field and provides network security assessments to several companies.

I would like to extend my thanks to Usha lyer for giving me the opportunity to get involved in this book, as well as my project coordinator Sai Gamare and the whole team behind the book. I thank my family and especially my girlfriend Paola Janahaní for the support, encouragement, and most importantly the patience while I was working on the book in the middle of the night.

## **About the Reviewers**

**Daniel W. Dieterle** has over 20 years of IT experience and has provided various levels of IT support to numerous companies from small businesses to large corporations. He enjoys computer security topics, and is an internationally published security author. Daniel regularly covers some of the latest computer security news and topics on his blog Cyberarms. wordpress.com. Daniel can be reached via e-mail at cyberarms@live.com or @cyberarms on Twitter.

**Silvio Cesar Roxo Giavaroto** is a professor of Computer Network Security at the University Anhanguera São Paulo in Brazil. He has an MBA in Information Security, and is also a CEH (Certified Ethical Hacker). Silvio is also a maintainer of www.backtrackbrasil.com.br.

**Adriano Gregório** is fond of operating systems, whether for computers, mobile phones, laptops, and many more. He has been a Unix administrator since 1999, and is always working on various projects involving long networking and databases, and is currently focused on projects of physical security, and logical networks. He is being certified by MCSA and MCT Microsoft.

**Javier Pérez Quezada** is an I + D Director at Dreamlab Technologies. He is the founder and organizer of the 8.8 Computer Security Conference (www.8dot8.org). His specialties include: web security, penetration testing, ethical hacking, vulnerability assessment, wireless security, security audit source code, secure programming, security consulting, e-banking security, data protection consultancy, consulting ISO / IEC 27001, ITIL, OSSTMM version 3.0, BackTrack 4 and 5, and Kali Linux. He has certifications in: CSSA, CCSK, CEH, OPST, and OPSA. Javier is also an instructor at ISECOM OSSTMM for Latin America (www.isecom.org).

**Ahmad Muammar WK** is an independent IT security consultant and penetration tester. He has been involved in information security for more than 10 years. He is a founder of ECHO (http://echo.or.id/), one of the oldest Indonesian computer security communities, and also a founder of IDSECCONF (http://idsecconf.org) the biggest annual security conference in Indonesia. Ahmad is well known in the Indonesian computer security community. He also writes articles, security advisories, and publishes research on his blog, http://y3dips.echo.or.id.

### www.PacktPub.com

#### Support files, eBooks, discount offers, and more

You might want to visit www.PacktPub.com for support files and downloads related to your book.

Did you know that Packt offers eBook versions of every book published, with PDF and ePub files available? You can upgrade to the eBook version at www.PacktPub.com and as a print book customer, you are entitled to a discount on the eBook copy. Get in touch with us at service@packtpub.com for more details.

At www.PacktPub.com, you can also read a collection of free technical articles, sign up for a range of free newsletters and receive exclusive discounts and offers on Packt books and eBooks.



http://PacktLib.PacktPub.com

Do you need instant solutions to your IT questions? PacktLib is Packt's online digital book library. Here, you can access, read and search across Packt's entire library of books.

#### Why Subscribe?

- Fully searchable across every book published by Packt
- Copy and paste, print and bookmark content
- ▶ On demand and accessible via web browser

#### Free Access for Packt account holders

If you have an account with Packt at www.PacktPub.com, you can use this to access PacktLib today and view nine entirely free books. Simply use your login credentials for immediate access.

# **Table of Contents**

Preface	1
Chapter 1: Up and Running with Kali Linux	5
Introduction	5
Installing to a hard disk drive	6
Installing to a USB drive with persistent memory	14
Installing in VirtualBox	17
Installing VMware Tools	24
Fixing the splash screen	25
Starting network services	26
Setting up the wireless network	27
Chapter 2: Customizing Kali Linux	31
Introduction	31
Preparing kernel headers	31
Installing Broadcom drivers	33
Installing and configuring ATI video card drivers	35
Installing and configuring nVidia video card drivers	38
Applying updates and configuring extra security tools	40
Setting up ProxyChains	41
Directory encryption	43
Chapter 3: Advanced Testing Lab	47
Introduction	47
Getting comfortable with VirtualBox	48
Downloading Windows Targets	56
Downloading Linux Targets	58
Attacking WordPress and other applications	59