

## Wireshark Network Analysis (Second Edition): The Official Wireshark Certified Network Analyst Study Guide

*Guide to TCP/IP, Fourth Edition introduces students to the concepts, terminology, protocols, and services that the Transmission Control Protocol/Internet Protocol (TCP/IP) suite uses to make the Internet work. This text stimulates hands-on skills development by not only describing TCP/IP capabilities, but also by encouraging students to interact with protocols. It provides the troubleshooting knowledge and tools that network administrators and analysts need to keep their systems running smoothly. Guide to TCP/IP, Fourth Edition covers topics ranging from traffic analysis and characterization, to error detection, security analysis and more. Both IPv4 and IPv6 are covered in detail. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.*

*"Network analysis is the process of listening to and analyzing network traffic. Network analysis offers an insight into network communications to identify performance problems, locate security breaches, analyze application behavior, and perform capacity planning. Network analysis (aka "protocol analysis") is a process used by IT professionals who are responsible for network performance and security." -- p. 2.*

*This book is aimed at IT professionals who want to develop or enhance their packet analysis skills. Basic familiarity with common network and application services terms and technologies is assumed; however, expertise in advanced networking topics or protocols is not required. Readers in any IT field can develop the analysis skills specifically needed to complement and support their respective areas of responsibility and interest.*

*Attacking Network Protocols is a deep dive into network protocol security from James Forshaw, one of the world's leading bug - hunters. This comprehensive guide looks at networking from an attacker's perspective to help you discover, exploit, and ultimately - protect vulnerabilities. You'll start with a rundown of networking basics and protocol traffic capture before moving on to static and dynamic protocol analysis, common protocol structures, cryptography, and protocol security. Then you'll turn your focus to finding and exploiting vulnerabilities, with an overview of common bug classes, fuzzing, debugging, and exhaustion attacks. Learn how to: - Capture, manipulate, and replay packets - Develop tools to dissect traffic and reverse engineer code to understand the inner workings of a network protocol - Discover and exploit vulnerabilities such as memory corruptions, authentication bypasses, and denials of service - Use capture and analysis tools like Wireshark and develop your own custom network proxies to manipulate - network traffic Attacking Network Protocols is a must-have for any penetration tester, bug hunter, or developer looking to understand and discover network vulnerabilities.*

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*A Hacker's Guide to Capture, Analysis, and Exploitation*

*Wireshark Network Security*

*Attacking Network Protocols*

*Understanding Incident Detection and Response*

*The Practice of Network Security Monitoring*

*Computer Networks*

*Learn how to use Docker containers effectively to speed up the development process*

Written by one of the foremost authorities in the field, Mechanical Tolerance Stackup and Analysis presents proven and easy-to-use methods for determining whether selected dimensioning and tolerancing schemes will yield functional parts and assemblies and the most practical procedure to communicate the results. Using a variety of examples and real-

Protect your network as you move from the basics of the Wireshark scenarios to detecting and resolving network anomalies. Key Features Learn protocol analysis, optimization and troubleshooting using Wireshark, an open source tool Learn the usage of filtering and statistical tools to ease your troubleshooting job Quickly perform root-cause analysis over your network in an event of network failure or a security breach Book Description Wireshark is an open source protocol analyser, commonly used among the network and security professionals. Currently being developed and maintained by volunteer contributions of networking experts from all over the globe. Wireshark is mainly used to analyze network traffic, analyse network issues, analyse protocol behaviour, etc. - it lets you see what's going on in your network at a granular level. This book takes you from the basics of the Wireshark environment to detecting and resolving network anomalies. This book will start from the basics of setting up your Wireshark environment and will walk you through the fundamentals of networking and packet analysis. As you make your way through the chapters, you will discover different ways to analyse network traffic through creation and usage of filters and statistical features. You will look at network security packet analysis, command-line utilities, and other advanced tools that will come in handy when working with day-to-day network operations. By the end of this book, you have enough skill with Wireshark 2 to overcome real-world network challenges. What you will learn Learn how TCP/IP works Install Wireshark and understand its GUI Creation and Usage of Filters to ease analysis process Understand the usual and unusual behaviour of Protocols Troubleshoot network anomalies quickly with help of Wireshark Use Wireshark as a diagnostic tool for network security analysis to identify source of malware Decrypting wireless traffic Resolve latencies and bottleneck issues in the network Who this book is for If you are a security professional or a network enthusiast who is interested in understanding the internal working of networks and packets, then this book is for you. No prior knowledge of Wireshark is needed.

Learn how to build an end-to-end Web application security testing framework KEY FEATURES Exciting coverage on vulnerabilities and security loopholes in modern web applications. Practical exercises and case scenarios on performing pentesting and identifying security breaches. Cutting-edge offerings on implementation of tools including nmap, burp suite and wireshark. DESCRIPTION Hands-on Penetration Testing for Web Applications offers readers with knowledge and skillset

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to identify, exploit and control the security vulnerabilities present in commercial web applications including online banking, mobile payments and e-commerce applications. We begin with exposure to modern application vulnerabilities present in web applications. You will learn and gradually practice the core concepts of penetration testing and OWASP Top Ten vulnerabilities including injection, broken authentication and access control, security misconfigurations and cross-site scripting (XSS). You will then gain advanced skillset by exploring the methodology of security testing and how to work around security testing as a true security professional. This book also brings cutting-edge coverage on exploiting and detecting vulnerabilities such as authentication flaws, session flaws, access control flaws, input validation flaws etc. You will discover an end-to-end implementation of tools such as nmap, burp suite, and wireshark. You will then learn to practice how to execute web application intrusion testing in automated testing tools and also to analyze vulnerabilities and threats present in the source codes. By the end of this book, you will gain in-depth knowledge of web application testing framework and strong proficiency in exploring and building high secured web applications.

**WHAT YOU WILL LEARN** Complete overview of concepts of web penetration testing. Learn to secure against OWASP TOP 10 web vulnerabilities. Practice different techniques and signatures for identifying vulnerabilities in the source code of the web application. Discover security flaws in your web application using most popular tools like nmap and wireshark. Learn to respond modern automated cyber attacks with the help of expert-led tips and tricks. Exposure to analysis of vulnerability codes, security automation tools and common security flaws.

**WHO THIS BOOK IS FOR** This book is for Penetration Testers, ethical hackers, and web application developers. People who are new to security testing will also find this book useful. Basic knowledge of HTML, JavaScript would be an added advantage.

**TABLE OF CONTENTS** 1. Why Application Security? 2. Modern application Vulnerabilities 3. Web Pentesting Methodology 4. Testing Authentication 5. Testing Session Management 6. Testing Secure Channels 7. Testing Secure Access Control 8. Sensitive Data and Information disclosure 9. Testing Secure Data validation 10. Attacking Application Users: Other Techniques 11. Attacking Application Users: Other Techniques 12. Automating Custom Attacks 13. Pentesting Tools 14. Static Code Analysis 15. Mitigations and Core Defense Mechanisms

Achieve improved network programmability and automation by leveraging powerful network programming concepts, algorithms, and tools

**Key Features** Deal with remote network servers using SSH, FTP, SNMP and LDAP protocols. Design multi threaded and event-driven architectures for asynchronous servers programming. Leverage your Python programming skills to build powerful network applications

**Book Description** Network programming has always been a demanding task. With full-featured and well-documented libraries all the way up the stack, Python makes network programming the enjoyable experience it should be. Starting with a walk through of today's major networking protocols, through this book, you'll learn how to employ Python for network programming, how to request and retrieve web resources, and how to extract data in major formats over the web. You will utilize Python for emailing using different protocols, and you'll interact with remote systems and IP and DNS networking. You will cover the connection of networking devices and configuration using Python 3.7, along with cloud-based network management tasks using Python. As the book progresses, socket programming will be covered, followed by how to design servers, and the pros and cons of multithreaded and event-driven architectures. You'll develop practical clientside applications, including web API clients, email clients, SSH, and FTP. These applications will also be implemented through

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existing web application frameworks. What you will learn  
Execute Python modules on networking tools  
Automate tasks regarding the analysis and extraction of information from a network  
Get to grips with asynchronous programming modules available in Python  
Get to grips with IP address manipulation modules using Python programming  
Understand the main frameworks available in Python that are focused on web application  
Manipulate IP addresses and perform CIDR calculations  
Who this book is for  
If you're a Python developer or a system administrator with Python experience and you're looking to take your first steps in network programming, then this book is for you. If you're a network engineer or a network professional aiming to be more productive and efficient in networking programmability and automation then this book would serve as a useful resource. Basic knowledge of Python is assumed.

Get up and running with Wireshark to analyze your network effectively

The Docker Workshop

Firewalls, NAT & Accounting

Wireshark Network Analysis (Second Edition)

Parentology

A Systems Approach

Wireshark 2 Quick Start Guide

**Network security is not simply about building impenetrable walls—determined attackers will eventually overcome traditional defenses. The most effective computer security strategies integrate network security monitoring (NSM): the collection and analysis of data to help you detect and respond to intrusions. In The Practice of Network Security Monitoring, Mandiant CSO Richard Bejtlich shows you how to use NSM to add a robust layer of protection around your networks—no prior experience required. To help you avoid costly and inflexible solutions, he teaches you how to deploy, build, and run an NSM operation using open source software and vendor-neutral tools. You'll learn how to: -Determine where to deploy NSM platforms, and size them for the monitored networks -Deploy stand-alone or distributed NSM installations -Use command line and graphical packet analysis tools, and NSM consoles -Interpret network evidence from server-side and client-side intrusions -Integrate threat intelligence into NSM software to identify sophisticated adversaries There's no foolproof way to keep attackers out of your network. But when they get in, you'll be prepared. The Practice of Network Security Monitoring will show you how to build a security net to detect, contain, and control them. Attacks are inevitable, but losing sensitive data shouldn't be.**

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Master Wireshark to solve real-world security problems If you don't already use Wireshark for a wide range of information security tasks, you will after this book. Mature and powerful, Wireshark is commonly used to find root cause of challenging network issues. This book extends that power to information security professionals, complete with a downloadable, virtual lab environment. Wireshark for Security Professionals covers both offensive and defensive concepts that can be applied to essentially any InfoSec role. Whether into network security, malware analysis, intrusion detection, or penetration testing, this book demonstrates Wireshark through relevant and useful examples. Master Wireshark through both lab scenarios and exercises. Early in the book, a virtual lab environment is provided for the purpose of getting hands-on experience with Wireshark. Wireshark is combined with two popular platforms: Kali, the security-focused Linux distribution, and the Metasploit Framework, the open-source framework for security testing. Lab-based virtual systems generate network traffic for analysis, investigation and demonstration. In addition to following along with the labs you will be challenged with end-of-chapter exercises to expand on covered material. Lastly, this book explores Wireshark with Lua, the light-weight programming language. Lua allows you to extend and customize Wireshark's features for your needs as a security professional. Lua source code is available both in the book and online. Lua code and lab source code are available online through GitHub, which the book also introduces. The book's final two chapters greatly draw on Lua and TShark, the command-line interface of Wireshark. By the end of the book you will gain the following: Master the basics of Wireshark Explore the virtual w4sp-lab environment that mimics a real-world network Gain experience using the Debian-based Kali OS among other systems Understand the technical details behind network attacks Execute exploitation and grasp offensive and defensive activities, exploring them through Wireshark Employ Lua to extend Wireshark features and create useful scripts To sum up, the book content, labs and online material, coupled with many referenced sources of PCAP traces, together present a dynamic and robust manual for information security professionals seeking to leverage Wireshark.

This is the eBook version of the print title. Note that the eBook does not provide access

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to the practice test software that accompanies the print book. Learn, prepare, and practice for CEH v8 exam success with this cert guide from Pearson IT Certification, a leader in IT certification learning. Master CEH exam topics Assess your knowledge with chapter-ending quizzes Review key concepts with exam preparation tasks Certified Ethical Hacker (CEH) Cert Guide is a best-of-breed exam study guide. Leading security consultant and certification expert Michael Gregg shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. You'll get a complete test preparation routine organized around proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. This EC-Council authorized study guide helps you master all the topics on the CEH v8 (312-50) exam, including: Ethical hacking basics Technical foundations of hacking Footprinting and scanning Enumeration and system hacking Linux and automated assessment tools Trojans and backdoors Sniffers, session hijacking, and denial of service Web server hacking, web applications, and database attacks Wireless technologies, mobile security, and mobile attacks IDS, firewalls, and honeypots Buffer overflows, viruses, and worms Cryptographic attacks and defenses Physical security and social engineering

Based on over 20 years of analyzing networks and teaching key analysis skills, this Second Edition covers the key features and functions of Wireshark version 2. This book includes 46 Labs and end-of-chapter Challenges to help you master Wireshark for troubleshooting, security, optimization, application analysis, and more.

Wireshark Certified Network Analyst Exam Prep Guide (Second Edition)

Hands-On Network Forensics

Run Web Security Testing on Modern Applications Using Nmap, Burp Suite and Wireshark (English Edition)

Secure your network through protocol analysis

## Mastering Wireshark

Practical Packet Analysis, 2nd Edition

Investigate network attacks and find evidence using common network forensic tools

*Analyze data network like a professional by mastering Wireshark - From 0 to 1337 About This Book Master Wireshark and train it as your network sniffer Impress your peers and get yourself pronounced as a network doctor Understand Wireshark and its numerous features with the aid of this fast-paced book packed with numerous screenshots, and become a pro at resolving network anomalies Who This Book Is For Are you curious to know what's going on in a network? Do you get frustrated when you are unable to detect the cause of problems in your networks? This is where the book comes into play. Mastering Wireshark is for developers or network enthusiasts who are interested in understanding the internal workings of networks and have prior knowledge of using Wireshark, but are not aware about all of its functionalities. What You Will Learn Install Wireshark and understand its GUI and all the functionalities of it Create and use different filters Analyze different layers of network protocols and know the amount of packets that flow through the network Decrypt encrypted wireless traffic Use Wireshark as a diagnostic tool and also for network security analysis to keep track of malware Troubleshoot all the network anomalies with help of Wireshark Resolve latencies and bottleneck issues in the network In Detail Wireshark is a popular and powerful tool used to analyze the amount of bits and bytes that are flowing through a network. Wireshark deals with the second to seventh layer of network protocols, and the analysis made is presented in a human readable form. Mastering Wireshark will help you raise your knowledge to an expert level. At the start of the book, you will be taught how to install Wireshark, and will be introduced to its interface so you understand all its functionalities. Moving forward, you will discover different ways to create and use capture and display filters. Halfway through the book, you'll be mastering the features of Wireshark, analyzing different layers of the network protocol, looking for any anomalies. As you reach to the end of the book, you will be taught how to use Wireshark for network security analysis and configure it for troubleshooting purposes. Style and approach Every chapter in this book is*

*explained to you in an easy way accompanied by real-life examples and screenshots of the interface, making it easy for you to become an expert at using Wireshark.*

*Firewalls, Network Address Translation (NAT), network logging and accounting are all provided by Linux's Netfilter system, also known by the name of the command used to administer it, iptables. The iptables interface is the most sophisticated ever offered on Linux and makes Linux an extremely flexible system for any kind of network filtering you might do. Large sets of filtering rules can be grouped in ways that makes it easy to test them and turn them on and off. Do you watch for all types of ICMP traffic--some of them quite dangerous? Can you take advantage of stateful filtering to simplify the management of TCP connections? Would you like to track how much traffic of various types you get? This pocket reference will help you at those critical moments when someone asks you to open or close a port in a hurry, either to enable some important traffic or to block an attack. The book will keep the subtle syntax straight and help you remember all the values you have to enter in order to be as secure as possible. The book has an introductory section that describes applications, followed by a reference/encyclopaedic section with all the matches and targets arranged alphabetically.*

*The Wireshark Field Guide provides hackers, pen testers, and network administrators with practical guidance on capturing and interactively browsing computer network traffic. Wireshark is the world's foremost network protocol analyzer, with a rich feature set that includes deep inspection of hundreds of protocols, live capture, offline analysis and many other features. The Wireshark Field Guide covers the installation, configuration and use of this powerful multi-platform tool. The book give readers the hands-on skills to be more productive with Wireshark as they drill down into the information contained in real-time network traffic. Readers will learn the fundamentals of packet capture and inspection, the use of color codes and filters, deep analysis, including probes and taps, and much more. The Wireshark Field Guide is an indispensable companion for network technicians, operators, and engineers. Learn the fundamentals of using Wireshark in a concise field manual Quickly create functional filters that will allow you to get to work quickly on solving problems Understand the myriad of options and the deep functionality*



*of Wireshark Solve common network problems Learn some advanced features, methods and helpful ways to work more quickly and efficiently*  
*This book provides system administrators with all of the information as well as software they need to run Ethereal Protocol Analyzer on their networks. There are currently no other books published on Ethereal, so this book will begin with chapters covering the installation and configuration of Ethereal. From there the book quickly moves into more advanced topics such as optimizing Ethereal's performance and analyzing data output by Ethereal. Ethereal is an extremely powerful and complex product, capable of analyzing over 350 different network protocols. As such, this book also provides readers with an overview of the most common network protocols used, as well as analysis of Ethereal reports on the various protocols. The last part of the book provides readers with advanced information on using reports generated by Ethereal to both fix security holes and optimize network performance. Provides insider information on how to optimize performance of Ethereal on enterprise networks. Book comes with a CD containing Ethereal, Tethereal, Nessus, Snort, ACID, Barnyard, and more! Includes coverage of popular command-line version, Tethereal.*

*The Official Wireshark Certified Network Analyst Study Guide*

*Applied Network Security Monitoring*

*Packet Analysis with Wireshark*

*Cert Eth Hack (CEH Cert Guid*

*Mechanical Tolerance Stackup and Analysis*

*Essential Skills for Network Analysis*

*Learning Python Networking*

Ethereal is the #2 most popular open source security tool used by system administrators and security professionals. This all new book builds on the success of Syngress' best-selling book Ethereal Packet Sniffing. Wireshark & Ethereal Network Protocol Analyzer Toolkit provides complete information and step-by-step Instructions for analyzing protocols and network traffic on Windows, Unix or Mac OS X networks. First, readers will learn about the types of sniffers available today and see the benefits of using Ethereal. Readers will then learn to install Ethereal in multiple environments including Windows, Unix and Mac OS X as well as building Ethereal from

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source and will also be guided through Ethereal's graphical user interface. The following sections will teach readers to use command-line options of Ethereal as well as using Tethereal to capture live packets from the wire or to read saved capture files. This section also details how to import and export files between Ethereal and WinDump, Snort, Snoop, Microsoft Network Monitor, and EtherPeek. The book then teaches the reader to master advanced tasks such as creating sub-trees, displaying bitfields in a graphical view, tracking requests and reply packet pairs as well as exclusive coverage of MATE, Ethereal's brand new configurable upper level analysis engine. The final section to the book teaches readers to enable Ethereal to read new Data sources, program their own protocol dissectors, and to create and customize Ethereal reports. Ethereal is the #2 most popular open source security tool, according to a recent study conducted by insecure.org Syngress' first Ethereal book has consistently been one of the best selling security books for the past 2 years

Computer Networks: A Systems Approach, Fifth Edition, explores the key principles of computer networking, with examples drawn from the real world of network and protocol design. Using the Internet as the primary example, this best-selling and classic textbook explains various protocols and networking technologies. The systems-oriented approach encourages students to think about how individual network components fit into a larger, complex system of interactions. This book has a completely updated content with expanded coverage of the topics of utmost importance to networking professionals and students, including P2P, wireless, network security, and network applications such as e-mail and the Web, IP telephony and video streaming, and peer-to-peer file sharing. There is now increased focus on application layer issues where innovative and exciting research and design is currently the center of attention. Other topics include network design and architecture; the ways users can connect to a network; the concepts of switching, routing, and internetworking; end-to-end protocols; congestion control and resource allocation; and end-to-end data. Each chapter includes a problem statement, which introduces issues to be examined; shaded sidebars that elaborate on a topic or introduce a related advanced topic; What's Next? discussions that deal with emerging issues in research, the commercial world, or society; and exercises. This book is written for graduate or upper-division undergraduate classes in computer networking. It will also be useful for industry professionals retraining for network-related assignments, as well as for network practitioners seeking to understand the workings of network protocols and the big picture of networking. Completely updated content with expanded coverage of the topics of utmost importance to networking professionals and students, including P2P, wireless, security, and applications Increased focus on application layer issues where innovative and exciting research and design is currently the center of attention Free downloadable network simulation software and lab experiments manual available

Wireshark is the world's foremost network protocol analyzer for network analysis and troubleshooting. This book

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will walk you through exploring and harnessing the vast potential of Wireshark, the world's foremost network protocol analyzer. The book begins by introducing you to the foundations of Wireshark and showing you how to browse the numerous features it provides. You'll be walked through using these features to detect and analyze the different types of attacks that can occur on a network. As you progress through the chapters of this book, you'll learn to perform sniffing on a network, analyze clear-text traffic on the wire, recognize botnet threats, and analyze Layer 2 and Layer 3 attacks along with other common hacks. By the end of this book, you will be able to fully utilize the features of Wireshark that will help you securely administer your network.

This book is intended to provide practice quiz questions based on the thirty-three areas of study defined for the Wireshark Certified Network Analyst Exam. This Official Exam Prep Guide offers a companion to Wireshark Network Analysis: The Official Wireshark Certified Network Analyst Study Guide (Second Edition).

Ethereal Packet Sniffing

Wireshark & Ethereal Network Protocol Analyzer Toolkit

Using Wireshark and the Metasploit Framework

The Wireshark Field Guide

Mastering Wireshark 2

Wireshark Network Analysis

Certified Ethical Hacker (CEH) Cert Guide

*Grasp the basics of packet capture and analyze common protocols Key Features Troubleshoot basic to advanced network problems using packet analysis Analyze common protocols and identify latency issues with Wireshark Explore ways to examine captures to recognize unusual traffic and possible network attacks Book Description Wireshark is a popular and powerful packet analysis tool that helps network administrators investigate latency issues and identify potential attacks. Learn Wireshark provides a solid overview of basic protocol analysis and helps you to navigate the Wireshark interface, so you can confidently examine common protocols such as TCP, IP, and ICMP. The book starts by outlining the benefits of traffic analysis, takes you through the evolution of Wireshark, and then covers the phases of packet analysis. We'll review some of the command line tools and outline how to download and install Wireshark on either a PC or MAC. You'll gain a better understanding of what happens when you tap into the data stream, and learn how to personalize the Wireshark interface. This Wireshark book compares the display and*

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capture filters and summarizes the OSI model and data encapsulation. You'll gain insights into the protocols that move data in the TCP/IP suite, and dissect the TCP handshake and teardown process. As you advance, you'll explore ways to troubleshoot network latency issues, and discover how to save and export files. Finally, you'll see how you can share captures with your colleagues using Cloudshark. By the end of this book, you'll have a solid understanding of how to monitor and secure your network with the most updated version of Wireshark. What you will learn

Become familiar with the Wireshark interface

Navigate commonly accessed menu options such as edit, view, and file

Use display and capture filters to examine traffic

Understand the Open Systems Interconnection (OSI) model

Carry out deep packet analysis of the Internet suite: IP, TCP, UDP, ARP, and ICMP

Explore ways to troubleshoot network latency issues

Subset traffic, insert comments, save, export, and share packet captures

Who this book is for

This book is for network administrators, security analysts, students, teachers, and anyone interested in learning about packet analysis using Wireshark. Basic knowledge of network fundamentals, devices, and protocols along with an understanding of different topologies will be beneficial. Provides information on ways to use Wireshark to capture and analyze packets, covering such topics as building customized capture and display filters, graphing traffic patterns, and building statistics and reports.

Applied Network Security Monitoring is the essential guide to becoming an NSM analyst from the ground up. This book takes a fundamental approach to NSM, complete with dozens of real-world examples that teach you the key concepts of NSM. Network security monitoring is based on the principle that prevention eventually fails. In the current threat landscape, no matter how much you try, motivated attackers will eventually find their way into your network. At that point, it is your ability to detect and respond to that intrusion that can be the difference between a small incident and a major disaster. The book follows the three stages of the NSM cycle: collection, detection, and analysis. As you progress through each section, you will have access to insights from seasoned NSM professionals while being introduced to relevant, practical scenarios complete with sample data. If you've never performed NSM analysis, Applied Network Security Monitoring

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*will give you an adequate grasp on the core concepts needed to become an effective analyst. If you are already a practicing analyst, this book will allow you to grow your analytic technique to make you more effective at your job. Discusses the proper methods for data collection, and teaches you how to become a skilled NSM analyst Provides thorough hands-on coverage of Snort, Suricata, Bro-IDS, SiLK, and Argus Loaded with practical examples containing real PCAP files you can replay, and uses Security Onion for all its lab examples Companion website includes up-to-date blogs from the authors about the latest developments in NSM*

*This collection of contributed chapters demonstrates a wide range of applications within two overlapping research domains: social media analysis and social network analysis. Various methodologies were utilized in the twelve individual chapters including static, dynamic and real-time approaches to graph, textual and multimedia data analysis. The topics apply to reputation computation, emotion detection, topic evolution, rumor propagation, evaluation of textual opinions, friend ranking, analysis of public transportation networks, diffusion in dynamic networks, analysis of contributors to communities of open source software developers, biometric template generation as well as analysis of user behavior within heterogeneous environments of cultural educational centers. Addressing these challenging applications is what makes this edited volume of interest to researchers and students focused on social media and social network analysis. Confidently navigate the Wireshark interface and solve real-world networking problems Learn Wireshark*

*Wireshark Revealed: Essential Skills for IT Professionals  
Practice, Challenges, and Solutions*

*Certified Scrum Master Secrets to Acing the Exam and Successful Finding and Landing Your Next Certified Scrum Master Certified Job*

*Analyzing and Troubleshooting Network Traffic*

*Network Security Through Data Analysis*

**Over 100 recipes to analyze and troubleshoot network problems using Wireshark 2 Key Features Place Wireshark 2 in your network and configure it for effective network**

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analysis Deep dive into the enhanced functionalities of Wireshark 2 and protect your network with ease A practical guide with exciting recipes on a widely used network protocol analyzer Book Description This book contains practical recipes on troubleshooting a data communications network. This second version of the book focuses on Wireshark 2, which has already gained a lot of traction due to the enhanced features that it offers to users. The book expands on some of the subjects explored in the first version, including TCP performance, network security, Wireless LAN, and how to use Wireshark for cloud and virtual system monitoring. You will learn how to analyze end-to-end IPv4 and IPv6 connectivity failures for Unicast and Multicast traffic using Wireshark. It also includes Wireshark capture files so that you can practice what you've learned in the book. You will understand the normal operation of E-mail protocols and learn how to use Wireshark for basic analysis and troubleshooting. Using Wireshark, you will be able to resolve and troubleshoot common applications that are used in an enterprise network, like NetBIOS and SMB protocols. Finally, you will also be able to measure network parameters, check for network problems caused by them, and solve them effectively. By the end of this book, you'll know how to analyze traffic, find patterns of various offending traffic, and secure your network from them. What you will learn Configure Wireshark 2 for effective network analysis and troubleshooting Set up various display and capture filters Understand networking layers, including IPv4 and IPv6 analysis Explore performance issues in TCP/IP Get to know about Wi-Fi testing and how to resolve problems related to wireless LANs Get information about network phenomena, events, and errors Locate faults in detecting security failures and breaches in networks Who this book is for This book is for security professionals, network administrators, R&D, engineering and technical support, and communications managers who are using Wireshark for network analysis and troubleshooting. It requires a basic understanding of networking concepts, but does not require specific and detailed technical knowledge of protocols or vendor implementations.

An award-winning scientist offers his unorthodox approach to childrearing: "Parentology is brilliant, jaw-droppingly funny, and full of wisdom...bound to change your thinking

about parenting and its conventions” (Amy Chua, author of *Battle Hymn of the Tiger Mother*). If you’re like many parents, you might ask family and friends for advice when faced with important choices about how to raise your kids. You might turn to parenting books or simply rely on timeworn religious or cultural traditions. But when Dalton Conley, a dual-doctorate scientist and full-blown nerd, needed childrearing advice, he turned to scientific research to make the big decisions. In *Parentology*, Conley hilariously reports the results of those experiments, from bribing his kids to do math (since studies show conditional cash transfers improved educational and health outcomes for kids) to teaching them impulse control by giving them weird names (because evidence shows kids with unique names learn not to react when their peers tease them) to getting a vasectomy (because fewer kids in a family mean smarter kids). Conley encourages parents to draw on the latest data to rear children, if only because that level of engagement with kids will produce solid and happy ones. Ultimately these experiments are very loving, and the outcomes are redemptive—even when Conley’s sassy kids show him the limits of his profession. *Parentology* teaches you everything you need to know about the latest literature on parenting—with lessons that go down easy. You’ll be laughing and learning at the same time.

Get started with Docker on your local machine and progress towards deploying useful applications in production with this simplified, practical guide **Key Features** Get a working understanding of Docker containers by incorporating them in your development process Complete interesting exercises to learn how to secure and control access of your containers Work with advanced features of Docker to make your development process smoother and reliable **Book Description** No doubt Docker Containers are the future of highly-scalable software systems and have cost and runtime efficient supporting infrastructure. But learning it might look complex as it comes with many technicalities. This is where *The Docker Workshop* will help you. Through this workshop, you’ll quickly learn how to work with containers and Docker with the help of practical activities. The workshop starts with Docker containers, enabling you to understand how it works. You’ll run third party Docker images and also create your own images using Dockerfiles and multi-stage

Dockerfiles. Next, you'll create environments for Docker images, and expedite your deployment and testing process with Continuous Integration. Moving ahead, you'll tap into interesting topics and learn how to implement production-ready environments using Docker Swarm. You'll also apply best practices to secure Docker images and to ensure that production environments are running at maximum capacity. Towards the end, you'll gather skills to successfully move Docker from development to testing, and then into production. While doing so, you'll learn how to troubleshoot issues, clear up resource bottlenecks and optimize the performance of services. By the end of this workshop, you'll be able to utilize Docker containers in real-world use cases. What you will learn

- Get a solid understanding of how Docker containers work
- Network Docker images and environments to allow communication between services
- Build and publish docker images from a CI/CD pipeline
- Use Docker Swarm to implement production-ready environments
- Find out how to replace Swarm with Kubernetes clusters
- Extend your Docker images with Plugins

Who this book is for This is the right learning asset if you are a developer or a beginner who wants to get a practical understanding of Docker containers. If you have experienced in running command shells or knowledge of IntelliJ, atom, or VSCode editors, then you will grasp the topics covered here quickly.

Good solid advice and great strategies in preparing for and passing the Certified Scrum Master exam, getting interviews and landing the Certified Scrum Master job. If you have prepared for the Certified Scrum Master exam - now is the moment to get this book and prepare for passing the exam and how to find and land a Certified Scrum Master job, There is absolutely nothing that isn't thoroughly covered in the book. It is straightforward, and does an excellent job of explaining some complex topics. There is no reason to invest in any other materials to find and land a Certified Scrum Master certified job. The plan is pretty simple, buy this book, read it, do the practice questions, get the job. This book figures out ways to boil down critical exam and job landing concepts into real world applications and scenarios. Which makes this book user-friendly, interactive, and valuable as a resource long after students pass the exam. People who teach Certified Scrum Master classes for a living or for their companies understand the true value of



this book. You certainly will too. To Prepare for the exam this book tells you: - What you need to know about the Certified Scrum Master Certification and exam - Preparation Tips for passing the Certified Scrum Master Certification Exam - Taking tests The book contains several suggestions on how preparing yourself for an interview. This is an aspect that many people underestimate, whilst having a well-written CV, a personal blog, and possibly a number of past projects is definitively important - there is much more to prepare for. It covers non-technical aspects (how to find a job, resume, behavioral etc.). A 'Must-study' before taking a Tech Interview. To Land the Job, it gives you the hands-on and how-to's insight on - Typical Certified Scrum Master Careers - Finding Opportunities - the best places to find them - Writing Unbeatable Resumes and Cover Letters - Acing the Interview - What to Expect From Recruiters - How employers hunt for Job-hunters.... and More This book offers excellent, insightful advice for everyone from entry-level to senior professionals. None of the other such career guides compare with this one. It stands out because it: - Explains how the people doing the hiring think, so that you can win them over on paper and then in your interview - Is filled with useful work-sheets - Explains every step of the job-hunting process - from little-known ways for finding openings to getting ahead on the job This book covers everything. Whether you are trying to get your first Certified Scrum Master Job or move up in the system, you will be glad you got this book. For any IT Professional who aspires to land a Certified Scrum Master certified job at top tech companies, the key skills that are an absolute must have are having a firm grasp on Certified Scrum Master This book is not only a compendium of most important topics for your Certified Scrum Master exam and how to pass it, it also gives you an interviewer's perspective and it covers aspects like soft skills that most IT Professionals ignore or are unaware of, and this book certainly helps patch them. When should you get this book? Whether you are searching for a job or not, the answer is now. Network Analysis using Wireshark Cookbook

Collection, Detection, and Analysis  
Network Analysis Using Wireshark 2 Cookbook

A complete guide to build and deploy strong networking capabilities using Python 3.7 and Ansible , 2nd Edition  
Building Situational Awareness  
Wireshark Workbook 1

*Use Wireshark 2 to overcome real-world network problems Key Features Delve into the core functionalities of the latest version of Wireshark Master network security skills with Wireshark 2 Efficiently find the root cause of network-related issues Book Description Wireshark, a combination of a Linux distro (Kali) and an open source security framework (Metasploit), is a popular and powerful tool. Wireshark is mainly used to analyze the bits and bytes that flow through a network. It efficiently deals with the second to the seventh layer of network protocols, and the analysis made is presented in a form that can be easily read by people. Mastering Wireshark 2 helps you gain expertise in securing your network. We start with installing and setting up Wireshark2.0, and then explore its interface in order to understand all of its functionalities. As you progress through the chapters, you will discover different ways to create, use, capture, and display filters. By halfway through the book, you will have mastered Wireshark features, analyzed different layers of the network protocol, and searched for anomalies. You'll learn about plugins and APIs in depth. Finally, the book focuses on packet analysis for security tasks, command-line utilities, and tools that manage trace files. By the end of the book, you'll have learned how to use Wireshark for network security analysis and configured it for troubleshooting purposes. What you will learn Understand what network and protocol analysis is and how it can help you Use Wireshark to capture packets in your network Filter captured traffic to only show what you need Explore useful statistic displays to make it easier to diagnose issues Customize Wireshark to your own specifications Analyze common network and network application protocols Who this book is for If you are a security professional or a network enthusiast and are interested in understanding the internal working of networks, and if you have some prior knowledge of using Wireshark, then this book is for you.*

*Network analysis using Wireshark Cookbook contains more than 100 practical recipes for analyzing your network and troubleshooting problems in the network. This book provides you with simple and practical recipes on how to solve networking problems with a step-by-step approach. This book is aimed at research and development professionals, engineering and technical support, and IT and communications managers who are using Wireshark for network analysis and troubleshooting. This book requires a basic understanding of networking concepts, but does not require specific and detailed technical knowledge of protocols or vendor implementations.*

*This significantly revised and expanded edition discusses how to use Wireshark to capture raw network traffic, filter and analyze packets, and diagnose common network problems.*

*Leverage the power of Wireshark to troubleshoot your networking issues by using effective packet analysis techniques and performing improved protocol analysis About This Book Gain hands-on experience of troubleshooting errors in TCP/IP and SSL protocols through practical use cases Identify and overcome security flaws in your network to get a deeper insight into security analysis This is a fast-paced book that focuses on quick and effective packet captures through practical examples and exercises Who This Book Is For If you are a network or system administrator who wants to effectively capture packets, a security consultant who wants to audit packet flows, or a white hat hacker who wants to view sensitive information and remediate it, this book is for you. This book requires decoding skills and a basic understanding of networking. What You Will Learn Utilize Wireshark's advanced features to analyze packet captures Locate the vulnerabilities in an application server Get to know more about protocols such as DHCPv6, DHCP, DNS, SNMP, and HTTP with Wireshark Capture network packets with tcpdump and snoop with examples Find out about security aspects such as OS-level ARP scanning Set up 802.11 WLAN captures and discover more about the WAN protocol Enhance your troubleshooting skills by understanding practical TCP/IP handshake and state diagrams In Detail Wireshark provides a very useful*

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*way to decode an RFC and examine it. The packet captures displayed in Wireshark give you an insight into the security and flaws of different protocols, which will help you perform the security research and protocol debugging. The book starts by introducing you to various packet analyzers and helping you find out which one best suits your needs. You will learn how to use the command line and the Wireshark GUI to capture packets by employing filters. Moving on, you will acquire knowledge about TCP/IP communication and its use cases. You will then get an understanding of the SSL/TLS flow with Wireshark and tackle the associated problems with it. Next, you will perform analysis on application-related protocols. We follow this with some best practices to analyze wireless traffic. By the end of the book, you will have developed the skills needed for you to identify packets for malicious attacks, intrusions, and other malware attacks. Style and approach This is an easy-to-follow guide packed with illustrations and equipped with lab exercises to help you reproduce scenarios using a sample program and command lines.*

*Develop skills for network analysis and address a wide range of information security threats*

*Applications of Social Media and Social Network Analysis*

*Wireshark for Security Professionals*

*Wireshark 101*

*Practical Packet Analysis*

*Hands-on Penetration Testing for Web Applications*

*Using Wireshark to Solve Real-world Network Problems*

Wireshark Network AnalysisThe Official Wireshark Certified Network Analyst Study GuideLightning Source Incorporated  
The complete companion to Japanese culinary culture Whether it's rubbing your chopsticks together, handing money to a sushi chef or setting your foot directly on the floor when removing your shoes, we'll tell you exactly what not to do to avoid looking like an ignorant tourist. Brush up on restaurant etiquette, local customs and what ingredients to expect in Lonely Planet's Eat Japan. To help you feel prepared for the Japanese food scene we'll cover how, when and where to eat, etiquette dos and don'ts, and what classic regional specialties are a must try. You'll find the best places to eat in every region as well as what to order when you're there and how to eat it. If you are looking for an authentic and immersive foodie experience but don't know where to start, Eat Japan is your answer. In-depth background on local food and traditions Practical info on popular food neighborhoods The visually appealing layout will help first-time food lovers get the most from their trip About Lonely Planet: Lonely Planet is a leading travel media company, providing both inspiring and trustworthy information for every kind of traveler since 1973. Over the past four decades, we've printed over 145 million guidebooks and grown a dedicated, passionate global community of travelers. You'll also find our content online, on mobile, video and in 14 languages, 12 international magazines, armchair and lifestyle books, eBooks, and more.

Traditional intrusion detection and logfile analysis are no longer enough to protect today's complex networks. In this practical guide, security researcher Michael Collins shows you several techniques and tools for collecting and analyzing network traffic datasets. You'll understand how your network is used, and what actions are necessary to protect and improve it. Divided into three sections, this book examines the process of collecting and organizing data, various tools for analysis,

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and several different analytic scenarios and techniques. It's ideal for network administrators and operational security analysts familiar with scripting. Explore network, host, and service sensors for capturing security data Store data traffic with relational databases, graph databases, Redis, and Hadoop Use SiLK, the R language, and other tools for analysis and visualization Detect unusual phenomena through Exploratory Data Analysis (EDA) Identify significant structures in networks with graph analysis Determine the traffic that's crossing service ports in a network Examine traffic volume and behavior to spot DDoS and database raids Get a step-by-step process for network mapping and inventory

Gain basic skills in network forensics and learn how to apply them effectively Key Features Investigate network threats with ease Practice forensics tasks such as intrusion detection, network analysis, and scanning Learn forensics investigation at the network level Book Description Network forensics is a subset of digital forensics that deals with network attacks and their investigation. In the era of network attacks and malware threat, it's now more important than ever to have skills to investigate network attacks and vulnerabilities. Hands-On Network Forensics starts with the core concepts within network forensics, including coding, networking, forensics tools, and methodologies for forensic investigations. You'll then explore the tools used for network forensics, followed by understanding how to apply those tools to a PCAP file and write the accompanying report. In addition to this, you will understand how statistical flow analysis, network enumeration, tunneling and encryption, and malware detection can be used to investigate your network. Towards the end of this book, you will discover how network correlation works and how to bring all the information from different types of network devices together. By the end of this book, you will have gained hands-on experience of performing forensics analysis tasks. What you will learn Discover and interpret encrypted traffic Learn about various protocols Understand the malware language over wire Gain insights into the most widely used malware Correlate data collected from attacks Develop tools and custom scripts for network forensics automation Who this book is for The book targets incident responders, network engineers, analysts, forensic engineers and network administrators who want to extend their knowledge from the surface to the deep levels of understanding the science behind network protocols, critical indicators in an incident and conducting a forensic search over the wire.

From Data to Action

Guide to TCP/IP

Eat Japan

Linux iptables Pocket Reference

Wireshark Essentials

Everything You Wanted to Know about the Science of Raising Children but Were Too Exhausted to Ask

Practical recipes to analyze and secure your network using Wireshark 2, 2nd Edition

*Wireshark is the world's most popular network analyzer solution. Used for network troubleshooting, forensics, optimization and*

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more, Wireshark is considered one of the most successful open source projects of all time. Laura Chappell has been involved in the Wireshark project since its infancy (when it was called Ethereal) and is considered the foremost authority on network protocol analysis and forensics using Wireshark. This book consists of 16 labs and is based on the format Laura introduced to trade show audiences over ten years ago through her highly acclaimed "Packet Challenges." This book gives you a chance to test your knowledge of Wireshark and TCP/IP communications analysis by posing a series of questions related to a trace file and then providing Laura's highly detailed step-by-step instructions showing how Laura arrived at the answers to the labs. Book trace files and blank Answer Sheets can be downloaded from this book's supplement page (see <https://www.chappell-university.com/books>). Lab 1: Wireshark Warm-Up Objective: Get Comfortable with the Lab Process. Completion of this lab requires many of the skills you will use throughout this lab book. If you are a bit shaky on any answer, take time when reviewing the answers to this lab to ensure you have mastered the necessary skill(s). Lab 2: Proxy Problem Objective: Examine issues that relate to a web proxy connection problem. Lab 3: HTTP vs. HTTPS Objective: Analyze and compare HTTP and HTTPS communications and errors using inclusion and field existence filters. Lab 4: TCP SYN Analysis Objective: Filter on and analyze TCP SYN and SYN/ACK packets to determine the capabilities of TCP peers and their connections. Lab 5: TCP SEQ/ACK Analysis Objective: Examine and analyze TCP sequence and acknowledgment numbering and Wireshark's interpretation of non-sequential numbering patterns. Lab 6: You're Out of Order! Objective: Examine Wireshark's process of distinguishing between out-of-order packets and retransmissions and identify mis-identifications. Lab 7: Sky High Objective: Examine and analyze traffic captured as a host was redirected to a malicious site. Lab 8: DNS Warm-Up Objective: Examine and analyze DNS name resolution traffic that contains canonical name and multiple IP address responses. Lab 9: Hacker Watch Objective: Analyze TCP connections and FTP command and data channels between hosts. Lab 10: Timing is Everything Objective: Analyze and compare path latency, name resolution, and server response times. Lab 11: The News Objective: Analyze capture location, path latency, response times, and keepalive intervals between an HTTP client and server. Lab 12: Selective ACKs Objective: Analyze the process of establishing Selective acknowledgment (SACK) and using SACK during packet loss recovery. Lab 13: Just DNS Objective: Analyze, compare, and contrast various DNS queries and responses to identify errors, cache times, and CNAME (alias) information. Lab 14: Movie Time Objective: Use various display filter types, including regular expressions (regex), to analyze HTTP redirections, end-of-field values, object download times, errors, response times and more. Lab 15: Crafty Objective: Practice your display filter skills using "contains" operators, ASCII filters, and inclusion/exclusion filters, while analyzing TCP and HTTP performance parameters. Lab 16: Pattern Recognition Objective: Focus on TCP conversations and endpoints while analyzing TCP sequence numbers, Window Scaling, keep-alive, and Selective Acknowledgment capabilities.

Master Wireshark and discover how to analyze network packets and protocols effectively, along with engaging recipes to troubleshoot network problems About This Book Gain valuable insights into the network and application protocols, and the key fields in each protocol Use Wireshark's powerful statistical tools to analyze your network and leverage its expert system to pinpoint

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*network problems Master Wireshark and train it as your network sniffer Who This Book Is For This book is aimed at IT professionals who want to develop or enhance their packet analysis skills. A basic familiarity with common network and application services terms and technologies is assumed. What You Will Learn Discover how packet analysts view networks and the role of protocols at the packet level Capture and isolate all the right packets to perform a thorough analysis using Wireshark's extensive capture and display filtering capabilities Decrypt encrypted wireless traffic Use Wireshark as a diagnostic tool and also for network security analysis to keep track of malware Find and resolve problems due to bandwidth, throughput, and packet loss Identify and locate faults in communication applications including HTTP, FTP, mail, and various other applications – Microsoft OS problems, databases, voice, and video over IP Identify and locate faults in detecting security failures and security breaches in the network In Detail This Learning Path starts off installing Wireshark, before gradually taking you through your first packet capture, identifying and filtering out just the packets of interest, and saving them to a new file for later analysis. You will then discover different ways to create and use capture and display filters. By halfway through the book, you'll be mastering Wireshark features, analyzing different layers of the network protocol, and looking for any anomalies. We then start Ethernet and LAN switching, through IP, and then move on to TCP/UDP with a focus on TCP performance problems. It also focuses on WLAN security. Then, we go through application behavior issues including HTTP, mail, DNS, and other common protocols. This book finishes with a look at network forensics and how to locate security problems that might harm the network. This course provides you with highly practical content explaining Metasploit from the following books: Wireshark Essentials Network Analysis Using Wireshark Cookbook Mastering Wireshark Style and approach This step-by-step guide follows a practical approach, starting from the basic to the advanced aspects. Through a series of real-world examples, this learning path will focus on making it easy for you to become an expert at using Wireshark.*

*Over 100 recipes to analyze and troubleshoot network problems using Wireshark 2 Key Features Place Wireshark 2 in your network and configure it for effective network analysis Deep dive into the enhanced functionalities of Wireshark 2 and protect your network with ease A practical guide with exciting recipes on a widely used network protocol analyzer Book Description This book contains practical recipes on troubleshooting a data communications network. This second version of the book focuses on Wireshark 2, which has already gained a lot of traction due to the enhanced features that it offers to users. The book expands on some of the subjects explored in the first version, including TCP performance, network security, Wireless LAN, and how to use Wireshark for cloud and virtual system monitoring. You will learn how to analyze end-to-end IPv4 and IPv6 connectivity failures for Unicast and Multicast traffic using Wireshark. It also includes Wireshark capture files so that you can practice what you've learned in the book. You will understand the normal operation of E-mail protocols and learn how to use Wireshark for basic analysis and troubleshooting. Using Wireshark, you will be able to resolve and troubleshoot common applications that are used in an enterprise network, like NetBIOS and SMB protocols. Finally, you will also be able to measure network parameters, check for network problems caused by them, and solve them effectively. By the end of this book, you'll know how to analyze traffic, find patterns of*

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*various offending traffic, and secure your network from them. What you will learn Configure Wireshark 2 for effective network analysis and troubleshooting Set up various display and capture filters Understand networking layers, including IPv4 and IPv6 analysis Explore performance issues in TCP/IP Get to know about Wi-Fi testing and how to resolve problems related to wireless LANs Get information about network phenomena, events, and errors Locate faults in detecting security failures and breaches in networks Who this book is for This book is for security professionals, network administrators, R&D, engineering and technical support, and communications managers who are using Wireshark for network analysis and troubleshooting. It requires a basic understanding of networking concepts, but does not require specific and detailed technical knowledge of protocols or vendor implementations.*

*Traditional intrusion detection and logfile analysis are no longer enough to protect today's complex networks. In the updated second edition of this practical guide, security researcher Michael Collins shows InfoSec personnel the latest techniques and tools for collecting and analyzing network traffic datasets. You'll understand how your network is used, and what actions are necessary to harden and defend the systems within it. In three sections, this book examines the process of collecting and organizing data, various tools for analysis, and several different analytic scenarios and techniques. New chapters focus on active monitoring and traffic manipulation, insider threat detection, data mining, regression and machine learning, and other topics. You'll learn how to: Use sensors to collect network, service, host, and active domain data Work with the SiLK toolset, Python, and other tools and techniques for manipulating data you collect Detect unusual phenomena through exploratory data analysis (EDA), using visualization and mathematical techniques Analyze text data, traffic behavior, and communications mistakes Identify significant structures in your network with graph analysis Examine insider threat data and acquire threat intelligence Map your network and identify significant hosts within it Work with operations to develop defenses and analysis techniques*