Read Free Practical Reverse Engineering X86 X64 Arm Windows Kernel Reversing Tools And Obfuscation Pdf For Free

Programming Windows Store Apps with C# May 07 2021 Annotation If you want to build Windows 8 applications for desktops and the forthcoming Microsoft Surface tablet PC, this book will show you how to work with the Metro design language and the Windows RT operating system. You'll learn this new landscape step-by-step, including the minute system details and design specifications necessary to innovate and build a variety of Windows 8 apps. It's ideal for .NET developers who use C?. Throughout the book, you'll follow one app from idea to the Windows Store to understand what's involved in every step of the process. You'll learn how to create in-app purchases, link with social networks, and incorporate the charm bar, which opens the Windows 8 start screen. Get a jump on developers looking to cash in on the demand for Windows 8 apps. Order your copy of Programming Metro-Style Applications with C? today.

Modern Assembly Language Programming with the ARM Processor Apr 06 2021 Modern Assembly Language Programming with the ARM Processor is a tutorial-based book on assembly language programming using the ARM processor. It presents the concepts of assembly language programming in different ways, slowly building from simple examples towards complex programming on bare-metal embedded systems. The ARM processor was chosen as it has fewer instructions and irregular addressing rules to learn than most other architectures, allowing more time to spend on teaching assembly language programming concepts and good programming practice. In this textbook, careful consideration is given to topics that students struggle to grasp, such as registers vs. memory and the relationship between pointers and addresses, recursion, and non-integral binary mathematics. A whole chapter is dedicated to structured programming principles. Concepts are illustrated and reinforced with a large number of tested and debugged assembly and C source listings. The book also covers advanced topics such as fixed and floating point mathematics, optimization, and the ARM VFP and NEONTM extensions. PowerPoint slides and a solutions manual are included. This book will appeal to professional embedded systems engineers, as well as computer engineering students taking a course in assembly language using the ARM processor. Concepts are illustrated and reinforced with a large number of tested and debugged assembly and C source listing Intended for use on very low-cost platforms, such as the Raspberry Pi or pcDuino, but with the

support of a full Linux operating system and development tools Includes discussions of advanced topics, such as fixed and floating point mathematics, optimization, and the ARM VFP and NEON extensions

Microsoft Azure Essentials - Fundamentals of Azure Jun 27 2020 Microsoft Azure Essentials from Microsoft Press is a series of free ebooks designed to help you advance your technical skills with Microsoft Azure. The first ebook in the series, Microsoft Azure Essentials: Fundamentals of Azure, introduces developers and IT professionals to the wide range of capabilities in Azure. The authors - both Microsoft MVPs in Azure - present both conceptual and how-to content for key areas, including: Azure Websites and Azure Cloud Services Azure Virtual Machines Azure Storage Azure Virtual Networks Databases Azure Active Directory Management tools Business scenarios Watch Microsoft Press's blog and Twitter (@MicrosoftPress) to learn about other free ebooks in the "Microsoft Azure Essentials" series.

Practical Reverse Engineering Feb 28 2023 Analyzing how hacks are done, so as to stop them in thefuture Reverse engineering is the process of analyzing hardware orsoftware and understanding it, without having access to the sourcecode or design documents. Hackers are able to reverse engineersystems and exploit what they find with scary results. Now the goodguys can use the same tools to thwart these threats. PracticalReverse Engineering goes under the hood of reverse engineeringfor security analysts, security engineers, and system programmers,so they can learn how to use these same processes to stop hackersin their tracks. The book covers x86, x64, and ARM (the first book to cover allthree); Windows kernel-mode code rootkits and drivers; virtualmachine protection techniques; and much more. Best of all, itoffers a systematic approach to the material, with plenty ofhands-on exercises and real-world examples. Offers a systematic approach to understanding reverseengineering, with hands-on exercises and real-world examples Covers x86, x64, and advanced RISC machine (ARM) architecturesas well as deobfuscation and virtual machine protectiontechniques Provides special coverage of Windows kernel-mode code(rootkits/drivers), a topic not often covered elsewhere, andexplains how to analyze drivers step by step Demystifies topics that have a steep learning curve Includes a bonus chapter on reverse engineering tools Practical Reverse Engineering: Using x86, x64, ARM, WindowsKernel, and Reversing Tools provides crucial, up-to-dateguidance for a broad range of IT professionals.

Modern Computer Architecture and Organization Feb 04 2021 A no-nonsense, practical guide to current and future processor and computer architectures, enabling you to design computer systems and develop better software applications across a variety of domains Key FeaturesUnderstand digital circuitry with the help of transistors, logic gates, and sequential logicExamine the architecture and instruction sets of x86, x64, ARM, and RISC-V processorsExplore the architecture of modern devices such as the iPhone X and high-performance gaming PCsBook Description Are you a software developer, systems designer, or computer architecture student looking for a methodical introduction to digital device architectures but overwhelmed by their complexity? This book will help you to learn how modern computer systems work, from the lowest level of transistor switching to the macro view of collaborating multiprocessor servers. You'll gain unique insights into the internal behavior of processors that execute the code developed in high-level languages and enable you to design more efficient and scalable software systems. The book will teach you

the fundamentals of computer systems including transistors, logic gates, sequential logic, and instruction operations. You will learn details of modern processor architectures and instruction sets including x86, x64, ARM, and RISC-V. You will see how to implement a RISC-V processor in a low-cost FPGA board and how to write a quantum computing program and run it on an actual quantum computer. By the end of this book, you will have a thorough understanding of modern processor and computer architectures and the future directions these architectures are likely to take. What you will learnGet to grips with transistor technology and digital circuit principlesDiscover the functional elements of computer processorsUnderstand pipelining and superscalar executionWork with floating-point data formatsUnderstand the purpose and operation of the supervisor modeImplement a complete RISC-V processor in a low-cost FPGAExplore the techniques used in virtual machine implementationWrite a quantum computing program and run it on a quantum computerWho this book is for This book is for software developers, computer engineering students, system designers, reverse engineers, and anyone looking to understand the architecture and design principles underlying modern computer systems from tiny embedded devices to warehouse-size cloud server farms. A general understanding of computer processors is helpful but not required.

Cyber-Security Threats, Actors, and Dynamic Mitigation Dec 22 2019 Cyber-Security Threats, Actors, and Dynamic Mitigation provides both a technical and state-of-the-art perspective as well as a systematic overview of the recent advances in different facets of cyber-security. It covers the methodologies for modeling attack strategies used by threat actors targeting devices, systems, and networks such as smart homes, critical infrastructures, and industrial IoT. With a comprehensive review of the threat landscape, the book explores both common and sophisticated threats to systems and networks. Tools and methodologies are presented for precise modeling of attack strategies, which can be used both proactively in risk management and reactively in intrusion prevention and response systems. Several contemporary techniques are offered ranging from reconnaissance and penetration testing to malware detection, analysis, and mitigation. Advanced machine learning-based approaches are also included in the area of anomaly-based detection, that are capable of detecting attacks relying on zero-day vulnerabilities and exploits. Academics, researchers, and professionals in cyber-security who want an in-depth look at the contemporary aspects of the field will find this book of interest. Those wanting a unique reference for various cyber-security threats and how they are detected, analyzed, and mitigated will reach for this book often.

Troubleshooting with the Windows Sysinternals Tools Apr 25 2020 Optimize Windows system reliability and performance with Sysinternals IT pros and power users consider the free Windows Sysinternals tools indispensable for diagnosing, troubleshooting, and deeply understanding the Windows platform. In this extensively updated guide, Sysinternals creator Mark Russinovich and Windows expert Aaron Margosis help you use these powerful tools to optimize any Windows system's reliability, efficiency, performance, and security. The authors first explain Sysinternals' capabilities and help you get started fast. Next, they offer in-depth coverage of each major tool, from Process Explorer and Process Monitor to Sysinternals' security and file utilities. Then, building on this knowledge, they show the tools being used to solve real-world cases involving error messages, hangs, sluggishness, malware

infections, and much more. Windows Sysinternals creator Mark Russinovich and Aaron Margosis show you how to: Use Process Explorer to display detailed process and system information Use Process Monitor to capture low-level system events, and quickly filter the output to narrow down root causes List, categorize, and manage software that starts when you start or sign in to your computer, or when you run Microsoft Office or Internet Explorer Verify digital signatures of files, of running programs, and of the modules loaded in those programs Use Autoruns, Process Explorer, Sigcheck, and Process Monitor features that can identify and clean malware infestations Inspect permissions on files, keys, services, shares, and other objects Use Sysmon to monitor security-relevant events across your network Generate memory dumps when a process meets specified criteria Execute processes remotely, and close files that were opened remotely Manage Active Directory objects and trace LDAP API calls Capture detailed data about processors, memory, and clocks Troubleshoot unbootable devices, file-in-use errors, unexplained communication, and many other problems Understand Windows core concepts that aren't well-documented elsewhere

The Ghidra Book Dec 14 2021 A guide to using the Ghidra software reverse engineering tool suite. The result of more than a decade of research and development within the NSA, the Ghidra platform was developed to address some of the agency's most challenging reverse-engineering problems. With the open-source release of this formerly restricted tool suite, one of the world's most capable disassemblers and intuitive decompilers is now in the hands of cybersecurity defenders everywhere -- and The Ghidra Book is the one and only guide you need to master it. In addition to discussing RE techniques useful in analyzing software and malware of all kinds, the book thoroughly introduces Ghidra's components, features, and unique capacity for group collaboration. You'll learn how to: • Navigate a disassembly • Use Ghidra's built-in decompiler to expedite analysis • Analyze obfuscated binaries • Extend Ghidra to recognize new data types • Build new Ghidra analyzers and loaders • Add support for new processors and instruction sets • Script Ghidra tasks to automate workflows • Set up and use a collaborative reverse engineering environment Designed for beginner and advanced users alike, The Ghidra Book will effectively prepare you to meet the needs and challenges of RE, so you can analyze files like a pro.

Rootkits Dec 02 2020 A guide to rootkits describes what they are, how they work, how to build them, and how to detect them.

Hands-On Penetration Testing on Windows Oct 12 2021 Master the art of identifying vulnerabilities within the Windows OS and develop the desired solutions for it using Kali Linux. Key Features Identify the vulnerabilities in your system using Kali Linux 2018.02 Discover the art of exploiting Windows kernel drivers Get to know several bypassing techniques to gain control of your Windows environment Book Description Windows has always been the go-to platform for users around the globe to perform administration and ad hoc tasks, in settings that range from small offices to global enterprises, and this massive footprint makes securing Windows a unique challenge. This book will enable you to distinguish yourself to your clients. In this book, you'll learn advanced techniques to attack Windows environments from the indispensable toolkit that is Kali Linux. We'll work through core network hacking concepts and advanced Windows exploitation techniques, such as stack and heap overflows, precision heap spraying, and kernel exploitation, using coding principles that allow you to leverage powerful Python scripts and shellcode. We'll wrap up with post-

exploitation strategies that enable you to go deeper and keep your access. Finally, we'll introduce kernel hacking fundamentals and fuzzing testing, so you can discover vulnerabilities and write custom exploits. By the end of this book, you'll be well-versed in identifying vulnerabilities within the Windows OS and developing the desired solutions for them. What you will learn Get to know advanced pen testing techniques with Kali Linux Gain an understanding of Kali Linux tools and methods from behind the scenes See how to use Kali Linux at an advanced level Understand the exploitation of Windows kernel drivers Understand advanced Windows concepts and protections, and how to bypass them using Kali Linux Discover Windows exploitation techniques, such as stack and heap overflows and kernel exploitation, through coding principles Who this book is for This book is for penetration testers, ethical hackers, and individuals breaking into the pentesting role after demonstrating an advanced skill in boot camps. Prior experience with Windows exploitation, Kali Linux, and some Windows debugging tools is necessary

Introducing Windows 8 Oct 20 2019 Introduces Windows 8, including new features and capabilities, and offers scenario-based insights on planning, implementing, and maintaining the operating system.

ARM 64-Bit Assembly Language Nov 25 2022 ARM 64-Bit Assembly Language carefully explains the concepts of assembly language programming, slowly building from simple examples towards complex programming on bare-metal embedded systems. Considerable emphasis is put on showing how to develop good, structured assembly code. More advanced topics such as fixed and floating point mathematics, optimization and the ARM VFP and NEON extensions are also covered. This book will help readers understand representations of, and arithmetic operations on, integral and real numbers in any base, giving them a basic understanding of processor architectures, instruction sets, and more. This resource provides an ideal introduction to the principles of 64-bit ARM assembly programming for both the professional engineer and computer engineering student, as well as the dedicated hobbyist with a 64-bit ARM-based computer. Represents the first true 64-bit ARM textbook Covers advanced topics such as fixed and floating point mathematics, optimization and ARM NEON Uses standard, free open-source tools rather than expensive proprietary tools Provides concepts that are illustrated and reinforced with a large number of tested and debugged assembly and C source listings

High-Performance Windows Store Apps Aug 10 2021 Understand what every developer should know about performance when building Windows Store apps. Not designed as a comprehensive reference, this book instead zeroes in on the essentials of planning for great performance and provides a solid starting point for building fast apps. This concise, performance-focused guide: Provides an introduction to the Windows platform from a performance point of view Describes how to set performance goals, establish tests to track performance, and covers tools to instrument code and analyze performance Explains why common techniques such as micro benchmarks and ad hoc testing often fall short in verifying performance Focuses on managed C#/XAML apps Although tools and techniques also apply to Visual Basic/XAML apps, all code examples use C# HTML5/JavaScript and C++/XAML are not covered

Visual Basic 2015 Unleashed Nov 13 2021 Using Visual Basic 2015, developers can build cutting-edge applications that run practically anywhere: on Windows desktops, new Windows 10 devices, in mobile and cloud environments, and beyond. Visual Basic

2015 Unleashed is the most comprehensive, practical reference to modern programming with VB 2015. Long-time Visual Basic MVP Alessandro Del Sole walks you through the latest version of the language, helping you thoroughly master its most valuable features, most powerful programming techniques, and most effective development patterns. Next, he shows how to use Visual Basic 2015 to build robust, effective software in a wide range of environments. Extensively updated for Visual Basic 2015's major improvements, this guide covers both Visual Basic 2015 Professional Edition for professional developers and the free Community Edition for hobbyists, novices, and students. Del Sole has added detailed coverage of building new universal Windows apps for Windows 10 and using new Visual Studio 2015 capabilities to supercharge your productivity as a developer. If you want to leverage all of VB 2015's power, this is the book you need. Detailed information on how to... Understand the Visual Studio 2015 IDE, .NET Framework 4.6 and the new .NET Core 5, and the anatomy of a VB 2015 application Debug VB applications and implement error handling and exceptions Keep your code clean and well-organized with VB 2015's new refactoring tools Master modern VB object development: namespaces, modules, structures, enums, inheritance, interfaces, generics, delegates, events, collections, iterators, and more Share Visual Basic code with Portable Class Libraries and Shared Projects Access data with LINQ and ADO.NET Entity Framework Manipulate XML documents with LINQ and XML Literals Build and deploy applications to run in the Microsoft Azure cloud Develop universal Windows apps that run on any Windows 10 device Use advanced .NET 4.6 platform capabilities, including async and parallel programming, multithreading, assemblies, reflection, and coding attributes Leverage new compiler APIs to write custom domain-specific live code analysis rules Test code with unit tests and TDD Deploy apps efficiently with InstallShield for Visual Studio and ClickOnce

Programming with 64-Bit ARM Assembly Language Feb 16 2022 Mastering ARM hardware architecture opens a world of programming for nearly all phones and tablets including the iPhone/iPad and most Android phones. It's also the heart of many single board computers like the Raspberry Pi. Gain the skills required to dive into the fundamentals of the ARM hardware architecture with this book and start your own projects while you develop a working knowledge of assembly language for the ARM 64-bit processor. You'll review assembly language programming for the ARM Processor in 64-bit mode and write programs for a number of single board computers, including the Nvidia Jetson Nano and the Raspberry Pi (running 64-bit Linux). The book also discusses how to target assembly language programs for Apple iPhones and iPads along with 64-Bit ARM based Android phones and tablets. It covers all the tools you require, the basics of the ARM hardware architecture, all the groups of ARM 64-Bit Assembly instructions, and how data is stored in the computer's memory. In addition, interface apps to hardware such as the Raspberry Pi's GPIO ports. The book covers code optimization, as well as how to inter-operate with C and Python code. Readers will develop enough background to use the official ARM reference documentation for their own projects. With Programming with 64-Bit ARM Assembly Language as your guide you'll study how to read, reverse engineer and hack machine code, then be able to apply these new skills to study code examples and take control of both your ARM devices' hardware and software. What You'll LearnMake operating system calls from assembly language and include other software libraries in your projects Interface apps to hardware devices such

as the Raspberry Pi GPIO ports Reverse engineer and hack code Use the official ARM reference documentation for your own projects Who This Book Is For Software developers who have already learned to program in a higher-level language like Python, Java, C#, or even C and now wish to learn Assembly programming.

Windows 11 All-in-One For Dummies Nov 20 2019 Get more out of your Windows 11 computer with easy-to-follow advice Powering 75% of the PCs on the planet, Microsoft Windows is capable of extraordinary things. And you don't need to be a computer scientist to explore the nooks and crannies of the operating system! With Windows 11 All-in-One For Dummies, anyone can discover how to dig into Microsoft's ubiquitous operating system and get the most out of the latest version. From securing and protecting your most personal information to socializing and sharing on social media platforms and making your Windows PC your own through personalization, this book offers step-by-step instructions to unlocking Windows 11's most useful secrets. With handy info from 10 books included in the beginner-to-advanced learning path contained within, this guide walks you through how to: Install, set up, and customize your Windows 11 PC in a way that makes sense just for you Use the built-in apps, or download your own, to power some of Windows 11's most useful features Navigate the Windows 11 system settings to keep your system running smoothly Perfect for anyone who's looked at their Windows PC and wondered, "I wonder what else it can do?", Windows 11 All-in-One For Dummies delivers all the tweaks, tips, and troubleshooting tricks you'll need to make your Windows 11 PC do more than you ever thought possible.

Microsoft Windows 8 Digital Classroom Sep 23 2022 The next best thing to having your own private instructor guiding you through Windows 8 is this terrific book-and-online video training tool from Elaine Marmel. Fifteen self-paced lessons show you how to customize settings, work with Internet Explorer, connect peripherals, and handle maintenance and troubleshooting. The step-by-step print book makes detailed tasks less intimidating, while video tutorials available for download at the companion website really drive home concepts and reinforce the instruction as you learn. You'll also get thoroughly up to speed on what's new in Windows 8 and how to get the most out of the new features. Features step-by-step instructions that make even the most complicated tasks easy to understand, while the video training enhances the content covered in the print book Includes 15 self-paced lessons with step-by-step instruction in Windows OS basics as well as new Windows 8 features Covers customizing the settings, working with Internet Explorer, connecting peripherals, handling maintenance and troubleshooting, and more Windows 8 Digital Classroom lets you jump right into Windows 8 today with and start learning at your own pace. Note: The supplementary materials are not included as part of the e-book file. These materials are available for download upon purchase

Agile, DevOps and Cloud Computing with Microsoft Azure Aug 30 2020 A step-by-step guide to understand Agile, Scrum, DevOps and Cloud Computing using Azure DevOps and Microsoft Azure Cloud DESCRIPTION Agile development and implementation of Scrum methodologies require quick delivery of applications. Manual activities to manage application lifecycle management are no longer sufficient. This book will cover the DevOps practices implementation that helps to achieve speed for faster time to market using transformation in culture using people, processes, and tools. This book discusses the definition of Cloud

computing and the benefits of Cloud Service Models. You will understand how Agile, DevOps practices implementation and Cloud computing can be utilized effectively to transform the culture of an organization. The main objective of this book is to demonstrate continuous practices of the DevOps culture using Microsoft Azure DevOps and Microsoft Azure Cloud. You will learn how to track features, user stories, backlogs, dashboards, and burndown charts. You will also learn how to create and manage repositories. This book gives an overview of Microsoft Azure Cloud and Azure App Services and a brief description of virtual machines and App Services. It summarizes Build and Release definitions available in Microsoft Azure DevOps and explains how to configure Pipelines and create end-to-end automation pipelines. KEY FEATURES ? Learn how to do Continuous Planning in Azure DevOps ? Learn the basics of Continuous Code Inspection and importance of Code Quality ? Learn how continuous integration can make a difference in the application life cycle ? Learn how to create and configure Cloud resources using Platform as a Service Model ? Learn how to perform continuous integration using the YAML script and continuous delivery pipeline using a release pipeline ? Learn how to configure monitoring for Platform as a Service resources WHAT WILL YOU LEARN By the end of the book, you will get an overview of Agile, Scrum, DevOps and Continuous Practices such as Continuous Integration, Continuous Delivery, Cloud Computing, and Continuous Code Inspection. You will learn how all these practices can be utilized in real-life scenarios with the sample applications. This book will provide detailed insights into Microsoft Azure Cloud, especially Platform as a Service Model. A step-by-step implementation guide of continuous practices of DevOps will help beginners to get started with. WHO THIS BOOK IS FOR DevOps Evangelists, DevOps Engineers, Technical Specialists, Technical Architects, and Cloud Experts Basic knowledge of application development and deployment, Cloud computing, and DevOps practices Beginners Table of Contents 1. An overview of Agile 2. Need for DevOps 3. An overview of Cloud Computing 4. Azure Boards 5. Azure Repos 6. Microsoft Azure Cloud 7. Microsoft Azure Cloud: IaaS and PaaS 8. Azure Pipelines: Continuous Integration and Continuous Delivery 9. Azure Pipelines Implementation

ASP.NET Core 5 for Beginners Jul 09 2021 Learn how to build web applications efficiently using ASP.NET Core 5 with the C# programming language and related frameworks Key FeaturesBuild web apps and services and cross-platform applications using .NET and C#Understand different web programming concepts with the help of real-world examplesExplore the new features and APIs in ASP.NET Core 5, EF Core, Visual Studio, and BlazorBook Description ASP.NET Core 5 for Beginners is a comprehensive introduction for those who are new to the framework. This condensed guide takes a practical and engaging approach to cover everything that you need to know to start using ASP.NET Core for building cloud-ready, modern web applications. The book starts with a brief introduction to the ASP.NET Core framework and highlights the new features in its latest release, ASP.NET Core 5. It then covers the improvements in cross-platform support, the view engines that will help you to understand web development, and the new frontend technologies available with Blazor for building interactive web UIs. As you advance, you'll learn the fundamentals of the different frameworks and capabilities that ship with ASP.NET Core. You'll also get to grips with securing web apps with identity implementation, unit testing, and the latest in containers and cloud-native to deploy them to AWS and Microsoft Azure. Throughout the book, you'll find clear and concise code samples that illustrate each concept along with the strategies and

techniques that will help to develop scalable and robust web apps. By the end of this book, you'll have learned how to leverage ASP.NET Core 5 to build and deploy dynamic websites and services in a variety of real-world scenarios. What you will learnExplore the new features and APIs introduced in ASP.NET Core 5 and BlazorPut basic ASP.NET Core 5 concepts into practice with the help of clear and simple samplesWork with Entity Framework Core and its different workflows to implement your application's data accessDiscover the different web frameworks that ASP.NET Core 5 offers for building web appsGet to grips with the basics of building RESTful web APIs to work with real dataDeploy your web apps in AWS, Azure, and Docker containersWork with SignalR to add real-time notifications to your appWho this book is for This book is for developers who want to learn how to develop web-based applications using the ASP.NET Core framework. Familiarity with the C# language and a basic understanding of HTML and CSS is required to get the most out of this book.

Ghidra Software Reverse Engineering for Beginners Jul 21 2022 Detect potentials bugs in your code or program and develop your own tools using the Ghidra reverse engineering framework developed by the NSA project Key FeaturesMake the most of Ghidra on different platforms such as Linux, Windows, and macOSLeverage a variety of plug-ins and extensions to perform disassembly, assembly, decompilation, and scriptingDiscover how you can meet your cybersecurity needs by creating custom patches and toolsBook Description Ghidra, an open source software reverse engineering (SRE) framework created by the NSA research directorate, enables users to analyze compiled code on any platform, whether Linux, Windows, or macOS. This book is a starting point for developers interested in leveraging Ghidra to create patches and extend tool capabilities to meet their cybersecurity needs. You'll begin by installing Ghidra and exploring its features, and gradually learn how to automate reverse engineering tasks using Ghidra plug-ins. You'll then see how to set up an environment to perform malware analysis using Ghidra and how to use it in the headless mode. As you progress, you'll use Ghidra scripting to automate the task of identifying vulnerabilities in executable binaries. The book also covers advanced topics such as developing Ghidra plug-ins, developing your own GUI, incorporating new process architectures if needed, and contributing to the Ghidra project. By the end of this Ghidra book, you'll have developed the skills you need to harness the power of Ghidra for analyzing and avoiding potential vulnerabilities in code and networks. What you will learnGet to grips with using Ghidra's features, plug-ins, and extensionsUnderstand how you can contribute to GhidraFocus on reverse engineering malware and perform binary auditingAutomate reverse engineering tasks with Ghidra plug-insBecome well-versed with developing your own Ghidra extensions, scripts, and featuresAutomate the task of looking for vulnerabilities in executable binaries using Ghidra scriptingFind out how to use Ghidra in the headless modeWho this book is for This SRE book is for developers, software engineers, or any IT professional with some understanding of cybersecurity essentials. Prior knowledge of Java or Python, along with experience in programming or developing applications, is required before getting started with this book.

The Antivirus Hacker's Handbook Jan 23 2020 Hack your antivirus software to stamp out future vulnerabilities The Antivirus Hacker's Handbook guides you through the process of reverse engineering antivirus software. You explore how to detect and exploit vulnerabilities that can be leveraged to improve future software design, protect your network, and anticipate attacks that may sneak

through your antivirus' line of defense. You'll begin building your knowledge by diving into the reverse engineering process, which details how to start from a finished antivirus software program and work your way back through its development using the functions and other key elements of the software. Next, you leverage your new knowledge about software development to evade, attack, and exploit antivirus software—all of which can help you strengthen your network and protect your data. While not all viruses are damaging, understanding how to better protect your computer against them can help you maintain the integrity of your network. Discover how to reverse engineer your antivirus software Explore methods of antivirus software evasion Consider different ways to attack and exploit antivirus software Understand the current state of the antivirus software market, and get recommendations for users and vendors who are leveraging this software The Antivirus Hacker's Handbook is the essential reference for software reverse engineers, penetration testers, security researchers, exploit writers, antivirus vendors, and software engineers who want to understand how to leverage current antivirus software to improve future applications.

Programming Windows Aug 22 2022 Reimagined for full-screen and touch-optimized apps, Windows 8 provides a platform for reaching new users in new ways. In response, programming legend Charles Petzold is rewriting his classic Programming Windows—one of the most popular programming books of all time—to show developers how to use existing skills and tools to build Windows 8 apps. Programming Windows, Sixth Edition focuses on creating Windows 8 apps accessing the Windows Runtime with XAML and C#. The book also provides C++ code samples. The Sixth Edition is organized in two parts: Part I, “Elementals,” begins with the interrelationship between code and XAML, basic event handling, dynamic layout, controls, templates, asynchronous processing, the application bar, control customization, and collections. You should emerge from Part I ready to create sophisticated page-oriented collection-based user interfaces using the powerful ListView and GridView controls. Part II, “Specialties,” explores topics you might not need for every program but are essential to a well-rounded education in Windows 8. These include multitouch, bitmap graphics, interfacing with share and search facilities, printing, working with the sensors (GPS and orientation), text, obtaining input from the stylus (including handwriting recognition), accessing web services, calling Win32 and DirectX functions, and bringing your application to the Windows 8 app store.

ASP.NET Core in 24 Hours, Sams Teach Yourself May 19 2022 In just 24 sessions of one hour or less, Sams Teach Yourself ASP.NET Core in 24 Hours, will help you build professional-quality, cloud-based, web-connected solutions with ASP.NET Core. This book’s straightforward, step-by-step approach guides you from the basics to advanced techniques, using practical examples to help you make the most of Microsoft’s radically revamped ASP.NET Core framework. ASP.NET Program Manager Jeffrey T. Fritz guides you from jumpstarting development with templates to implementing cutting-edge security and containerization. Every lesson builds on what you’ve already learned, giving you a rock-solid foundation for real-world success. Step-by-step instructions carefully walk you through the most common ASP.NET Core tasks and techniques Practical, hands-on examples show you how to apply what you learn Notes and Tips point out shortcuts, solutions, and problems to avoid Learn how to… Set up your work environment on Windows or non-Windows operating systems Develop solutions more quickly by starting with project templates Configure ASP.NET

Core, services, and applications Access data with Entity Framework Core Build modern architectures, controllers, and views with the new version of MVC Scaffold user interfaces and incorporate reusable UI components Read and write data using web API end-points Manage client-side packages with npm and bower Integrate Angular with ASP.NET Core Authenticate users, and protect your website with ASP.NET Core Authorization Deploy ASP.NET Core solutions into production Work with Docker containers in the ASP.NET Core environment

Inside Windows Debugging Jan 03 2021 Use Windows debuggers throughout the development cycle—and build better software Rethink your use of Windows debugging and tracing tools—and learn how to make them a key part of test-driven software development. Led by a member of the Windows Fundamentals Team at Microsoft, you'll apply expert debugging and tracing techniques—and sharpen your C++ and C# code analysis skills—through practical examples and common scenarios. Learn why experienced developers use debuggers in every step of the development process, and not just when bugs appear. Discover how to: Go behind the scenes to examine how powerful Windows debuggers work Catch bugs early in the development cycle with static and runtime analysis tools Gain practical strategies to tackle the most common code defects Apply expert tricks to handle user-mode and kernel-mode debugging tasks Implement postmortem techniques such as JIT and dump debugging Debug the concurrency and security aspects of your software Use debuggers to analyze interactions between your code and the operating system Analyze software behavior with Xperf and the Event Tracing for Windows (ETW) framework

Learning OpenCV 3 Jul 29 2020 "This book provides a working guide to the C++ Open Source Computer Vision Library (OpenCV) version 3.x and gives a general background on the field of computer vision sufficient to help readers use OpenCV effectively."--Preface.

Azure Internet of Things Revealed Feb 22 2020 Design, build, and justify an optimal Microsoft IoT footprint to meet your project needs. This book describes common Internet of Things components and architecture and then focuses on Microsoft's Azure components relevant in deploying these solutions. Microsoft-specific topics addressed include: deploying edge devices and pushing intelligence to the edge; connecting IoT devices to Azure and landing data there, applying Azure Machine Learning, analytics, and Cognitive Services; roles for Microsoft solution accelerators and managed solutions; and integration of the Azure footprint with legacy infrastructure. The book concludes with a discussion of best practices in defining and developing solutions and creating a plan for success. What You Will LearnDesign the right IoT architecture to deliver solutions for a variety of project needs Connect IoT devices to Azure for data collection and delivery of services Use Azure Machine Learning and Cognitive Services to deliver intelligence in cloud-based solutions and at the edge Understand the benefits and tradeoffs of Microsoft's solution accelerators and managed solutions Investigate new use cases that are described and apply best practices in deployment strategies Integrate cutting-edge Azure deployments with existing legacy data sources Who This Book Is For Developers and architects new to IoT projects or new to Microsoft Azure IoT components as well as readers interested in best practices used in architecting IoT solutions that utilize the Azure platform

Practical Malware Analysis Jan 15 2022 Malware analysis is big business, and attacks can cost a company dearly. When malware breaches your defenses, you need to act quickly to cure current infections and prevent future ones from occurring. For those who want to stay ahead of the latest malware, Practical Malware Analysis will teach you the tools and techniques used by professional analysts. With this book as your guide, you'll be able to safely analyze, debug, and disassemble any malicious software that comes your way. You'll learn how to: –Set up a safe virtual environment to analyze malware –Quickly extract network signatures and host-based indicators –Use key analysis tools like IDA Pro, OllyDbg, and WinDbg –Overcome malware tricks like obfuscation, anti-disassembly, anti-debugging, and anti-virtual machine techniques –Use your newfound knowledge of Windows internals for malware analysis –Develop a methodology for unpacking malware and get practical experience with five of the most popular packers –Analyze special cases of malware with shellcode, C++, and 64-bit code Hands-on labs throughout the book challenge you to practice and synthesize your skills as you dissect real malware samples, and pages of detailed dissections offer an over-the-shoulder look at how the pros do it. You'll learn how to crack open malware to see how it really works, determine what damage it has done, thoroughly clean your network, and ensure that the malware never comes back. Malware analysis is a cat-and-mouse game with rules that are constantly changing, so make sure you have the fundamentals. Whether you're tasked with securing one network or a thousand networks, or you're making a living as a malware analyst, you'll find what you need to succeed in Practical Malware Analysis.

The Art of Memory Forensics Jun 20 2022 Memory forensics provides cutting edge technology to help investigate digital attacks Memory forensics is the art of analyzing computer memory (RAM) to solve digital crimes. As a follow-up to the best seller Malware Analyst's Cookbook, experts in the fields of malware, security, and digital forensics bring you a step-by-step guide to memory forensics—now the most sought after skill in the digital forensics and incident response fields. Beginning with introductory concepts and moving toward the advanced, The Art of Memory Forensics: Detecting Malware and Threats in Windows, Linux, and Mac Memory is based on a five day training course that the authors have presented to hundreds of students. It is the only book on the market that focuses exclusively on memory forensics and how to deploy such techniques properly. Discover memory forensics techniques: How volatile memory analysis improves digital investigations Proper investigative steps for detecting stealth malware and advanced threats How to use free, open source tools for conducting thorough memory forensics Ways to acquire memory from suspect systems in a forensically sound manner The next era of malware and security breaches are more sophisticated and targeted, and the volatile memory of a computer is often overlooked or destroyed as part of the incident response process. The Art of Memory Forensics explains the latest technological innovations in digital forensics to help bridge this gap. It covers the most popular and recently released versions of Windows, Linux, and Mac, including both the 32 and 64-bit editions.

Reversing Jan 27 2023 Beginning with a basic primer on reverse engineering-including computer internals, operating systems, and assembly language-and then discussing the various applications of reverse engineering, this book provides readers with practical, in-depth techniques for software reverse engineering. The book is broken into two parts, the first deals with security-related reverse

engineering and the second explores the more practical aspects of reverse engineering. In addition, the author explains how to reverse engineer a third-party software library to improve interfacing and how to reverse engineer a competitor's software to build a better product. * The first popular book to show how software reverse engineering can help defend against security threats, speed up development, and unlock the secrets of competitive products * Helps developers plug security holes by demonstrating how hackers exploit reverse engineering techniques to crack copy-protection schemes and identify software targets for viruses and other malware * Offers a primer on advanced reverse-engineering, delving into "disassembly"-code-level reverse engineering-and explaining how to decipher assembly language

Windows 8 Secrets Mar 05 2021 Tips, tricks, treats, and secrets revealed on Windows 8 Microsoft is introducing a major new release of its Windows operating system, Windows 8, and what better way for you to learn all the ins and outs than from two internationally recognized Windows experts and Microsoft insiders, authors Paul Thurrott and Rafael Rivera? They cut through the hype to get at useful information you'll not find anywhere else, including what role this new OS plays in a mobile and tablet world. Regardless of your level of knowledge, you'll discover little-known facts about how things work, what's new and different, and how you can modify Windows 8 to meet what you need. Windows 8 Secrets is your insider's guide to: Choosing Windows 8 Versions, PCs and Devices, and Hardware Installing and Upgrading to Windows The New User Experience The Windows Desktop Personalizing Windows Windows Store: Finding, Acquiring, and Managing Your Apps Browsing the Web with Internet Explore Windows 8's Productivity Apps Windows 8's Photo and Entertainment Apps Xbox Games with Windows 8 Windows 8 Storage, Backup, and Recovery Accounts and Security Networking and Connectivity Windows 8 for Your Business Windows Key Keyboard Shortcuts Windows 8 Secrets is the ultimate insider's guide to Microsoft's most exciting Windows version in years.

Docker on Windows Sep 30 2020 Learn how to run new and old Windows applications in Docker containers. About This Book Package traditional .NET Frameworks apps and new .NET Core apps as Docker images, and run them in containers for increased efficiency, portability, and security Design and implement distributed applications that run across connected containers, using enterprise-grade open source software from public Docker images Build a full Continuous Deployment pipeline for a .NET Framework application, and deploy it to a highly-available Docker swarm running in the cloud Who This Book Is For If you want to modernize an old monolithic application without rewriting it, smooth the deployment to production, or move to DevOps or the cloud, then Docker is the enabler for you. This book gives you a solid grounding in Docker so you can confidently approach all of these scenarios. What You Will Learn Comprehend key Docker concepts: images, containers, registries, and swarms Run Docker on Windows 10, Windows Server 2016, and in the cloud Deploy and monitor distributed solutions across multiple Docker containers Run containers with high availability and fail-over with Docker Swarm Master security in-depth with the Docker platform, making your apps more secure Build a Continuous Deployment pipeline by running Jenkins in Docker Debug applications running in Docker containers using Visual Studio Plan the adoption of Docker in your own organization In Detail Docker is a platform for running server applications in lightweight units called containers. You can run Docker on Windows Server 2016 and Windows 10, and run your

existing apps in containers to get significant improvements in efficiency, security, and portability. This book teaches you all you need to know about Docker on Windows, from 101 to deploying highly-available workloads in production. This book takes you on a Docker journey, starting with the key concepts and simple examples of how to run .NET Framework and .NET Core apps in Windows Docker containers. Then it moves on to more complex examples—using Docker to modernize the architecture and development of traditional ASP.NET and SQL Server apps. The examples show you how to break up monoliths into distributed apps and deploy them to a clustered environment in the cloud, using the exact same artifacts you use to run them locally. To help you move confidently to production, it then explains Docker security, and the management and support options. The book finishes with guidance on getting started with Docker in your own projects, together with some real-world case studies for Docker implementations, from small-scale on-premises apps to very large-scale apps running on Azure. Style and approach Using a step-by-step approach, this book shows you how to use Docker on Windows. It includes practical examples and real-world technical and business scenarios that will help you effectively implement Docker in your environment.There are over 50 examples of Dockerized applications, using C# .NET projects as the source and packaging them into Docker images.

Learning Malware Analysis Nov 01 2020 Understand malware analysis and its practical implementation Key Features Explore the key concepts of malware analysis and memory forensics using real-world examples Learn the art of detecting, analyzing, and investigating malware threats Understand adversary tactics and techniques Book Description Malware analysis and memory forensics are powerful analysis and investigation techniques used in reverse engineering, digital forensics, and incident response. With adversaries becoming sophisticated and carrying out advanced malware attacks on critical infrastructures, data centers, and private and public organizations, detecting, responding to, and investigating such intrusions is critical to information security professionals. Malware analysis and memory forensics have become must-have skills to fight advanced malware, targeted attacks, and security breaches. This book teaches you the concepts, techniques, and tools to understand the behavior and characteristics of malware through malware analysis. It also teaches you techniques to investigate and hunt malware using memory forensics. This book introduces you to the basics of malware analysis, and then gradually progresses into the more advanced concepts of code analysis and memory forensics. It uses real-world malware samples, infected memory images, and visual diagrams to help you gain a better understanding of the subject and to equip you with the skills required to analyze, investigate, and respond to malware-related incidents. What you will learn Create a safe and isolated lab environment for malware analysis Extract the metadata associated with malware Determine malware's interaction with the system Perform code analysis using IDA Pro and x64dbg Reverse-engineer various malware functionalities Reverse engineer and decode common encoding/encryption algorithms Reverse-engineer malware code injection and hooking techniques Investigate and hunt malware using memory forensics Who this book is for This book is for incident responders, cyber-security investigators, system administrators, malware analyst, forensic practitioners, student, or curious security professionals interested in learning malware analysis and memory forensics. Knowledge of programming languages such as C and Python is helpful but is not mandatory. If you have written few lines of code and have a basic

understanding of programming concepts, you'll be able to get most out of this book.

Mastering Reverse Engineering Oct 24 2022 Implement reverse engineering techniques to analyze software, exploit software targets, and defend against security threats like malware and viruses. Key FeaturesAnalyze and improvise software and hardware with real-world examplesLearn advanced debugging and patching techniques with tools such as IDA Pro, x86dbg, and Radare2.Explore modern security techniques to identify, exploit, and avoid cyber threatsBook Description If you want to analyze software in order to exploit its weaknesses and strengthen its defenses, then you should explore reverse engineering. Reverse Engineering is a hackerfriendly tool used to expose security flaws and questionable privacy practices.In this book, you will learn how to analyse software even without having access to its source code or design documents. You will start off by learning the low-level language used to communicate with the computer and then move on to covering reverse engineering techniques. Next, you will explore analysis techniques using real-world tools such as IDA Pro and x86dbg. As you progress through the chapters, you will walk through use cases encountered in reverse engineering, such as encryption and compression, used to obfuscate code, and how to to identify and overcome anti-debugging and anti-analysis tricks. Lastly, you will learn how to analyse other types of files that contain code. By the end of this book, you will have the confidence to perform reverse engineering. What you will learnLearn core reverse engineeringIdentify and extract malware componentsExplore the tools used for reverse engineeringRun programs under non-native operating systemsUnderstand binary obfuscation techniquesIdentify and analyze anti-debugging and anti-analysis tricksWho this book is for If you are a security engineer or analyst or a system programmer and want to use reverse engineering to improve your software and hardware, this is the book for you. You will also find this book useful if you are a developer who wants to explore and learn reverse engineering. Having some programming/shell scripting knowledge is an added advantage.

Old New Thing Dec 26 2022 "Raymond Chen is the original raconteur of Windows." --Scott Hanselman, ComputerZen.com "Raymond has been at Microsoft for many years and has seen many nuances of Windows that others could only ever hope to get a glimpse of. With this book, Raymond shares his knowledge, experience, and anecdotal stories, allowing all of us to get a better understanding of the operating system that affects millions of people every day. This book has something for everyone, is a casual read, and I highly recommend it!" --Jeffrey Richter, Author/Consultant, Cofounder of Wintellect "Very interesting read. Raymond tells the inside story of why Windows is the way it is." --Eric Gunnerson, Program Manager, Microsoft Corporation "Absolutely essential reading for understanding the history of Windows, its intricacies and quirks, and why they came about." --Matt Pietrek, MSDN Magazine's Under the Hood Columnist "Raymond Chen has become something of a legend in the software industry, and in this book you'll discover why. From his high-level reminiscences on the design of the Windows Start button to his low-level discussions of GlobalAlloc that only your inner-geek could love, The Old New Thing is a captivating collection of anecdotes that will help you to truly appreciate the difficulty inherent in designing and writing quality software." --Stephen Toub, Technical Editor, MSDN Magazine Why does Windows work the way it does? Why is Shut Down on the Start menu? (And why is there a Start button, anyway?) How can I tap into the dialog loop? Why does the GetWindowText function behave so strangely? Why are registry files called "hives"?

Many of Windows' quirks have perfectly logical explanations, rooted in history. Understand them, and you'll be more productive and a lot less frustrated. Raymond Chen--who's spent more than a decade on Microsoft's Windows development team--reveals the "hidden Windows" you need to know. Chen's engaging style, deep insight, and thoughtful humor have made him one of the world's premier technology bloggers. Here he brings together behind-the-scenes explanations, invaluable technical advice, and illuminating anecdotes that bring Windows to life--and help you make the most of it. A few of the things you'll find inside: What vending machines can teach you about effective user interfaces A deeper understanding of window and dialog management Why performance optimization can be so counterintuitive A peek at the underbelly of COM objects and the Visual C++ compiler Key details about backwards compatibility--what Windows does and why Windows program security holes most developers don't know about How to make your program a better Windows citizen

Windows Sysinternals Administrator's Reference Jun 08 2021 Get in-depth guidance—and inside insights—for using the Windows Sysinternals tools available from Microsoft TechNet. Guided by Sysinternals creator Mark Russinovich and Windows expert Aaron Margosis, you'll drill into the features and functions of dozens of free file, disk, process, security, and Windows management tools. And you'll learn how to apply the book's best practices to help resolve your own technical issues the way the experts do. Diagnose. Troubleshoot. Optimize. Analyze CPU spikes, memory leaks, and other system problems Get a comprehensive view of file, disk, registry, process/thread, and network activity Diagnose and troubleshoot issues with Active Directory Easily scan, disable, and remove autostart applications and components Monitor application debug output Generate trigger-based memory dumps for application troubleshooting Audit and analyze file digital signatures, permissions, and other security information Execute Sysinternals management tools on one or more remote computers Master Process Explorer, Process Monitor, and Autoruns

Implementing Reverse Engineering May 27 2020 More practical less theory KEY FEATURES ? In-depth practical demonstration with multiple examples of reverse engineering concepts. ? Provides a step-by-step approach to reverse engineering, including assembly instructions. ? Helps security researchers to crack application code and logic using reverse engineering open source tools. ? Reverse engineering strategies for simple-to-complex applications like Wannacry ransomware and Windows calculator. DESCRIPTION The book 'Implementing Reverse Engineering' begins with a step-by-step explanation of the fundamentals of reverse engineering. You will learn how to use reverse engineering to find bugs and hacks in real-world applications. This book is divided into three sections. The first section is an exploration of the reverse engineering process. The second section explains reverse engineering of applications, and the third section is a collection of real-world use-cases with solutions. The first section introduces the basic concepts of a computing system and the data building blocks of the computing system. This section also includes open-source tools such as CFF Explorer, Ghidra, Cutter, and x32dbg. The second section goes over various reverse engineering practicals on various applications to give users hands-on experience. In the third section, reverse engineering of Wannacry ransomware, a well-known Windows application, and various exercises are demonstrated step by step. In a very detailed

and step-by-step manner, you will practice and understand different assembly instructions, types of code calling conventions, assembly patterns of applications with the printf function, pointers, array, structure, scanf, strcpy function, decision, and loop control structures. You will learn how to use open-source tools for reverse engineering such as portable executable editors, disassemblers, and debuggers. WHAT YOU WILL LEARN ? Understand different code calling conventions like CDECL, STDCALL, and FASTCALL with practical illustrations. ? Analyze and break WannaCry ransomware using Ghidra. ? Using Cutter, reconstruct application logic from the assembly code. ? Hack the Windows calculator to modify its behavior. WHO THIS BOOK IS FOR This book is for cybersecurity researchers, bug bounty hunters, software developers, software testers, and software quality assurance experts who want to perform reverse engineering for advanced security from attacks. Interested readers can also be from high schools or universities (with a Computer Science background). Basic programming knowledge is helpful but not required. TABLE OF CONTENTS 1. Impact of Reverse Engineering 2. Understanding Architecture of x86 machines 3. Up and Running with Reverse Engineering tools 4. Walkthrough on Assembly Instructions 5. Types of Code Calling Conventions 6. Reverse Engineering Pattern of Basic Code 7. Reverse Engineering Pattern of the printf() Program 8. Reverse Engineering Pattern of the Pointer Program 9. Reverse Engineering Pattern of the Decision Control Structure 10. Reverse Engineering Pattern of the Loop Control Structure 11. Array Code Pattern in Reverse Engineering 12. Structure Code Pattern in Reverse Engineering 13. Scanf Program Pattern in Reverse Engineering 14. strcpy Program Pattern in Reverse Engineering 15. Simple Interest Code Pattern in Reverse Engineering 16. Breaking Wannacry Ransomware with Reverse Engineering 17. Generate Pseudo Code from the Binary File 18. Fun with Windows Calculator Using Reverse Engineering

CLR via C# Mar 17 2022 Dig deep and master the intricacies of the common language runtime, C#, and .NET development. Led by programming expert Jeffrey Richter, a longtime consultant to the Microsoft .NET team - you'll gain pragmatic insights for building robust, reliable, and responsive apps and components. Fully updated for .NET Framework 4.5 and Visual Studio 2012 Delivers a thorough grounding in the .NET Framework architecture, runtime environment, and other key topics, including asynchronous programming and the new Windows Runtime Provides extensive code samples in Visual C# 2012 Features authoritative, pragmatic guidance on difficult development concepts such as generics and threading

Windows Internals, Part 1 Apr 18 2022 The definitive guide–fully updated for Windows 10 and Windows Server 2016 Delve inside Windows architecture and internals, and see how core components work behind the scenes. Led by a team of internals experts, this classic guide has been fully updated for Windows 10 and Windows Server 2016. Whether you are a developer or an IT professional, you'll get critical, insider perspectives on how Windows operates. And through hands-on experiments, you'll experience its internal behavior firsthand–knowledge you can apply to improve application design, debugging, system performance, and support. This book will help you: · Understand the Window system architecture and its most important entities, such as processes and threads · Examine how processes manage resources and threads scheduled for execution inside processes · Observe how Windows manages virtual and physical memory · Dig into the Windows I/O system and see how device drivers work and integrate with the

rest of the system · Go inside the Windows security model to see how it manages access, auditing, and authorization, and learn about the new mechanisms in Windows 10 and Server 2016

Programming C# 10 Mar 25 2020 C# is undeniably one of the most versatile programming languages available to engineers today. With this comprehensive guide, you'll learn just how powerful the combination of C# and .NET can be. Author Ian Griffiths guides you through C# 10.0 and .NET 6 fundamentals and techniques for building cloud, web, and desktop applications. Designed for experienced programmers, this book provides many code examples to help you work with the nuts and bolts of C#, such as generics, LINQ, and asynchronous programming features. You'll get up to speed on .NET 6 and the latest C# 9.0 and 10.0 additions, including records, enhanced pattern matching, and new features designed to remove "ceremony" to improve productivity. Understand how .NET has changed in the most recent releases, and learn what it means for application development Select the most appropriate C# language features for any task Learn when to use the new features and when to stick with older ones Examine the range of functionality available in .NET's class libraries Learn how you can apply these class libraries to practical programming tasks Explore numerous small additions to .NET that improve expressiveness "Unlike books that focus on Visual Studio and technologies that interact with C#, this one covers the core language, and mastery of this core is essential to successfully building good software. It covers important concepts followed by generous code examples to explain them. It's thorough, detailed, and gets at the nooks and crannies of the language rarely covered elsewhere. It's a complete course on C#."--Jeremy MorganSoftware/DevOps Engineer Ian Griffiths has worked in various aspects of computing, including computer networking, embedded real-time systems, broadcast television systems, medical imaging, and all forms of cloud computing. Ian is a Technical Fellow at endjin, and a Microsoft MVP in Developer Technologies. He's the author of several O'Reilly books and has written courses on Windows Presentation Foundation (WPF) and TPL Tables. Technology brings him joy.

Windows and Linux Penetration Testing from Scratch Sep 11 2021 Master the art of identifying and exploiting vulnerabilities with Metasploit, Empire, PowerShell, and Python, turning Kali Linux into your fighter cockpit Key Features Map your client's attack surface with Kali Linux Discover the craft of shellcode injection and managing multiple compromises in the environment Understand both the attacker and the defender mindset Book Description Let's be honest—security testing can get repetitive. If you're ready to break out of the routine and embrace the art of penetration testing, this book will help you to distinguish yourself to your clients. This pen testing book is your guide to learning advanced techniques to attack Windows and Linux environments from the indispensable platform, Kali Linux. You'll work through core network hacking concepts and advanced exploitation techniques that leverage both technical and human factors to maximize success. You'll also explore how to leverage public resources to learn more about your target, discover potential targets, analyze them, and gain a foothold using a variety of exploitation techniques while dodging defenses like antivirus and firewalls. The book focuses on leveraging target resources, such as PowerShell, to execute powerful and difficult-to-detect attacks. Along the way, you'll enjoy reading about how these methods work so that you walk away with the necessary knowledge to explain your findings to clients from all backgrounds. Wrapping up with post-exploitation strategies, you'll be

able to go deeper and keep your access. By the end of this book, you'll be well-versed in identifying vulnerabilities within your clients' environments and providing the necessary insight for proper remediation. What you will learn Get to know advanced pen testing techniques with Kali Linux Gain an understanding of Kali Linux tools and methods from behind the scenes Get to grips with the exploitation of Windows and Linux clients and servers Understand advanced Windows concepts and protection and bypass them with Kali and living-off-the-land methods Get the hang of sophisticated attack frameworks such as Metasploit and Empire Become adept in generating and analyzing shellcode Build and tweak attack scripts and modules Who this book is for This book is for penetration testers, information technology professionals, cybersecurity professionals and students, and individuals breaking into a pentesting role after demonstrating advanced skills in boot camps. Prior experience with Windows, Linux, and networking is necessary.

- Windows Sysinternals Administrators Reference
- Programming Windows Store Apps With C
- Modern Assembly Language Programming With The ARM Processor
- Windows 8 Secrets
- Modern Computer Architecture And Organization
- Inside Windows Debugging
- Rootkits
- Learning Malware Analysis
- Docker On Windows
- Agile DevOps And Cloud Computing With Microsoft Azure
- Learning OpenCV 3
- Microsoft Azure Essentials Fundamentals Of Azure
- Implementing Reverse Engineering
- Troubleshooting With The Windows Sysinternals Tools
- Programming C 10
- Azure Internet Of Things Revealed
- The Antivirus Hackers Handbook
- Cyber Security Threats Actors And Dynamic Mitigation
- Windows 11 All in One For Dummies
- Introducing Windows 8