Windows 2000 Device Driver Model A Developers Guide From The Instructors At Productivity Point With Cdrom Next Level

Comprehensive guides to the latest Beowulf tools and methodologies. Beowulf clusters, which exploit mass-market PC hardware and software in conjunction with cost-effective commercial network technology, are becoming the platform for many scientific, engineering, and commercial applications. With growing popularity has come growing complexity. Addressing that complexity, Beowulf Cluster Computing with Linux and Beowulf Cluster Computing with Windows provide system users and administrators with the tools they need to run the most advanced Beowulf clusters. The book is appearing in both Linux and Windows versions in order to reach the entire PC cluster community, which is divided into two distinct camps according to the node operating system. Each book consists of three stand-alone parts. The first provides an introduction to the underlying hardware technology, assembly, and configuration. The second part offers a detailed presentation of the major parallel programming librairies. The third, and largest, part describes software infrastructures and tools for managing cluster resources. This includes some of the most popular of the software packages available for distributed task scheduling, as well as tools for monitoring and administering system resources and user accounts. Approximately 75% of the material in the two books is shared, with the other 25% pertaining to the specific operating system. Most of the chapters include text specific to the operating system. The Linux volume includes a discussion of parallel file systems.

Details the features of Windows 2000 Server and Professional with instructions on installation, configuration, file management, security, remote access, TCP/IP, and Internet Information Server 5

Delve inside Windows architecture and internals—and see how core components work behind the scenes. Led by three renowned internals experts, this classic guide is fully updated for Windows 7 and Windows Server 2008 R2—and now presents its coverage in two volumes. As always, you 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. In Part 1, you will: Understand how core system and management mechanisms work—including the object manager, synchronization, Wow64, Hyper-V, and the registry Examine the data structures and activities behind processes, threads, and jobs Go inside the Windows security model to see how it manages access, auditing, and authorization Explore the Windows networking stack from top to bottom—including APIs, BranchCache, protocol and NDIS drivers, and layered services Dig into internals hands-on using the kernel debugger, performance monitor, and other tools

The Windows 2000 Device Driver BookA Guide for ProgrammersPrentice Hall Professional

Here's the book you need to prepare for Exam 70-216, Implementing and Administering a Microsoft Windows 2000 Network Infrastructure. This study guide provides: In-depth coverage of every exam objective--all the information you need Practical information on managing a Windows 2000 network infrastructure Hundreds of challenging review questions, in the book and on the CD Leading-edge exam preparation software, including a testing engine, electronic flashcards, and simulation software Authoritative coverage of all exam objectives, including: DNS in a Windows 2000 network infrastructure DHCP in a Windows 2000 network infrastructure Remote access in a Windows 2000 network infrastructure Network protocols in a Windows 2000 network infrastructure WINS in a Windows 2000 network infrastructure IP routing in a Windows 2000 network infrastructure Certificate Services Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Software developer and author Karen Hazzah expands her original treatise on device drivers in the second edition of Writing Windows VxDs and Device Drivers. The book and companion disk include the author's library of wrapper functions that allow the progr

A guide to Windows 2000 Server technology offers IT professionals solutions and strategies for managing installation, account administration, file and print configuration, security, maintenance, back-up, and troubleshooting

The book Operating System by Rohit Khurana is an insightful work that elaborates on fundamentals as well as advanced topics of the discipline. It offers an in-depth coverage of concepts, design and functions of an operating system irrespective of the hardware used. With illustrations and examples the aim is to make the subject crystal clear and the book extremely student-friendly. The book caters to undergraduate students of most Indian universities, who would find subject matter highly informative and enriching. Tailored as a guide for self-paced learning, it equips budding system programmers with the right knowledge and expertise. The book has been revised to keep pace with the latest technology and constantly revising syllabuses. Thus, this edition has become more comprehensive with the inclusion of several new topics. In addition, certain sections of the book have been thoroughly revised. Key Features • Case studies of Unix, Linux and Windows to put theory concepts into practice • A crisp summary for recapitulation with each chapter • A glossary of technical terms • Insightful questions and model test papers to prepare for the examinations New in this Edition • More types of operating system, like PC and mobile; Methods used for communication in client-server systems. • New topics like: Thread library; Thread scheduling; Principles of concurrency, Precedence graph, Concurrency conditions and Sleeping barber problem; Structure of page tables, Demand segmentation and Cache memory organization; STREAMS; Disk attachment, Stable and tertiary storage, Record blocking and File sharing; Goals and principles of protection, Access control matrix, Revocation of access rights, Cryptography, Trusted systems, and Firewalls.

A guide for administrators and professional users of a Windows 2000 network offers an overview of the Active Directory, Kerberos authentication, and other new additions to Windows 2000

This book will assist readers in the analysis, tuning, optimization, automation, enhancement, maintenance, and troubleshooting of Windows 2000. The authors show users how to use operating system utilities, Resource Kit applications, and third-party tools to help you accomplish everyday and advanced Windows 2000 system tasks.The CD-ROM contains shareware and third-party applications that help users to achieve high system optimization.

The Microsoft® Windows® driver model (WDM) supports Plug and Play, provides power management capabilities, and expands on the driver/minidriver approach. Written by long-time device-driver expert Walter Oney in cooperation with the Windows kernel team, this book provides extensive practical examples, illustrations, advice, and line-by-line analysis of code samples to clarify real-world driver-programming issues. And it's been updated with the latest details about the driver technologies in Windows XP and Windows 2000, plus more information about how to debug drivers. Topics covered include: Beginning a driver project and the structure of a WDM driver; NEW: Minidrivers and class drivers, driver taxonomy, the WDM development environment and tools, management checklist, driver selection and loading, approved API calls, and driver stacks Basic programming techniques; NEW: Safe string functions, memory limits, the Driver Verifier scheme and tags, the kernel handle flag, and the Windows 98 floating-point problem Synchronization; NEW: Details about the interrupt request level (IRQL) scheme, along with Windows 98 and Windows Me compatibility The I/O request packet (IRP) and I/O control operations; NEW: How to send control operations to other drivers, custom queue implementations, and how to handle and safely cancel IRPs Plug and Play for function drivers; NEW: Controller and multifunction devices, monitoring device removal in user mode, Human Interface Devices (HID), including joysticks and other game controllers, minidrivers for non-HID devices, and feature reports Reading and writing data, power management, and Windows Management Instrumentation (WMI) NEW: System wakeup, the WMI control for idle detection, and using WMIMOFCK Specialized topics and distributing drivers; NEW: USB 2.0, selective suspend, Windows Hardware Quality Lab (WHQL) certification, driver selection and loading, officially approved API calls, and driver stacks COVERS WINDOWS 98, WINDOWS ME, WINDOWS 2000, AND WINDOWS XP! CD-ROM FEATURES: A fully searchable electronic copy of the book Sample code in Microsoft Visual C++® A Note Regarding the CD or DVD The print version of this book ships with a CD or DVD. For those customers purchasing one of the digital formats in which this book is available, we are pleased to offer the CD/DVD content as a free download via O'Reilly Media's Digital Distribution services. To download this content, please visit O'Reilly's web site, search for the title of this book to find its catalog page, and click on the link below the cover image (Examples, Companion Content, or Practice Files). Note that while we provide as much of the media content as we are able via free download, we are sometimes limited by licensing restrictions. Please direct any questions or concerns to booktech@oreilly.com.

An exhaustive technical manual outlines the Windows NT concepts related to drivers; shows how to develop the best drivers for particular applications; covers the I/O Subsystem and implementation of standard kernel mode drivers; and more. Original. (Intermediate).

Developing Windows NT Device Drivers: A Programmer's Handbookoffers programmers a comprehensive and in-depth guide to building device drivers for Windows NT. Written by two experienced driver developers, Edward N. Dekker and Joseph M. Newcomer, this book provides detailed coverage of techniques, tools, methods, and pitfalls to help make the often complex and byzantine "black art" of driver development straightforward and accessible. This book is designed for anyone involved in the development of Windows NT Device Drivers, particularly those working on drivers for nonstandard devices that Microsoft has not specifically supported. Because Windows NT does not permit an application program to directly manipulate hardware, a customized kernel mode device driver must be created for these nonstandard devices. And since experience has clearly shown that superficial knowledge can be hazardous when developing device drivers, the authors have taken care to explore each relevant topic in depth. This book's coverage focuses on drivers for polled, programmed I/O, interrupt-driven, and DMA devices. The authors discuss the components of a kernel mode device driver for Windows NT, including background on the two primary bus interfaces used in today's computers: the ISA and PCI buses. Developers will learn the mechanics of compilation and linking, how the drivers register themselves with the system, experience-based techniques for debugging, and how to build robust, portable, multithread- and multiprocessor-safe device drivers that work as intended and won't crash the system. The authors also show how to call the Windows NT kernel for the many services required to support a device driver and demonstrate some specialized techniques, such as mapping device memory or kernel memory into user space. Thus developers will not only learn the specific mechanics of high-quality device driver development for Windows NT, but will gain a deeper understanding of the foundations of device driver design.

Written for IT professionals, network administrators, and support personnel, this book provides instruction for installing Windows 2000 Professional, calculating deployment costs, configuring and troubleshooting network capabilities, managing registry settings, fixing printing errors, and optimizing performance. A companion CD-ROM contains demo sof

Covers installation, configuration, Registry manipulation, network management, Active Directory, and security

The start-to-finish tutorial and reference for Windows 2000 kernel debugging! The expert guide to Windows 2000 kernel debugging and crash dump analysis Interpreting Windows 2000 stop screens--in depth! Making the most of WinDbg and KD Debugging hardware: ports, BIOS, PCI and SCSI buses, and chipsets Advanced coverage: remote debugging, Debugging Extensions, Driver Verifier, and more Step-by-step crash dump analysis and kernel debugging How to interpret every element of a Windows 2000 stop screen Using WinDbg: configuring options, symbol paths, DLLs, and more Debugging hardware: ports, BIOS, PCI and SCSI buses, chipsets, and more Configuring local and remote kernel debugging environments Includes extensive code samples This comprehensive guide to Windows 2000 kernel debugging will be invaluable to anyone who must analyze and prevent Windows 2000 system crashes--especially device driver authors and debuggers. Renowned kernel debugging expert Steven McDowell covers every aspect of kernel debugging and crash dump analysis--including advanced hardware debugging and other techniques barely addressed in Microsoft's documentation. Discover what Microsoft's WinDbg debugger can (and can't) do for you, and how to configure both local and remote kernel debugging environments. Learn to use Windows 2000's crash dump feature, step by step. Learn how to start and stop errant drivers, pause target systems, retrieve system and driver state, and step through source code using breakpoints and source-level debugging. McDowell demonstrates techniques for taking control of target systems,including finding "lost" memory blocks, setting process and thread contexts, and reviewing I/O system error logs. You'll learn how to use Microsoft's powerful Debugger Extensions to run virtually any command you choose, and master the new Driver Verifier, which can detect common mistakes in driver code with unprecedented speed and accuracy.

This festschrift volume constitutes a unique tribute to Zohar Manna on the occasion of his 64th birthday. Like the scientific work of Zohar Manna, the 32 research articles span the entire scope of the logical half of computer science. Also included is a paean to Zohar Manna by the volume editor. The articles presented are devoted to the theory of computing, program semantics, logics of programs, temporal logic, automated deduction, decision procedures, model checking, concurrent systems, reactive systems, hardware and software verification, testing, software engineering, requirements specification, and program synthesis.

Here's the book you need to prepare for Exam 70-215, Installing, Configuring, and Administering Microsoft Windows 2000 Server. This study guide provides: In-depth coverage of every exam objective—all the information you need Practical information on every aspect of Windows 2000 Server Hundreds of challenging review questions, in the book and

on the CD Leading-edge exam preparation software, including a testing engine, electronic flashcards, and simulation software Authoritative coverage of all exam objectives, including: Installing Windows 2000 Server Installing, configuring, and troubleshooting access to resources Configuring and troubleshooting hardware devices and drivers Managing, monitoring, and optimizing system performance, reliability, and availability Managing, configuring, and troubleshooting storage use Configuring and troubleshooting Windows 2000 network connections Implementing, monitoring, and troubleshooting security Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Master the new Windows Driver Model (WDM) common to Windows 98 and Windows 2000. You get theory, instruction and practice in driver development, installation and debugging. Addresses hardware and software interface issues, driver types, and a description of the new 'layer' model of WDM. ;

Faster, stronger, better than it was before – this is the only Windows XP book readers will ever need!

See how the core components of the Windows operating system work behind the scenes—guided by a team of internationally renowned internals experts. Fully updated for Windows Server(R) 2008 and Windows Vista(R), this classic guide delivers key architectural insights on system design, debugging, performance, and support—along with hands-on experiments to experience Windows internal behavior firsthand. Delve inside Windows architecture and internals: Understand how the core system and management mechanisms work—from the object manager to services to the registry Explore internal system data structures using tools like the kernel debugger Grasp the scheduler's priority and CPU placement algorithms Go inside the Windows security model to see how it authorizes access to data Understand how Windows manages physical and virtual memory Tour the Windows networking stack from top to bottom—including APIs, protocol drivers, and network adapter drivers Troubleshoot file-system access problems and system boot problems Learn how to analyze crashes

Unlike previous electronic commerce books which stress theory, the Administrator's Guide to e-Commerce is a hands-on guide to creating and managing websites using the Microsoft BackOffice product suite. This book will explore the role of networking technologies to industry growth, issues of privacy and security, and most importantly, guidance in taking an existing Web server and creating an electronic storefront.

Here's the Windows 2000 Server book every administrator will need—one that contains only the most advanced information rather than rehashing the basics yet again. Written by a Windows 2000 expert and security consultant, this book provides high-level coverage of Windows 2000 system design and implementation, from planning and security to daily maintenance and troubleshooting. Includes a detailed discussion of assessing your network's security needs and implementing an effective solution. Use this book as a supplement to Mastering Windows 2000 Server.

Focusing on the needs of the technical professional who is responsible for a series of Windows NT and Windows 2000 systems, The Windows 2000 Professional Handbook is designed to be both a handy desk reference in addition to a textbook for MCSE courses. This book provides readers with insights into how Microsoft's latest enterprise-based operating system solves the connectivity challenges with hands-on examples and cases that arise in organizations running multiple operating systems.

For repairing performance loss or maximizing current potential, this guide aims to provide the information and conceptual framework that will enable readers to be performance experts. Includes information on processor performance, application profiling and hardware considerations.

The quick, easy way to get up-to-speed on the Win 32 API--completely updated--covers Windows 2000, NT4, and Windows 98/95. There are detailed chapters on every key topic: processes and threads, security, directories and drives, and many more. The CD-ROM contains all sample code.

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

Showcases Windows 2000's business and laptop suitablity, covering day-to-day administrative tasks and migrating from Windows NT to Windows 2000.

Identifies common problems and offers solutions for resolving issues with dual-boot systems, data recovery, hardware configuration conflicts, Registry restoration, Internet connection configuration, and setting up ftp sites.

Windows NT/2000 Native API Reference is absolutely unique. Currently, documentation on WIndows NT's native APIs can only be found through access to the source code or occasionally Web sites where people have chosen to share bits of insight gained through reverse engineering. This book provides the first complete reference to the API functions native to Windows NT and covers the set of services that are offered by Windows NT to both kernel- and user-mode programs. Ideal for the intermediate and advanced level user- and kernel-mode developers of Windows systems, this books is devoted to the NT native API and consists of documentation of the 210 routines included in the API. Also included are all the functions added in Windows 2000.

An authoritative guide to Windows NT driver development, now completely revised and updated. The CD-ROM includes all source code, plus Microsoft hardware standards documents, demo software, and more.

Covers the Windows 2000 Professional, Windows 2000 Server, Network Infrastructure Implementation, Directory Services Infrastructure Implementation, Directory Services Infrastructure Design, Network Infrastructure Design, and Security Design (70-220) exams

Offers test-taking strategies and tips, provides multiple installation methods for Windows 2000 Professional, and explains how to perform tasks such as remote printing and Internet connection sharing.

Essential Computer and it Fundamentals for Engineering And S

Practical knowledge and skills of the Windows 2000 Registry database are critical for system administrators, technical support personnel, and advanced Windows NT/2000 users. This book was created to clarify many of the frequently asked questions surrounding one of the most confusing components of the Windows 2000 operating system. Offering a comprehensive overview of Registry concepts and features, complete coverage of Registry backup and recovery protocols, as well as troubleshooting the most common system problems this book should be of interest to system engineers facing challenges with the increasingly complex network. The text contains: a concise overview of the Windows 2000 Registry structure, valid data types, and data storage methods; a full chapter dedicated to securing and protecting your Registry while avoiding conflicts that create difficulties completing everyday tasks; step-by-step instructions dedicated to the various methods of backing up and restoring the Registry database; and a definition of the interface of the Registry editors, keys, and utilities for novice users. The text examines and explains multiple Registry configurations and network settings and includes instructions for fine-tuning your Registry. There are detailed descriptions of the Windows 2000 boot process and tips and techniques for eliminating boot failures. The text includes descriptions of popular third-party tools for exiting the Registry and a complete listing of additional Windows 2000 Registry information sources.

Offers test-taking strategies and tips while covering topics including troubleshooting, system performance, storage access, security settings, and administrative tools.

Developers are used to working with Wizards, component-like products that allow them to create certain elements - like dialog buttons - quickly and easily while they are coding applications. With the launch of Windows 2000, Microsoft has announced a new set of Wizards that will help administrators and users configure and set up Windows 2000 Professional (the Windows NT 4 Workstation successor) and Windows 2000 Server (the Windows NT 4 Server successor). Windows 2000 Setup and Configuration Wizards covers all the available Wizards, with an emphasis on those new to Windows 2000. Each Wizard is broken down by dialog box, with explanations of all options and required elements so administrators will know what to be prepared with. In addition, coverage of new services that will speed configuration and set up (like the Windows Installer) will be covered. * This is the first book to focus on Wizards and Windows 2000 automated components * Network administrators and developers will save time using this book