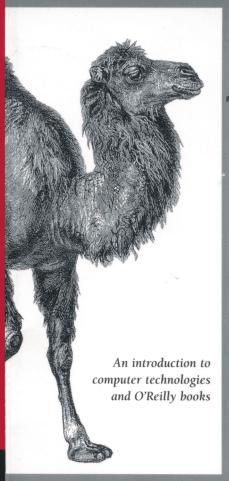
# A Field Guide to O'Reilly Animals









## A Field Guide to O'Reilly Animals



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#### A Field Guide to O'Reilly Animals

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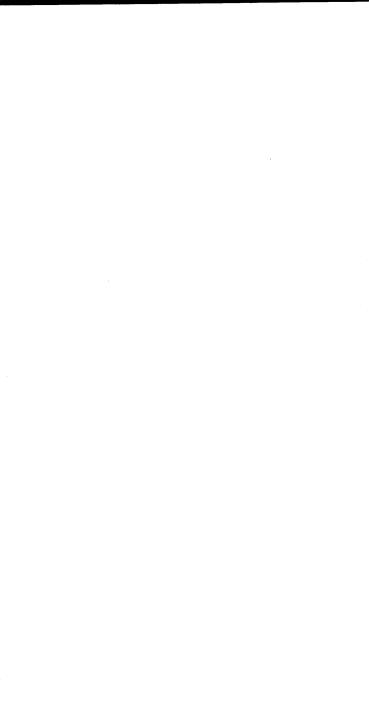
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## **Table of Contents**

Chapter 1	Join the Expedition
Chapter 2	Open Source
Chapter 3	Unix & Linuxg
Chapter 4	System & Network Administration 15
Chapter 5	Security
Chapter 6	Web & Internet
Chapter 7	XML 39
Chapter 8	Scripting Languages
Chapter 9	C & C++50
Chapter 10	Java
Chapter 11	Microsoft Technologies 60
Chapter 12	Databases
Chapter 13	Macintosh
Chapter 14	Personal Digital Assistants 82
Chanter 15	Why Are There Animals on Our Poolse?







## Join the Expedition

Many of the exotic animals featured in this field guide may not be familiar to you. Like Linux,® Perl, Java,™ and Windows® .NET.™ You may not know what they are, exactly, or who uses them and why. But you want to learn just enough about them so that this exciting new world doesn't pass you by. That's why we designed A Field Guide to O'Reilly Animals. Our easy-to-read, easy-to-understand guide to technology for non-technical people will answer many of the questions you have about the people who buy our books, and the reasons they read them. This quick little guide will take you on an expedition through the wilds of computer and Internet technology, and bring you back safely.

#### Who Buys Our Books?

Those who rely on O'Reilly publications are the system administrators who oversee complex computer networks, and the programmers who develop the sophisticated programs (also known as "applications") required to run them. A network can be a group of computer workstations within a company or organization, or it can be the system used to maintain a site on the World Wide Web

Why do these people rely on us? Part of the learning curve for any new technology includes what we call "information pain" and O'Reilly is uniquely qualified to supply the information that programmers and administrators need to solve tough technical problems. Our background in the computer business, rather than as traditional publishers, has

1

given us a very different approach than most computer book publishers. Our editors are former programmers or top technical writers. Because we are close to the industry, we know what kinds of books are really needed.

## Four things immediately set us apart from other technical publishers:

#### Our passion for knowledge

Our books go beyond the obvious, capturing the efforts of technical innovators who discover fresh, efficient, and creative ways to use emerging technologies.

#### Our community focus

We're not in the business to publish books for broad commercial appeal. Our books speak directly to the technical community, in ways that are challenging and interesting.

#### We act as a catalyst

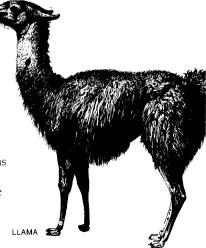
We help make technologies more accessible to the people who need them, and we do this through conferences and online services, as well as through books.

#### Our readers trust us

People tell us that reading one of our books is like having an experienced user at their side. They know they're getting information they can depend on.

#### The Secret of Our Animal Guides

We offer hundreds of titles describing how to design effective web sites, how to administer their underlying databases, and how to take the best advantage of web tools and scripting languages. Our corporate commitment to Perl and other open technologies has helped spawn what is now known as the Open Source



Movement. Our books on Java, Oracle, and XML, among others, have helped millions of programmers and system administrators around the world

There is another distinction about O'Reilly, of course. Most of our books feature an exotic animal on the cover. Wild and free, these animals are rather like the technologies they represent. In some cases, they have become de facto brands for our books. Readers, for example, know *Programming Perl* informally as "the camel book." *Learning Perl* has become "the llama book." In this way, each of our books has its own unique identity, but not every one of them is associated with an animal.

We also use a color-code system to identify specific topic areas, or groups of technologies. Perl books are always peacock blue. Our Linux books are a rust brown color, Java books are royal purple, web and Internet books are aqua bluegreen, and system and network administration titles we identify by their dark blue color. Customers with a collection of O'Reilly books can easily arrange different topics according to the color of the book spine.

#### **Understanding Our Product Line**

Among our Animal Guides, you will find many titles that cover specific topics, such as *Understanding the Linux Kernel* in the rust brown Linux books. You will also find three generic product types that appear in many of the color-coded Animal series:

#### ■ Definitive Guides

As the name implies, the large format "Definitive Guides" are often the most complete resource on a particular technology. In books such as HTML & XHTML: The Definitive Guide and JavaScript: The Definitive Guide, you will find everything you need to know on the subject. As one of our loyal customers commented, if the information isn't in there, then you don't need to know it.

#### ■ Learning Books

For people unfamiliar with a particular technology, books such as Learning Perl and Learning Java guide them through

a careful learning process, as each successive chapter builds on their knowledge. Exercises are included so that readers can test their comprehension. The "Learning Books" assume that readers are professional programmers, knowledgeable about computers but wanting to learn a new technology.

#### ■ Pocket References

These are small, handy guides, 4x6-inches in trim size and usually under 100 pages. Books such as Apache Pocket Reference and Python Pocket Reference contain only the bare essentials of the technology for quick reference. Programmers often take these books with them when they are troubleshooting a system at a customer's location.

#### Learning the Exceptions

Now, there are always exceptions to the rule. Some of our books do not fit into the color-coded system we mention above, and some do not feature animals, objects, or icons of any kind. Naturally, they are still important items in the catalog, and many are among our bestsellers:

#### ■ In A Nutshell

Books in our "Nutshell" series are always marked by a metallic rust-red color on the spine, no matter what technology they discuss. For example, you will find the rustred Perl in a Nutshell among the blue Perl books and Web Design in a Nutshell in the green Web & Internet category. "Nutshell" books are very technical and we assume that readers are, or intend to be, serious users of the technology. Those who buy these books refer to them often, and many times a "Nutshell" book is the only reference material that technical people will have on their desks.

#### ■ Missing Manuals

These books, such as iMovie2: The Missing Manual and Windows 2000 Pro: The Missing Manual, are all written or edited by author David Pogue, and they primarily cover Macintosh or Windows applications. These books are intended to fill the gap for technologies or products that don't come with adequate documentation. Missing Manuals are the books "that should have been in the box."



#### **Fascinating Times Ahead**

We understand what it means to learn a whole variety of new and changing technologies all at once. This field is a constant challenge, and the future always seems to be unfolding before our eyes. We write books that are as complete as documentation, but are still as interesting and readable as commercial books. When people buy our books, we hope they never have to look at the documentation again, except for system-specific options that aren't industry-standard. And whenever possible, we'll even cover those items.

That's why we update our books frequently, often making small changes every time we reprint. We keep our print runs short, so that we have the opportunity to revise every four to six months. Many of the changes are in response to feedback from readers as well as changes to the software.

All of our books—in fact, anything with the O'Reilly name—we've designed to be useful, interesting, and truthful. We believe that plenty of intelligent, discriminating people in the world value those qualities as deeply as we do. We have arranged a pleasant journey of discovery for you in the pages that follow. Once you've read A Field Guide to O'Reilly Animals, you'll have a good grasp of exciting technologies available now, and of the fascinating times that lie ahead.

So, sit back, relax, and enjoy the expedition.



## **Open Source**

While large corporations such as Microsoft, Oracle, and Sun Microsystems grab most of the attention, many important innovations in computer software today come from a grassroots movement known as "Open Source." As one of the leaders of this movement, O'Reilly publishes books on a variety of open source solutions, such as Linux, Perl, Apache, and MySQL. Open or "free" software is not a new concept—what is exciting is the growth and spread of this technology.

Open source software is, simply, a product whose source code—or recipe—is freely available to anyone who wishes to use, modify, and redistribute it. If you think this is a radical idea, many software companies agree. But it's just a continuation of the way computer science evolved thirty years ago. As scientists, computer programmers freely shared ideas and inventions in an effort to drive progress and innovation. Then software companies produced "proprietary" software, whose source code was developed in secret and updated by a select group of programmers within the company. There is nothing wrong with making profits from their inventions. The problem, some people believe, is that they limit innovation, flexibility, customization, and widespread adoption.

#### The Linux Experience

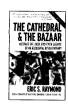
Over the past decade, open source developers have demonstrated that when source code is freely shared, superior software is the result. Take Linux, for example. Early versions of this operating system software were tested in several contexts by independent developers all over the globe. Many eyes found more bugs much faster than a select group could, and these developers shared their suggestions, via the Internet, with the original developer. Some of the contributors added features, others suggested limits to the number of functions. Through this method, the Linux code became much stronger and cleaner than anyone in isolation could have made it.

The more Linux is used, the more innovative ways developers find to use it. Some companies, such as Red Hat Software, Inc., choose to distribute complete Linux systems—bundled with other software, open source and otherwise—for a profit. That's encouraged, as long as the source code remains open. Open source simply means "non-proprietary," not "non-profit." In the same spirit, corporations such as IBM® and Oracle have turned their attention to open source solutions, and have contributed to the source code of several products. And innovation is the reason Netscape® recently made the decision to open the source code to its browser.

#### Rapid Spread of Innovation

You will find books on open source solutions throughout this guide, since this class of software serves many functions. Linux is an operating system similar to Windows NT.\* Perl is a "scripting language" for writing web applications. Apache is a web server, and MySQL is one of the world's fastest database programs. And there are many other programs filling many more capacities. To get you started, O'Reilly has three important volumes about the Open Source Movement and the impact it has had on the computer industry, computer science, and society as a whole.

#### **OPEN SOURCE BOOKS**



#### The Cathedral & The Bazaar

Eric S. Raymond

A collection of essays on the Open Source Movement, this revised and expanded edition is a must for anyone who cares about the future of the computer industry or the dynamics of the information economy.



## Open Sources: Voices from the Open Source Revolution

Edited by Chris DiBona, Sam Ockman & Mark Stone

The leaders of open source come together to discuss the new vision of the software industry they created. The essays in this volume offer insight into how the Open Source Movement works, why it succeeds, and where it is going.



## Peer-to-Peer: Harnessing the Power of Disruptive Technologies

Edited by Andy Oram

This compilation represents the collected wisdom of today's peer-to-peer luminaries. It includes discussions of topics ranging from accountability and trust to security and performance. Fraught with questions and promise, peer-to-peer is sure to remain on the computer industry's center stage for years to come.



## **Unix & Linux**

The heart of every computer and computer network is its operating system. Most people are familiar with the two that dominate the PC market, Microsoft's Windows® and (to a much lesser degree) Apple's Mac® OS. But there are more sophisticated operating systems for mainframe computers and high-powered workstations, as well as PCs, capable of running an array of complex, cutting-edge applications. Unix® is the oldest and most powerful of this class, but Microsoft's Windows® 2000 is closing the gap, along with a remarkable open source system known as Linux that runs on standard PCs. Linux is a Unix-like operating system in terms of functionality and usage.

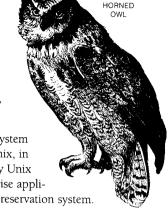
#### Unix

In the early 1970s, scientists at Bell Laboratories introduced an operating system called Unix, written with the new "C" programming language. Before that time, early operating systems were written specifically for their host computers, but this potent and flexible combination allowed Unix to be used on a variety of machines. The first truly "portable" operating system was born. And though many modifications have occurred since, both Unix and C remain the backbone of present-day computing.

Prohibited by antitrust laws to market Unix, Bell Labs distributed the system's source code, for a fee, to universities and research labs so they could make custom modifications. When the Bell monopoly was broken up in 1984, AT&T began to market Unix in earnest, but by then the

operating system existed in many variations. Today, several versions are in use, including proprietary releases such as Solaris™ from Sun Microsystems, AIX<sup>™</sup> from IBM. and Hewlett-Packard's UX™. Add to that five open source versions: BSD, OpenBSD, 386BSD, NetBSD. and FreeBSD

At this point, no other operating system can compete with the power of Unix, in any of its versions. Right now, only Unix is capable of running large enterprise applications such as Sabre, the airlines reservation system.



#### **UNIX BOOKS**



#### Effective awk Programming, 3rd Edition Arnold Robbins

This book offers the most up-to-date coverage of the POSIX standard for awk available anywhere, and sheds light on many of the "dark corners" of the language, with example programs and a summary of how the awk language evolved.



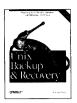
#### Learning the UNIX Operating System, 4th Edition

Jerry Peek, Grace Todino & John Strang One of the bestselling books on Unix, this is a concise introduction that tells users what they need to get started. The fourth edition also covers Linux, and is an ideal primer for beginners.



#### sed & awk, 2nd Edition

Dale Dougherty & Arnold Robbins sed and awk are two text manipulation programs that are mainstays of the Unix programmer's toolbox. This edition covers the sed and awk programs as they are mandated by the POSIX standard and includes discussion of the GNU versions of these programs.



#### Unix Backup & Recovery

W. Curtis Preston

A complete overview of all facets of Unix backup and recovery, this guide offers practical, affordable solutions for environments of all sizes and budgets.



## UNIX in a Nutshell: System V Edition, 3rd Edition

Arnold Robbins

The most complete and informative Unix reference book available, this reference includes descriptions and examples that put all the system commands in context. A true bestseller.



#### UNIX Power Tools, 2nd Edition

Jerry Peek, Tim O'Reilly & Mike Loukides Loaded with practical advice, this book addresses the technology that Unix users face today, including POSIX utilities (GNU versions), bash and tcsh shell, and Perl. Contains a CD-ROM with freeware.

#### Linux

In contrast to laboratory conditions that originally produced Unix, Linux ushered in a radical new method for developing software. It began as a fun experiment after AT&T withdrew access to the Unix source code and made the system proprietary. Suddenly, many people who wanted to use Unix couldn't afford the license. That included Linus Torvalds, a student at Helsinki University in Finland. If he couldn't buy Unix, Torvalds decided, he'd write his own version.

What inspired Torvalds was the work of researchers such as Richard Stallman, who—incensed by AT&T's decision—were determined to produce "free source" software so that powerful corporations could not dominate computing. Having produced several software tools through his GNU project, Stallman was the first to articulate the vision of building a complete, free operating system comparable to Unix.

Some suggest that what Torvalds developed was perhaps not as significant as how he developed it. Rather than keep Linux to himself until it was "perfected." Torvalds put early versions of his new code on the Internet so others could test the fledgling system. Almost immediately, he received significant enhancements and suggestions from programmers all over the globe. This unusual approach to developing software surprised many researchers. How could such a chaotic method result in such a strong and stable system? Aren't inventions refined under controlled conditions? In isolation?

Torvald's work on the Linux "kernel"-the core of the operating system—worked well with tools that Stallman's GNU project created, demonstrating the power of freely distributed source code. As Linux evolved, it filled a very important hole in the world of free source software: The ability to run a computer without paying for a license. Some consider this the missing piece of Richard Stallman's dream to keep source code free.

#### LINUX BOOKS



#### Linux Device Drivers, 2nd Edition

Alessandro Rubini & Jonathan Corbet A practical guide for those who want to support computer peripherals or develop new hardware under the Linux system, this edition includes new calls and techniques in Versions 2.1 and 2.4 of the Linux kernel



#### Linux in a Nutshell, 3rd Edition

Ellen Siever, Stephen Spainhour. Stephen Figgins & Jessica P. Hekman This complete reference covers all user, programming, administration, and networking commands for common Linux distributions.



#### Linux Network Administrator's Guide. 2nd Edition

Olaf Kirch & Terry Dawson

One of the most successful books to come from the Linux Documentation Project, this guide covers all the essential networking software included with Linux.



#### LPI Linux Certification in a Nutshell Jeffrey Dean

This book is geared toward junior system administrators who want to be certified Linux administrators. It prepares readers for the LPI 101 and 102 exams, and explains Linux in a way that is clear and easy to understand



#### Running Linux, 3rd Edition

Matt Welsh, Matthias Kalle Dalheimer & Lar Kaufman

This book explains everything users need to understand, install, and start using the Linux operating system. Comes with an installation tutorial and system maintenance tips. Covers KDE, Samba, and PPP.



#### Understanding the Linux Kernel

Daniel P. Bovet & Marco Cesati The kernel is the heart of the Linux operating system. The authors introduce each topic by explaining its importance and showing how kernel operations relate to the utilities that are familiar to Unix programmers.



#### Linux Distributions

Linux's popularity is exploding. More flexible than Unix, Linux runs on a wide variety of platforms, from mainframes and workstations to PCs. With its ability to run complex applications, including robotic devices and systems aboard the space shuttle, Linux has attracted thousands of developers, as many as 20 million users worldwide, and runs 30% of all web sites. That's because the operating system is widely available through many resourceful distributors.

A complete Linux system includes the kernel, plus several associated software applications. It's similar to the way Windows® '98 is packaged, except that Linux includes technical applications that are geared toward software developers, system administrators, and webmasters. Most of the applications, such as Perl, Apache, MySQL, and desktop environments called GNOME and KDE, are open source. While all this software is free, putting it together is time-consuming, so distributors such as Red Hat, Debian and SuSE sell complete Linux systems, which include access to the source code so users can make custom modifications. Linux dominates some areas, such as web services, and many believe it has significant advantages as a network server. But at this time Linux and Unix are not in wide use as desktop systems.

#### LINUX DISTRIBUTIONS BOOK



Learning Red Hat Linux, 2nd Edition Bill McCarty

This book introduces Red Hat Linux, the most popular commercial distribution of Linux in the U.S. Intended for beginners, it is a "one stop shop" for getting started with Linux



## System & Network Administration

System administration, simply, is the task of overseeing an organization's computing functions. Depending on the organization, a system administrator might be in charge of the company web server, or all the machines that comprise a local area network (LAN), or both. Though different skills are necessary depending on the task, a system administrator's job is to manage the way a company's resources are distributed, via computer, to those who need it. That could mean making sure employees can use the company network, or that customers can find what they need via the web. In either case, the goal of an administrator is the same: remain invisible. Employees and users often forget they're on a network until something goes wrong.

## Running a Network

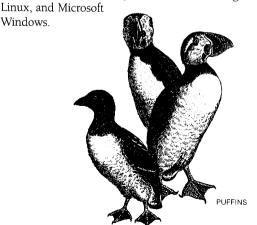
Though a computer "network" can refer to many arrangements, the term generally refers to the system that ties a company's workstations, servers, printers, and other devices together—an internal network. For many network administrators, the primary task is to make sure traffic flows smoothly when several people log on at once and initiate shared functions, such as printing a document. All of the actions have to be coordinated, or the system freezes. As demanding as these administrative tasks can be, it was much simpler a decade ago when internal networks were truly closed systems, when all computers in a LAN were physically wired together in a single location. Today, as

companies expand their networks to include branch offices and "telecommuters," the Internet plays an increasing role. And that's a whole new ballgame.

To manage traffic in and out of the server via the Internet, an administrator needs to learn TCP/IP, the Internet protocol, along with technologies such as DNS (Domain Name System) and BIND to connect their network to the Web. Often. network administrators choose to include an "Intranet," the name given to private, Internet-based corporate networks that include private web pages for company news and information. Any network that connects to the Internet faces a new challenge—the need for adequate security. Email connections alone can open an entire network and all of its data to outsiders, so network administrators must install buffers—or "firewalls"—between the network and the Internet to thwart unauthorized access. But even firewalls don't eliminate the risk of intrusion

#### Choosing a Server

A critical part of system and network administration is the task of choosing, configuring, and maintaining technology that will manage network and/or web servers. Servers can run on any number of different platforms, or operating systems, and there are performance requirements peculiar to each, including the types of applications that you install with it. O'Reilly supplies comprehensive guides on system administration specifically for networks running Unix.



Windows

#### SYSTEM & NETWORK ADMINISTRATION BOOKS



#### DNS and BIND, 4th Edition

Paul Albitz & Cricket Liu

This book discusses one of the Internet's fundamental building blocks: the distributed host information database that's responsible for translating names into addresses, routing mail, and many other services.



## Essential System Administration, 2nd Edition

Æleen Frisch

Covering all major versions of Unix, this second edition of *Essential System Administration* provides a compact, manageable introduction to the tasks faced by everyone responsible for a Unix system.



## Essential Windows NT System Administration

Æleen Frisch

This book combines practical experience with technical expertise to help you manage Windows NT systems as productively as possible, covering standard utilities offered with this popular operating system.



#### Ethernet: The Definitive Guide

Charles E. Spurgeon

The choice for networking administrators since the early 1980s, Ethernet is the core technology used by every high-tech business. This book includes everything administrators need to know to set up and maintain an Ethernet network.



#### Exim: The Mail Transfer Agent

Philip Hazel

Exim's features include sophisticated rules for routing mail to individual users or sets of users, information lookups in a variety of formats, spam filtering, virus or attachment checking, and mailing list management. This book, written by the developer of Exim. fleshes out its features with clear explanations and illuminating examples.



#### Internet Core Protocols: The Definitive Guide

Fric Hall

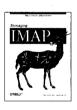
This book provides details on TCP, IP, and UDP. Many network problems can only be debugged by looking at all the bits traveling back and forth on the wire. This guide explains what those bits are and how to interpret them.



#### Linux Network Administrator's Guide, 2nd Edition

Olaf Kirch & Terry Dawson

One of the most successful books to come from the Linux Documentation Project, this guide covers all the essential networking software included with Linux.



#### Managing IMAP

Dianna Mullet & Kevin Mullet Managers and system administrators considering Internet Message Access Protocol (IMAP) for their messaging system will find this book a valuable tool for IMAP system provision, maintenance, and support.



#### **Managing Mailing Lists**

Alan Schwartz

This book covers four mailing list packages (Majordomo, LISTSERV, Listproc, and SmartList) and tells you what you need to know to set up and run a mailing list, from writing the charter to dealing with bounced messages.



## Managing Microsoft Exchange Server Paul Robichaux

Targeted at medium-sized installations and up, this book addresses the difficult problems facing users of the Microsoft Exchange Server.



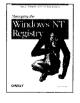
## Managing NFS and NIS, 2nd Edition Hal Stern

This is the only practical book devoted entirely to NFS (Network File System) and NIS (Network Information System), two tools that allow computers on a network to access each other's files transparently. These are fundamental technologies for Unix networking.



## Managing the Windows 2000 Registry Paul Robichaux

This edition is the system administrator's guide to maintaining, monitoring, and updating the Registry database for Windows 2000.



## Managing the Windows NT Registry Paul Robichaux

The Windows NT Registry is the repository for all hardware, software, and application configuration settings.



#### MCSF in a Nutshell: The Windows 2000 Exams

Michael Moncur & Paul Murphy

A comprehensive study guide, this book is all that MCSE (Microsoft Certified Systems Engineer) candidates in the Windows 2000 track need to pass the required five MCSE core exams and two elective exams



#### **Network Printing**

Matthew Gast & Todd Radermacher This book shows network administrators how to set up a network printing architecture that supports all kinds of clients using Linux machines as print servers.



#### Perl for System Administration

David N. Blank-Edelman

Aimed at all levels of administrators on the Unix, Windows NT, or Mac OS platforms, this book assumes only a little familiarity with Perl. It explores aspects of administration where Perl can be most useful.



#### Programming Internet Email

David Wood

More than a technology for messaging, Internet mail protocols are also a programming interface on top of which core applications are built. This book is a guide for programmers and power users trying to get under the hood of their own email systems.





#### Running Linux, 3rd Edition

Matt Welsh Matthias Kalle Dalheimer & Lar Kaufman

This book explains everything users need to understand, install, and start using the Linux operating system. Comes with an installation tutorial and system maintenance tips.



#### sendmail. 2nd Edition

Bryan Costales & Eric Allman

This hot-selling edition covers everything administrators need to know about sendmail. the dominant (and open source) Internet mail server for Linux and Unix-based networks



#### **System Performance Tuning**

Mike Loukides

Answers the fundamental question: How can I get my Unix-based computer to do more work without buying more hardware? Readers learn how to make better use of resources they already have.



#### TCP/IP Network Administration. 2nd Edition

Craig Hunt

This is the complete guide for Linux and Unix administrators for setting up and running TCP/IP, the de facto standard for transmitting data over networks.



#### termcap & terminfo

John Strang, Linda Mui & Tim O'Reilly This handbook provides information on writing and debugging terminal descriptions, as well as terminal initialization, for the two Unix terminal databases.



#### Unix Backup & Recovery

W. Curtis Preston

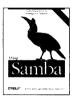
A complete overview of all facets of Unix backup and recovery, this guide offers practical, affordable solutions for environments of all sizes and budgets.



#### Using & Managing PPP

Andrew Sun

This book is for network administrators and others who have to set up computer systems to use PPP, which stands for "Point-to-Point Protocol," a method of connecting a computer to the Internet.



#### Using Samba

Robert Eckstein, David Collier-Brown & Peter Kelly

An open source application that's increasing in popularity, Samba turns a Unix or Linux system into a file and print server for Microsoft Windows network clients.



#### Virtual Private Networks, 2nd Edition

Charlie Scott, Paul Wolfe & Mike Erwin This book explains how to plan and build a Virtual Private Network (VPN), with costs. configuration, and ways to install and use VPN technologies that are available for Windows NT and Unix.



#### Windows 2000 Active Directory

Alistair G. Lowe-Norris

The most important change in Windows 2000 is the inclusion of Active Directory, a fully qualified directory service. Coming to grips with Active Directory may be an administrator's biggest headache. But, with this book, it doesn't have to be that way.



#### Windows 2000 Administration in a Nutshell

Mitch Tulloch

This handy book covers important day-today administrative tasks, and the tools for performing each one. It also helps administrators bridge the gap between the NT and Windows 2000 platforms.



#### Windows NT Desktop Reference

Æleen Frisch

A hip-pocket quick reference to Windows NT commands as well as the most useful commands from the Resource Kits.



#### Windows NT in a Nutshell

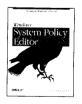
Eric Pearce

This book organizes NT's complex 4.0 GUI interface, dialog boxes, and multitude of DOS-shell commands into an easy-to-use quick reference for anyone who uses or manages an NT system. It addresses the single-system home user as well as the administrator of a 1,000-node corporate network



#### Windows NT TCP/IP Network Administration

Craig Hunt & Robert Bruce Thompson An indispensable guide to setting up and running a TCP/IP network on Windows NT that covers the fundamentals—the protocols, routing, and setup.



#### Windows System Policy Editor

Stacey Anderson-Redick

How can Windows administrators set up different security restrictions for different users? Or one policy for a whole group? This book is for those in charge of administering Windows workstations in a school, library, office, or any other environment where security is crucial.



## **Security**

Everyone is familiar with malicious viruses like the "Love Bug" or "Melissa," which can corrupt particular computer files or wipe a hard drive clean. And they've heard reports of people attempting to "hack" into computer systems at the Pentagon. But it's not until security is breached at a company like Microsoft that people start to wonder about their own vulnerability. For anyone with a web presence, or even a simple connection to the Internet, security should be a concern. That goes for companies, organizations, and individuals.

Most attacks are not random. Roughly 80% of security breaches at companies and organizations come from the inside, from disgruntled employees or temporary workers seeking to deface the company's image or steal proprietary information. And those attacks come from computers within an organization's network. What's a company to do? There are several complex, sophisticated, and expensive solutions available, and O'Reilly has many books that help programmers and administrators to address security issues.

#### **Detection and Response**

How do network administrators know when there has been an unauthorized entry into the network? How do they check to see if there's been any damage? Software tools that perform "intrusion detection" can mathematically trace patterns for irregularities, and several free and open source

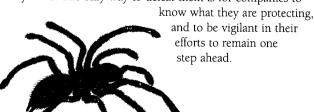
tools are available for detecting attacks. But the real safeguard is prevention with the use of policies, software tools, and careful monitoring of network activity.

#### Means of Protection

Beyond that, there are many programming techniques for protecting data and monitoring traffic within, to and from a network. Companies with a web presence usually install "firewalls," software that runs on a separate server to act as a buffer between the company network and the Internet. Basically, firewall software is a set of rules that allow certain traffic, and particular data, to pass while blocking everything else. Attacks can come in many different forms. One is called a "buffer overflow," when someone deliberately sends enough information to overwhelm the server and cause a crash. Another is the distributed denial of service (DDoS), in which the server cannot get access to the Internet

Inside the firewall, other security mechanisms are designed to protect sensitive areas of the network. Visitors may encounter an "authentication program" that will establish that they are who they claim to be by asking for a user name and password. This is vital with peer-to-peer connections in which companies share data with one another. The most common method for protecting the data itself is encryption, which scrambles or codes the information. This is how e-commerce sites attempt to guard credit card data.

No programs are foolproof, of course. Enterprising intruders continue in their attempts to bypass or outfox security systems. The only way to defeat them is for companies to



#### SECURITY ROOKS



#### Building Internet Firewalls, 2nd Edition

Flizabeth D. Zwicky, Simon Cooper & D. Brent Chapman

This highly respected and bestselling book is a practical and detailed guide that provides step-by-step explanations of how to design and install firewalls, covering a wide range of services and protocols for Unix, Linux, and Windows NT



#### **Computer Security Basics**

Deborah Russell & G.T. Gangemi, Sr. A broad introduction to many areas of computer security, this handbook describes complicated concepts like trusted systems, encryption, and mandatory access control in simple terms.



#### Java Cryptography

Jonathan Knudsen

This guide teaches you how to write secure programs using Java's cryptographic tools, and includes thorough discussions of the java.security package and the Java Cryptography Extensions (JCE).



#### Java Security, 2nd Edition

Scott Oaks

This essential book covers Java's security mechanisms and teaches you how to work with them. Class loaders, security managers, access lists, digital signatures, and authentication are all discussed



#### Malicious Mobile Code

Roger Grimes

Malicious Mobile Code arms Windows administrators and users with the strategies, tips, and tricks they need to secure their systems against destructive, self-replicating viruses or worms



#### **Oracle Security**

Marlene Theriault & William Heney This book covers Oracle security from simple to complex, with practical strategies such as developing auditing and backup plans. It also touches on advanced security features. such as encryption, Trusted Oracle, and Internet and web protection.



#### PGP: Pretty Good Privacy

Simson Garfinkel

PGP is a freely available encryption program that protects the privacy of files and electronic mail. This book is both a technical user's guide and a fascinating behind-thescenes look at cryptography and privacy.



#### Practical UNIX & Internet Security, 2nd Edition

Simson Garfinkel & Gene Spafford Covering Linux and many types of Unix systems, this book includes Unix and security basics, system administrator tasks, network security, and appendixes containing checklists and helpful summaries.



#### Securing Windows NT/2000 Servers for the Internet

Stefan Norberg

In recent years, Windows NT and 2000 systems have emerged as viable platforms for Internet servers, but securing Windows for Internet use is a complex task. This concise guide simplifies the task.



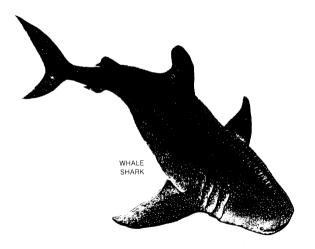
#### SSH. The Secure Shell: The Definitive Guide

Daniel I. Barrett & Richard Silverman SSH (Secure Shell) is a popular TCP/IPbased product for network security and privacy, supporting strong encryption and authentication. This book shows how to install, maintain, and troubleshoot SSH for Unix, Windows, and Macintosh®



#### Web Security & Commerce

Simson Garfinkel with Gene Spafford This guide helps users minimize the risks of the Web, covering browser vulnerabilities, privacy concerns, issues with Java, JavaScript, ActiveX® and plug-ins, digital certificates, cryptography, web server security, blocking software, censorship technology, and relevant civil and criminal issues.





## Web & Internet

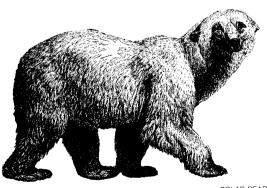
Large corporate web sites generally involve a team of people to handle a wide range of functions. Often, people involved in one aspect may not understand exactly what others on the team do, since the technologies for each are so diverse. Web authors and designers are concerned with the structure, usability, and visual impact of a web site. Web programmers can use a variety of programming languages to create and deliver dynamic, or interactive, documents. Web administrators ensure that the web server the program that generates web pages—is working properly to "serve" those pages as efficiently as possible. Each area offers a variety of challenges, and O'Reilly has many books that address the topics, technologies, and programs that are involved

## Web Authoring & Design

Web authoring and web design involve creating the basic content for a web site, whether with text, graphics, or more complex multimedia components. A web designer's immediate concern is the "look and feel" of a web site, a vital component for getting visitors to spend more time there. Authors must also structure information so people can find what they're looking for, and ensure that visitors can navigate easily from one page to another without getting lost.

Beyond that, the roles of web authors and designers can be quite different depending on the design parameters of a particular site: communicating messages effectively through the tasteful use of text, graphics, audio, and video is just the beginning. There are many other factors to consider. For instance, different web browsers (Microsoft® Internet Explorer, Netscape Navigator, and Opera) often display web site elements differently, and cell phones and PDAs (Personal Digital Assistants) have their own unique requirements. Many web users turn off graphics to improve speed, and that may affect how a web site communicates its message. Visually impaired users rely on text-based browsers (such as Lynx®) and other programs to change text to audio, and if the site has no text-linking system, it will be unusable to these people. Designing a site to accommodate all visitors is tricky, and web authors need to know their audience before proceeding.

The primary language of a web author is the HyperText Markup Language (HTML). There are several web authoring tools, such as Macromedia® Dreamweaver® and Microsoft® FrontPage®, which help web authors work with HTML through use of a WYSIWYG interface.



#### WEB AUTHORING & DESIGN ROOKS

#### THE WEB STUDIO SERIES



#### Designing Web Audio: RealAudio, MP3, Flash, and Beatnik

Josh Beggs & Dylan Thede

This is the most complete Internet audio guide on the market, loaded with informative real-world case studies and interviews with some of the world's leading audio and web producers.



#### Designing with JavaScript 2nd Edition

Nick Heinle & Bill Pena

This book focuses on the most useful and applicable scripts for making truly interactive, engaging web sites. It explains how programmers can alter scripts to get the effects they want, and how to write groundbreaking scripts from scratch.



#### Learning Web Design: A Beginner's Guide to HTML, Graphics, and Beyond

Jennifer Niederst

This book builds solid foundations in HTML, graphics, design principles, and web functionality that designers need for creating effective web pages.



#### Web Navigation: Designing the User Experience

Jennifer Fleming

The first in-depth look at designing web site navigation using design strategies, this book focuses on designing by purpose, with chapters on entertainment, shopping, identity, learning, information, and community sites.

#### COMPANION BOOK



#### Web Design in a Nutshell

Iennifer Niederst

This book provides quick access to the wide range of technologies and techniques from which web designers and authors must draw. It's the perfect companion to the Web Studio series

#### ANIMAL GUIDES



#### Cascading Style Sheets: The Definitive Guide

Eric A. Mever

Cascading Style Sheets (CSS) is the W3Capproved method for controlling visual presentation on web pages. This comprehensive guide to CSS is for both advanced and novice web authors.



#### CSS Pocket Reference

Eric A. Meyer

This companion reference to Cascading Style Sheets: The Definitive Guide introduces Cascading Style Sheets and lists all CSS1 properties, plus the CSS1 pseudo-elements and pseudo-classes. To help overcome the obstacle of browser incompatibility, we've included a comprehensive guide to how the browsers have implemented support for CSS1.



#### Information Architecture for the World Wide Web

Louis Rosenfeld & Peter Morville Learn how to merge aesthetics and mechanics to design web sites that "work." This book shows how to apply principles of architecture and library science to design cohesive web sites and intranets that are easy to use, manage, and expand.



#### HTML & XHTML: The Definitive Guide. 4th Edition

Chuck Musciano & Bill Kennedy

This complete guide is full of examples, sample code, and practical hands-on advice for creating truly effective web pages and mastering advanced features. The fourth edition covers XHTML 1.0, HTML 4.01, Netscape® 6.0, and Internet Explorer 5.0.



#### HTML Pocket Reference

Iennifer Niederst

This pocket reference delivers a concise guide to every HTML tag. It also contains detailed information on the tag's attributes. as well as browser support information.

## Web Programming

Web programmers deal with complex functions that web site viewers never see-the behind-the-scenes programs that make a site interactive or "dynamic." A good example of web programming is what occurs when you search for an item on a web site. Once you type in your query and submit, a program in the web server searches a database and sends back a result. When you fill in a form on a web site. a program might be required to update a database. It looks simple, and happens quickly, but programs sophisticated enough to handle queries and forms require a good deal of programming code. Complex programs used in "enterprise" web sites tie together several independent aspects of a company's operation, such as ordering, inventory, shipping, and billing. There are many programs that can do back-end

work, and many ways to use and modify each program.



JAVAN RHINOCEROUS

#### WER PROGRAMMING BOOKS



#### ASP in a Nutshell, 2nd Edition

A. Keyton Weissinger

This edition provides the high-quality reference documentation that web application developers really need to create effective Active Server Pages.



## CGI Programming with Perl, 2nd Edition

Scott Guelich, Shishir Gundavaram & Gunther Birznieks

The Common Gateway Interface (CGI) is one of the most powerful methods of providing dynamic content on the Web. CGI is a generic interface for calling external programs to crunch numbers, query databases, generate customized graphics, or perform any other server-side task.



#### **Designing Active Server Pages**

Scott Mitchell

Intended for intermediate to advanced Windows programmers, this book details how to create powerful, reusable ASP pages. It also covers various Microsoft and thirdparty components that can enhance the power and versatility of ASP.



#### Developing ASP Components, 2nd Edition

Shellev Powers

An Active Server Page (ASP) Component is a reusable segment of code that adds a particular function to a larger web application. To develop them, programmers must be able to perform many tasks, and master one or more language tools. This edition gives them a valuable road map for success.



#### Dynamic HTML: The Definitive Reference

Danny Goodman

This indispensable compendium for web content developers contains complete reference material for all of the HTML tags. CSS style attributes, browser document objects, and JavaScript objects.



### JavaScript: The Definitive Guide, 3rd Edition

David Flanagan

This book provides a thorough description of the core JavaScript language and its clientside framework, and contains an in-depth reference section



## JavaScript Pocket Reference

David Flanagan

A companion volume to JavaScript: The Definitive Guide, 3rd Edition, this handy reference guide provides a complete overview of the core JavaScript language.



## mod\_perl Pocket Reference

Andrew Ford

This concise, conveniently formatted reference covers functions as well as configuration directives that help maximize the effectiveness of mod\_perl, a module for the Apache software.





### Programming Web Services with XML-RPC

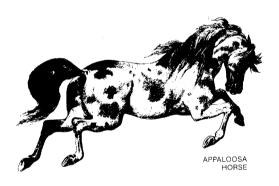
Simon St.Laurent, Joe Johnston & Fdd Dumbill

Accessing a web application directly from a remote script or a program running on any platform is the "next killer app." XML-RPC allows developers to open "web services" on the Internet, and this book puts developers firmly in control of the XML-RPC protocol.



## **Writing Apache Modules** with Perl and C

Lincoln Stein & Doug MacEachern This guide to web programming shows how to extend the capabilities of the Apache web server. It explains the design of Apache, mod\_perl, and the Apache API.



## Web Administration

The front-end design and the back-end programming are contained within the web server, the computer that is contacted when you access a web site. A server is a computer whose resources are shared by more than one person, and in the case of web servers, hundreds or thousands of people may access it at once. One web server might contain several web sites, if the sites are small, while a large enterprise web site might require several web servers to execute all the

functions. Web administration includes setting-up, maintaining, and "tuning" a web server. And the web administrator's job is to make sure that the information on a site is accessible and usable, that the site is always available, that its performance is good, that users can get the information they need, and that the site is able to collect the information it needs to serve those users. The job can be daunting, since the web site is the lifeblood of many companies.

The primary tool for managing these functions is web server software, and in that area, there is little competition. An open source product called Apache has more than 50% of the web serving market. Microsoft owns half of the commercial server market with its Internet Information Server® (IIS), but its 20% overall market share pales when compared to Apache.

#### WEB ADMINISTRATION BOOKS



#### Apache: The Definitive Guide, 2nd Edition

Ben Laurie & Peter Laurie Written by key members of the Apache group, this book is the only guide on the market that describes how to obtain, set up. and secure the Apache software on both Unix and Windows systems.



## Apache Pocket Reference

Andrew Ford

A companion volume to the book cited above, this handy guide provides a summary of command-line options, configuration directives, and modules, and covers Apache support utilities.



## Web Performance Tuning

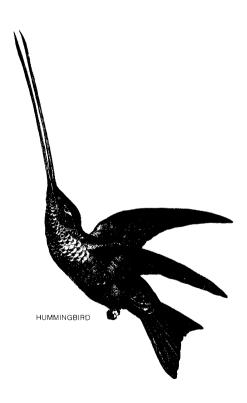
Patrick Killelea

For anyone who has waited too long for a web page to display or watched servers slow to a crawl, this book includes tips on tuning server software, operating system, network, and the web browser itself.



### Web Security & Commerce

Simson Garfinkel with Gene Spafford This guide helps users minimize the risks of the Web, covering browser vulnerabilities, privacy concerns, issues with Java, JavaScript, ActiveX, and plug-ins, digital certificates, cryptography, Web server security, blocking software, censorship technology, and relevant civil and criminal issues.





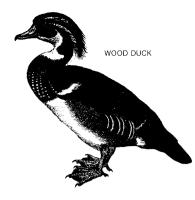
As we explained in the previous chapter, HTML has long been the core language for web authoring. But a relative newcomer called XML is about to change web communication dramatically. Short for "eXtensible Markup Language," XML is an exacting language that enables data to be transported over the Internet and between different software applications. Right now, electronic data is contained in many different applications written in different programming languages on different computer platforms. And none of them is able to interact with others. Even HTML is interpreted differently according to which browser you use, or which platform you're on.

## "World Peace" to Data

Because XML uses tags that any operating system can read, data delivered in an XML format can be sent from one device to another—or one application to another—and retain its structure. XML is really a "meta language" that defines rules for describing data and documents. With XML, people are able to specify a set of tags and the rules for their use, so that they can describe a specific type of data. Biologists who want to share genome data will develop one set of XML tags, while businesses that want to communicate about parts and supplies will develop another.

Some believe that XML will bring "world peace to data." You can send any message, document, or other data among Windows computers, Unix-based systems, Linux systems,

or even PalmPilots.™ XML is a license-free standard language created and maintained by a non-profit group known as W3C—the World Wide Web Consortium—that includes professionals from throughout the industry.



#### XML BOOKS



# **Building Oracle XML Applications**Steve Muench

This book gives Java and PL/SQL developers a rich and detailed look at the many tools Oracle provides to support XML development.



#### DocBook: The Definitive Guide

Norman Walsh & Leonard Muellner
DocBook is a Document Type Definition
(DTD) for use with XML that defines how to
mark up documents, especially technical documents. The DocBook DTD is the standard
adopted by several open source documentation efforts. This book contains both an introduction to XML and the DocBook DTD.



# HTML & XHTML: The Definitive Guide, 4th Edition

Chuck Musciano & Bill Kennedy
This complete guide is full of examples,
sample code, and practical hands-on advice
for creating truly effective web pages and
mastering advanced features. The fourth
edition covers XHTML 1.0, HTML 4.01,
Netscape 6.0, and Internet Explorer 5.0.



## Iava & XML, 2nd Edition

Brett McLaughlin

This book shows how to put these two revolutionary technologies together, building real-world applications in which both the code and the data are truly portable.



# Learning WML & WMLScript: Programming the Wireless Web

Martin Frost

The next generation of mobile communicators is here, and delivering content will mean programming in WML (Wireless Markup Language) and WMLScript. This book gets developers up to speed quickly on these technologies so they can format information applications for display by mobile devices.



#### Learning XML

Erik T. Ray

In this book, the author explains XML and its capabilities succinctly and professionally, with references to real-life projects and other cogent examples. It shows the purpose of XML markup itself.



#### XML in a Nutshell

Elliotte Rusty Harold & W. Scott Means
This is just what serious XML developers
need in order to take full advantage of XMIs
incredible potential: a comprehensive, easyto-access desktop reference to the fundamental rules that all XML documents and authors
must adhere to.



## XML Pocket Reference, 2nd Edition

Robert Eckstein

This is both a handy introduction to XML terminology and syntax, and a quick reference to XML instructions, attributes, entities, and datatypes. A perfect tutorial for learning the basics of XML.



# Scripting Languages

As the World Wide Web has grown in size, so has the use of scripting languages such as Perl, Python, and Tcl. Initially, these "lighter weight" programming languages were designed as "glue" to connect separate components in a large software application. And usually, the components were written in more "substantial" programming languages such as C. Today the use of scripting languages has evolved, and now they're used for a variety of purposes, such as managing web sites and databases. Some even advocate using them as full-fledged programming languages for applications outside of the Web.

What is the difference between a scripting language and a programming language such as C or Java? Scripting languages are "interpreted," meaning that the program's instructions can be executed immediately by running them through a program called an "interpreter." A language like C, on the other hand, has to be compiled, a laborious process that turns instructions into machine language the binary code of ones and zeros. Compiled programs ultimately run faster, but scripting languages are easier to use, and developers can write and test programs in onefourth the time. And the quick execution of a scripting language makes it perfect for the speed of the Web.

#### Perl

This is the darling of scripting languages. Written in 1987 by Larry Wall as a simple means to solve system administration problems on the Unix platform, Perl has found its way into complex web applications of multinational banks, the U.S. Federal Reserve, and hundreds of large corporations. Perl's "killer application" is its use in CGI scripts, the programs that allow web site visitors to access back-end functions via forms and database queries. But Perl has also evolved into a general purpose language for web site management and web page creation, and is an excellent tool for text manipulation and network programming.

Because Perl is as an open source solution (as are most scripting languages), programmers have supplied thousands of modules for Perl that perform many common functions, making it that much easier to write an application. Applications written in Perl can run on a variety of operating -systems, such as Unix, Linux, Windows, and Mac OS.

#### PERL BOOKS



#### Learning Perl, 3rd Edition

Randal I Schwartz & Tom Phoenix In this update of a bestseller, two leading Perl trainers teach programmers to use Perl Version 5.6. It has been rewritten from the ground up to reflect the needs of programmers learning Perl today.



## **Mastering Regular Expressions**

Jeffrey E. F. Friedl

Regular expressions are a powerful tool for manipulating text and data. The author leads you through the steps of crafting regular expressions that get the job done. He examines a variety of tools and uses them in an extensive array of examples.



# Perl 5 Pocket Reference, 3rd Edition

Iohan Vromans

Revised to cover Perl Version 5.6, this guick reference provides a complete overview of the Perl programming language in a convenient, carry-around booklet.



#### Perl Cookbook

Tom Christiansen & Nathan Torkington This is a comprehensive collection of problems, solutions, and practical examples for anyone programming in Perl. It contains hundreds of Perl "recipes" that have been reviewed and tested by the best minds in the Perl community.



#### Perl for System Administration

David N. Blank-Edelman

Aimed at all levels of administrators on the Unix, Windows NT, or Mac OS platforms. this book assumes only a little familiarity with Perl. It explores aspects of system administration where Perl can be most useful.



#### Perl in a Nutshell

Ellen Siever, Stephen Spainhour & Nathan Patwardhan

The perfect companion for working programmers, this book is a comprehensive reference guide to the world of Perl. It contains everything you need to know for all but the most obscure Perl questions.



#### Programming Perl, 3rd Edition

Larry Wall, Tom Christiansen & Jon Orwant This is not just a book about Perl; it is also a unique introduction to the language and its culture. This third edition has been expanded to cover Version 5.6 of Perl.



## Programming the Perl DBI

Alligator Descartes & Tim Bunce The primary interface for database programming in Perl is DBI. Coauthored by Alligator Descartes, one of the most active members of the DBI community, and by Tim Bunce, the inventor of DBI, this book explains the architecture of DBI and shows you how to write DBI-based programs.

# **Python**

Python, too, has become a general purpose open source language for many platforms, and users claim that it's less complex to learn than Perl, with code that's easy to read. Because it ships with all the major Linux distributions, Python has built quite a following among Linux users-with more than half a million copies—but it still has only one-tenth the users of Perl altogether. Python's object-oriented features make it compatible for use with the Java programming language, Windows, and XML. Created by Guido van Rossum, Python's ease of use makes it an ideal first programming language for fledgling programmmers.

#### **PYTHON BOOKS**



## Learning Python

Mark Lutz & David Ascher An introduction to the increasingly popular Python programming language, this book introduces the elements of Python and shows how to perform common programming tasks for real applications.



## Programming Python, 2nd Edition

Mark Lutz

Endorsed by Python creator Guido van Rossum, this book contains the most comprehensive user material available on Python and complements reference materials that accompany Version 2.0 of the software.



#### Python Pocket Reference

Mark Lutz

A companion volume to Programming Python and Learning Python, this small book summarizes prominent Python language features and complements Python's online reference material.



## Python Standard Library

Frederik Lundh

This book contains author-tested accurate documentation of all the modules in the Python Standard Library. Covering all the new modules and related information for Python 2.0, it also includes over 300 annotated example scripts.

## Tcl

Pronounced "tickle," Tcl (which stands for "Tool Command Language") shares many of the attributes of Perl and Python. An open source solution written by John Ousterhout, Tcl runs on many platforms and is used for a variety of applications. But, when coupled with its associated user interface toolkit, known as Tk. Tcl is better for creating graphical user interfaces (GUIs) similar to what you find in Windows. Tcl also has an interactive shell-another user interface—which allows developers to write applications without using an editor. So far, more than half a million users have chosen Tcl, including some in large enterprises that use it for mission-critical work.

#### TCL BOOKS



#### Tcl/Tk in a Nutshell

Paul Raines & Jeff Tranter

The Tcl language and Tk graphical toolkit are powerful building blocks for custom applications. This quick reference briefly describes every command and option in the core Tcl/Tk distribution.



#### Tcl/Tk Pocket Reference

Paul Raines

A companion volume to *Tcl/Tk* in a *Nutshell*, this handy reference guide provides easy access to just what you need and includes easy-to-understand summaries of *Tcl/Tk* language elements.



#### Tcl/Tk Tools

Mark Harrison

One of the greatest strengths of Tcl/Tk is the range of extensions written for it. This book clearly documents the most popular and robust extensions by the people who created them

## **JavaScript**

Despite the similarity in names, JavaScript™ is not a simplified version of Java. In fact, the two programming languages are not related. JavaScript was developed by Netscape, and Java was created by Sun Microsystems.

While most languages rely on the web server to execute web applications



("server-side" scripting), JavaScript is designed to have the web browser itself execute the program, a unique feature known as "client-side" scripting. The web server will send HTML files, with JavaScript embedded in them, to the browser on a user's computer. One common use for JavaScript is for "rollovers"—text or graphics that change when you move the mouse pointer over them. But there are many ways to design a dynamic web site with JavaScript that reacts to user interaction

JavaScript is considered a "safe" scripting language, in that it cannot access system controls or the user's hardware. Since JavaScript poses few risks—it can't print a document, modify browser settings or access a database, for instance—this language, along with Perl, are the two major scripting languages on the Web today.

#### JAVASCRIPT BOOKS



# JavaScript: The Definitive Guide, 3rd Edition

David Flanagan

This third edition of the definitive reference to JavaScript covers the latest version of the language, JavaScript 1.2, as supported by Netscape Navigator 4 and Internet Explorer 4.



## JavaScript Application Cookbook

Jerry Bradenbaugh

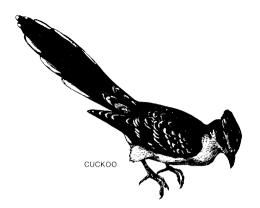
This book literally hands the webmaster a set of ready-to-go, client-side JavaScript applications with thorough documentation to help them understand and extend the applications.



## JavaScript Pocket Reference

David Flanagan

A companion volume to *JavaScript: The Definitive Guide*, 3rd Edition, this handy reference guide provides a complete overview of the core JavaScript language.



### **PHP**

Many web developers use this unique scripting language for processing forms and accessing databases in place of CGI scripts, because PHP's strength is its compatibility with many types of database programs. Like JavaScript, PHP is embedded within HTML files, but programs written in PHP are executed in the web server. Created by Rasmus Lerdorf, PHP is an open source solution that has boomed in the last two years. Many web designers see PHP as a simple way to build database-backed web sites.

#### PHP BOOK



#### PHP Pocket Reference

Rasmus Lerdorf

A handy quick reference for PHP, this small book acts both as a perfect tutorial for learning the basics of PHP syntax and as a reference to the vast array of functions provided by PHP.



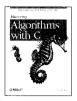
# C & C++

When it comes to general purpose programming languages, two of the most widely used are C and C++, the two oldest languages still in use. Both were considered important breakthroughs when they emerged (C in 1971, and C++ in 1983) and now they are taught in college to beginning programmers. Yet, professional developers still consider them both powerful and flexible enough for use in a variety of applications for the Web and computer desktops alike.

## C

C has the distinction of being the first "high-level" programming language. Until it appeared, an application written on one type of computer often couldn't run on another. C changed all that. The first major program written in C was the Unix operating system, and Unix broke barriers as the first "portable" operating system because it could be used on many different computers. It took a while before people started using C for other purposes, but developers found it useful for other systems, as well as single applications. Developers of embedded applications, especially, like C because it requires less memory than other languages. And it's relatively simple. A developer can hold the entire logical structure of C in his head without referring to a manual. As such, C is the model from which many other programming languages are derived.

#### C BOOKS



## Mastering Algorithms with C

Kyle Loudon

Intended for anyone with a basic understanding of the C language, this book offers robust solutions for everyday programming tasks.



# Practical C Programming, 3rd Edition Steve Qualline

This book teaches how to create C programs that are easy to read, maintain, and debug.

## C++

As innovative and flexible as it is, *C* has its limitations when it comes to managing memory, among other things. So, Bell Labs created an improved version called C++, which became the first "object-oriented" programming language. Basically, C++ has the ability to take segments of code and turn them into objects, a handy device for certain program functions that are intended to be used again and again. Instead of rewriting the same code over again, developers using C++ can simply move the appropriate object into place. Of course, as an improvement to *C*, C++ is far more complex and the learning curve is steeper. Still, C++ is extremely popular, especially for graphical applications that run on the Windows and Macintosh platforms.

#### C & C++ BOOKS



#### C++: The Core Language

Gregory Satir & Doug Brown
For C programmers transitioning to C++, this book thoroughly explains the important concepts and features and gives brief overviews of the rest of the language.



#### Learning DCOM

Thuan L. Thai

This book introduces C++ programmers to DCOM (Distributed Components Object Model) and gives them the basic tools they need to create distributed components.



## Practical C++ Programming

Steve Oualline

A complete introduction to the C++ language, this book emphasizes a practical, real-world approach, including how to debug, how to make your code understandable to others, and how to understand other people's code.



# Programming Embedded Systems in C and C++

Michael Barr

This book introduces embedded systems to C and C++ programmers. Topics include testing, memory devices, driver design and implementation, and making the most of C++ without a performance penalty.





# Java

When Sun Microsystems introduced Java in 1995, it was a revolution for the programming world. Java was the first programming language that was "platform-independent." That was significantly different from portability. Developers could use a language such as C on different computers running different operating systems. But once a developer wrote an application, say, for the Linux environment, the application couldn't run on Windows, and vice versa. The developer had to write a different version of the application for each operating environment. Until Java came along.

# Java Applications and Applets

Sun achieved platform independence with a device called the Java Virtual Machine™ (JVM). Once a developer writes an application in Java, that application can be run on any machine that supports a JVM. And since there are JVMs for all the popular operating systems, there is no need to change the code to fit different environments. The application can run virtually anywhere. Java is an object-oriented language, like C++, but Java has been simplified in some ways, to make it less complicated to write programs.

With Java, a programmer can create a standalone application, such as a spreadsheet or a graphics program, as they would with C or C++. But because a JVM can be embedded in another application, like a web browser, Java can also be used to write mini-applications, called applets, which run within a larger application. When Java was first introduced, applets that ran within a web browser were all the rage,

since they allowed web developers to do things within web pages that were otherwise impossible. While you still see Java applets on some web sites today, Java's real niche is for something entirely different—enterprise computing.

#### JAVA APPLICATIONS AND APPLETS



## Creating Effective JavaHelp

Kevin Lewis

JavaHelp is an online help system developed in the Java programming language. This book shows how to create a basic JavaHelp system, prepare help topics, and deploy the help system in an application.



## Java 2D Graphics

Ionathan Knudsen

This book describes the 2D API from top to bottom, and shows how to create and manipulate the three types of graphics objects: shapes, text, and images.



## Java Cryptography

Jonathan Knudsen

This guide teaches you how to write secure programs using Java's cryptographic tools, and includes thorough discussions of the java.security package and the Java Cryptography Extensions (JCE).



# Java Examples in a Nutshell, 2nd Edition David Flanagan

Full of real-world example programs that serve as great learning tools, this edition contains 164 complete, practical programs: over 17,900 lines of densely commented, professionally written Java code.





## Java Foundation Classes in a Nutshell

David Flanagan

This book provides an in-depth overview of the important pieces of the Java Foundation Classes, such as the Swing components and Java 2D.



#### lava I/O

Elliotte Rusty Harold

All of Java's Input/Output (I/O) facilities are based on streams, which provide simple ways to read and write data of different types. This book has in-depth information about the four main categories of streams and uncovers less-known features to help make your I/O operations more efficient.



#### Java in a Nutshell, 3rd Edition

David Flanagan

The third edition of this bestselling book covers Java 1.2 and 1.3. It contains an advanced introduction to Java and its key APIs and provides quick reference material.



#### Java Internationalization

Andy Deitsch & David Czarnecki
This book shows how to write software
that is truly multi-lingual, using Java's very
sophisticated Unicode internationalization
facilities.



#### Java Performance Tuning

Jack Shirazi

This book contains step-by-step instructions on all aspects of the performance tuning process, right from such early considerations as setting goals, measuring performance, and choosing a compiler.



#### Java Security, 2nd Edition

Scott Oaks

This essential book covers Java's security mechanisms and teaches you how to work with them. Class loaders, security managers, access lists, digital signatures, and authentication are all discussed.



#### **Java Swing**

Robert Eckstein, Marc Loy & Dave Wood The Swing classes eliminate Java's biggest weakness: its relatively primitive user interface toolkit. This book allows users to take full advantage of the Swing classes, providing detailed descriptions of every class and interface in the key Swing packages.



#### Iava Threads, 2nd Edition

Scott Oaks & Henry Wong

This edition shows you how to take full advantage of Java's thread facilities: where to use threads to increase efficiency, how to use them effectively, and how to avoid common mistakes.



## Jini in a Nutshell

Scott Oaks & Henry Wong

This is a quick reference guide to Jini, a simple set of Java classes and services that allows devices (e.g., printers) and services (e.g., printing) to seamlessly interact with each other.



## Learning Java

Pat Niemeyer & Jonathan Knudsen For programmers either just migrating to Java or already working steadily in the forefront of Java development, this book gives a clear, systematic overview of the Java™ 2 Standard Edition.

# **Enterprise Computing**

Java has proven to be very well-suited for the complicated back-end functions required in "enterprise computing." Enterprise applications are those that enable different systems in a corporate (or enterprise) environment to communicate with one another. A complex e-commerce site, for example, has to coordinate instantly with the ordering department, customer service, the inventory system, shipping department, and billing system, all of which keep separate records on independent computer networks. Coordinating all of these disparate systems is also referred to as "distributed computing."

Sun has long been an advocate of network computing, especially when it comes to connecting with complex databases. For years, the company has led the field in building computer workstations for Unix servers; in fact, Sun Solaris™ is the world's most popular Unix platform. When Java arrived, the language completed Sun's circle of proprietary solutions for enterprise computing. One of the company's most popular platforms is J2EE™—Java™ 2 Platform, Enterprise Edition—that helps users simplify the process of developing specific applications for their enterprise by creating standardized, reusable software modules.

Lately, developers have found ways to combine Java with XML to facilitate communications between companies. Web-based commerce is big and growing bigger by the day. Perhaps that's the basis for Sun's assertion that nearly one million developers are writing Java applications.

#### **ENTERPRISE COMPUTING BOOKS**



# Database Programming with JDBC and Java, 2nd Edition

George Reese

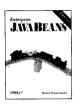
This book describes the standard Java interfaces that make portable object-oriented access to relational databases possible, and offers a robust model for writing applications that are easy to maintain.



#### **Developing Java Beans**

Robert Englander

This book describes how to write Beans, which are software components that can be used in visual programming environments.



## Enterprise JavaBeans, 2nd Edition

Richard Monson-Haefel

This edition shows enterprise software developers how to develop enterprise Beans to model business objects and processes.



#### Iava & XML, 2nd Edition

Brett McLaughlin

This book shows how to put two revolutionary technologies together; building realworld applications in which both the code and the data are truly portable. Significantly updated from the original edition.



### Java Distributed Computing

Jim Farley

A general introduction to distributed computing, meaning programs that run on two or more systems, this book focuses on how to structure and write distributed applications.



## Java Enterprise in a Nutshell

David Flanagan, Jim Farley, William Crawford & Kris Magnusson

The Java Enterprise APIs are essential building blocks for creating enterprise-wide distributed applications in Java. This book is a fast-paced tutorial and compact reference on Java's API technologies.



#### Java Message Service

Richard Monson-Haefel & David Chappell This book is a thorough introduction to Java Message Service (JMS) from Sun Microsystems, and shows how to build applications using the point-to-point and publish-and-subscribe models.



# Java Network Programming, 2nd Edition Elliotte Rusty Harold

This edition is a complete introduction to developing network programs (both applets and applications) using Java, covering everything from networking fundamentals to remote method invocation (RMI).



## Java Servlet Programming, 2nd Edition

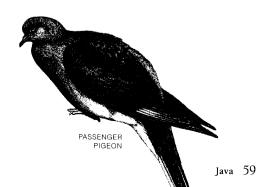
Jason Hunter with William Crawford
Java servlets offer a fast, powerful, portable
replacement for CGI scripts. This book
covers everything for writing effective
servlets. Covers the latest software
specifications.



#### JavaServer Pages

Hans Bergsten

This book illustrates how JSP capitalizes on the power of Java servlets to create effective, reusable web applications, whether you're a programmer or a web author.





# Microsoft Technologies

Microsoft has enjoyed a pretty enviable position in recent vears. The Windows operating systems—95, 98, and Me dominate 90% of the PC market, while Windows NT/2000 is the most popular system for corporate networks. With so many desktops running Windows, software developers were eager to jump on the bandwagon, and Microsoft's Visual Basic became the most widely used programming language in the world.

Of course, some experts predicted that the increasing popularity of the Web, and emerging technologies such as instant messaging, would leave Microsoft behind and their dominance would end. Yet, recently the company announced a new computing strategy called ".NET" (pronounced dotnet) that may actually put Microsoft on the leading edge of these new technologies. If so, the software giant will retain its stature, and more developers will be looking to climb aboard

## Visual Basic

When Windows first came out, developers used C++ to write an array of new business and consumer applications. But as powerful and flexible as C++ is, programmers found hand-coding the graphical user interface (GUI) for a Windows application to be very difficult. Microsoft's Visual Basic solved this problem with an easy-to-use graphical tool. It's not the best programming language by any means, Visual Basic lacks the object-oriented environment of C++,

but it's easier to use and more compatible with Windows than anything else. Estimates say that roughly half of the world's developers currently write applications in Visual Basic

#### **VISUAL BASIC BOOKS**



## Access Database Design & Programming, 2nd Edition

Steven Roman

This bestselling book covers the new Access™ VBA Integrated Development Environment used by Word, Excel® and PowerPoint® the VBA language itself, and Microsoft's latest data access technology, Active Data Objects (ADO).



#### CDO & MAPI Programming with Visual Basic

Dave Grundgeiger

This book dives deep into Microsoft's Collaboration Data Objects (CDO) and the Messaging Application Programming Interface (MAPI), then moves into useful messaging applications that can be written in Visual Basic



### MCSD in a Nutshell The Visual Basic Exams

Iames Foxall, MCSD

Programmers tend to be specialists, doing the same kind of programming over and over, yet the MCSD exam is targeted at technical generalists. This is the perfect study guide to help developers master technologies less familiar to them



#### VB & VBA in a Nutshell: The Language Paul Lomax

For Visual Basic and VBA programmers, this book boils the essentials of the languages into a single volume, including undocumented and little-documented areas essential to everyday programming.



#### VBScript in a Nutshell

Paul Lomax, Matt Childs & Ron Petrusha Whether programmers are using VBScript to create client-side scripts, ASP applications, WSH scripts, or programmable Outlook® forms, this complete reference is the book they'll need.



## VBScript Pocket Reference

Paul Lomax, Matt Childs & Ron Petrusha Based on the bestselling VBScript in a Nutshell, this small book details every VBScript language element—every statement. function, and object-both in VBScript itself and in the Microsoft Scripting Runtime Library.



#### Visual Basic Controls in a Nutshell

Evan S. Dictor

To create professional applications, developers need extensive knowledge of Visual Basic controls and their numerous properties, methods, and events. This quick reference documents the steps involved in using each major VB control.



# Visual Basic Shell Programming

I. P. Hamilton

This book ventures where none have gone before by showing how to develop shell extensions that more closely integrate an application with the Windows shell.



#### Win32 API Programming with Visual Basic

Steven Roman

The missing documentation for VB programmers who want to harness the power of accessing the Win32 API within Visual Basic is provided in this book.



## Writing Excel Macros

Steven Roman

A solid introduction to writing VBA macros and programs in Excel, this book shows how to get more power out of Excel at the programming level.



## Writing Word Macros

Steven Roman

This no-nonsense book delves into VBA programming and tells programmers how to use VBA to automate all the tedious, repetitive jobs they never thought they could do in Microsoft Word.

## .NET and Web Services

Microsoft's rationale for its new .NET strategy is a growing belief that "web services" will be the applications of the future. People will be able to find and use programs via the Internet to augment tasks that they need to perform, without having to buy or even learn new software. Let's say a company manager emails a message to customers in Russia. The company's mail server, recognizing the Russian address. routes the message to an application owned by another company on a separate server—that translates the message into Russian and then sends it on its way. By arrangement, the first company simply connects to the network server containing the translation software. There is no exchange of software, and no need for direct interaction with the user. Just a service rendered, program to program. CRANE

Microsoft Technologies

63

For developers, the move from current programming technologies to .NET will be as significant as the move from DOS to Windows. With .NET, Microsoft's goal is to transcend the limitations of individual computers, networks, and devices, and to provide a platform and software tools so developers can build a new class of Internet applications. To accomplish that, Microsoft is making extensive use of XML. "SOAP." and other new protocols (agreed-upon formats for transmitting data between devices) that will allow applications on different platforms to communicate with each other.

XML allows data to be transported intact from one platform to another (see Chapter 7: "XML"). And SOAP-or "Simple Object Access Protocol"—is a new standard that enables programs to request services from one another, regardless of the language they are written in or the operating system they are running on. SOAP makes use of both XML and the HTTP Internet protocol to do its work. The fact that Microsoft has embraced open standards like XML and SOAP means the company is finally learning to play fair with others by adding an element of openness to their platform. All of Microsoft's new .NET systems will be XMLand SOAP-enabled, and the company's new development tools will have XML embedded in them

#### NET AND WEB SERVICES BOOKS



## NFT Framework Essentials

Thuan Thai & Hoang Lam

A concise introduction to the .NET platform and frameworks, including .NET languages, Common Language Runtime (CLR), ASP .NET. Windows Forms, ADO .NET, and base class libraries.



#### C# Essentials

Ben Albahari, Peter Drayton & Brad Merrill A quick introduction to the C# language and NET Framework, this book provides a C# language reference and details that experienced programmers need to evaluate or begin implementing this exciting new language.



## Programming C#

Jesse Liberty

C# is Microsoft's new language for programming web services on the .NET platform. This book, by bestselling author Jesse Liberty, is the authoritative guide to programming in this new language.

# Windows Applications

Though the majority of users simply breeze through Windows without a second thought, power users delve into various nuances of the operating system and the applications it supports. O'Reilly manuals supply tips and tricks, not found in any Windows documentation, that address certain system "annoyances," enabling users to tinker with Windows 98, Windows Me (the Millennium Edition), and Windows 2000 so these systems will run faster than normal.

#### WINDOWS APPLICATIONS BOOKS



#### Excel 2000 in a Nutshell

Jinjer Simon

A one-stop reference to every one of Excel's menu options and functions, for both professional and power users of Excel 2000.



## Optimizing Windows for Games, Graphics & Multimedia

David L. Farquhar

Every Windows user has spent many frustrating hours trying to figure out ways to optimize system performance. This book has tips and tricks not found in any Windows documentation.



## Outlook 2000 in a Nutshell

Tom Syroid & Bo Leuf

This fills the need for an up-to-date and comprehensive reference book for sophisticated users who want to get all they can out of this powerful and versatile program.



## Windows 2000 Pro: The Missing Manual

Sharon Crawford

Bestselling Windows NT author Sharon Crawford provides the friendly, authoritative book that should have been in the box.



#### Windows 2000 Quick Fixes

Iim Boyce

This guide troubleshoots both the Windows 2000 Professional and the Windows 2000 Server editions, taking power users through installation, complex networking configuration problems, and important backup and security concerns.



### Windows 98 Annoyances

David A. Karp

Based on the popular Windows Annoyances web site, this book provides an authoritative collection of techniques for customizing Windows 98.



## Windows Me: The Missing Manual

David Pogue

This is a friendly, authoritative book that should have been in the box. It's the ideal user's guide for the world's most popular operating system.



#### Windows Me Annoyances

David Karp

The latest in this series of Windows Annoyances titles, based again on David Karp's popular Windows Annoyances web site. This volume covers the new Windows Millennium Edition (Me).



## Word 2000 in a Nutshell

Walter Glenn

This book is a clear, concise, and complete reference to the most popular word-processing program in the world.



# Datahases

Before the advent of the Web. databases were considered, well, boring. Stodgy. The computer equivalent of rows and rows of filing cabinets stuffed with names and numbers. The stuff of big insurance companies. Now with the emphasis on e-commerce, databases are not only vital, they're trendy, even sexy. Entire web applications are written on top of them. People who want a successful e-business choose a database before anything else.

### Oracle Fundamentals

When you talk about databases, you have to talk about Oracle Corporation. The first company to successfully market a commercial database product, Oracle's customers today include 98 of the Fortune 100 companies, with sales that are double its nearest competitor, IBM. Since the company released its first product in 1979, Oracle has doubled in size every ten years, primarily by helping big companies manage all that static back-office data. In recent years, though, the company has shifted into higher gear, providing dynamic e-commerce database products for big and small businesses alike. That's possible because Oracle's database source code runs on more than 70 computer platforms, from mainframes to PC networks and handheld PDAs.

What drives Oracle—and anyone else marketing database products—is SQL (Structured Query Language), the language of all relational databases. With relational databases, data is stored in several related tables, rather than one self-contained record. Files in a relational database can be viewed, used, or combined in many different ways, because few assumptions are required about how data can be related, and one database can be stored on several different computers. Today SQL is the database standard in widest use. Several companies, including Microsoft, have SQL products on the market. But Oracle remains the clear leader of this technology.

#### ORACLE FUNDAMENTALS BOOKS



### Oracle Design

Dave Ensor & Ian Stevenson

This book looks thoroughly at the field of Oracle relational database design, an often neglected area of Oracle, but one that has an enormous impact on the ultimate power and performance of a system.



### Oracle Essentials: Oracle9i, Oracle8i & Oracle8, 2nd Edition

Rick Greenwald, Robert Stackowiak & Jonathan Stern

This concise guide explains what's important about Oracle8 (the "object-relational database") and Oracle8i (the "Internet database").



# Oracle SQL: The Essential Reference David Kreines

Everything Oracle developers and DBAs (database administrators) need to know about standard SQL (Structured Query Language) and Oracle's extensions to it is in this single, concise reference volume.



# Oracle SQL\*Plus: The Definitive Guide Ionathan Gennick

This book is the definitive guide to SQL\*Plus, Oracle's interactive query tool. Despite the wide availability and usage of SQL\*Plus, few developers and DBAs know how powerful it really is.



# Oracle SQL\*Plus Pocket Reference

Jonathan Gennick

This quick reference is an excellent, portable resource for every Oracle administrator and developer. It summarizes the syntax of SQL\*Plus, Oracle's ubiquitous interactive query tool.



### Oracle 8 Design Tips

Dave Ensor & Jan Stevenson

Oracle8 offers some dramatically different features from previous versions, including better scalability, reliability, and security. This small book tells Oracle designers and developers what they need to know to use the Oracle8 features to best advantage.



### Oracle8i Internal Services for Waits, Latches, Locks, and Memory

Steve Adams

Based on Oracle8i, release 8.1, this concise book contains detailed, hard-to-find information about Oracle internals (data structures, algorithms, hidden parameters, and undocumented system statistics).



### SQL In A Nutshell

Kevin Kline with Daniel Kline
A practical and useful command reference to
the latest release of the Structured Query
Language (SQL99), this book is for experienced SQL programmers, analysts, and database administrators

### Oracle PL/SQL

O'Reilly's clientele, of course, is interested in ways to write programs or web applications that interact with—and take advantage of—Oracle databases. SQL is ideal for data access and manipulation, and a decade ago, many companies relied on single database queries and updates as their sole computing function. Now, however, companies need to tie databases to other aspects of the business, and

this requires use of a "procedural" language. With Oracle's PL/SQL, developers can write programs with embedded SOL statements to retrieve or update data so that companies can perform complete business transactions. PL/SQL is popu-

lar with developers who build Oracle-based applications to sell commercially, and with companies that want to custom-develop applications unique to their business.

### **ORACLE PL/SQL BOOKS**



### Advanced Oracle PL/SQL Programming with Packages

Steven Feuerstein

This book explains the best way to construct packages, a powerful part of Oracle's PL/SQL procedural language that can dramatically improve your programming productivity and code quality.



### Oracle Built-in Packages

Steven Feuerstein, Charles Dye & John Beresniewicz

Oracle's built-in packages dramatically extend the power of the PL/SOL language, but few developers know how to use them effectively. This book is a complete reference to all of the built-ins, including those new to Oracle8.



### Oracle PL/SQL Best Practices

Steve Feuerstein

This book, intended as a companion to O'Reilly's larger Oracle books, pulls together all kinds of best practices, hints for code style consistency, and coding approaches to guarantee the best possible performance for PL/SQL programs.



### Oracle PL/SQL Built-ins Pocket Reference

Steven Feuerstein, John Beresniewicz & Chip Dawes

This companion quick reference to Oracle PL/SQL Programming and Oracle Built-in Packages will help you use Oracle's extensive set of built-in functions and packages, including those new to Oracle8



### Oracle PL/SQL Developer's Workbook

Steven Feuerstein with Andrew Odewahn This workbook presents a carefully constructed set of problems and solutions that will test a developer's language skills and help them improve.



#### Oracle PL/SQL Language Pocket Reference

Steven Feuerstein, Bill Pribyl & Chip Dawes This pocket reference boils down the most vital information from Oracle PL/SQL Programming into an accessible quick reference that summarizes the basics of PL/SQL.



### Oracle PL/SQL Programming, 2nd Edition

Steven Feuerstein with Bill Pribyl The first edition became indispensable for PL/SQL developers. The second edition focuses on Oracle8, covering Oracle8 object types, object views, collections, and external procedures.



#### Oracle PL/SQL Programming Guide to Oracle8i Features

Steven Feuerstein

This concise and engaging guide gives programmers a jump start on the new PL/SQL features of Oracle8i (Oracle's "Internet database").

### Oracle & the Web

With the release of Versions 8 and 8i in the late '90s. Oracle made a radical departure from its stodgy past. No longer a self-contained system, the Oracle database now communicates with other technologies to run powerful new e-commerce applications. Oracle8 was first with its support of object-oriented programming, so users could create and store objects in the database. But the real promise arrived with Oracle8i, the "Internet database." which includes the Java Virtual Machine and much improved support for the Web. With Oracle's JDeveloper™ tool, users can develop basic Java applications without writing code. The WebDB™ tool allows developers to use HTML, and Oracle has XML-enabled its entire Internet platform to take advantage of XML's enormous potential for e-commerce data exchange.

GARDEN SPIDER

#### ORACLE & THE WEB BOOKS



### **Building Oracle XML Applications**

Steve Muench

This book gives Java and PL/SQL developers a rich and detailed look at the many tools Oracle provides to support XML development.



### Oracle & Open Source

Andy Duncan & Sean Hull This book describes nearly 100 open source tools, from the widely applied (Linux and Perl), to the Oracle-specific (Orasoft and Orac). Readers learn where to get them and how to create new open source Oracle tools.



### **Oracle Web Applications**

Andrew Odewahn

This is an easy-to-understand guide to building Oracle8i web applications using a variety of tools---PL/SQL, HTML, XML, WebDB, and Oracle® Application Server (OAS).

### Oracle Networking & Administration

Why are Oracle databases at the heart of the world's busiest e-commerce sites-Amazon, eBay, eTrade, and Yahoo among them? Performance, certainly, but also because of the advanced networking capabilities. A decade ago, companies had control over database access. Now. thousands of unknown users can access a single web-based database every day. These databases must constantly keep track of customers, inventories, billing, and shipping, as well as run automated tasks such as product searches. helpdesks, and customer inquiries. Issues such as data availability, "scalability"—its ability to grow with a site's needs—and security are paramount. The Oracle Internet Application Server was designed to take the pain out of web administration, with technologies such as parallel processing (using more than one computer at once to run a database) and distributed databases (spread over more than one computer).

#### **ORACLE NETWORKING & ADMINISTRATION BOOKS**



### Oracle Database Administration: The Essential Reference

David Kreines & Brian Laskey

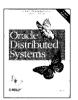
This book provides a concise reference to the enormous store of information Oracle8 or Oracle7 DBAs need every day. It covers DBA tasks (installation, tuning, backups, networking, auditing, query optimization) and provides quick references on a variety of topics.



#### Oracle DBA Checklists Pocket Reference

By the staff of RevealNet

This concise reference summarizes the enormous number of tasks an Oracle database administrator must perform into a series of easy-to-use checklists.



### Oracle Distributed Systems

Charles Dve

This book describes how you can use multiple databases and both Oracle8 and Oracle7 distributed system features to best advantage.



### Oracle Net8: Configuration and Troubleshooting

Hugo Toledo & Jonathan Gennick Describes everything DBAs need to know to install, configure, tune, and troubleshoot Net8, Oracle's networking technology.



### Oracle Parallel Processing

Tushar Mahapatra & Sanjay Mishra These days, databases often grow to enormous sizes, straining the ability of singleprocessor or single computer systems to handle the load. This is the first book to describe the full range of parallel processing capabilities in the Oracle environment.



### Oracle Performance Tuning, 2nd Edition

Mark Gurry & Peter Corrigan

The first edition of this book became a classic for developers and DBAs. This edition offers 400 pages of updated material on Oracle features



### **Oracle Scripts**

Brian Lomasky & David C. Kreines A powerful toolset for Oracle DBAs and developers, these scripts will simplify everyday tasks-monitoring databases, protecting against data loss, improving security and performance, and helping to diagnose problems and repair databases in emergencies.



#### Oracle Security

Marlene Theriault & William Heney This book covers Oracle security from simple to complex, with practical strategies such as developing auditing and backup plans. It also touches on advanced security features. such as encryption, Trusted Oracle, and Internet and web protection.



#### Oracle SQL\*Loader: The Definitive Guide

Jonathan Gennick & Sanjay Mishra Despite the wide availability and use of SQL\*Loader, few Oracle DBAs and developers know how powerful it really is. This book describes all of SQL\*Loader's functions, including how to construct the necessary control files, load different types of data, and get the best performance.



### Unix for Oracle DBAs Pocket Reference Donald K. Burleson

This book is a perfect fit for the pockets of DBAs who need to have the specialized Unix database commands at their fingertips.

### SOL Server and MySQL

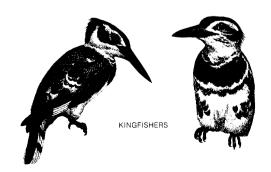
Despite its eminence, Oracle isn't quite the last word on databases. Microsoft's SQL Server is also in wide use, and Transact-SOL is SOL Server's procedural language of choice. An open source solution—MySQL—has become very popular in recent years, and works very well with both Linux and Unix-based systems. MySQL is reputed by some to be "the fastest database in the world," and the program satisfies the needs of many high-profile users, including the U.S. Census Bureau. Perl, Python, and PHP interact seamlessly with these databases, and the quick execution of these open source solutions make MySQL perfect for web applications.

#### SOL SERVER AND MYSQL BOOK



### MySQL & mSQL

Randy Jay Yarger, George Reese & Tim King This book teaches DBAs how to use MySOL and mSQL, two popular and robust database products that support key subsets of SQL on both Linux and Unix systems.





### Macintosh

Although Windows clearly rules most PC desktops, Apple Computer's colorful Macintosh has enjoyed a loyal and fervent following for many years, especially among graphic designers, artists, musicians, and others in creative fields. Not only were many applications first developed for Mac, but the operating system itself, known as the Mac OSwith its easy-to-use drag-and-drop interface—has been touted by users as a superior product. Yet, the Mac OS through Version 9 is based on code written more than 20 years ago, and many patches and extensions have been required to keep it up to date. Now Apple is including open source technologies as a centerpiece for a new Mac OS version that is bound to cause ripples throughout the computer industry.

### Developing for the Mac

In March 2001, Apple released its long-overdue (and much anticipated) new version of the Mac OS, dubbed "OS X." For the first time, Apple software will reflect the same virtues as its hardware: Sexy on the outside, gutsy deep inside. Based on BSD, an open source version of Unix, the Mac OS X includes such developer-friendly features as true multithreading, protected memory, and dual processor capability. OS X also supports Java and many open source technologies such as GNU Emacs, an editing tool for programmers, and the MySQL database. During the coming months, you will see many results of open source ingenuity applied to Macintosh technology. Forget about wimpy

add-ons such as the "personal web server" that comes with earlier versions of Mac OS; OS X now ships with a built-in Apache server.

Mac OS X is serious software that works with many cuttingedge tools web developers use today, and programmers who have relied on other platforms are starting to take notice. There is a distinct "O'Reilly advantage" to this new development: Because we're already plugged into both open source and Java technologies, O'Reilly has teamed up with Apple Computer to produce "official" technical publications that complement the documentation. We will provide Apple developers with the most comprehensive, current, and reliable texts on OS X available

#### MACINTOSH DEVELOPMENT BOOKS



### AppleScript in a Nutshell

Bruce W. Perry

This book puts the power of the popular. user-friendly AppleScript programming language right in your customers' hands. And there should be plenty of customers, since AppleScript comes with every new or recent Macintosh



### Crossing Platforms: A Macintosh/ Windows Phrasebook

Adam Engst & David Pogue

Mac users working in Windows or Windows users working on a Mac often find themselves in unfamiliar territory. This guide offers users a handy way of translating skills and knowledge from one platform





### Learning Carbon

Carbon.™ the other new API for Mac OS X application developers, is the subject of this detailed volume. It shows how to put together a Carbon program that executes tasks commonly found in an application, such as handling windows, printing, opening and saving files.



### Learning Cocoa

An evolved API (Application Programmer Interface), Cocoa® is one of two interfaces that Mac programmers use to write applications for Mac OS X. This book teaches readers about Cocoa application development not merely by reading, but by doing.



#### Mac OS in a Nutshell

Rita Lewis with Bill Fishman Designed for serious Mac OS users, this book is a comprehensive, compact reference to Mac OS 9 that systematically unveils littleknown details of the operating system in a consistent reference format.



### REALbasic: The Definitive Guide, 2nd Edition

Matt Neuburg

REALbasic® allows users to design astonishingly fast, full-fledged applications. Simply put, it is like having Visual Basic on the Mac. This book documents essential concepts and takes the reader from no knowledge of programming to the ability to program every aspect of REALbasic.

### **Macintosh Applications**

In January 2000, David Pogue, award-winning author and New York Times columnist, teamed up with O'Reilly & Associates to launch a new series of books known as "Missing Manuals." Among the subjects Pogue addresses are Macintosh software and hardware, along with popular consumer software from companies such as Macromedia. These manuals have been specifically written for products that don't come with adequate documentation, or, as David Pogue puts it, these are the books "that should have been in the box "

#### MACINTOSH APPLICATIONS BOOKS



### AppleWorks 6: The Missing Manual

Iim Elferdink & David Reynolds

This book guides readers through the basics and hidden talents of AppleWorks, placing special emphasis on Version 6's enhanced word processing, Internet, and presentation features



### Dreamweaver 4: The Missing Manual

Dave McFarland

The ideal companion to this complex WYSIWYG software from Macromedia. this book begins with an anatomical tour of a web page, then walks users through the process of creating and designing a complex web site.



### iMovie:™The Missing Manual

David Pogue

This book takes you through every step of iMovie, the free Macintosh digital-video editing software, which has everything users need to produce pro-quality video from digital camcorders.



### iMovie2: The Missing Manual

David Pogue

From choosing and using a digital camcorder to burning the finished work onto CDs, this edition helps iMovie2™ users realize the software's potential.



### Mac OS 9: The Missing Manual

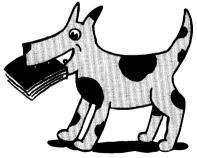
David Pogue

A warm, witty, jargon-free guide to the Macintosh platform's latest system software. Written with enough patience for the novice and enough depth for the power user.



### Office 2001 for Macintosh: The Missing Manual

Nan Barber & David Reynolds This book tackles each of the primary Office® applications with depth, humor, and clarity, and provides relief for the hapless Mac user.





# **Personal Digital Assistants**

Fueling the desire for people to have the data they need anywhere at any time is the new class of wireless computing devices known as Personal Digital Assistants, or PDAs. When they first appeared on the market, PDAs were used primarily as personal management systems, with schedules and address books. Now they have the speed and memory size to download large documents and publications, such as the New York Times Online. Palm users regularly send and receive email, and check online financial information as they dash between appointments. The Palm company tagline, "Always keep it connected and always have it with you," has become the user mantra.

### The Palm OS

The best-known PDAs—including Visor™ and CLIE,™ as well as Palm™—run the Palm OS (operating system), and the vast majority of PDA developers use the system to write new wireless applications. Palm has more than 130,000 registered developers, or currently 75% of the PDA market, and that includes powerhouses such as Sony, Handspring, and Nokia. From professionals to garage programmers, the advantages of the Palm OS are clear: Power and versatility. That's precisely what engineers need to create the next generation of PDA devices and applications for instant communication, wireless access, and customized solutions for large enterprises.

O'Reilly recently teamed with Palm to provide developers with the most up-to-date and thorough texts available on the Palm OS. O'Reilly's Palm Programming and PalmPilot: The Ultimate Guide already are the two bestselling Palm books on the market. And there are many more to come.

#### PERSONAL DIGITAL ASSISTANTS BOOKS



### Palm OS Network Programming

Greg Winton

The complete guide to the hot new field of network applications development for the Palm computing platform. All the major concepts needed to develop in the Palm networking environment are here.



### Palm OS Programming

Neil Rhodes & Julie McKeehan Used by Palm for their developer training, this tutorial-style book shows intermediate to experienced C programmers how to build a Palm application from the ground up.



### PalmPilot: The Ultimate Guide, 2nd Edition

David Pogue

The bible for users of Palm VII™ and all other Palm models, this new edition of O'Reilly's runaway bestseller is densely packed with previously undocumented information.



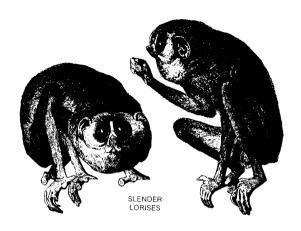


# Why Are There Animals on Our Books?

The animals on the covers of our books are a hallmark of the brand, making them instantly recognizable on bookshelves throughout the world. Over the years, countless readers have sent O'Reilly questions about the animals, but probably the most often-asked question would be, "Why do you put animals on books about computer languages?"

This question touches on a bit of early O'Reilly history. Edie Freedman (now Creative Director) was hired to design the first book covers. She thought the books had the strangest titles-sed & awk?-that evoked images of the popular fantasy game Dungeons & Dragons. While looking for imagery, she came across the Dover Pictorial Archives, a series of books (and now CD-ROMs) containing copyrightfree 18th- and 19th-century wood and copperplate engravings of animals. She encountered a pair of slender lorises and had an epiphany. "That's sed and awk!"

She scanned several animals from the archives, placed them on mock-up covers, and presented them to everyone at O'Reilly. They thought the animals were awful and Edie had to talk Tim O'Reilly into following her instincts. Customers wound up loving the covers, and the brand was born



"On a more somber note," explains Freedman, "working with the animal engravings has made me much more aware of what is happening to our environment. Many of the animals that appear on our covers are endangered. But in the 19th century, the time that most of the engravings were created, these animals were plentiful. Perhaps our use of animal images on our covers will encourage people to work harder to save the species that are still sharing the planet with us."

### Index

NET Framework Essentials	04
Access Database Design & Programming, 2nd Ed	61
Advanced Oracle PL/SQL Programming with Packages	
Apache: The Definitive Guide, 2nd Ed	
Apache Pocket Reference	
AppleScript in a Nutshell	
AppleWorks 6: The Missing Manual	
ASP in a Nutshell, 2nd Ed	
Building Internet Firewalls, 2nd Ed	26
Building Oracle XML Applications	40, 72
C# Essentials	64
C++: The Core Language	
Cascading Style Sheets: The Definitive Guide	
The Cathedral & The Bazaar	
CDO & MAPI Programming with Visual Basic	
CGI Programming with Perl, 2nd Ed.	
Computer Security Basics	
Creating Effective JavaHelp	
Crossing Platforms	
CSS Pocket Reference	32
Database Programming with JDBC and Java, 2nd Ed	
Designing Active Server Pages	
Designing Web Audio	
Designing with JavaScript	
Developing ASP Components, 2nd Ed	
Developing Java Beans	
DNS and BIND, 4th Ed	
DocBook: The Definitive Guide	
Dreamweaver 4: The Missing Manual	
Dynamic HTML: The Definitive Reference	35

Effective awk Programming, 3rd Ed.	.10
Enterprise JavaBeans, 2nd Ed	
Essential System Administration, 2nd Ed	
Essential Windows NT System Administration	
Ethernet: The Definitive Guide	
Excel 2000 in a Nutshell	
Exim: The Mail Transfer Agent	
HTML & XHTML: The Definitive Guide, 4th Ed	40
HTML Pocket Reference	
iMovie: The Missing Manual	.80
iMovie2: The Missing Manual	.81
Information Architecture for the World Wide Web	.32
Internet Core Protocols: The Definitive Guide	.18
Java 2D Graphics	.54
Java & XML, 2nd Ed	58
Java Cryptography26,	54
Java Distributed Computing	
Java Enterprise in a Nutshell	
Java Examples in a Nutshell, 2nd Ed.	
Java Foundation Classes in a Nutshell	.55
Java I/O	
Java in a Nutshell, 3rd Ed.	
Java Internationalization	
Java Message Service	59
Java Network Programming, 2nd Ed.	
Java Performance Tuning	
Java Security, 2nd Ed26,	
Java Servlet Programming, 2nd Ed.	
Java Swing	
Java Threads, 2nd Ed	
JavaScript: The Definitive Guide, 3rd Ed	
JavaScript Application Cookbook	
JavaScript Pocket Reference	
,	-

JavaServer Pages	
Jini in a Nutshell56	
Learning Carbon	
Learning Cocoa	
Learning DCOM	
Learning Java	
Learning Perl, 3rd Ed	
Learning Python	
Learning Red Hat Linux, 2nd Ed	
Learning the UNIX Operating System, 4th Ed	
Learning Web Design	
Learning WML & WMLScript	
Learning XML	
Linux Device Drivers, 2nd Ed	
Linux in a Nutshell, 3rd Ed	
Linux Network Administrator's Guide, 2nd Ed	į
LPI Linux Certification in a Nutshell	i
Mac OS 9: The Missing Manual	
Mac OS in a Nutshell	)
Malicious Mobile Code	r
Managing IMAP	3
Managing Mailing Lists	)
Managing Microsoft Exchange Server	)
Managing NFS and NIS, 2nd Ed	)
Managing the Windows 2000 Registry	)
Managing the Windows NT Registry20	)
Mastering Algorithms with C	1
MCSD in a Nutshell: The Visual Basic Exams61	1
MCSE in a Nutshell: The Windows 2000 Exams	)
mod_perl Pocket Reference	5
MySQL & mSQL	5
Network Printing	0

Office 2001 for Macintosh: The Missing Manual81
Open Sources
Optimizing Windows for Games, Graphics & Multimedia 65
Oracle & Open Source
Oracle Built-in Packages
Oracle Database Administration
Oracle DBA Checklists Pocket Reference
Oracle Design
Oracle Distributed Systems
Oracle Essentials: Oracle9i, Oracle8i & Oracle8, 2nd Ed 68
Oracle Net8: Configuration and Troubleshooting
Oracle Parallel Processing
Oracle Performance Tuning, 2nd Ed
Oracle PL/SQL Best Practices
Oracle PL/SQL Built-ins Pocket Reference
Oracle PL/SQL Developer's Workbook
Oracle PL/SQL Language Pocket Reference
Oracle PL/SQL Programming, 2nd Ed
Oracle PL/SQL Programming Guide to Oracle8i Features71
Oracle Scripts
Oracle Security
Oracle SQL: The Essential Reference
Oracle SQL*Loader: The Definitive Guide
Oracle SQL*Plus: The Definitive Guide
Oracle SQL*Plus Pocket Reference
Oracle Web Applications: PL/SQL Developer's Introduction73
Oracle8 Design Tips
Oracle8i Internal Services for Waits, Latches,
Locks, and Memory
Outlook 2000 in a Nutshell
Palm OS Network Programming83
Palm OS Programming, 2nd Ed
PalmPilot: The Ultimate Guide, 2nd Ed
Peer-to-Peer: Harnessing the Disruptive Potential of
Collaborative Networking

Perl 5 Pocket Reference, 3rd Ed44
Perl Cookbook
Perl for System Administration
Perl in a Nutshell
PGP: Pretty Good Privacy27
PHP Pocket Reference
Practical C Programming, 3rd Ed
Practical C++ Programming
Practical UNIX & Internet Security, 2nd Ed
Programming C#
Programming Embedded Systems in C and C++
Programming Internet Email20
Programming Perl, 3rd Ed
Programming Python, 2nd Ed
Programming the Perl DBI
Programming Web Services with XML-RPC
Python Pocket Reference
Python Standard Library46
REALbasic: The Definitive Guide, 2nd Ed
Running Linux, 3rd Ed
Securing Windows NT/2000 Servers for the Internet
sed & awk, 2nd Ed
sendmail, 2nd Ed
SQL in a Nutshell
SSH, The Secure Shell: The Definitive Guide
System Performance Tuning
Tcl/Tk in a Nutshell
Tcl/Tk Pocket Reference
Tcl/Tk Tools
TCP/IP Network Administration, 2nd Ed
termcap & terminfo
Understanding the Linux Kernel
Unix Backup & Recovery
Olim Ducting Sa tiere

Unix for Oracle DBAs Pocket Reference
UNIX in a Nutshell, 3rd Ed
UNIX Power Tools, 2nd Ed
Using & Managing PPP
Using Samba2
VB & VBA in a Nutshell: The Language
VBScript in a Nutshell
VBScript Pocket Reference
Virtual Private Networks, 2nd Ed
Visual Basic Controls in a Nutshell
Visual Basic Shell Programming
Web Design in a Nutshell
Web Navigation: Designing the User Experience
Web Performance Tuning
Web Security & Commerce
Win32 API Programming with Visual Basic
Windows 2000 Active Directory
Windows 2000 Administration in a Nutshell
Windows 2000 Pro: The Missing Manual
Windows 2000 Quick Fixes
Windows 98 Annoyances
Windows Me: The Missing Manual
Windows Me Annoyances
Windows NT Desktop Reference
Windows NT in a Nutshell
Windows NT TCP/IP Network Administration
Windows System Policy Editor23
Word 2000 in a Nutshell
Writing Apache Modules with Perl and C
Writing Excel Macros
Writing Word Macros
XML in a Nutshell
XML Pocket Reference, 2nd Ed



## A Field Guide to O'Reilly Animals

# What makes a technology right for an O'Reilly book?

I am often asked how we decide which technologies are important and therefore which books to publish, given the vast array of possibilities. Our publishing decisions spring directly from our core values as a company.

What we really do at O'Reilly is capture the knowledge of technology innovators—those who are out on the edge, working with new technologies that are about to take the world by storm and change it forever. We follow the advancing wavefront of innovation, carrying information back from the frontier to the surge of settlers coming in behind. As a result, we don't focus our efforts on the latest popular trends—we look for the hardcore technical information about emerging technologies that are going to change the world.

Our business isn't bound to the particular formats—books, the Web, conferences—through which we convey that information, but to the information itself, and the processes we use to identify what's important, who the real experts are, and how their knowledge can be made accessible to others. In other words, we look for interesting people doing important things with technology, and then we find ways to spread the word to others who need it.

Jim O'Reilly Tim O'Reilly President & CEO O'Reilly & Associates, Inc.



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