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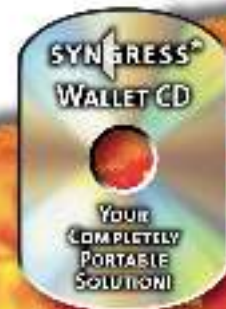
Your Guide to Open Source Security

- Step-by-Step Instructions for Deploying Open Source Security Tools
- Hundreds of Tools & Traps and Damage & Defense Sidebars, Security Alerts, and Exercises!
- Bonus Wallet CD with Configuration Examples, Packet Captures, and Programs

James Stanger, Ph.D.
Patrick T. Lane
Edgar Danielyan Technical Editor



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HACK PROOFING™

Linux: A Guide to Open Source Security



1 YEAR UPGRADE
BUYER PROTECTION PLAN

The Only Way to Stop a Hacker Is to Think Like One

James Stanger
Patrick T. Lane

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Contributors

Patrick T. Lane (MCSE, MCP+I, MCT, Network+, i-Net+, CIW) is a Content Architect for ProsoftTraining.com, a leading Internet skills training and curriculum development company. He is the author of more than 20 technical courses and is the Director of the CIW Foundations and CIW Internetworking Professional series. While at ProsoftTraining.com, Patrick helped create the Certified Internet Webmaster (CIW) program and the i-Accelerate program for Intel, Novell, and Microsoft professionals.

Patrick consults as a mail, news, FTP, and Web Administrator for several organizations, including jCert Initiative Inc. and ProsoftTraining.com. He is also a network security consultant and writer who specializes in TCP/IP internetworking, LAN/WAN solutions, network and operating system security, and the Linux and Windows NT/2000 platforms. He has consulted for the University of Phoenix/Apollo Group, Novell, Intel, NETg, WAVE technologies, KT Solutions, SmartForce, and Futurekids. Patrick is a member of the CompTIA Network+ Advisory Committee, and co-author of Syngress Publishing's *E-mail Virus Protection Handbook* (ISBN: 1-928994-23-7). His work has been published in eight languages and he has been a featured speaker for the SmartForce Seminar Series on E-Business, the Internet World PING Series on Internet Protocol version 6, and the Information Technology Association of America (ITAA). He holds a master's degree in education.

James Stanger (Ph.D., MCSE, MCT) directs the Linux, Security, and Server Administrator certification tracks for ProsoftTraining.com. Since receiving his Ph.D. in 1997, he has focused on auditing Internet servers and writing courseware, books, and articles about administering and securing Internet servers. James has consulted for IBM, Symantec, Evinci

(www.evinci.org), Pomeroy (www.pomeroy.com), Securify (www.securify.com), Brigham Young University, and California State, San Bernardino. He specializes in troubleshooting firewalls, intrusion detection, DNS, e-mail, and Web server implementations.

James was the Technical Editor of Syngress Publishing's *E-mail Virus Protection Handbook* (ISBN: 1-928994-23-7) and has been an instructional designer of security and A+ courses for NetG, Thompson/WAVE learning, and ComputerPREP. Active in the Linux community, James sits on the Linux Professional Institute (www.lpi.org), SAIR (www.linuxcertification.org), and CompTIA Linux+ (www.comptia.org) advisory boards, each of which is dedicated to creating and maintaining industry-respected certifications. As the Vice Chair of the Linux Professional Institute (LPI) Advisory Council, he acts as liaison between the LPI and companies such as IBM, Compaq, and Intel.



Technical Editors

Edgar Danielyan (CCNA) is a self-employed developer specializing in GCC, X Window, Tcl/Tk, logic programming, Internet security, and TCP/IP; as well as having worked with BSD, SVR4.2, FreeBSD, SCO, Solaris, and UnixWare. He has a diploma in company law from the British Institute of Legal Executives as well as a paralegal certificate from the University of Southern Colorado. He is currently working as the Network Administrator and Manager of a top-level Armenian domain. He has also worked for the United Nations, the Ministry of Defense of the Republic of Armenia, and Armenian national telephone companies and financial institutions. Edgar speaks four languages, and is a member of ACM, IEEE CS, USENIX, CIPS, ISOC, and IPG.

Larry Karnis (RHCE, Master ACE, CITP), is a Senior Consultant for Application Enhancements, a Unix, Linux, and Internet consulting firm located in Toronto, Canada. His first exposure to Unix was over 20 years ago where he used Unix Version 6 while completing a bachelor's degree in computer science and mathematics. Larry deploys and manages Linux-based solutions such as Web and file and print servers, and Linux firewalls.

About the CD

This book is accompanied by a CD containing files and open source programs used throughout the book. The files include configuration examples, packet captures, and additional resources. We have included the specific open source programs used in the book so you can follow the chapter demonstrations step-by-step on your own systems.

Each file on the CD is discussed in detail and referenced throughout the book with the CD icon below. When a specific file or program is required, it directs you to the accompanying CD. The book also directs you to the Web site where you can download the most current version, and find additional resources relating to that program. For instance, you can download Free Secure Wide Area Network (FreeS/WAN) at www.freeswan.org, or use the version located on the CD. It is recommended that you use the version included on the CD because this will increase the chances that the book demonstrations will be successful, as some of the programs may have changed since this book was printed.

The book is written to Red Hat Linux 7.x. Therefore, most of the CD files are Red Hat Package Manager (.rpm) files. There are also many Tape Archive (.tar) files and GNU Zip (.gzip) files. Instructions for unpacking and installing these files are included in their respective locations throughout the book. To mount the CD onto your Linux system, you would issue the following command (for Red Hat systems):

```
mount -t iso9660 /dev/cdrom /mnt/cdrom
```

And to unmount:


```
umount /mnt/cdrom
```

It is recommended that you copy the CD files to your hard drive before working with them. If you use other versions of Linux, you may need to modify the demonstrations, or download a portable version of the open source programs to work with your version of Linux.



Look for this CD icon when obtaining files used in the book demonstrations.

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Determining Which Ports to Block

When determining which ports to block on your server, you must first determine which services you require. In most cases, block all ports that are not exclusively required by these services. This is tricky, because you can easily block yourself from services you need, especially services that use ephemeral ports. If your server is an exclusive e-mail server running SMTP and IMAP, you can block all TCP ports except ports 25 and 143, respectively. If your server is an exclusive HTTP server, you can block all ports except TCP port 80.

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Learn How to Set Preferences For TkAntivir



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SECURITY ALERT!

Although Tripwire has a “file integrity mode,” Tripwire is not really an integrity checker in the classic sense. It does not, for example, test the file’s stability or inode number or any other aspect in regards to file storage. Tripwire simply compares a file’s new signature with that taken when the database was created. Other tools may be used to check the integrity of a file’s permissions and ownership information.

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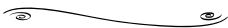
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Learn the Flags Used in TCP Connections



Flag	Description
SYN	Synchronize sequence numbers. Used for connection establishment.
FIN	The sender is finished with the connection. Used for connection termination.
RST	Reset the connection.
PSH	Push the data.
ACK	Acknowledgment
URG	Urgent

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Answer Your Questions about Kerberos

Q: I wish to remove a principal from the keytab of one of my Kerberos clients. How do I do this?

A: Enter `kadmin` as an administrative user on the Kerberos client (not the KDC) and use the `ktremove` option. For example, if you wanted to remove the principal for the user named *james*, you would do the following:

```
terminal$ /usr/
kerberos/sbin/kadmin
kadmin: ktremove
-p james
kadmin: quit
terminal$
```

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Secure E-Commerce Transactions

If hackers were alerted to an unsecure server, they could capture packets going in and out of the server to gain the data they sought. For example, if an e-commerce server does not use any type of network encryption for transactions, there is a great deal of data to be gained by a hacker. Unfortunately, many small companies or entrepreneurs set up their own Web servers, unaware of potential security problems, and set up simple scripts to process payment forms.

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Secure Tunneling with Virtual Private Networks (VPNs)

VPNs provide a private data network over public telecommunication infrastructures, such as the Internet, by providing authentication and encryption through a data “tunnel” between devices. All data transmitted between the devices through the tunnel is secure, regardless of what programs the devices are running.

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**Configure Squid
with the /etc/squid/
squid.conf file**



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