THE COMPLETE HANDBOOK OF THE INTERNET

The Complete Handbook of the Internet

by

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Springer Science+Business Media, B.V.

A C.I.P. Catalogue record for this book is available from the Library of Congress.

ISBN 978-1-4613-4999-0 ISBN 978-0-306-48331-8 (eBook)
DOI 10.1007/978-0-306-48331-8

Printed on acid-free paper

Originally published by Kluwer Academic Publishers, Boston 2002
Softcover reprint of the hardcover 1st edition 2002

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Preface

This is one of the most exciting times in technology, ever, and the Internet has the potential to change the way that people work and play, in a way that few technological areas have ever done before. It will soon become part of the fabric of our life, in the same way that the motor car, the telephone and the television have done in the past. The greatest problem is that Internet technology is moving so fast that it is difficult to keep up with it. Thus, it is important to understand the key underlying principles of it, which allows everyone to learn new developments. This book, and the associated WWW site and CD-ROM, will hopefully help provide this foundation. It contains over 1600 pages within 74 chapters and appendices, arranged in nine main sections. These sections are:

A. **Distributed Systems**. These chapters contain information on the underlying operating systems, and how resources are shared over local systems, and also over networks.
B. **Data Communications**. These chapters contain information on the basic principles of transmitting data over an electronic connection.
C. **Networks**. The Internet could not exist without the connection of nodes to networks. These chapters discuss many of the main networking technologies, such as Ethernet, ATM, ISDN, and modem connections.
D. **Network Protocols**. These chapters outline some of the protocols that are used to transfer data from one node to another over the Internet.
E. **Routers and Security**. Routers are important devices on the Internet and allow data to be routed from one node to another. Along with routers, the main elements of security are covered in these sections. These chapters include coverage of firewalls, proxy servers, and encryption.
F. **Session Protocols**. Session layer protocols are important in the reliable transmission of data over the Internet, as they allow two nodes to negotiate a connection, and then pass information about the session. The main session protocols which are supported on the Internet are electronic mail, the WWW, and FTP/Telnet. These chapters cover the operation of thee important protocols.
G. **Networking Operating Systems**. The Internet could not really exist in its current form without an underlying network operating system which integrates the network, networking protocols, and other devices to produce an integrated system. These chapters cover the three main network operating systems: Microsoft Windows, Novell NetWare and UNIX.
H. **WWW fundamentals**. These chapters cover the key principles of WWW presentation, and the methods which are used to add extra functionality to the WWW.
I. **Multimedia and databases**. These chapters outline how multimedia can be used over the Internet, and how databases operate in a distributed system.

The appendices include reference material on related subjects, such as server configuration, and reference guides for important commands. Along with the book, the associated CD-ROM contains a fully searchable version of the book. It also contains the associated source code, and RFC documents.

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