

Dictionary of Computer and Internet Terms

Eighth Edition

Douglas A. Downing, Ph.D.
*School of Business and Economics
Seattle Pacific University*

Michael A. Covington, Ph.D.
*Artificial Intelligence Center
The University of Georgia*

Melody Mauldin Covington
*Covington Innovations
Athens, Georgia*

With the assistance of
Catherine Anne Covington



ABOUT THE AUTHORS

Douglas Downing teaches economics and quantitative methods and is undergraduate program director for the School of Business and Economics at Seattle Pacific University. He is the author of several books in both Barron's Easy Way and Business Review series. He is also the author of *Java Programming the Easy Way* and *Dictionary of Mathematics Terms*, published by Barron's Educational Series, Inc. He holds the Ph.D. degree in economics from Yale University.

Michael Covington is Associate Director of the Artificial Intelligence Center at the University of Georgia. He is the author of several books and over 250 magazine articles. He holds the Ph.D. degree in linguistics from Yale University.

Melody Mauldin Covington is a graphic designer living in Athens, Georgia. She is the author of *Dictionary of Desktop Publishing* (published by Barron's).

Catherine Anne Covington is a student and web designer in Athens, Georgia.

© Copyright 2003, 2000, 1998, 1996, 1995, 1992, 1989, and 1986
by Barron's Educational Series, Inc.

All rights reserved.

No part of this book may be reproduced in any form, by photostat, microfilm, xerography, or any other means, or incorporated into any information retrieval system, electronic or mechanical, without the written permission of the copyright owner.

All inquiries should be addressed to:
Barron's Educational Series, Inc.
250 Wireless Boulevard
Hauppauge, New York 11788
<http://www.barronseduc.com>

Library of Congress Catalog Card No. 2002033231

International Standard Book No. 0-7641-2166-9

Library of Congress Cataloging-in-Publication Data

Downing, Douglas.

Dictionary of computer and Internet terms / Douglas A. Downing,
Michael A. Covington, Melody Mauldin Covington.—8th ed.

p. cm.

First-4th eds. published under title: Dictionary of computer terms.
ISBN 0-7641-2166-9

I. Computers—Dictionaries. 2. Internet Dictionaries. I. Covington,
Michael A., 1957— II. Covington, Melody Mauldin. III. Downing, Douglas.
Dictionary of computer terms. IV. Title.

QA76.15 .D667 2002
004'.03—dc21

2002033231

PRINTED IN CANADA

98765

K

k, K abbreviation for KILOBYTE (or, less commonly, *kilohm* or other metric units). By convention, a capital K stands for a factor of 1,024, and a lowercase k stands for a factor of 1000, as in the metric system (kilograms, kilometers, etc.). *See also* MEMORY; BYTE; MEGABYTE.

K6 chip microprocessor introduced by AMD in 1997 as a competitor to the Intel Pentium.

K56flex a standard formerly used by Rockwell and other modem manufacturers for transmitting data on telephone lines at speeds up to 56,600 bits per second, now superseded by V.90.

kana the Japanese phonetic writing system. There are two styles, *hiragana* and *katakana*. Kana contrasts with *kanji*, the Chinese-derived symbols for whole words. Written Japanese uses a mixture of kana and kanji.

kanji *see* KANA.

katakana *see* KANA.

kBps kiloBytes per second. *See also* KILOBYTE; BAUD.

kbps kilobits per second. *See* BIT.

Kerberos an authentication protocol that allows users and computers to identify each other without risk of impersonation and to communicate securely by encrypting their data. A Kerberos system uses a central authentication server to issue *tickets*, which are temporary authorizations to communicate. Each ticket is valid only for a specific user and for a limited length of time. Thus, an intercepted or stolen ticket is of little use. Because of the encryption used, forged tickets are virtually impossible to produce.

Kerberos was developed at the Massachusetts Institute of Technology, which distributes an implementation of it free of charge (<http://web.mit.edu/kerberos/www/>). Kerberos has many commercial implementations. *See* PROTOCOL. In Greek mythology, Kerberos (in Latin, Cerberus) is the dog that guards the gate of Hades.

Kermit a protocol for transferring files from one computer to another by modem. Kermit is also the name of a program (distributed free by Columbia University) that implements this protocol.

Kermit makes an exact copy of the original file even when transmitting over a noisy line. All data packets are error-checked, and erroneous packets are retransmitted. *See* PROTOCOL.

kernel the central part of an OPERATING SYSTEM. In many operating systems, only the kernel can access hardware directly.

Usage note: For obscure reasons this term is often spelled *kernal*. This may be nothing more than a typing error that appeared in an influential manual and caught on.

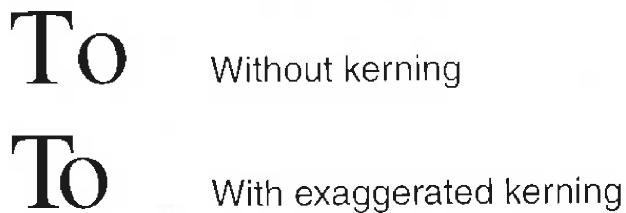


FIGURE 148. Kerning

kerning adjustment of the amount of space between certain combinations of letters in proportional-pitch type. If the combination “To” is typeset with the same letter spacing as “Th,” the letters seem to be too widely spaced. “To” looks better if the top of the “T” is allowed to overhang the “o” slightly. *See* Figure 148.

key

1. a button on a computer keyboard.
2. the item by which a data file is sorted or searched. For instance, if a file of names and addresses is sorted by zip codes, then the zip code is the key.
3. the password or other secret information needed to decode an encrypted message. *See* ENCRYPTION.

keyboard the primary computer input device for alphanumeric data. There are many different types of keyboard layouts; for the most part the alphabet and numbers are consistently placed, but there is considerable variation in the placement of the auxiliary characters, editing keys, and function keys. Most keyboards have a numeric keypad (for typing digits) at the right; if you use a mouse a lot, but don’t type many numbers, you may prefer a narrower keyboard that omits the keypad and lets you put your mouse closer to where you sit. Some keyboards have a mouse-like pointing device built in; these are generally fine for menu selection but not precise enough for drawing.

When buying a new computer, be sure to evaluate the keyboard carefully. A keyboard that feels “dead” can be tiring to use. Practice typing on several different models to find one that feels good to you. Some keyboards are bent in the middle so that your hands can stay in a more comfortable position. Spending a few extra dollars for a good keyboard can be a wise investment; after all, it is the part of your computer that you are in contact with constantly.

keyboarding entering data through the keyboard; typing.