



PUBLISHED BY Microsoft Press A Division of Microsoft Corporation One Microsoft Way Redmond, Washington 98052-6399

Copyright © 1999 by Microsoft Corporation

All rights reserved. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of the publisher.

Library of Congress Cataloging-in-Publication Data Microsoft Computer Dictionary. -- 4th ed.

p. cm.

Previous eds. published under title: Microsoft Press computer dictionary

ISBN 0-7356-0615-3

1. Computers Dictionaries. 2. Microcomputers Dictionaries.

I. Microsoft Press computer dictionary.

QA76.15.M538 1999

004'.03--dc21

99-20168

CIP

Printed and bound in the United States of America.

1 2 3 4 5 6 7 8 9 MLML 4 3 2 1 0 9

Distributed in Canada by ITP Nelson, a division of Thomson Canada Limited.

A CIP catalogue record for this book is available from the British Library.

Microsoft Press books are available through booksellers and distributors worldwide. For further information about international editions, contact your local Microsoft Corporation office or contact Microsoft Press International directly at fax (425) 936-7329. Visit our Web site at <a href="majoress.microsoft.com">mspress.microsoft.com</a>.

Macintosh, Power Macintosh, QuickTime, and TrueType fonts are registered trademarks of Apple Computer, Inc. Kodak is a registered trademark of the Eastman Kodak Company. Intel is a registered trademark and Indeo is a trademark of Intel Corporation. Active Desktop, Active Directory, ActiveMovie, Active Platform, ActiveX, Authenticode, BackOffice, DirectInput, DirectX, Microsoft, Microsoft Press, MS-DOS, MSN, NetMeeting, NetShow, Visual Basic, Visual C++, Visual J++, WebTV, WebTV Network, Win32, Win32s, Windows, Windows NT, and XENIX are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. PANTONE is a registered trademark of Pantone, Inc. Other product and company names mentioned herein may be the trademarks of their respective owners.

The example companies, organizations, products, people, and events depicted herein are fictitious. No association with any real company, organization, product, person, or event is intended or should be inferred.

Acquisitions Editor: Christey Bahn Project Editor: Kim Fryer



icons. When these buttons or icons are clicked on with the mouse, macros or certain functions of the application are activated. For example, word processors often feature toolbars with buttons for changing text to italic, boldface, and other styles. Toolbars often can be customized by the user and usually can be moved around on the screen according to the user's preference. See the illustration. See also graphical user interface. Compare menu bar, palette (definition 1), taskbar, title bar.



#### Toolbar.

toolbox n. A set of predefined (and usually precompiled) routines a programmer can use in writing a program for a particular machine, environment, or application. Also called toolkit. See also library (definition 1).

**Toolbox** *n*. A set of routines stored mostly in the readonly memory of a Macintosh that provides application programmers with the tools needed to support the graphical interface characteristic of the computer. *Also called* User Interface Toolbox.

Tool Command Language/Tool Kit n. See Tcl/Tk. toolkit n. See toolbox.

top-down design n. A program design methodology that starts with defining program functionality at the highest level (a series of tasks) and then breaks down each task into lower-level tasks, and so on. See also bottom-up programming, top-down programming. Compare bottom-up design.

top-down programming n. An approach to programming that implements a program in top-down fashion. Typically, this is done by writing a main body with calls to several major routines (implemented as stubs). Each routine is then coded, calling other, lower-level, routines (also done initially as stubs). See also bottom-up design, stub, top-down design. Compare bottom-up programming.

topic drift n. The tendency of an online discussion to move from its original subject to other related or unrelated subjects. For example, someone in a conference devoted to television may ask about a news program; then somebody else may say something about a story on that program about food poisoning, which leads somebody else to start a general discus-

sion on the advantages of organic fruits and vegetables.

topic group n. An online discussion area for participants with a common interest in a particular subject.

top-level domain n. In the domain-name system of Internet addresses or DNS hierarchy, any of the broadest category of names, under which all domain names fit. Top-level domains for sites in the United States include .com, .edu, .gov, .net, and .org. See also DNS (definition 1), major geographic domain.

top-of-file n. 1. The beginning of a file. 2. A symbol used by a program to mark the beginning of a file—the first character in the file or, in an indexed (ordered) database, the first indexed record. Acronym: TOF. See also beginning-of-file.

**topology** *n*. The configuration or layout of a network formed by the connections between devices on a LAN (local area network) or between two or more LANs. *See also* bus network, LAN, ring network, star network, token ring network, tree network.

**total bypass** *n*. A communications network that uses satellite transmission to bypass both local and long-distance telephone links.

total cost of ownership n. Specifically, the cost of owning, operating, and maintaining a single PC. More generally, the cost to businesses and organizations of setting up and maintaining complex and farreaching networked computer systems. Total cost of ownership includes the up-front costs of hardware and software added to later costs of installation, personnel training, technical support, upgrades, and repairs. Industry initiatives designed to lower the total cost of ownership include centralized network management and administration, as well as hardware solutions in the form of network-based computers with or without local storage and expansion capability. See also cost of ownership (CO).

touch pad n. A variety of graphics tablet that uses pressure sensors, rather than the electromagnetics used in more expensive high-resolution tablets, to track the position of a device on its surface. See also absolute pointing device, graphics tablet.

**touch screen** *n*. A computer screen designed or modified to recognize the location of a touch on its surface. By touching the screen, the user can make a selection or move a cursor. The simplest type of touch screen is made up of a grid of sensing lines, which determine the location of a touch by matching

vertical and horizontal contacts. Another, more accurate type uses an electrically charged surface and sensors around the outer edges of the screen to detect the amount of electrical disruption and pinpoint exactly where contact has been made. A third type has infrared light-emitting diodes (LEDs) and sensors around the outer edges of the screen. These LEDs and sensors create an invisible infrared grid, which the user's finger interrupts, in front of the screen. Compare light pen.

touch-sensitive display n. See touch screen. touch-sensitive tablet n. See touch pad.

touch tone dialing n. The signaling system used in telephones with touch-tone keypads, in which each digit is associated with two specific frequencies. During dialing, these frequencies—for example, 1336 Hz and 697 Hz for the number 2—are transmitted to the telephone company. Also called DTMF, Dual Tone Multiple Frequency.

tower n. A microcomputer system in which the cabinet for the central processing unit (CPU) is tall, narrow, and deep rather than short, wide, and deep. The motherboard is usually vertical, and the disk drives are often perpendicular to the motherboard. A tower cabinet is at least 24 inches tall. See the illustration. See also cabinet, microcomputer, motherboard. Compare minitower.



Tower.

TP n. See transaction processing.

TPC n. See Transaction Processing Council.

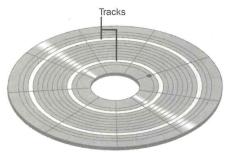
TPC-D n. Acronym for Transaction Processing Council Benchmark D. A benchmark standard that addesses a broad range of decision support applica-

tions working with complex data structures. See also Transaction Processing Council.

TP monitor *n*. Short for teleprocessing monitor or transaction processing monitor. A program that controls the transfer of data between terminals (or clients) and a mainframe (or one or more servers) so as to provide a consistent environment for one or more online transaction processing (OLTP) applications. A TP monitor may also control the appearance of the screen displays and check input data for proper format. *See also* client (definition 3), mainframe computer, OLTP, server (definition 1).

**trace** *vb.* To execute a program in such a way that the sequence of statements being executed can be observed. *See also* debugger, single step.

track¹ n. One of numerous circular data storage areas on a floppy disk or a hard disk, comparable to a groove on a record but not spiral. Tracks, composed of sectors, are recorded on a disk by an operating system during a disk format operation. On other storage media, such as tape, a track runs parallel to the edge of the medium. See the illustration.

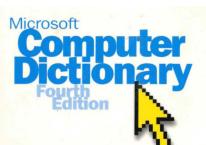


Track!. The storage areas on a floppy disk or hard drive.

track² vb. 1. To follow a path. 2. In data management, to follow the flow of information through a manual or an automated system. 3. In data storage and retrieval, to follow and read from a recording channel on a disk or a magnetic tape. 4. In computer graphics, to cause a displayed symbol, such as a pointer, to match on the screen the movements of a mouse or another pointing device.

trackball n. A pointing device that consists of a ball resting on two rollers at right angles to each other, which translate the ball's motion into vertical and horizontal movement on the screen. A trackball also typically has one or more buttons to initiate other

T



# **The Comprehensive** Standard for Business, School, Library, and Home

MICROSOFT COMPUTER DICTIONARY, Fourth Edition, remains the authoritative source of definitions for computer terms, concepts, and acronyms. Written in a clear, easy-to-understand style, this Fourth Edition defines over 8,000 terms and has been fully updated to include the latest technologies you will encounter at home and at workincluding Y2K, networks, e-commerce, cyberculture, enterprise computing, component terminology, Windows® 98, and UNIX. As an added bonus, the dictionary extensively covers computer industry acronyms, jargon, and slangoften the most confusing terms in the high-tech world.

Here's why the new MICROSOFT COMPUTER DICTIONARY, Fourth Edition, is the finest reference of its kind:

- It's comprehensive—covering everything from A: (drive) to Zulu
- It's easy to use-in addition to definitions, you'll find pronunciation keys for difficult words, parts of speech, and extensive cross-references.
- It's up to date-plus, you can access and download online updates every quarter on the Microsoft Press® Web site.



#### Included on CD-ROM

Fully searchable versions of the MICROSOFT COMPUTER DICTIONARY and MICROSOFT MANUAL OF STYLE FOR TECHNICAL PUBLICATIONS—plus Microsoft Internet Explorer 5!

For system requirements see the information page near the CD-ROM.

"The Microsoft Press Computer Dictionary is the perfect way to clear up a puzzling word or phrase in computer culture.

-Michael Heim, Ph.D., author of Electric Language and Virtual Realism

"The must-have computer resource."

-Compute

## **Other Great** Learning Solutions— **Made by Microsoft**

Whether you're a beginner or a advanced user, Microsoft Press has books to fit your needs and



#### **Quick Course®** series-

Software training for people in a hurry



At a Glance serie Easy, visual informa just when you need



#### **Microsoft Pocket Guides-**



#### Step by Step series-

Microsoft's self-paced training kits



#### Step by Step Interactive series Multimedia training



### **Running series-**

Comprehensive information in one volume



#### **Expert Companion** series-

High-powered tips an tricks for advanced us







Computers/General Reference







