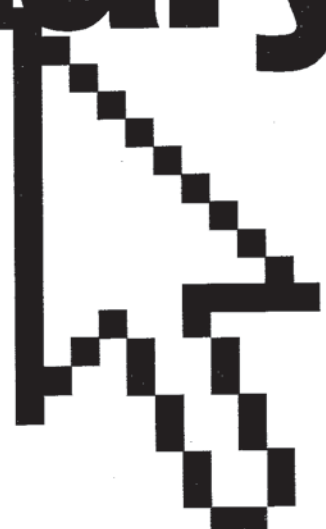


**Microsoft® Press**

Microsoft®  
**Computer  
Dictionary**  
Fourth  
Edition



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 [mspress.microsoft.com](http://mspress.microsoft.com).

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

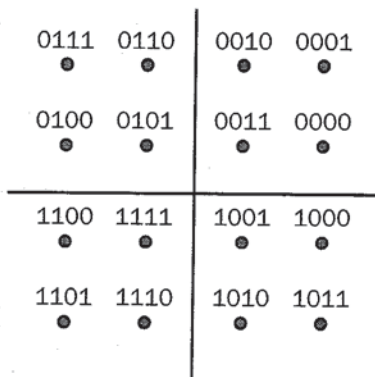
keep track of conversations, e-mail, and other forms of communication with a large number of current and prospective customers or clients. *See also* database.

**container** *n.* **1.** In OLE terminology, a file containing linked or embedded objects. *See also* OLE. **2.** In SGML, an element that has content as opposed to one consisting solely of the tag name and attributes. *See also* element (definition 2), SGML, tag (definition 3).

**content** *n.* **1.** The data that appears between the starting and ending tags of an element in an SGML or HTML document. The content of an element may consist of plain text or other elements. *See also* element (definition 2), HTML, SGML, tag (definition 3). **2.** The message body of a newsgroup article or e-mail message. **3.** The “meat” of a document, as opposed to its format or appearance.

**content-addressed storage** *n.* *See* associative storage.

**content aggregator** *n.* **1.** Broadly, an organization or business that groups Internet-based information by topic or area of interest—for example, sports scores, business news, or online shopping—to provide users with a means of accessing that content from a single location. **2.** In terms of push technology and multicasting, a service business that mediates between subscribers (“customers”) and content providers by gathering and organizing information for broadcast over the Internet. Content aggregators supply subscribers with client software through which content providers broadcast (push) information via “channels” that allow users both to choose the kind of information they receive and to decide when they want it updated. *Also called* channel aggregator. *See also* push, webcasting. *Compare* content provider.



Constellation.

**contention** *n.* On a network, competition among nodes for the opportunity to use a communications line or network resource. In one sense, contention applies to a situation in which two or more devices attempt to transmit at the same time, thus causing a collision on the line. In a somewhat different sense, contention also applies to a free-for-all method of controlling access to a communications line, in which the right to transmit is awarded to the station that wins control of the line. *See also* CSMA/CD. *Compare* token passing.

**content provider** *n.* **1.** Broadly, an individual, group, or business that provides information for viewing or distribution on the Internet or on private or semiprivate intranets or extranets. Content in this sense includes not only information but also video, audio, software, listings of Web sites, and product-specific materials such as online catalogs. **2.** A service business that makes Internet information resources available to users. Content providers include online services such as America Online and CompuServe, Internet service providers (ISPs), and an increasing number of media companies representing television, long-distance telephone, and publishing industries. *See also* online information service, ISP. *Compare* content aggregator.

**contents directory** *n.* A series of queues that contain the descriptors and addresses of routines located within a region of memory.

**context-dependent** *adj.* Of, pertaining to, or characteristic of a process or a set of data characters whose meaning depends on the surrounding environment.

**context-sensitive help** *n.* A form of assistance in which a program that provides on-screen help shows information to the user concerning the current command or operation being attempted.

**context-sensitive menu** *n.* A menu that highlights options as available or unavailable depending on the context in which the option is called. The menus on Windows’ menu bar, for example, are context sensitive; options such as “copy” are grayed out if nothing is selected.

**context switching** *n.* A type of multitasking: the act of turning the central processor’s “attention” from one task to another, rather than allocating increments of time to each task in turn. *See also* multitasking, time slice.





**gas-discharge display** *n.* A type of flat-panel display, used on some portable computers, containing neon between a horizontal and a vertical set of electrodes. When one electrode in each set is charged, the neon glows (as in a neon lamp) where the two electrodes intersect, representing a pixel. *Also called* gas-plasma display. *See also* flat-panel display, pixel.

**gas-plasma display** *n.* *See* gas-discharge display.

**gate** *n.* **1.** An electronic switch that is the elementary component of a digital circuit. It produces an electrical output signal that represents a binary 1 or 0 and is related to the states of one or more input signals by an operation of Boolean logic, such as AND, OR, or NOT. *Also called* logic gate. *See also* gate array. **2.** The input terminal of a field-effect transistor (FET). *Also called* gate electrode. *See also* drain (definition 1), FET, MOSFET, source (definition 2). **3.** A data structure used by 80386 and higher microprocessors to control access to privileged functions, to change data segments, or to switch tasks.

**gate array** *n.* A special type of chip that starts out as a nonspecific collection of logic gates. Late in the manufacturing process, a layer is added to connect the gates for a specific function. By changing the pattern of connections, the manufacturer can make the chip suitable for many needs. This process is very popular because it saves both design and manufacturing time. The drawback is that much of the chip goes unused. *Also called* application-specific integrated circuit, logic array.

**gated** *adj.* **1.** Transmitted through a gate to a subsequent electronic logic element. **2.** Transmitted through a gateway to a subsequent network or service. For example, a mailing list on BITNET may be gated to a newsgroup on the Internet.

**gate electrode** *n.* *See* gate (definition 2).

**gateway** *n.* A device that connects networks using different communications protocols so that information can be passed from one to the other. A gateway both transfers information and converts it to a form compatible with the protocols used by the receiving network. *Compare* bridge.

**gating circuit** *n.* An electronic switch whose output is either on or off, depending on the state of two or more inputs. For example, a gating circuit may be used to pass or not pass an input signal, depending on the states of one or more control signals. A gating

circuit can be constructed from one or more logic gates. *See also* gate (definition 1).

**GB** \gig'ə-bit, jig'ə-bit\ *n.* *See* gigabyte.

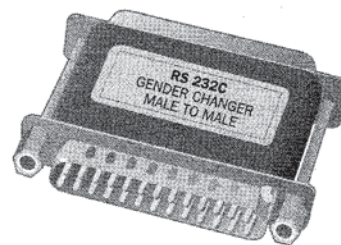
**Gbps** *n.* *See* gigabits per second.

**GDI** *n.* Acronym for **Graphical Device Interface**. In Windows, a graphics display system used by applications to display or print bitmapped text (TrueType fonts), images, and other graphical elements. The GDI is responsible for drawing dialog boxes, buttons, and other elements in a consistent style on screen by calling the appropriate screen drivers and passing them the information on the item to be drawn. The GDI also works with GDI printers, which have limited ability to prepare a page for printing. Instead, the GDI handles that task by calling the appropriate printer drivers and moving the image or document directly to the printer, rather than reformatting the image or document in PostScript or another printer language. *See also* bitmapped font, dialog box, driver, PostScript.

**geek** *n.* **1.** Generally, a person who enjoys cerebral activities (such as wordplay or computer programming) more than the mainstream population does. Geeks in this sense increasingly claim the word with pride, but it may give offense when used by others, suggesting inadequacy in normal social relationships. **2.** A computer expert or specialist. For issues of etiquette, *see* definition 1. *Compare* guru, techie, wizard.

**gender bender** *n.* *See* gender changer.

**gender changer** *n.* A device for joining two connectors that are either both male (having pins) or both female (having sockets). *See* the illustration. *Also called* gender bender.



*Gender changer.*

**General Protection Fault** *n.* The error condition that occurs in an 80386 or higher processor running in protected mode (such as Windows 3.1) when an application attempts to access memory outside of its

of the screen typically refreshes the entire image area at a rate of about 60 hertz, or 60 times per second. Interlaced monitors, which redraw alternate lines during each sweep of the electron beam, actually refresh any particular line only 30 times per second. Because odd and even lines are refreshed on successive sweeps, however, the effective refresh rate is 60 times per second.

**REGEDIT** \rej'ed'it\ *n.* See Registry Editor.

**regenerate** *vb.* See rewrite.

**regeneration buffer** *n.* See video buffer.

**regenerator** *n.* See repeater.

**region** *n.* **1.** An area dedicated to or reserved for a particular purpose. **2.** In video programming, a contiguous group of pixels that are treated as a unit. On the Macintosh, for example, a region is an area in a grafPort that can be defined and manipulated as an entity. The visible working area within a window is an example of a region. See also grafPort.

**region fill** *n.* In computer graphics, the technique of filling a defined region on the screen with a selected color, pattern, or other attribute. See also region.

**register** *n.* A set of bits of high-speed memory within a microprocessor or other electronic device, used to hold data for a particular purpose. Each register in a central processing unit is referred to in assembly language programs by a name such as AX (the register that contains the results of arithmetic operations in an Intel 80x86 processor) or SP (the register that contains the memory address of the top of the stack in various processors).

**registration** *n.* The process of precisely aligning elements or superimposing layers in a document or a graphic so that everything will print in the correct relative position. See also registration marks.

**registration marks** *n.* Marks placed on a page so that in printing, the elements or layers in a document can be arranged correctly with respect to each other. Each element to be assembled contains its own registration marks; when the marks are precisely superimposed, the elements are in the correct position. See the illustration.



Registration marks.

**Registry or registry** *n.* A central hierarchical database in Windows 9x, Windows CE, Windows NT, and Windows 2000 used to store information necessary to configure the system for one or more users, applications, and hardware devices. The Registry contains information that Windows continually references during operation, such as profiles for each user, the applications installed on the computer and the types of documents each can create, property sheet settings for folders and application icons, what hardware exists on the system, and which ports are being used. The Registry replaces most of the text-based .ini files used in Windows 3.x and MS-DOS configuration files, such as AUTOEXEC.BAT and CONFIG.SYS. Although the Registry is common to the several Windows platforms, there are some differences among them. Also called System Registry. See also hierarchical database, .ini, input/output port, property sheet, Registry Editor.

**Registry Editor** *n.* An application under Windows 9x and Windows NT that allows the user to edit the entries in the Registry. *Acronym:* REGEDIT. See also Registry.

**regression analysis** *n.* In statistics, an analysis of the degree to which variations in an independent variable affect a dependent variable (a variable whose value depends on the value of another variable). See also multiple regression.

**regression testing** *n.* Complete retesting of a modified program, rather than a test of only the modified routines, to ensure that no errors have been introduced with the modifications.

**relation** *n.* A structure composed of attributes (individual characteristics, such as name or address, corresponding to the columns in a table) and tuples (sets of attribute values describing particular entities, such as customers, corresponding to the rows in a table). Within a relation, tuples cannot be repeated; each must be unique. Further, tuples are unordered within a relation; interchanging two tuples does not change the relation. Finally, if relational theory is to be applicable, the domain of each attribute must be atomic—that is, a simple value, rather than a structure such as an array or a record. A relation in which the domains of all attributes are atomic is said to be normalized or in first normal form. See also normal form (definition 1).

R