Mc Graw Hill

"The Most Comprehensive A-Z
Computer Reference Available"

Computer Desktop
Encyclopedia

9TH EDITION

FREE CD-ROM
INCLUDES THOUSANDS
OF EXPANDED
DEFINITIONS AND
ILLUSTRATIONS!

More than 10,000 terms clearly
and accurately defined

Hundreds of illustrations help
explain devices and clarify concepts

Covers emerging trends and topics
to keep you on top of the latest
developments in computing

More than 5,000 *additional*
definitions on CD!

Alan Freedman
President of The Computer Language Company

OSBORNE

Computer Desktop Encyclopedia, Ninth Edition

This book was composed with Corel VENTURA™ Publisher.

voxel   (VOlume piXEL) A three-dimensional pixel. A voxel represents a quantity of 3-D data just as a pixel represents a point or cluster of points in 2-D data. It is used in scientific and medical applications that process 3-D images.

Voyetra   (Voyetra Turtle Beach, Inc., Yonkers, NY, www.tbeach.com) A manufacturer of sound cards and music software that is a result of a late-1996 merger of Voyetra Technologies and Turtle Beach Systems. Voyetra was founded in 1975 as Octave Electronics, a synthesizer and repair facility in southern New York state. It introduced the Voyetra synthesizer and later moved into software for MIDI sequencer and music-related applications. Voyetra utilities are bundled with numerous sound cards.

Turtle Beach was founded in 1985 in York, PA, and became known for its award-winning Multisound line of high-end sound cards. Its consumer brands are also popular and are named after beaches from around the world such as Malibu, Montego and Daytona.

VPC   (Virtual Processor Complex) An IBM mainframe multiprocessing that uses several computers under tight central control.

VPN   (Virtual Private Network) A private network that is configured within a public network. For years, common carriers have built VPNs that appear as private national or international networks to the customer, but physically share backbone trunks with other customers. VPNs enjoy the security of a private network via access control and encryption, while taking advantage of the economies of scale and built-in management facilities of large public networks. VPNs have been built over X.25, Switched 56, frame relay and ATM technologies. Today, there is tremendous interest in VPNs over the Internet, especially due to the constant threat of hacker attacks. The VPN adds that extra layer of security, and a huge growth in VPN use is expected. See *PPTP, L2F, L2TP, IPsec, PVC, security* and *transparent LAN service.*

VP ratio   (Virtual Processor ratio) The number of virtual processors that a physical processor is simulating.

VPS   (Vectors Per Second) The measurement of the speed of a vector or array processor.

VR   See *virtual reality.*

VRAM   See *video RAM.*

VRC   (Vertical Redundancy Check) An error checking method that generates and tests a parity bit for each byte of data that is moved or transmitted.

VRML   (Virtual Reality Modeling Language) A 3-D graphics language used on the Web. After downloading a VRML page, its contents can be viewed, rotated and manipulated. Simulated rooms can be "walked into." The VRML viewer is launched from within the Web browser.

The first VRML viewer was WebSpace from SGI, whose Open Inventor graphics library was the basis for developing VRML. WebFX, WorldView and Fountain are other Windows viewers, and Whurlwind and Voyager are Mac viewers.

VS   (1) (Virtual Storage) Same as *virtual memory.*
(2) (Virtual Storage) A family of minicomputers from Wang introduced in 1977, which use virtual memory techniques.

VSAM   (Virtual Storage Access Method) An IBM access method for storing data, widely used in IBM mainframes. It uses the B+tree method for organizing data.

VSAT   (Very Small Aperture satellite Terminal) A small earth station for satellite transmission that handles up to 56 Kbits/sec of digital transmission. VSATs that handle the T1 data rate (up to 1.544 Mbits/sec) are called "TSATs."

VSB   (1) (VME Subsystem Bus) An auxiliary "backdoor" protocol on the VME bus that allows high-speed transfer between devices. It was faster than the main bus before the 64-bit implementation arrived.
(2) (Vestigial SideBand) A digital modulation method developed by Zenith for cable modems and terrestrial transmission for DTV. See *8-VSB.*