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Microsoft

Computer Dictionary

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information are recorded and stored in a separate log. If a system failure or other abnormal interruption occurs, the system will use stored backup files to repair files corrupted in the crash. Journalized file systems are widely used for business and intranet file servers. In 2001, IBM contributed journalized file system technology to the open source community to allow development of similar file systems for Linux servers.

joystick *n.* A pointing device used mainly but not exclusively for computer games. A joystick has a base, on which control buttons can be mounted, and a vertical stem, which the user can move in any direction to control the movement of an object on the screen; the stem may also have control buttons. The buttons activate various software features, generally producing on-screen events. A joystick is usually used as a relative pointing device, moving an object on the screen when the stem is moved and stopping the movement when the stem is released. In industrial control applications, the joystick can also be used as an absolute pointing device, with each position of the stem mapped to a specific location on the screen. See the illustration. *See also* absolute pointing device, relative pointing device. *Compare* game pad.



Joystick.

.jpeg *n.* The file extension that identifies graphic image files in the JPEG format. *See also* JPEG.

JPEG *n.* **1.** Acronym for **Joint Photographic Experts Group**. An ISO/ITU standard for storing images in compressed form using a discrete cosine transform. JPEG trades off compression against loss; it can achieve a compression ratio of 100:1 with significant loss and possibly

20:1 with little noticeable loss. **2.** A graphic stored as a file in the JPEG format.

JPEG File Interchange Format *n.* *See* JFIF.

.jpg *n.* The file extension that identifies graphic images encoded in the JPEG File Interchange Format, as originally specified by the Joint Photographic Experts Group (JPEG). Inline graphics on World Wide Web pages are often .jpg files, such as coolgraphic.jpg. *See also* JPEG (definition 2).

JScript *n.* An interpreted, object-based scripting language that borrows from C, C++, and Java. It is Microsoft's implementation of the ECMA 262 language specification (ECMAScript Edition 3). The latest versions of JavaScript and JScript are compliant with the European Computer Manufacturing Association's ECMAScript Language Specification (ECMA 262 standard, for short).

JSFG *n.* *See* Java Speech Grammar Format.

JSP *n.* Short for **JavaServer Pages**. A technology created by Sun Microsystems to enable development of platform-independent Web-based applications. Using HTML and XML tags and Java scriptlets, JSP helps Web site developers create cross-platform programs. JSP scriptlets run on the server, not in a Web browser, and generate dynamic content on Web pages, with the ability to integrate content from a variety of data sources, such as databases, files, and JavaBean components. Web site developers can concentrate on design and display of a Web site without the need for application development expertise. *See also* Java, JavaBean. *Compare* Active Server Pages.

JSP container *n.* Short for **JavaServer Pages container**. In the J2EE platform, a JSP container provides the same services as a servlet container, such as providing network services over which requests and responses are sent, decoding requests, and formatting responses. All servlet containers must support HTTP as a protocol for requests and responses, but they may also support additional request-response protocols such as HTTPS. The JSP container is also an engine that interprets and processes JSP pages into a servlet. *See also* container, HTTP, HTTPS, J2EE, servlet, servlet container.

JTA *n.* Acronym for **Java Transaction API**. In the J2EE platform, JTA specifies transactions, comments, and rollbacks used by EJBs (Enterprise JavaBeans). It is a high-level, implementation-independent protocol API that allows applications and application servers to access transactions. *See also* application programming interface, J2EE, JTS, rollback.

(capable of extremely fast data transmission), Multibus also allows multiple bus masters. *See also* bus.

multicast address dynamic client allocation

protocol *n.* An extension to the DHCP protocol standard used to support dynamic assignment and configuration of IP multicast addresses on TCP/IP-based networks. *Acronym:* MADCAP.

multicast backbone *n.* *See* MBONE.

multicasting *n.* The process of sending a message simultaneously to more than one destination on a network.

Compare anycasting.

multichannel multipoint distribution service *n.* *See* MMDS.

Multi-Color Graphics Array *n.* *See* MCGA.

multi-element *adj.* Consisting of multiple data elements that all have the same format for storing the same kind of information. The data elements may be simple variables, as in an array of integer variables, or they may be more complicated data structures, as in an array of employee records each of which contains fields for an employee's name, Social Security number, pay rate, and so on.

multifile sorting *n.* The process of sorting a body of data that resides in more than one file.

MultiFinder *n.* A version of the Macintosh Finder that provides support for multitasking. The primary use of MultiFinder is to allow multiple applications to be simultaneously resident in memory. A single mouse click switches between applications, and information from one application can be copied to another. If the active application allows true multitasking, background tasks can be processed. *See also* Finder.

multifunction board *n.* A computer add-in board that provides more than one function. Multifunction boards for personal computers frequently offer additional memory, serial/parallel ports, and a clock/calendar.

multifunction peripheral *n.* A multipurpose device that combines printing with faxing, scanning (color or black and white), and copying (color or black and white) in a single unit. Multifunction peripherals are especially popular with the SOHO (small office, home office) market, where cost-effectiveness and space limitations can be significant considerations. *Acronym:* MFP. *Also called:* multifunction printer.

multifunction printer *n.* *See* multifunction peripheral.

multihoming *n.* **1.** In Mac OS X, an automatic network selection feature that allows one computer to maintain multiple network addresses. Multihoming may be used with a computer that is used from multiple locations, such as home and office, or to create special connection settings, such as separate systems for communication inside and outside of an intranet. **2.** The use of multiple addresses and/or multiple interfaces for a single node. A multihomed host has either multiple network interfaces connected to two or more networks, or a single network interface that has been assigned multiple IP addresses. Multihoming can be used to provide redundancy to achieve quality of service.

multilayer *adj.* **1.** In board design, of or pertaining to a printed circuit board consisting of two or more layers of board material. Each separate layer has its own metallic tracings to provide electrical connections between various electronic components and to provide connections to the other layers. The layers are laminated together to produce a single circuit board to which the components, such as integrated circuits, resistors, and capacitors, are attached. Multilayer design allows many more discrete paths between components than single-layer boards do. **2.** In computer-aided design (CAD), of or pertaining to drawings, such as electronic circuits, that are built up using multiple layers, each with a different level of detail or a different object, so that distinct parts of the drawing can easily be manipulated, overlaid, or peeled off.

multilayer switch *n.* A network switch that uses information from more than one ISO/OSI layer (Layer 2, Layer 3, Layer 4, and/or Layer 7) to forward traffic. *See also* ISO/OSI reference model, switch (definition 4).

Multilink Point-to-Point Protocol *n.* An Internet protocol that allows computers to establish multiple physical links to combine their bandwidths. This technology creates a virtual link with more capacity than a single physical link. *Acronym:* MPPP. *See also* PPP.

multimedia *n.* The combination of sound, graphics, animation, and video. In the world of computers, multimedia is a subset of hypermedia, which combines the aforementioned elements with hypertext. *See also* hypermedia, hypertext.

Multimedia Extensions *n.* *See* MMX.

Multimedia PC *n.* Software and hardware standards set forth by the Multimedia PC Marketing Council, which

reliability, availability, serviceability *n.* Acronym: RAS. See high availability.

reload *vb.* **1.** To load a program into memory from a storage device again in order to run it, because the system has crashed or the program's operation was otherwise interrupted. **2.** To retrieve a new copy of the Web page currently visible in a Web browser.

relocatable address *n.* In programming, an address that is to be adjusted to reflect the actual place in memory into which a program is loaded for execution. In "Get the byte located 12 bytes from this instruction," the address is relocatable; in "Get the byte located at address 255," the address is not relocatable. This convention is comparable to describing the "address" of a parked car as "level 2, row G" on one day and "level 5, row B" on another.

relocatable code *n.* A program written in such a way that it can be loaded into any part of available memory rather than having to be placed in one specific location. In relocatable code, address references that depend on the program's physical location in memory are calculated at run time so that program instructions can be carried out correctly. See also reentrant code.

relocate *n.* To move programs and blocks of memory about within available space so as to use memory resources flexibly and efficiently. A relocatable program can be loaded by the operating system into any part of available memory rather than into only one specific area. A relocatable block of memory is a portion of memory that can be moved around by the operating system as required; for example, the system might collect several available, relocatable blocks of memory to form one larger block of the size requested for use by a program.

RELURL *n.* See relative URL.

remailer *n.* A service that will forward e-mail while concealing the e-mail address of the originator of the message. Remailers may be used by individuals who wish to retain their privacy or avoid unsolicited commercial e-mail (UCE). Remailers may also be used to hide the identities of individuals and businesses sending spam or malicious or fraudulent e-mail.

remark *n.* See comment, REM statement.

remote *adj.* Not in the immediate vicinity, as a computer or other device located in another place (room, building,

or city) and accessible through some type of cable or communications link.

remote access *n.* The use of a remote computer.

remote access server *n.* A host on a LAN (local area network) that is equipped with modems to enable users to connect to the network over telephone lines. Acronym: RAS.

Remote Access Service *n.* Windows software that allows a user to gain remote access to the network server via a modem. Acronym: RAS. See also remote access.

remote administration *n.* The performance of system administration-related tasks via access from another machine in a network.

Remote Application Programming Interface *n.* A Remote Procedure Call (RPC) mechanism that enables an application running on a desktop computer to make function calls on a Windows CE-based device. The desktop computer is known as the Remote Application Programming Interface (RAPI) client, and the Windows CE device is known as the RAPI server. RAPI runs over Winsock and TCP/IP. Acronym: RAPI. See also remote procedure call.

Remote Authentication Dial-In User Service *n.* See RADIUS.

remote communications *n.* Interaction with a remote computer through a telephone connection or another communications line.

remote computer system *n.* See remote system.

Remote Data Objects *n.* An object-oriented data access tool featured in Visual Basic 4 and later. Remote Data Objects have no native file format of their own; they can be used only with databases complying with the most recent ODBC standards. This feature is popular for its speed and minimal coding requirements. Acronym: RDO. See also ODBC, Visual Basic.

Remote Installation Services *n.* Software services that allow an administrator to set up new client computers remotely, without having to visit each client. The target clients must support remote booting. Acronym: RIS.

remote login *n.* The action of logging in to a computer at a distant location by means of a data communications connection with the computer that one is presently using. After remote login, the user's own computer behaves like a terminal connected to the remote system. On the Inter-