

The Facts On File
DICTIONARY
of
COMPUTER SCIENCE

Revised Edition

Edited by
John Daintith
Edmund Wright

 **Facts On File**
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The Facts On File Dictionary of Computer Science
Revised Edition

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duplex transmission

DVD STORAGE COMPARISONS			
Number of sides	Number of layers	Capacity	Movie time (approximate)
1	1	4.7 Gb	2 hours
1	2	8.5 Gb	4 hours
2	1	9.4 Gb	4.5 hours
2	2	17.0 Gb	more than 8 hours

duplex transmission /dew-pleks/ (full-duplex transmission, FDX) Transmission of data between two endpoints, the data being able to travel in both directions simultaneously. Duplex transmission is used over telephone networks and terminal communication lines, and any other situation in which it is desirable that both ends be allowed to transmit at once. *Compare* half-duplex transmission; simplex transmission.

DVD The successor of the CD, with a far greater storage capacity. The disks can have 4 layers, 2 on each side, with capacities ranging from 4.7 Gb for a single-layer single-sided disk to 17 Gb for a double-layer double-sided disk. Audio, video, and computer data can be recorded. Disks of this type have enough capacity to hold full-length feature films. DVDs can be read-only, recordable, and rewritable in the same fashion as CDs. Originally 'DVD' was an abbreviation for *digital video disk*, but later also for *digital versatile disk*. Because no consensus was reached DVD is now the official name of the format and not an abbreviation for anything.

DVI *See* digital video interface.

dyadic operator (binary operator) *See* operator.

dynamic 1. Changing or capable of being changed over a period of time, usually while a system or device is in operation

or a program is running. For example, a *dynamic allocation* of a resource can be made while the system is running, and *dynamic RAM* is a type of semiconductor memory that requires its contents to be refreshed periodically since they degrade with time.

2. Taking place during the execution of a program, as happens with a *dynamic dump*.

Compare static.

dynamic data exchange *See* DDE.

dynamic HTML (dynamic hypertext mark-up language; DHTML) An extended version of HTML designed to add additional animation features and more user interactivity to Web pages. It involves scripts in JavaScript or VBScript run on the user's computer to change elements on the screen and respond to user input.

dynamic link library *See* DLL.

dynamic RAM (DRAM) For years the most common type of relatively inexpensive main RAM. Dynamic refers to the memory's method of storage, basically storing the charge on the capacitor, which leaks the charge over time and must be refreshed about every thousandth of a second. It is slower than SRAM.

dynamic Web page *See* server-side scripting.