Data Encyclopedia Article

Data

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The general definition of data, according to the United States Federal Acquisition Regulations, is "recorded information, regardless of form or the media of which it may be recorded." This definition includes computer software and technical data.

Data is the plural of datum, as single piece of information. In practice, data is used as both the singular and plural form of the word. Practically, data can be thought of as distinct pieces of information. In the context of computing, data can exist in a variety of forms, such as numbers or text on pieces of paper, as a graphic image, or as coded information stored in electronic **memory**.

The term data is often used to distinguish between that information that is recognizable to a machine (data files) from the information humans can assimilate (text files). Both contain data, although data files contain binary data, and text files contain **ASCII** data. Database management systems contain several layers of data. Data files store the database information, while other files, called metadata, store administrative information (index files and dictionary information, for example).

Computationally, data is represented using the binary numbering system, and is organized as various packets of information (**bit**, nibble, **byte**, word) so as to be logically interpretable to the machine and the **operator**.