

IEEE Standard Glossary of Computer Graphics Terminology

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IEEE Standard Glossary of Computer Graphics Terminology

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IEEE Computer Society**

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Abstract: Terms in the field of computer graphics are defined. Topics covered include general computer graphics concepts, computer graphics hardware and hardware concepts, primitives and attributes, input devices, image concepts and techniques, display techniques, visual effects, windows and viewports, CRT terminology, and three-dimensional technology. Terms considered to be parochial to one group or organization, company proprietary or trademarked, multiword terms whose meaning could be inferred from the definitions of the component words, and terms whose meaning in the computer field could be directly inferred from their standard English meaning are excluded.

Keywords: Terminology; definition; glossary; computer graphics

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Foreword

(This foreword is not a part of IEEE Std 610.6, IEEE Standard Glossary of Computer Graphics.)

The computer field is continuing to expand. New terms are being generated and new meanings are being adopted for existing terms. The IEEE Computer Dictionary project was undertaken to document this vocabulary. Its purpose is to identify terms currently in use in the computer field and to establish standard definitions for these terms. The dictionary is intended to serve as a useful reference for those in the computer field and for those who come into contact with computers, either through their work or in their everyday lives.

The completed dictionary will contain terms from each of the following areas: Computer Hardware, Software Engineering, Mathematics of Computing, Theory of Computation, Computer Applications, Artificial Intelligence, Data Management, Image Processing and Pattern Recognition, Modeling and Simulation, Computer Graphics, Computer Networking, Computer Languages, and Computer Security and Privacy. This glossary contains the terms related to Computer Graphics.

Every effort has been made to use definitions from established standards in this dictionary. When existing standards were found to be incomplete, unclear, or inconsistent with other entries in the dictionary, however, new, revised, or composite definitions have been developed.

At the time this glossary was approved, the following people formed the steering committee of the Computer Dictionary working group:

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1. Scope

This glossary defines terms in the field of Computer Graphics. Topics covered include general computer graphics concepts, computer graphics hardware and hardware concepts, primitives and attributes, input devices, image concepts and techniques, display techniques, visual effects, windows and viewports, CRT terminology, and three-dimensional technology.

Terms were excluded if they were considered to be parochial to one group or organization, company-proprietary or trademarked; multiword terms whose meaning could be inferred from the definitions of the component words; or terms whose meaning in the computer field could be directly inferred from their standard English meaning. Some technical terms that appear in the definitions are defined in other glossaries in the 610 series and are not included as entries here.

2. Dictionary Structure

Entries in the dictionary are arranged alphabetically. An entry may consist of a single word, such as "image," or a phrase, such as "background image." Phrases are given in their natural order (background image) rather than in reversed order (image, background).

Blanks precede all other characters in alphabetizing. Hyphens and slashes are treated as blanks.

If a term has more than one definition, the definitions are numbered. The order of the definitions does not imply preference or frequency of use. In most cases noun definitions are given first, followed by verb and adjective definitions as applicable. Examples and notes have been added to clarify selected definitions.

The following cross-references are used to show a term's relationship to other terms in the dictionary:

- *Contrast with* refers to a term with an opposite or substantially different meaning.
- *Syn* refers to a synonymous term.
- *See also* refers to a related term.
- *See* refers to a preferred term or to a term where the desired definition can be found.

The word "deprecated" indicates a term or definition whose use is discouraged because such use is obsolete, misleading, or ambiguous.

3. References

In those cases in which a definition is directly quoted from an existing dictionary or glossary, the following references apply:

[610.1] IEEE Std 1084-1986, IEEE Standard Glossary of Mathematics of Computing Terminology (ANSI).¹

[610.2] IEEE Std 610.2-1987, IEEE Standard Glossary of Computer Applications Terminology (ANSI).

[610.5] IEEE Std 610.5-1990, IEEE Standard Glossary of Data Management Terminology (ANSI).

[610.12] IEEE Std 610.12-1990 [Revision of IEEE Std 729-1983], IEEE Standard Glossary of Software Engineering Terminology (ANSI).

When the following draft standard is approved and published, it will become part of these references:

[P610.10] P610.10, Draft Glossary of Computer Hardware Terminology.

¹ IEEE publications are available from the Service Center, the Institute of Electrical and Electronics Engineers, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331.