



# Open Standard Open Source Open Format

An Introduction

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# Open Standard, Open Source, Open Format

*As the concepts of open standards, open source software and open formats gain visibility, so does the confusion as to what each term means. Following is a brief definition of each concept.*

## Open Standard

A *standard* is a basis for comparison; a reference point against which other things can be evaluated; an acknowledged measure of comparison for quantitative or qualitative value. Similar to a blueprint, a standard provides guidance to someone when they build something. Standards form the basis upon which weight, measurement, time and currency are established.

An *open standard* is a standard that is not owned by anyone and can be used by everyone. *Open standards* enable products developed by different vendors to work together.



Open standards play a role in our lives 24 hours a day. The size and shape of electrical plugs and sockets are examples of open standards. The electronic devices that plug into those sockets are also examples of open standards. Even though these devices were designed and produced by different vendors, they work because of the standardization of the plugs, sockets and the electrical power delivery.

In computers, open standards facilitate interoperability across diverse hardware and software products and services. As a result of this, it is equally possible for an open standard to be implemented in an open-source software package as it is in a proprietary software package.

## Open Source Software (OSS)

*Open source software* is software in which the source code (the actual computer code the programmers wrote) is available to the general public for use and/or modification from its original design.

*Open source* does not necessarily mean *zero-cost*. A great amount of open source software is available at

no charge, and many open source projects are developed by a community of volunteers. However, there are commercial vendors that enhance open source software and charge a fee.

*Proprietary (closed-source) software* is software owned by an individual or a company (usually the one that developed it). In contrast to open source software, the makers of proprietary software do not generally make source code available. There are almost always major restrictions on its use, and its source code is almost always kept secret. The software is usually made available to other parties under contract or licensing agreement.

Following are examples of proprietary programs and some of the open source alternatives for each:

Type	Proprietary	Open Source
Operating System	Windows	Red Hat Linux
Office Suite	MS Office	OpenOffice.org; KOffice; IBM Lotus Symphony
Image Editor	Adobe Photoshop	GIMP
Browser	Internet Explorer	Mozilla Firefox
E-Mail	MS Outlook	Thunderbird
Web Server	MS IIS	Apache

## Distinguishing Between Open Standards and Open Source

In the broadest sense, *open standards* are the result of a process for establishing uniform technical specifications. An example of open standards at work to achieve technological progress is the *Internet*; virtually all of the technology specifications on which it depends are open, as is the process for defining new ones. No matter which browser you use, you almost always see the same page in the same way. That is because web pages are written in a standard language, HTML.



*Open source* refers to software, and the term indicates that the underlying software code is available for inspection and modification by anyone.

## Open Format

Whenever someone is writing an article, retouching an image, building a web page, listening to a song or watching a favorite movie on a computer, they are using files. These files need to have a *format* in order to be opened, read or modified. The format is what enables an application to interpret the raw data contained in the file.

File formats are marked in the extension of the file name, the characters after the period in the name of a file. These extensions are used by computers to identify how a file is to be used and what programs can be used to open it. For instance, *this.wpd* is a document created in WordPerfect.

A file format can be open or proprietary. An *open format* is a published specification, usually maintained by a non-proprietary standards organization, and free of legal restrictions on use. Open formats can be opened by a variety of manufacturers' products. In a *proprietary format*, only the software produced by the company who owns the specification of the format will be able to correctly open and read the data in the file.

## Open Document Format

*Open Document Format* (ODF) is an open format for saving and exchanging editable office documents, such as text documents (including memos, reports and books), spreadsheets, charts and presentations.

### Background

A standard for ODF was developed by a Technical Committee of the Organization for the Advancement of Structured Information Standards (OASIS), an international, non-profit consortium that drives the development and adoption of open standards for the information society. The ODF Technical Committee has members from a diverse set of individuals and companies, including IBM and Sun Microsystems. Microsoft recently announced its plans to join the Technical Committee to work on the next version of ODF.

OASIS approved ODF as an OASIS Standard on May 1, 2005. In 2006, ODF was approved as an official international standard (ISO/IEC 26300) by the International Organization for Standardization (ISO).

## ODF File Extensions

ODF File Extension	Format Type
.odt	Word processing (text) documents
.ods	Spreadsheets
.odp	Presentations
.odg	Graphics
.odf	Formulae, mathematical equations

## Applications That Support ODF

A number of software applications and programs (*open source* and *proprietary*) support ODF, including:

- OpenOffice.org
- KOffice
- Google Docs
- Corel WordPerfect Office X4
- IBM Lotus Symphony
- Sun StarOffice 8

Microsoft announced in May 2008 that it will deliver support for ODF within Office 2007 with the delivery of Office 2007 Service Pack 2 (SP2) during the first half of 2009. The change will enable Office users to set ODF as the default file format.

## Open Office XML (OOXML)

Developed by Microsoft as an alternative to ODF, OOXML is an electronic document format for spreadsheets, charts, presentations and word processing documents. OOXML was approved on April 1, 2008, as an international standard (ISO/IEC 29500) by the ISO.

Many OOXML opponents have since filed appeals with the ISO concerning the adoption of OOXML as a standard. As a result of this, publication of the specification has been put on hold. The standard cannot be published until these complaints have been heard. Procedure requires that they be addressed by the end of June, when the ISO and the International Electrotechnical Commission (IEC) have to hand over their comments on the complaints to two management committees for a final decision.