



Firenze, 27 Nov 2004

Libertà del software e non solo

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Agenda

- Categorie di software
- Le licenze
- EULA Microsoft vs GNU GPL
- GNU/Linux: un sistema operativo libero
- Il software libero ed il business
- Libertà della conoscenza
- I brevetti software
- Trusted computing
- Uso improprio dei termini

Il software

Il **software** è la logica che fa funzionare i computer (hardware): cioè il software sono i *programmi*.

Un programma nasce da un'idea che descrive la risoluzione di un problema: l'*algoritmo*.

L'algoritmo, opportunamente codificato secondo un linguaggio di programmazione, dà origine ai **file sorgenti**.

I file sorgenti, mediante la compilazione, producono i **file eseguibili**, non intellegibili da un essere umano, ma comprensibili dal computer.

Categorie di software

- Software proprietario
- Shareware
- Freeware
- Pubblico dominio
- Open source (OSI)
- Software libero (free software)

Il software libero

- 0.** Libertà di *eseguire* il programma per qualunque scopo.
- 1.** Libertà di *studiare* come funziona il programma e di *adattarlo* alle proprie esigenze.
- 2.** Libertà di *ridistribuire* copie del programma.
- 3.** Libertà di migliorare il programma e di *distribuire tali miglioramenti*.

Le licenze

Il software *non appartiene* all'utente!

Il suo utilizzo è regolato dalla **licenza** (EULA – End User License Agreement).

Alcuni esempi di licenze

- EULA Microsoft
- Artistic (OSI)
- Creative Commons
- GNU GPL
- GNU LGPL
- ...

EULA Microsoft (Windows XP Professional)

- Nessuna libertà per l'utente e tutti i diritti di Microsoft.
- Installazione consentita su un solo PC (max. 2 CPU e 10 connessioni remote).
- È vietato tentare di scoprire il funzionamento del sistema.
- Il software può smettere di funzionare per modifiche (non ben specificate) all'hardware o per l'installazione di fix o patch.
- Non si può continuare ad utilizzare la versione precedente dopo l'acquisto di un suo aggiornamento.
- Microsoft può raccogliere informazioni sul sistema e sul suo utilizzo e può eseguire operazioni sul computer senza nessuna richiesta all'utente.
- Il software è fornito così com'è, incluse tutte le imperfezioni, errori e bug. Microsoft non è responsabile per eventuali danni, da esso derivati.
- Non è fornita alcuna garanzia dopo i 90 giorni dall'acquisto. Nessuna garanzia neanche per l'installazione di eventuali patch.

GNU GPL (General Purpose License)

- Concede la massima libertà all'utente, proteggendo il copyright.
- Il software può essere installato su quante macchine si desidera.
- Il software deve essere fornito sempre corredato dei sorgenti completi in forma leggibile dal computer.
- Un programma derivato da software GPL, o che comunque ha bisogno di software GPL per poter funzionare, deve essere rilasciato con licenza GPL.
- Garantisce agli utenti la possibilità di copia, modifica e di redistribuzione del software, in perpetuo.
- È possibile applicare eventuali restrizioni geografiche per evitare problemi relativi ai brevetti.
- Non è fornita garanzia di alcun tipo. L'utente si assume la responsabilità delle conseguenze dell'esecuzione del software.
- Versioni successive della licenza con la stessa natura.

GNU/Linux

un sistema operativo libero

Perché usare **GNU/Linux**?

- Gratuito
- Multiutente
- Efficiente
- Affidabile
- Sicuro
- Scalabile
- Configurabile
- Basato su standard pubblici
- Gestione di reti
- Documentato



Il software libero ed il business

- Il software libero non è necessariamente gratuito.
- Soltanto il lavoro effettivamente svolto ha senso di essere retribuito.
- Distribuire il software al cliente ed ad altri?
- L'esplosione dell'*e-business*: i professionisti del software e gli “improvvisati”. *L'informatica non è una cosa semplice.*
 - ◆ Il codice sorgente è accessibile: si può giudicare il prodotto e quindi il fornitore.
 - ◆ Il codice sorgente è modificabile da chiunque: non ci si vincola ad un fornitore.
- Costi contenuti: vantaggio per le PMI e per le PA.
- L'open source, il “rivale” di Microsoft.

Libertà della conoscenza

- La condivisione della conoscenza favorisce il progresso scientifico.
- GNU FDL (Free Documentation License): una licenza libera per le opere letterarie.
Esempi di opere distribuite con questa licenza
 - Wikipedia (l'enciclopedia libera)
 - "Informatica e GNU/Linux" di Daniele Masini
 - "GaPiL" di Simone Piccardi
- La conoscenza è il substrato della società necessario per lo sviluppo delle idee.
- I formati elettronici per la distribuzione dell'informazione: "no" ai formati proprietari.

I brevetti software

- Il **brevetto** (*patent*) nasce con lo scopo di favorire la diffusione delle idee, in modo da promuovere lo sviluppo scientifico.
- Il brevetto ha senso soltanto per le opere materiali.
- I *brevetti software* impediscono il riuso del software stesso, andando contro ai principi che hanno fatto nascere il brevetto.
- Si tende a non perturbare lo status quo per mantenere il potere.
 - ◆ Legge Urbani.
 - ◆ Brevetti software nell'UE.
- Aumento dei profitti per gli avvocati.

Trusted computing

- Il TCG (Trusted Computing Group)
AMD, HP, IBM, Intel, Microsoft, Sony e Sun (promotori).
- TC alias TCPA, Palladium, NGSCB, trustworthy computing, safer computing.
- Solo il software certificato (dal TCG?) può essere eseguito sui computer.
- Computer più sicuri, ma per chi? Non si aggiunge valore per l'utente, lo si distrugge.
 - ◆ Controllo del computer da parte del produttore del software.
 - ◆ Censura dei contenuti da parte dei controllori del TC (il TCG?).
- Il TC è attuale!
 - ◆ Numero identificativo del Pentium III.
 - ◆ IBM ThinkPad (da Maggio 2002) monta il chip Fritz.
 - ◆ Windows XP, Xbox, Windows server 2003 sono dotati di caratteristiche TC compliant.

Uso improprio dei termini

- **Open source**
spesso usato per indicare soltanto che di un software sono disponibili i sorgenti.
- **Free software**
spesso usato per indicare il software gratuito (*freeware*).
- **Hacker**
spesso usato per indicare chi tenta di infiltrarsi impropriamente nei sistemi o chi “buca” i programmi (*malicious hacker* o *cracker*).
- **Software commerciale**
spesso usato per indicare software non libero.
- **DRM (Digital Rights Management)**
indica un sistema che limita le libertà degli utenti (meglio Digital Restrictions Management).

Creazione di *falsi bisogni* per distogliere l'attenzione dai veri problemi.

Link utili

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<http://sourceforge.net>
- GNU e Free Software Foundation
<http://www.gnu.org>
<http://www.fsf.org>
- Creative Commons
<http://creativecommons.org>
- Artistic License (Open source)
<http://www.opensource.org/licenses/artistic-license.php>
- Appunti di informatica libera
<http://a2.swlibero.org>
- A Comparison of the GPL and the Microsoft EULA
http://www.cybersource.com.au/cyber/about/comparing_the_gpl_to_eula.pdf
- Linux da zero
<http://erlug.linux.it/linuxdazero>
- GaPiL
<http://gapil.firenze.linux.it>
- Informatica e GNU/Linux
<http://vandali.org/DanieleMasini/infolinux.php>
- Wikipedia - L'enciclopedia libera
<http://en.wikipedia.org>
- NoSoftwarePatents.com
<http://www.nosoftwarepatents.com>
- Trusted Computing Group
<https://www.trustedcomputinggroup.org/home>
- Trusted Computing: Promise and Risk
http://www.eff.org/Infrastructure/trusted_computing/20031001_tc.php
- Trusted Computing Frequently Asked Questions
<http://www.cl.cam.ac.uk/~rja14/tcpa-faq.html>

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Version 1.2, November 2002

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