

GNU General Public License v. 3 e sistemi DRM: considerazioni preliminari

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IV Incontro DMINIT

Ricercatore presso il Politecnico di Torino

NON rappresento la Free Software Foundation

Le opinioni qui espresse sono soltanto mie, e non riflettono le opinioni e/o le posizioni del Politecnico di Torino o di qualsiasi altra organizzazione con cui io abbia avuto o abbia dei rapporti, se non diversamente indicato.

- 0) *Alcune note terminologiche*
- 1) *La licenza GNU GPL: cenni storici e principali caratteristiche in chiave comparativa*
- 2) *Ruoli dei sistemi DRM nella licenza GNU GPL v3*
- 3) *Il processo di revisione della GNU GPL v3*

Tranne ove diversamente indicato, “GNU GPLv2” o “GPLv2” si riferisce alla versione 2 della licenza; “GNU GPLv3” o “GPLv3” si riferisce alla versione 3, in fase di elaborazione. Tutti i commenti si riferiscono alla bozza 1 della versione 3.

In più parti uso il termine “Software Libero”, anziché “Software Open Source”, per meglio evidenziare alcune finalità eminentemente politiche sottostanti alla GPLv3, con particolare riferimento alla “problematica DRM”.

La GNU General Public License (GNU GPLv2) è una licenza d'uso e distribuzione di opere dell'ingegno.

Non si applica solo al *software*: vedi art. 0, primo capoverso, prima frase:

“This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License”

Redatta dalla Free Software Foundation US (<http://www.fsf.org/>) come principale strumento legale del progetto GNU (GNU's Not Unix - <http://www.gnu.org/>).

Lo scopo del progetto GNU è di “sviluppare un sistema operativo Unix-compatibile completo che [sia] Software Libero” (<http://www.gnu.org/home.it.html>).

Una parte rilevante degli attuali “sistemi Linux” è in realtà composto da software prodotto dal progetto GNU (Linux => GNU/Linux).

La Free Software Foundation definisce “Software Libero” l'insieme dei programmi per elaboratore i cui termini di uso e distribuzione – che può anche essere a scopo di lucro o profitto – garantiscano all'utente:

la “[I]ibertà di eseguire il programma, per qualsiasi scopo (libertà 0)”

la “[I]ibertà di studiare come funziona il programma e adattarlo alle proprie necessità (libertà 1). L'accesso al codice sorgente ne è un prerequisito”

la “[I]ibertà di ridistribuire copie in modo da aiutare il prossimo (libertà 2)”

La “[I]ibertà di migliorare il programma e distribuirne pubblicamente i miglioramenti, in modo tale che tutta la comunità ne tragga beneficio (libertà 3). L'accesso al codice sorgente ne è un prerequisito”

(da “Cos'è il Software Libero”, <http://www.gnu.org/philosophy/free-sw.it.html>)

E' importante essere a conoscenza di questa definizione, perché in base ad essa la FSF ha basato, basa e baserà le sue strategie relative all'elaborazione della GPLv3, ivi incluse le clausole relative ai sistemi DRM.

Il meccanismo chiave della licenza GPLv2 (e GPLv3) è il c.d. copyleft o permesso d'autore (termine coniato da Francesco Potortì):

“Nel rendere un programma copyleft, per prima cosa mettiamo in chiaro che è soggetto a diritto d'autore; poi aggiungiamo le condizioni di distribuzione, che sono uno strumento legale per dare a chiunque i diritti d'uso, di modifica e redistribuzione del codice del programma ed ogni programma da esso derivato, ma solo se si lasciano invariati i termini di distribuzione. Così, il codice e le libertà divengono legalmente inseparabili”

(da “Cos'è il permesso d'autore”, <http://www.gnu.org/licenses/licenses.it.html#WhatIsCopyleft>)

GNU GPLv2, art. 2:

“You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

[...]

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program. [...]”

GNU GPLv3, art. 5.2:

“Having modified a copy of the Program under the conditions of section 2, thus forming a work based on the Program, you may copy and distribute such modifications or work in the form of source code under the terms of Section 4 above, provided that you also meet all of these conditions:

- * a) The modified work must carry prominent notices stating that you changed the work and the date of any change.
- * b) You must license the entire modified work, as a whole, under this License to anyone who comes into possession of a copy. This License must apply, unmodified except as permitted by section 7 below, to the whole of the work. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.

[...]

These requirements apply to the modified work as a whole. If identifiable sections of that work, added by you, are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works for use not in combination with the Program. But when you distribute the same sections for use in combination with covered works, no matter in what form such combination occurs, the whole of the combination must be licensed under this License, whose permissions for other licensees extend to the entire whole, and thus to every part of the whole. Your sections may carry other terms as part of this combination in limited ways, described in section 7.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program. [...]”

GNU GPLv2, art. 3:

“You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a) **Accompany it with the complete corresponding machine-readable source code**, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b) **Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code**, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) **Accompany it with the information you received as to the offer to distribute corresponding source code**. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it [...]”

GNU GPLv3, art. 6.3:

“You may copy and distribute a covered work in Object Code form under the terms of Sections 4 and 5, **provided that you also distribute the machine-readable Complete Corresponding Source Code** (herein the "Corresponding Source") under the terms of this License, in one of these ways:

[...] [sostanzialmente equivalenti alle modalità della GNU GPL versione 2]

Distribution of the Corresponding Source in accord with this section must be in a format that is publicly documented, unencumbered by patents, and must require no special password or key for unpacking, reading or copying. [...]”

IMPORTANTE:

“The "Complete Corresponding Source Code" for a work in object code form means all the source code needed to understand, adapt, modify, compile, link, install, and run the work, excluding general-purpose tools used in performing those activities but which are not part of the work. [...]

Complete Corresponding Source Code also includes any encryption or authorization codes necessary to install and/or execute the source code of the work, perhaps modified by you, in the recommended or principal context of use, such that its functioning in all circumstances is identical to that of the work, except as altered by your modifications. It also includes any decryption codes necessary to access or unseal the work's output. Notwithstanding this, a code need not be included in cases where use of the work normally implies the user already has it.“

GNU GPLv3, art. 3:

“As a free software license, this License intrinsically disfavors **technical** attempts to restrict users' freedom to copy, modify, and share copyrighted works. Each of its provisions **shall be interpreted in light of this specific declaration** of the licensor's intent. Regardless of any other provision of this License, **no permission is given to distribute covered works that illegally invade users' privacy, nor for modes of distribution that deny users that run covered works the full exercise of the legal rights granted by this License.**

No covered work constitutes part of an effective technological protection measure: that is to say, distribution of a covered work as part of a system to generate or access certain data constitutes general permission at least for development, distribution and use, under this License, of other software capable of accessing the same data.”

GNU GPLv3, preambolo:

“Some countries have adopted laws prohibiting software that enables users to escape from Digital Restrictions Management. DRM is fundamentally incompatible with the purpose of the GPL, which is to protect users' freedom; therefore, the GPL ensures that the software it covers will neither be subject to, nor subject other works to, digital restrictions from which escape is forbidden.”

GPLv3 e DRM: i punti salienti

- 1) Each of [GPLv3's] provisions shall be interpreted in light of this specific declaration of the licensor's intent
- 2) No permission is given to distribute covered works that illegally invade users' privacy
- 3) [No permission is given] for modes of distribution that deny users that run covered works the full exercise of the legal rights granted by this License
- 4) No covered work constitutes part of an effective technological protection measure
- 5) [D]istribution of a covered work as part of a system to generate or access certain data constitutes general permission at least for development, distribution and use, under this License, of other software capable of accessing the same data
- 6) Complete Corresponding Source Code also includes any encryption or authorization codes necessary to install and/or execute the source code of the work
- 7) [Complete Corresponding Source Code] also includes any decryption codes necessary to access or unseal the work's output
- 8) Distribution of the Corresponding Source [...] must be in a format that is publicly documented, unencumbered by patents, and must require no special password or key for unpacking, reading or copying
- 9) Technical attempts
- 10) Escape is forbidden

1) Each of [GPLv3's] provisions shall be interpreted in light of this specific declaration of the licensor's intent

(riferita a “this License intrinsically disfavors technical attempts to restrict users' freedom to copy, modify, and share copyrighted works”)

La natura specifica della dichiarazione verrà analizzata in seguito.

Questa frase è intesa a chiarire gli intenti del licenziante in fase di interpretazione della licenza (cf. Capo IV Codice Civile, “Dell'interpretazione del contratto”).

2) No permission is given to distribute covered works that illegally invade users' privacy

Possibile difficoltà di implementare sistemi DRM che utilizzino meccanismi di profiling “invasivi”, con particolare riferimento a:

art. 23(1) decr. leg. 30 giugno 2003, n. 196 (“Il trattamento di dati personali da parte di privati o di enti pubblici economici è ammesso solo con il consenso espresso dell'interessato”)

art. 23(3) ib. (“Il consenso è validamente prestato solo se è espresso liberamente e specificamente in riferimento ad un trattamento chiaramente individuato, se è documentato per iscritto, e se sono state rese all'interessato le informazioni di cui all'articolo 13”).

Ma si veda anche art. 24 ib. (“Casi nei quali può essere effettuato il trattamento senza consenso”), in part. art. 24(b) ib. (“Il consenso non è richiesto, oltre che nei casi previsti nella Parte II, quando il trattamento [...] è necessario per eseguire obblighi derivanti da un contratto del quale è parte l'interessato o per adempiere, prima della conclusione del contratto, a specifiche richieste dell'interessato”).

Dato personale: “qualunque informazione relativa a persona fisica, persona giuridica, ente od associazione, identificati o identificabili, anche indirettamente, mediante riferimento a qualsiasi altra informazione, ivi compreso un numero di identificazione personale”

3) [No permission is given] for modes of distribution that deny users that run covered works the full exercise of the legal rights granted by this License

cf. licenze Creative Commons:

“Non puoi distribuire, comunicare al pubblico, rappresentare, eseguire, recitare o esporre in pubblico l’Opera, neanche in forma digitale, usando misure tecnologiche miranti a controllare l’accesso all’Opera ovvero l’uso dell’Opera, in maniera incompatibile con i termini della presente Licenza.”

Può un sistema tecnico/tecnologico gestire correttamente *ex ante* tutte le sfaccettature che la legge sul diritto d'autore (tra le altre) comprende?

Si noti in particolare:

- libere utilizzazioni (art. 70, art. 97 l.d.a.)
- definizione di opera derivata

Si veda anche punto (9).

4) No covered work constitutes part of an effective technological protection measure

Aiuto interpretativo (plausibilmente).

“Freedom zero says you are free to run the program as you wish for any purpose. We are not limiting freedom zero. If someone wants to run a program to encrypt something, that's fine. If someone wants to run a program to decrypt something, that's fine. If somebody wants to run a program to produce an encrypted medium that's difficult to access, that's fine. If somebody has some other GPL covered program to access that media and he wants to run it to access the encrypted data, that's fine too. And distributing software that could be used for those purposes is also entirely permitted, and will be permitted by GPL version 3. However, freedom zero does not include imposing your purposes on someone else who is going to run the program, because his freedom zero is the freedom to run the program for any purpose of his. So, there is no such thing as the freedom to use any software to impose your purpose on someone else”

(da Ciaran O'Riordan (ed.), “DRM and GPLv3”, <http://fsfeurope.org/projects/gplv3/drm-and-gplv3.en.pdf>)

5) [D]istribution of a covered work as part of a system to generate or access certain data constitutes general permission at least for development, distribution and use, under this License, of other software capable of accessing the same data

“In the United States, this language, we believe, has specific consequences with respect to the Digital Millennium Copyrights Act. We wish to point out that no GPL'd program can be regarded as a measure in circumvention of any other GPL'd program's access protection schemes. We believe that this language will also provide some assistance in achieving similar results under statutory enforcement schemes in pursuance of the EUCD and other international regulation meant to assist disablement of users. Here again we are simply speaking to courts to explain how we understand the intent of licensors. We have no power to change local law, but we do have power by giving permission to make clear where our permissions should not be mis-read under local laws that presume user disablement from mere technological existence.”

(da Ciaran O'Riordan (ed.), “DRM and GPLv3”, <http://fsfeurope.org/projects/gplv3/drm-and-gplv3.en.pdf>)

6) Complete Corresponding Source Code also includes any encryption or authorization codes necessary to install and/or execute the source code of the work

“[W]e focussed on a different aspect of DRM, which is, stopping the users from controlling the software that runs in their machine. Treacherous Computing is designed such that if you modify the software, it won't be able to do the job. They use things like checksumming the software and checking whether it has been signed and authorised, and so if you modify the program and you install it, since your version hasn't been signed by them, your version isn't really authorised, so either it won't run, or it won't be able to open the files that you want to open or the network server will refuse to talk to it, or in one way or another you will be blocked from really doing the job that the original version was set out to do. So what we're doing in GPL version three is, we're saying they're welcome to design free software to do whatever it is they want, and they're welcome to set up the machine such that it won't run a program unless it's been signed, but they have to give you the signature key so that you can sign your own version.”

(da Ciaran O'Riordan (ed.), “DRM and GPLv3”, <http://fsfeurope.org/projects/gplv3/drm-and-gplv3.en.pdf>)

7) [Complete Corresponding Source Code] also includes any decryption codes necessary to access or unseal the work's output

“Well, GPL version three says that if they distribute a GPL-covered program in this way, they must provide you with the key necessary so that you can sign your version and make it access the same data. Otherwise, they would say “Yes, you can run your modified version, but it will have a different check sum, so your version will only operate on data files made for your version, just as our version only operates on data made for our version”. And what that means is that all the available files will only work with their version and your changed version will not be able to access them [...] [t]he plan is that they will publish files that are encrypted and it will be impossible to access those files with any other program, so GPL version three is designed to ensure that you really, effectively, get the freedom to take the program you were given, modify it, and run the modified version to do a different thing on the same data on the same machine.”

(da Ciaran O’Riordan (ed.), “DRM and GPLv3”, <http://fsfeurope.org/projects/gplv3/drm-and-gplv3.en.pdf>)

8) Distribution of the Corresponding Source [...] must be in a format that is publicly documented, unencumbered by patents, and must require no special password or key for unpacking, reading or copying

9) Technical attempts

Uno degli scogli più rilevanti nel dialogo risiede plausibilmente nella natura “tecnologica” o “tecnica” dei sistemi DRM, in particolare:

- solitamente agiscono *ex ante* e non *ex post* l'intervento analitico di una terza parte neutrale (il giudice)
- il loro funzionamento è complicato da comprendere per l'utente finale (lo è anche il diritto) ma, in più, in molti casi l'utente non ha possibilità di accesso al codice sorgente del sistema DRM (combinazione diritto d'autore, norme a tutela dei TPM, limiti al *reverse engineering* al solo fine dell'interoperabilità)
- in ragione dei primi due punti, possono tendere a sbilanciare i rapporti di forza tra le parti

10) Escape is forbidden

Problema dei rapporti di forza: in generale, il DRM viene visto come un'imposizione che è difficile aggirare.

Sono ammessi soltanto i sistemi DRM che prevedono l'opzione di “opt-out” per gli utenti?

Il processo di revisione della GNU GPLv3

La licenza GNU GPLv3 è ancora in fase di discussione.

- Initial Draft Announcement: Gennaio 2006
- Publication of Revised Drafts: Giugno-Luglio 2006
Ottobre 2006 (forse)
- Draft Discussion
- Last Call Draft 45 giorni, ETA non più tardi del 15 Gennaio 2007

ETA: non più tardi di Marzo 2007, preferibilmente entro il 15/01/2007.

Documento di riferimento: <http://gplv3.fsf.org/process-definition>

Commenti alla bozza: <http://gplv3.fsf.org/comments/>

Sito web di riferimento: <http://gplv3.fsf.org/>

Riferimenti

<i>Free Software Foundation US:</i>	http://www.fsf.org/
<i>Free Software Foundation Europe:</i>	http://www.fsfeurope.org/
<i>FSF, “Cos'è il permesso d'autore”:</i>	http://www.gnu.org/licenses/licenses.it.html#WhatIsCopyleft
<i>FSF, “Cos'è il Software Libero”:</i>	http://www.gnu.org/philosophy/free-sw.it.html
<i>GNU GPL v2.0:</i>	http://www.gnu.org/licenses/gpl.html
<i>GNU GPL v3, bozza 1:</i>	http://gplv3.fsf.org/draft
<i>GNU GPL v3, bozza 1, “rationale”:</i>	http://gplv3.fsf.org/rationale
<i>GNU GPL v3, commenti alla bozza:</i>	http://gplv3.fsf.org/comments
<i>GNU GPL v3, processo di discussione:</i>	http://gplv3.fsf.org/process-definition
<i>O'Riordan (ed.), “DRM and GPLv3”:</i>	http://fsfeurope.org/projects/gplv3/drm-and-gplv3.en.pdf
<i>Progetto GNU:</i>	http://www.gnu.org/