

Free Software for e-government: an opportunity, a *necessity*

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E-government

Goals :

- ▶ Simplify access to administrative data
 - ▷ for the administration (IDA initiative)
 - ▷ for the citizen (portals)
- ▶ Reduce management costs
- ▶ Improve the citizen/government relationship
- ▶ Increase citizen participation **e-elections ?**

Means :

E-government: requirements

Some requirements *specific to* the public administration

- ▶ very long term archiving, data integrity (anagraphic data, fiscal data...)
- ▶ data security (privacy, confidentiality, sensitive information, defense, ...)
- ▶ moderate cost
- ▶ citizen identification

all this subject to

- ▶ technological ecumenism

Does the end justify the means?

Temptation:

- ▶ turnkey **closed** commercial solutions

Advantages:

- ▶ No thinking required
- ▶ Backed up by solid multinational software companies
- ▶ Maybe you make the cover of Times on the side of some "computer science genius"

But the means may corrupt the end...

Closed, or worse, **monopolistic software**, leads to giving up:

- ▶ **technological control**: no source access, prisoner of proprietary data format and protocols
- ▶ **financial control**: **X P**, software rental, information tax
- ▶ **technological neutrality** (e.g. :UK EG odyssey)
- ▶ **data confidentiality** (SirCam viruses, etc.)
- ▶ **“illusion” of security** (no check without source access)
The push to silence security firms actually *reduces* security
- ▶ **control of your technological agenda**: you are not the one that holds the knife on the safe side

E-government: what we really want

Solutions that:

- ▶ give control back to the user
- ▶ allow to choose among a large set of providers (quality and price thru competition)
- ▶ guarantee technological neutrality (open formats and protocols)
- ▶ preserve the “illusion” of security (public auditing of the code)
- ▶ provide for everlasting solutions (user driven, not reseller pushed)

This is technologically, socially, economically feasible today! via *free software*

Definitions

Freeware

software for free

Definitions

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software for free

Shareware

software for sale, with a trial period

Free Software

(Open Source, Logiciel Libre)

Something radically different, at the origin of the Internet and Web success

Free, Open Source Software : Logiciel libre

Free (français: gratuit):

software you do not pay (today)

Free (français: libre):

software with 4 rights

- ▶ Freedom to **use** the software
- ▶ Freedom to **examine** the source code and **adapt** it to your needs
- ▶ Freedom to **distribute** copies
- ▶ Freedom to **distribute** the source (possibly **modified**)

There are **obligations** too, that vary according to the licence:
GPL/BSD/Mozilla/X, etc.

Libre *is not* **gratuit**

non libre, gratuit :

Internet Explorer, MacTCP, Acrobat Reader, freeware, etc.

non libre, non gratuit :

no comment ...

libre, gratuit :

Mozilla, Linux, FreeBSD, OpenBSD, sendmail, perl, etc.

libre, non gratuit :

commercial Linux distributions, etc.

Logiciel libre vs. proprietary software

Logiciel libre :

- ▶ creation of a competent workforce
- ▶ multiplies verifiers, divides crackers: access to the source attracts competent programmers
- ▶ gives control to the users
- ▶ necessary prerequisite to data security

Proprietary software :

- ▶ no understanding, no customization
- ▶ no control of the technological evolution
- ▶ cannot guarantee security
- ▶ multiplies pirates, divides verifiers
- ▶ tends to create monopolies that exact an information tax

Bottomline

Free software is not just a good idea ...

... it's a necessity!

PowerPoint ?

No

What is Active DVI ? a DVI previewer written in Ocaml at INRIA...