



*Free/Libre Software and Open  
Knowledge Office (OSLUCA)*  
University of Cádiz

## What is Free/Libre Software?

A program is Free/Libre Software if you can:

- Use it of any purpose.
- Adapt it to your needs.
- Distribute copies of it to anyone.
- Improve the program and make changes available.

So “Free” is refers to the freedom you have regarding it. It is more than just “free cost”, freeware, shareware, demo, ...

Free/Libre Software is also called “Libre Software” or “Open Source Software”.

## Why Using Free/Libre Software is Important?

- It follows standards, so your data is not captive inside of a program.
- You are free to choose your provider (this way you avoid a vendor lock-in)
- You can improve the software and adapt it to your needs (fixing bugs, adding new functionalities, etc).
- You don't have to pay annual licenses or updates (with new hardware requirements).
- You can teach using tools that later will be available for your students in business world.
- Forget about paying one license for each PC.

## But how can the Software be Free/Libre?

- Licenses provide little incomes for the majority of IT companies. They usually them from services (auditories, courses, implantations, etc).
- If a program is ...
  - Good, it'll be used worldwide (multiplying the incomes it provides).
  - Bad, then hiding the code won't make it better.
- Development rate increases, free/libre software usually have very good documentation, less (and sooner solved) bugs, lots of interfaces with other systems, etc).

## Who uses Free/Libre Software?

- Some institutions support free/libre software: Brazil, Andalusian regional government, University of Cádiz.
- More than 50% of Internet web servers run free/libre software.
- Report for European Commission: “Economic Impact of FLOSS on Innovation and Competitiveness of the EU ICT sector”. It explains why Free/Libre Software can be the way for Europe to lead IT business in future.
- NASA: Free/Libre Software has traveled to Mars.

## What kind of Free/Libre Software is available?

There is a wide range of FS solutions:

- Operating System: Linux, BSD, ...
- Office solutions: OpenOffice, Koffice, ...
- Internet tools: Firefox, Thunderbird, ...
- Multimedia: GIMP, Audacity, MPlayer, ...
- Programming: C/C++, Java, PHP, Python, Mono, ...
- Servers: Apache web server, MySQL Databases, Firewalls, ...
- CMS: Drupal, PHPNuke, Wikis, Moodle, ...
- Management: groupware, accountancy, CRM, ERP, ...

## How can I implant Free/Libre Software solutions?

Two ways:

- Buy services of a company:
  - Multinationals: IBM, HP, Sun, ...
  - Nationals/regional.
- Do it yourself
  - In UCA we have a computing department responsible of that (good results).
  - For some task external companies are contracted.

## Free/Libre Software in UCA

The Free/Libre Software Office (OSLUCA) started in 2004. Our main working lines are:

- Popularization: conferences, tutorials, forums, attending meetings to share experiences, ...
- Supporting teaching: recommending free/libre programs for any need.
- E-learning environment: Migration from WebCT to Moodle.
- Supporting researching with Free/Libre Software (developing and adapting it when necessary).
- No discrimination to any user: UCA was the first Spanish university (and one of the first in the world) to adopt open standards.
- Transfer of knowledge: collaboration with institutions, developments, ...
- University management: OpenOffice courses, corporative website, ...
- Students: free Internet access points running free/libre software, laptops to be borrowed at the library (provided by Toshiba): they only have Free/Libre Software installed and allow Internet *wi-fi* connection.
- Community: Forums, Forge to develop software, Free/Libre software and documentation compilation.

## Free/Libre Software in Teaching: an ethical issue

If you use Free/Libre Software for teaching:

- Your students can install the software they use in university in their home PCs.
- Your students have access to the documentation of the systems freely.
- Your IT students can see how the systems work and improve or adapt it.
- Your students can use those systems in future work without paying any license (what makes them more competitive).

## An example of successful Free/Libre Software project to support researching: R-UCA

- Statistics system *SPSS* increases its license price by 10, so it was out of our budget and we couldn't afford it.
- There was a free/libre software alternative: *R*. It's as good as *SPSS* but the graphical interface isn't very good.
- But there were some teachers who didn't want to change ...
- Solution: OSLUCA is responsible of a non-traumatic change.
- When? Course 2007/08.
- Who? Researching group and internal students.
- R-UCA goals:
  - Development of teaching resources under Free/Libre license GNU-FDL.
  - Courses for teachers, researchers and workers.
  - Creation of a Wiki to keep Spanish documentation about *R*.
  - Creation of a forum to support people using *R*.
  - Support to *R* project, mainly for Spanish community.

## Conclusions

- Free/Libre Software is a reality used for more and more companies and institutions every day.
- Any deployment or change in software must be planned and with enough resources (workers or partners).
- UCA Experience in Free/Libre Software has proved to be a success (money saved and new possibilities).

## Additional information:

- OSLUCA home site: <http://www.uca.es/softwarelibre>
- OSLUCA generic mail address: [osl@uca.es](mailto:osl@uca.es)
- My personal email: [manuel.palomo@uca.es](mailto:manuel.palomo@uca.es)