

THE *Open* GROUP



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**Boundaryless Information Flow**  
**Open Source in the Enterprise**

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# The Business Model of Free Software

## Legal Myths and Real Benefits

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# Overview

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- Who Are We?
- What is *Free Software*
- Business Models of *Free Software*
- *Free Software* & Internet Downloads



**Who Are We?**



# ACT Europe & Ada Core

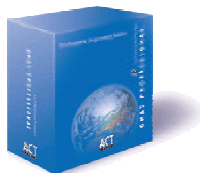
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- The leader in Ada 95 technology
- GNU technology contributor
- Everything that we do is *Free Software*

## Core Products

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- **GNAT Pro**



- Full-featured Ada 95 development environment

- **GNAT Pro High-Integrity Edition**

- To develop safety-critical applications



# Customers & Application Domains

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- Air traffic control
- Avionics
- Communications
- Energy
- Financial industry
- Medical Imagery
- Military
- Space
- Television
- Transportation
- Alcatel
- BAe
- Boeing
- Canal+ Technologies
- EADS
- Ericsson
- Eurocontrol
- Lockheed Martin
- Philips Semiconductors
- Raytheon
- Rockwell Collins
- SAAB
- Smith Industries
- THALES



# What is Free Software?



# Intellectual Property Rights (IPR)

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- The authors of a work own its copyright
- Unless:
  - Work-made-for-hire implied by employment
  - Specific work-made-for-hire agreement
  - Specific contractual assignment occurs
- Both source and object code can be copyrighted

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# What Does Copyright Control?

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- It allows the author to control copying
- Loading a program is a copy

# Copyright & Licensing

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- A copyrighted work cannot be copied unless...
- ... the copyright holder grants you a license ...
- ... permitting copies under specified circumstances
- Licenses are free to contain the clauses they like
  - Not quite...
  - E.g. In the EU it is legal to decompile applications for interoperability
- **Virtually all software today is sold with a license**

# Free Software Is Copyrighted Software

- *Free Software* comes with a license ...
- The General Public License (GPL)
- If you violate the GPL the copyright holder(s) can sue you
- From this point there is **NO DIFFERENCE** between



# GPL: The License of *Free Software* (FS)

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- **The GPL is written to favor FS users**
  - Unlike Microsoft license which is written to favor Microsoft
- **Specifically the GPL guarantees:**
  - Sources are available to recipients of FS programs
  - *Freedom* to run, copy, redistribute, change a FS program
  - If you distribute a FS program the recipients have your same rights
  - If you modify a FS program and redistribute the new modified program you must distribute your changes
- **Examples of *Free Software*:**
  - *Emacs, GCC, GDB, GNAT, GNU/Linux, ...*

# **Free Software & Public Domain**

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- **FS is NOT Public Domain (PD)**

**Software is in the PD if:**

- **Enough time has elapsed**
  - But this can be extended by modification
- **Explicitly placed in the PD by the holder of the copyright**
- **Up to the user to determine if something is in the PD**
  - PD software is owned by no one
  - You can do anything with PD software
  - Even have your own proprietary version

## Free Software & Open Source Software (OSS)

- OSS used to describe software that came with sources
- The term was abused by some vendors that provided...
- ... the sources under a very restrictive license
- [OpenSource.Org](http://opensource.org) has given the licensing criteria upon which a program can be considered OSS
- Free Software with its GPL is an example of OSS
- The BSD or Apache licenses are other examples of OSS



# Business Models of Free Software



# Software Business Models

(1 of 2)

	B2C	B2B
Paid-Up-Front (PUF)	<ul style="list-style-type: none"> <li>• No upgrades</li> <li>• No support</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrades</li> <li>• Some support</li> </ul>
Subscription based	<ul style="list-style-type: none"> <li>• Upgrades</li> <li>• No Support</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrades</li> <li>• Advanced support</li> </ul>

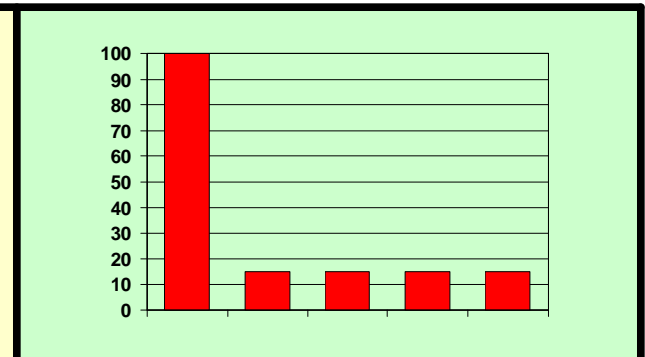
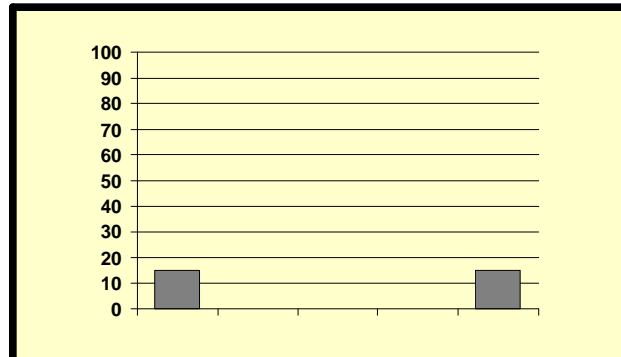
# Software Business Models

(2 of 2)

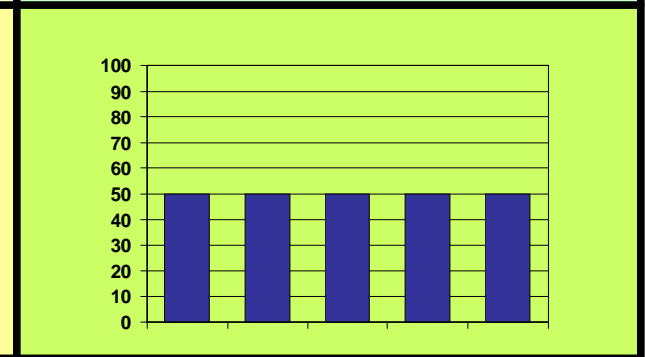
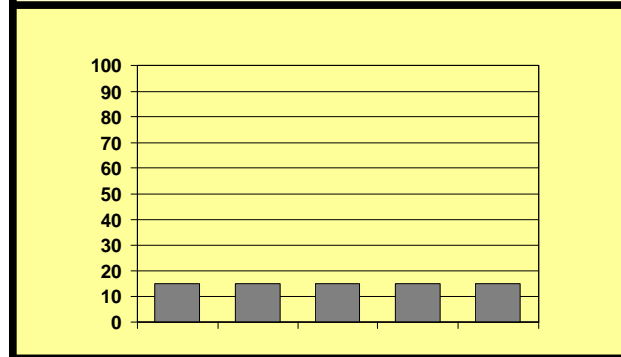
B2C

B2B

Paid-Up-Front  
(PUF)



Subscription  
based



## Free as in Freedom

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- You can sell *Free Software*
- *Free Software* is a matter of liberty not price
- A *Free Software* product is like any other product
- There are no restrictions on the price that can be charged

# Developing Proprietary Software

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- No problem in using FS tools to develop proprietary software
  - Eg. GDB, Emacs, ...

What about FS components (libraries, runtimes,...)?

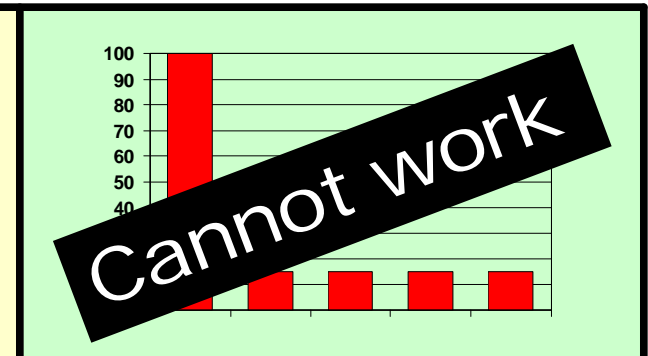
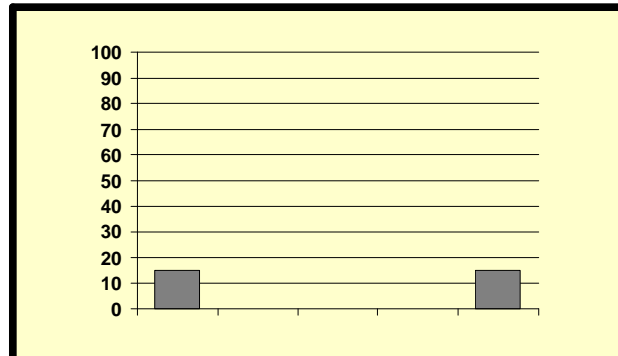
- If license is the GPL cannot redistribute the combined work
- FS vendors license their FS components with a special version of the GPL that allows distribution of combined work
  - E.g GNAT-modified GPL
- The Cygwin example

# Free Software & Business Models

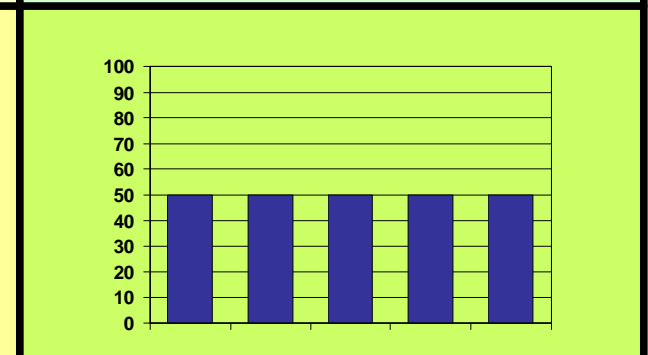
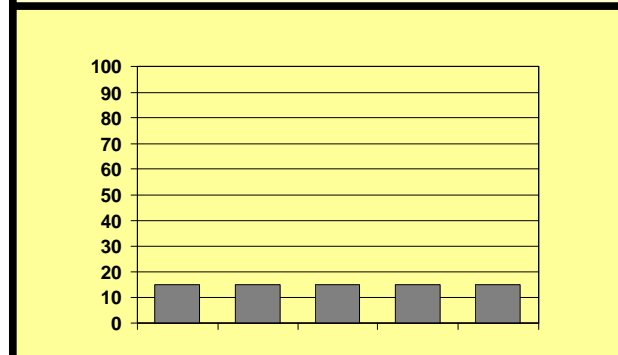
B2C

B2B

Paid-Up-Front  
(PUF)



Subscription  
based



## Selling *Free Software*

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- **FS is either sold as a commodity**
  - E.g. GNU/Linux
- **Or comes with a high-quality service**
  - E.g. GNAT Pro
  - Expertise-based support
  - Strong incentive to give a high-quality service
  - Allows the creation of a local pool of expertise



**Free Software**  
**&**  
**Internet Downloads**

# Internet Downloads

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- You have NO obligation to make a FS program available gratis
- However, FS programs can often be downloaded from the Net
- Why? Reasons vary
  - Marketing & mindshare
  - Create a community
  - Break a monopoly
  - ....



## Downloads & Legal Guarantees

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- What legal guarantees do you have ...
- ... when you download software off the net?
- Typically NONE
  
- You must identify the copyright holders and the license
- You may be **LEGALLY** responsible wrt 3<sup>rd</sup> party IPRs
  - In the US you are legally responsible: strict liability

# Purchased FS & Legal Guarantees

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When you buy FS the FS vendor gives you:

- A written license and
- Is legally liable to you for potential IPR violations



# Conclusion

## Summary

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- Free Software is just like any other software
- It is copyrighted software that comes with a license

The critical difference with conventional software is:

- License provides maximum freedom to the users
- No lock in
- License favors a support-centric business model