

Some about Open Source

Why should you consider using open source software in your IP-product?

IP-Dagarna 2000

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What is Open Source?

- × *Many definitions*
 - × *There are many definitions on what OSS (or Free Software, as FSF calls it) are. Many engaged people and organizations.*
- × *Common points*
 - × *You are allowed to use the software for any purpose.*
 - × *You are allowed to redistribute the software without obligations to the authors.*
 - × *You are allowed to modify the software and distribute your changes*

Why Open Source?

- x Your investment is safe*
 - x You do not depend on a vendor. If the company that sell you the software stops existing, or stops supporting the product, you can still use the software.*
- x You are not alone but still independent*
 - x You can modify the functionality of the product or fix it yourself if it's broken.*
- x No licenses to keep track of and pay for*
 - x Not really true, there are many licenses!*

Why not Open Source?

- x No one to sue if things goes wrong*
 - x You are not backed up by the makers of the software*
 - x The licenses of commercial software often makes it impossible to sue anyone anyway*
- x Open Source needs some knowledge*
 - x There are many different licenses*
 - x Free software are not always good software*
 - x You can always present your problem to an open source company and buy your solution and still have the benefits of free software*

GPL, Open Source or Free Software???

- × *This is a problem, too many similar words*
- × *Free Software, Open Source*
 - × *With the most free software you can do what you want. But remember that there are many different licenses*
- × *GNU GPL (General Public License)*
 - × *Free Software, copyleft*
 - × *Takes rights from the authors and gives it to the product.*
- × *What is free in free software?*
 - × *Free as in freedom of speech not free Pizza*
 - × *Free Software may be commercial as well as non-commercial software may be proprietary.*

Why Linux in your IP-product?

- × *It's build on Unix philosophies*
 - × *Unix is not just an operating system. It's a way of thinking and program.*
- × *Easy to port*
 - × *Linux are already ported to at least 12 platforms. More are on the way*
- × *It's very scalable*
 - × *Runs in large servers as well as very small devices*
- × *It's modular*
 - × *You can change it while it runs*
- × *It's GPL (General Public License)*
- × *It has network functionalities built in*
 - × *Includes firewall and routing capabilities*

*Why *BSD in your IP-product?*

- × It's Unix*
- × Easy to port*
 - × NetBSD available for about 30 platforms*
- × It's scalable*
 - × Runs in large servers as well as handheld devices*
- × It's not GPL (General Public License)*
 - × It's under BSD-License that are even more free*
- × It has network functionalities built in*
 - × The FreeBSD IP stack are what many considers the reference implementation of the IP-stack*
 - × Firewall functionality built in*

Real world examples (1/4)

- x IBM Linux Watch (Source IBM)*
 - x A wrist watch running Linux 2.2 and X11R6*
 - x Built to show the viability of Linux across all platforms*
 - x Powerful; 8MB of RAM, 8MB of flash storage*
 - x Connectable; IrDA*
 - x Light; Weight 44g*
 - x Small;*
 - x The whole watch is 56x48x12.25 mm*
 - x The motherboard is 27.5x35.3 mm*
- x More information and photos*
 - x <http://www.research.ibm.com/WearableComputing/>*

Real world examples (2/4)

- × *Wearables Lab's Matchbox Web server*
 - × *Not a commercial product*
 - × *Runs RedHat Linux and Apache Web server*
 - × *Size; 71x45x5mm. Weight; 20g*
- × *Wearables Lab's Matchbox PC*
 - × *Not a commercial product*
 - × *Extends the Web server with, among other things, disk and graphics. This makes it a fully functional PC that can run several operating systems.*
 - × *Size; 71x45x24mm. Weight; 90g*
- × *More information and photos*
 - × *<http://wearables.stanford.edu>*

Real world examples (3/4)

- × *Agenda Computing's Agenda VR*
 - × *A PDA running Linux*
 - × *Runs Linux 2.4 and X11R6*
 - × *Easy to build/port software to it*
 - × *You can use familiar libs like glibc*
 - × *FLTK are included for easy development of GUIs*
 - × *Communicates though RS232 and IrDA*

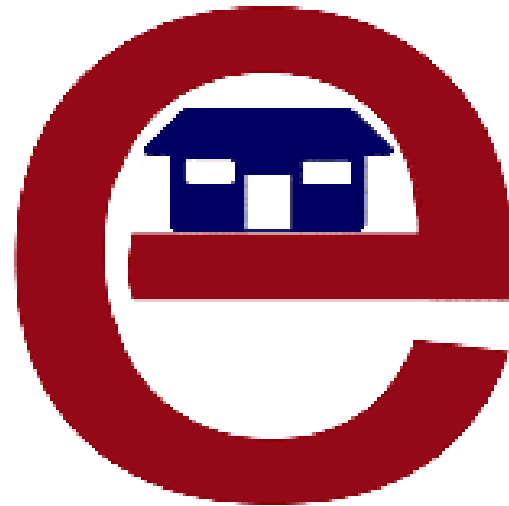
- × *More information and photos*
 - × *<http://www.agendacomputing.com>*

Real world examples (4/4)

- × *Ericsson's e-box*
 - × *A commercial product*
 - × *Used as a residential gateway in smart homes*
 - × *Runs a Linux 2.2 operating system*
 - × *Has firewall functionality built in*

- × *More information*
 - × *<http://www.ericsson.se/ebox>*

IT made invisible



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