Training evaluation report

Training session: Embedded Linux Training
Training dates: Jan. 28 - Feb. 1, 2008 (5 days)

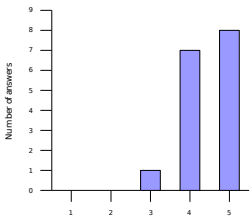
Number of participants: 17
Returned feedback forms: 16/17

Thank you for having organized a Free Electrons training session!
Here is a wrap-up of evaluations from participants.

Learning objectives

1. How well did the course meet your learning objectives?

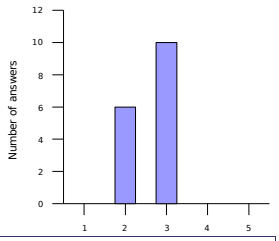
Rating	Answers	Description
1	0	Not met
2	0	
3	1	
4	7	
5	8	Fully met



4 - Quite a lot of things in only one week. Perhaps some more time for labs or 2 weeks training sessions.
3 - Maybe I expected the lectures to be more focused on Linux embedded. I found them too generic.
4 - The contents are perfect, but need more time to understand it better.
5 - This course is not for newbies ;-)

2. How was the duration of the course?

Rating	Answers	Description
1	0	Too short. Couldn't learn enough in such a short time.
2	6	A little too short
3	10	Just fine
4	0	A little too long
5	0	Definitely too long. The concepts could be learned in much less time.

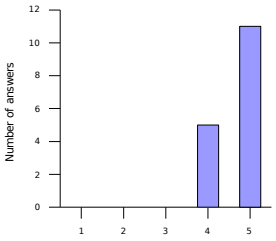


2 - Lots of concepts, very useful and interesting.
2 - There is a lot of material, and there is too little time for labs.
2 - You need previous knowledge, otherwise you are a bit lost.

Lecture materials

3. How helpful were the lecture materials?

Rating	Answers	Description
1	0	Not helpful. Made things more difficult to learn and understand.
2	0	
3	0	
4	5	
5	11	Really made things easier to understand and learn.



4 - Require some experience.

5 - However, there are too many slides for only one week.

5 - Links were very useful.

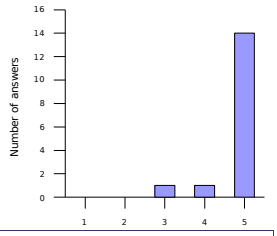
5 - The material is OK. However I have found that the time for lectures should be increased. The lecture material could be done in a auto-learning way so the instructor could explain while doing the lectures.

4 - More outline slides will be helpful.

5 - Better if you put more examples and give all the lab's solutions at the end of the course.

4. Will you recommend these materials to others?

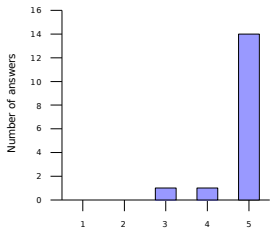
Rating	Answers	Description
1	0	No. Not helpful without following the sessions.
2	0	
3	1	
4	1	
5	14	Definitely



5- I hope people in the company take care of this documentation (not only for using but for knowing the complexity, too).

5. If you have Linux project opportunities, will you use these materials again?

Rating	Answers	Description
1	0	No. I will look for other sources of information.
2	0	
3	1	
4	1	
5	14	Definitely



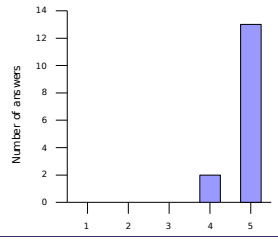
5 - I will, from next week.

5 - There are a good digest of Linux “state of the art”.

Instructor added value

6. How knowledgeable was the instructor?

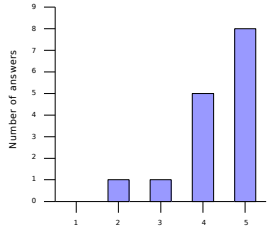
Rating	Answers	Description
1	0	Not enough for my own technical experience.
2	0	
3	0	
4	2	
5	13	More than enough for my own experience.



5 - Better in Spanish

7. Did instructor oral explanations add value to the lecture materials?

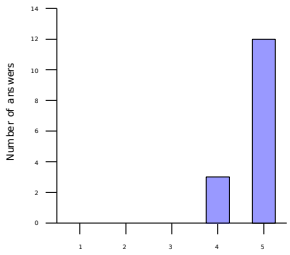
Rating	Answers	Description
1	0	No added value to reading the materials.
2	1	
3	1	
4	5	
5	8	Yes. The instructor really made very useful oral explanations.



3 - The slides provide all the information, so there isn't really much to add.

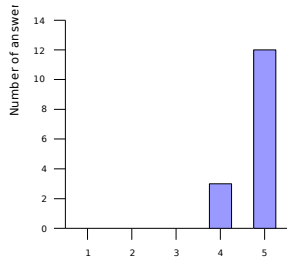
8. How well did the instructor answer questions from the audience?

Rating	Answers	Description
1	0	Poorly. Didn't try to understand the questions well or rarely managed to find useful answers.
2	0	
3	0	
4	3	
5	12	Answered very well to questions from the audience



9. Was the instructor helpful with practical labs?

Rating	Answers	Description
1	0	No, not enough available and helpful during the labs.
2	0	
3	0	
4	3	
5	12	Yes. The instructor definitely helped to make labs a learning opportunity.

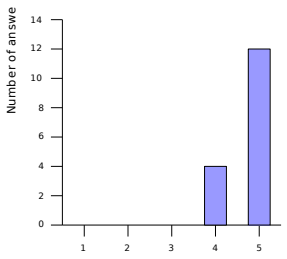


5 - Too many people with problems. It does that in many times we must wait for or answer to a class mate. The explanation of instructor is very fine.

Training labs

10. How useful were the training labs?

Rating	Answers	Description
1	0	Not useful. Didn't add significant value to the lectures.
2	0	
3	0	
4	4	
5	12	Very useful. Helped to highlight things not understood and build useful experience.

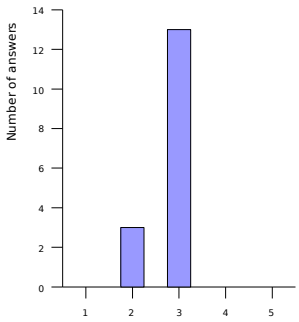


5 - They are essential

5 - Totally necessary

11. How difficult were the training labs?

Rating	Answers	Description
1	0	Too difficult. Didn't help or even discouraged a beginner to get more familiar with the tools and concepts.
2	3	A bit too difficult. Would be better if the lab instructions gave a bit more details about explanations.
3	13	Just fine. Prompted me to look for answers, get my own experience and find my own solutions.
4	0	Too easy for my own technical level.
5	0	Too easy for everyone. Should challenge participants more and help everyone to practice on real issues.

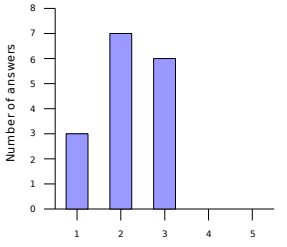


3 - Good!

2 - I think more details can help me because I have never used Linux, but I know this course is not for beginners and so it forced our curiosity and try to do the things ourselves or with the help of the “community”.

12. Was enough time dedicated to the practical labs?

Rating	Answers	Description
1	3	No. More practice is needed
2	7	A little bit more time would help.
3	6	Just fine
4	0	A little bit less time would be enough.
5	0	Don't need to spend so much time on labs. On-the-job practice is best

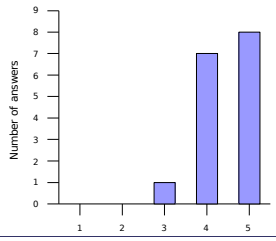


1 - But I know that we haven't time. Lectures are so interesting and big that there isn't enough time to do all.

Training conditions

13. How do you rate training conditions (room size, equipment, environment...)?

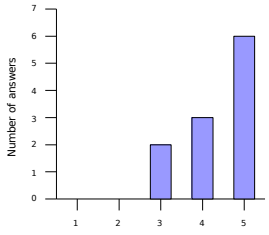
Rating	Answers	Description
1	0	Poor.
2	0	
3	1	
4	7	
5	8	Very good.



3 - Problems with the Internet connection.
4 - Internet connection should be better.

14. How do you rate the training equipment (mainly computers)?

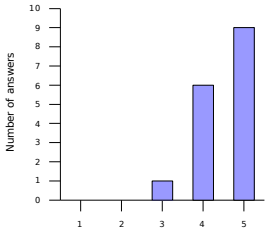
Rating	Answers	Description
1	0	Poor. Not powerful enough to execute practical labs.
2	0	
3	2	
4	3	
5	6	Very good. Very little time waiting, more time learning.



N/A - Does not apply. We used our own computers.
5 - I brought mine
N/A - Just our own laptop, so... I don't know how to evaluate this.

15. How well was the course organized (program, registration, meeting the schedule...)?

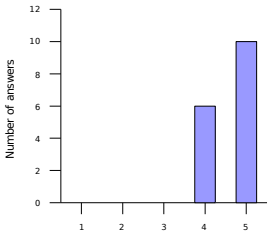
Rating	Answers	Description
1	0	Not well
2	0	
3	1	
4	6	
5	9	Very well



Overall rating

16. How much did you learn?

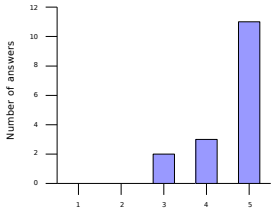
Rating	Answers	Description
1	0	Definitely not much
2	0	
3	0	
4	6	
5	10	Definitely more than I expected.



4 - As I said before, I was expecting more embedded-focused lectures.
5 - But I will learn much more when I go to the office and review all information you have shown us.

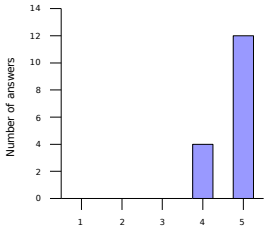
17. How useful will this course be in your daily job?

Rating	Answers	Description
1	0	Not useful.
2	0	
3	2	
4	3	
5	11	Very useful. Will make my job easier and more productive.



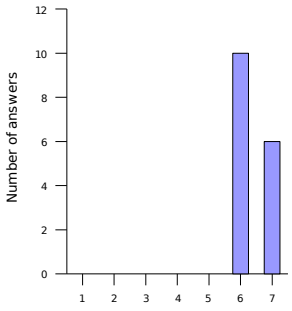
18. Would you recommend this course to others?

Rating	Answers	Description
1	0	No.
2	0	
3	0	
4	4	
5	12	Yes, definitely



19. Overall rating

Rating	Answers	Description
1	0	Very disappointing
2	0	Disappointing
3	0	A little bit disappointing
4	0	OK
5	0	Pretty good
6	10	Very good
7	6	Excellent

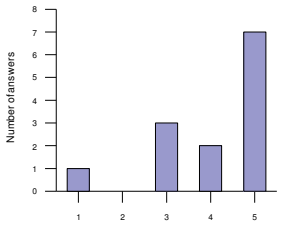


6 - Well done! Great job!

7 - The overall impression of the course was excellent. Maybe the contents are a bit too much for only 5 days; but anyway it's always good to learn new things. If you add to the presentations, a little bit of written documentation that briefly explain each subject, and how to <*??*> it, it would be the best.

20. An extra session?

Rating	Answers	Description
1	1	No
2	0	
3	3	Why not?
4	2	
5	7	Yes, definitely



3 - Other topic: CAN bus

5 - More practical sessions.

5 - Embedded specific materials, uClinux...

5 - Deeper kernel internals (new driver model - kobjects, ksets, subsystems buses, devices and relationship, scheduler,...). JFFS2 implementation.

5 - I don't know because I don't have the level, but I'm sure that there are more topics.

4 - Threading in user space.

3 - Posix API's, user programming deeper.

N/A - I have to learn lots of things about “API”s but this is because of my low level in Linux.

5 - RT Linux => Xenomai

Number of votes for topics in an extra session

Understanding the Linux kernel		Linux device driver development		Linux board support packages		Embedded system development		Miscellaneous needs	
Process management	2	USB device drivers	4	Processor specific code	3	Lightweight tools	1	Java	2
Filesystem implementation	3	USB host drivers	5	Board specific code	4	Embedded system development tools	4	Real-time	6
Memory management	3	PCI drivers	4	Board specific interrupt support code	2	Cross-compiling toolchains	3	Audio	3
Scheduling implementation	3	Network drivers	4	DMA support	5	Debugging solutions	5	Video	3
Bootstrap code	3	Block drivers	2	Bootloader development	2	Software development tools	2	uClinux	3
		Flash drivers	2			Programming with graphical libraries	5	Voice over IP	1
		I2S drivers	2			POSIX API	5		
		Input drivers	1			System optimization	5		
		Sound drivers	3			Root filesystem creation	2		
		Video drivers	2						

Instructor comments

Thanks to the (sometimes oral) suggestions from the audience, I will improve future training sessions...

- By giving more time for labs.
- By giving solutions for all labs at the end of the course.