



Training evaluation report

Training session: Embedded Linux Training
Training dates: Apr. 2-4, 2008 (3 days)

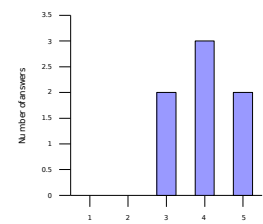
Number of participants: 8
Returned feedback forms: 7/8

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	2	
4	3	
5	2	Fully met

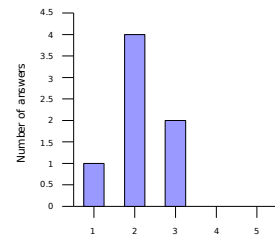


5 - Already a daily Linux user. Came to learn new things and benefit from professional training material. Learnt many new things as well. Excellent!

3 - No initial learning objectives.

2. How was the duration of the course?

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



2 - If I were to be fully operational (on the new concepts) after the training, I would say it was too short. But I know I can use the training material as a future reference so it was just a little "too short", especially on some labs (concentrated on operational stuff, did not always get the big picture).

2 - 3 days instead of 5 is too short to complete the labs.

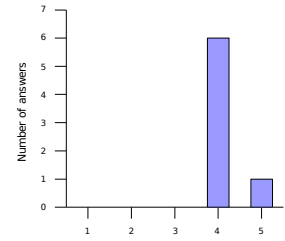
3 - Some parts were probably too long, but the whole was good.



Lecture materials

3. How helpful were the lecture materials?

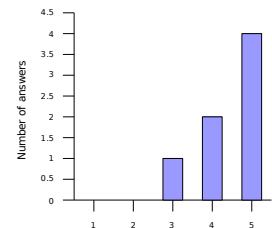
Rating	Answers	Description
1	0	Not helpful. Made things more difficult to learn and understand.
2	0	
3	0	
4	6	
5	1	Really made things easier to understand and learn.



4 - Material really helpful. It will be even more as a reference for future usage.
 4 - Helpful to cope with labs. Examples are OK. External available resources are OK.
 4 - Missing information, because we've skipped some labs.
 4 - It would be good to add a little more info to the slides, somewhere a little to concise and need some "padding out".

4. Will you recommend these materials to others?

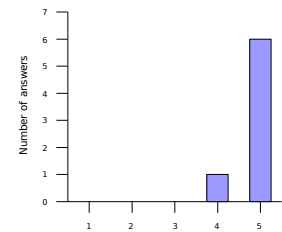
Rating	Answers	Description
1	0	No. Not helpful without following the sessions.
2	0	
3	1	
4	2	
5	4	Definitely



5 - High quality, professional presentation.
 3 - For some who has not attended the lecture, I would suggest the electronic version of the training book.

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	0	
4	1	
5	6	Definitely



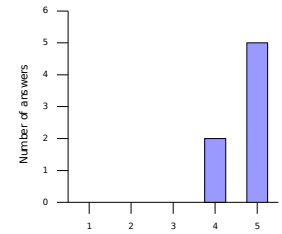
5 - Excellent material, especially for the links inside it.



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	5	More than enough for my own experience.

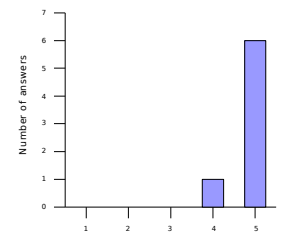


4 - Was looking for kernel dev info, in which the instructor is fluent. Good.

5 - Explanations were understandable. I am not a Linux developer, but it was OK.

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

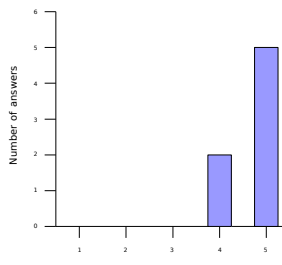
Rating	Answers	Description
1	0	No added value to reading the materials.
2	0	
3	0	
4	1	
5	6	Yes. The instructor really made very useful oral explanations.



5 - Did not hesitate to add comments + useful precisions. Was always honest: could share some info which was not on slides but always said whether he was not sure of it.

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

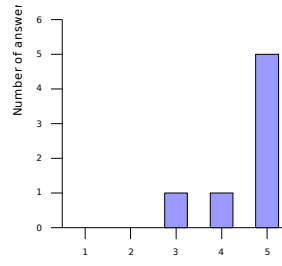
Rating	Answers	Description
1	0	Poorly. Didn't try to understand the questions well or rarely managed to find useful answers.
2	0	
3	0	
4	2	
5	5	Answered very well to questions from the audience



5 - Honest + technical explanations were precise and helped understand matters.

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	1	
4	1	
5	5	Yes. The instructor definitely helped to make labs a learning opportunity.



5 - Got precisely to the point while still explaining matters. Did not hesitate to engage / tackle a difficult problem.

4 - In fact, time missed to complete the lab.

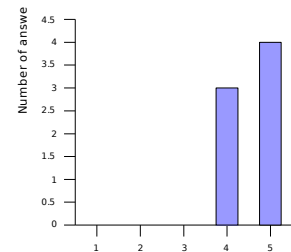
3 - Skipping some labs made things harder but good enough.



Training labs

10. How useful were the training labs?

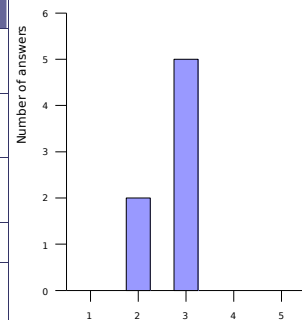
Rating	Answers	Description
1	0	Not useful. Didn't add significant value to the lectures.
2	0	
3	0	
4	3	
5	4	Very useful. Helped to highlight things not understood and build useful experience.



5 - May the most valuable part. Excellent material for the practical labs which allowed to practise with real life setups. Qemu much better (and faster) than real boards!

11. How difficult were the training labs?

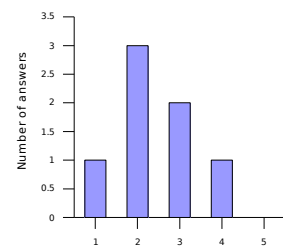
Rating	Answers	Description
1	0	Too difficult. Didn't help or even discouraged a beginner to get more familiar with the tools and concepts.
2	2	A bit too difficult. Would be better if the lab instructions gave a bit more details about explanations.
3	5	Just fine. Prompted me to look for answers, get my 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 - Correct level of difficulty. Need some previous Linux expertise on some matters though.
2 - Many points were new for me, so I did not have enough time.

12. Was enough time dedicated to the practical labs?

Rating	Answers	Description
1	1	No. More practice is needed
2	3	A little bit more time would help.
3	2	Just fine
4	1	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



2 - In adequation with training itself. I guess this is because we did it in 3 days vs. 5 days.
3 - Download time can be optimized.

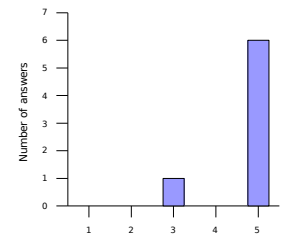
1 - I regret we didn't have more time to spend on labs. I felt that the balance labs / theory wasn't quite right and would have liked more practical work. Perhaps shorter, simpler labs but more of them.



Training conditions

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

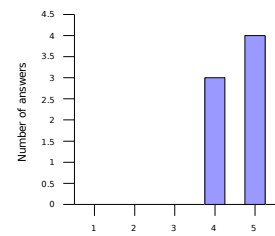
Rating	Answers	Description
1	0	Poor.
2	0	
3	1	
4	0	
5	6	Very good.



5 - Very good but maybe N/A since this was our room.

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	0	
4	3	
5	4	Very good. Very little time waiting, more time learning.

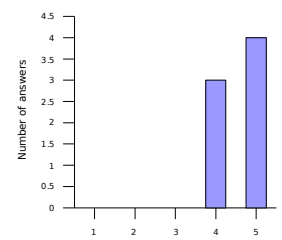


5 - All the more interesting as we already performed the Ubuntu install beforehand. Truly excellent to have network available for package download.

4 - Connection to LXR was too poor from time to time.

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

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



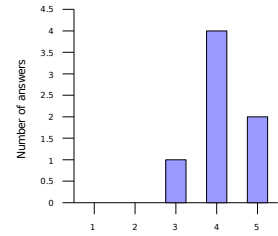
4 - On track. We missed some parts though (udev and kernel init). Seems to be due to 5 days -> 3 days reduction though.



Overall rating

16. How much did you learn?

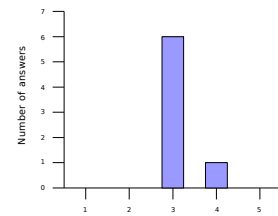
Rating	Answers	Description
1	0	Definitely not much
2	0	
3	1	
4	4	
5	2	Definitely more than I expected.



4 - Did not consult training material beforehand so I did not have expectations. Well worth it was the training though.

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

Rating	Answers	Description
1	0	Not useful.
2	0	
3	6	
4	1	
5	0	Very useful. Will make my job easier and more productive.



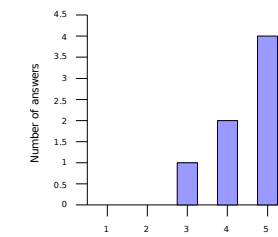
3 - Do not work on Linux but on vxWorks. Already a daily Linux user (as dev env). Training will be useful in the future though.

3 - I'm not a Linux developer.

3 - Was more for discovering purpose.

18. Would you recommend this course to others?

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

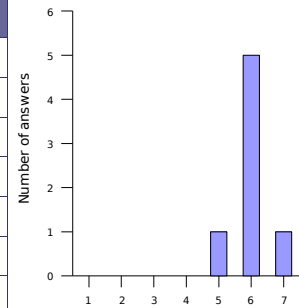


5 - Excellent training on embedded Linux. The fact that it is in line with free software is a plus (open model for slides & sources & feedback).



19. Overall rating

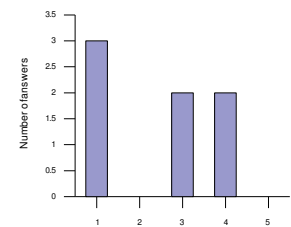
Rating	Answers	Description
1	0	Very disappointing
2	0	Disappointing
3	0	A little bit disappointing
4	0	OK
5	1	Pretty good
6	5	Very good
7	1	Excellent



6 - Very high quality training. Well prepared labs and chosen software solutions. Excellent material (slides & lab books).

20. An extra session?

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



1 - Need to think about our needs (since we do not do daily Linux dev)
 4 - Linux boot time.
 1 - No need today (maybe USB)

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	USB device drivers	Processor specific code	1 Lightweight tools	Java
Filesystem implementation	USB host drivers	Board specific code	1 Embedded system development tools	1 Real-time
Memory management	PCI drivers	Board specific interrupt support code	1 Cross-compiling toolchains	Audio
Scheduling implementation	Network drivers	DMA support	1 Debugging solutions	Video
Bootstrap code	1 Block drivers	Bootloader development	1 Software development tools	uClinux
	Flash drivers		Programming with graphical libraries	Voice over IP
	I2S drivers		POSIX API	
	Input drivers		System optimization	
	Sound drivers		1 Root filesystem creation	
	Video drivers			

Free Electrons comments

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

- By making some lecture parts shorter, to focus on essential things and leave more time for practical labs.
- By making our LXR server faster.
- By introducing new small hands on labs that break up long sequences of lectures.