

Review report of a final thesis

Czech Technical University in Prague

Faculty of Information Technology

Student: Andrea Holoubková
Reviewer: Ing. Tomáš Zahradnický, Ph.D.
Thesis title: Survey and example of trusted platform (TPM)
Branch of the study: Information Technology

Date: 30. 1. 2018

<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 5.</i>
1. Difficulty and other comments on the assignment	1 = extremely challenging assignment, 2 = rather difficult assignment, 3 = <u>assignment of average difficulty</u>, 4 = easier, but still sufficient assignment, 5 = insufficient assignment
<i>Criteria description:</i> Characterize this final thesis in detail and its relationships to previous or current projects. Comment what is difficult about this thesis (in case of a more difficult thesis, you may overlook some shortcomings that you would not in case of an easy assignment, and on the contrary, with an easy assignment those shortcomings should be evaluated more strictly.)	
<i>Comments:</i> I consider difficulty of the assignment to be average.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 4.</i>
2. Fulfilment of the assignment	1 = <u>assignment fulfilled</u>, 2 = assignment fulfilled with minor objections, 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled
<i>Criteria description:</i> Assess whether the thesis meets the assignment statement. In Comments indicate parts of the assignment that have not been fulfilled, completely or partially, or extensions of the thesis beyond the original assignment. If the assignment was not completely fulfilled, try to assess the importance, impact, and possibly also the reason of the insufficiencies.	
<i>Comments:</i> The student had to an overview of TPM-like technologies and I state she did. For this reason I find the assignment fulfilled.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 4.</i>
3. Size of the main written part	1 = <u>meets the criteria</u>, 2 = meets the criteria with minor objections, 3 = meets the criteria with major objections, 4 = does not meet the criteria
<i>Criteria description:</i> Evaluate the adequacy of the extent of the final thesis, considering its content and the size of the written part, i.e. that all parts of the thesis are rich on information and the text does not contain unnecessary parts.	
<i>Comments:</i> Size of the written part in my opinion exceeds the average bachelor thesis.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
4. Factual and logical level of the thesis	90 (A)
<i>Criteria description:</i> Assess whether the thesis is correct as to the facts or if there are factual errors and inaccuracies. Evaluate further the logical structure of the thesis, links among the chapters, and the comprehensibility of the text for a reader.	
<i>Comments:</i> Disk encryption in section 2.1 is in my opinion too broadly discussed disturbing otherwise smooth flow of the thesis. Otherwise I find the logical and factual level excellent.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
5. Formal level of the thesis	90 (A)
<i>Criteria description:</i> Assess the correctness of formalisms used in the thesis, the typographical and linguistic aspects, see Dean's Directive No. 26/2017, Article 3.	
<i>Comments:</i> The formal level of thesis is excellent. Language of the thesis is very good, though I'm missing an article or two. Typographical aspect of the thesis is also excellent. I find only minor issues such as wrongly written quotes. English quotes are written as 66 quoted content 99, while the thesis commonly uses 99 quoted content 99.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
6. Bibliography	95 (A)

Criteria description:
Evaluate the student's activity in acquisition and use of studying materials in his thesis. Characterize the choice of the sources. Discuss whether the student used all relevant sources, or whether he tried to solve problems that were already solved. Verify that all elements taken from other sources are properly differentiated from his own results and contributions. Comment if there was a possible violation of the citation ethics and if the bibliographical references are complete and in compliance with citation standards.

Comments:

I find the bibliography rich and numerous. The only thing I could criticise is that several references are missing their authors such as [33, 47, 55, ...].

Evaluation criterion:

The evaluation scale: 0 to 100 points (grade A to F).

7. Evaluation of results, publication outputs and awards

85 (B)

Criteria description:

Comment on the achieved level of major results of the thesis and indicate whether the main results of the thesis extend published state-of-the-art results and/or bring completely new findings. Assess the quality and functionality of hardware or software solutions. Alternatively, evaluate whether the software or source code that was not created by the student himself was used in accordance with the license terms and copyright. Comment on possible publication output or awards related to the thesis.

Comments:

It appears that the thesis is slightly positively biased. The student does not mention any negative aspects of using a TPM such as that it might be factory backdoored. She only refers to external sources.

Evaluation criterion:

No evaluation scale.

8. Applicability of the results

Criteria description:

Indicate the potential of using the results of the thesis in practice.

Comments:

I believe the thesis could serve as a step-by-step guide to the TPM.

Evaluation criterion:

No evaluation scale.

9. Questions for the defence

Criteria description:

Formulate any question(s) that the student should answer to the committee during the defence (use a bullet list).

Questions:

1. TPM PCRs are 20 bytes long and their value is calculated by using SHA-1. This hash function has been obsoleted recently. Are TPM users at risk?

Evaluation criterion:

The evaluation scale: 0 to 100 points (grade A to F).

10. The overall evaluation

90 (A)

Criteria description:

Summarize the parts of the thesis that had major impact on your evaluation. The overall evaluation **does not** have to be the arithmetic mean or any other formula with the values from the previous evaluation criteria 1 to 9.

Comments:

I do hereby recommend the thesis for defence and grade it with A (excellent).

Signature of the reviewer: