Review report of a final thesis

Czech Technical University in Prague   **Faculty of Information Technology**

Student: Bc. Marek Krátký
Reviewer: Ing. Alexandru Moucha, Ph.D.
Thesis title: Turris plugin pro analýzu síťového provozu pomocí statistických metod
Branch of the study: Computer Security (Master, in Czech and in English)

Date: 1. 6. 2015

Evaluation criterion:	The evaluation scale: 1 to 5.
1. Difficulty and other comments on the assignment	*1 = extremely challenging assignment,* *2 = rather difficult assignment,* **3 = assignment of average difficulty,** *4 = easier, but still sufficient assignment,* *5 = insufficient assignment*
Criteria description: *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.)*	
Comments: The work of the student was to implement a plugin for the Turris (distributed firewall and intrusion prevention system) allowing statistical analysis of the network traffic.	

Evaluation criterion:	The evaluation scale: 1 to 4.
2. Fulfilment of the assignment	**1 = assignment fulfilled,** *2 = assignment fulfilled with minor objections,* *3 = assignment fulfilled with major objections,* *4 = assignment not fulfilled*
Criteria description: *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.*	
Comments: The requirements were fulfilled.	

Evaluation criterion:	The evaluation scale: 1 to 4.
3. Size of the main written part	**1 = meets the criteria,** *2 = meets the criteria with minor objections,* *3 = meets the criteria with major objections,* *4 = does not meet the criteria*
Criteria description: *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.*	
Comments: The size and quality of the work correspond to the required levels.	

Evaluation criterion:	The evaluation scale: 0 to 100 points (grade A to F).
4. Factual and logical level of the thesis	*90 (A)*
Criteria description: *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.*	
Comments: The work follows the natural logical pattern of solving the problem. The written document follows the guidelines.	

Evaluation criterion:	The evaluation scale: 0 to 100 points (grade A to F).
5. Formal level of the thesis	*90 (A)*
Criteria description: *Assess the correctness of formalisms used in the thesis, the typographical and linguistic aspect s, see Dean's Directive No. 12/2014, Article 3.*	
Comments: The work is very well written , easy to read and understand.	

Evaluation criterion:	The evaluation scale: 0 to 100 points (grade A to F).
6. Bibliography	*90 (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: Very good work with the documentation for the Turris ecosystem (hardware + Linux).	
Evaluation criterion:	*The evaluation scale: 0 to 100 points (grade A to F).*

| 7. | Evaluation of results, publication outputs and awards | *80 (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:
The plugin was tested only in lab environments.

| *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:
The work itself does not contain any novelty factor though it can be further developed and tested in real networks.

| *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:
Who is the author of equations 2.1 and 2.4?

I suggest for the future not to provide code (as in section 3.3) but pseudocode, logical diagram or explanation. What is the real information a reader gets from the code on pages 40 and 41, for example?

| *Evaluation criterion:* | *The evaluation scale: 0 to 100 points (grade A to F).* |

10. The overall evaluation
79 (C)

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:
The work is good and proves that the author is able to read, understand and apply technical documentation into a project. I recommend the work for defence.

Signature of the reviewer: