

## I. IDENTIFICATION DATA

<b>Thesis name:</b>	<b>Enhancing security and privacy of computer networks with OpenBSD as network operating system on router</b>
<b>Author's name:</b>	<b>Matyáš Vohralík</b>
<b>Type of thesis :</b>	bachelor
<b>Faculty/Institute:</b>	Faculty of Electrical Engineering (FEE)
<b>Department:</b>	Department of Computer Science
<b>Thesis reviewer:</b>	Ing. Petr Císař
<b>Reviewer's department:</b>	NVision ICT Czech Republic, a.s.

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b>	<b>ordinarily challenging</b>
<i>Evaluation of thesis difficulty of assignment.</i>	
The assignment requires a good knowledge of OpenBSD OS. It is not so commonly used compared to MS Windows, Linux, Android or iOS, so it is more difficult to find relevant information and solve problems.	

<b>Satisfaction of assignment</b>	<b>fulfilled</b>
<i>Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.</i>	
The thesis fulfills most of the assignment. The fact that the resulting solution works just on different hardware is not, from my point of view, any serious fault. Having the solution running on the required hardware would be just matter of some extra time and effort, with not much of invention needed.	

<b>Method of conception</b>	<b>correct</b>
<i>Assess that student has chosen correct approach or solution methods.</i>	
The approach of solution chosen by the student is good and in line with common practice. Obviously, the student has gained all the necessary knowledge needed to solve this kind of integration tasks. Maybe solution based on simple shell scripts would not be robust enough for a commercial product, but it is definitely sufficient for a bachelor thesis.	

<b>Technical level</b>	<b>A - excellent.</b>
<i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i>	
The student has demonstrated a good knowledge and range of skills from OS management to shell scripting. Also, I recognize the amount of work needed to convert the theoretical articles on the subject, that are base of the integration, into real and concrete configuration files or scripts that actually implement it.	

<b>Formal and language level, scope of thesis</b>	<b>B - very good.</b>
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
The look of the thesis follows common practice and I consider it good. The student has chosen to perform the thesis in English language which he obviously knows very well, so I see no issue with the language of the thesis. However, there is another aspect of the thesis that I consider less than perfect: its general readability and the structure of the text. The thesis starts with theoretical analysis, as usual, where the theory needed for the solution is explained. And then, the text goes straight very low-level, explaining the actual configuration of the particular software components. What I miss there is a chapter that would explain the structure of the solution in high-level, to allow the reader to understand the overall working of the solution and what is the usage of the preceding theoretical part. Of course, the information can be found in the following text, but from my point of view, this is not a good approach. For example, the first picture that can be considered a block diagram of the solution can be found in chapter 5 "Configuration and testing".	

**Selection of sources, citation correctness****A - excellent.**

*Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.*

I have no comments nor objections to this aspect of the thesis.

**Additional commentary and evaluation**

*Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.*

As I have already mentioned, from technical point of view, the student has been performing very well, but he has a bit of difficulty with presenting and explaining his work to others.

**III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION**

*Summarize thesis aspects that swayed your final evaluation. Please present apt questions which student should answer during defense.*

Overall, it is a good thesis. The major technical goal has been achieved and it definitely outweighs the formal issue of the thesis. Therefore, in my evaluation, it has no impact on the final grade. Neither has the fact that the assignment has not been 100% fulfilled.

I have no questions to the thesis.

I evaluate handed thesis with classification grade **A - excellent**.

Date: **16.1.2023**

Signature:

