

Module grade: 20%

Submission due: Friday 4pm, October 26<sup>th</sup> 2018

# Coursework 1 – Individual Report –

#### **Notes to students**

#### **General Guidance:**

You are encouraged to write as much as you think is necessary to answer the question appropriately, and whilst there are no specific rules about the size of the submission we would expect somewhere in the region of 1500--2000 words **for each paper**. You should include references in the Harvard style and evidence of research material to reinforce your answers. Base your answers on a combination of the information from the course module, the document you review, and your own thoughts and opinions.

Please submit coursework electronically (only) and will be run through our plagiarism detection mechanisms. Please ensure you are familiar with the Universities Plagiarism rules and if you are in any doubt please contact your module tutor.

#### **Additional Guidance:**

https://local.cis.strath.ac.uk/wp/wp-content/uploads/pgthandbook2018.pdf

### Question

Critically review any **one** of the following papers using the assignment guidance provided below.

- (a) A survey of BGP security, Issues and Solutions by K Butler, T R Farley, P McDaniel, and J Rexford, Proceedings of the IEEE Volume 98 Issue 1 http://ix.cs.uoregon.edu/~butler/pubs/bgpsurvey.pdf
- (b) *Phonotactic Reconstruction of Encrypted VoIP Conversations: Hookt on fon-iks*. Andrew M. White, Austin R. Matthews, Kevin Z. Snow and Fabian Monrose, "IEEE Symposium on Security and Privacy, 2011.

http://www.cs.unc.edu/~fabian/papers/foniks-oak11.pdf

## **Assignment Guidance and Marking Criteria**

Write your submission like a report addressed to a security expert (top security czar of a company or a security professor in a university). It should introduce the topic you are studying to the reader, explain why the topic is interesting, how it relates to previous work (with references), and then describe the methodology used to investigate the topic and a statement of the results. Feel to use the following as a structure, if you wish.

15% -- What questions does the paper ask, why are those questions interesting?

20% -- How does it answer them (detail the topic investigation methodology)?

20% -- What are the results?

5% -- What did you learn from this paper?

30% -- Write a critical commentary on the strengths and weaknesses of the work taking previous work in the area into consideration (see related work section of the paper).

10% -- Write a discussion note about the paper itself by presenting a list of topics or questions about the paper (not the questions the paper asks) for the reader to consider.

## Learning goals

This assignment covers network security, protocols, cryptography, and threat modeling. It tests the student's ability to apply security fundamentals knowledge in the above sub-areas and invites them to engage in the topic in terms of reproducing book work, applying existing knowledge, and making links between their knowledge and the wider security literature.