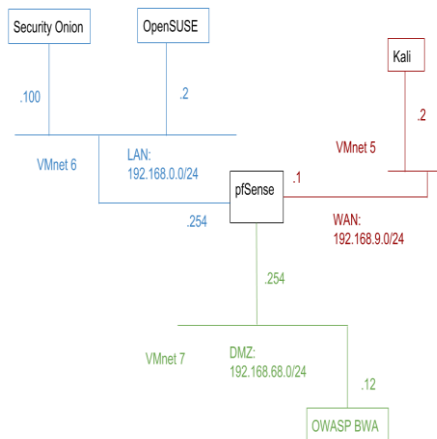


Security Tools Rebuild

By: **Cassie Grove; Connor Jack; James Troman**

Supervisor: **Paul Bryant**

Client: **John Gould**



The Virtual Environment Topology.

The OpenVAS tool that gave the most issues.

The main machine used.

INTRODUCTION

Over the period of Trimester 2 2018, in the IA7308 Security Testing and Network Defence course, the students had a difficult time in completing all the lab content provided by the tutor.

Our client, whom is also the tutor, proposed that the team rebuild the lab content with new and up to date versions of the tools and the virtual machines, with new PDF instructions to follow suit.

DEVELOPMENT

The project team selected the Agile Scrum methodology to tackle the situation in sprints. It allowed the team to conduct daily stand ups for communication and be able to play around with the sprints.

Sprint 1 was to solve the main issue that both students and client were having, and that was the tool of OpenVAS. The team wrote up Test Strategy, Plan and Cases. We found that due to software not all being updated, this caused the issues for the clients students.

Sprint 2 was to update all virtual machines that were used in the environment used. They included the Kali, OpenSUSE, Security Onion, pfSense and OWASP BWA.

Sprint 3 the team was given a list of the average grades that the class of 2018 in each lab. Taking the worst average, the project team took the first 10 and updated the tools, and the instructional PDFs.

Sprint 4 was the final 10 labs, in which the team ran into trouble with one particular lab that included the Snorby tool. The team discovered that the Snorby tool was no longer used in the newer versions of Security Onion, and even reverting back to the older version of Security Onion did not fix the problem. The team made do with what they could, and made a new lab that carries out part of the original content.

CONCLUSION

The project was to rebuild all the security tools and operating systems as well as write up new instructional PDFs.

The project team has provided a series of updated versions of software that would allow the client to give his future students the experience to play around with up to date security tools and provide a more up to date learning experience.