

Aaron Lee Cowdry, BSc. Computer Networks, UWTSD Swansea, School of Applied Computing

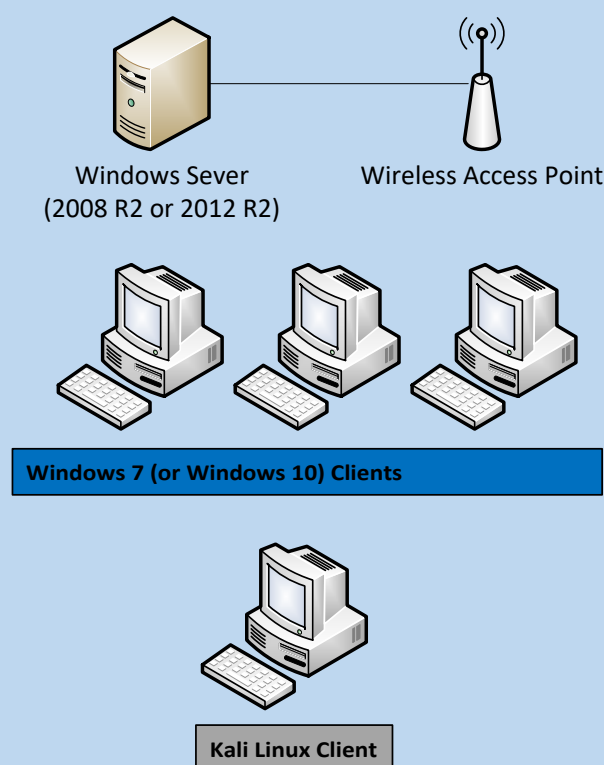
Student ID: P134514 | acowdry.134514@student.uwtsd.ac.uk

1. Introduction

Kali Linux is network penetration testing tool. It is used to evaluate the electiveness of security on a network using ethical hacking techniques.

The virtualised network will be built with in Oracle VM VirtualBox.

The network will include a sever installed with Windows 2008 (or 2012) and three Windows 7 (or Windows 10, if available). A forth client will be installed with Kali Linux This client will be used to carry out the penetration test- ing scenarios.



2. Aims & Objectives

Aims -

The aim of the project will be to create a client-server based network using VirtualBox in WLAN environment.

Different ethical hacking techniques will be carried out with no security features active on the network and then repeated with certain security features active.

Objectives -

- Review the current literature in the field.
- Carry out an experiment using the features of Kali Linux.
- Compare the results of the wireless penetration technique's scenarios.

3. Research Philosophy & Approach

A positivism research philosophy is suggested for this project due it being based experiment and observations being carried out on the network.

A deductive approach will be used in the project. This would included a hypothesis for the project outcome.

4. Research Strategy

The proposed project will use following research strategies:

- Experimental
- Document Review
- Survey

5. Data Collection Methods

Data could be collected by carrying out a survey based on how well the network performers during each attack against a common criteria so that each type of attack could be compared with each other.