Wireless Network Penetration Testing

INTRODUCTION AND WIRELESS PENETRATION TEST PROCESS OVERVIEW



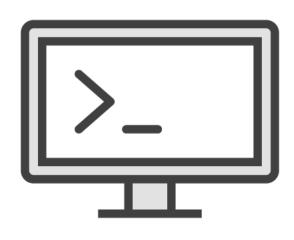
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CYBER SECURITY CONSULTANT

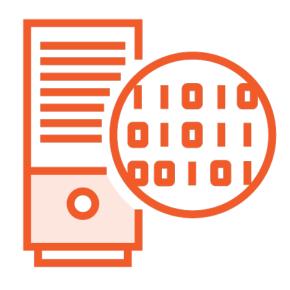
Almost all companies have wireless networks.



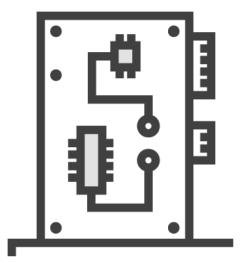
What You Will Need



Kali Linux VM



Basic Linux knowledge



Compatible network card



Module Overview



Wireless penetration testing process overview

Pre-engagement tasks

Our course scenario



Wireless Penetration Testing Process



Process Overview

- 1 Initiation
- 2 Information gathering
- 3 Vulnerability identification
- 4 Exploitation

5 Reporting

Initiation: Pre-engagement

Define scope

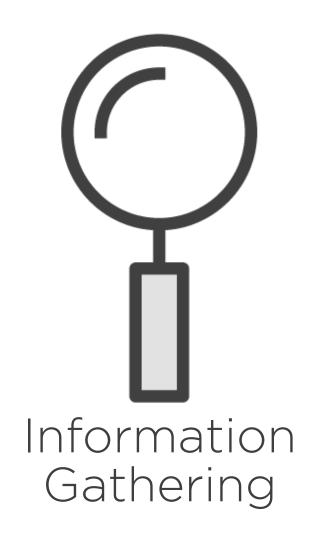
Collect environment information

Schedule tests

Communicate to stakeholders

Get client formal sign-off





Identify wireless networks
Identify network segments
Identify technologies used
Identify protocols
Create a target list

Vulnerability Identification



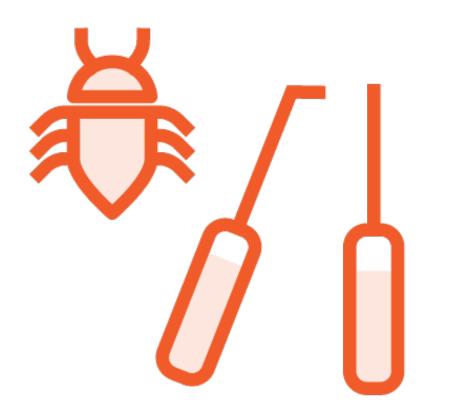
Identify potential attack vectors



Identify exploitations



Exploitation



Test potential vulnerabilities without breaking anything

Document successful attacks and potential attacks



Reporting



Describe the vulnerabilities found

Describe potential issues

Describe confirmed issues

Define risk

Propose recommendations



Pre-engagement Tasks



Define scope

Collect environment information

Schedule tests

Communicate to stakeholders

Get client formal sign-off

Initiation: Pre-engagement



Globomantics Course Scenario



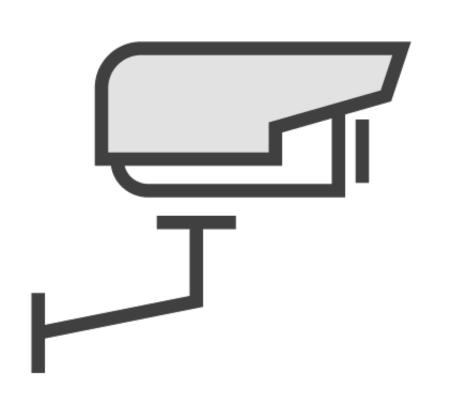
Scope



Analyze all the wireless networks in the company, determine the risk of the current wireless networks, and propose improvements



Environmental Information



GBM laptops (WPA2/WPS)

GBM cameras (WPE)

GBM guest Wi-Fi (open/portal authentication)

GBM cafeteria (open)



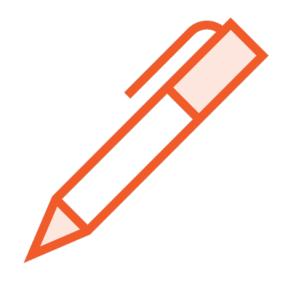


Schedule was agreed upon with the client



Communications were sent to IT Managers





Client signed off



Tests are ready to start



Module Summary



It is important to follow a process

The process is composed of 5 stages:

Initiation

Information Gathering

Vulnerability Identification

Exploitation

Reporting

Pentests need to be scoped, scheduled and approved by the client



Next up: Information Gathering

