

Wireless Penetration Testing Framework

- 1. WLAN Discovery
- 2. Encrypted and Unencrypted WLAN configuration
- 3. SSID Scanning and Monitoring
- 4. IP Sniffing Detection
- 5. Wireless Data Collection
- 6. WI-FI Mac Analysis
- 7. Wireless Tools & Information Analysis
- 8. Client, Crypto & Enterprise Attacks Testing
- 9. Analyzing wireless traffic with TCPDump, Wireshark, Kismet
- 10. Mapping Wireless Networks with GPSMAP
- 11. Live Network Mapping
- 12. Identifying capabilities & Features of EAP
- 13. Packet Framing on Wireless Networks
- 14. Sniffing in Monitor Mode detection
- 15. Defining and Understanding rogue networks
- 16. Security from malicious Rogue Networks
- 17. Wired & Wireless side AP Fingerprinting
- 18. Wireless side warwalking & Client monitoring
- 19. Mobile Devices & hotspots Access testing
- 20. Defensive Measures for Administrators and Service Providers
- 21.WEP, WPA-PSK, WPA2-PSK Decryption Mechanism Configuration.
- 22. Applying WEP Failures to other network protocols
- 23. Testing Hotspot injection Attacks
- 24. Testing of PSPF & Wireless network isolation vulnerabilities
- 25. Establishing Amazon EC2 cloud computing systems for public and private networks
- 26. Testing of TKIP Plain text Recovery Attacks
- 27. Testing & Configuration of Protocol Fuzzing



- 28. Configuring Metasploit Framework Meterpreter Exploits
- 29. WLAN IDS Analyst Techniques
- 30. WIDS Deployment Models
- 31. Trend Analysis and Anomaly analysis
- 32. Evaluating Attacks through traffic Analysis
- 33. Managing an authentication Architecture
- 34. Managing Client certificate trust Policies
- 35. Different techniques for deploying a new root certificate authority Manual , Web Server Delivery, Scripted Web Server Delivery, Automatic trust with GPO
- 36. Managing third party wireless manager tools
- 37. Create a custom installer with Odyssey manager
- 38. Implementing wireless specific GPO Policies



Penetration testing process

Phase 1 – Reconnaissance

- 1. Responsive Access Points
- 2. Sniffing
- 3. Undetectable

Phase 2 – Attack & Penetration

1. Bypass or Attack security controls

Phase 3 – Client Side Attacks

- 1. Supplicant Attack
- 2. Capture and Crack Credentials

Phase 4 – Entering the Network

- 1. Hosts Identified
- 2. Network Size Determined

Phase 5 – Vulnerability Assessment

1. Manual and Automated

Phase 6 – Exploitation & Data Capture

- 1. Penetrate Compromise
- 2. Data Analysis