

# Advance penetration testing with Kali Linux

- Introduction to kali Linux
  - What is new in kali linux
  - Installing kali linux
  - Configure Network Connection
  - Using kali Linux
  - Update kali Linux
- Penetration Testing Standard
  - Open Web Application Security Project (OWASP)
  - Licensee Penetration Testing (LPT)
- Penetration Testing Classification
  - White Box and Black Box
  - Penetration Testing vs Vulnerability Assessment
- Advance Penetration Methodology
  - Target Framework and Scope
  - Gathering client requirements
  - Test plan checklist
  - Profiling test boundaries
- Information Discovery
  - Google hacking
  - DNS Information Gathering
  - Whois Information Gathering
  - Route and Network information Gathering
  - All-in-one information gathering
- Scanning Target

Advance Network Scanning

Port Scanning

Stealth Port scanning techniques

Udp port Scanning

Packet crafting using Hping

Nmap Scanning and Plug-ins

Active Banners and System OS Enumeration

Passive Banners and System OS Enumeration

➤ Vulnerability Assessment Tools for System

Nessus

Open Vas

➤ Enumerating Target

Enumerating users, groups and shares

Enumerating DNS resource records

Enumerating Network devices

➤ Target Exploitation

Setting up metasploit

Exploitation with Metasploit

Working with Meterpreter Session

VNC Exploitation

Stealing password Hash

Adding custom Modules to Metasploit

➤ Exploit Writing

Using Immunity Debugger

Writing Exploit for real world applications

➤ Privileges Escalation

Breaking Password hashes

Cracking telnet and ssh password

Cracking FTP password

Using metasploit post exploitation modules

➤ Maintaining Access

Protocol tunneling

Proxy

Installing persistent Backdoor

➤ Advance Sniffing

ARP Poisoning

DHCP Starvation

Mac flooding

DNS Poisoning: redirecting user to fake website

Sniffing credentials from secured websites

➤ DOS Attack

Syn Attack

Application request Flood Attack

Service request Flood

Permanent denial of service attack

➤ Web Penetration Testing

Introduction to Web Application Vulnerabilities

Web Application Assessment and Exploitation with automation Tools

Hacking database using SQL injection

Hijacking web sessions

➤ Wireless Penetration Testing

Introduction to Wireless Security

Cracking Wireless Encryptions (WEP,WPA,WPA2)

Configuring Fake Access Point

Halting wireless network through Dos attack

Restricting wireless access through wireless jammer

- Exploits and Client Side Attack
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  - Introduction to Buffer overflow
  - Introduction to fuzzing
  - Fast-Track Hacking
- Social Engineering Toolkit
  - Stealing passwords through phishing
  - Generating backdoors
  - Java Applet attack
- Firewall Testing
  - Introduction to Firewall
  - Testing Firewall
  - Testing Firewall Rules
  - Testing Ports
- Document Management and Reporting
  - Documentation and results verification
  - Dradis Framework
  - Magic Tree and Maltego
- Data Collection ,Evidence Management and Reporting
  - Type of Report
  - Presentation Report
  - Post Testing Procedure