

## 04-Enumeration

PLEASE use prebuilt labs

Victim Data: direct interaction Need 2-6 computers online that have the services running and vulnerable

**Advanced:** Build a data file / artifact that is actionable by the contract holder. There are no instructions for this task. You must figure everything out.

Attacker Data: Kali/ Parrot

### Objective

extract information about the target organization:

- Machine names, their OSes, services, and ports
- Network resources
- Usernames and user groups
- Lists of shares on individual hosts on the network
- Policies and passwords
- Routing tables
- Audit and service settings
- SNMP and FQDN details

### Overview of Enumeration

Enumeration creates an active connection with the system and performs directed queries to list information about the target.

### Lab Tasks

Ethical hackers or penetration testers use several tools and techniques to enumerate the target network. Recommended labs that will assist you in learning various enumeration techniques include:

1. Perform NetBIOS enumeration
  - Perform NetBIOS enumeration using Windows command-line utilities
  - ~~Perform NetBIOS enumeration using NetBIOS Enumerator~~

- Perform NetBIOS enumeration using an NSE Script
- 2. Perform SNMP enumeration
  - Perform SNMP enumeration using snmp-check
  - ~~○ Perform SNMP enumeration using SoftPerfect Network Scanner~~
- 3. Perform LDAP enumeration
  - Perform LDAP enumeration using Active Directory Explorer (AD Explorer)
- 4. Perform NFS enumeration
  - Perform NFS enumeration using RPCScan and SuperEnum
- 5. Perform DNS enumeration
  - Perform DNS enumeration using zone transfer
  - Perform DNS enumeration using DNSSEC zone walking
- 6. Perform RPC, SMB, and FTP enumeration
  - Perform RPC and SMB enumeration using NetScanTools Pro
  - Perform RPC, SMB, and FTP enumeration using Nmap
- 7. Perform enumeration using various enumeration tools
  - ~~○ Enumerate information using Global Network Inventory~~
  - ~~○ Enumerate network resources using Advanced IP Scanner~~
  - Enumerate information from Windows and Samba host using Enum4linux