Discovery with ADRecon

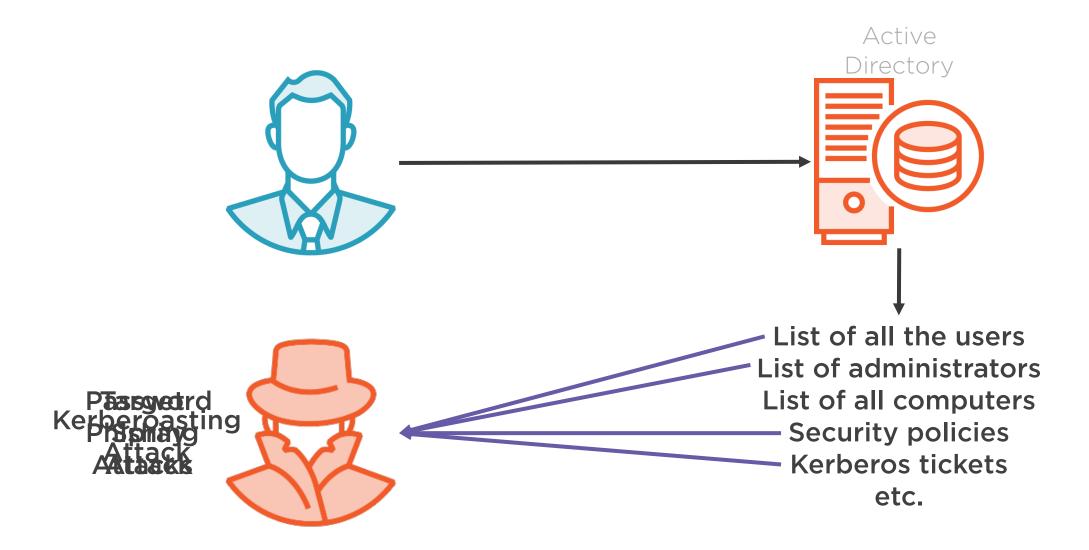


Ricardo Reimao

CYBER SECURITY CONSULTANT



Information Gathering from Active Directory





ADRecon



ADRecon

Author: Prashant Mahajan @prashant3535

A tool which gathers information about the Active Directory and generates a report which can provide a holistic picture of the current state of the target AD environment.



ADRecon

Open source tool (GNU v3.0)

https://github.com/adrecon/ADRecon

Version for Azure Active Directory https://github.com/adrecon/AzureADRecon

Usually not detected by anti-virus

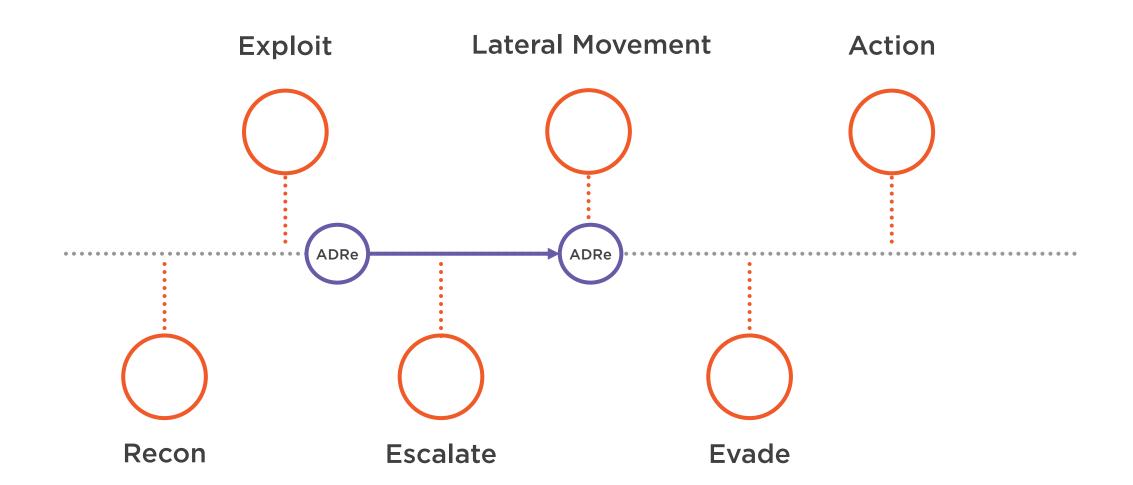
Does not require admin privileges

Gathers several interesting information

- Users
- Service accounts
- Security policies
- Computers
- etc.



Kill Chain





MITRE ATT&CK

Tactics

Initial Access

Execution

Persistence

Privilege Escalation

Defense Evasion

Credential Access

Discovery

Lateral Movement

Collection

Command & Control

Exfiltration

Impact



MITRE ATT&CK

Initial Access

Execution

Persistence

Privilege Escalation

Defense Evasion

Credential Access

Discovery

Tactics

Lateral Movement

Collection

Command & Control

Exfiltration

Impact

T1201:

Password Policy Discovery

T1069:

Permission Groups Discovery

T1087:

Account Discovery



MITRE ATT&CK

Initial Access T1558: **Credential Access Steal or Forge Kerberos Tickets Tactics** T1558.003: Kerberoasting Lateral Movement Collection -T1213: **Data from Information Repositories** Command & Control Impact



Staying Legal

Stealing data without authorization is ILLEGAL in most countries



Letter of engagement, detailing dates and scope of what will be executed

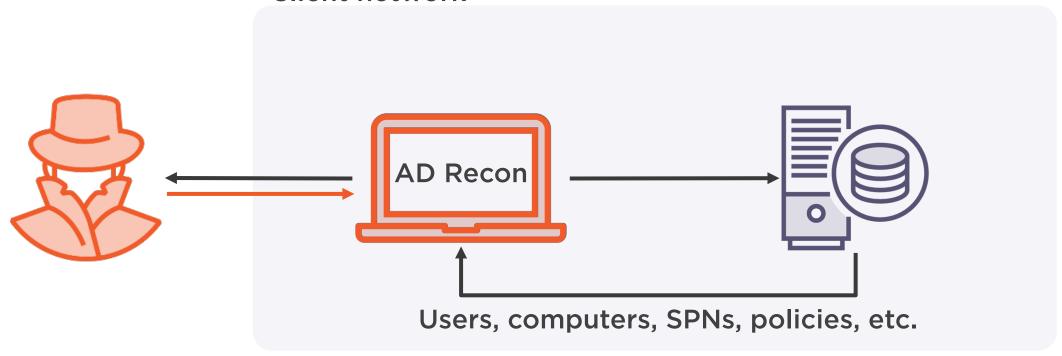
Formal document, signed by the client, authorizing the types of attack you may perform

Always consult the client before any attack that may impact the network



Attack Explanation

Client network



Prerequisites

Small Lab Environment

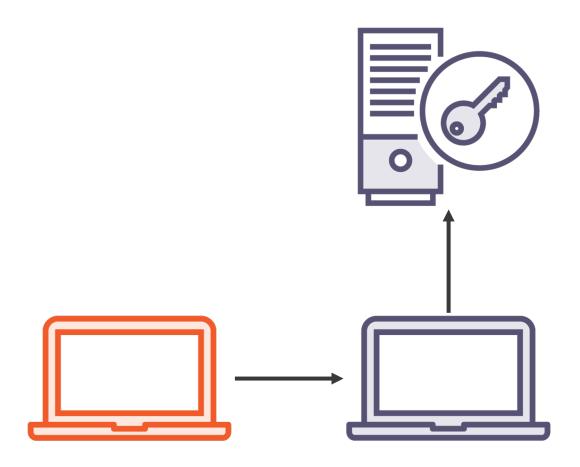
Windows 2016 Domain

Including:

- Windows 2016 domain controller
- Windows workstation

Additional:

- Attacker machine: Kali Linux





Demo Place Holder

- 1. Installation Tips and Tricks
- 2. First use instructions and common usage syntax
- 3. Use of main features on live targets or in live environment



More Information

Official Documentation

Few other capabilities

https://github.com/adrecon/ADRecon

https://github.com/adrecon/ AzureADRecon

Author's talk on the tool

OWASP Conference https://www.youtube.com/ watch?v=hNwXd54O8tU

Password Cracking Tools

Hashcat

https://hashcat.net/

John-The-Ripper

https://github.com/magnumripper/ JohnTheRipper

Remediation

Monitor high traffic of AD requests

Use complex passwords for service accounts



Thank you!



Ricardo Reimao Cyber security consultant

