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COS30015 – Lab 4

C2 Persistence

Presented by Jamie Ooi

Thursday 25 August, 2022



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COS30015 IT Security – Lab 4 Background

Red Team

Lab 4 - Malware Implant



What is Malware and How Does It Work?
searchsecurity.techtarget.com

Lab 2 - Fingerprinting



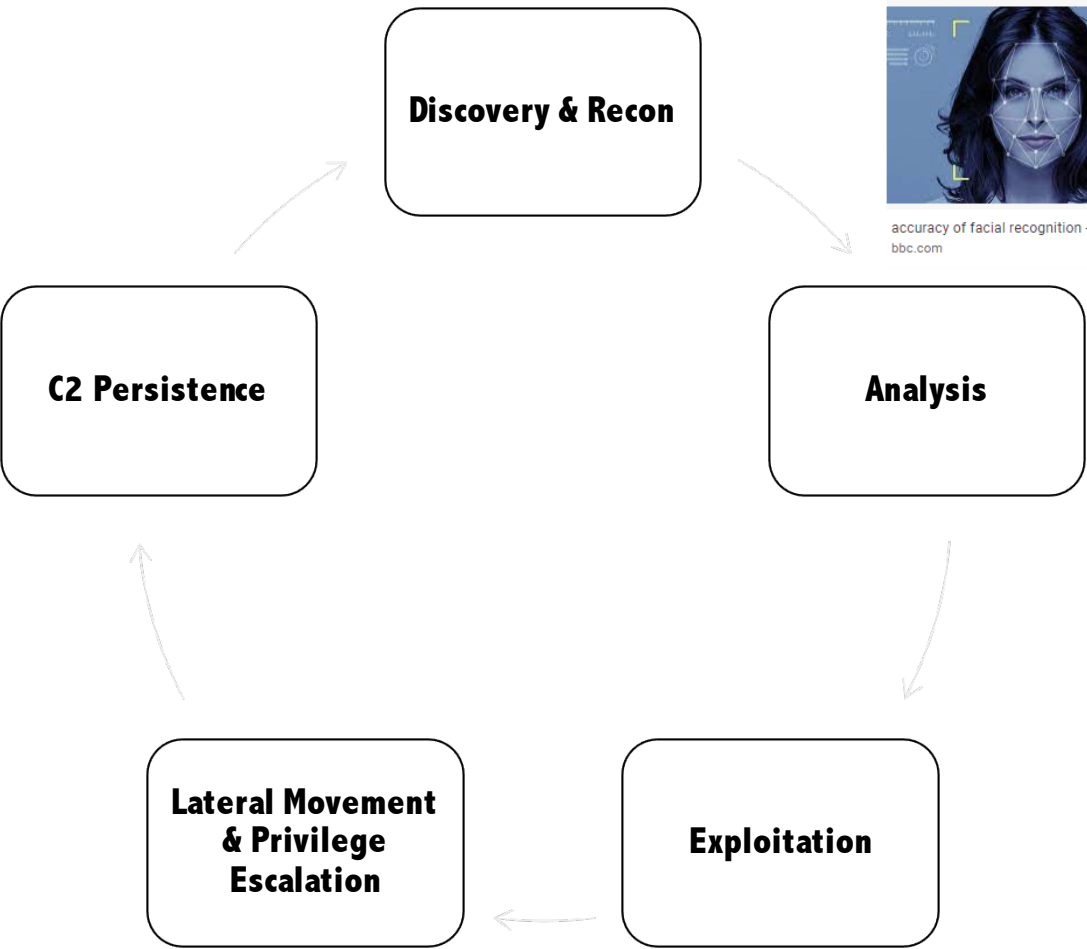
accuracy of facial recognition - BBC News
bbc.com

Lab 3 - Buffer Overflow Identification

Buffer overflow example
www.hackingtutorials.org

Buffer (8 bytes)								Overflow	
U	S	E	R	N	A	M	E	1	2
0	1	2	3	4	5	6	7	8	9

Buffer overflow explained: The basics ...
hackingtutorials.org



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Command and Control (C2) Persistence

To establish persistent (forever, kinda) access on your target

- **Methods of delivery:** phishing, USB drop, browser drive by, untrusted downloads, file upload
- **Some examples of maintaining persistent access:**
 - Kerberoasting Golden Ticket
 - Anti-virus Evasion
 - Reverse Shell
 - Privilege Escalation to Domain Administrator

Lab 4 - Malware Implant



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Stuxnet

- Discovered in 2010, was dormant / active since 2005
- Targeted SCADA systems
- Delivered via an infected USB drive – breached the “*air gap*”
- Identified because it accidentally infected an engineer’s computer
- Infects a computer and then scans the network for specific Siemens software
- Tweaked the frequency of the centrifuges at specified time of the day, so that parts were being thrown out



Ooh a free usb drive - Piece of Candy ...
memegenerator.net

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when my computer is slow - Meme Generator
meme-generator.com

Three Virtual Machines
RedHat Linux 7.3,
WindowsXP Control,
Windows XP

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Questions ?

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Thursday 25 August, 2022

Reminder:
Assignment 1 is due in
2 weeks!



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