508.2 - Intrusion Analysis

Advanced Evidence of Execution 6-33
Prefetch6-13
Re view 6-8
Evidence of execution8
'PECmd.exe' – Prefetch file analysis 9-13
Overview9
Usage10
Output and a nalysis11
ShimCache (AppCompatCache)14-16
Times tomp detection15
'AppCompatParser.exe' – Execution history16
Amcache.hve17-26
Overview
Parsing Amcache19-22
Auditing executable presence19
Auditing installed drivers21
'amca chepa rser.exe' – Amca che extra ction 23-26
Overview23
Example output24-25
Associated vs. Unassociated24
What to look for25
Application Execution Analysis2
Scaling automatic execution analysis27-31
Overview27
'appcompatprocessor.py' – Scaling analysis 28-30
Stacking with a ppcompat processor.py32
Least frequency of occourance32
Even Log Analysis for Responders and
Hunters
Event Log Fundamentals38-43
Where to find event logs
History38
Maxsize options39
Types of event logs 40

Security log	41-43
Categories	42
alysis Scenarios	44-
Se curity log: Tracking a ccount usage	46-72
Detailed log properties	
Logon type codes	50
Identifying logon sessions	52
Logon ID	52
Session duration/length	52
Identifying brute force attacks	54
Built-in Accounts	56-57
Tracking admin account activity	58
Auditing account creation	60
Tracking RDP sessions	62-67
Remote desktop logging	67
Terminal Services / RDP client log	67
Account logon events	69-72
NTLM	69
Kerberos	69
Logon error codes	70-71
Pass the hash	72
Security log: Tracking recon	74-75
Account and group enumeration	74-75
Security log: Tracking lateral movement	85-104
Networkshares	85-86
Overview	85
Cobalt strike example	86
Runas / Explicit Credentials	88-92
Runas detection	90
Cobalt strike example (make_token & p	th)92
Auditing scheduled tasks	94-99
Hunting	95
Remote task scheduler artifacts	98-99
Suspicious services	101-104
Overview	101
Ps Exec	103-104
Event log clearing	106-107
Event log attacks	109-110

mimikatz - 'event::drop'	109	Warning, error and crash logs 139-14	10
DanderSpiritz – 'eventlogedit'	109	'report.wer' – Windows error reporting14	12
Invoke-Phant0m	109	Process tracking and capturing CU143-14	1 5
Eventlog analysis tools	77-82	CLI Auditing example14	
Event log explorer	77	WMI – Windows Management Instrumentation. 147	7-
'EvtxCmd.exe' – cmd event log parser	79-82	156	
EvtxCmd maps	80	Overview14	١7
Grouping and filtering EvtxCmd results	82	WBEM/CIM/WMIC14	١7
Lateral Movement Adverary Tactics. 1	13-134	WMI Attacks148-15	1
Lateral movement: Copy malware	113-118	Recon14	
RDP se rvi æs	. 114-116	Privilege Escalation	0
Source system artifacts	114-115	wmic service / Get-WmiObject -Class win32 process15	60
Destination system artifacts		Lateral movement15	
Windows ad min shares		process call create	
Source system artifacts	117	Capturing WMI commands15	52
Destination system artifacts		Auditing WMI Persistence153-15	
Lateral movement: Execution	119-134	'WMI-Activity/Operational' log15	3
Ps Exe c		Quick wins15	54
Source system artifacts	-	PowerShell logging156-17	1
Destination system artifacts		WinRM (PowerShell Remoting)15	
Remote management tools		PS downgrade attacks15	8
Remote services		Enable PowerShell logging15	9
Overview		Script block logging16	0
Artifacts		PowerShell 'stealth' syntax16	52
Remote scheduled tasks		Quick wins16	3
Overview	123-124	PowerShells cript obfuscation163-16	54
Artifacts	126	Cyberchef16	54
Remote registry interaction	124	PowerShell transcript logs167-16	9
Overview	124	PSReadline/'ConsoleHost_history.txt' (PowerShell command history)17	71
Windows remote shell (WinRS)	123-124		
Overview	123-124	Eventlog summary/cheatsheet17	
WMI	127-128	Eventlog collection	
Artifacts	127-128	Live system collection17	
PowerShell Remoting	129-131	Log forwarding	
Source systemartifacts	129-130	PowerShell - 'Get-WinEvent'17	
Destination system artifacts	131	Scaling log a nalys is17	7
Application deployment software	132-133	Eventlog resources	
Vulnerability Exploitation	134	Sysmon179-18	
CLI, PowerShell and WMI Analysis 1	39-182	Log analysis resources18	12

Evidence of malware execution 139-145