

Forum:[Hack Forums](#)

Thread: [\[PowerShell\] TCP Port Scanner](#)

Travelers - August 19, 2017, 1:39 pm

Been messing with this thing for about a day now. I'm by no means a coding expert so I'm pretty thrilled I was able to make my first port scanner. This thing only scans TCP ports, and you are able to define the ports/port range you want to scan.

I put plenty of comments in there, also. If you find any errors while running it, please let me know so I can correct them. Also feel free to tweak based on your needs or make your own improvements.

Code # PowerShell port scanner v 0.1.3

```
#
# added $scan.dispose()
#
# clear screen
cls
# change title window name
$host.ui.RawUI.WindowTitle = "Power Port Scanner"
# port range listed in an array
# define range of ports to scan
# using ".." creates a range to read from
$ports = 1..1024
# store the time in a variable
$dateTime = Get-Date
Write-Host "Welcome to the Power Port Scanner"
$remoteIP = Read-Host "What is the IP of the remote host to scan: "
Write-Host "Starting scan of $remoteIP at $dateTime"
# create Scanner Function
# use foreach loop to scan each port in $ports
Function Scanner {
    foreach ($port in $ports)
    {
        try {
            $scan = New-Object System.net.Sockets.TcpClient
            $scan.Connect($remoteIP, $port);
            Write-Host "Port $Port is up"
        }
        # send all errors to oblivion
        catch {
            $_ > null
        }
    }
    $scan.dispose()
}
Scanner
Write-Host "Scan completed at $dateTime"
# create an exit to the script
Write-Host "Press any key to continue ..."
```

```
# silently exit running script
$x = $host.UI.RawUI.ReadKey("NoEcho,IncludeKeyDown")
```

HFDone - August 20, 2017, 8:38 am

close the TcpClient if its open

Travelers - August 20, 2017, 8:50 am

(Aug 20, 2017 08:38 AM)HFDone Wrote: [\[CITE\]](#) close the TcpClient if its open
Would you be able to elaborate on that? Why would I need to do this if I'm just checking to see if the ports are open?

Are you suggesting that I leave a \$scan.dispose at the end of the script?

HFDone - August 20, 2017, 10:16 am

you open it, when you done you close it !

```
$scan.Connect($remoteIP, $port);
if ($scan.Connected()) {$scan.Close()}
```

Travelers - August 20, 2017, 12:22 pm

(Aug 20, 2017 10:16 AM)HFDone Wrote: [\[CITE\]](#) you open it, when you done you close it !

```
$scan.Connect($remoteIP, $port);
if ($scan.Connected()) {$scan.Close()}
```

Yes, ok. Close it when I'm done. But could you explain why?

HFDone - August 20, 2017, 12:32 pm

why not ? you have 1024 open connection do nothing

Travelers - August 20, 2017, 12:35 pm

(Aug 20, 2017 12:32 PM)HFDone Wrote: [\[CITE\]](#) why not ? you have 1024 open connection do nothing

Right. I was looking for a much more detailed answer, but Google saved the day. Thanks, Google.

(Aug 20, 2017 10:16 AM)HFDone Wrote: [\[CITE\]](#) you open it, when you done you close it !

```
$scan.Connect($remoteIP, $port);
if ($scan.Connected()) {$scan.Close()}
```

Adding this section, as you have described, in the script causes it to not work correctly. I have added \$scan.dispose() to clean up resources that were being used by the \$scan object, inside the Function that I called. This is more tidy and adds fewer characters to the code overall. Thank you for suggesting this.

HFDone - August 20, 2017, 12:54 pm

```
if ($scan.Connected()) {Write-Host "Port $Port is up";$scan.Close()}
```