PowerShellScripts / proxyTunnel.ps1

147 lines (109 loc) · 4.98 KB

Code Blame Raw

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<#
.SYNOPSIS

Creates a TCP Tunnel through the default system proxy. As such, it automatically handles proxy auth

Author: Arno0x0x (https://twitter.com/Arno0x0x)
License: GPL3
Required Dependencies: None
Optional Dependencies: None

.DESCRIPTION

Creates a TCP Tunnel through the default system proxy. As such, it automatically handles proxy auth

.PARAMETER bindIP

The local IP the tunnel will bind to. Defaults to 127.0.0.1 .

.PARAMETER bindPort

The local TCP port the tunnel will bind to. Defaults to 5555 .

.PARAMETER destHost

The destination host that should be reached through the tunnel.

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```
27      .PARAMETER destPort
28
29      The destination port that should be reached through the tunnel.
30
31      .EXAMPLE
32
33      powershell .\proxyTunnel.ps1 -bindPort 4444 -destHost myserver.example.com -destPort 22
34
35      Then, an SSH connection to 127.0.0.1:4444 will be tunneled, through the corporate proxy, to myserve
36      #>
37
38      Param (
39              [String]$bindIP = "127.0.0.1",
40
41              [Int]$bindPort = 5555,
42
43              [String]$destHost = $( Read-Host "Enter tunnel destination IP or Hostname: " ),
44
45              [Int]$destPort = $( Read-Host "Enter tunnel destination port: " )
46          )
47
48      $clientBuffer = new-object System.Byte[] 1024
49      $request = [System.Net.HttpWebRequest]::Create("http://" + $destHost + ":" + $destPort )
50      $request.Method = "CONNECT"
51
52      # Detect and set automatic proxy and network credentials
53      $proxy = [System.Net.WebRequest]::GetSystemWebProxy()
54      $proxy.Credentials = [System.Net.CredentialCache]::DefaultNetworkCredentials
55      $request.Proxy = $proxy
56
57      $listener = new-object System.Net.Sockets.TcpListener([System.Net.IPAddress]::Parse($bindIP), $binc
58
59
60      #-------------------------------------------------------------------------
61      # This script block is executed in a separate PowerShell object, as another
62      # thread. It reads data from the serverStream and writes it to the clientStream
63      # as long as there's data
64      $Script = {
65              param($state)
66              $serverBuffer = new-object System.Byte[] 1024
67
68              $count = 0
69              do {
70                      $count = $state.serverStream.Read($serverBuffer, 0 ,$serverBuffer.length)
71                      $state.clientStream.Write($serverBuffer, 0 , $count)
72                      $state.clientStream.Flush()
```

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73              } while ($count -gt 0)
74      }
75
76      #------------------------------------------------------------------------
77      # Starting the TCP listener
78      $listener.start()
79
80      write-host "Waiting for a connection on port $bindPort..."
81      $client = $listener.AcceptTcpClient()
82      write-host "Connected from $($client.Client.RemoteEndPoint)"
83
84      #------------------------------------------------------------------------------------------------------
85      # Get the client side stream object to read/write to
86      $clientStream = $client.GetStream() # This is a System.Net.Sockets.NetworkStream
87
88      #------------------------------------------------------------------------------------------------------
89      # Get the server side response and corresponding stream object to read/write to
90      $serverResponse = $request.GetResponse()
91      $responseStream = $serverResponse.GetResponseStream()
92
93      #------------------------------------------------------------------------------------------------------
94      # Reflection inspection to retrieve and reuse the underlying networkStream instance
95      $BindingFlags= [Reflection.BindingFlags] "NonPublic,Instance"
96      $rsType = $responseStream.GetType()
97      $connectionProperty = $rsType.GetProperty("Connection", $BindingFlags)
98      $connection = $connectionProperty.GetValue($responseStream, $null)
99      $connectionType = $connection.GetType()
100     $networkStreamProperty = $connectionType.GetProperty("NetworkStream", $BindingFlags)
101     $serverStream = $networkStreamProperty.GetValue($connection, $null)
102
103     # This state object is used to pass various object by reference to the child PowerShell object (thr
104     # that is created afterwards
105     $state = [PSCustomObject]@{"serverStream"=$serverStream;"clientStream"=$clientStream}
106
107     # Create a child PowerShell object to run the background Socket receive method.
108     $PS = [PowerShell]::Create()
109     $PS.AddScript($Script).AddArgument($state) | Out-Null
110     [System.IAsyncResult]$AsyncJobResult = $null
111
112     try
113     {
114             # The receive job is started asynchronously.
115             $AsyncJobResult = $PS.BeginInvoke()
116
117             do {
118                     $bytesReceived = $clientStream.Read($clientBuffer, 0, $clientBuffer.length)
```

```
                    $serverStream.Write($clientBuffer, 0 , $bytesReceived)
                    #$text = [System.Text.Encoding]::ASCII.GetString($buffer, 0, $bytesReceived)
                    #Write-Host $text

            } while ($client.Connected -or $clientStream.DataAvailable)
    }
    catch {
            $ErrorMessage = $_.Exception.Message
            Write-Host $ErrorMessage
    }
    finally {
            # Cleanup the client socket and child PowerShell process.
        if ($client -ne $null) {
            $client.Close()
            $client.Dispose()
            $client = $null
        }

            if ($listener -ne $null) {
                    $listener.Stop()
            }

            write-host "Connection closed."

        if ($PS -ne $null -and $AsyncJobResult -ne $null) {
            $PS.EndInvoke($AsyncJobResult)
            $PS.Dispose()
        }
    }
```