

2025

# CTF INTERNACIONAL METARED ETAPA MEXICO

WRITEUP

## CHALLENGE

DarkInfo

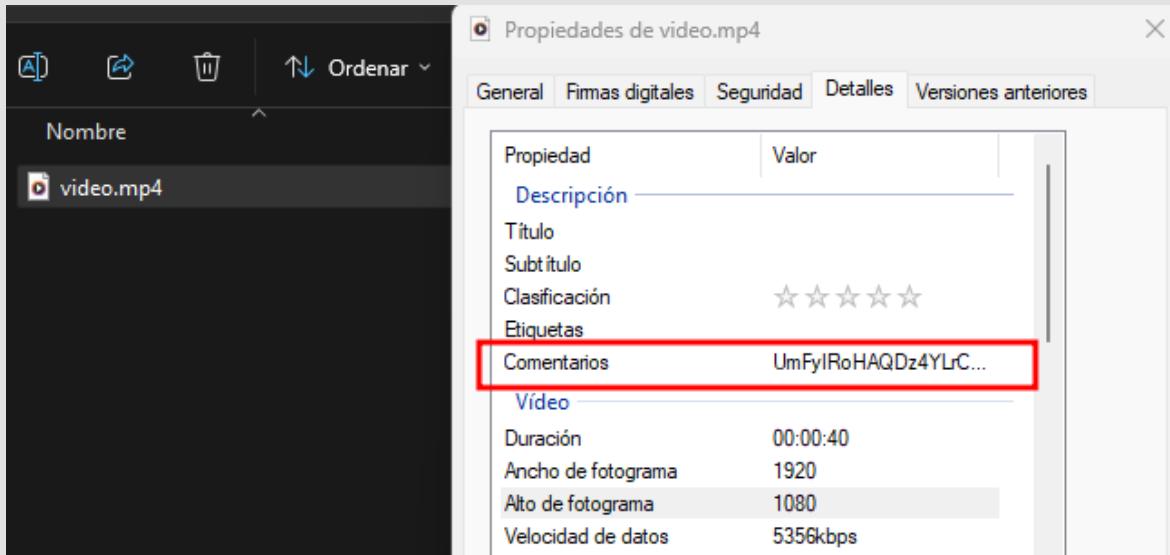


# Description

<b>Title:</b>	DarkInfo
<b>Description:</b>	The hunt consists of checking details in each object found
<b>Flag:</b>	flagmx{AI_sp33ds_7p_d33pf4k3_cr34t10n}
<b>File:</b>	Video.7z
<b>Dificultad:</b>	Avanzado
<b>Tags</b>	Misc

## Solution:

An mp4 file is provided containing base64 metadata, when decoded it is seen that it is a rara and when decompressed it is obtained the flag



We look at the content of the comment metadata and extract it with exiftool into a single string.

```
└$ exiftool -s -s -s -comment video.mp4 | tr -d '\r\n' > archivo_extraido_limpio.b64
```

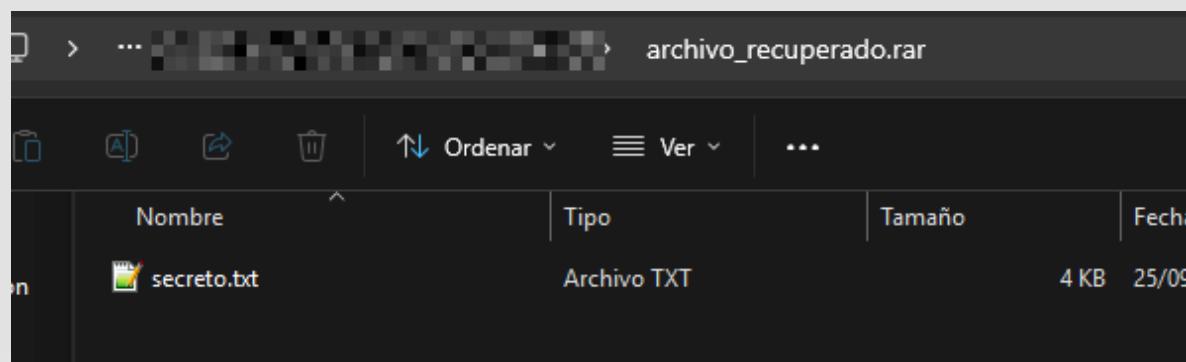
The file `archivo_extraido_limpio.b64` contains a base64 string. If we decode it, we see that it indicates it's a RAR.

```
└$ base64 -d archivo_extraido_limpio.b64
Rar!  
 secreto.txt
-Ew-.--.
Ee4#T#ET*****B#t/* **,***#***Vp@N***BdéJ[ JU*k*** )*V*{ }
u;*5d* 'na*Q***l**8'ol*( P*****~cOAn"**T*^U7f*ü*o***9*s*** :HL*J*B***
```

we decode it as rar.

```
L$ base64 -d archivo_extraido_limpio.b64 > archivo_recuperado.rar
```

We unzip the archivo\_recuperado.rar file and obtain a secret.txt file with the flag.



Looking at the secret.txt file, we see that the first character of each line contains the flag; we can see the characters {}. It only remains to observe the details and perform processes to reverse the strings.

```

[secret.txt]  x
1  }>zERYMJj9nITSDZkSxGj1EgfasA8k0Ra2A1rB89q1riAcgRNqDK51VnhbR20hZzGim7bKAfczJw6pvWkSNJPcmGdyNw12vcMB
2  nhrFkSWk71F0ddgpfPvi98w0lmiv5qCj17jQTdsDr5W6CayN5nB5jtVK93h0DNGRSW8dfBbALuJ0mVS32aOY41M5V37cuSbPQ8
3  OtaBeLjLHHm2YFHHoNePyiOrTxU6XkjvLgqRX1XkG114D4mBb3GjA5STe0Y0KZVJ1HMBuVeIgXs8jxCeHSZrb3HRLu2GsBzQzO
4  1yBOKObRcheo37vF2PE4AkcsCFFG0jsvUya8AFzeOGDahfU1jnQGiuX0agJT82R4ELiCDczAa1UCQgrBGFWINDXILLhWL8Lp
5  tRMtmLVlKqu2gxPmMwQ049ThToS2qNQu0r2zU09p8CeICzN9OyHBQ9c4bp9JyKYFzHyeIDeCS9cAW13IGeZY32uyQa3JgjauhzUL
6  416dRJ1R13h51paeo4PQ1XQLElWj3BWqlAo6Gis1DjY3osNs5bjRnX2nFR92nNXTEJgscoXIXWCughvVkrYs7b3FOEvGvRDBP
7  3OMEs8vWTbrPAwY2oQF5wiu8t177rdcE61kfAld0oNy0Q3iREzwX9jivBGFoyqd7tsRlt8fHqK19GVuaNI6Ts7UpwCH6BDaVOQD
8  rvHepdsoJUZdIuz3bJcUU5IdOfAp9oaNU64cuSOIePieRh7cN7bEWnD4rhucWQA69XR5k6a1UNxxi2eWpIeGqVHn061f9YU
9  c0o3KmdTiyFrXlu01kFUQCgtsIp1UpjuMP1PzgEnTvHz3qgnGdiqthktosGFTzvEsqMR6zGKxOTwygMSov8cVMSVKhvichtfywLX
10 _39SgTKR3VhkCzsTxWS0aaV1RdvslqgWjHe681e3CAqXgpgHBrGmsqiUrww3H5dyFCWEj5gKEBKRWL672UEH4N2q4JNib4tixqh
11 312XzhhyX2RJsDh1617M0cneWyy4E0KpeIn1LBNgv0t52bDvtJsnXbyJXjKKM4G3EFM0Njpyk6bfM1ETNnxYrROV1xLfxijm
12  kh16buLYlefCa8zFzgpkohZRIrgys1LnGhMopAPg33c4BsAsQF8zCAUj0rEsXxZq4suyKJnLb060jWWiCok6BaG
13  4nM5YbcRPrQ7LtgWuM50e9CaVmNt4KdpyV5s1a0UHAK4m3w7p6zo5FcAt7DC58J1LSMCtxvtCURJ8aQdGpJ1M8JW9w38CqnRb5A
14  f:LEs2qUbHw3PL1TQ4YjymHC8fHQGrudRNQp8zOrgdoHnsQRZ09KDbKGKyXMqegU92wDjNgbMr1sCM8bN68qLD9G5gKXmx17j
15  p1z6ICbfvD4Qu70CVKNmriI32R8CpJSceaz6w0GEN8Z261EEQX1cd02FwkbWrgxJuhRtgwBgdCmXob7UDxRjLABAPgjBWzD1J
16  32MJu7MazKxmjkGxDSh1j2SMrBmw4taBIM512Y8yA6FT1ycpNmwf36v2zplvYzq1Kq72EHnw7RamdyxP6N9X5yCzvqgh717ND2
17  32e0whqg9j1MuDz3UEzvPByMxrqja8udyR5fdFjluhgYqpwFzvz1wH3rz6nKiTi8Dn2QH46MWhhHnkZ1P3BbLjhVAr
18  daaeze8drfz3G6tfzI4aqUavtV0KYngGAwU2qahAHhbifTltQ3061MKVH9ajhNuPf4VkfnnM379tPzvfr55wwSwFfjR57ElhD8
19  _0zwp6vCvsOmD2R3uuErHLQHgRfipIpKXCX8QaSBiEEyPW1B2tu3vYqdVeuEahhC7F2TzWkTcUsgszwuPlyYYwyg5ptBGcDc5X
20  peAoTLS5squzRPIXYu4dnOEmt3h9WMSuWkONfocKVZhR4L3vDsrruWZeQ1C84DgEsfGn23xRQqtLReffB1YgZKgyzzYwnKxz0
21  7sw4fEyibwmwYijiteAetLFxjTvbhckGacZTnARLw8Pd1rls7KfQ8Kb4a9RyGvFKFh0ZmowQsRyCu8c2Jdg0Bgl1AbPCVkr30IM
22  _3BggjDMeZemqCcKUM7sgISPRIF1L2YFGkbHnQ58N4K1e5zFyrwJxsAsxhs6YghQytCWtY0ntQpZs969Sr9Uprhj4trgGu10DIO
23  s2Rcx4A7EtWjzxKzm60EphvvSqqYK4D9mB0n5tVPrqVldRym8UdcGfLpd60Qwhid98InPNTaDvVQnYNTA0U6YMc0K81pHy1TDWz
24  d2MeFyvjNh6EZKdyH8VpcEs4ptoLGu73fA05H1J2KmwyCiqlG3zmmvHYc9PmK4nC2J4ySmGU177G2NxpM9Ei9ogNek5Nyvfxsv
25  30ZM8djQbXcDaC0gVe4cldx8XFXxxhW08JBEjF17WxVzVjSLMwKKUF6QdKJ61iY5h44McN1dYdxOMBuTw84Xzun8TjZ30SMzCJ
26  30Gtf1lPp1dQ1drREq76GueqrjyPLpxbYCIewKFTdovtPP2v00EvbxPmHn7K8rY0YxrFrA2351PapgyYtO9sQxe3dKQprK5zc5X
27  p1BLdmWdfnC5VkfzfbA2LpxrPFBde9pbmj5zqR230uXf5wPrqIBGno0Z80DG5x51UDU2h7P1koD0ZajmkJntqExqZjW6kJD07Zz
28  ss8BY0ZYGhWF5vuwEtSFih7W2BYA7JcXf5209B68gNtITap9a0F7IrtrYrjSrVtY6D2qnnosmsgzvAuJx0Gx01weEAReQ6qxtV2D
29  _1P7Nk8u5L1HrIVLaTaboVPTPe8RYkgat2a26V76ai1TkEhUri1d9n2EVbxFan8dY6ucNuRsQd3S9tWunxtCaLroIhuafCDfwTzf
30  1Im9UjtaTFz0FD2AuhTgpOW5B7UYpdzbAjt08smjB2OJeKxo9szHm4rAHPbZMvttCUFR56TeCjx8boAzBCEnJwkFv50r61Q96YQ
31  A39kpoltzCVV5vtzRPC70YKvcwYk90me27icCXztPx3tqgwIR55ssrtTFK1KZyGobAlsag9C06VfYdsVkhBana8hSnpT3qgmiVaO
32  {VzuTNSPPF8w8oPgvd8qghQwiiCV2n13Xsp1rzXK05sW22z3YqIubth0m3csqGEQfpypLLpGNmmndLQGTz7hdzLgw9Efkh0drGxU
33  x7Y2UyIhqMxczqjQndom6yz6Whc7gsOggFq8unqDjDgqodMaeOE1PT26he4vM39McFu6Czd6V6j7T2bd7jnd35QbXeZTa9WbLDE
34  m04KxkyEDnQ1k1JBZ119E82B0dRqy7STh3bA7gEbBLZU1i08NE1X57BLtgCYouDK087pT20MwXbMLTLatXnKSSz0H1dJctDO
35  g9N8L8914aBQRV6o0c2uKwWstQvCmWnUXUD1p9eE44JnyBFqULAB21kgacZbvi43118AXTRRKzjM05D4x08GDw0xvI3BJ1u3XQ
36  ad4v5ftZDFbwpo3CywyhNqr0Yu16eIuoVTSoc6s4VvyTnerRaiZaGc4kvCX9gDrmxtUP3W3jd7kY6eUakEVMJ7D1EtMzLcbZPTy
37  17CoTSt9cNxxzfkrDztcyhcFpPmpg5SrBhot4iXuC18D700dZzufqnsMcZsiC3N674SkzKE0w8q1SV2Y9qXh0W6EDhQcKEMLGMm
38  fke2v0YQ1Jsjfxsr3hPwW0DWdnsgXsNbX07h2zFjcyQgk9NL8UcFGy9L18jFQaCTkGPO16pccQp3h1mi6fm4BoGLjTuQf8

```

You can run or create a script in Bash or PowerShell to automatically perform the steps. An example would be the following.

```

$rutaArchivo = "secreto.txt"
$lineas = Get-Content $rutaArchivo

$cadenaUnida = ($lineas | ForEach-Object {
    if ($_. -ne "") { $_[0] } else { "" }
}) -join ""

$arrayCaracteres = $cadenaUnida.ToCharArray()
[array]::Reverse($arrayCaracteres)
$cadenainvertida = -join $arrayCaracteres
Write-Host "Cadena invertida:"
Write-Host $cadenainvertida
Write-Host ""

```

Running this script allows us to obtain the flag. The first characters of each line are the flag characters; they must be scrolled horizontally and then reversed.

```
PS C:\Windows\system32\WindowsPowerShell\v1.0\> .\decodificar.ps1
Cadena invertida:
flagmx{AI_sp33ds_7p_d33pf4k3_cr34t10n}
```

The flag is:

**flagmx{AI\_sp33ds\_7p\_d33pf4k3\_cr34t10n}**