

catthequest 副本

Web:

Web File Viewer

```
1 /secret/flag.txt base64 encode
```

Reverse:

Wramup

.pyc文件，pycdc反编译得到源码，写脚本解密即可

```
1 input = "j6emavj5arn5vj2t6a2ha5pet{rv32p"
2 flag = ""
3 for i in range(len(input)):
4     flag += chr(ord(input[i]) - 2)
5 print(flag)
```

CAT{h4ck_th3_pl3th0r4_of_3ncrypt10n}

Jakshu

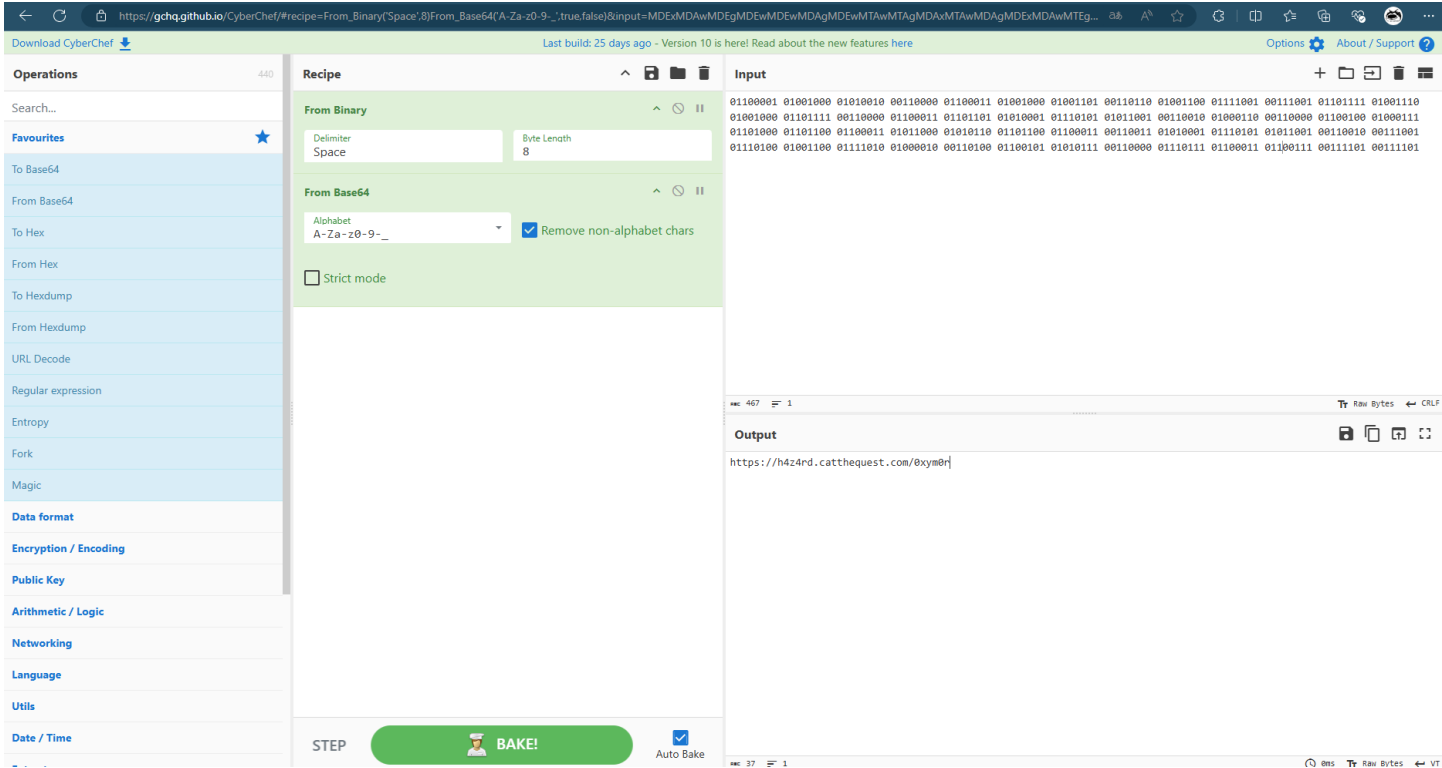
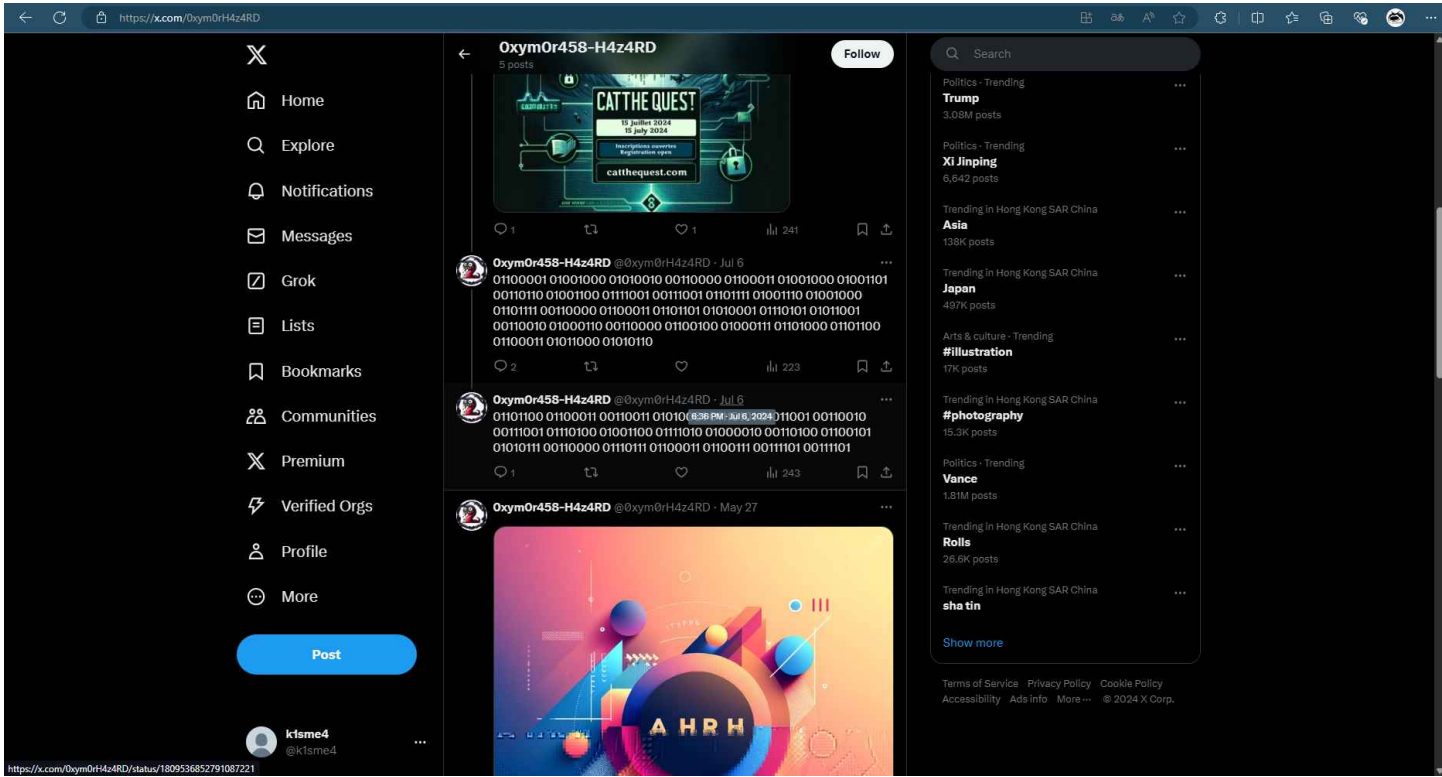
```
1 #include <stdio.h>
2 int main()
3 {
4     int v8[34];
5     v8[0] = 46;
6     v8[1] = 46;
7     v8[2] = 58;
8     v8[3] = 17;
9     v8[4] = 88;
10    v8[5] = 95;
11    v8[6] = 86;
```

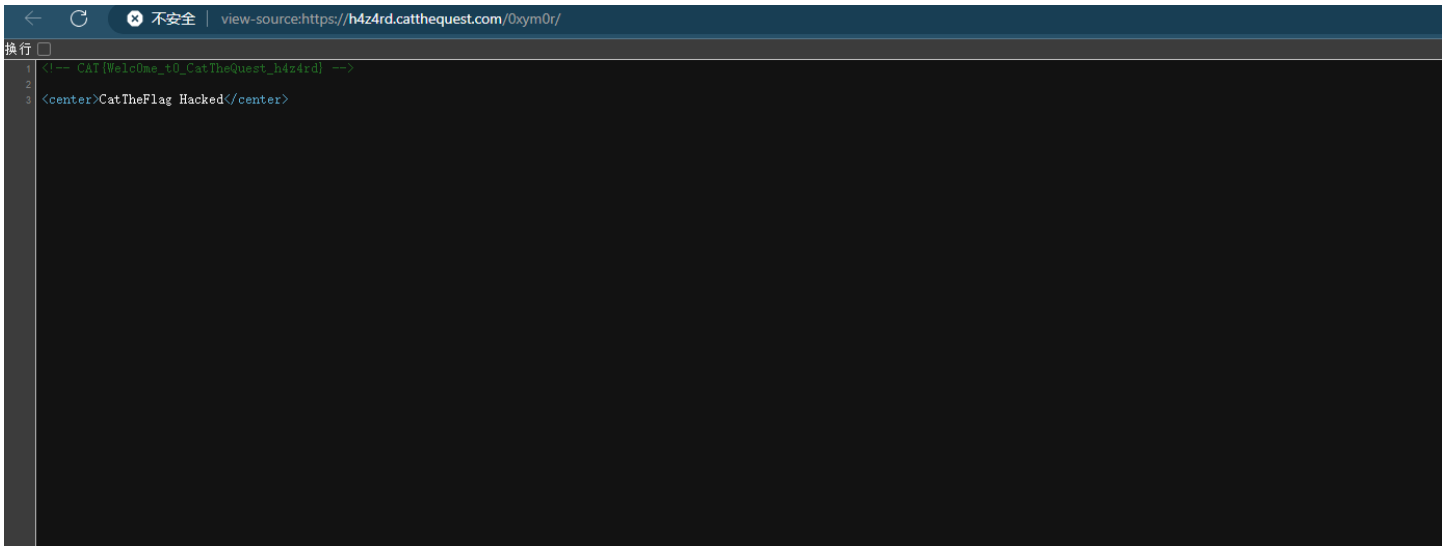
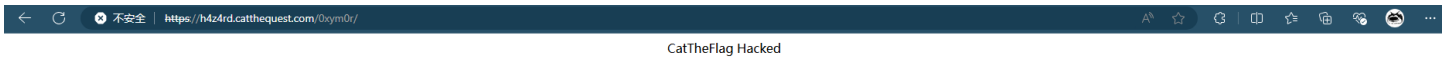
```
12  v8[7] = 93;
13  v8[8] = 90;
14  v8[9] = 91;
15  v8[10] = 92;
16  v8[11] = 86;
17  v8[12] = 94;
18  v8[13] = 89;
19  v8[14] = 80;
20  v8[15] = 93;
21  v8[16] = 94;
22  v8[17] = 93;
23  v8[18] = 11;
24  v8[19] = 8;
25  v8[20] = 12;
26  v8[21] = 13;
27  v8[22] = 11;
28  v8[23] = 15;
29  v8[24] = 80;
30  v8[25] = 93;
31  v8[26] = 86;
32  v8[27] = 94;
33  v8[28] = 15;
34  v8[29] = 13;
35  v8[30] = 8;
36  v8[31] = 10;
37  v8[32] = 11;
38  v8[33] = 23;
39  int input[40];
40  char s[] = "monji";
41  for (int i = 0; i < 34; i++)
42  {
43      v8[i] = v8[i] ^ s[i % 5];
44      printf("%C", v8[i]);
45  }
46  return 0;
47 }
```

CAT{12930219039013aaabee9090edeee}

Misc:

0xym0r





```
1 CAT{Welc0me_t0_CatTheQuest_h4z4rd}
```

Find da target

给了一个网络数据帧文件，说是让找一个主PC端的IP地址，懒得看，大模型直接出了

- NOP
- NOP
- 时间戳: TSval 923456789, TSecr 187654321

这些数据帧包含了在一个TCP会话中的细节信息，展示了源和目标的以太网地址和IP地址，以及TCP会话中的端口号、序列号、确认号、窗口大小和时间戳等信息。

热键建议：

- W: 继续
- A: 备用
- S: 解释
- D: 迭代改进



其中主PC的IP地址是多少



主PC的IP地址是192.166.47.3。

这是在数据帧3、7和9中所使用的源IP地址。在这些帧中，该IP地址总是作为源IP出现，表明它是发起通信的一方。



Research and Destroy

给了一段模拟将流量从僵尸计算机重定向到目标计算机来模拟攻击的脚本，说白了就是解密，按照它的逻辑将列表中的僵尸ip和目标ip转化出来，把原本的代码修修，按照原本逻辑跑一下，对应ip输进去直接出了

```
1 zombys_ip:
2 192.168.1.10-192.168.2.12-192.168.3.14-192.168.4.16-192.168.5.18-192.168.6.20-
   192.168.7.22-192.168.8.24-192.168.9.26-192.168.10.28
3 target_ip:
4 192.166.47.3
```

代码给修修

```
1 import struct
2
3 def ip_to_binary(ip):
4     return struct.unpack("!I", struct.pack("BBBB", *map(int, ip.split('.'))))
5     [0]
6
7 def binary_to_ip(binary):
8     return '.'.join(map(str, struct.unpack('BBBB', struct.pack('!I',
9     binary))))
10
11 def ip_to_hex(ip):
12     return f"{ip_to_binary(ip):08x}"
13
14 def ip_to_base64(ip):
15     return struct.pack('!I', ip_to_binary(ip)).hex()
16
17 def hex_to_ip(hex_str):
18     return binary_to_ip(int(hex_str, 16))
19
20 def bin_to_ip(bin_str):
21     return binary_to_ip(int(bin_str, 2))
22
23 zombys = [
24     'c0a8010a',
25     'c0a8020c',
26     'c0a8030e',
27     'c0a80410',
28     'c0a80512',
29     'c0a80614',
30     'c0a80716',
31     'c0a80818',
32     'c0a8091a',
33     'c0a80a1c'
34 ]
35
36 target = 'c0a62f03'
37
38 zombie_ips_binary = [bytes.fromhex(ip) for ip in zombys]
39 target_ip_binary = bytes.fromhex(target)
40
41 def ip_to_binary_str(ip):
42     return f"{ip_to_binary(ip):032b}"
43
44 def binary_str_to_ip(bin_str):
45     return binary_to_ip(int(bin_str, 2))
46
47 def check_zombie_ips(zombie_ips):
```

```

46     try:
47         zombie_ips_input_binary = [ip_to_binary(ip) for ip in zombie_ips]
48         return set(zombie_ips_input_binary) == set([int(ip.hex(), 16) for ip in
zombie_ips_binary])
49     except ValueError as e:
50         print(f"Error: {e}")
51         return False
52
53 def check_target_ip(target_ip):
54     return ip_to_binary(target_ip) == struct.unpack("!I", target_ip_binary)[0]
55
56 print("ip zombys(separate '-') :")
57 zombie_ips_input = input().split('-')
58 print("target:")
59 target_ip_input = input().strip()
60
61 if check_zombie_ips(zombie_ips_input) and check_target_ip(target_ip_input):
62     print("Correct")
63     last_octets = [ip.split('.')[ -1] for ip in zombie_ips_input]
64     last_octets.append(target_ip_input.split('.')[ -1])
65     bin_strs = [ip_to_binary_str(ip) for ip in zombie_ips_input]
66     target_ip_bin_str = ip_to_binary_str(target_ip_input)
67
68     flag_parts = [
69         "CAT{",
70         ''.join([str(int(bin_str, 2)) for bin_str in bin_strs]),
71         target_ip_bin_str[ -6:],
72         "} "
73     ]
74
75     flag = ''.join(flag_parts)
76     print("Flag:", flag)
77 else:
78     print("No No No")
79

```

```

PS E:\VScode_learning\.vscode> E:\anaconda\python.exe -u "e:\VScode_learning\.vscode\CTF2.0\CATflag.py"
ip zombys(separate '-') :
192.168.1.10-192.168.2.12-192.168.3.14-192.168.4.16-192.168.5.18-192.168.6.20-192.168.7.22-192.168.8.24-192.168.9.26-192.168.10.28
target:
192.166.47.3
Correct
Flag: CAT{3232235786323223604432322363023232236560323223681832322370763232237334323223759232322378503232238108000011}

```

V@mos

- 1 the key is in the thesured
- 2 题干就是flag

```
3 CAT{V@m0s_12}
```

凯撒Caesar解码:

```
model #0: Uif mgc lv lr ymj ymjxzwjq  
model #1: The lfb ku kq xli xliwyvip  
model #2: Sgd kea jt jp wkh wkhvxuhog  
model #3: Rfc jdz is io vjg vjguwtgnf  
model #4: Qeb icy hr hn uif uiftvsfme  
model #5: Pda hbx gq gm the thesureld  
model #6: Ocz gaw fp fl sgd sgdrtdqkc  
model #7: Nby fzv eo ek rfc rfcqspcjb  
model #8: Max eyu dn dj qeb qebprobia  
model #9: Lzw dxt cm ci pda pdaoqnahz  
model #10: Kyv cws bl bh ocz ocznpmzgy  
model #11: Jxu bvr ak ag nby nbymolyfx  
model #12: Iwt auq zj zf max maxlnkxew
```

[2]Affiche Cybernétique

签到题，图片保存下来，zsteg拿flag:

```
(kali㉿kali)-[~/桌面]  
$ zsteg felix.png  
b1,rgb,lsb,xy .. text: " CAT{Q.rar-key→FTPF18-08-1944}"  
b1,bgr,msb,xy .. file: Tower32/600/400 68020 object - version 25626  
b2,r,msb,xy .. text: "@UUUUUUUUUUUUUUUUUUUUUUUUUU"  
b2,g,msb,xy .. text: "UUUUUUUUUUUUUUUUUUUUUUUUUU"
```

根据题目要求改一下即可

```
1 CAT{Q.rar-key→FTPF18/08/1944}
```

Secret Chest

```
1 POST /flag HTTP/1.1  
2 Host: 165.227.157.253:5000  
3 Content-Length: 35  
4 Pragma: no-cache  
5 Cache-Control: no-cache  
6 Upgrade-Insecure-Requests: 1  
7 Origin: http://165.227.157.253:5000  
8 Content-Type: application/json  
9 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36  
  (KHTML, like Gecko) Chrome/126.0.0.0 Safari/537.36  
10 Accept:  
  text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,ima  
  ge/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7  
11 Referer: http://165.227.157.253:5000/flag
```



```

12 Accept-Encoding: gzip, deflate
13 Accept-Language: zh-CN,zh;q=0.9,tr;q=0.8
14 Connection: close
15
16 {
17     "token":"3AyrucrEM0key3"
18 }
19

```

RawParamsHeadersHex

POST /flag HTTP/1.1
Host: 165.227.157.253:5000
Content-Length: 34
Pragma: no-cache
Cache-Control: no-cache
Upgrade-Insecure-Requests: 1
Origin: http://165.227.157.253:5000
Content-Type: application/json
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/126.0.0.0 Safari/537.36
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
Referer: http://165.227.157.253:5000/flag
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,tr;q=0.8
Connection: close

"token":"3AyrucrEM0key3"

RawHeadersHex

HTTP/1.0 200 OK
Content-Type: application/json
Content-Length: 40
Server: Werkzeug/2.0.3 Python/3.9.19
Date: Tue, 16 Jul 2024 10:15:53 GMT

{"flag":"CAT{S3cr3t_Ch3st_B4D_S4BtY}"}

[3] Mise en Abymes

测试一下 CAT{ :

```

kali@kali: ~/桌面
$ grep -r "CAT{" /home/kali/桌面/Q
/home/kali/桌面/Q/cat/billo.txt:#####<?7,(Tzv(OkA@!GS9C(≤(10[..gv7E(6%)wrr,fNSYohyR",q2`k52\y;:IEryf`jamS4s6Lc6ca+^c8N:$d,NN0+^,)l)eC,[U^X9HdR(\k6`Fg!~ImaEwg7U]p'*,%T
/home/kali/桌面/Q/cat/billo.txt:#####

```

了解了，标志为这一大串#号，继续搜：

```

kali@kali: ~/桌面
$ grep -r "#####" /home/kali/桌面/Q
/home/kali/桌面/Q/Plaudern/billy.txt:#####legends}#####
/home/kali/桌面/Q/chat/billi.txt:#####XVII→17#####
/home/kali/桌面/Q/chatto/billo.txt:#####473KHZ#####
/home/kali/桌面/Q/gato/billo.txt:#####0503AJ#####
/home/kali/桌面/Q/cat/billo.txt:#####CAT{#####

```

按顺序拼一下即可：

```
1 CAT{473KHZXVII->170503AJ}legends}
```

Door and machines

Q0FUe3pvpbWJ5el9hcmVfYXJpdGhtZXRpY3M=

Recipe

From Base64

Alphabet

A-Za-z0-9+/=

☒ Remove non-alphabet chars

☐ Strict mode

Input

Q0FUe3pzbWJ5e19hcmVfYXJpdGhtZXRpY3M=

Output

CAT{zombyz_are_arithmetics}

fi3sh4mpctoi6am1cixsc4m1qp48g

Z-Base-32 解密:

★ 浏览完整的工具列表

结果

-snimda_are_firsts

Z-BASE-32的解密

★ Z-BASE-32 编码的消息 (?)

fi3sh4mpctoi6am1cixsc4m1qp48g

★ 结果格式

☒ 可打印字符串 (ASCII/UNICODE)

☐ 十六进制 00-7F-FF

☐ 十进制 0-127-255

☐ 八进制 000-177-377

☐ 二进制 00000000-11111111

☐ 完整的号码

☐ 要下载的文件

2d6f74686572735f6172655f686578617d

Recipe

From Hex

Delimiter
None

Input

2d6f74686572735f6172655f686578617d

Output

-others_are_hexa}

CAT{zombyz_are_arithmetics-snimda_are_firsts-others_are_hexa}

A network trace

看了一眼 全是tcp 大小都差不多 直接搜就有了

应用显示过滤器 ... (Ctrl-/)

分组详情 宽窄 区分大小写 字符串 CAT{

| No. | Time | Source | Destination | Protocol | Length | Info |
|-----|--------------|-----------|-------------|----------|--------|--|
| 718 | 28.696112... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=155746 Win=2603 |
| 713 | 28.696066... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=150274 Win=2494 |
| 712 | 28.696055... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=147538 Win=2439 |
| 707 | 28.696013... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=144802 Win=2384 |
| 706 | 28.696006... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=142066 Win=2329 |
| 705 | 28.695997... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=139330 Win=2275 |
| 704 | 28.695988... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=136594 Win=2220 |
| 703 | 28.695977... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=133858 Win=2165 |
| 697 | 28.695934... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=132490 Win=2138 |
| 696 | 28.695926... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=129754 Win=2083 |
| 695 | 28.695920... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=127018 Win=2028 |
| 694 | 28.695910... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=122914 Win=1946 |
| 693 | 28.695886... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=120178 Win=1891 |
| 684 | 28.695781... | 10.1.1.11 | 10.1.1.2 | TCP | 52 | 52180 → 43664 [ACK] Seq=12 Ack=109234 Win=1672 |

CAT{TeSt-Du-Syst3me-Gen3r@tif}

[Expert Info (Comment/Comment): CAT{TeSt-Du-Syst3me-Gen3r@tif}]

Frame 684: 52 bytes on wire (416 bits), 52 bytes captured (416 bits) on interface trameTCP, id 0

Section number: 1

Interface id: 0 (trameTCP)

Encapsulation type: Raw IP (7)

Arrival Time: Mar 12, 2024 22:16:03.762032284 中国标准时间

[Time shift for this packet: 0.000000000 seconds]

Epoch Time: 1710252963.762032284 seconds

[Time delta from previous captured frame: 0.000009032 seconds]

[Time delta from previous displayed frame: 0.000009032 seconds]

[Time since reference or first frame: 28.695781948 seconds]

Frame Number: 684

Frame Length: 52 bytes (416 bits)

Capture Length: 52 bytes (416 bits)

[Frame is marked: False]

[Frame is ignored: False]

[Protocols in frame: raw:inet:tcp]

CAT{TeSt-Du-Syst3me-Gen3r@tif}