



Mission Name

Reassembling

Background

Ethan and Claire discuss their confusion and speculate reasons why Atali would want to investigate his own company / order the release of code snippets. Dr Pinche shows the evidence that Atali ordered Jailnor to be killed. This evidence needs to be reassembled to get information.

Technical High-Level Overview

A camera picture based on Jailnor murder is provided to the player. This picture has been tampered to deny its opening, modifying the first 8 bytes of the header. Player must replace these 8 bytes, knowing that this picture is a PNG file.

Short Description

Your goal is to try to open the provided camera picture and get the room number that Jailnor was killed.

Mission Description

A camera picture based on Jailnor murder is provided to you. Your goal is to try to open the provided camera picture and get the room number that Jailnor was killed.

Location

- RECON CAR - AIR



Tools

- HxD Editor

Questions

Which is the last byte of PNG footer?

- 82

Hints

1. Check file's header.
2. Investigate pictures headers.
3. Add a PNG header to the file using an HEX EDITOR

Write Up

Once it knows that the picture is a PNG image, player has to replace the first 8 bytes using an HEX Editor like HxD.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|--|
| 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 0D | 49 | 48 | 44 | 52 | IHDR | |
| 00 | 00 | 02 | B8 | 00 | 00 | 02 | 34 | 08 | 02 | 00 | 00 | 00 | 79 | D0 | CD | |
| DB | 00 | 00 | 00 | 01 | 73 | 52 | 47 | 42 | 00 | AE | CE | 1C | E9 | 00 | 00 | |
| 00 | 04 | 67 | 41 | 4D | 41 | 00 | 00 | B1 | 8F | 0B | FC | 61 | 05 | 00 | 00 | |
| 00 | 09 | 70 | 48 | 59 | 73 | 00 | 00 | 0E | C3 | 00 | 00 | 0E | C3 | 01 | C7 | |
| 6F | A8 | 64 | 00 | 00 | 12 | FB | 49 | 44 | 41 | 54 | 78 | 5E | ED | DD | 4F | |
| 6F | 54 | E5 | DF | C7 | 71 | 7B | 3F | 00 | 63 | C5 | 95 | 31 | C6 | 00 | 26 | |

Figure 1

By these bytes: 89 50 4e 47 0d 0a 1a 0a

| | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|-----------|
| 89 | 50 | 4E | 47 | 0D | 0A | 1A | 0A | 00 | 00 | 00 | 0D | 49 | 48 | 44 | 52 | IPNG | IHDR |
| 00 | 00 | 02 | B8 | 00 | 00 | 02 | 34 | 08 | 02 | 00 | 00 | 00 | 79 | D0 | CD | , | yDf |
| DB | 00 | 00 | 00 | 01 | 73 | 52 | 47 | 42 | 00 | AE | CE | 1C | E9 | 00 | 00 | Ü | sRGB @í é |
| 00 | 04 | 67 | 41 | 4D | 41 | 00 | 00 | B1 | 8F | 0B | FC | 61 | 05 | 00 | 00 | gAMA | ± üa |
| 00 | 09 | 70 | 48 | 59 | 73 | 00 | 00 | 0E | C3 | 00 | 00 | 0E | C3 | 01 | C7 | pHYs | Ã Ä Ç |

Figure 2

And finally the image could be opened:

CAM 1

LOCATION: ROOM1458

Figure 3

Finally player could get the room number:1458

Flag Information

flag{1458}