Mission Name

CameraForensics

History Background

Background for this chapter is Ethan got from the datacard, passwords, access codes and in particular some Skytech maps to look for his brother. In this case, there are security cameras installed inside Skytech and Claire has to analyse them.

Technical High-Level Overview

An IP Camera firmware is provided to the player, in order get which is the group ID of user who has the User ID 11 inside the Camera File System. Player must analyse the firmware provided.

Short Description

You´re going to analyse an IP camera Firmware. Your goal is to find out which is which is the group ID of user who has the User ID 11 of the IP camera.

Mission Description

There are security cameras installed inside Skytech and Claire has to analyse them. You´re going to analyse an IP camera Firmware. Your goal is to find out which is the group ID of user who has the User ID 11 of the IP camera. Please locate the name.

Location

SYLVARCON | SKYTECH HQ

Tools

- binwalk

Questions

Which group has the ID 0?

- root

Which is the size of the device /dev/shm in mb?

- 20

Which is the nameserver used?

- 192.168.31.228

Hints

1. Check if the camera has any partition.
2. User binwalk.
3. Analyse Squash File system and locate passwd file

Write Up

Player must use binwalk to extact camera filesystem, launching the following command:

binwalk -eM “firmware provided”

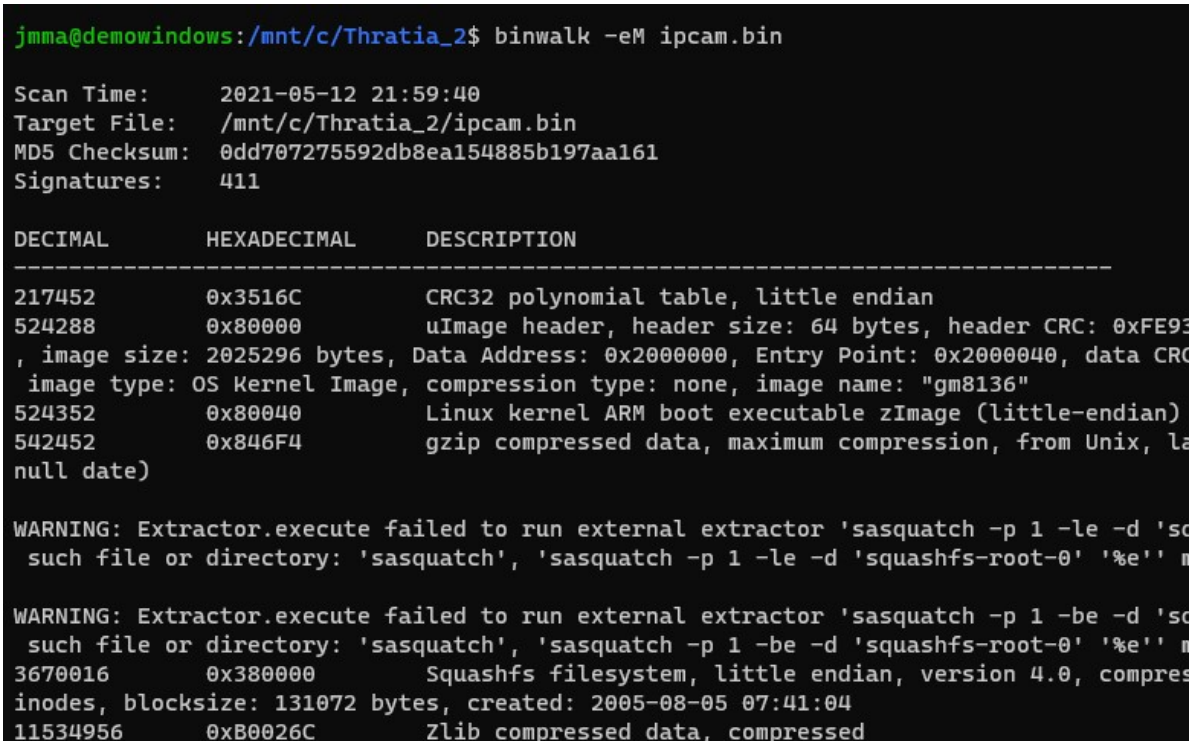

Figure 1

Once firmware is extracted, player should analyse Squash File system:

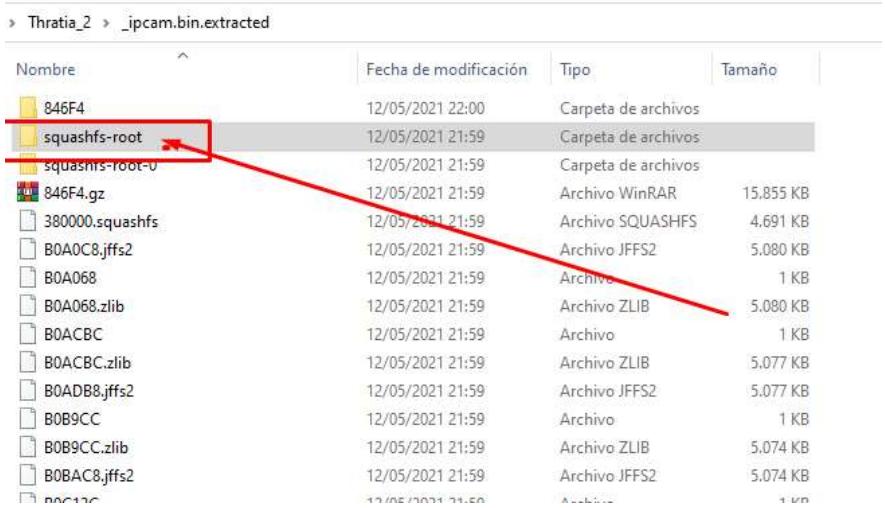

Figure 2

Next step would be to locate, who the user is, with id 11. To accomplish this, player must locate passwd file:

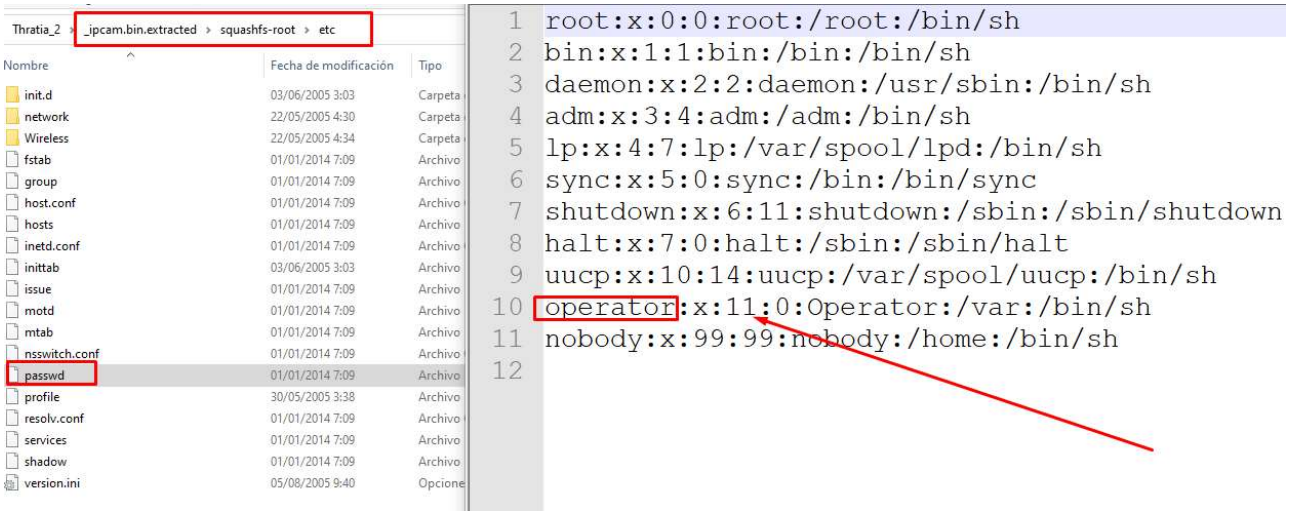

Figure 3

The name of the user is operator, and the group ID is 11.

Flag Information

flag{operator}