Network Analysis

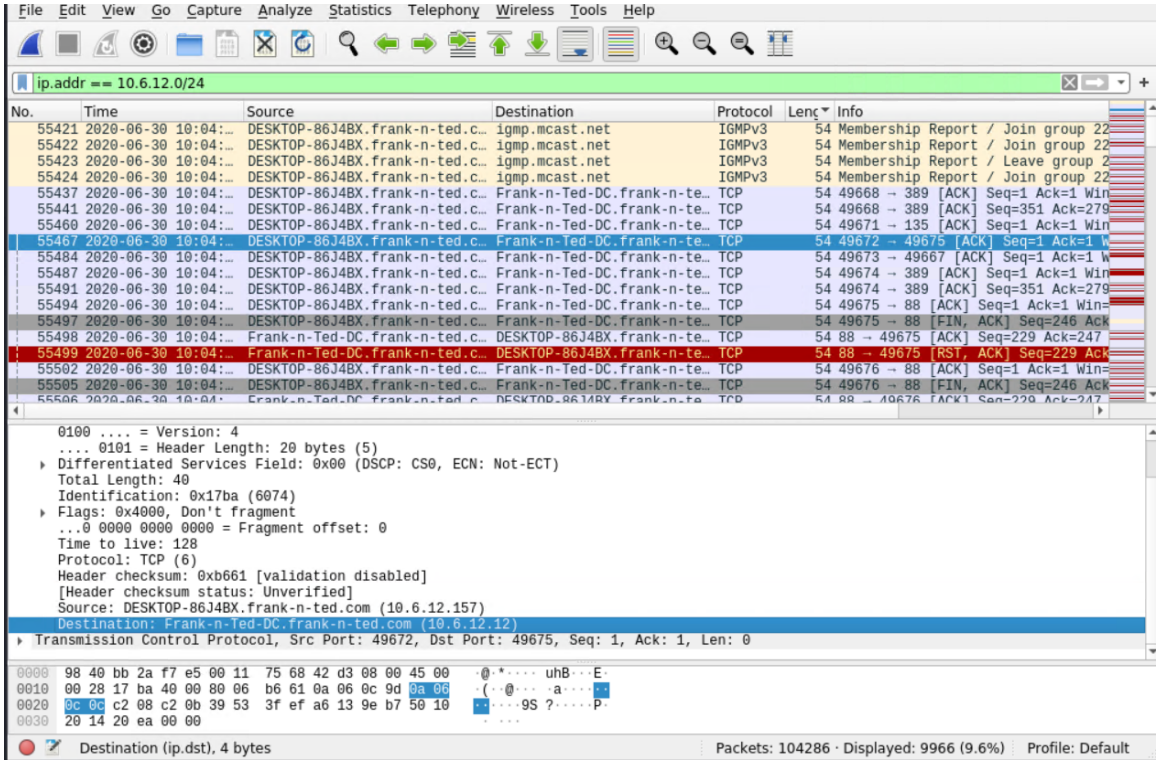
Time Thieves

At least two users on the network have been wasting time on YouTube. Usually, IT wouldn't pay much mind to this behavior, but it seems these people have created their own web server on the corporate network. So far, Security knows the following about these time thieves:

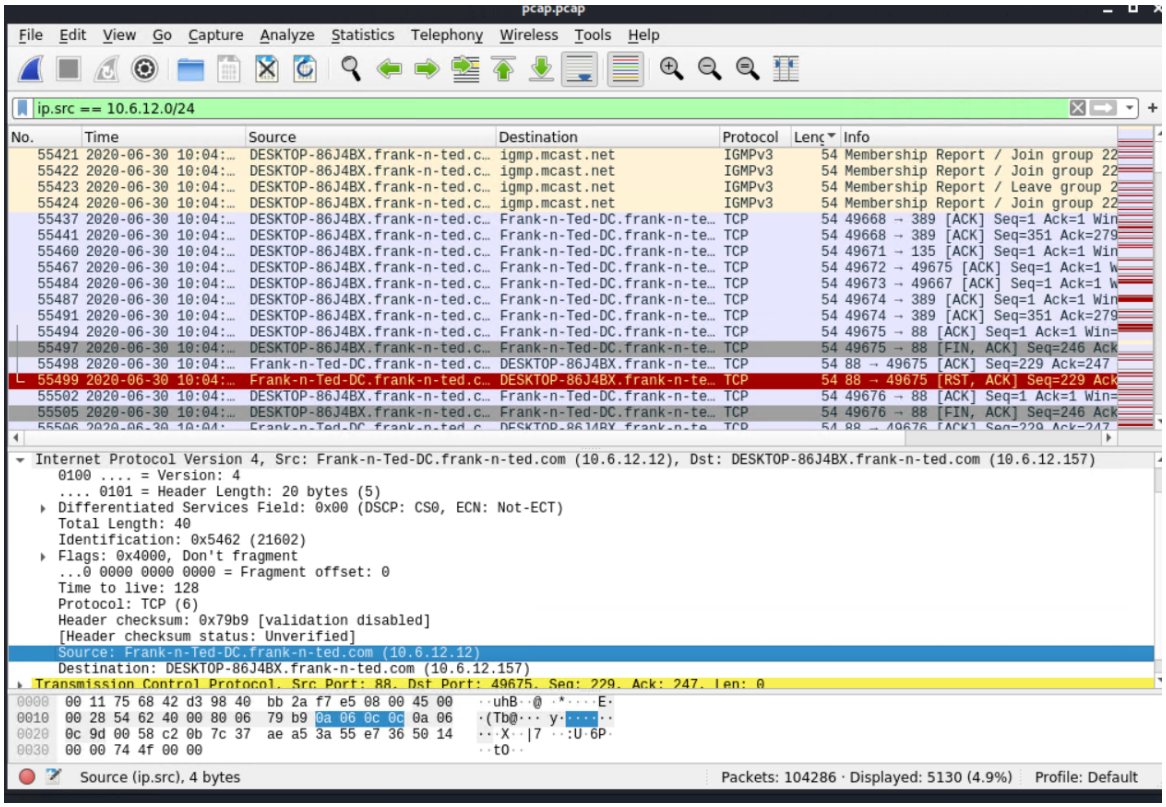
- They have set up an Active Directory network.
- They are constantly watching videos on YouTube.
- Their IP addresses are somewhere in the range `10.6.12.0/24`.

You must inspect your traffic capture to answer the following questions:

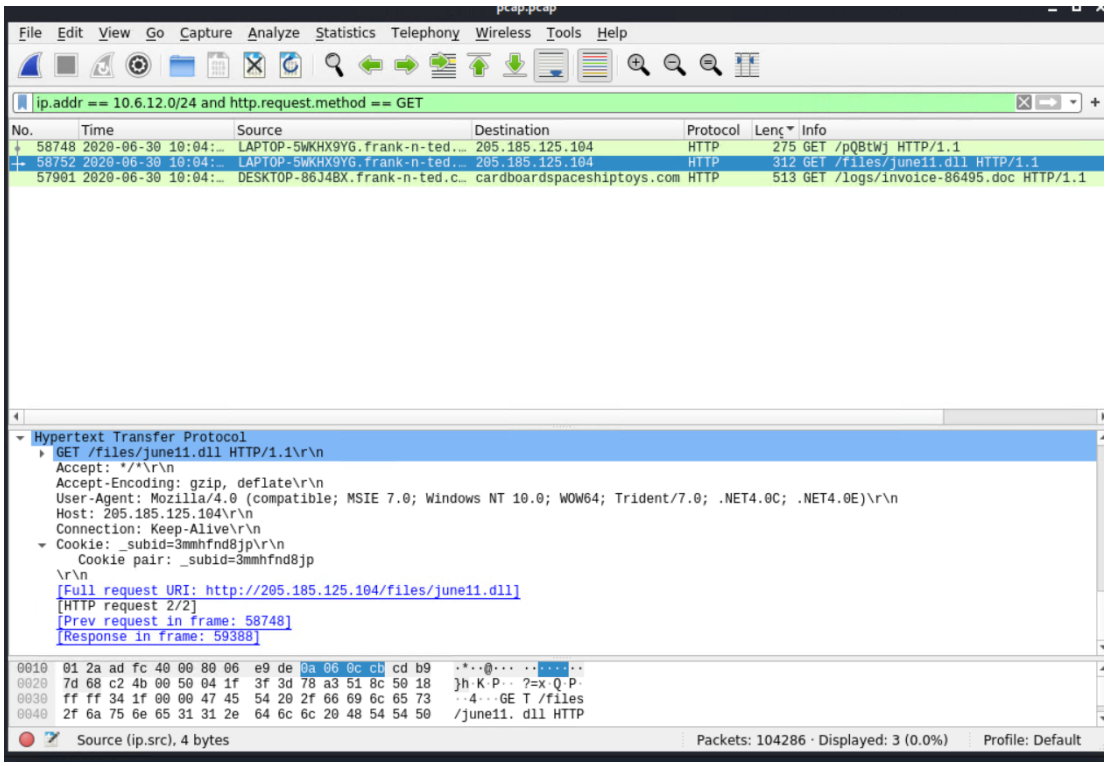
1. What is the domain name of the users' custom site?
    a. Frank-n-Ted-DC. frank-n-ted.com



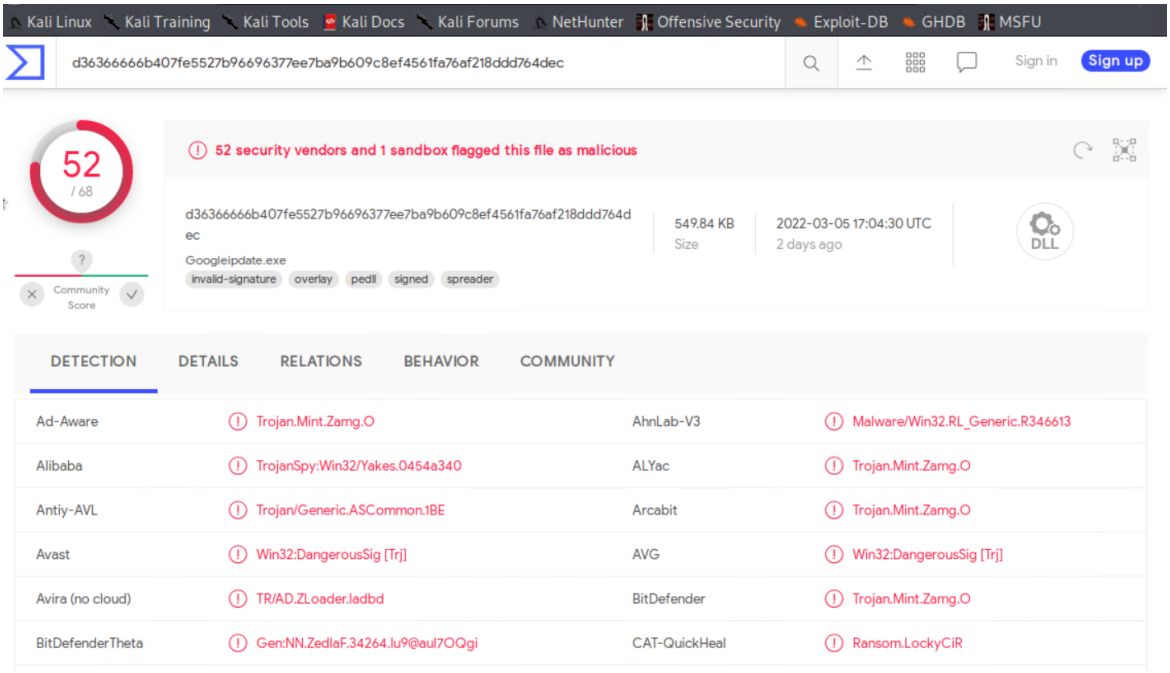
2. What is the IP address of the Domain Controller (DC) of the AD network?
    a. 10.6.12.12



3. What is the name of the malware downloaded to the `10.6.12.203` machine? Once you have found the file, export it to your Kali machine's desktop.
    a. june11.dll



4. Upload the file to VirusTotal.com.



5. What kind of malware is this classified as?
    a. Trojan.Mint.Zamg.O

Vulnerable Windows Machines

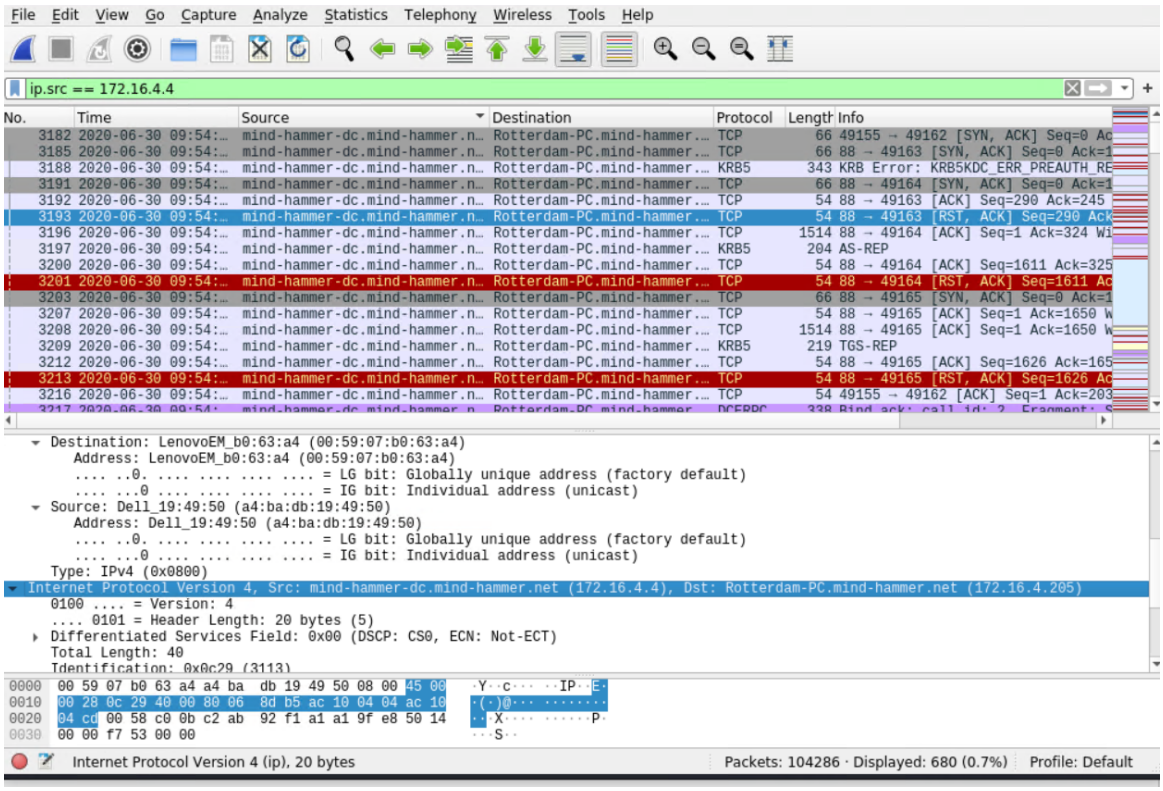
The Security team received reports of an infected Windows host on the network. They know the following:

- Machines in the network live in the range `172.16.4.0/24`.
- The domain mind-hammer.net is associated with the infected computer.
- The DC for this network lives at `172.16.4.4` and is named Mind-Hammer-DC.
- The network has standard gateway and broadcast addresses.

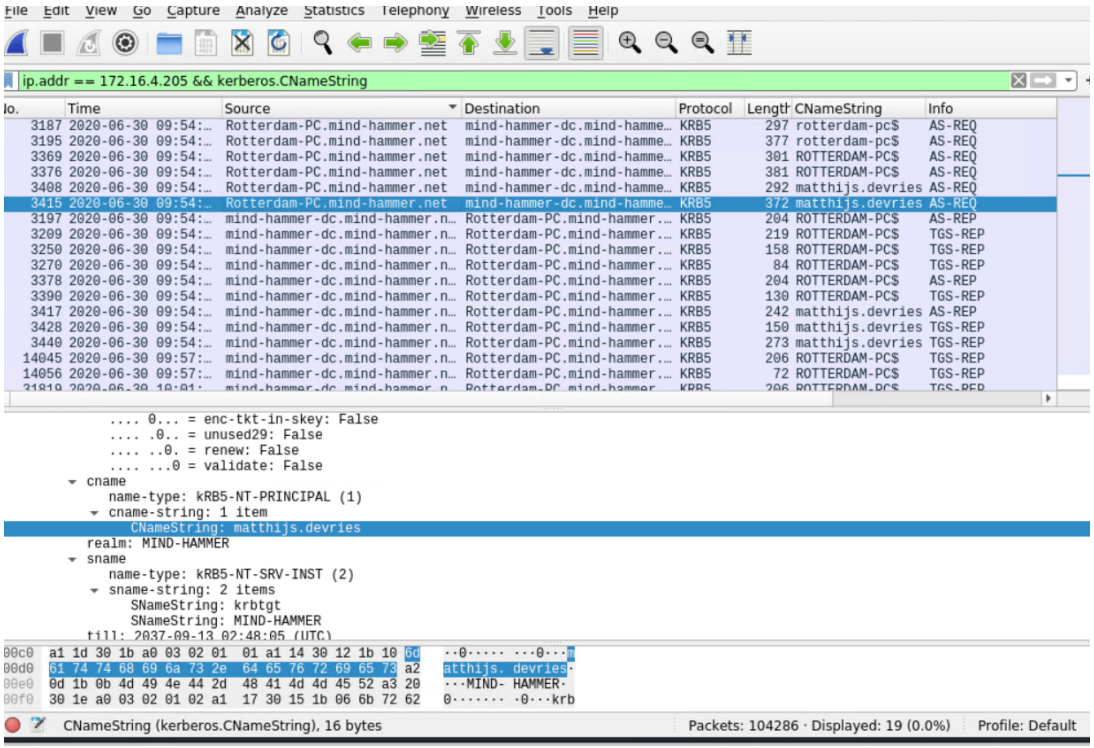
Inspect your traffic to answer the following questions:

1. Find the following information about the infected Windows machine:

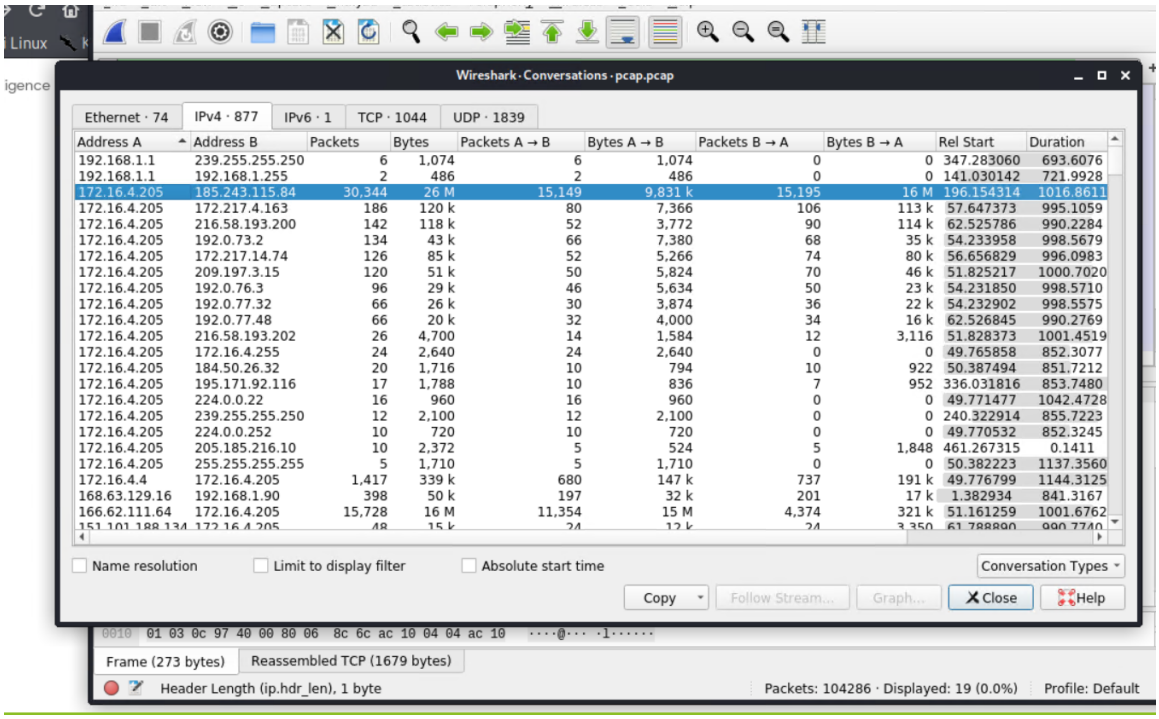
- Host name: Rotterdam-PC
- IP address: 172.16.4.205
- MAC address: 00:59:07:b0:63:a4

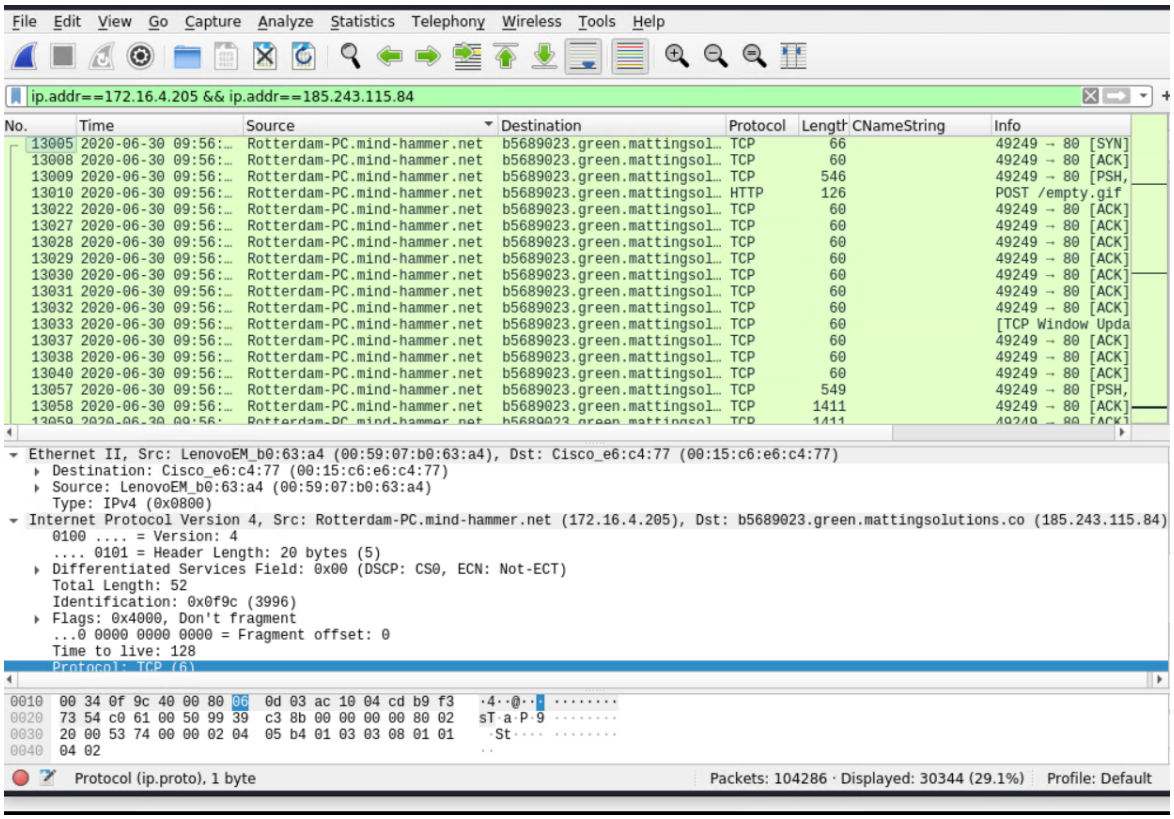


2. What is the username of the Windows user whose computer is infected?
   - matthijs.devries

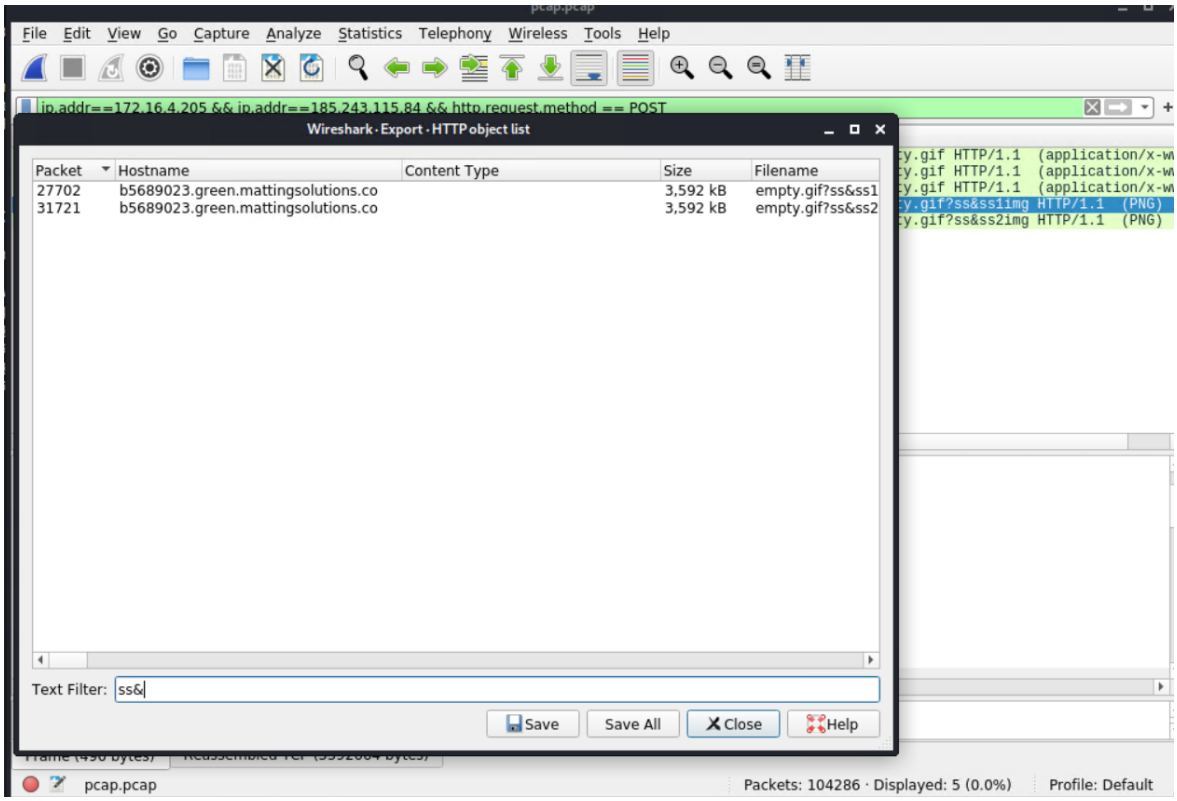


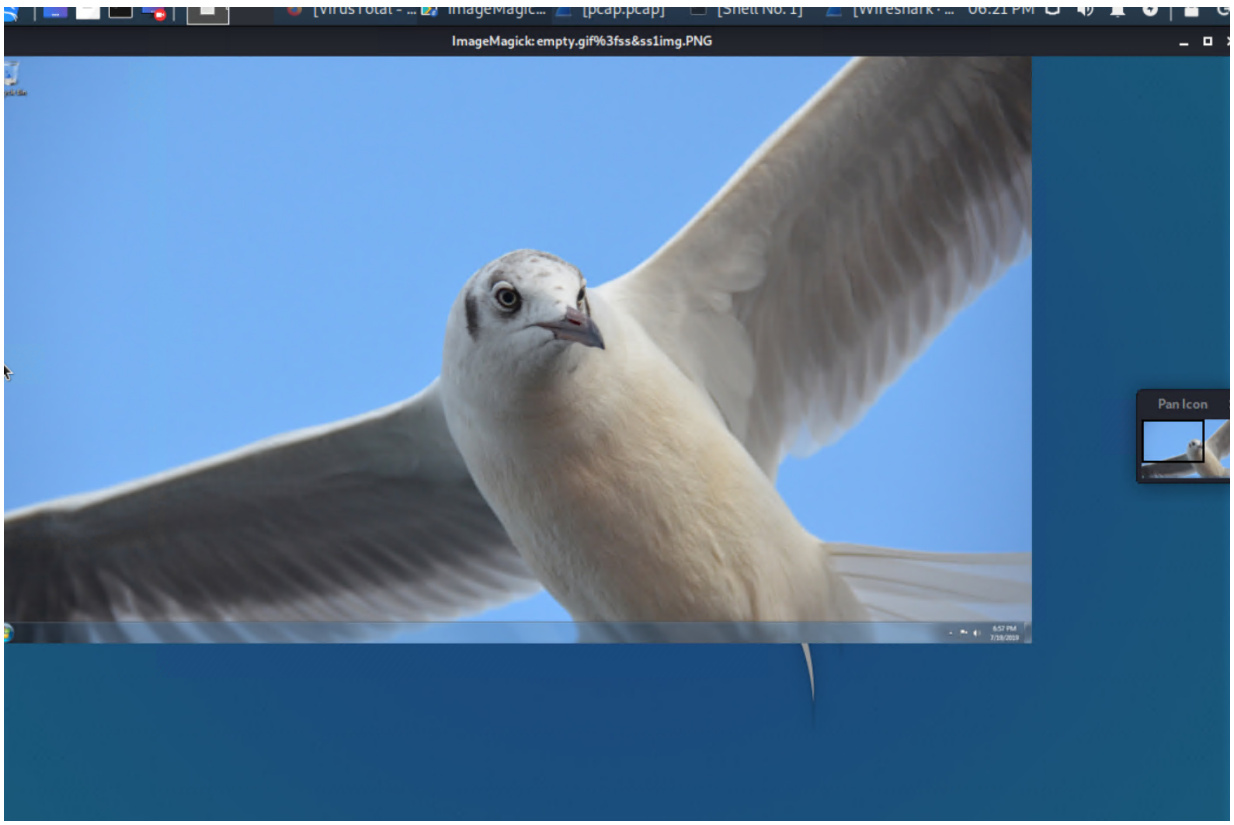
3. What is the IP address used in the actual infection traffic?
    - 185.243.115.84





4. As a bonus, retrieve the desktop background of the Windows host.





Illegal Downloads

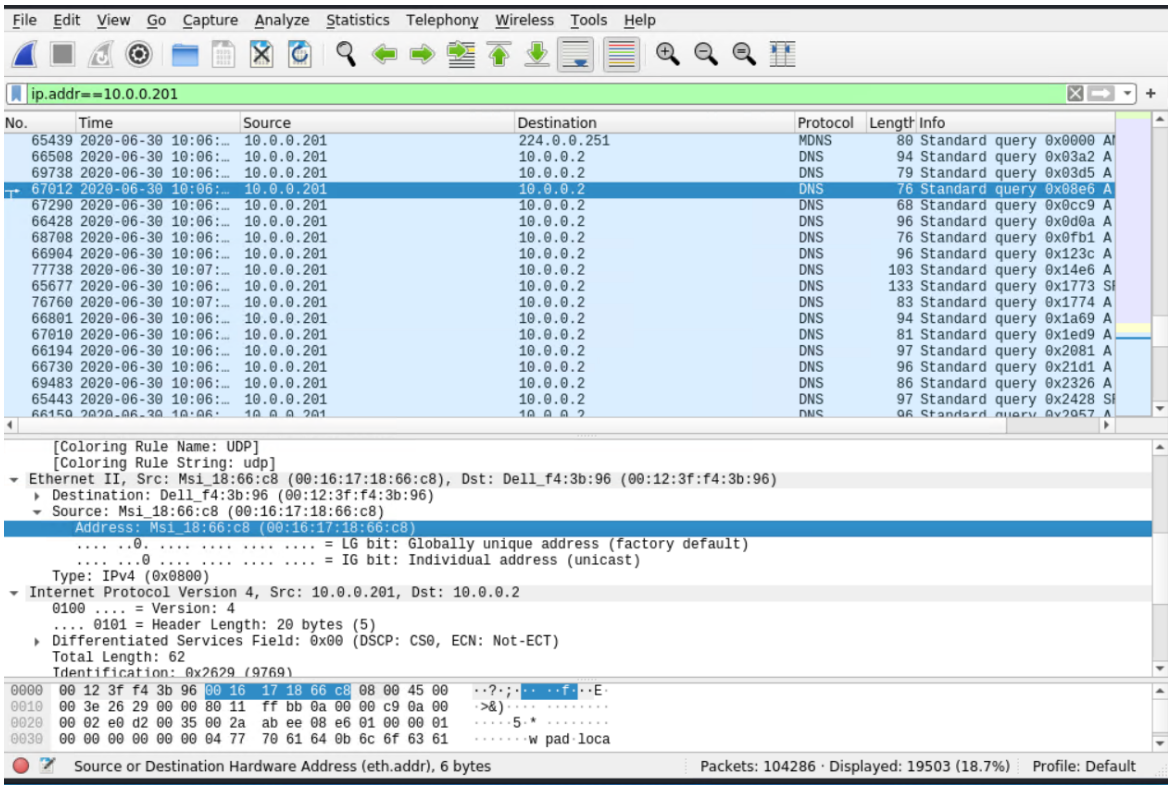
IT was informed that some users are torrenting on the network. The Security team does not forbid the use of torrents for legitimate purposes, such as downloading operating systems. However, they have a strict policy against copyright infringement.

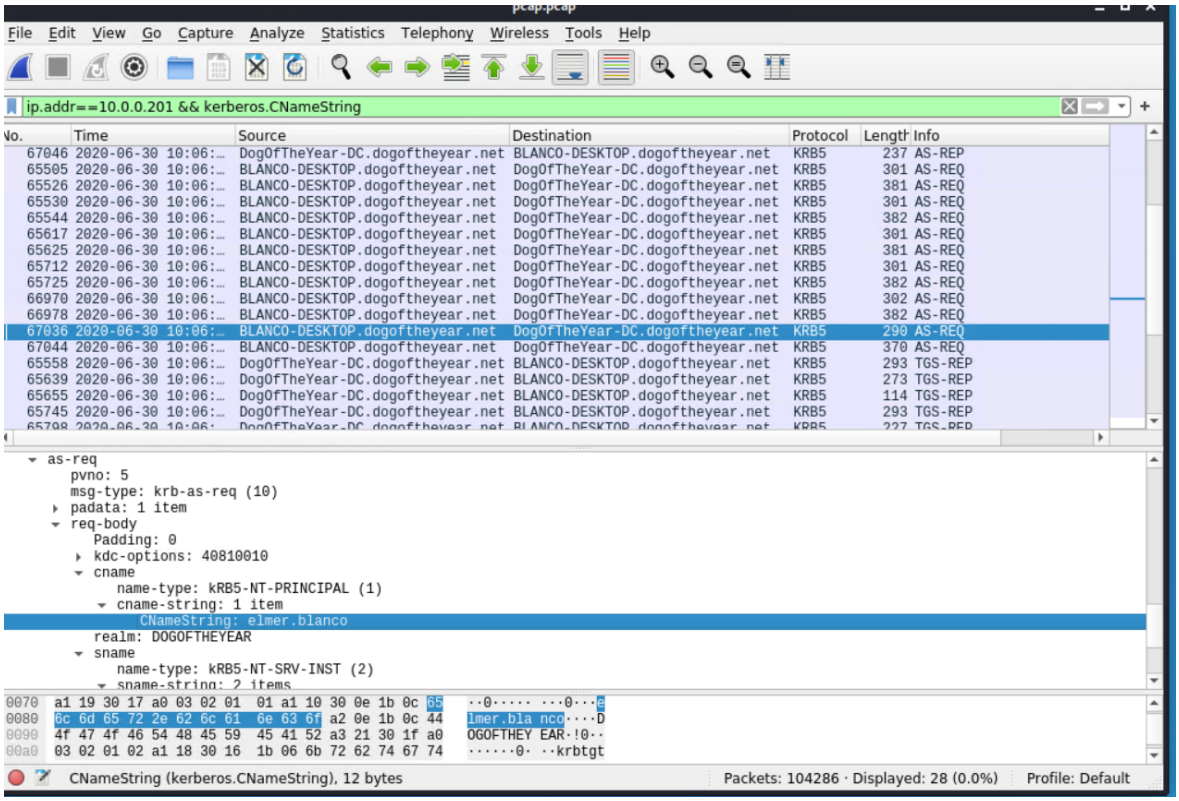
IT shared the following about the torrent activity:

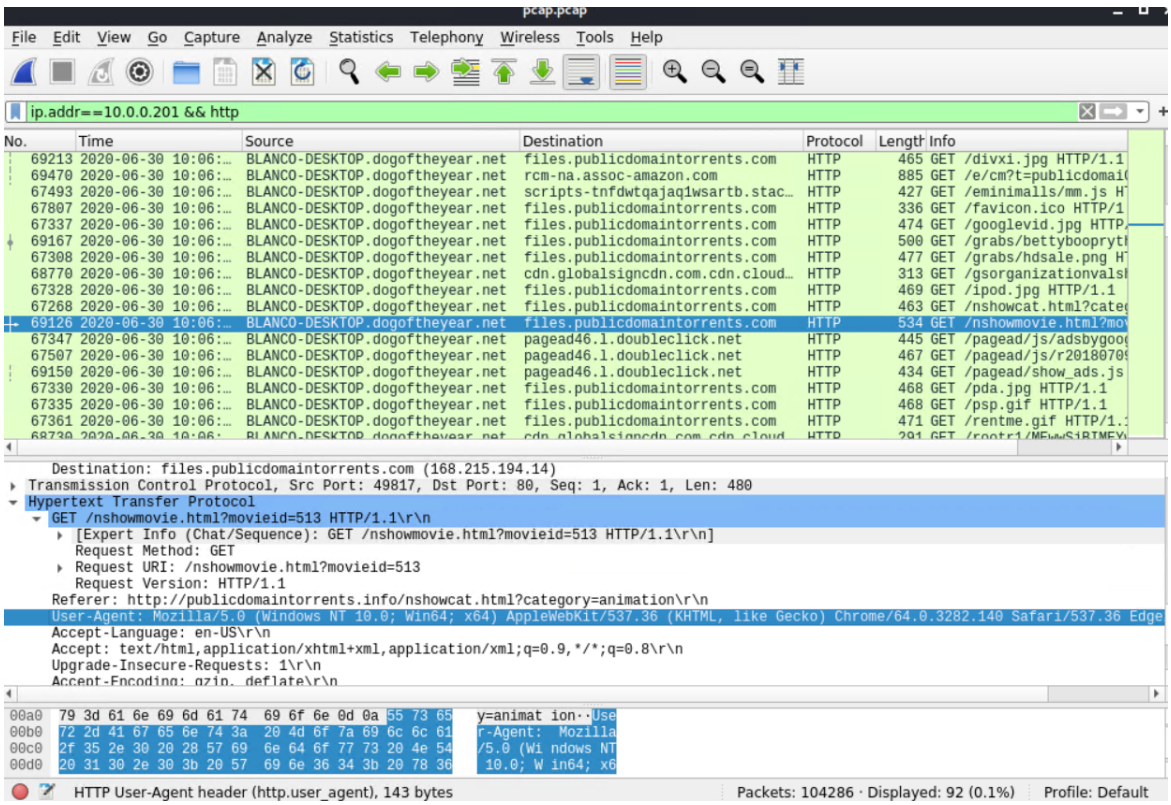
- The machines using torrents live in the range `10.0.0.0/24` and are clients of an AD domain.
- The DC of this domain lives at `10.0.0.2` and is named DogOfTheYear-DC.
- The DC is associated with the domain dogoftheyear.net.

Your task is to isolate torrent traffic and answer the following questions:

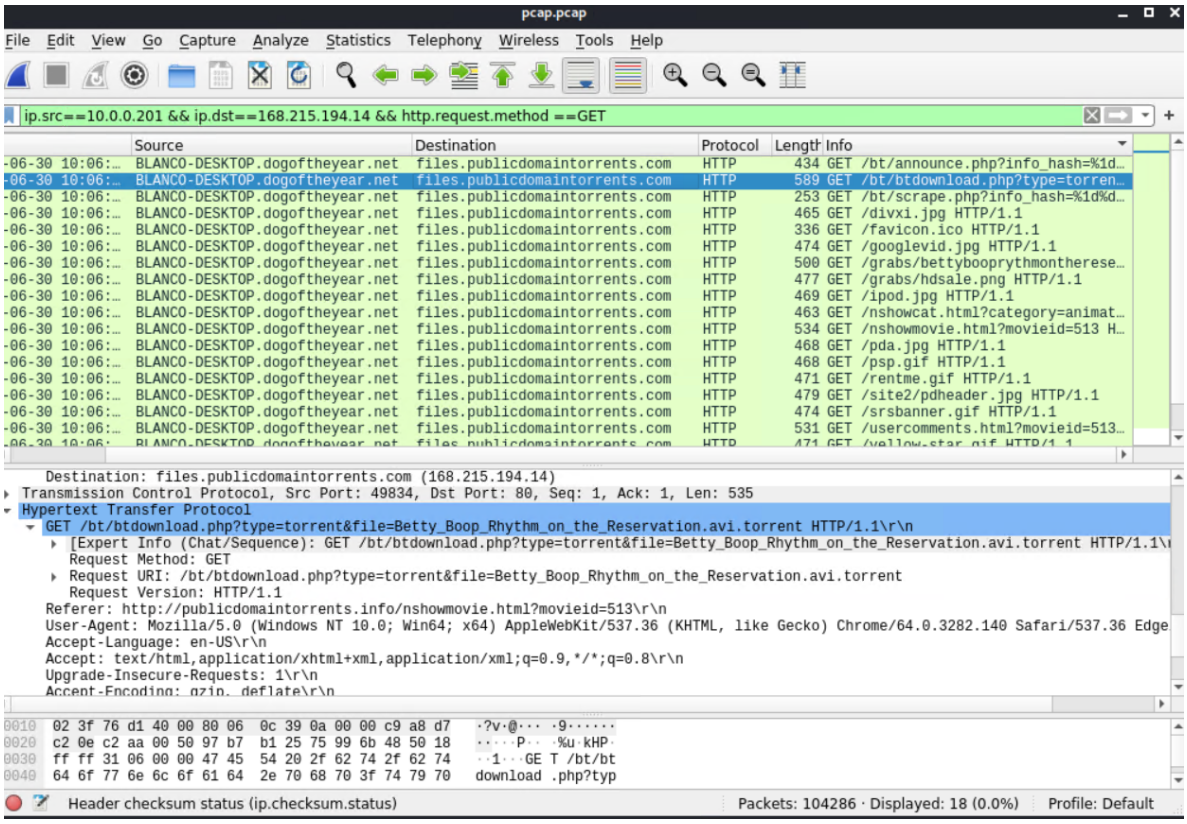
1. Find the following information about the machine with IP address `10.0.0.201`:
    - MAC address: 00:16:17:18:66:c8
    - Windows username: elmer.blanco
    - OS version: Windows NT 10.0

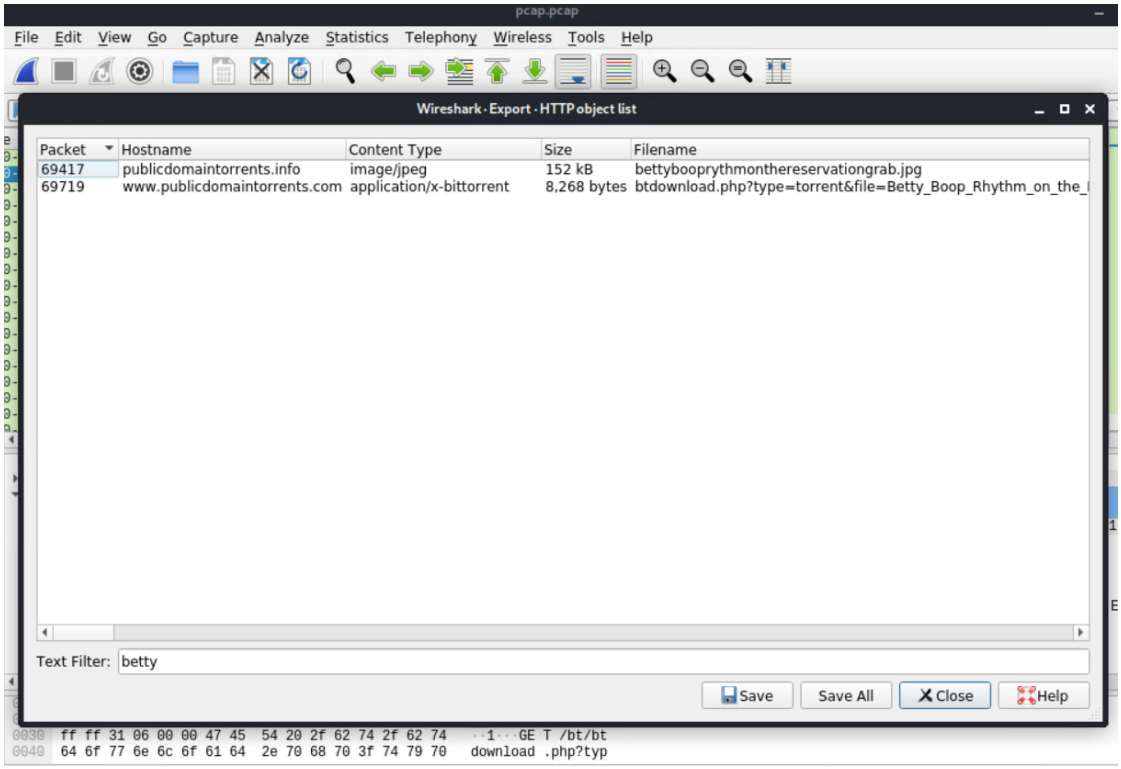


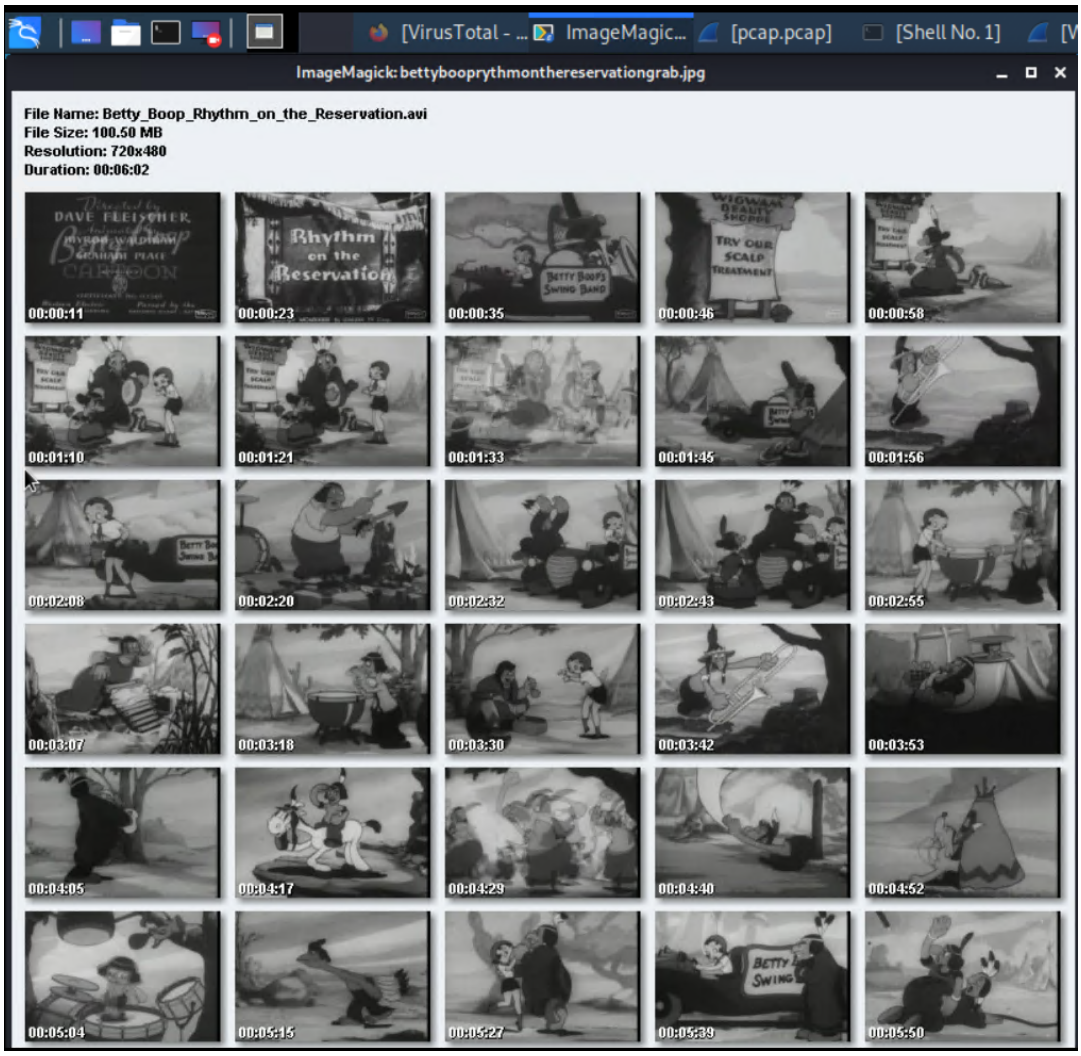




2. Which torrent file did the user download?
    - Betty_Boop_Rhythm_on_the_Reservation.avi.torrent


pcap.pcap
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
ip.src==10.0.0.201 && ip.dst==168.215.194.14 && http.request.method ==GET
Source Destination Protocol Length Info
BLANCO-DESKTOP.dogoftheyear.net files.publicdomaintorrents.com HTTP 589 GET /bt/btdownload.php?type=torren…
Destination: files.publicdomaintorrents.com (168.215.194.14)
Transmission Control Protocol, Src Port: 49834, Dst Port: 80, Seq: 1, Ack: 1, Len: 535
Hypertext Transfer Protocol
GET /bt/btdownload.php?type=torrent&file=Betty_Boop_Rhythm_on_the_Reservation.avi.torrent HTTP/1.1\r\n
Request Method: GET
Request URI: /bt/btdownload.php?type=torrent&file=Betty_Boop_Rhythm_on_the_Reservation.avi.torrent
Request Version: HTTP/1.1
Referer: http://publicdomaintorrents.info/nshowmovie.html?movieid=513\r\n
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/64.0.3282.140 Safari/537.36 Edge
Accept-Language: en-US\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n
Upgrade-Insecure-Requests: 1\r\n
Header checksum status (ip.checksum.status)
Packets: 104286 · Displayed: 18 (0.0%)
Profile: Default


pcap.pcap
File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help
Wireshark · Export · HTTP object list
Packet Hostname Content Type Size Filename
69417 publicdomaintorrents.info image/jpeg 152 kB bettybooprythmonthereservationgrab.jpg
69719 www.publicdomaintorrents.com application/x-bittorrent 8,268 bytes btdownload.php?type=torrent&file=Betty_Boop_Rhythm_on_the_
Text Filter: betty
Save Save All Close Help



Prepared by **Ognen Nastoski**

March 8, 2022