## **Possible Solution**

What date and time the infected memory image was collected?

- Plugin: imageinfo
- By defining the profile in the command, the results of the scan should appear after seconds to 1-2 minutes.
- Correct answers (either is ok):
  - Image date and time : 2021-07-22 05:49:20 UTC+0000 Image local date and time : 2021-07-22 07:49:20 +0200

Which plugin of Volatility generates a list of processes as a tree?

- Command: vol.py -h | grep process
- Correct answer: pstree

What is the IP address of the investigated computer?

- Plugin: netscan
- Correct answer: 192.168.240.129

What is the name and the PID of the malicious process?

- Plugin: cmdline
- Correct answer:
  - Name: gcttt.exe
  - PID: 5040

List a maximum of 5 additional executables that reside in the same path as the malicious process and that have the same execution timestamp as the malicious process.

- Plugin: mftparser
- Correct answer:
  - Newptad284.exe
  - Install.exe
  - askinstall20.exe
  - md2 2efs.exe
  - BTRSetp.exe
  - Duplicates are NEWPTA-1, ASKINS-1 and shouldn't count as correct answer.
  - Gcttt.exe doesn't qualify for "all other executable names" as specified in the task.

Dump the malicious process into a file and search the file for a suspicious ASCII URL string that most likely is hosting other malware components. What's the registrar of that domain? Record the ASCII URL and the domain name registrar.

## Dumping:

• Plugin / command: procdump -p 5040

## Searching:

- Command: strings executable.5040.exe | grep http
- Correct answer: http[:]//uehge4g6Gh[.]2ihsfa[.]com (or screenshot of actual URL)
- Strings encoded in Unicode will not show the desired URL, however ASCII encoded strings command will do.
- Please note that the [] brackets are here to disarm the link. Conscious candidates should know that potentially malicious links should be disarmed first. There are many ways to do this. Brackets are common practice.

## Registrar:

- Approach: "whois" query on the internet
- Correct answer: NameCheap Inc.

Which of the DLLs linked to the malicious process is most likely responsible for initiating HTTP Internet connections?

- Plugin / command: impscan -p 5040 | grep -i http
- Correct Answer: WINHTTP.DLL

What is the SID of the user account under which the process was executed?

- Plugin / command: getsids | grep gcttt.exe
- Correct answer: S-1-5-21-2016556524-1009367435-3578074633-1000