EX NO: 8 PERFORM ROOTKIT DETECTION AND REMOVAL NAME: Hemanth kumar

DATE: 14.04.2025 USING RKHUNTER TOOL ROLL NO: 231901010

### AIM:

Perform real-time file system analysis on a Linux system to identify an attacker's artefacts.

### TASK 2: INVESTIGATION SETUP

After updating the PATH and LD\_LIBRARY\_PATH environment variables, run the command check-env What is the flag that is returned in the output?

# TASK 3: FILES, PERMISSION AND TIMESTAMPS

To practice your skills with the find command, locate all the files that the user **bob** created in the past 1 minute. Once found, review its contents. What is the flag you receive?

THM{0b1313afd2136ca0faafb2daa2b430f3}

V Correct Answer

Hint

Extract the metadata from the reverse.elf file. What is the file's MIME type?

Application/octet-stream

V Correct Answer

Run the stat command against the /etc/hosts file on the compromised web server. What is the full Modify Timestamp (mtime) value?

2020-10-26 21:10:44.000000000 +0000

✓ Correct Answer

# TASK 4: USERS AND GROUPS

Investigate the user accounts on the system. What is the name of the backdoor account that the attacker created? b4ckd00r3d ✓ Correct Answer ∀ Hint What is the name of the group with the group ID of 46? plugdev ✓ Correct Answer View the /etc/sudoers file on the compromised system. What is the full path of the binary that Jane can run as sudo? /usr/bin/pstree ✓ Correct Answer TASK 5: USER DIRECTORIES AND FILES View Jane's .bash history file. What flag do you see in the output? THM[f38279ab9c6af1215815e5f7bbad891b] ✓ Correct Answer What is the hidden flag in Bob's home directory? ✓ Correct Answer THM[6ed90e00e4fb7945bead8cd59e9fcd7f] Run the stat command on Jane's authorized keys file. What is the full timestamp of the most recent modification? ✓ Correct Answer 2024-02-13 00:34:16.005897449 +0000 TASK 6: BINARIES AND EXECUTABLES Run the debsums utility on the compromised host to check only configuration files. Which file came back as altered? ✓ Correct Answer /etc/sudoers What is the md5sum of the binary that the attacker created to escalate privileges to root? 7063c3930affe123baecd3b340f1ad2c ✓ Correct Answer

# TASK 7: ROOTKITS

Run chkrootkit on the affected system. What is the full path of the sh file that was detected?

/var/tmp/findme.sh 

Correct Answer

Run rkhunter on the affected system. What is the result of the (UID 0) accounts check?

Warning

# CONCLUSION:

Rootkit detection and removal using rkhunter tool is successfully performed.