Network Security Laboratory – Lecture 7

PASSWORD CRACKING

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Password Storage

- On operative system, passwords are stored encrypted inside some special files

- These files usually contains the users and the passwords encrypted with an Hash function

- In Linux these files are called shadow

- In Windows are called SAM

Linux Shadow Files

- Shadow files usually can be read only from root users, to protect it

- In the shadow password mechanism the data are split in two differents file:

- Passwd file, that contains users

- Shadow file, that contains hashed password

Windows Security Account Manager (SAM) Files

▶ Security Account Manager (SAM) is an encrypted DataBase that contains users and passwords of windows

▶ SAM and SYSTEM file, useful for decrypting and obtain password for windows, are located in %Windows%/system32/config path

▶ These file are also mounted inside windows registry on path:

  ▶ HKLM/SYSTEM

  ▶ HKLM/SAM

▶ These path are useful if we want to attack the SAM database in order to decrypt passwords

Exercises

- On course Website there are two guides for password storage attack

    - Exercise for Shadow file attack (Linux)

    - Exercise for SAM file attack (Windows)

- Using these guide you must discover password of both operative system

Questions?

The lesson is over.

Thank you!