

ProLUG Security Engineering

Unit 3 Worksheet

Instructions

Fill out this sheet as you progress through the lab and discussions. Hold your worksheets until the end to turn them in as a final submission packet.

Discussion Questions:

Unit 3 Discussion Post 1: There are 16 Stigs that involve PAM for RHEL 9. Read the guide from Rocky Linux here: <https://docs.rockylinux.org/guides/security/pam/>

1. What are the mechanisms and how do they affect PAM functionality?
 - a. Review /etc/pam.d/sshd on a Linux system, what is happening in that file relative to these functionalities?
2. What are the common PAM modules?
 - a. Review /etc/pam.d/sshd on a Linux system, what is happening in that file relative to these functionalities?
3. Look for a blog post or article about PAM that discusses real world application. Post it here and give us a quick synopsis. (Bonus arbitrary points if you find one of our ProLUG members blogs on the subject.)

Unit 3 Discussion Post 2: Read about active directory (or LDAP) configurations of Linux via sssd here:

https://docs.rockylinux.org/guides/security/authentication/active_directory_authentication/

1. Why do we not want to just use local authentication in Linux? Or really any system?
2. There are 4 SSSD STIGS.
 - a. What are they?
 - b. What do they seek to do with the system?

Definitions/Terminology

PAM

AD

LDAP

sssd

oddjob

krb5

realm/realmd

wheel (system group in RHEL)

Notes During Lecture/Class:

Links:

- <https://www.sans.org/information-security-policy/>
- <https://www.sans.org/blog/the-ultimate-list-of-sans-cheat-sheets/>
- <https://docs.rockylinux.org/guides/security/pam/>
- https://docs.rockylinux.org/guides/security/authentication/active_directory_authentication/
- https://docs.rockylinux.org/books/admin_guide/06-users/

Terms:

Useful tools:

- STIG Viewer 2.18
- SCC Tool (version varies by type of scan)
- OpenScap

Lab and Assignment

Unit3_Identity_and_Access_Management - To be completed outside of lecture time.

Digging Deeper

1. How does `/etc/security/access.conf` come into play with `pam_access`? Read up on it here: https://man7.org/linux/man-pages/man8/pam_access.8.html
 - a. Can you find any other good resources?
 - b. What is the structure of the `access.conf` file directives?
2. What other important user access or user management information do you learn by reading this? https://docs.rockylinux.org/books/admin_guide/06-users/
 - a. What is the contents of the `/etc/login.defs` file? Why do you care?

Reflection Questions

1. What questions do you still have about this week?
2. How are you going to use what you've learned in your current role?