**File Permissions and Network Tools**

Module 5

**Module Duration:** 1 Hour

# **Module Objectives:**

# Learn how passwords are stored with hash functions and hash values

# Understand the importance of a strong password

1. Learn how to create new users in your VMs
2. Discover what file permissions are and how they operate
3. Gain networks tools to use in ISEAGE

# **Module Lesson**

| **Component** | **Title** | **Purpose** |
| --- | --- | --- |
| 1. [Slideshow](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | File Permissions and Network Tools | Learn about user, network tools, and how to keep your accounts secure. |
| 3. [Activity 1](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | User Privileges | You’re Hired!!! |
| 2. [Activity 2](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | The Hacker’s Toolkit | In the shoes of the hacker |
| 4. [Check Your Knowledge!](https://www.cyio.iastate.edu/cyber-defense/)  (5-10 minutes) | Module 5 Check your Knowledge! | Review of keys terms and information |

Total Duration: 55 minutes

Note: All activities designed for this module are hands-on. The speed at which the activities can be completed will vary. Each module should approximately take one club or class time to complete.

# **Additional Resources:**

* Password Information
  + [Lesson 11: Creating Strong Passwords](https://youtu.be/wHY2WQsmMzM)
  + [Lesson 10: Common Password Threats](https://youtu.be/Mi5tFGmUtLM)
  + [Lesson 9: Passwords and Hash Functions](https://youtu.be/piWvJkTp8y0)
  + [Lesson 12: Managing Passwords](https://youtu.be/KvfjkO-RG24)
* [VMware Glossary](https://www.vmware.com/topics/glossary/)