**Navigating the File System**

Module 4

**Module Duration:** 1 Hour

# **Module Objectives:**

# Learn how the Linux File System is constructed

# Familiarize yourself with basic Linux commands and files

1. Understand network essentials
2. Learn what IP addresses are and how they are used
3. Connect your virtual machines to the Internet

# **Module Lesson**

| **Component** | **Title** | **Purpose** |
| --- | --- | --- |
| 1. [Slideshow](https://www.cyio.iastate.edu/cyber-defense/)  (20 minutes) | Navigating Linux File System | Learn the basic commands you need to navigate your VM |
| 3. [Activity 1](https://www.cyio.iastate.edu/cyber-defense/)  (30 minutes) | Configuring Network Settings | Establish internet connection on virtual machine |
| 2. [Activity 2](https://www.cyio.iastate.edu/cyber-defense/)  (10 minutes) | Hide and Seek | Practice your navigation skills within the file system |
| 4. [Cheat Sheet](https://www.cyio.iastate.edu/cyber-defense/)  (varies) | Linux Commands Cheat Sheet | Basic Commands Dictionary |

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 meeting or class period to complete.

# **Additional Resources:**

* How the internet works.
* [Lesson 6: Demystifying the Internet (Part 1)](https://youtu.be/ot4xSrWi8TE)
* [Lesson 7: Demystifying the Internet (Part 2)](https://youtu.be/DeKA47QA1R8)
* [Lesson 8: Demystifying the Internet (Part 3)](https://youtu.be/AIpdkqPArOQ)
* Linux Basics
* [Data Science Tutorials - 02 Linux for Beginners](https://youtube.com/playlist?list=PL6YwPExkSESqcOfH8SP0vYRnavpJf-JRH)
* [VMware Glossary](https://www.vmware.com/topics/glossary/)