**NSSA221 Systems Administration I**

**Lab 01 Report**

# Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade \_\_\_\_/50

**Requirements:**

Use this document to answer questions related to Lab 01. Submit this template to the assignment drop box by the due date. Late submissions are subject to a 20% penalty. Submit the report using the following format for the title; LR01, followed by an underscore, and the first initial of your first name in uppercase and your entire last name with the first letter in uppercase.

**Example:** LR01\_GArcoraci.docx

Answer ALL questions in your OWN words. Your answer should indicate that you understand the topic in question and relate it to the lab experience, not a general textbook answer. DO NOT copy and paste or plagiarize. Some questions may require an outside resource and be included as part of the answer. Please cite it accordingly. You may include citations to support your answer, but it should NOT be the entire answer.

Your answers must be complete sentences and use proper sentence structure. Phrases or one-word responses will receive a zero.

1. In this lab, you worked in the department's private cloud environment (RLES). Do some research and describe what you think private and public clouds are? What about hybrid cloud infrastructure? What are the differences, and what are the similarities?
2. In the lab, you used an SSH client to access the Serenity server. Some of the more familiar SSH clients are MobaXterm, Putty, and openSSH. Describe what the Secure Shell Protocol (SSH) is and why it is so widely used.
3. In RLES, you can create a snapshot of your virtual machine. Explain what a snapshot is and provide an example of when you might create one. What are full and linked clones? VMware documentation can help you with answering this question.
4. What is Network Address Translation? How is it being used in your virtual environment as it relates to the pfSense deployment? Using RFC 1918 what are private IP addresses?
5. How are Linux man pages organized. What are the sections and what sections do you think are most useful to sysadmins and why?



Place the screenshots for the lab below. For each missing screenshot, you will receive a 5% penalty on the report grade. If your screenshots do not include the required information, are illegible, blurry, or otherwise unreadable, you will not receive credit. Any attempt to alter the information in the screenshots in any way is considered to be academic dishonesty, and you will receive a zero grade for the report. Within one-week late submission 20 % deduction.

**All screenshots must be labeled using the following titles, place the image BELOW the title.**

Figure 1 – Windows 2019 Server System Information

Figure 2 – Windows 2019 Server Network Information

Figure 3 – PfSense Dashboard

Figure 4 – CentOS 8 Release Information

Figure 5 – CentOS 8 Network Information

Figure 6 – Windows 10 Network Information

Figure 7 – Git Repository Verification