IT 3850 Computer System Administration  
Spring 2022

**Laboratory # 7 - SFTP & SAMBA**

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1. **Objectives**
2. Explain how to enable an SFTP server.
3. Explain how to enable a SAMBA server.
4. **Material Required**

One RHEL Linux VM and Microsoft Windows 10 VM.

1. **Activity**
2. Go through the Web Server Module slides and videos available on Canvas.
3. On the RHEL server VM, configure SFTP by following the steps shared on Canvas.
4. On the RHEL server VM, configure SAMBA by following the steps shared on Canvas.
5. **Review Questions**

**\*Important\*. For each question where you are required for a screenshot, include the screenshot that clearly demonstrates you completed that step successfully.** Include any commands you executed for each step as well, if applicable**. All the screenshots for this lab and future labs must include your pawprint in the command prompt or have other information visible that identifies you (i.e. type/draw your pawprint).** This is to ensure that you are submitting your own work.

Answer the following questions and perform the following tasks. Construct your report in a document to submit on Canvas. Make sure to read the directions and the rubric carefully!

Include screenshots for questions 1 and 2 to demonstrate your work.

1. (SFTP) From an MS Windows 10 VM, use MobaXterm to access via SFTP to the RHEL server, create a file and name it as your pawprint. Provide a screenshot of the MobaXterm window showing the file created.

Via the session tool entered the local host address along with user name and password to access the sftp

Graphical user interface

Description automatically generatedA screenshot of a computer

Description automatically generated with medium confidence

1. (SFTP) On the RHEL server VM, access the SFTP server through the command-line interface. Use the SFTP CLI to:
   1. Text

      Description automatically generatedList the contents of your SFTP server including the file you created through WinSCP. Provide a screenshot.

Use command sftp [ftp\_user@192.269.100.65](mailto:ftp_user@192.269.100.65) to access sftp server. Then used ls command to view current directory items.

* 1. Retrieve the file from the SFTP server and place the file in your user home directory. Then, list the contents of your local directory showing the file was copied successfully. Provide a screenshot of these commands being executed.

A screenshot of a computer

Description automatically generated with medium confidence

Used command get Kmm2hb to download a copy of file to local directory.

Used code ls to display that the file was downloaded into my directory

1. (SAMBA) From an MS Windows 10 VM use the File Explorer to access via SAMBA to the RHEL server, and:
   1. Provide a screenshot showing the windows authentication popup for your SAMBA server located on your RHEL VM.

A screenshot of a computer

Description automatically generated

Used [\\192.168.100.65](file://192.168.100.65) in the file explorer to access samba server

* 1. Create a file through your Windows system and name it as your pawprint. Provide a screenshot showing the file created in the **Windows** file explorer.

Graphical user interface, application

Description automatically generated

After logging into the samba server, I created a new text file with my pawprint

* 1. On your RHEL system, provide a screenshot showing the file created in the **Linux** file system by listing the contents of your SAMBA file directory

Graphical user interface, application

Description automatically generated

Using the files application on the RHEL went to the /var/samba folder and found where the document I created was located.

1. Provide a strong reason why you would recommend configuring an SFTP server.

I recommend configuring a SFTP server because like the name states it is a secure file transfer protocol. This allows for a safer way to transfer files among different devices. It can require a username and password and can be encrypted. They are often setup on private networks which restrict outsiders from attacking it but they can also be used over multiple networks.

1. Provide a strong reason why you would recommend configuring a SAMBA server over an SFTP server.

I would recommend a SAMBA server over a SFTP server if you are more concerned with your security. Samba, because it uses the linux operating system seems more secure to me because it supports different types of encryption. Also because you are using Linux, you require any attackers to have knowledge of multiple systems when it comes to navigating your server. Samba can be remote which is also a big plus.