CIS-2235 Advanced Sys Admin
Lab #8 Assignment

Objective

Install and use ftp, sshfs, and Samba.

Introduction

We want to share data between users, computers and operating systems. There are many different file sharing protocols. In this lab, we'll install and use a few popular ones.

Ensure that you can log into server lemuria.cis.vtc.edu using ssh on port 2221. Let me know if you can't log in and I'll have you added (or pwd reset).

Tasks

1. Setup host-only networking following directions in Canvas if you have not already. Show that you can communicate with your VM without port forwarding, just the VM host only IP address (or /etc/hosts alias if configured). Example: $ ssh <user>@<vm-ip> instead of $ ssh -p 2222 <user>@localhost. This will make the following file server setup and testing easier.

2. Setup an anonymous FTP server drop-box on your VM.

   - What package did you need? (vsftp recommended, but sftp or ftps ok)
   - How did you enable anonymous ftp upload?
   - Connect to your FTP server (localhost is fine, but Mac Finder works well: ftp://<vm-ip>, or Filezilla, etc.), log in as anonymous, upload a file, and verify.

3. Demonstrate the use of SSHFS from your VM to *another* computer running ssh. You can use lemuria for this -- just create a subdirectory in your home directory on lemuria, create a file in it, and then mount the directory from your VM.

   - What package did you need and was there any setup?
   - Remember that lemuria listens for ssh on non-standard port 2221.
   - Show how to mount a dir and copy a file to or from it.
   - How do you unmount it?

4. Install Samba on your VM to host a guest share (read only) *and* a private group share (writable).

   - Connect to your VM using the smb://<vm>/<share> protocol from your host system and transfer files (Mac Finder, Windows File Explorer, Ubuntu Nautilus, etc.).
   - Verify that you can't write to the guest share but you can write to the private group share.