Managing a Web Server Lab 4: Backups & Access

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Introduction

Create a logbook documenting the following tasks, to create a user on the server you should use the `adduser user` command, where `user` is the name of the user account you wish to create. Run the add user command as root (`su -`).

Part 1: Create users and files

1.1 Logged in as root create a user called `usera`, with a password of `userapass` using the adduser command.

1.2 Switch user to `usera` with the command: `su usera`

1.3 Create a file called: `TEST_FILE`

1.4 Take an md5sum digital signature of the `TEST_FILE` using:

```
md5sum TEST_FILE
```

1.5 Forward the digital signature to a new file, the cat command will show that you have the hash sum inside the new file:

```
md5sum TEST_FILE > hashsum_file

cat hashsum_file
```

1.6 Document evidence of this - add a screenshot of the md5 sum of the `TEST_FILE`, add a screenshot of the output of running `cat` on the hash sum file.

Part 2: SCP & TAR

2.1 Download Filezilla https://filezilla-project.org/. Add a screenshot to the logbook of the program installed and running on your host operating system. Next document the IP address of the guest machine and ensure you can ping it from the host machine.

2.2 On the server create a backup of the `TEST_FILE`:

```
tar -cvf my_backup.tar TEST_FILE
```

2.3 Use FileZilla/WinSCP to connect your host operating system to your guest operating system, log in as usera. You *may* have to change the adapter to bridged mode for this - or NAT might work? Once connected, enter the usera username, password and ip address of the guest OS into the software, connect using port 22 for SSH. Add a screenshot of a successful connection to the logbook.

2.4 Successfully copy the TEST_FILE from the guest machine to the host. Add a screenshot of the file saved on the host machine to the logbook.

Part 3: Create & Backup a Website

3.1 Create a new directory called (new_website) on the server with the following structure, the mkdir and touch commands will be required.

/new_website/index.html

/new_website/img/

/new_website/styles/

/new_website/assets/scripts.js

/new_website/styles/main.css

3.2 Edit the index file at `/new_website/index.html` file to make a basic website:

```
<!DOCTYPE html>
<html>
      <body>
            <h1>This is my demo website</h1>
                  <p>My first paragraph.</p>
      </body>
</html>
```

Using the `tar` command, create a tar archive of the whole `new_website` directory and its contents. Take an `md5sum` of the tar archive and store it in a file. Add a screenshot to the logbook of this once the archiving process completes.

3.3 SCP the website from the server to the host machine using the software installed in step 2.1 - add a screenshot of the website tar archive when saved on the host machine.

3.4 Unpack the tarball and then browse to the website in the browser from machine A. On windows you will need to install 7zip https://www.7-zip.org/ to do this. Show the index file created in step 3.2 loaded in a web browser on the host machine after being unpacked.

Part 4: Install an FTP Server

4.1 On the server install `vsftpd`, then check that systemd has started the ftp server:
apt install vsftpd -y && systemctl status vsftpd

4.2 Open Firefox on the server and navigate to ftp://127.0.0.1 enter the username and password for `usera` to verify FTP is working, you should now see the `usera` home directory, presented via FTP in the web browser. Add a screenshot of the TEST_FILE loaded in the web browser.

4.3 Connect Filezilla to the guest like in step 2.3 this time using port 21 for FTP and add a screenshot of the successful connection to the logbook.