CIS133 –Homework NIS

Requirements of the Assignment

- Before starting this assignment you must have successfully configured the NFS server and NFS client from the NFS homework. Use those two virtual operating systems to complete this assignment. If you've submitted the NFS assignment and have not yet been graded on it, I would prefer that you WAIT before working on this. If waiting is not an option, clone both server and client and appropriately name each.
- Before beginning, delete <u>all</u> users from the clients (even the cis133 user). Be sure to delete their home folders as well.
- The objective of this assignment is to configure your server as an NIS server and configure your client as an NIS client. You also must configure the Centos machine that has been placed in your CIS133 folder as an NIS client. (If the Centos machine is not there, let me know.)
 - o The hostname of the Centos machine that has been placed in your CIS133 folder must be changed to *YourInitials*-Centos-133. Leave the existing IP settings.
 - o user accounts must exist only at the server. To start, the users that were created at the server in homework #1 will do. You will later be asked to add more users.
 - o the NIS domain name must be cis133-#.bcc. The number(#) should match the number assigned to you within vmware. i.e., If your cis133 folder includes S02 use cis133-02.bcc as your domain name, etc.
 - o users must be able to login with a server account while at either client
 - o user's home folders must be stored on the server and mounted at each client
 - o you must configure the services using names, not IP addresses
 - o the NIS server must be configured to start the NIS/yp services when the computer starts
 - the NIS server must configure maps for, at a minimum, the passwd, group and shadow files.
 - the NIS server must be configured to support only hosts from the 10.131.0.0 network.

Do not answer questions 1 thru 28 until you've successfully configured and tested NIS on the server and clients. If you make changes to the configurations after generating screenshots, update your screenshots.

NIS Server

- 1. Show me the contents of the /etc/exports file.
- 2. Show me the contents of the /etc/fstab file.
- 3. Show me the contents of the /etc/hosts file.
- **4.** Use the ifconfig command to show me the server's ip address.
- 5. Show me the last 10 or 15 lines from the local /etc/passwd file.
- 6. View the contents of the nis mapping to the passwd file using the ypcat command
- 7. Show me the last 4 or 5 lines from the /etc/yp.conf file
- **8.** Show me the contents of the /etc/defaultdomain file
- **9.** Show me the contents of the /var/yp/securenets file
- **10.** Display the contents of the /var/yp/cis133-#.bcc folder (ls –l)
- **11.** Execute the <u>command</u> to check the status of ypserver. Include the command and its output as your answer to this question.

- **12.** Execute the <u>command</u> that will check the status of the yppasswdd daemon. Include the command and its output as your answer to this question.
- **13.** Execute the ypwhich command; include it and its output as your answer.

NIS OpenSuse Client

- **14.** Show me the contents of the /etc/fstab file.
- 15. Show me the contents of the /etc/hosts file.
- **16.** Use the ifconfig command to show me the client's ip address.
- 17. Show me the last 5 or 6 lines from the /etc/passwd file.
- **18.** Show me the last 4 or 5 lines from the /etc/yp.conf file
- 19. Execute the ypwhich command; include the command and its output in your answer.
- 20. Show me the output of the mount command (grep this output to include only mounted devices that are from your server).

NIS Centos Client

- 21. Show me the contents of the /etc/fstab file.
- 22. Show me the contents of the /etc/hosts file.
- 23. Use the ifconfig command to show me the client's ip address.
- **24.** Show me the last 5 or 6 lines from the /etc/passwd file.
- 25. Show me the last 4 or 5 lines from the /etc/yp.conf file
- **26.** Execute the ypwhich command; include the command and its output in your answer.
- 27. Show me the output of the mount command (grep this output to include only mounted devices that are from your server).
- 28. While at the <u>server</u>, login as one of the NIS users. Execute each of the below commands and provide **one** screenshot that shows all:

Highlight each command in the screenshot.

- a. Display the last 15 lines of the /etc/passwd file
- b. View the contents of the nis mapping to the passwd file using the ypcat command
- c. Change your own password
- **29.** While at the OpenSuse client, login as one of the NIS users. Execute each of the below commands and provide **one** screenshot that shows all Highlight each command in the screenshot.
 - a. Display the last 15 lines of the /etc/passwd file
 - b. View the contents of the nis mapping to the passwd file using the ypcat command
 - c. Execute the whoami command
 - d. Execute the cd command and then execute the pwd command
 - e. Execute the ypwhich command; include it and its output as your answer.
 - d. Change your own password
- **30.** While at the Centos client, login as one of the NIS users. Execute each of the below commands and provide **one** screenshot that shows all Highlight each command in the screenshot.

- a. isplay the last 15 lines of the /etc/passwd file
- b. Display the last 15 lines of the /etc/passwd file
- c. View the contents of the nis mapping to the passwd file using the ypcat command
- d. Execute the whoami command
- e. Execute the cd command and then execute the pwd command
- f. Execute the ypwhich command; include it and its output as your answer.
- g. Change your own password
- **31.** While at the server, create 2 new NIS users. Each user must have a home folder and a password and must be able to authenticate at each client. Provide a list of each command used to complete this task.
- **32.** Confirm to me that the two users created in #31 were able to successfully login at *each* client through the <u>graphical</u> interface.
- **33.** While at the client use the ypmatch command to query the passwd map file for each of the users created in #32. Include each command and its output as the answer to this question.

Additional OpenSuse Client Requirements

- 34. At the OpenSuse client computer, complete the following:
 - a. Execute cfdisk to display the current disk configuration. Provide a screenshot of the results.
 - b. Use the fdisk command to delete the partition that is no longer being used at the client. Explain what you did.

Be very careful; don't delete the wrong partition. If you're unsure of what you're doing, consider cloning th

If you're unsure of what you're doing, consider cloning the working NIS client before completing this...

- c. Re-execute the command used in 34a. (another screenshot of output required)
- 35. Expand the /dev/sda2 partition to use the space that was freed up in question 34. Use gparted to do this. (If you opt to use a different method, please provide a detailed explanation of what you did.)

When done...

- a. Execute the cfdisk to display the current disk configuration. Provide a screenshot of the results.
- b. Display the contents of the fstab file