# The Bash Shell

Note

All labs rely on previous courseware and lab information.

## Scenario

“Stellar performance last week,” said Mrs. Y. “Keep it up like that and you will be a shoe in.” You really need the extra money. Moving forward, you have to use the bash shell environment to set up a basic set of company commands to ease the workload.

## Objectives

In this lab, you will:

* Create a new alias to do the auditing of the company and print it to the screen in audit format
* Create an alias that will allow you to securely transfer a file to IA

## Exercise 1: Create an Alias for a Backup Operation\*\*

Doing work manually is one thing; automating it is another. Let us reduce time doing easy tasks by creating aliases to conduct them. Specifically, you need to create an alias that will allow you to back up whatever path you provide it.

Helpful Hint

You may have to use **sudo** to complete this exercise if you are not root.

### TODO

1. Create an alias that will use **tar** to back up the second parameter provided into the first parameter. See the following command-line example:

* Usage example: **backup “fileToSaveTo.tar.gz” “pathToBackUp”**

### Steps

1. Validate that you are in the **companyA** folder in the terminal by typing **pwd** and pressing ENTER.
2. Create an alias called backup by typing **alias backup='tar -csvpzf** ' and pressing ENTER.
3. Use the **backup** alias to back up the companyA folder by typing **backup /home/labsuser/backup.CEO.tar.gz** **/home/labsuser/companyA/.CEO/** and pressing ENTER.

Note

If you don’t have permission, use the **sudo** command to allow access.

[labsuser@centos companyA]$ backup /home/labsuser/backup.CEO.tar.gz /home/labsuser/companyA/.CEO/

tar: Removing leading `/' from member names

/home/labsuser/companyA/.CEO/

/home/labsuser/companyA/.CEO/CompanyAudit.csv

[labsuser@centos companyA]$ ls ..

asnlib backup.CEO.tar.gz backup.companyA.tar.gz companyA work

## Exercise 2: Create an Alias to Transfer a File

The week is almost over and you need to ensure you are staying on task and up to Mrs. Y’s standards. Establish an alias that will allow you to transfer the backup directly to the IA team.

Helpful Hint

You may have to use **sudo** to complete this exercise if you are not root.

### TODO

1. Create an alias named **iatransfer** to transfer the **backup.tar.gz** file to **IA**.

* Example: **iatransfer** *–* will transfer the file created in exercise 1 to IA.

### Steps

1. Validate that you are in the **companyA** folder by typing **pwd** and pressing ENTER.
2. Create the alias **iatransfer** by typing alias **iatransfer='scp /home/lasbuser/backup.companyA.tar.gz USERNAME@127.0.0.1:/home/YOURUSERNAME/companyA/IA'** and pressing ENTER.
3. Use the **iatransfer** alias by typing **iatransfer** and pressing ENTER. At the password prompt, input your password and press ENTER to transfer to **IA**.

[labsuser@centos companyA]$ alias iatransfer='scp /home/labsuser/backup.companyA.tar.gz labsuser@127.0.0.1:/home/

labsuser/companyA/IA'

[labsuser@centos companyA]$ iatransfer

The authenticity of host '127.0.0.1 (127.0.0.1)' can't be established.

RSA key fingerprint is SHA256:avhYOuhDUy7DP03FuCwi09Q8rMWtyQnDcFUxzFGMQ8A.

RSA key fingerprint is MD5:89:e6:67:23:da:e6:72:fa:e1:d6:d1:d2:53:e1:14:21.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added '127.0.0.1' (RSA) to the list of known hosts.

labsuser@127.0.0.1's password:

backup.companyA.tar.gz 100% 3398 17.1MB/s 00:00

[labsuser@centos companyA]$

## STOP

You have successfully completed this lab.