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CSE570 - Cloud Computing

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Linux Assignment:

This is a series of tasks to help you become familiar with Linux.

**Using ssh and log into ceclnx01.cec.miamioh.edu**

**Answer the following:**

1. **Use ifconfig and tell me how many interfaces are present. For each interface, what is the IP and the Mac Address**

2 Interfaces are present:

eml :

IP Address: 134.5.148.193

Mac Address: 44:a8:42:31:62:2c

lo:

IP Address: 127.0.0.1

Mac Address: N/A Not available through ifconfig on my PC (Since it's my

computer)

Source: <https://askubuntu.com/questions/919901/how-to-get-mac-address-from-ifconfig>

1. **Use the command "route -n". What is the default gateway for this machine?**

Default Gateway: 134.53.148.222

1. **How many processors are on this machine (cpus?) Yes you will have to google to figure out this command. Tell me what command you used.**

Command: lscpu

Reports 24 cpus

Source: <https://www.cyberciti.biz/faq/check-how-many-cpus-are-there-in-linux-system/>

1. **How much memory is on this machine. What command did you use?**

Apparently, the command

**free -g**

Is more accurate than the classic

/proc/meminfo

There is **~125gb** memory total on the machine

1. **How many processes are currently running on this machine? Again, what command did you use?**

At the time I did this assignment, 411 processes

ps -e | wc -l (all processes piped into a word counter)

1. **Look in your .ssh directory. If you have a public key in id\_rsa.pub, what is it? If you don't, create it (ssh-keygen). paste your public key here.**

ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQDKHHQxORLbeqxqTG4f+7CATVXO+mKzqvpVhBQdi81sBRBSLUHjJs6nJuYGx42JMHpfo2vCdw822j5NTz5aQGj3P1wqZM+YFdBws7RQ8Dqky26i+I65u4o5tRbXJOTCIHaCkM69AmKKND5ZgHsAbYXhT7HOJy9GP/mXAXlIizgNFM3mHkZk3cxg6xpO1mdAgOoNuDYuIiTyBSOaezCpVdYN4nj+XFGiJkY+tdC0wxLKpCjw9MCkeNZXHksocLJ4+qZLVhGFIOG0O7jhjZKer9725UankCDBtk7vWxTmte7S329rl/uD+PtEevXDinrLWmznt1GV1kZ/3UDaNE4IoHmL dunnnm2@ceclnx01

1. **Create the following file: public\_html/devops1.html**
   1. **In this file put in your name and your email and your public key**
   2. **You should be able to access this file via** [**https://ceclnx01.cec.miamioh.edu/~UID/devops1.html**](https://ceclnx01.cec.miamioh.edu/~UID/devops1.html) **(UID is your unique id)**
2. **There is a file at http://campbest.cec.miamioh.edu/devops.png Use the wget command to transfer this file to your public\_html directory. Again once done you should be able to see it at** [**https://ceclnx01.cec.miammioh.edu/~UID/devops.png**](https://ceclnx01.cec.miammioh.edu/~UID/devops.png)
3. **Using the following private keyfile: (keyfile at end of this document)**
   1. **You will all be logging into the same account on this machine. DO NOT MESS AROUND WITH IT. Yes I know you can. Don't.**
   2. **create a file called devopskey**
   3. **Paste the entire keyfile into this new file (devopskey)**
      1. **that includes the lines BEGIN.. and ENDS...**
   4. **Use this key to login to the server devops.cec.miamioh.edu**
      1. **ssh -i ./devopskey devops**[**@devops.cec.miamioh.edu**](mailto:ubuntu@devops1.cec.miamioh.edu)
      2. **Make sure you understand why you need the -i**
   5. **What is the IP address of this machine (ifconfig)**
      1. **is this a public address or a private address?**

Private, (192.168.13.8 is in the reserved set of non-routable addresses)

* + 1. **Is this this a Miami Routable Address? Explain**

Internally, it can be used as a Miami routable address. The NAT will take care of mapping the internal private addresses to public Miami addresses

* 1. **Use the command "w3m** [**http://whatismyip.com**](http://whatismyip.com)**"**
     1. **record the public IP that this service sees.**

134.53.148.221

* 1. **Use the command "w3m** [**http://ceclnx01.cec.miamioh.edu**](http://ceclnx01.cec.miamioh.edu)**"**
     1. **Record the IP that this site reports.**

172.17.31.223

* 1. **Record how many processors are in this server.**

2 CPUs

* 1. **Use the "who" command to see how many people are currently logged into this machine.**

1 Person, just me

* 1. **Use the "last" command to see the last people who logged in.**

Last visitor was 22 minutes before me, also on the devops account.

* 1. **Record the IP address of the server devops.cec.miamioh.edu**
     1. **dig is command to get the IP address of a DNS entry**

172.17.31.223

1. **Write a simple java program that displays numbers from 1->100 USING THE COMMAND LINE AND AN EDITOR. This program should be in your home directory on ceclnx01 and should be called devops.java. Make sure that the compiled version devops.class is also there.**

**private key file:**

**-----BEGIN RSA PRIVATE KEY-----**

**MIIEpAIBAAKCAQEAw0oGHfeGa4p0VFarvV0+NhkugNB0t8TmwKRMyREn4J6PHKod**

**/cvovROA6c8cgjJA8SGxFJxBAMSO1ZiTBZSQTKCYhu2DEqe1lEqYAEfoPeBnI0KU**

**VqVmSeZPFEieCquL0iVLSLUrPkCTXfNfMd2noYn986iTrQIcRtgEeTny9TyeTRxu**

**E0DT1VX5NKNVI88eVMr0xRVO3uSiqkEx91N37L4DWtF2Xj3TJBJkcUE7eU1P8nG2**

**ZCdKQs5fc22hutJldJdsHFSZzVyhBifzPvRuak/gmy1Z+5A+POt/ypfCPNCFc2gu**

**+I4qdgw0rsJKfgtt9IH8FGspM4bG6bEeCpYCdQIDAQABAoIBAQC7+H9EzuDimET6**

**fOYXgi2EUt6w/HSsAel92WdTTaENknD7zT7K8D9X5vL5mfG92/MoZh6VUQU8YPV+**

**4Ln68BGowBewH+M+zJB5aQc/lfcTv/BmPwqbD98SGI1bX75HVPFjV6RMGp3B8NQn**

**5T5muAxG75SxuDxUlah0BC7iJIYXxw6oKd4Nw9MgplmUh25CwQsn0KeEwzt/xiw7**

**dRwCMRfpyg0gcEQaaTJgd/kc5L0J4GhWEFG+cng3GTEq+cupE5IbD65agaE6Fwdm**

**5V15uPNmkNIw3C92dAWN1yX8V6TpQbYyt5/tV8sqLir5p+Pr0s2wS148e0NX6X1o**

**jMICj8/hAoGBAPA+9B/zLpYLMyB1KgF+8opeoonuw4hwR7L5kCBrPVeWrSUG96hD**

**9JNr+EYDm8EYlks7yd+kyH/GyuWNcFP2p8dWfHRuwDfEp12F7D5i9pAnaIsRm5yw**

**BwRUcwM+GXSeDT4XUHL4GPv6CM5CEb/Rl6OAFsaySBvFkynqfquF815tAoGBANAY**

**X8GtklQ88E7cRoSbN8rIAxNnbqHoV6EJzUefW9fNmj3L5JkP9e3o5bU7/GPrvdCu**

**Mg1ikaBTJBuQKUKq2674E3yFVXLEdYKfpSzrQdXvi7lAHwGz6r0HBcWg0qEJ1Gkz**

**L59xn7TH7AUOG6dIFY0z7KlIwi2YPEZ+nTCaMY8pAoGAZE3EWvqK/rYaWHjSWuGH**

**neG49uGq3XITXVP4qrBbYhBUpdrs12HX4Rz5ATJMeygqx6pktGz2EPMMjx6oQUX/**

**8qfXOj1rH12JivB5G+rximoJqdZmI9sScupXQolQ03GRkdTmD7oppDpWJtdK1c1K**

**BEdcOwUAOigZMyzmSfKZE1kCgYEAn+x7et8n+/ExRYnn7/VR9VetdXYiAfALmElu**

**J8MC1GDATwmpTzCC8inwj03gc/IyWHPnJ34/KJV8xGoQK5ofZuJkJ2hY+PCe1ppW**

**WKUcXYvRN7ddnPNmTYteFjm4ZeamBYs+6CxsboTOkDv9aJvvZCspkBfIkz3R5ONd**

**boKx37ECgYAwlxdmim0AidQb3jFbJ0FDTv5m3X2ezPQFsUxrf3947h6UJtWdc7Kn**

**jbtd807zP/PyPhxCDU67eUOSyGBpp7aLLa6X6NyjbhqslpwbLNs6659KeFyubV7D**

**Hpc0ITeR5fpIYyPhtwhHkMNraehqh3p2TOVyX+RopfHaxGXsVk2zBQ==**

**-----END RSA PRIVATE KEY-----**