ASSIGNMENT LEAP 4.0 (LINUX+PYTHON)

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Github: https://github.com/Pooja357914/Leap-4.0.git

My OS preference(LINUX distro)

The first impression:

I latterly up to date a guide designed to help human beings select the right Linux distribution for them by using going through the top 25 Linux distributions on Distrowatch and offering a brief approximately every one, listing who they may be for and what users can anticipate.There were a handful that I hadn't tried myself and so I had to use different people's words to explain them. I decide to work up with **. I can now say that i have attempted CentOs distribution**.

I used VMwareWorkstation as host of CentOs:

VMware Workstation is a hypervisor that runs on x64 variations of home windows and Linux operating structures; it enables users to installation digital machines on a single physical machine, and use them concurrently in conjunction with the real device.

Centos isn't always the simplest operating gadget derived from Linux, there are numerous differences which make Centos particular from different Linux-based working systems. The CentOS Linux distribution is a strong, predictable, possible and reproducible platform derived from the assets of Red Hat organization Linux (RHEL). They are now trying to amplify on that through developing the sources needed by way of other communities to come together and be capable of construct at the CentOS Linux platform. And today we begin the manner via delivering a clear governance version, elevated transparency and get admission to. inside the coming weeks their intention is to put up their personal roadmap that includes variations of the middle CentOS Linux.

Why I chose CentOs 8:

The professionals are that it is well matched with Red Hat company so whatever that works on one will work on the other and the administration strategies are the identical, and that it inherits the equal long time guide with computer virus and protection fixes backported so that they don't change conduct. if you get some thing operating, you can count on it to keep running for decades and not using a more effort than an occasional 'yum update' to the system.
What I experienced:

For the maximum novices, there are crucial motives to decide whether a Linux-based operating machine is suitable for them. one among them is the simplicity to apply the OS, and the other is the choice of pre-mounted packages.
Linux CentOS does a fairly exact job on the subject of essential apps. There are some obvious choices, consisting of Mozilla Firefox as the default net browser, LibreOffice for dealing with your workplace wishes, and Rhythmbox as the default audio participant.
The useful utilities encompass a clock, calculator, touch, as well as the primary textual content editor gEdit. a number of the other thrilling choices are photograph supervisor software known as Shotwell, YouTube browser, and Virtualisation app.
CentOS even consists of a DVD burner, and lots of tools centered on communication. The default email app is Evolution, and the selected chat patron is Empathy. you can additionally use Ekiga Softphone because the VOIP client, and a webcam viewer software program named Cheese.
All of these are smart picks, so we recommend giving them a try. you can constantly replace them with any other opportunity later.

Pros:

Stability:

compared to other Linux-based running systems, Centos handiest runs the most primary, strong versions of software packages, decreasing the danger of machine crashes.

Speed:

Centos can function tons quicker than similar Linux-based totally running systems as it most effective runs basic variations of software program.

Reliability:

The upgrade help cycle for Centos is set 5 years; different Linux-primarily based systems have shorter help cycles, from 3 years all the way down to approximately 18 months.

Fee:

Centos is simply one in all many broadly available Linux-based totally operating structures that are available free of charge.

Cons:

GUI interface :GUI interface should be more interactive so that end users could work seamlessly. Still users prefers to work on window based OS.

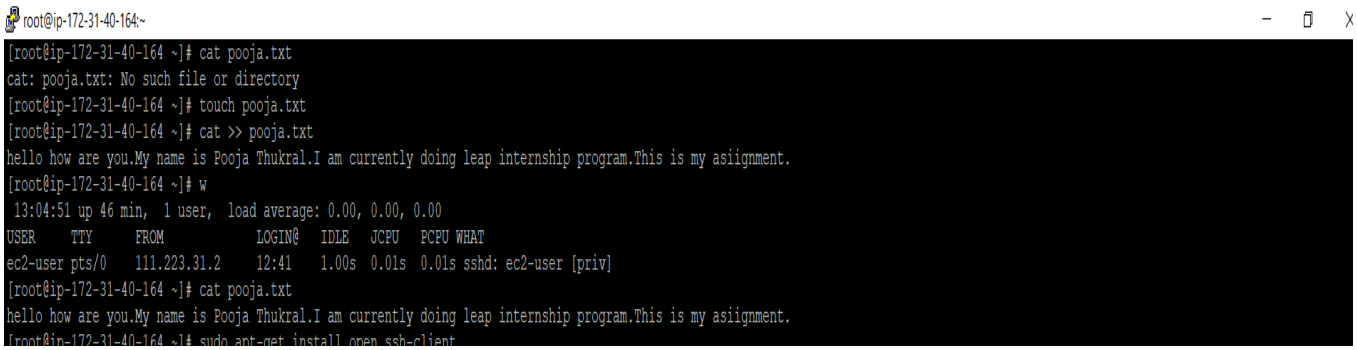
Complex: It is a little complex because few c/c++ libraries will give dependencies issues.

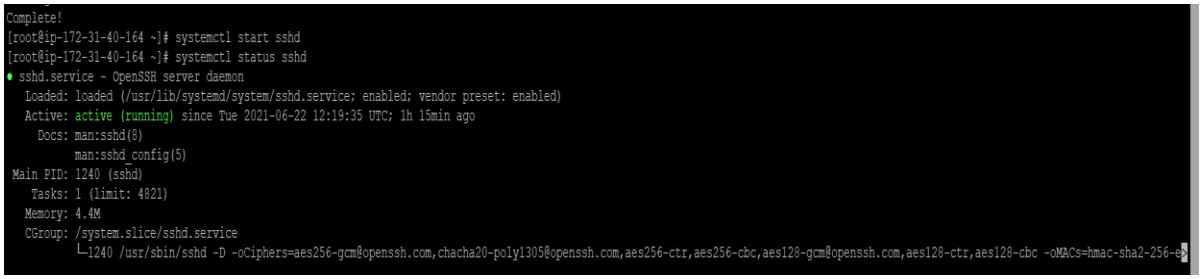
Installing/uninstalling packages: Installing/uninstalling packages in RHEL is a little bit of a headache.

Creating two VM'S and copying a file using SSH.

1. Load an SSH terminal. You can either search for "terminal" or press **CTRL** + **ALT** + **T** on your keyboard.
2. Type in **ssh** and press **Enter** in the terminal.
3. If the client is installed, you will receive a response.Otherwise, you will have to install the OpenSSH client:
4. Run the following command to install the OpenSSH client on your computer--
   sudo apt-get install openssh-client
5. Type in your superuser password when asked.Hit Enter to complete the installation.
6. Command to connect remote machine --ssh your_username@host_ip_address.
7. Now check:

- The IP address of the remote machine is correct.
- The port SSH daemon is listening to is not blocked by a firewall or forwarded incorrectly.
- Your username and password are correct.
- The SSH software is installed properly.





Making a Functional phonebook

Phonebook.py

```
import mysql.connector
from tkinter import *
from mysql.connector import Error

def getConnection(usr,passw,db):
    if connection.is_connected():
        return connection

fr=Frame()
fr.pack()
l1=Label(fr,text="Name")
l1.pack(side='top')
e1=Entry(fr)
e1.pack(side='top')
l2=Label(fr,text="Phone Number")
l2.pack(side='top')
e2=Entry(fr)
e2.pack(side='top')
def h1():
    global e1,e2
    connection =
mysql.connector.connect(host='localhost',database='phonebook',user='root',pass
word='',auth_plugin='mysql_native_password')
    cursor= connection.cursor()
    name=e1.get()
    phone=e2.get()
    query = "INSERT INTO phbook VALUES (%s,%s)"
    val = (e1.get(),e2.get())
    cursor.execute(query,val)
    connection.commit()
    query = "select * from phbook"
    cursor.execute(query)
```

```
    lst.delete(0,'end')
    for x in cursor.fetchall():
        w = str(x[0]) +" "*4+str(x[1])
        lst.insert('0',w)

def h3():
    global e1,e2
    connection =
mysql.connector.connect(host='localhost',database='phonebook',user='root',pass
word='',auth_plugin='mysql_native_password')
    cursor= connection.cursor()
    name=e1.get()
    phone=e2.get()
    query = "DELETE FROM phbook WHERE Name=%s or Phone=%s"
    val = (e1.get(),e2.get())
    cursor.execute(query,val)
    connection.commit()
    query = "select * from phbook"
    cursor.execute(query)
    lst.delete(0,'end')
    for x in cursor.fetchall():
        w = str(x[0]) +" "*4+str(x[1])
        lst.insert('0',w)
def h4():
    global e1,e2
    connection =
mysql.connector.connect(host='localhost',database='phonebook',user='root',pass
word='',auth_plugin='mysql_native_password')
    cursor= connection.cursor()
    name=e1.get()
    phone=e2.get()
    query = "select * from phbook"
    cursor.execute(query)
    lst.delete(0,'end')
    for x in cursor.fetchall():
        w = str(x[0]) +" "*4+str(x[1])
        lst.insert('0',w)

b1=Button(fr,text="ADD CONTACT",command=h1)
b3=Button(fr,text="DELETE CONTACT",command=h3)
b1.pack(side='top')
b3.pack(side='top')
b4=Button(fr,text="LOAD ALL CONTACTS",command=h4)
```

```
b4.pack(side='top')
lst=Listbox(fr,height = 10,width = 40)
scrll=Scrollbar(fr)
scrll.config(command=lst.yview)
lst.config(yscrollcommand=scrll.set)
scrll.pack(side='right',fill="y")
lst.pack(side='left')
lst.bind('<Double-1>',h5)
fr.mainloop()
```

```
File  Edit  View  Search  Terminal  Help
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use phonebook
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select * from phbook;
+--------+----------+
| Name   | Phone    |
+--------+----------+
| Danish | 9906123  |
| John   | 1234     |
| Suhaib | 4567     |
| Rayees | 45672345 |
| Kamran | 567844   |
| Rizwan | 09876    |
+--------+----------+
6 rows in set (0.00 sec)

mysql>
```