Summer Internship Industrial Training on

Linux System Administration v9

Summer Internship Tasks

* Send Whatsapp Message using terminal
* Output of a command should be spoken from the speaker also .
* Send Email from Linux Terminal .
* Send SMS using terminal .
* Use linux as a zoom server .
* To make a post in telegram,instagram,facebook, discord from the linux terminal
* Change the color of files and folder in linux .
* Reading the entire RAM .
* Change the look and feel of GNome terminal .
* To create user and set password.
* Running linux in the browser .
* Google search from terminal .
* Run Windows softwares e.g notepad in linux .
* Sync two different folders in linux . It should ask the user which folders to sync.
* On your cmd you print something and it will be converted to ascii art.

Task 1

1.Send Whatsapp Message using terminal

In this article, we will explore how to send WhatsApp messages directly from the command line using Node.js and Mudslide.

Step 1: Installing Node.js:

To install Node.js, follow these commands in your terminal:

```
$ curl -fsSL https://rpm.nodesource.com/setup_19.x | sudo bash -
$ sudo yum install -y nodejs
$ sudo yum groupinstall 'Development Tools'
```

Activities Terminal Aug 25 18:13

root@localhost:~ — sudo yum groupinstall Development Tools

```
[root@localhost ~]# yum install _y nodejs
Updating Subscription Management repositories.
Last metadata expiration check: 0:04:12 ago on Sunday 25 August 2024 06:06:34 PM.
No match for argument: _y
Package nodejs-2:19.9.0-1nodesource.x86_64 is already installed.
Error: Unable to find a match: _y
[root@localhost ~]# yum install -y nodejs
Updating Subscription Management repositories.
Last metadata expiration check: 0:04:26 ago on Sunday 25 August 2024 06:06:34 PM.
Package nodejs-2:19.9.0-1nodesource.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@localhost ~]# sudo yum groupinstall 'Development Tools'
Updating Subscription Management repositories.
Last metadata expiration check: 0:05:44 ago on Sunday 25 August 2024 06:06:34 PM.
Dependencies resolved.
================================================================================================================================
 Package                                Architecture          Version                                Repository                                Size
================================================================================================================================
Installing group/module packages:
 asciidoc                               noarch                9.1.0-3.el9                            rhel-9-for-x86_64-appstream-rpms          265 k
 autoconf                               noarch                2.69-38.el9                            rhel-9-for-x86_64-appstream-rpms          685 k
 automake                               noarch                1.16.2-8.el9                           rhel-9-for-x86_64-appstream-rpms          693 k
 bison                                  x86_64                3.7.4-5.el9                            rhel-9-for-x86_64-appstream-rpms          947 k
 byacc                                  x86_64                2.0.20210109-4.el9                     rhel-9-for-x86_64-appstream-rpms           92 k
 diffstat                               x86_64                1.64-6.el9                             rhel-9-for-x86_64-appstream-rpms           46 k
 flex                                   x86_64                2.6.4-9.el9                            rhel-9-for-x86_64-appstream-rpms          318 k
 gcc                                    x86_64                11.4.1-3.el9                           rhel-9-for-x86_64-appstream-rpms           32 M
 gcc-c++                                x86_64                11.4.1-3.el9                           rhel-9-for-x86_64-appstream-rpms           13 M
 gdb                                    x86_64                10.2-13.el9                            rhel-9-for-x86_64-appstream-rpms          123 k
 glibc-devel                            x86_64                2.34-100.el9_4.2                       rhel-9-for-x86_64-appstream-rpms           42 k
 intltool                               noarch                0.51.0-20.el9                          rhel-9-for-x86_64-appstream-rpms           60 k
 jna                                    x86_64                5.6.0-8.el9                            rhel-9-for-x86_64-appstream-rpms          274 k
 libtool                                x86_64                2.4.6-45.el9                           rhel-9-for-x86_64-appstream-rpms          586 k
 ltrace                                 x86_64                0.7.91-43.el9                          rhel-9-for-x86_64-appstream-rpms          142 k
 make                                   x86_64                1:4.3-8.el9                            rhel-9-for-x86_64-baseos-rpms             541 k
 patchutils                             x86_64                0.4.2-7.el9                            rhel-9-for-x86_64-appstream-rpms          111 k
 perl-Fedora-VSP                        noarch                0.001-23.el9                           rhel-9-for-x86_64-appstream-rpms           25 k
 perl-generators                        noarch                1.11-12.el9                            rhel-9-for-x86_64-appstream-rpms           18 k
 pesign                                 x86_64                115-6.el9_1                            rhel-9-for-x86_64-appstream-rpms          179 k
 redhat-rpm-config                      noarch                207-1.el9                              rhel-9-for-x86_64-appstream-rpms           76 k
```

Activities Terminal Aug 25 18:16

root@localhost:~

```
  Verifying        : glibc-headers-2.34-100.el9_4.2.x86_64                                                                  92/95
  Verifying        : java-1.8.0-openjdk-headless-1:1.8.0.422.b05-2.el9.x86_64                                               93/95
  Verifying        : kernel-devel-5.14.0-427.31.1.el9_4.x86_64                                                              94/95
  Verifying        : kernel-headers-5.14.0-427.31.1.el9_4.x86_64                                                            95/95
Installed products updated.

Installed:
  annobin-12.31-2.el9.x86_64                          asciidoc-9.1.0-3.el9.noarch                         autoconf-2.69-38.el9.noarch
  automake-1.16.2-8.el9.noarch                        bison-3.7.4-5.el9.x86_64                            boost-filesystem-1.75.0-8.el9.x86_64
  boost-regex-1.75.0-8.el9.x86_64                     boost-system-1.75.0-8.el9.x86_64                    boost-thread-1.75.0-8.el9.x86_64
  byacc-2.0.20210109-4.el9.x86_64                     copy-jdk-configs-4.0-3.el9.noarch                   debugedit-5.0-5.el9.x86_64
  diffstat-1.64-6.el9.x86_64                          docbook-dtds-1.0-79.el9.noarch                      docbook-style-xsl-1.79.2-16.el9.noarch
  dwz-0.14-3.el9.x86_64                               dyninst-12.1.0-1.el9.x86_64                         efi-srpm-macros-6-2.el9_0.noarch
  efivar-libs-38-3.el9.x86_64                         elfutils-0.190-2.el9.x86_64                         elfutils-devel-0.190-2.el9.x86_64
  elfutils-libelf-devel-0.190-2.el9.x86_64            flex-2.6.4-9.el9.x86_64                             fonts-srpm-macros-1:2.0.5-7.el9.1.noarch
  gcc-11.4.1-3.el9.x86_64                             gcc-c++-11.4.1-3.el9.x86_64                         gcc-plugin-annobin-11.4.1-3.el9.x86_64
  gdb-10.2-13.el9.x86_64                              gdb-headless-10.2-13.el9.x86_64                     gettext-common-devel-0.21-8.el9.noarch
  gettext-devel-0.21-8.el9.x86_64                     ghc-srpm-macros-1.5.0-6.el9.noarch                  glibc-devel-2.34-100.el9_4.2.x86_64
  glibc-headers-2.34-100.el9_4.2.x86_64               go-srpm-macros-3.2.0-3.el9.noarch                   intltool-0.51.0-20.el9.noarch
  java-1.8.0-openjdk-headless-1:1.8.0.422.b05-2.el9.x86_64  javapackages-filesystem-6.0.0-4.el9.noarch  jna-5.6.0-8.el9.x86_64
  kernel-devel-5.14.0-427.31.1.el9_4.x86_64           kernel-headers-5.14.0-427.31.1.el9_4.x86_64         kernel-srpm-macros-1.0-13.el9.noarch
  libbabeltrace-1.5.8-10.el9.x86_64                   libipt-2.0.4-5.el9.x86_64                           libstdc++-devel-11.4.1-3.el9.x86_64
  libtool-2.4.6-45.el9.x86_64                         libxcrypt-devel-4.4.18-3.el9.x86_64                 libzstd-devel-1.5.1-2.el9.x86_64
  lksctp-tools-1.0.19-3.el9_4.x86_64                  ltrace-0.7.91-43.el9.x86_64                         lua-5.4.4-4.el9.x86_64
  lua-posix-35.0-8.el9.x86_64                         lua-srpm-macros-1-6.el9.noarch                      m4-1.4.19-1.el9.x86_64
  make-1:4.3-8.el9.x86_64                             mokutil-2:0.6.0-4.el9.x86_64                        nss-tools-3.90.0-7.el9_4.x86_64
  ocaml-srpm-macros-6-6.el9.noarch                    openblas-srpm-macros-2-11.el9.noarch                openssl-devel-1:3.0.7-27.el9.x86_64
  patch-2.7.6-16.el9.x86_64                           patchutils-0.4.2-7.el9.x86_64                       perl-Fedora-VSP-0.001-23.el9.noarch
  perl-File-Compare-1.100.600-481.el9.noarch          perl-File-Copy-2.34-481.el9.noarch                  perl-Thread-Queue-3.14-460.el9.noarch
  perl-XML-Parser-2.46-9.el9.x86_64                   perl-generators-1.11-12.el9.noarch                  perl-locale-1.09-481.el9.noarch
  perl-macros-4:5.32.1-481.el9.noarch                 perl-srpm-macros-1-41.el9.noarch                    perl-threads-1:2.25-460.el9.x86_64
  perl-threads-shared-1.61-460.el9.x86_64             perl-version-7:0.99.28-4.el9.x86_64                 pesign-115-6.el9_1.x86_64
  pyproject-srpm-macros-1.12.0-1.el9.noarch           python-srpm-macros-3.9-53.el9.noarch                qt5-srpm-macros-5.15.9-1.el9.noarch
  redhat-rpm-config-207-1.el9.noarch                  rpm-build-4.16.1.3-29.el9.x86_64                    rpm-sign-4.16.1.3-29.el9.x86_64
  rust-srpm-macros-17-4.el9.noarch                    sgml-common-0.6.3-58.el9.noarch                     source-highlight-3.1.9-11.el9.x86_64
  systemtap-5.0-4.el9.x86_64                          systemtap-client-5.0-4.el9.x86_64                   systemtap-devel-5.0-4.el9.x86_64
  systemtap-runtime-5.0-4.el9.x86_64                  tbb-2020.3-8.el9.x86_64                             tzdata-java-2024a-1.el9.noarch
  valgrind-1:3.22.0-2.el9.x86_64                      valgrind-devel-1:3.22.0-2.el9.x86_64                xz-devel-5.2.5-8.el9_0.x86_64
  zlib-devel-1.2.11-40.el9.x86_64                     zstd-1.5.1-2.el9.x86_64

Complete!
[root@localhost ~]#
```

Task 1

1.Send Whatsapp Message using terminal

In this article, we will explore how to send WhatsApp messages directly from the command line using Node.js and Mudslide.

Step 2: Installing Mudslide:

Mudslide is a powerful command-line tool that enables interaction with WhatsApp directly from your terminal.

```
$ npm install -g mudslide
```

```
[root@localhost ~]# npm install -g mudslide
npm WARN EBADENGINE Unsupported engine {
npm WARN EBADENGINE   package: '@thi.ng/bitstream@2.4.0',
npm WARN EBADENGINE   required: { node: '>=18' },
npm WARN EBADENGINE   current: { node: 'v16.20.2', npm: '8.19.4' }
npm WARN EBADENGINE }
npm WARN EBADENGINE Unsupported engine {
npm WARN EBADENGINE   package: '@thi.ng/errors@2.5.15',
npm WARN EBADENGINE   required: { node: '>=18' },
npm WARN EBADENGINE   current: { node: 'v16.20.2', npm: '8.19.4' }
npm WARN EBADENGINE }

changed 154 packages, and audited 155 packages in 27s

30 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

Task 1

1.Send Whatsapp Message using terminal

In this article, we will explore how to send WhatsApp messages directly from the command line using Node.js and Mudslide.

Step 3: Logging in to WhatsApp:
To utilize Mudslide, you need to log in to your WhatsApp account through the command line.

```
$ npx mudslide login
```

[root@localhost ~]# npx mudslide login
info In the WhatsApp mobile app go to "Settings > Connected Devices >
info Connect Device" and scan the QR code below
success Logged in
pause Wait until WhatsApp finishes connecting, then press any key to exit
waiting Closing WA connection, waiting for 1 second(s)...

Task 1

1.Send Whatsapp Message using terminal

In this article, we will explore how to send WhatsApp messages directly from the command line using Node.js and Mudslide.

Step 4: Sending WhatsApp Messages:
Now that you've successfully logged in, you can start sending WhatsApp messages directly from your terminal using Mudslide.

```
$ npx mudslide send me 'Hello Linux Worls'
```

Task 2

2.Send SMS using terminall

For programmatically sending SMS messages, Twilio is a popular service. Start by installing the Twilio Python library

```
pip install twilio
```

Create a Python script to send an SMS directly from your terminal using Mudslide.

```
from twilio.rest import Client

account_sid = 'your_account_sid'
auth_token = 'your_auth_token'
client = Client(account_sid, auth_token)message =
client.messages.create(
body="Your SMS message here",
from_="your_twilio_phone_number",
to="recipient_phone_number"
)print(message.sid)
```

```
[root@localhost ~]# yum install twilio
Updating Subscription Management repositories.
Last metadata expiration check: 20:07:20 ago on Saturday 24 August 2024 05:07:08 PM.
No match for argument: twilio
Error: Unable to find a match: twilio
[root@localhost ~]# pip install twilio
Collecting twilio
  Downloading twilio-9.2.3-py2.py3-none-any.whl (1.8 MB)
     |[redacted]| 1.8 MB 979 kB/s
Collecting aiohttp>=3.8.4
  Downloading aiohttp-3.10.5-cp39-cp39-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (1.2 MB)
     |[redacted]| 1.2 MB 1.6 MB/s
Collecting aiohttp-retry>=2.8.3
  Downloading aiohttp_retry-2.8.3-py3-none-any.whl (9.8 kB)
Collecting PyJWT<3.0.0,>=2.0.0
  Downloading PyJWT-2.9.0-py3-none-any.whl (22 kB)
Requirement already satisfied: requests>=2.0.0 in /usr/lib/python3.9/site-packages (from twilio) (2.25.1)
Collecting attrs>=17.3.0
  Downloading attrs-24.2.0-py3-none-any.whl (63 kB)
     |[redacted]| 63 kB 1.5 MB/s
Collecting aiohappyeyeballs>=2.3.0
  Downloading aiohappyeyeballs-2.4.0-py3-none-any.whl (12 kB)
```

Task 3

3.Send Email from Linux Terminal

The mail command is a simple yet effective way to send emails right from the terminal. If you don't have it installed, you can do so with

```
sudo yum install mailx
```

Compose an email and send it using the following syntax:

```
echo "This is the body of the email" |
mail -s "Subject"
recipient@example.com
```

Task 4

4.On your cmd you print something and it will be converted to ascii art

Installing Figlet
First, you need to install Figlet. Depending on your Linux distribution, you can use one of the following commands:

```
$:sudo yum install figlet
$:figlet "Hello World”
```

ASCII into text file

```
$:figlet "Hello World" > hello.txt
```

```
Dependencies resolved.
================================================================================
 Package     Arch        Version                                Repo       Size
================================================================================
Installing:
 figlet      x86_64      2.2.5-23.20151018gita565ae1.el9        epel      124 k

Transaction Summary
================================================================================
Install  1 Package

Total download size: 124 k
Installed size: 665 k
Is this ok [y/N]: y
Downloading Packages:
figlet-2.2.5-23.20151018gita565ae1.el9.x86_64.r  14 kB/s | 124 kB     00:08
--------------------------------------------------------------------------------
Total                                            8.8 kB/s | 124 kB     00:14
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing        :                                                        1/1
  Installing       : figlet-2.2.5-23.20151018gita565ae1.el9.x86_64          1/1
  Running scriptlet: figlet-2.2.5-23.20151018gita565ae1.el9.x86_64          1/1
  Verifying        : figlet-2.2.5-23.20151018gita565ae1.el9.x86_64          1/1
Installed products updated.

Installed:
  figlet-2.2.5-23.20151018gita565ae1.el9.x86_64

Complete!
[root@localhost ~]# figlet "hello world"
 _              _ _                          _           _
| |__   ___| | | ___   __      _____  _ __| | __| |
| '_ \ / _ \ | |/ _ \  \ \ /\ / / _ \| '__| |/ _` |
| | | |  __/ | | (_) |  \ V  V / (_) | |  | | (_| |
|_| |_|\___|_|_|\___/    \_/\_/ \___/|_|  |_|\__,_|
```

Task 5

5.Sync two different folders in linux . It should ask the user which folders to sync

I have recently came across a request/challenge to setup a two-way sync with as less voodoo as possible

Step 1: ssh passwordless access

Lsyncd requires rsync to work without user intervention.

```
$> ssh webdev@193.92.100.2
```

Login to server WebApp1 and on the command prompt issue:

```
$> ssh-keygen -t rsa
$> ssh-copy-id webdev@193.92.100.2
$> service sshd status -l
$> sudo ssh webdev@193.92.100.2
$> sudo ssh-keygen -t rsa
$> sudo ssh-copy-id webdev@193.92.100.2
```

Task 5

5.Sync two different folders in linux . It should ask the user which folders to sync

I have recently came across a request/challenge to setup a two-way sync with as less voodoo as possible

Step 2: Setup folders and folder structure

- the replication (project)folder.
- For example: /var/www/html/mysite/
- the rsync temporary files folder. For example: /home/webdev/mysite/rsync_temp/

Step 3: Install lsyncd and its log and status files

This is quite straightforward. Use yum to install lsyncd:
Once done, do not start the service, as it requires a few more ste

```
$> sudo yum install lsyncd
```

Once done, do not start the service, as it requires a few more steps prior to starting it.

```
$> sudo touch /var/log/lsyncd/lsyncd.{log,status}
```

Task 6

6.Google search from terminal.

Have you wondered about searching Google directly from the terminal?
In this article, I will be showing you an easy and simple way to Google Search directly from the terminal.

Step 1: Install the glook first

```
$> npm i -g glook
```

Step 1: Search on google

```
$> glook search
```

root@localhost:~
root@localhost:~
root@localhost:~
[root@localhost ~]# pip insall twilio
ERROR: unknown command "insall" - maybe you meant "install"
[root@localhost ~]# pip install twilio
Collecting twilio
Using cached twilio-9.2.3-py2.py3-none-any.whl (1.8 MB)
Requirement already satisfied: PyJWT<3.0.0,>=2.0.0 in /usr/local/lib/python3.9/site-packages (from twilio) (2.9.0)
Requirement already satisfied: aiohttp>=3.8.4 in /usr/local/lib64/python3.9/site-packages (from twilio) (3.10.5)
Requirement already satisfied: requests>=2.0.0 in /usr/lib/python3.9/site-packages (from twilio) (2.25.1)
Requirement already satisfied: aiohttp-retry>=2.8.3 in /usr/local/lib/python3.9/site-packages (from twilio) (2.8.3)
Requirement already satisfied: attrs>=17.3.0 in /usr/local/lib/python3.9/site-packages (from aiohttp>=3.8.4->twilio) (24.2.0)
Requirement already satisfied: aiosignal>=1.1.2 in /usr/local/lib/python3.9/site-packages (from aiohttp>=3.8.4->twilio) (1.3.1)
Requirement already satisfied: aiohappyeyeballs>=2.3.0 in /usr/local/lib/python3.9/site-packages (from aiohttp>=3.8.4->twilio) (2.4.0)
Requirement already satisfied: multidict<7.0,>=4.5 in /usr/local/lib64/python3.9/site-packages (from aiohttp>=3.8.4->twilio) (6.0.5)
Requirement already satisfied: frozenlist>=1.1.1 in /usr/local/lib64/python3.9/site-packages (from aiohttp>=3.8.4->twilio) (1.4.1)
Requirement already satisfied: async-timeout<5.0,>=4.0 in /usr/local/lib/python3.9/site-packages (from aiohttp>=3.8.4->twilio) (4.0.3)
Requirement already satisfied: yarl<2.0,>=1.0 in /usr/local/lib64/python3.9/site-packages (from aiohttp>=3.8.4->twilio) (1.9.4)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in /usr/lib/python3.9/site-packages (from requests>=2.0.0->twilio) (1.26.5)
Requirement already satisfied: chardet<5,>=3.0.2 in /usr/lib/python3.9/site-packages (from requests>=2.0.0->twilio) (4.0.0)
Requirement already satisfied: idna<3,>=2.5 in /usr/lib/python3.9/site-packages (from requests>=2.0.0->twilio) (2.10)
Installing collected packages: twilio
Successfully installed twilio-9.2.3
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv
[root@localhost ~]# npm i -g glook
added 11 packages in 2s
4 packages are looking for funding
run `npm fund` for details
[root@localhost ~]# glook apple
Searching for "apple" on Google
[root@localhost ~]#

SOOS • mudslide • NPM
idealTree:@whiskeysock
apple - Google Search
https://www.google.com/search?q=apple
Customer Portal
Red Hat
Red Hat Products Doc...
Red Hat Enterprise Lin...
Red Hat Developer Por...
Red Hat Container Cat...
Red Hat Hybrid Cloud ...
Google
apple
Sign in
All
Images
Shopping
News
Videos
Maps
Web
More
Tools
Sponsored
Apple
https://www.apple.com › in
Apple | Official Site
Save up to ₹10000 on Mac or iPad with Apple education savings. Plus get AirPods with Mac and Apple Pencil with iPad. Terms apply. Services: Apple Trade In, Shop with Specialists, Free delivery, No Cost EMI available.
University Offer 2024
Get AirPods with Mac and Apple Pencil with iPad. Terms apply.
Mac
MacBook Pro, MacBook Air and iMac. Customise yours. Shop now.
iPhone 15 Pro
Get up to ₹5000.00 instant cashback with eligible cards. Terms apply.
The new iPad Air
Fresh Air. The redesigned iPad Air in two sizes. Buy now.
Apple
Apple
4.7 (89)
Technology company
Apple Inc. is an American multinational corporation and technology company headquartered in Cupertino, California, in Silicon Valley. It is best known for its consumer electronics, software, and services. Wikipedia
Customer service: 000 800 040 1966
Stock price: AAPL (NASDAQ) $226.84 +2.31 (+1.03%)
23 Aug, 4:00 pm GMT-4 - Disclaimer
Founders: Steve Jobs, Steve Wozniak, Ronald Wayne
Headquarters: Cupertino, California, United States
COO: Jeff Williams
CEO: Tim Cook (24 Aug 2011–)
Founded: 1 April 1976, Los Altos, California, United States
Profiles

Task 7

7.Run Windows softwares e.g notepad in linux

want to run Windows applications like Notepad on a Linux system

1.Install Wine:

- Open your terminal and run the following
  sudo dnf install wine
- For Ubuntu or Debian-based systems, you would use:
- sudo apt install wine
-

1.Run the Application:

- wine notepad.exe

```
root@localhost:~                                                    root@localhost:~
[root@localhost ~]# sodo yum install wine --skip-broken
bash: sodo: command not found...
[root@localhost ~]# sudo yum install wine --skip-broken
Updating Subscription Management repositories.
Last metadata expiration check: 2:30:01 ago on Sunday 25 August 2024 06:06:34 PM.
Dependencies resolved.

 Problem: package wine-8.0-1.el9.x86_64 from epel requires wine-core(x86-64) = 8.0-1.el9, but none of the providers can be installed
  - conflicting requests
  - nothing provides mesa-libOSMesa(x86-64) needed by wine-core-8.0-1.el9.x86_64 from epel
  - nothing provides mingw64-zlib needed by wine-core-8.0-1.el9.x86_64 from epel
================================================================================================================================
 Package                                Architecture                        Version                                  Repository                        Size
================================================================================================================================
Skipping packages with broken dependencies:
 wine                                   x86_64                              8.0-1.el9                                epel                              10 k
 wine-core                              x86_64                              8.0-1.el9                                epel                              93 M

Transaction Summary
================================================================================================================================
Skip  2 Packages

Nothing to do.
Complete!
[root@localhost ~]#
[root@localhost ~]#
```

mingw64-filesystem-148-3.el9.noarch
mingw64-libpng-1.6.37-9.el9.noarch
mingw64-vkd3d-1.6-2.el9.noarch
mingw64-zlib-1.3.1-1.el9.noarch
openssl-libs-1:3.0.7-27.el9.i686
p11-kit-0.25.3-2.el9.i686
pcre2-10.40-5.el9.i686
speex-1.2.0-11.el9.i686
twolame-libs-0.3.13-19.el9.i686
wine-8.0-1.el9.x86_64
wine-common-8.0-1.el9.noarch
wine-desktop-8.0-1.el9.noarch
wine-fonts-8.0-1.el9.noarch
wine-ms-sans-serif-fonts-8.0-1.el9.noarch
wine-symbol-fonts-8.0-1.el9.noarch
wine-tahoma-fonts-8.0-1.el9.noarch
wine-wingdings-fonts-8.0-1.el9.noarch
mingw64-lcms2-2.14-1.el9.noarch
mingw64-libxml2-2.9.14-1.el9.noarch
mingw64-win-iconv-0.0.8-7.el9.noarch
mpg123-libs-1.26.2-5.el9.i686
opus-1.3.1-10.el9.i686
pango-1.48.7-3.el9.i686
pixman-0.40.0-6.el9_3.i686
systemd-libs-252-32.el9_4.i686
unixODBC-2.3.9-4.el9.x86_64
wine-alsa-8.0-1.el9.x86_64
wine-core-8.0-1.el9.x86_64
wine-filesystem-8.0-1.el9.noarch
mingw64-libgcc-13.2.1-7.el9.x86_64
mingw64-libxslt-1.1.37-1.el9.noarch
mingw64-winpthreads-11.0.1-3.el9.noarch
nettle-3.9.1-1.el9.i686
orc-0.4.31-6.el9.i686
pcre-8.44-3.el9.3.i686
pulseaudio-libs-15.0-2.el9.i686
taglib-1.12-6.el9.i686
wavpack-5.4.0-5.el9.i686
wine-cms-8.0-1.el9.x86_64
wine-courier-fonts-8.0-1.el9.noarch
wine-fixedsys-fonts-8.0-1.el9.noarch
wine-marlett-fonts-8.0-1.el9.noarch
wine-small-fonts-8.0-1.el9.noarch
wine-systemd-8.0-1.el9.noarch
wine-webdings-fonts-8.0-1.el9.noarch
zlib-1.2.11-40.el9.i686
Complete!
[root@localhost ~]# sudo apt install wine
sudo: apt: command not found
[root@localhost ~]# wine notepad.exe
wine: created the configuration directory '/root/.wine'
Wine Mono Installer
Downloading...
Cancel
Install
02c:fixme:actctx:parse_depend_manifests Could not find
ntrols" (6.0.0.0)
048:fixme:actctx:parse_depend_manifests Could not find dependent assembly L"Microsoft.Windows.Common-Controls" (6.0.0.0)
050:fixme:actctx:parse_depend_manifests Could not find dependent assembly L"Microsoft.Windows.Common-Controls" (6.0.0.0)
048:err:ole:StdMarshalImpl_MarshalInterface Failed to create ifstub, hr 0x80004002
048:err:ole:CoMarshalInterface Failed to marshal the interface {6d5140c1-7436-11ce-8034-00aa006009fa}, hr 0x80004002
048:err:ole:apartment_get_local_server_stream Failed: 0x80004002
048:err:ole:start_rpcss Failed to open RpcSs service
050:err:ole:StdMarshalImpl_MarshalInterface Failed to create ifstub, hr 0x80004002
050:err:ole:CoMarshalInterface Failed to marshal the interface {6d5140c1-7436-11ce-8034-00aa006009fa}, hr 0x80004002
050:err:ole:apartment_get_local_server_stream Failed: 0x80004002
050:fixme:imm:ImeSetActiveContext (000000000001002E, 0): stub
050:fixme:imm:ImmReleaseContext (0000000000010020, 000000000001002E): stub
02c:fixme:imm:ImeSetActiveContext (0000000000010056, 1): stub
02c:fixme:imm:ImmReleaseContext (0000000000010054, 0000000000010056): stub
094:fixme:imm:ImeSetActiveContext (0000000000010088, 1): stub
094:fixme:imm:ImmReleaseContext (0000000000010090, 0000000000010088): stub
094:fixme:urlmon:InternetBindInfo_GetBindString not supported string type 20

Task 8

8.To create user and set password

1.Create a user
2.The simple format for this command is useradd [options] USERNAME.
3.For example useradd test (as the root user - prefix with sudo if you are not logged in as root).

PassWord

- You then add a password for the test user by using the passwd command: passwd test. This will prompt you to enter a password for the user.
- There is an option for adding an encrypted password via the -p option on useradd, but this is not recommended for security purposes.

root@localhost:~
root@localhost:~
root@localhost:~
root@localhost:~
root@localhost:~
root@localhost:~
[root@localhost ~]# sudo useradd Ram
[root@localhost ~]# sudo passwd Ram
Changing password for user Ram.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# cat /etc/passwd | grep Ram
Ram:x:1001:1001::/home/Ram:/bin/bash
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# sudo userdel Ram
[root@localhost ~]# cat /etc/passwd | grep Ram
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# sudo userdel -r Ram
userdel: user 'Ram' does not exist
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]#

Task 9

9.Use linux as a zoom server

To use Linux as a Zoom server, you can set up a self-hosted version of Zoom.

step 1: Install the zoom-client file

- yum install zoom-client
- cd downloads
- yum install zoom.x86.64.rpm

Step 2: Open zoom

- zoom

Download Center for Zoo
https://zoom.us/download
Customer Portal
Red Hat
Red Hat Products Doc...
Red Hat Enterprise Lin...
zoom_x86_64.rpm
1h 28m left — 610 KB of 191 MB (34.4 KB/sec)
Show all downloads
zoom
Products
Solutions
Resources
Plans & Pricing
Version 6.1.10 (1400)
Unlock the full suite of collaboration with Team Chat, Whiteboard, Notes and more - included with your Zoom Meetings account.
Linux Type
RedHat
OS Architecture
64 bit
Download
rpm (for RedHat 8.0+)
Version 6.1.10 (1400)
*Zoom's rpm packages are signed with a GPG key. Please run "rpm --import package-signing-key.pub" to import the key in case package management utility asks for a missing public key.
Download Public Key
Key fingerprint: 59C8 6188 E22A BB19 BD55 4047 7B04 A1B8 DD79 B481
Zoom Workplace for mobile

root@localhost:~/Downloads — /usr/bin/python3.9 /usr/bin/yum install zoom_x86_64.rpm
[root@localhost ~]# yum install zoom-client
Updating Subscription Management repositories.
Last metadata expiration check: 0:14:38 ago on Sunday 25 August 2024 08:49:43 AM.
No match for argument: zoom-client
Error: Unable to find a match: zoom-client
[root@localhost ~]# ls
anaconda-ks.cfg Desktop Documents Downloads Music Pictures Public Templates Videos
[root@localhost ~]# cd Downloads
[root@localhost Downloads]# ls
ngrok-v3-stable-linux-s390x.tgz zoom_x86_64.rpm
[root@localhost Downloads]# yum install zoom_x86_64.rpm
Updating Subscription Management repositories.
Last metadata expiration check: 0:27:31 ago on Sunday 25 August 2024 08:49:43 AM.
Dependencies resolved.
Package Architecture Version Repository Size
Installing:
zoom x86_64 6.1.10.1400-1 @commandline 191 M
Installing dependencies:
libXScrnSaver x86_64 1.2.3-10.el9 rhel-9-for-x86_64-appstream-rpms 27 k
Transaction Summary
Install 2 Packages
Total size: 191 M
Total download size: 27 k
Installed size: 676 M
Is this ok [y/N]:

root@localhost:~/Downloads
Last metadata expiration check: 0:27:31 ago on Sunday 25 August 2024 08:49:43 AM.
Dependencies resolved.
Package Architecture Version Repository Size
Installing:
zoom x86_64 6.1.10.1400-1 @commandline 191 M
Installing dependencies:
libXScrnSaver x86_64 1.2.3-10.el9 rhel-9-for-x86_64-appstream-rpms 27 k
Transaction Summary
Install 2 Packages
Total size: 191 M
Total download size: 27 k
Installed size: 676 M
Is this ok [y/N]: y
Downloading Packages:
libXScrnSaver-1.2.3-10.el9.x86_64.rpm 43 kB/s | 27 kB 00:00
Total 43 kB/s | 27 kB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
Installing : libXScrnSaver-1.2.3-10.el9.x86_64 1/2
Installing : zoom-6.1.10.1400-1.x86_64 2/2
Running scriptlet: zoom-6.1.10.1400-1.x86_64 2/2
run post install script, action is 1...
Verifying : libXScrnSaver-1.2.3-10.el9.x86_64 1/2
Verifying : zoom-6.1.10.1400-1.x86_64 2/2
Installed products updated.
Installed:
libXScrnSaver-1.2.3-10.el9.x86_64 zoom-6.1.10.1400-1.x86_64
Complete!
[root@localhost Downloads]#

root@localhost:~ — zoom
[root@localhost ~]# zoom
Zoom Workplace
zoom
Workplace
Join a meeting
Sign in
Version: 6.1.10 (1400)

Task 10

10.Change the color of files and folder in linux

Customizing the colors of files and folders in Linux can enhance your terminal experience and help you quickly identify different file types.

Cmd: $ls

Cmd: $export LS_COLORS=”di=0; 31:fi=35”

Cmd: $ls

Activities
Terminal
Aug 25 10:24
root@localhost:~
root@localhost:~
root@localhost:~
[root@localhost ~]# ls
: anaconda-ks.cfg Desktop Documents Downloads Music Pictures Public Templates Videos
[root@localhost ~]# export LS_COLORS="di=0;31:fi=35"
[root@localhost ~]# ls
: anaconda-ks.cfg Desktop Documents Downloads Music Pictures Public Templates Videos
[root@localhost ~]#

Task 11

11.Reading the entire RAM

eading the entire RAM (Random Access Memory) on a Linux system can be useful for various purposes, including debugging, forensic analysis

For a quick view of the RAM contents, you can use the cat command, but this will only show a portion of the memory:

Cmd: $cat/proc/meminfo

Activities Terminal Aug 25 10:30

root@localhost:~

```
[root@localhost ~]# cat /proc/meminfo
MemTotal:        7869112 kB
MemFree:         5602648 kB
MemAvailable:    6443204 kB
Buffers:            3820 kB
Cached:           818844 kB
SwapCached:            0 kB
Active:          1296332 kB
Inactive:         330160 kB
Active(anon):     827908 kB
Inactive(anon):        0 kB
Active(file):     468424 kB
Inactive(file):   330160 kB
Unevictable:           0 kB
Mlocked:               0 kB
SwapTotal:       2097148 kB
SwapFree:        2097148 kB
Zswap:                 0 kB
Zswapped:              0 kB
Dirty:                 0 kB
Writeback:             0 kB
AnonPages:        778676 kB
Mapped:           249196 kB
Shmem:             24080 kB
KReclaimable:     345296 kB
Slab:             449720 kB
SReclaimable:     345296 kB
SUnreclaim:       104424 kB
KernelStack:       10512 kB
```

Task 12

12.Running linux in the browser

If you prefer a command-line interface, you can use text-based browsers like Lynx or w3m.

If you prefer a command-line interface, you can use text-based browsers like Lynx or w3m.

1.Install Lynx:

```
Cmd: $sudo dnf install lynx
```

2.Install Lynx:

```
Cmd: $lynx https://www.example.com
```

```
[khemraj_parate@localhost ~]$ sudo -i
[sudo] password for khemraj_parate:
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# dnf install lynx
Updating Subscription Management repositories.

This system is registered with an entitlement server, but is not receiving updates. You can use subscription-manager to assign subscriptions.

Last metadata expiration check: 0:01:22 ago on Sunday 25 August 2024 04:39:37 PM.
Package lynx-2.8.9-20.el9.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@localhost ~]# lynx https://www.google.com

www.google.com cookie: AEC=AVYB7crzIpMWkjkx7VfDlh6aEIrYMgO8QkZ8EU9bZorFhNrnfNPbh9cScA Allow? (Y/N/Always/neVer)
```