



RHEL9

Session 5 – 29th October 2022 Summary

- To check connectivity between two systems-

```
root@localhost:~  
[root@localhost ~]# ifconfig  
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  
    inet 192.168.1.2  netmask 255.255.255.0  br  
    ether 08:00:27:a0:bb:9c  txqueuelen 1000  (  
    RX packets 1728  bytes 1599836 (1.5 MiB)  
    RX errors 0  dropped 0  overruns 0  frame 0  
    TX packets 525  bytes 51045 (49.8 KiB)  
    TX errors 0  dropped 0  overruns 0  carrier
```

```
Select Command Prompt - ping 192.168.1.2  
Microsoft Windows [Version 10.0.19044.2130]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\Vimal Daga>ping 192.168.1.2  
  
Pinging 192.168.1.2 with 32 bytes of data:  
Reply from 192.168.1.2: bytes=32 time<1ms TTL=64  
Reply from 192.168.1.2: bytes=32 time<1ms TTL=64
```

- To configure server as SSH Server- before installing the software, we can check software already installed

```
[root@localhost ~]# rpm -qa | grep ssh  
libssh-config-0.9.6-3.el9.noarch  
libssh-0.9.6-3.el9.x86_64  
openssh-8.7p1-8.el9.x86_64  
openssh-clients-8.7p1-8.el9.x86_64  
openssh-server-8.7p1-8.el9.x86_64  
[root@localhost ~]#
```

```
[root@localhost ~]#
[root@localhost ~]# rpm -q openssh-server
openssh-server-8.7p1-8.el9.x86_64
[root@localhost ~]# yum install openssh-server
```

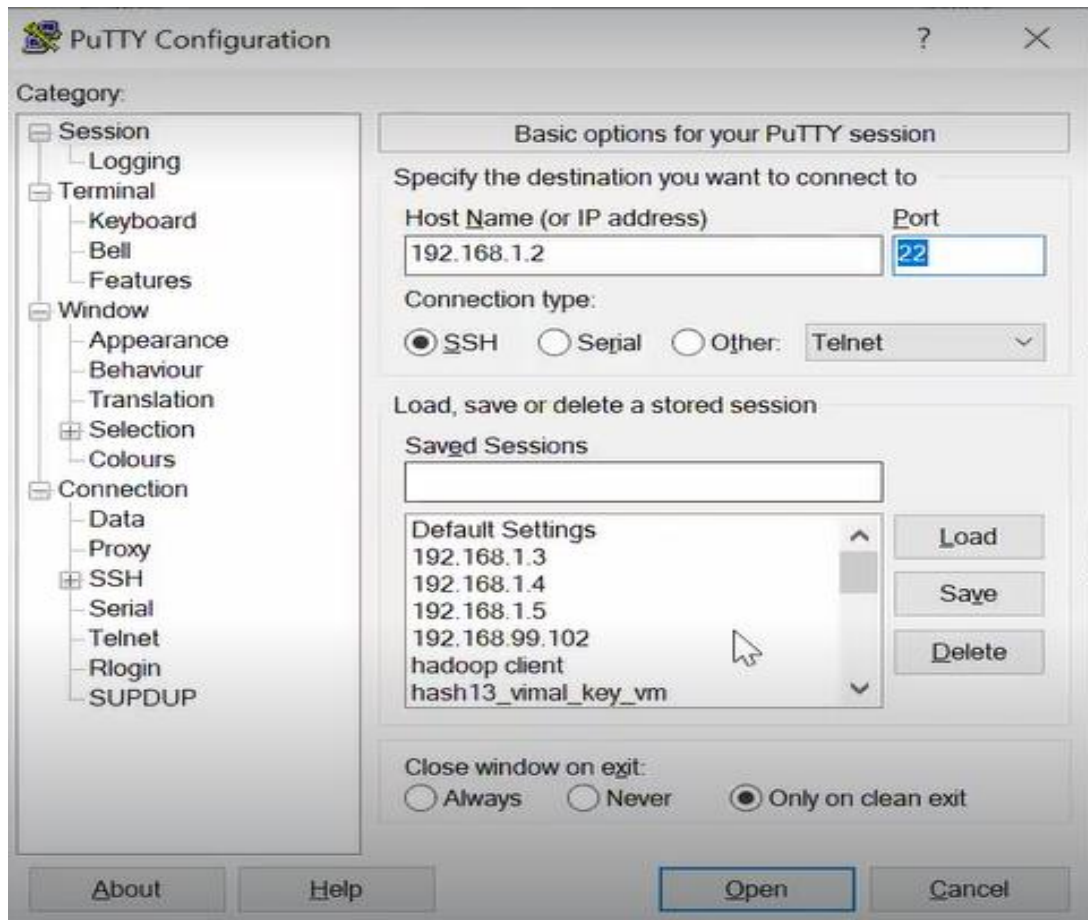
- To start the service-

```
[root@localhost ~]# systemctl start sshd
[root@localhost ~]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2022-10-29 14:24:40 IST; 24min ago
     Docs: man:sshd(8)
           man:sshd_config(5)
    Main PID: 821 (sshd)
      Tasks: 1 (limit: 50436)
     Memory: 3.7M
        CPU: 30ms
    CGroup: /system.slice/sshd.service
            └─821 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

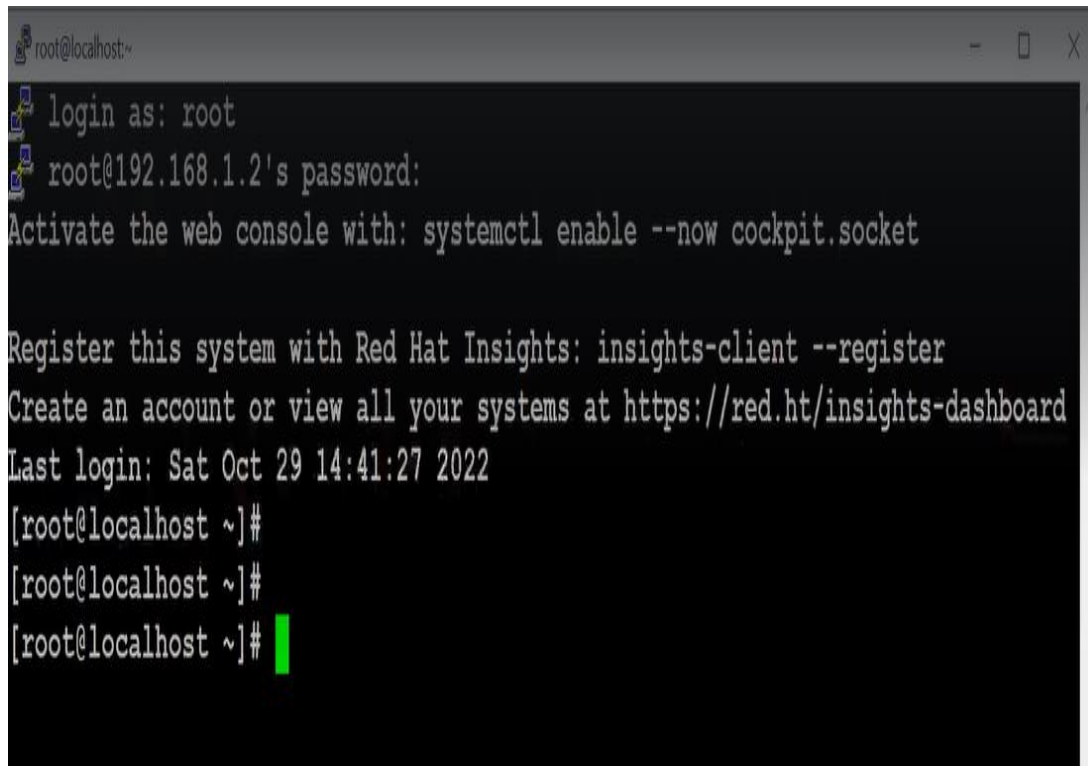
Oct 29 14:24:40 localhost systemd[1]: Starting OpenSSH server daemon...
Oct 29 14:24:40 localhost sshd[821]: Server listening on 0.0.0.0 port 22.
Oct 29 14:24:40 localhost sshd[821]: Server listening on :: port 22.
Oct 29 14:24:40 localhost systemd[1]: Started OpenSSH server daemon.
lines 1-16/16 (END)
```

- The sshd service is working on port no 22

```
[root@localhost ~]# ss -tnlp
State      Recv-Q    Send-Q    Local Address:Port    Peer Address:Port
Process
LISTEN     0          4096      0.0.0.0:111            0.0.0.0:*
users: (("rpcbind",pid=735,fd=4),("systemd",pid=1,fd=42))
LISTEN     0          511      0.0.0.0:8080           0.0.0.0:*
users: (("httpd",pid=972,fd=4),("httpd",pid=971,fd=4),("httpd",pid=970,fd=4),("httpd",pid=934,fd=4))
LISTEN     0          511      0.0.0.0:80            0.0.0.0:*
users: (("httpd",pid=972,fd=3),("httpd",pid=971,fd=3),("httpd",pid=970,fd=3),("httpd",pid=934,fd=3))
LISTEN     0          128      0.0.0.0:22            0.0.0.0:*
users: (("sshd",pid=821,fd=3))
LISTEN     0          128      127.0.0.1:631         0.0.0.0:*
users: (("cupsd",pid=818,fd=7))
LISTEN     0          4096      [::]:111              [::]:*
users: (("rpcbind",pid=735,fd=6),("systemd",pid=1,fd=44))
LISTEN     0          128      [::]:22               [::]:*
users: (("sshd",pid=821,fd=4))
LISTEN     0          128      [::]:631              [::]:*
users: (("cupsd",pid=818,fd=6))
```



- For remote login – we use login name and password



- The shell is given by the ssh protocol

```
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]# date  
Sat Oct 29 02:59:27 PM IST 2022  
[root@localhost ~]# cal  
      October 2022  
Su Mo Tu We Th Fr Sa  
          1  
 2  3  4  5  6  7  8  
 9 10 11 12 13 14 15  
16 17 18 19 20 21 22  
23 24 25 26 27 28 29  
30 31  
[root@localhost ~]#
```

- From here we create a folder - remotely

```
root@localhost:~  
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]# pwd  
/root  
[root@localhost ~]# mkdir vimal  
[root@localhost ~]# ls  
aaa          a.txt      Documents  Music      Public     Videos  
anaconda-ks.cfg Desktop    Downloads  Pictures   Templates  vimal  
[root@localhost ~]#
```

- We can see the same – locally

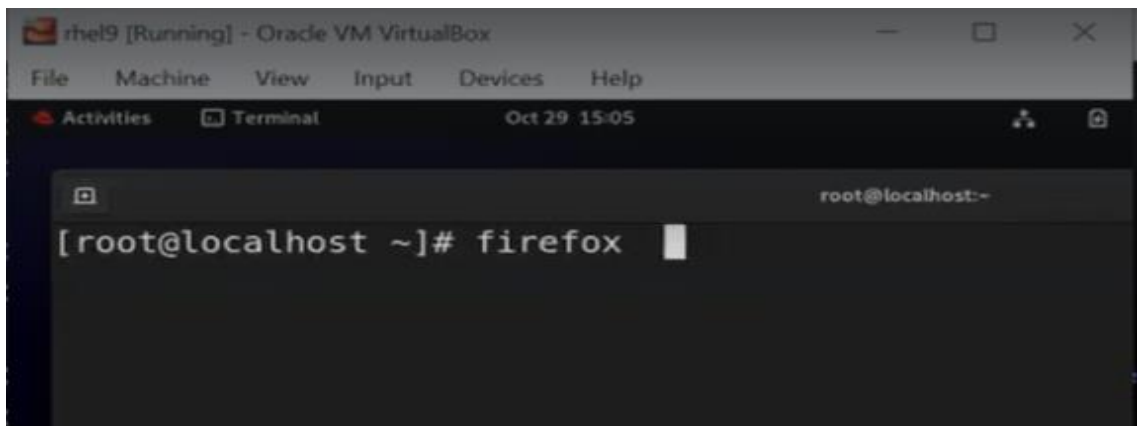
```
rhel9 [Running] - Oracle VM VirtualBox  
Red Hat Enterprise Linux 9.0 (Plow)  
Kernel 5.14.0-70.22.1.el9_0.x86_64 on an x86_64  
Activate the web console with: systemctl enable --now cockpit.socket  
  
localhost login: root  
Password:  
Last login: Sat Oct 29 14:58:38 from 192.168.1.12  
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]# pwd  
/root  
[root@localhost ~]# ls  
aaa          a.txt      Documents  Music      Public     Videos  
anaconda-ks.cfg Desktop    Downloads  Pictures   Templates  vimal
```


- If we remove the directory locally – the same thing is visible remotely

```
[root@localhost ~]# rmdir vimal/
[root@localhost ~]# ls
aaa          a.txt      Documents  Music      Public     Videos
anaconda-ks.cfg Desktop    Downloads  Pictures   Templates
[root@localhost ~]# _
```

```
root@localhost:~
[root@localhost ~]#
[root@localhost ~]#
[root@localhost ~]# pwd
/root
[root@localhost ~]# mkdir vimal
[root@localhost ~]# ls
aaa          a.txt      Documents  Music      Public     Videos
anaconda-ks.cfg Desktop    Downloads  Pictures   Templates  vimal
[root@localhost ~]# ls
aaa          a.txt      Documents  Music      Public     Videos
anaconda-ks.cfg Desktop    Downloads  Pictures   Templates
[root@localhost ~]#
```

- Start the firefox locally- from GUI

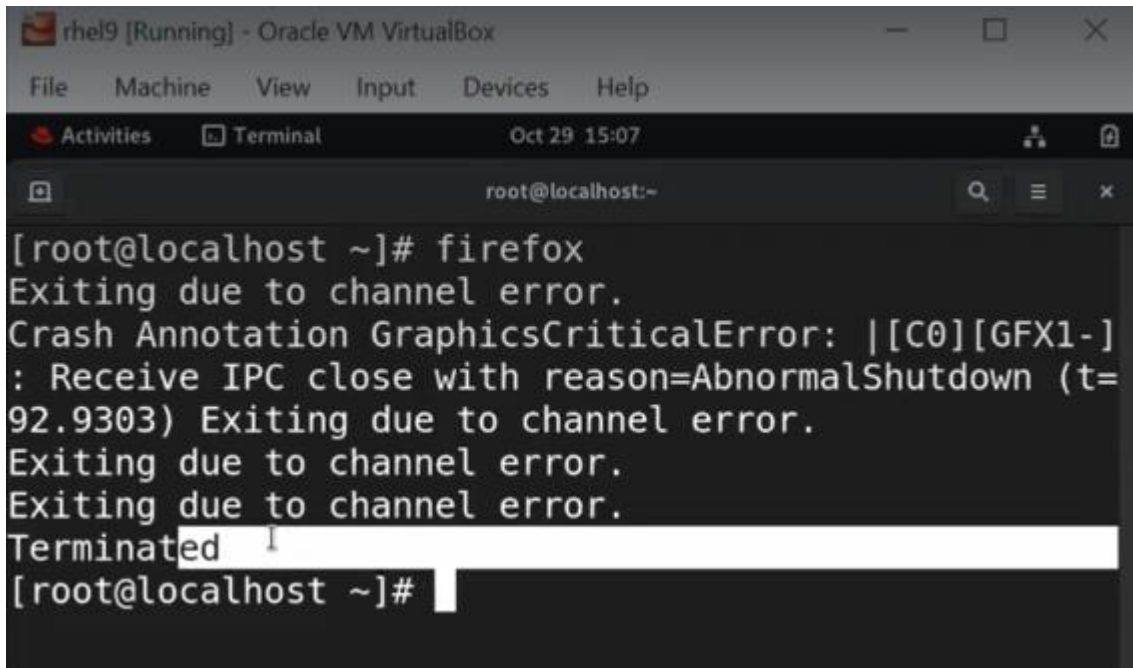


- The firefox is a graphical program, we cannot see from black screen but we can see the process using the command

```
[root@localhost ~]# pgrep firefox
3324
[root@localhost ~]#
```

- The command to stop the firefox –

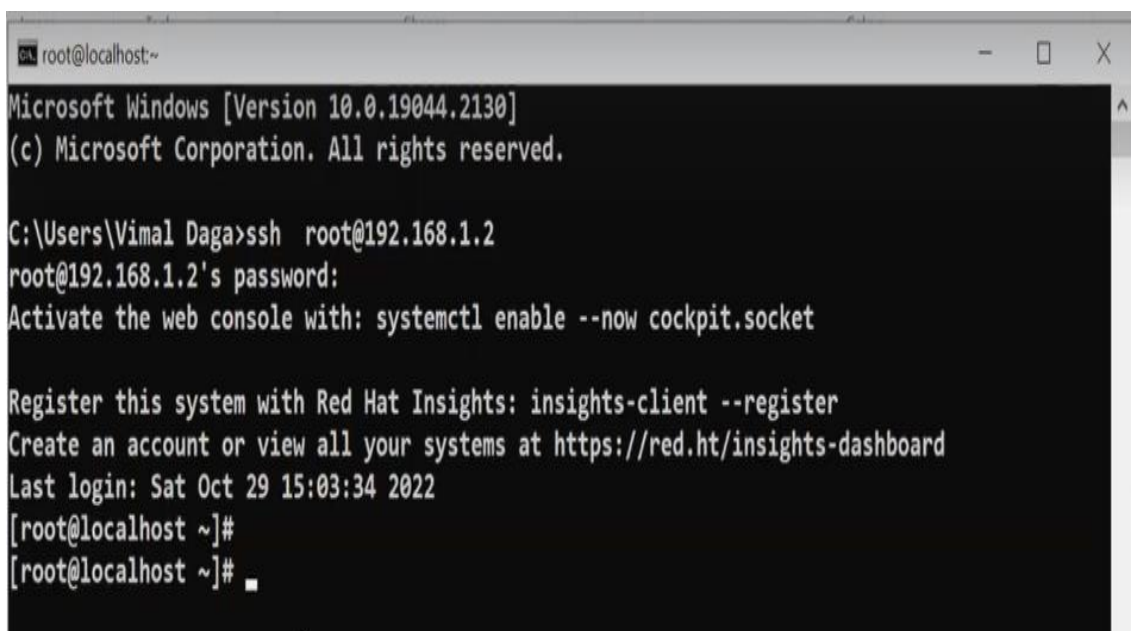
```
[root@localhost ~]# kill 3324
```



The screenshot shows a terminal window titled 'rhel9 [Running] - Oracle VM VirtualBox'. The terminal output shows the command 'firefox' being executed, followed by several error messages: 'Exiting due to channel error.', 'Crash Annotation GraphicsCriticalError: |[C0][GFX1-]: Receive IPC close with reason=AbnormalShutdown (t=92.9303) Exiting due to channel error.', and 'Exiting due to channel error.' The process is then terminated, and the prompt returns to '[root@localhost ~]#'.

```
rhel9 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal Oct 29 15:07
root@localhost:~
[root@localhost ~]# firefox
Exiting due to channel error.
Crash Annotation GraphicsCriticalError: |[C0][GFX1-]: Receive IPC close with reason=AbnormalShutdown (t=92.9303) Exiting due to channel error.
Exiting due to channel error.
Exiting due to channel error.
Terminated
[root@localhost ~]#
```

- For remote login-



The screenshot shows a terminal window titled 'root@localhost:~'. The output shows the Windows command prompt 'C:\Users\Vimal Daga>ssh root@192.168.1.2', followed by the password prompt 'root@192.168.1.2's password:', and then the Linux prompt '[root@localhost ~]#'. The terminal also displays system messages about enabling cockpit.socket and registering with Red Hat Insights.

```
root@localhost:~
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Vimal Daga>ssh root@192.168.1.2
root@192.168.1.2's password:
Activate the web console with: systemctl enable --now cockpit.socket

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Sat Oct 29 15:03:34 2022
[root@localhost ~]#
[root@localhost ~]#
```

- The command to see the configuration file

```
root@localhost:~  
[root@localhost ~]# rpm -q openssh-server  
openssh-server-8.7p1-8.el9.x86_64  
[root@localhost ~]# rpm -q c openssh-server  
/etc/pam.d/sshd  
/etc/ssh/sshd_config  
/etc/ssh/sshd_config.d/50-redhat.conf  
/etc/sysconfig/sshd  
[root@localhost ~]# vim /etc/ssh/sshd_config
```

```
root@localhost:~ — vim /etc/ssh/sshd_config  
# The strategy used for options in the default sshd_config shipped with  
# OpenSSH is to specify options with their default value where  
# possible, but leave them commented. Uncommented options override the  
# default value.  
  
# To modify the system-wide sshd configuration, create a *.conf file under  
# /etc/ssh/sshd_config.d/ which will be automatically included below  
Include /etc/ssh/sshd_config.d/*.conf  
  
# If you want to change the port on a SELinux system, you have to tell  
# SELinux about this change.  
# semanage port -a -t ssh_port_t -p tcp #PORTNUMBER  
#  
Port 22  
#AddressFamily any  
#ListenAddress 0.0.0.0  
#ListenAddress ::  
  
#HostKey /etc/ssh/ssh_host_rsa_key  
#HostKey /etc/ssh/ssh_host_ecdsa_key  
#HostKey /etc/ssh/ssh_host_ed25519_key  
  
# Ciphers and keying  
21,1 6%
```

```
root@localhost:~ — vim /etc/ssh/sshd_config  
# The strategy used for options in the default sshd_config shipped with  
# OpenSSH is to specify options with their default value where  
# possible, but leave them commented. Uncommented options override the  
# default value.  
  
# To modify the system-wide sshd configuration, create a *.conf file under  
# /etc/ssh/sshd_config.d/ which will be automatically included below  
Include /etc/ssh/sshd_config.d/*.conf  
  
# If you want to change the port on a SELinux system, you have to tell  
# SELinux about this change.  
# semanage port -a -t ssh_port_t -p tcp #PORTNUMBER  
#  
Port 31  
#AddressFamily any  
#ListenAddress 0.0.0.0  
#ListenAddress ::  
  
#HostKey /etc/ssh/ssh_host_rsa_key  
#HostKey /etc/ssh/ssh_host_ecdsa_key  
#HostKey /etc/ssh/ssh_host_ed25519_key  
  
# Ciphers and keying  
21,1 6%
```

```
[root@localhost ~]# rpm -q openssh-server
openssh-server-8.7p1-8.el9.x86_64
[root@localhost ~]# rpm -q -c openssh-server
/etc/pam.d/sshd
/etc/ssh/sshd_config
/etc/ssh/sshd_config.d/50-redhat.conf
/etc/sysconfig/sshd
[root@localhost ~]# vim /etc/ssh/sshd_config
[root@localhost ~]# systemctl reload sshd
[root@localhost ~]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: activating (auto-restart) (Result: exit-code) since Sat 2022-10-29 15:17:24 CEST; 1min 1s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
   Process: 814 ExecStart=/usr/sbin/sshd -D $OPTIONS (code=exited, status=255/SUCCESS)
   Process: 2498 ExecReload=/bin/kill -HUP $MAINPID (code=exited, status=0/SUCCESS)
   Main PID: 814 (code=exited, status=255/EXCEPTION)
      CPU: 175ms

Oct 29 15:17:24 localhost.localdomain systemd[1]: sshd.service: Main process exited, code=exited, status=255/SUCCESS
Oct 29 15:17:24 localhost.localdomain systemd[1]: sshd.service: Failed with result 'exit-code'.
lines 1-12/12 (END)
```

➤ Disable the SELinux and check the port no

```
[root@localhost ~]# getenforce
Enforcing
[root@localhost ~]# setenforce 0
[root@localhost ~]# systemctl restart sshd
[root@localhost ~]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2022-10-29 15:18:52 IST; 5s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
   Main PID: 2592 (sshd)
      Tasks: 1 (limit: 50436)
     Memory: 1.7M
        CPU: 12ms
    CGroup: /system.slice/sshd.service
            └─2592 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Oct 29 15:18:52 localhost.localdomain systemd[1]: Starting OpenSSH server daemon: /usr/sbin/sshd -D [listener] 0 of 10-100 startups.
Oct 29 15:18:52 localhost.localdomain sshd[2592]: Server listening on 0.0.0.0 port 22.
Oct 29 15:18:52 localhost.localdomain systemd[1]: Started OpenSSH server daemon: /usr/sbin/sshd -D [listener] 0 of 10-100 startups.
Oct 29 15:18:52 localhost.localdomain sshd[2592]: Server listening on :: port 22.
lines 1-16/16 (END)
```



```

[root@localhost ~]# getenforce
Permissive
[root@localhost ~]# netstat -tnlp
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
PID/Program name
tcp        0      0 0.0.0.0:111             0.0.0.0:*               LISTEN
1/systemd
tcp        0      0 0.0.0.0:8080            0.0.0.0:*               LISTEN
907/httpd
tcp        0      0 0.0.0.0:80              0.0.0.0:*               LISTEN
907/httpd
tcp        0      0 127.0.0.1:631           0.0.0.0:*               LISTEN
811/cupsd
tcp        0      0 0.0.0.0:31              0.0.0.0:*               LISTEN
2592/sshd: /usr/sbi
tcp6       0      0 :::111                  :::*                     LISTEN
1/systemd
tcp6       0      0 :::1:631                :::*                     LISTEN
811/cupsd
tcp6       0      0 :::31                   :::*                     LISTEN
2592/sshd: /usr/sbi
[root@localhost ~]#

```

➤ From the client when we login, the connection refused-

```

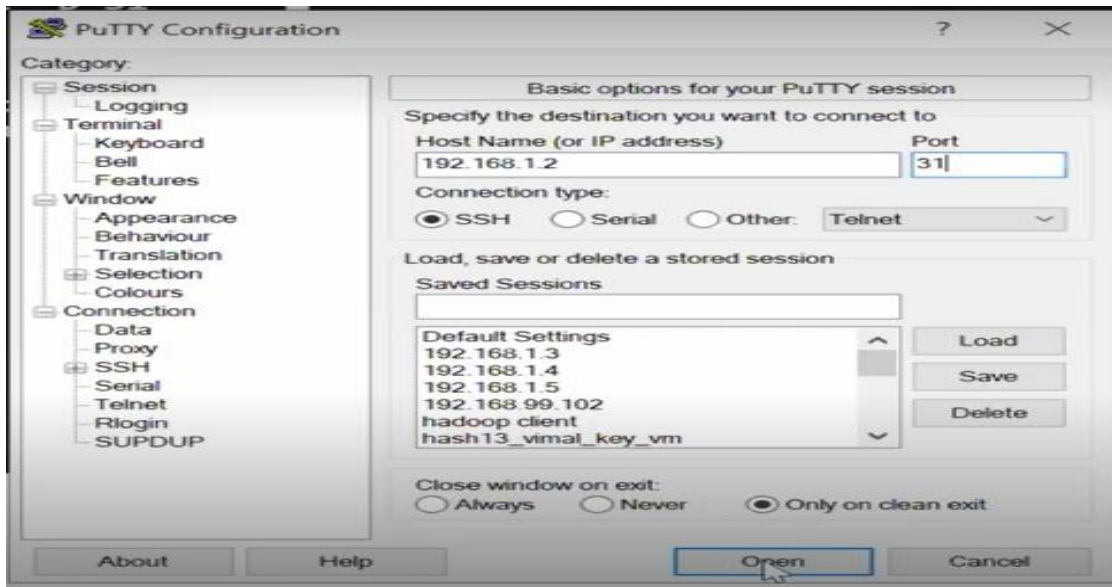
C:\Users\Vimal Daga>ssh root@192.168.1.2
ssh: connect to host 192.168.1.2 port 22: Connection refused

C:\Users\Vimal Daga>ssh root@192.168.1.2 -p 31
root@192.168.1.2's password:
Activate the web console with: systemctl enable --now cockpit.socket

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Sat Oct 29 15:13:56 2022
[root@localhost ~]# date
Sat Oct 29 03:21:19 PM IST 2022
[root@localhost ~]# cal
      October 2022
Su Mo Tu We Th Fr Sa
                1
 2  3  4  5  6  7  8
 9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 31
[root@localhost ~]#

```

- Similarly with putty



- Create a user- locally

```
[root@localhost ~]# useradd yash
[root@localhost ~]# passwd yash
Changing password for user yash.
New password:
BAD PASSWORD: The password is a palindrome
Retype new password:
passwd: all authentication tokens updated successfully.
[root@localhost ~]#
```

- Login from windows

```
Select yash@localhost:~
C:\Users\Vimal D>ssh yash@192.168.1.2 -p 31
yash@192.168.1.2's password:
Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
[yash@localhost ~]$
[yash@localhost ~]$
[yash@localhost ~]$
```

- Whatever done on ssh server will be recorded

```
[root@localhost ~]# cd /var/log/
[root@localhost log]# ls
anaconda      cups          maillog       secure-20221016
audit         dnf.librepo.log maillog-20221016 secure-20221029
boot.log      dnf.log       maillog-20221029 speech-dispatcher
boot.log-20221015 dnf.rpm.log  messages     spooler
boot.log-20221016 firewallld   messages-20221016 spooler-20221016
boot.log-20221020 gdm          messages-20221029 spooler-20221029
boot.log-20221029 hawkey.log   private      sssd
btmpt         hawkey.log-20221016 qemu-ga      tallylog
chrony        hawkey.log-20221029 README       wtmp
cron          httpd        rhsm
cron-20221016 insights-client samba
cron-20221029 lastlog      secure
[root@localhost log]#
```

```
[root@localhost log]# cat secure
```

```
user root
Oct 29 15:23:08 localhost useradd[2676]: new group: name=yash, GID=1002
Oct 29 15:23:08 localhost useradd[2676]: new user: name=yash, UID=1002, GID=1002
, home=/home/yash, shell=/bin/bash, from=/dev/pts/0
Oct 29 15:23:11 localhost passwd[2687]: pam_unix(passwd:chauthtok): password cha
nged for yash
Oct 29 15:23:11 localhost passwd[2687]: gkr-pam: couldn't update the login keyri
ng password: no old password was entered
Oct 29 15:26:19 localhost sshd[2619]: Received disconnect from 192.168.1.12 port
58503:11: disconnected by user
Oct 29 15:26:19 localhost sshd[2619]: Disconnected from user root 192.168.1.12 p
ort 58503
Oct 29 15:26:19 localhost sshd[2615]: pam_unix(sshd:session): session closed for
user root
Oct 29 15:26:31 localhost sshd[2774]: Accepted password for yash from 192.168.1.
12 port 58534 ssh2
Oct 29 15:26:31 localhost systemd[2779]: pam_unix(systemd-user:session): session
opened for user yash(uid=1002) by (uid=0)
Oct 29 15:26:31 localhost sshd[2774]: pam_unix(sshd:session): session opened for
user yash(uid=1002) by (uid=0)
[root@localhost log]#
[root@localhost log]#
[root@localhost log]#
```

- The “who” command gives more clear picture

```
[root@localhost log]# who
root      tty2          2022-10-29 15:13 (tty2)
yash      pts/1         2022-10-29 15:29 (192.168.1.12)
[root@localhost log]# date
Sat Oct 29 03:30:48 PM IST 2022
[root@localhost log]#
```

- The ssh protocol provides lots of facilities- by remote login we can run commands

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Vimal Daga>ssh -l root 192.168.1.2
root@192.168.1.2's password:
Activate the web console with: systemctl enable --now cockpit.socket

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Sat Oct 29 15:21:59 2022 from 192.168.1.12
[root@localhost ~]# date
Sat Oct 29 04:32:33 PM IST 2022
[root@localhost ~]# exit
logout
Connection to 192.168.1.2 closed.

C:\Users\Vimal Daga>
C:\Users\Vimal Daga>
```

- Without login we can perform remote program/command execution

```
C:\Users\Vimal Daga>
C:\Users\Vimal Daga>ssh -l root 192.168.1.2 date
root@192.168.1.2's password:
Sat Oct 29 04:33:45 PM IST 2022

C:\Users\Vimal Daga>
C:\Users\Vimal Daga>
C:\Users\Vimal Daga>
```

- It also supports file transfer – “scp” command is used

```
[root@localhost ~]# cd /root/
[root@localhost ~]# ls
aaa          a.txt       Documents   hhhh        Pictures    Templates
anaconda-ks.cfg Desktop     Downloads   Music        Public      Videos
[root@localhost ~]# cat > vimal.txt
i m vimal
[root@localhost ~]# pwd
/root
[root@localhost ~]# ls
aaa          a.txt       Documents   hhhh        Pictures    Templates  vimal.txt
anaconda-ks.cfg Desktop     Downloads   Music        Public      Videos
[root@localhost ~]# cat vimal.txt
i m vimal
[root@localhost ~]#
```



```
C:\Users\Vimal Daga>scp root@192.168.1.2:/root/vimal.txt "C:\Users\Vimal Daga\Desktop\icon"
root@192.168.1.2's password:
vimal.txt          100% 10  10.0KB/s  00:00
C:\Users\Vimal Daga>
```

```
C:\Users\Vimal Daga>scp "C:\Users\Vimal Daga\Desktop\icon\hello.txt" root@192.168.1.2:/root/yy.txt
root@192.168.1.2's password:
hello.txt          100%  9   3.0KB/s  00:00
C:\Users\Vimal Daga>
```

- This can be verified locally

```
[root@localhost ~]# pwd
/root
[root@localhost ~]# ls
aaa          a.txt  Documents  hhhh  Pictures  Templates  vimal.txt
anaconda-ks.cfg Desktop Downloads Music  Public   Videos   yy.txt
[root@localhost ~]# cat yy.txt
i m hello[root@localhost ~]#
```

- If we want to transfer entire folder

```
[root@localhost ~]# mkdir code
[root@localhost ~]# cd code/
[root@localhost code]# ls
[root@localhost code]# touch a b c
[root@localhost code]# ls
a  b  c
[root@localhost code]# pwd
/root/code
[root@localhost code]# cd /root/
[root@localhost ~]# ll
bash: ll: command not found...
Similar command is: 'ls'
[root@localhost ~]# ls
aaa          code      Downloads  Pictures  Videos
anaconda-ks.cfg Desktop  hhhh      Public   vimal.txt
a.txt        Documents Music     Templates yy.txt
[root@localhost ~]#
```

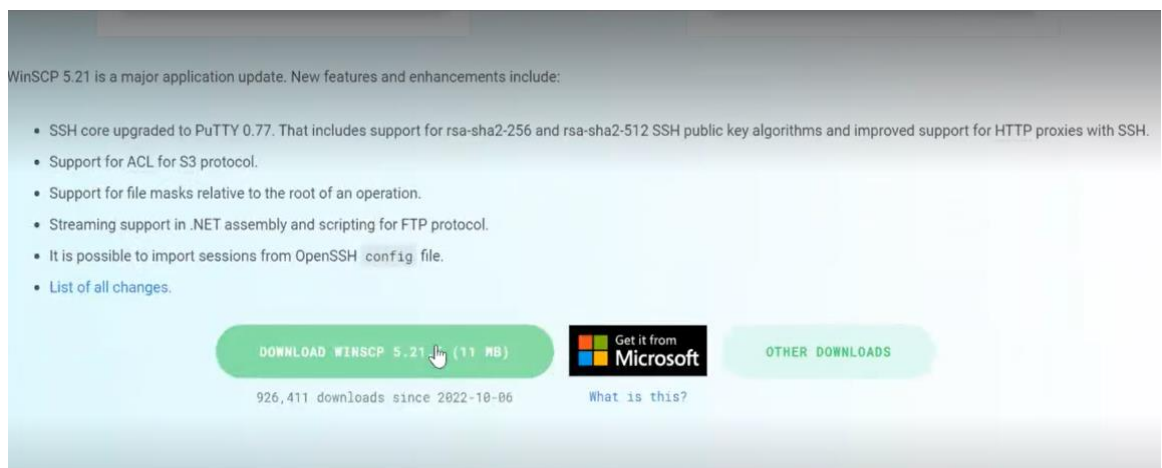
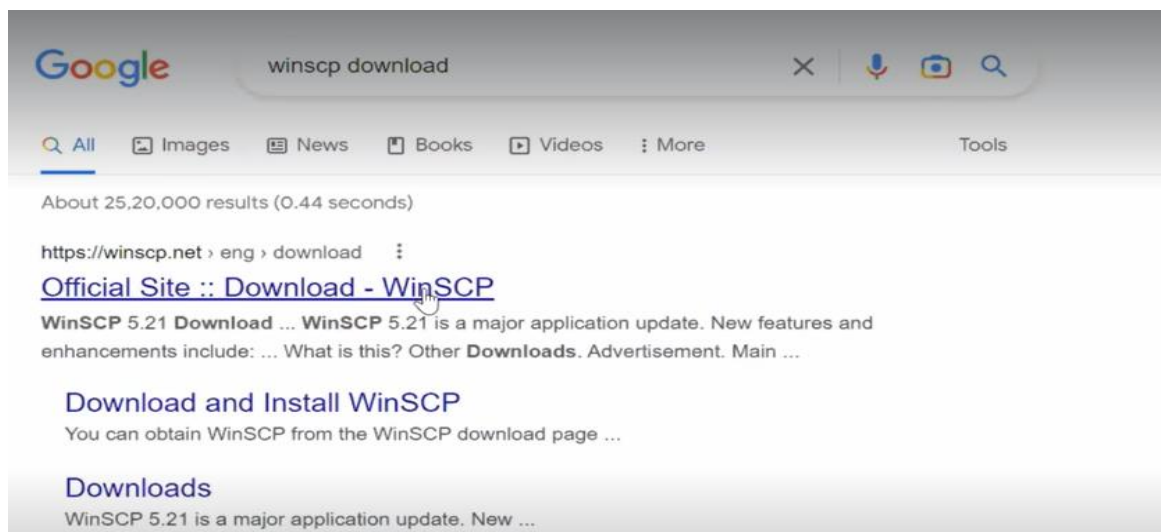
```
Select Command Prompt

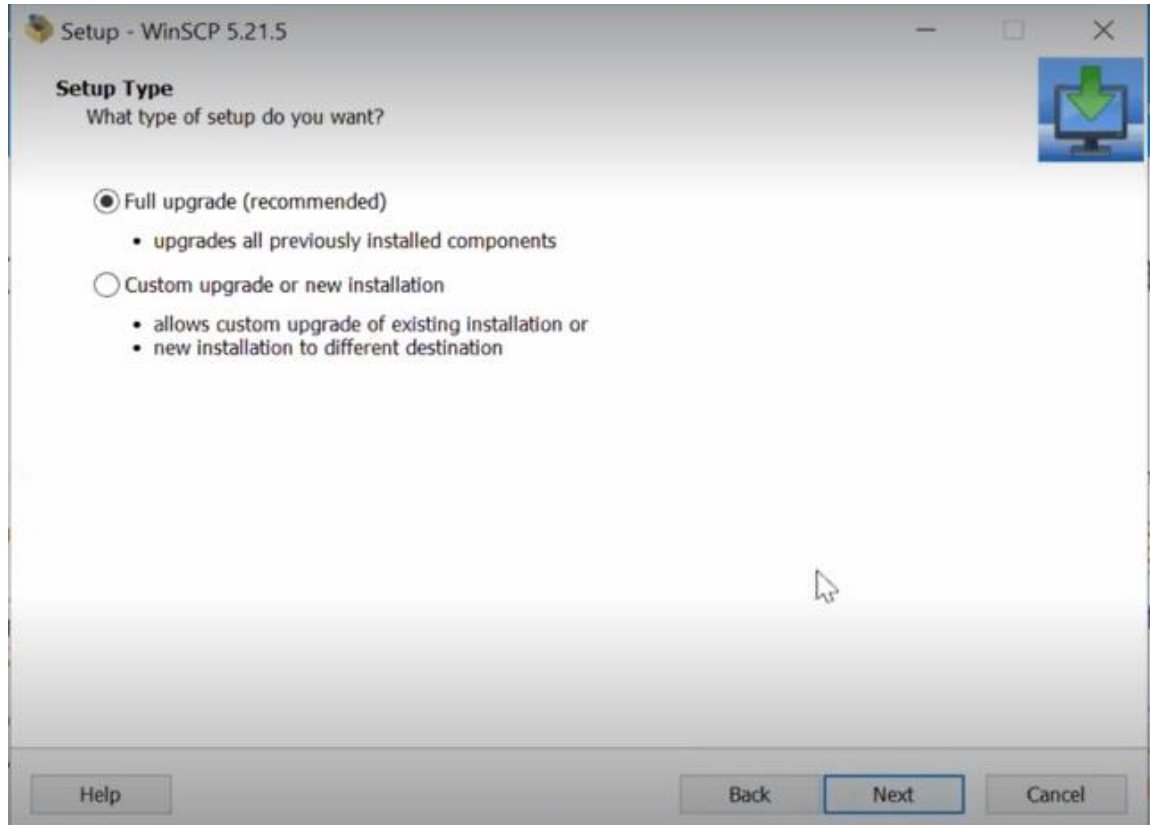
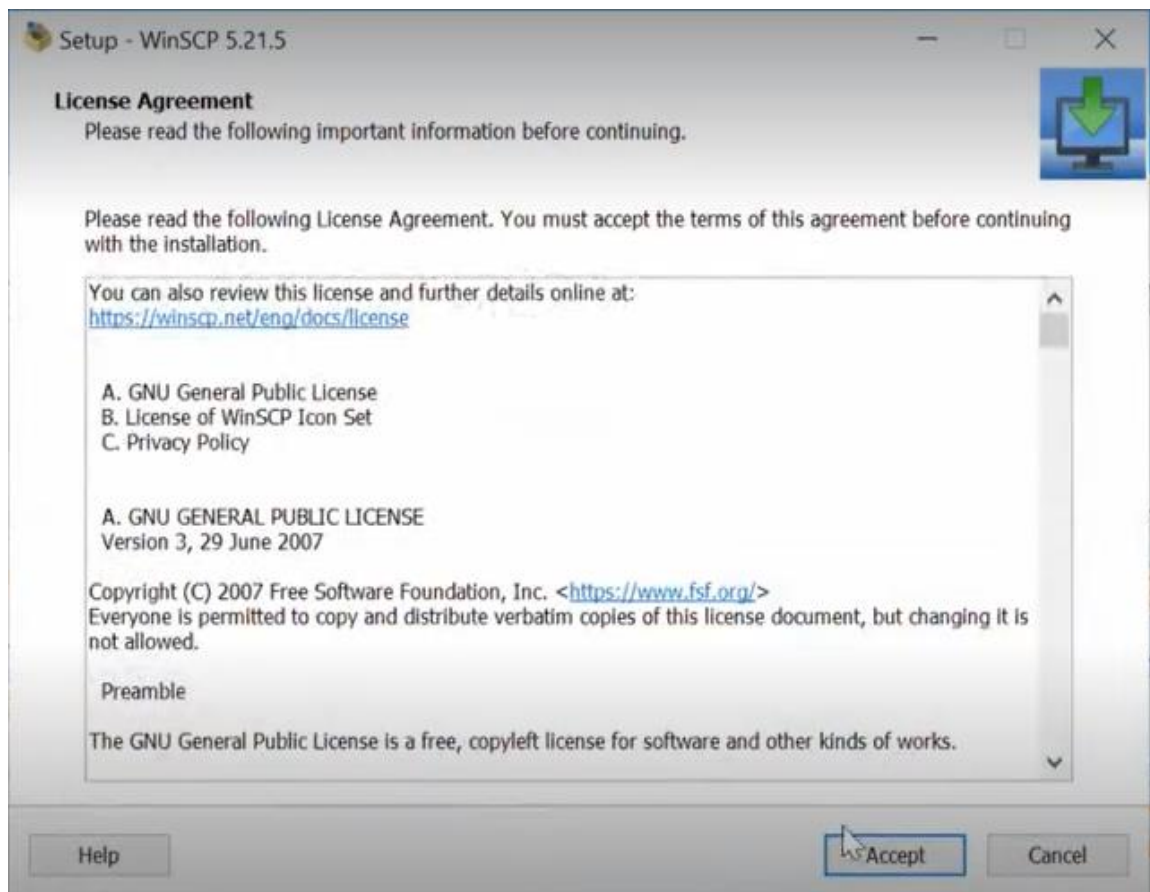
C:\Users\Vimal Daga>scp root@192.168.1.2:/root/code/ "C:\Users\Vimal Daga\Desktop\icon"
root@192.168.1.2's password:
scp: /root/code: not a regular file

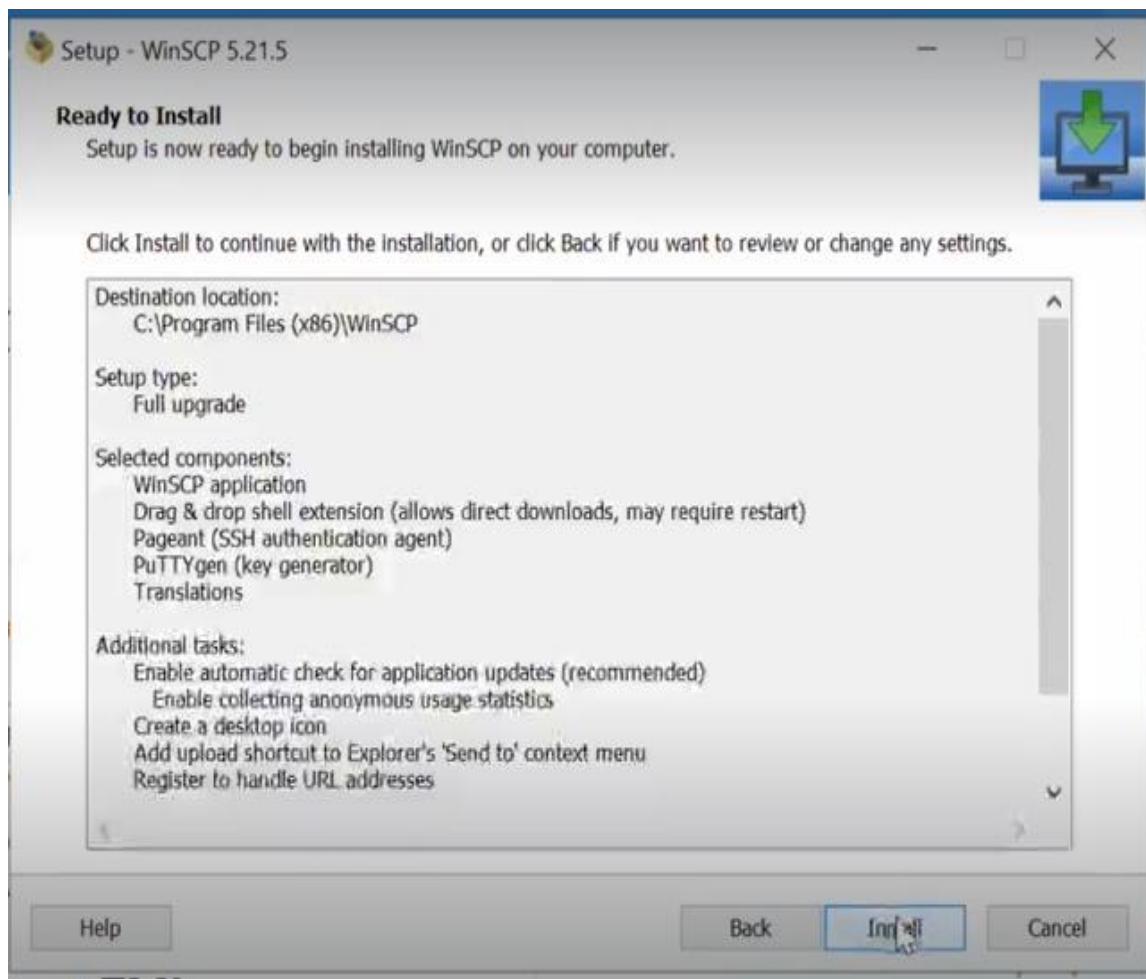
C:\Users\Vimal Daga>scp -r root@192.168.1.2:/root/code/ "C:\Users\Vimal Daga\Desktop\icon"
root@192.168.1.2's password:
a 100% 0 0.0KB/s 00:00
b 100% 0 0.0KB/s 00:00
c 100% 0 0.0KB/s 00:00

C:\Users\Vimal Daga>
```

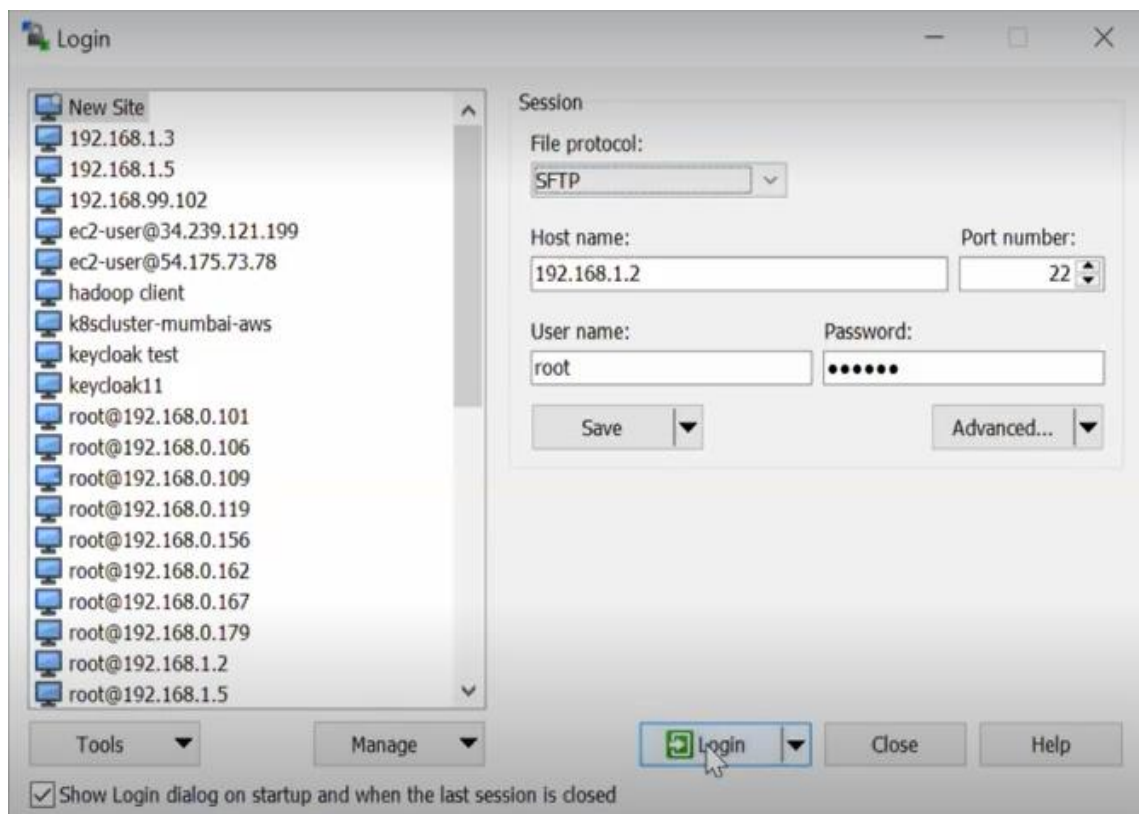
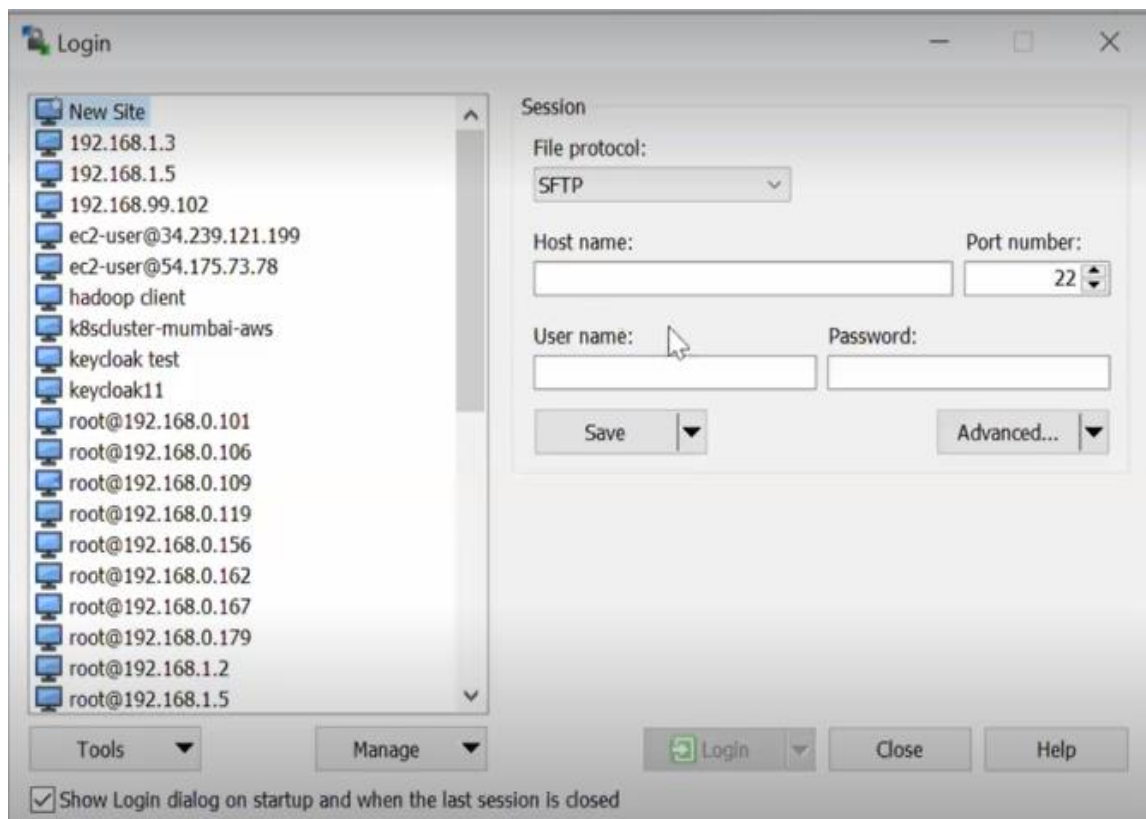
➤ The file transfer using GUI- winscp – graphical way to transfer files

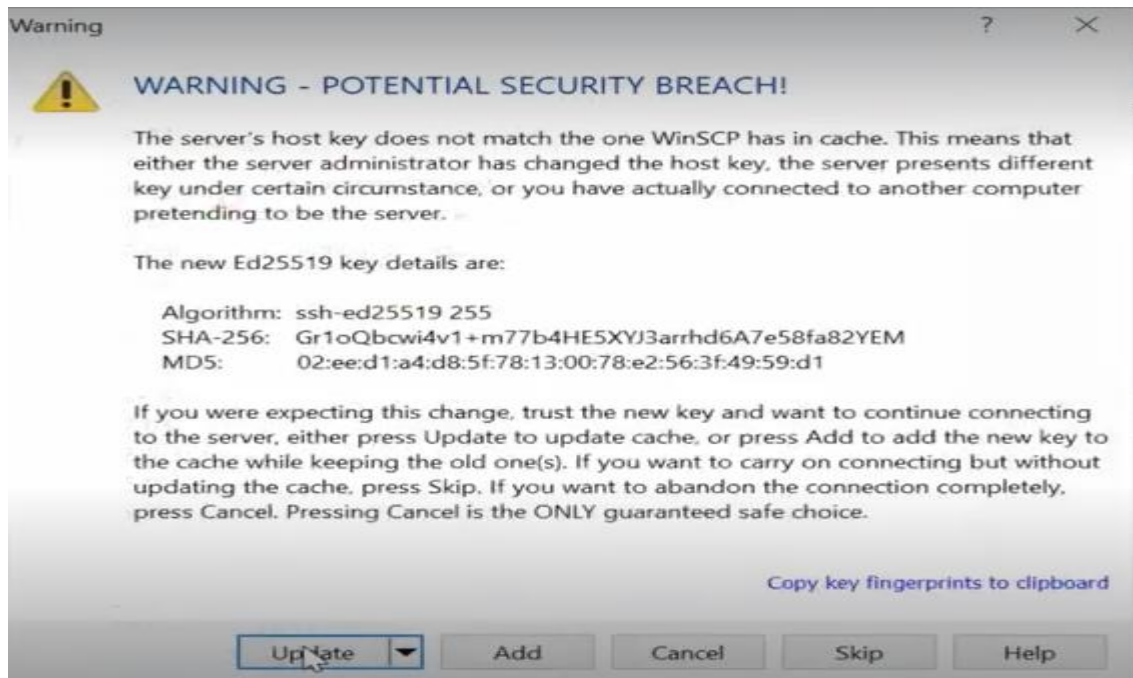






- Click on New Site





C:\Users\Vimal Daga\Documents\DevOps Training 2022\ansiblew\				/root/			
Name	Size	Type	Changed	Name	Size	Changed	Rights Owner
		Parent directory	27-03-2022 15:45:31	..		08-10-2022 16:05:28	r-xr-xr-x root
network		File folder	27-03-2022 15:45:31	aaa		09-10-2022 16:11:40	rw-r-xr-x root
e.yml	1 KB	YML File	27-03-2022 14:29:11	code		29-10-2022 16:46:26	rw-r-xr-x root
m.yml	1 KB	YML File	27-03-2022 12:10:12	Desktop		08-10-2022 17:15:54	rw-r-xr-x root
pass.yml	1 KB	YML File	27-03-2022 12:08:52	Documents		08-10-2022 17:15:54	rw-r-xr-x root
web.yml	1 KB	YML File	12-03-2022 16:16:23	Downloads		08-10-2022 17:15:54	rw-r-xr-x root
first.html.j2	1 KB	J2 File	12-03-2022 15:43:06	hhhh		29-10-2022 16:35:00	rw-r-xr-x root
backup_first2.yml	1 KB	YML File	12-03-2022 15:35:06	Music		08-10-2022 17:15:54	rw-r-xr-x root
backup_web.yml	1 KB	YML File	12-03-2022 15:14:38	Pictures		16-10-2022 16:13:41	rw-r-xr-x root
backup.html.j2	1 KB	J2 File	12-03-2022 15:13:05	Public		08-10-2022 17:15:54	rw-r-xr-x root
webvar.yml	1 KB	YML File	12-03-2022 12:56:11	Templates		08-10-2022 17:15:54	rw-r-xr-x root
web.conf.j2	1 KB	J2 File	12-03-2022 12:32:41	Videos		08-10-2022 17:15:54	rw-r-xr-x root
dockerc.yml	1 KB	YML File	06-03-2022 17:25:53	a.txt	0 KB	09-10-2022 16:11:47	rw-r--r-- root
myfacts.yml	1 KB	YML File	05-03-2022 17:27:34	anaconda-ks.cfg	1 KB	08-10-2022 16:15:42	rw----- root
webserver.yml	1 KB	YML File	27-02-2022 17:44:03	vimal.txt	1 KB	29-10-2022 16:38:17	rw-r--r-- root
mycmd.yml	1 KB	YML File	27-02-2022 17:15:03	yy.txt	1 KB	29-10-2022 16:45:12	rw-r--r-- root
var3.yml	1 KB	YML File	27-02-2022 17:13:17				
var2.yml	1 KB	YML File	27-02-2022 16:57:38				
file1.yml	1 KB	YML File	27-02-2022 16:53:35				

- To create an empty password

```
[root@localhost sshd_config.d]# useradd jack
[root@localhost sshd_config.d]#
[root@localhost sshd_config.d]# passwd -d jack
Removing password for user jack.
passwd: Note: deleting a password also unlocks the password.
passwd: Success
[root@localhost sshd_config.d]#
```

- To login without password via ssh

```
# For this to work you will also need host keys in /etc/ssh/ssh_known_hosts
#HostbasedAuthentication no
# Change to yes if you don't trust ~/.ssh/known_hosts for
# HostbasedAuthentication
#IgnoreUserKnownHosts no
# Don't read the user's ~/.rhosts and ~/.shosts files
#IgnoreRhosts yes

# To disable tunneled clear text passwords, change to no here!
#PasswordAuthentication yes
PermitEmptyPasswords yes

# Change to no to disable s/key passwords
#KbdInteractiveAuthentication yes

# Kerberos options
#KerberosAuthentication no
#KerberosOrLocalPasswd yes
#KerberosTicketCleanup yes
#KerberosGetAFSToken no
#KerberosUseKuserok yes
```

```
[root@localhost sshd_config.d]# systemctl reload sshd
[root@localhost sshd_config.d]#
```

```
C:\Users\Vimal Daga>
C:\Users\Vimal Daga>ssh jack@192.168.1.2
Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last failed login: Sat Oct 29 17:07:51 IST 2022 from 192.168.1.12 on ssh:notty
There were 2 failed login attempts since the last successful login.
Last login: Sat Oct 29 17:07:27 2022
```

- To set message of the day

```
[root@localhost sshd_config.d]# vim /etc/motd
```



```
root@localhost:/etc/ssh/sshd_config.d — vim /etc/motd
#####
##### Welcome Back from diwali festival #####
now focus on study....

:wq
```

```
localhost login: tom
Password:
Last login: Sat Oct 29 17:12:44 on tty4
#####
##### Welcome Back from diwali festival #####
now focus on study....

[ tom@localhost ~ ]$
[ tom@localhost ~ ]$
[ tom@localhost ~ ]$
```

- Any one login via ssh they will also get the message of the day

```
root@localhost:/etc/ssh/sshd_config.d — vim /etc/ssh/sshd_config
# WARNING: 'UsePAM no' is not supported in Fedora and may cause several
# problems.
#UsePAM no

#AllowAgentForwarding yes
#AllowTcpForwarding yes
#GatewayPorts no
#X11Forwarding no
#X11DisplayOffset 10
#X11UseLocalhost yes
#PermitTTY yes
PrintMotd yes
#PrintLastLog yes
#TCPKeepAlive yes
#PermitUserEnvironment no
#Compression delayed
#ClientAliveInterval 0
#ClientAliveCountMax 3
#UseDNS no
#PidFile /var/run/sshd.pid
#MaxStartups 10:30:100
#PermitTunnel no
#ChrootDirectory none
"/etc/ssh/sshd_config" 130L, 3650B 105,2 86%
```

```

C:\Users\Vimal Daga>
C:\Users\Vimal Daga>
C:\Users\Vimal Daga>ssh tom@192.168.1.2
tom@192.168.1.2's password:
#####
##### Welcome Back from diwali festival #####
now focus on study.....

Register this system with Red Hat Insights: insights-client --register
Create an account or view all your systems at https://red.ht/insights-dashboard
Last login: Sat Oct 29 17:14:30 2022
[tom@localhost ~]$

```

- To set message of the before the password

```

root@localhost:/etc/ssh/sshd_config.d — vim /etc/ssh/sshd_config
#X11UseLocalhost yes
#PermitTTY yes
PrintMotd yes
#PrintLastLog yes
#TCPKeepAlive yes
#PermitUserEnvironment no
#Compression delayed
#ClientAliveInterval 0
#ClientAliveCountMax 3
#UseDNS no
#PidFile /var/run/sshd.pid
#MaxStartups 10:30:100
#PermitTunnel no
#ChrootDirectory none
#VersionAddendum none

# no default banner path
Banner /etc/mybanner

```

```

[root@localhost sshd_config.d]# vim /etc/mybanner

```

```
root@localhost:/etc/ssh/sshd_config.d — vim /etc/mybanner
hey thi s is LW server
not allowed ...
.....
:wq
```

```
Command Prompt - ssh tom@192.168.1.2
C:\Users\Vimal Daga>ssh tom@192.168.1.2
hey thi s is LW server
not allowed ...
.....
tom@192.168.1.2's password:
```