

# **Password based Authentication & Key based Authentication in Linux**

## Password based Authentication:

Create user:        **useradd harish**

Validate:         **id harish**


Create password: **passwd harish**

enabling password based authentication:

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vim /etc/ssh/sshd\_config

make Password Authentication to 'yes'

 root@ip-172-31-38-237:/home/ec2-user

```
#PubkeyAuthentication yes

# The default is to check both .ssh/authorized_keys and .ssh/authorized_keys2
# but this is overridden so installations will only check .ssh/authorized_keys
AuthorizedKeysFile      .ssh/authorized_keys

#AuthorizedPrincipalsFile none

# 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

# Explicitly disable PasswordAuthentication. By presetting it, we
# avoid the cloud-init set_passwords module modifying sshd_config and
# restarting sshd in the default instance launch configuration.
PasswordAuthentication yes
PermitEmptyPasswords no

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

:wq -- save and exit the file

systemctl restart sshd → restart sshd service

## In the terminal:

ssh harish@<public IP>

## Key based Authentication:

ssh-keygen -f harish → to setup keybased authentication take keys from ramesh

cat harish.pub → copy the key

```
[harish@ip-172-31-38-237 ~]$ ssh-keygen -f harish
Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in harish
Your public key has been saved in harish.pub
The key fingerprint is:
SHA256:YiCnynbeDtF2xVhU5n2fpluACNsRSd7WRxgWmS3YlPM harish@ip-172-31-38-237.ec2.i
nternal
The key's randomart image is:
+---[RSA 3072]-----+
|      .+++ +=0.|
|      +.000*00|
|  . o  ..00.o..o+|
|  +..  .+ + ...E|
|  .. 00.S o . ..o|
|..  o...      o.|
|.o o          . .|
|. o o          o |
|  ..o          . |
+-----[SHA256]-----+
[harish@ip-172-31-38-237 ~]$ ls
harish  harish.pub
[harish@ip-172-31-38-237 ~]$ cat harish.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQgQDEoGCEbNEvbHNNQM6wMPzgMjh2taYebmVaLk/eGjnK
uOk4p3keUaVFvJ+/sJ3HpW/RZPEiUB7gvR7Zmo6bs+IZbHffiwOgNQ+wX4x84GbTRoQyWLqxBdlIA59Z
HqLdEtFpIoAGIX3YuZ9Y7SMhb9kKRB+FJLVRfOYFrzSrG7flUvSPda3Io9HPz4fDid7KI5UElVuXQf+i
VAgn4SSSMnkqvjflCsJ5c76hyyuiycMgDVXaEZBGn2gypIX6uipk/cOnZuJfqmefk4xveY+XlF8R2rqZ
lbKggbhLm/3ItUDcUNO0yQp4njDmw44BJahb58Rdeq+epDBcEIkJmvXHgY0rT3mEEe7pvEOgnt7ifplY
tR0l0Tpo64zBNY9lwIWA8wMa0rCJKrtJv0hFtifIfprX+f23xD+qfv8FNFH3buHyaKJSRNMUaMNw43S2
yYaS2MbpvMqFYY4wNGisgdGejZG03Ce4lEtv14xOcQt5TKPQomwtCsfo9R57xh3WmaMv0G8= harish@
ip-172-31-38-237.ec2.internal
```

key will be sent to administrator via email. Administrator will perform below steps

cd /home/ harish

ls -la

chmod 700 .ssh

cd .ssh

touch authorized\_keys

chmod 700 authorized\_keys

vim authorized\_keys → paste the copied public key (harish.pub)

vim /etc/ssh/sshd\_config

search ?key → uncomment Pubkey Authentication yes

make Password Authentication 'no'

systemctl restart sshd → restart sshd service

```
ssh -i privatekey user@<Public IP>
```

```
[harish@ip-172-31-38-237 ~]$ ssh -i harish harish@34.229.135.234  
      #  
    _##_ Amazon Linux 2023  
   ~\__#####\  
  ~~ \_____|  
     \|###|  
     \|#/ https://aws.amazon.com/linux/amazon-linux-2023  
     V~' '->  
~~~~~  
~~~.  
~~~./ / / / /  
~~~/m/'
```

Last login: Mon Aug 19 09:20:33 2024 from 34.229.135.234

```
[harish@ip-172-31-38-237 ~]$
```