How to Setup SSH Passwordless Login in Linux

SSH (Secure SHELL) is an open-source and most trusted network protocol that is used to log in to remote servers for the execution of commands and programs. It is also used to transfer files from one computer to another computer over the network using a **secure copy (SCP**) command and **Rsync** command.

In this example, we will set up SSH password-less automatic login from server **34.239.117.87** as user **aniket** to **192.168.0.11** with user **harsh**

Step 1: Create Authentication SSH-Keygen Keys on – (34.239.117.87)

First login into server **34.239.117.87** with user **aniket** and generate a pair of public keys using the following command**.**

```
aniket@ip-172-31-88-117:~$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/aniket/.ssh/id_rsa):
Created directory '/home/aniket/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/aniket/.ssh/id_rsa
Your public key has been saved in /home/aniket/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:H6pfkz4cVjUby5qQ9BiDV3doKaWUHbCebdVvtSH2aHU aniket@ip-172-31-88-117
The key's randomart image is:
+---[RSA 3072]----+
|          . .+=++.|
|         . =.o+0 ..|
|          o *oB BE|
|           +.+oO.*|
|         S .oo=ooo|
|          ooo+. . |
|         .o=.     |
|        . oo.     |
|       ... ..     |
+----[SHA256]-----+
```

Step 2: Upload SSH Key to – 44.203.173.79

Use **SSH** from server **34.239.117.87** and upload a new generated public key (id_rsa.pub) on server **44.203.173.79** under **harsh's .**ssh directory as a file name authorized_keys**.**

```
aniket@ip-172-31-88-117:~$ ssh-copy-id harsh@44.203.173.79
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/aniket/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
harsh@44.203.173.79's password:

Number of key(s) added: 1

Now try logging into the machine, with:   "ssh 'harsh@44.203.173.79'"
and check to make sure that only the key(s) you wanted were added.

aniket@ip-172-31-88-117:~$
```

Step 3: Test SSH Passwordless Login from 34.239.117.87

```
aniket@ip-172-31-88-117:~$ ssh harsh@44.203.173.79
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Fri Jun  2 05:21:34 UTC 2023

  System load:  0.0               Processes:             113
  Usage of /:   20.9% of 7.57GB   Users logged in:       2
  Memory usage: 25%               IPv4 address for eth0: 172.31.84.118
  Swap usage:   0%


Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update

harsh@ip-172-31-84-118:~$
```