SSH PASSWORDLESS AUTHENTICATION

System1-**cserver – 192.168.198.128**

System2-**cclient– 192.168.198.130**

Trying to establish ssh passwordless authentication between server & client

On server system

Step1: open terminal and enter

ssh-keygen –t rsa

```
cserver@localhost:~
[cserver@localhost ~]$
[cserver@localhost ~]$
[cserver@localhost ~]$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/home/cserver/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/cserver/.ssh/id_rsa.
Your public key has been saved in /home/cserver/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:CDdpqp0Y4WMIpiNEtvvKxwPjFsPah5uR+16IQkena4Q cserver@localhost.localdomain
The key's randomart image is:
+---[RSA 2048]----+
| o               |
|o .    .         |
|.+....=          |
|=o+.o= o         |
|*E=+. . S        |
|oX+O..           |
|=.%=+            |
|++=B.            |
|o=*o.            |
+----[SHA256]-----+
[cserver@localhost ~]$
```

Note down this command will save id_rsa file and id_rsa.pub (public key) file will save in **/home/$USER/.ssh** path, if we want to change we can change this path.

And we didn't given any passphrase (password)

Step2:

Copy the file with name authorized_keys and set authorized_keys file permission 600

```
cserver@localhost:~/.ssh
[cserver@localhost .ssh]$ cp id_rsa.pub authorized_keys
[cserver@localhost .ssh]$
[cserver@localhost .ssh]$ ll authorized_keys
-rw-r--r-- 1 cserver cserver 411 Oct 14 12:08 authorized_keys
[cserver@localhost .ssh]$ chmod 600 authorized_keys
[cserver@localhost .ssh]$
[cserver@localhost .ssh]$ ll authorized_keys
-rw------- 1 cserver cserver 411 Oct 14 12:08 authorized_keys
[cserver@localhost .ssh]$
[cserver@localhost .ssh]$
```

Share file with the remote system using any secure connection like scp, ftp…

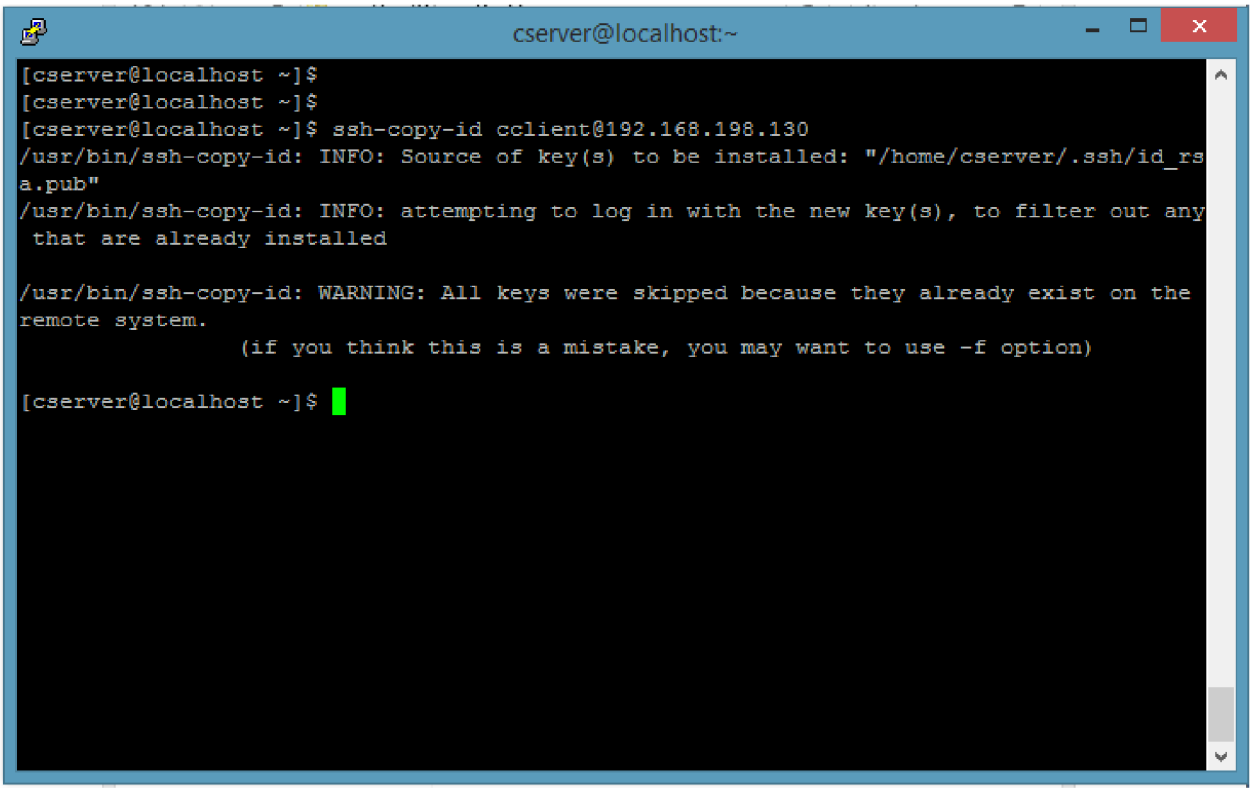
scp .ssh/authorized_keys cclient@192.168.198.130:/home/cclient/.ssh

```
cserver@localhost:~
[cserver@localhost ~]$ scp .ssh/authorized_keys cclient@192.168.198.130:/home/cclient/.
ssh
The authenticity of host '192.168.198.130 (192.168.198.130)' can't be established.
ECDSA key fingerprint is SHA256:T/F4AfUOZ+p5dFgqAXvUfMXXnGVAFtwA7iw+mCyHfxI.
ECDSA key fingerprint is MD5:bb:2e:70:21:a6:9b:be:eb:14:17:ae:6b:da:e4:8c:a8.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.198.130' (ECDSA) to the list of known hosts.
cclient@192.168.198.130's password:
authorized_keys                                   100%  411   172.1KB/s   00:00
[cserver@localhost ~]$
```

or

use below command

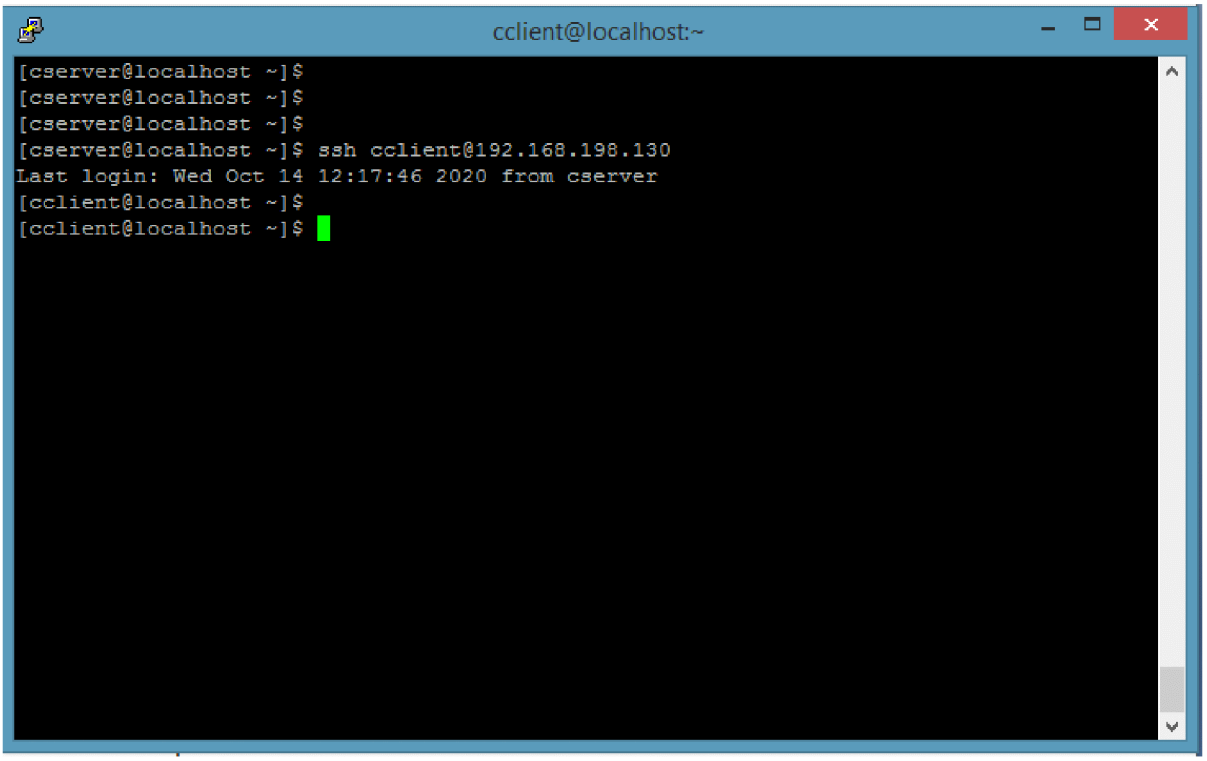
ssh-copy-id cclient@192.168.198.130



Step3:

Now you can connect remote system without using password.

See below figure before connection the host name is **cserver@localhost** and after connection the host name is **cclient@localhost**



Reference:

https://www.youtube.com/watch?v=NWuDfRDqjRs