# Automate Backup in Linux Using RSYNC & Crontab | Backup Data On Remote Server Using RSYNC

rsync or remote synchronization is a software utility for Unix-Like systems that efficiently sync files and directories between two hosts or machines.

One of them being the source or the local-host from which the files will be synced, the other one being the remote-host, on which synchronization will take place.

There are basically two ways in which rsync can copy/sync data:

Copying/syncing to/from another host over any remote shell like ssh, rsh.

Copying/Syncing through rsync daemon using TCP.

\_\_\_\_\_

```
yum repolist

rpm -qa | grep rsync

yum install rsync -y

rpm -qi rsync

su - vikasnehra

mkdir backup

cd backup

touch test{1..10}.txt

mkdir -p /tmp/backup

rsync --help
```

```
rsync -v /home/vikasnehra/backup/* /tmp/backup/
exit

mkdir -p /backupsource/
cd /backupsource/; touch test{1..10}.txt

CLIENT: (192.168.1.108)

yum repolist

rpm -qa | grep rsync

yum install rsync -y

mkdir -p /backupdestination/
```

```
rsync -av -e ssh /backupsource/ root@192.168.1.108:/backupdestination/

Go To CLIENT:

cd /backupdestination/

Is -lha

rm -rf *

Is -lha /root/.ssh/

mkdir -p /root/.ssh/

touch /root/.ssh/authorized_keys
```

```
Go To SERVER:

ssh-keygen

scp -r /root/.ssh/id_rsa.pub root@192.168.1.108:/root/.ssh/authorized_keys

date

crontab -e
25 20 *** bash /root/backup.sh

vim /root/backup.sh
!#/bin/bash
/usr/bin/rsync -av -e ssh /backupsource/ root@192.168.1.108:/backupdestination/

crontab -l

tail -f /var/log/cron

Go To CLIENT:
```

# II /backupdestination/

---

#### # Client

```
[root@client ~]# uname -a
Linux client 4.18.<mark>0-80.el8.x</mark>86_64 #1 SMP Wed Mar 13 12:02:46 UTC 2019 x86_64 x86_6
4 x86_64 GNU/Linux
[root@client ~]# |
```

# #Server

```
root@server ~]# #Welcome to Nehra Classes Youtube Channel#
[root@server ~]# #Automate Backup Using rsync & crontab in Linux#
[root@server ~]# uname -a
_inux server 3.10.0-1062.el7.x86_64 #1 SMP Thu Jul 18 20:25:13 UTC 2019 x86_64 x86
_64 x86_64 GNU/Linux
[root@server ~]# ■
```

```
[root@server ~]# yum repolist
oaded plugins: langpacks, product-id, search-disabled-repos, subscription-manager
This system is not registered with an entitlement server. You can use subscription
manager to register.
repo id
            repo name
                                                                             status
                                                                             13,322
5,229
epel/x86 64 Extra Packages for Enterprise Linux 7 - x86 64
localrepo
            localrepo
            Remi's PHP 7.2 RPM repository for Enterprise Linux 7 - x86_64
emi-php72
                                                                               407
            Safe Remi's RPM repository for Enterprise Linux 7 - x86_64
remi-safe
                                                                              3,809
repolist: 22,767
root@server ~]#
```

```
[root@server ~]# rpm -qa | grep rsync
rsync-3.1.2-6.el7_6.1.x86_64

#1.Rsync backup inside same machine (folder to Folder)
[root@server ~]# su - vikasnehra
Last login: Sun Jun 14 15:34:59 IST 2020 on pts/1
[vikasnehra@server ~]$ ll
total 4
drwxrwxr-x. 2 vikasnehra vikasnehra 192 Jun 14 15:35 backup
-rw-r--r-. 1 root root 211 Jun 4 19:43 httpd.conf
drwx----. 8 vikasnehra vikasnehra 267 May 11 11:23 Maildir
[vikasnehra@server ~]$ cd backup/
[vikasnehra@server backup]$ ll
```

```
[vikasnehra@server backup]$ ll
total 4
-rw-rw-r--. 1 vikasnehra vikasnehra 136 Jun 14 15:35 cal.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test10.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test2.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test3.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test4.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test5.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test6.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test7.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test8.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test8.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test8.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 15:35 test9.txt
[vikasnehra@server backup]$ ■
```

```
[vikasnehra@server backup]$ rm -rf *
[vikasnehra@server backup]$ ll
total 0
[vikasnehra@server backup]$ ■
```

[vikasnehra@server backup]\$ touch test{1..10}.txt
[vikasnehra@server backup]\$ ll
total 0
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test10.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test1.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test2.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test3.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test4.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test5.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test6.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test7.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test8.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test8.txt
-rw-rw-r--. 1 vikasnehra vikasnehra 0 Jun 14 19:56 test8.txt
[vikasnehra@server backup]\$ cal > cal.txt
[vikasnehra@server backup]\$ ll

```
[vikasnehra@server <mark>backup</mark>]$ cd/tmp
[vikasnehra@server tmp]$ mkdir -p /tmp/backup
[vikasnehra@server tmp]$ cd backup/
[vikasnehra@server backup]$ ll
total 4
rw-rw-r--. 1 vikasnehra vikasnehra 136 Jun 14 15:10 cal.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test10.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test1.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test2.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test3.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test4.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test5.txt
-rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test6.txt
                                       0 Jun 14 15:10 test7.txt
rw-rw-r--. 1 vikasnehra vikasnehra
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test8.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test9.txt
vikasnehra@server backup]$ rm -rf *
[vikasnehra@server backup]$
[vikasnehra@server backup]$ ll
total 4
-rw-rw-r--. 1 vikasnehra vikasnehra 136 Jun 14 19:57 cal.txt
                                       0 Jun 14 19:56 test10.txt
rw-rw-r--. 1 vikasnehra vikasnehra
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test1.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test2.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test3.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test4.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test5.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test6.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test7.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 19:56 test8.txt
                                       0 Jun 14 19:56 test9.txt
-rw-rw-r--. 1 vikasnehra vikasnehra
[vikasnehra@server backup]$ |
# Create a/ tmp Dir
[vikasnehra@server <mark>backup</mark>]$ cd /tmp
[vikasnehra@server tmp]$ mkdir -p /tmp/backup
[vikasnehra@server tmp]$ cd backup/
[vikasnehra@server backup]$ ll
otal 4
rw-rw-r--. 1 vikasnehra vikasnehra 136 Jun 14 15:10 cal.txt
                                       0 Jun 14 15:10 test10.txt
rw-rw-r--. 1 vikasnehra vikasnehra
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test1.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test2.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test3.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test4.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test5.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test6.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test7.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test8.txt
-rw-rw-r--. 1 vikasnehra vikasnehra
                                       0 Jun 14 15:10 test9.txt
[vikasnehra@server backup]$ rm -rf *
[vikasnehra@server backup]$ |
```

```
[vikasnehra@server backup]$ rm -rf *
[vikasnehra@server backup]$ ll
total 0
[vikasnehra@server backup]$ clear
```

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```
vikasnehra@server backup]$ rsync --he
or rsync [OPIION]... [USER@]HOSI::SRC [DESI]
or rsync [OPTION]... rsync://[USER@]HOST[:PORT]/SRC [DEST]
The ':' usages connect via remote shell, while '::' & 'rsync://' usages connect
to an rsync daemon, and require SRC or DEST to start with a module name.
Options
-v, --verbose
                                 increase verbosity
     --info=FLAGS
                                  fine-grained informational verbosity
     --debug=FLAGS
                                 fine-grained debug verbosity
                                 special output handling for debugging
     --msgs2stderr
 -q, --quiet
--no-motd
                                  suppress non-error messages
                                 suppress daemon-mode MOTD (see manpage caveat)
                                 skip based on checksum, not mod-time & size archive mode; equals -rlptgoD (no -H,-A,-X)
 -c, --checksum
 -a, --archive
     --no-OPTION
                                 turn off an implied OPTION (e.g. --no-D)
 -r, --recursive
                                 recurse into directories
 -R, --relative
                                 use relative path names
                                 don't send implied dirs with --relative
     --no-implied-dirs
 -b, --backup
                                  make backups (see --suffix & --backup-dir)
```

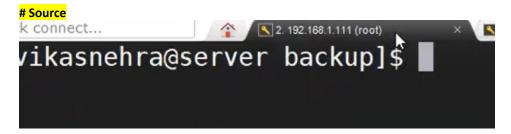
# # Create a backup using Rsync

```
[vikasnehra@server backup]$ cd
[vikasnehra@server ~]$ rsync -v /home/vikasnehra/backup/* /tmp/backup/ i
cal.txt
test1.txt
test10.txt
test2.txt
test3.txt
test4.txt
test5.txt
test6.txt
test7.txt
test8.txt
test9.txt
sent 788 bytes received 225 bytes 2,026.00 bytes/sec
total size is 136 speedup is 0.13
[vikasnehra@server ~]$
```

```
[vikasnehra@server ~]$ cd /tmp/backup/
vikasnehra@server backup]$ ll
otal 4
rw-rw-r--. 1 vikasnehra vikasnehra 136 Jun 14 19:59 cal.txt
rw-rw-r--. 1 vikasnehra vikasnehra
rw-rw-r--. 1 vikasnehra vikasnehra
                                   0 Jun 14 19:59 test10.txt
                                   0 Jun 14 19:59 test1.txt
                                   0 Jun 14 19:59 test2.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                   0 Jun 14 19:59 test3.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                   0 Jun 14 19:59 test4.txt
rw-rw-r--. 1 vikasnehra vikasnehra
rw-rw-r--. 1 vikasnehra vikasnehra
                                   0 Jun 14 19:59 test5.txt
                                   0 Jun 14 19:59 test6.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                   0 Jun 14 19:59 test7.txt
rw-rw-r--. 1 vikasnehra vikasnehra
                                   0 Jun 14 19:59 test8.txt
rw-rw-r--. 1 vikasnehra vikasnehra
rw-rw-r--. 1 vikasnehra vikasnehra
                                   0 Jun 14 19:59 test9.txt
vikasnehra@server backup]$
[vikasnehra@server backup]$ cat cal.txt
       June 2020
Su Mo Tu We Th Fr Sa
        2
                    5
     1
            3
                4
                        6
    8
        9
          10 11 12 13
14 15
      16 17 18 19 20
21 22 23 24 25 26 27
28 29 30
[vikasnehra@server backup]$ c
```

# Files have successfully created /tmp folder -in same Machine

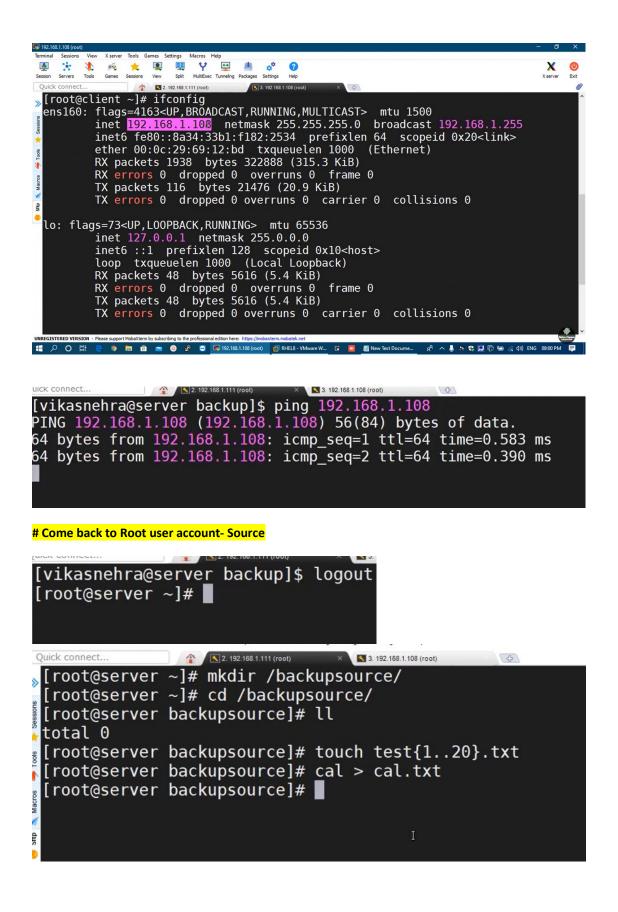
# 2. Rsync backup Source to Destination machine



**#Destination - Remote location** 

```
Quick connect...

| Toot@client ~]# uname -a
| Linux client 4.18.0-80.el8.x86_64 #1 SMP Wed Mar 13 12:02:46 UTC 2019 x86_64 x86_64 x86_64 4 x86_64 GNU/Linux
| [root@client ~]# |
```



```
0 Jun 14 20:01 test12.txt
rw-r--r-. 1 root root
rw-r--r-. 1 root root
                         0 Jun 14 20:01 test13.txt
rw-r--r-. 1 root root
                        0 Jun 14 20:01 test14.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test15.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test16.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test17.txt
rw-r--r-. 1 root root
                        0 Jun 14 20:01 test18.txt
rw-r--r-. 1 root root
                        0 Jun 14 20:01 test19.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test1.txt
rw-r--r-. 1 root root
                        0 Jun 14 20:01 test20.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test2.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test3.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test4.txt
                        0 Jun 14 20:01 test5.txt
rw-r--r--. 1 root root
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test6.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test7.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test8.txt
rw-r--r--. 1 root root
                        0 Jun 14 20:01 test9.txt
root@server backupsource]#
```

# # Go to Destination ... Create a backup

```
[root@client ~]# rpm -qa | grep rsync

rsync-3.1.3-4.el8.x86_64
[root@client ~]# clear

[root@client ~]# mkdir -p /backupdestination/
[root@client ~]# cd /backupdestination/
[root@client backupdestination]# ll

total 0
[root@client backupdestination]#
```

# Now time to Rsync from Source to Destination Move the backupfiles to Remote location

```
[root@server backupsource]# rsync -av -e ssh /backupsource/ root@192.168.1.108:/backupdestination/:
The authenticity of host '192.168.1.108 (192.168.1.108)' can't be established.
ECDSA key fingerprint is SHA256:9kj2akycdfmtziFmDcWVrZHAsKYjqvuYNaiqcYr55h0.
ECDSA key fingerprint is MD5:5b:27:c6:bd:ae:c3:47:8d:1c:c7:df:f1:4a:1e:2a:9d.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.1.108' (ECDSA) to the list of known hosts.
root@192.168.1.108's password: ■
```

```
test14.txt
test15.txt
test16.txt
test17.txt
test18.txt
test19.txt
test2.txt
test20.txt
test3.txt
test4.txt
test5.txt
test6.txt
test7.txt
test8.txt
test9.txt
sent 1,379 bytes received 418 bytes 133.11 bytes/sec
total size is 136 speedup is 0.08
[root@server backupsource]#
```

# # Check Destination Server

```
[root@client ~]# mkdir -p /backupdestination/
[root@client ~]# cd /backupdestination/
[root@client backupdestination]# ll
total 0
[root@client backupdestination]# ll■
```

```
0 Jun 14 20:01 test12.txt
 rw-r--r--. 1 root root
 rw-r--r--. 1 root root
                               0 Jun 14 20:01 test13.txt
 rw-r--r-. 1 root root
                             0 Jun 14 20:01 test14.txt
 rw-r--r-. 1 root root 0 Jun 14 20:01 test15.txt
 rw-r--r-. 1 root root 0 Jun 14 20:01 test17.txt
 rw-r--r-. 1 root root 0 Jun 14 20:01 test18.txt
 rw-r--r--. 1 root root 0 Jun 14 20:01 test19.txt
 rw-r--r-. 1 root root 0 Jun 14 20:01 test1.txt
rw-r--r-. 1 root root 0 Jun 14 20:01 test20.txt
 rw-r--r--. 1 root root  0 Jun 14 20:01 test2.txt
 rw-r--r-. 1 root root 0 Jun 14 20:01 test3.txt

rw-r--r-. 1 root root 0 Jun 14 20:01 test4.txt

rw-r--r-. 1 root root 0 Jun 14 20:01 test5.txt

rw-r--r-. 1 root root 0 Jun 14 20:01 test6.txt
 rw-r--r-. 1 root root 0 Jun 14 20:01 test7.txt
 rw-r--r--. 1 root root
                               0 Jun 14 20:01 test8.txt
root@client backupdestination]# cat cal.txt
       June 2020
Su Mo Tu We Th Fr Sa
        2
            3
               4 5 6
    1
       9 10 11 12 13
    8
l4 15 16 17 18 19 20
21 22 23 24 25 26 27
28 29 30
root@client backupdestination]# clear
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# File are successfully copied to Destination/remote Server using Rsync
# Last final Task how to Automate this Process using Cronjob
# source
[root@server backupsource]# crontab -e
# Ref - destination
                   2. 192.168.1.111 (root)
[root@client backupdestination]# date
Mon Jun 15 <mark>01:37:</mark>22 IST 2020
[root@client backupdestination]#
```

```
# Source
```

42: min / 01-hr / \* -day off month / \* - each month /\* day of Week-each day /script-Location

# # Save + exit : wq!

```
[root@server backupsource]# crontab -e
no crontab for root - using an empty one
crontab: installing new crontab I
[root@server backupsource]# crontab -l
42 01 * * * bash /root/backup.sh
[root@server backupsource]#
```

# Create Script file for this crontab, which will automate the backup process

```
root@server backupsource]# vim /root/backup.sh
```

```
!#/bin/bash
/usr/bin/rsync -av -e ssh /backupsource/ root@192.168.1.108:/backupdestination/
```

# # date cmd backup source server

```
[root@server backupsource]# date
Sun Jun 14 20:36:49 IST 2020
[root@server backupsource]#
```

```
[root@server backupsource]# crontab -e
```

This script will execute @ 20:hrs: 46mins in this machine

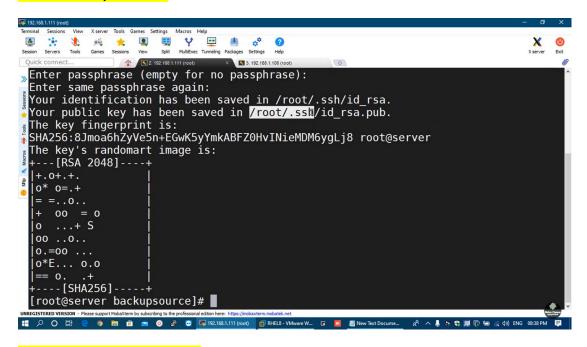
```
# SaVE + EXIT - wq!
```

```
[root@server backupsource]# cronta₺ -e
crontab: installing new crontab
[root@server backupsource]# ■
```

# # move to destination sever

```
[root@client backupdestination]# ll <sup>I</sup>
total 0
[root@client backupdestination]# |
```

# # Create ssh-keys in Source



# # Go to server set the below cmd

```
[root@client backupdestination]# mkdir -p /root/<mark>.§sh</mark>/
[root@client backupdestination]# |
```

# Source to destination Server

```
[root@server backupsource]# scp -r /root/.ssh/id rsa.pub root@192.168.1.108:/root/
.ssh/authorized_keys
 root@192.168.1.108's password:
                                                                                     100% 393
                                                                                                          381.6KB/s
                                                                                                                               00:00
id_rsa.pub
[root@server backupsource]#
# Modify the permissions on the destination server
[root@client backupdestination]# chmod 700 /root/.ssh/
 root@client backupdestination]# chmod 600 /root/.ssh/authorized_keys
# Source
                             ckupsource]# tail -f /var/log/cron
server crond[1395]: (root) RELOAD (/var/spool/cron/root)
server crontab[3177]: (root) BEGIN EDIT (root)
server crontab[3177]: (root) REPLACE (root)
server crontab[3177]: (root) END EDIT (root)
server crond[1395]: (root) RELOAD (/var/spool/cron/root)
server crontab[3199]: (root) BEGIN EDIT (root)
server crontab[3199]: (root) REPLACE (root)
server crontab[3199]: (root) END EDIT (root)
server crond[1395]: (root) END EDIT (root)
server CROND[3231]: (root) CMD (/var/spool/cron/root)
            server bac
20:34:01
20:34:58
20:35:13
20:35:13
20:36:01
20:37:01
20:37:15
20:37:15
Jun
Jun
Jun
Jun
Jun
Jun
Jun
 Jun
             20:38:01 20:40:01
Iroot@server backupsource]# tall -T /Var/log/cro
Jun 14 20:34:01 server crond[1395]: (root) RELOAD (/var/spool/cron/root)
Jun 14 20:34:58 server crontab[3177]: (root) BEGIN EDIT (root)
Jun 14 20:35:13 server crontab[3177]: (root) REPLACE (root)
Jun 14 20:35:13 server crontab[3177]: (root) END EDIT (root)
Jun 14 20:36:01 server crond[1395]: (root) RELOAD (/var/spool/cron/root)
Jun 14 20:37:01 server crontab[3199]: (root) BEGIN EDIT (root)
Jun 14 20:37:15 server crontab[3199]: (root) REPLACE (root)
Jun 14 20:37:15 server crontab[3199]: (root) END EDIT (root)
Jun 14 20:38:01 server crond[1395]: (root) RELOAD (/var/spool/cron/root)
Jun 14 20:40:01 server CROND[3231]: (root) CMD (/usr/lib64/sa/sal 1 1)
Jun 14 20:46:01 server CROND[3296]: (root) CMD (bash /root/backup.sh)
# destination server
 [root@client backupdestination]# ll
total 4
 rw-r--r-. 1 root root 136 Jun 14 20:01 cal.txt
                                                              0 Jun 14 20:01 test10.txt
 rw-r--r--. 1 root root
 rw-r--r--. 1 root root
                                                              0 Jun 14 20:01 test11.txt
 rw-r--r--. 1 root root
                                                              0 Jun 14 20:01 test12.txt
                                                              0 Jun 14 20:01 test13.txt
 rw-r--r--. 1 root root
 rw-r--r-. 1 root root
                                                              0 Jun 14 20:01 test14.txt
                                                              0 Jun 14 20:01 test15.txt
 rw-r--r--. 1 root root
                                                              0 Jun 14 20:01 test16.txt
 rw-r--r--. 1 root root
                                                              0 Jun 14 20:01 test17.txt
 rw-r--r--. 1 root root
                                                              0 Jun 14 20:01 test18.txt
 rw-r--r--. 1 root root
 rw-r--r--. 1 root root
                                                              0 Jun 14 20:01 test19.txt
```

0 Jun 14 20:01 test1.txt

0 Jun 14 20:01 test3.txt

0 Jun 14 20:01 test4.txt

0 Jun 14 20:01 test20.txt
0 Jun 14 20:01 test2.txt

rw-r--r--. 1 root root

rw-r--r--. 1 root root

rw-r--r--. 1 root root

rw-r--r--. 1 root root rw-r--r--. 1 root root

```
[root@server backupsource]# crontab -e
crontab: installing new crontab
[root@server backupsource]# 

**** * * backupsource] **

*** * * bash /root/backup.sh
```