Servidores Web de Altas Prestaciones

Practise 2

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<u>1-2</u>. Our first goal is to connect the two machines with each other. So we clone the /var/www/ folder from machine1 to machine2 (clone):

```
receiving incremental file list
rsync: failed to set times on "/var/www/.": Operation not permitted (1)
sent 15 bytes received 169 bytes 122.67 bytes/sec
total size is 6972 speedup is 37.89
rsync error: some files/attrs were not transferred (see previous errors) (code 2
3) at main.c(1536) [generator=3.0.9]
katsikeros@katsikeros:~$ sudo rsync -avz -e ssh katsikeros@192.168.56.102:/var/w
ww/ /var/www/
[sudo] password for katsikeros:
katsikeros@katsikeros:~$ sudo su
[sudo] password for katsikeros:
root@katsikeros:/home/katsikeros# rsync -auz -e ssh katsikeros@192.168.56.102:/u
ar/www/ /var/www/
The authenticity of host '192.168.56.102 (192.168.56.102)' can't be established. ECDSA key fingerprint is a5:bb:ba:7f:b3:80:85:dd:30:db:c7:01:70:83:af:a4.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '192.168.56.102' (ECDSA) to the list of known hosts.
katsikeros@192.168.56.102's password:
Permission denied, please try again.
katsikeros@192.168.56.102's password:
receiving incremental file list
koto/
sent 21 bytes received 175 bytes 8.71 bytes/sec
total size is 6972 speedup is 35.57
root@katsikeros:/home/katsikeros#
```

As we see it works perfectly.

<u>3.</u> Our next goal is to do this connection without having to give a password. To do that we use the RSA encryption key. To do this we do the following commands:

```
root@katsikeros:/home/katsikeros# ssh-keygen -t rsa -b 2048
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
/root/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
1e:fc:69:f1:2d:34:dc:f6:c3:bc:f1:3f:3e:77:9a:b9 root@katsikeros
The key's randomart image is:
  -[ RŠA 2048]-
         S . + o
         . 0 = +0.
          . + o .=.I
               . =BI
                E=0 I
root@katsikeros:/home/katsikeros#
to make sure we haven't added extra keys that you weren't expecting.
root@katsikeros:/home/katsikeros# ssh katsikeros@192.168.56.102
katsikeros@192.168.56.102's password:
root@katsikeros:/home/katsikeros# cat ~/.ssh/id_rsa.pub | ssh katsikeros@192.168
.56.102 'cat >> ~/.ssh/authorized_keys'
katsikeros0192.168.56.102's password:
root@katsikeros:/home/katsikeros# ssh katsikeros@192.168.56.102
Welcome to Ubuntu 12.04.5 LTS (GNU/Linux 3.2.0-29-generic-pae i686)
 * Documentation: https://help.ubuntu.com/
  System information as of Tue Apr 4 20:34:38 CEST 2017
  System load: 0.01
                                     Processes:
                 17.8% of 6.71GB
  Usage of /:
                                    Users logged in:
  Memory usage: 6%
                                     IP address for eth0: 192.168.56.102
  Swap usage:
  Graph this data and manage this system at:
    https://landscape.canonical.com/
New release '14.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.
Last login: Tue Apr 4 20:20:37 2017 from 192.168.56.101
katsikeros@katsikeros:~$
```

As we see after we send the key to the "server" we can use ssh to login without being asked for password.

4. Our next goal is to remotely schedule a task that will copy the var/www/ folder every hour with crontab. We do this with the following commands:

First we connect to machine without password. Then we do "nano /etc/crontab" and we modify like this:

```
GNU nano 2.2.6
                                    File: /etc/crontab
                                                                                          Modified
  /etc/crontab: system-wide crontab
# Unlike any other crontab you don't have to run the `crontab'
# command to install the new version when you edit this file
# and files in /etc/cron.d. These files also have username fields,
# that none of the other crontabs do.
SHELL=/bin/sh
PATH=/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin
# m h dom mon dow user command
17 ×
                              cd / && run-parts --report /etc/cron.hourly
                    root
25 6
                              test -x /usr/sbin/anacron | | ( cd / && run-parts --repo$
          * * *
                    root
                    root test -x /usr/sbin/anacron || ( cd / && run-parts --repo$ root test -x /usr/sbin/anacron || ( cd / && run-parts --repo$ root rsync -avz -e ssh katsikeros@192.168.56.102:/var/www/ /var$
47 6
          * * 7
52 6
          1 * *
                To WriteOut TR Read File TY Prev Page TR Cut Text TC Cur Pos
To Justify Where Is V Next Page TU UnCut Text To Spell
^G Get Help
^X Exit
```

The rsync command will execute every hour.