7.2 Setting Up Hadoop - Generating RSA Keys

drhoffma   Oct 11   7d

I'm having trouble with the section of 7.2 Setting Up Hadoop where the article instructs the reader to generate RSA keys and then ssh into localhost. I've tried it twice and I've also tried closing and opening the terminal. Both times SSH was not able to connect on localhost with the keys.

```
drhoffma@drhoffma-ThinkPad-T500:~/services/hadoop$ ssh-keygen -t dsa -P '' -f ~/.ssh/id_dsa
Generating public/private dsa key pair.
/home/drhoffma/.ssh/id_dsa already exists.
Overwrite (y/n)? y
Your identification has been saved in /home/drhoffma/.ssh/id_dsa.
Your public key has been saved in /home/drhoffma/.ssh/id_dsa.pub.
The key fingerprint is:
----------KEY REMOVED BY ME SINCE I'M POSTING THIS------------
drhoffma@drhoffma-ThinkPad-T500
The key's randomart image is:
+---[DSA 1024]----+
| o+=*=o          |
| ooo+oo.  .      |
|.  +. o+ +       |
|  o..+..= .      |
|.+ +=o.oS        |
|=o*+ .E          |
|Bo*.o            |
|==oo             |
|o+               |
+----[SHA256]-----+
drhoffma@drhoffma-ThinkPad-T500:~/services/hadoop$ cat ~/.ssh/id_dsa.pub >> ~/.ssh/authorized_keys
drhoffma@drhoffma-ThinkPad-T500:~/services/hadoop$ ssh localhost
ssh: connect to host localhost port 22: Connection refused
```

3d ago

Adrian   7d
Chief PyImageSearcher

You might not have the SSH server installed on your system. The server is different from the client. Executing the following command will install and start your SSH server every time your system starts:

```
$ sudo apt-get install openssh-server
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You can read more about the process here:

http://www.htpcbeginner.com/install-ssh-server-on-ubuntu-1204/

But I'm pretty confident that you don't have the SSH server running.

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Adrian, thanks. That's correct, I didn't have it installed. I installed it, added the key, but it still asked for a password. So I restarted the server (sudo service ssh restart), and it still asked for a password. Do you have any more suggestions?

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I would verify that you can login to your own machine via SSH first:

```
$ ssh drhoffma@localhost
```

This should prompt you for a password since you don't have password-less access setup. Enter your password and ensure you can login.

From there, delete your previous keys and try again. If that *still* doesn't resolve the issue then we'll have to do some research.

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I found this guide: http://linoxide.com/ubuntu-how-to/setup-passwordless-ssh-logon-ubuntu-14-04/

And edited `/etc/ssh/sshd.config` as instructed. I changed a line:

```
PermitRootLogin without-password
```
changed above line from "prohibit-password"

I then stopped and started the ssh server and tried again with no luck.

Does anyone who has this set up mind checking their `/etc/ssh/sshd.config`

In the below terminal output, I didn't remove my keys...hopefully nobody can figure out my ip 😁

```
drhoffma@drhoffma-ThinkPad-T500:~$ ssh localhost
drhoffma@localhost's password:
Welcome to Ubuntu 16.04.1 LTS (GNU/Linux 4.4.0-38-generic x86_64)
* Documentation: https://help.ubuntu.com
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* Support: https://ubuntu.com/advantage
13 packages can be updated.
8 updates are security updates.
Last login: Tue Oct 11 11:21:01 2016 from 127.0.0.1
drhoffma@drhoffma-ThinkPad-T500:~$ exit
logout
Connection to localhost closed.
drhoffma@drhoffma-ThinkPad-T500:~$ vim ~/.ssh/authorized_keys
```

^ in the above text editor I removed contents of the file.

```
drhoffma@drhoffma-ThinkPad-T500:~$ ls ~/.ssh/
authorized_keys id_dsa id_dsa.pub known_hosts
drhoffma@drhoffma-ThinkPad-T500:~$ rm ~/.ssh/id_dsa ~/.ssh/id_dsa.pub
rhoffma@drhoffma-ThinkPad-T500:~$ cd ~/.ssh
drhoffma@drhoffma-ThinkPad-T500:~/.ssh$ ls -al
total 12
drwx------ 2 drhoffma drhoffma 4096 Oct 12 11:04 .
drwxr-xr-x 27 drhoffma drhoffma 4096 Oct 12 09:55 ..
-rw-rw-r-- 1 drhoffma drhoffma 0 Oct 12 11:03 authorized_keys
-rw-r--r-- 1 drhoffma drhoffma 444 Oct 11 11:20 known_hosts
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Generating public/private dsa key pair.
Your identification has been saved in /home/drhoffma/.ssh/id_dsa.
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SHA256:E8aJJAtW85ef3oATi+oSLa6BGqbYTeABAjntO4j8LvE drhoffma@drhoffma-ThinkPad-T500
The key's randomart image is:
+---[DSA 1024]----+
|.oo.+ . |
|+... * o o |
|oo . o O |
|... + * . |
|o.oo . S + |
|++=o.. + o |
|+o=+o . . |
```

```
|==oE |
|=.+oo |
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AAAAB3NzaC1kc3MAAACBAOutVC+R8hJHf6BFFbEF1llF9IM14C+P6vZN1KdQQrsuzaSk7I9s7TZtfaIlGStbNCxTCNhyEngjNOBwv0+
wZR3higUH3h/it7XvwCUcFZLyBKRpjUsju7m3LYP/Smwtt+kTt8MwvDb/v2URxxiePVKjHpsdAQuH9ytp9eNHT0tbAAAAFQDadHM3hE
4aENTxGVw7UVQOgqU1VwAAAIEAtNinOPdzUMxszXr0SAIkx6wfV4LznWa1FlTvKNfMkg/izbU7O3qbCNIqseYW+bm27uH/+wY3elo2P
ok3zV6T/pLcIwry7tYE0un7mng+WeDcx3pwafN2ZLu8PNalivRmTEzjl53h97Fc0Y079bOS9sU20AmNgFss35h5/oej1C8AAACBAJtf
Wpp3pmlwPYIuH40ff/MC5sPnixxN9+BRDPJl9jGgPn32eKlkfqzD8BV1JnKlKwYtlMgcEQQXkmHhV9KFmpD/h46TE+6TitfT6/SDcwf
JcQU5Mr9CIJd+txWdGh6n6fACi8pDBAtDmvNN/36epVLH5URECcV7pBY8yOo5iaLCm drhoffma@drhoffma-ThinkPad-T500
drhoffma@drhoffma-ThinkPad-T500:~/.ssh$ sudo service ssh stop
drhoffma@drhoffma-ThinkPad-T500:~/.ssh$ sudo vim /etc/ssh/sshd_config
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Man, that is really strange. A few suggestions:

1. Try to replicate the issue on the Gurus VM and compare keys/steps.
2. Post on the Ubuntu Forums regarding the issue as well.

Nothing is standing out as being obvious to me, but at the same time I'll be the first to admit that this isn't my area of expertise. The
PermitRootLogin shouldn't matter. This should literally be just a keys issue.

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Thanks Adrian. It's a little bit frustrating. But I'll proceed through the rest of lesson with the VM.

1. I'm downloading the VM now on a slow coffee shop connection (on a different laptop then typical since mine is out to Lenovo for repair).
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|.   +. o+ +       |
|  o..+..= .       |
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|==oo             |
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```

wZR3higUH3h/it7XvwCUcFZLyBKRpjUsju7m3LYP/Smwtt+kTt8MwvDb/v2URxxiePVKjHpsdAQuH9ytp9eNHT0tbAAAAFQDadHM3hE
4aENTxGVw7UVQOgqU1VwAAAIEAtNinOPdzUMxszXr0SAIkx6wfV4LznWa1FlTvKNfMkg/izbU7O3qbCNIqseYW+bm27uH/+wY3elo2P
ok3zV6T/pLcIwry7tYE0un7mng+WeDcx3pwafN2ZLu8PNalivRmTEzjl53h97Fc0Y079bOS9sU20AmNgFss35h5/oej1C8AAACBAJtf
Wpp3pmlwPYIuH40ff/MC5sPnixxN9+BRDPJl9jGgPn32eKlkfqzD8BV1JnKlKwYtlMgcEQQXkmHhV9KFmpD/h46TE+6TitfT6/SDcwf
JcQU5Mr9CIJd+txWdGh6n6fACi8pDBAtDmvNN/36epVLH5UREcV7pBY8yOo5iaLCm drhoffma@drhoffma-ThinkPad-T500
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