Login with SSO                    **FAQ**

**Forum**    Activity Page    Please read before SSO login

Advanced Search

Quick Links     Forum Community     Ubuntu Community     Other Support     Social Media     Useful Links

🏠  Forum      The Ubuntu Forum Community      Other Discussion and Support      Tutorials

HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

**Thread:** **HowTo: Use Grsync and OpenSSH to sync your /home directory over a network**

Like   Be the first of your friends to like this.

Thread Tools      Display

May 15th, 2008                                                                #1

**50words**  👤

**Frothy Coffee!**

🫘 🫘 🫘 🫘 🫘

**Join Date:**
Feb 2007

**Location:**
Minneapolis, MN

**Beans:**
191

**Distro:**
Ubuntu 7.10 Gutsy Gibbon

### HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

This tutorial will cover three things:

1) installing rsync, the Grsync GUI for rsync, and OpenSSH;
2) using rsync over an OpenSSH connection to syncronize your /home directory between two computers; and
3) excluding files you do not want to sync.

Reason: I use a desktop and a laptop. I want to keep my /home directory on both identical, since I use the same software, etc., on both. OpenSSH provides a secure connection if you are syncing remotely over the internet, and is a really easy way to connect to another computer on your network.

1) Installing rsync, Grsync, and OpenSSH

This is a piece of cake. Copy each of the following lines into the terminal:

Code:
```
sudo apt-get install grsync
sudo apt-get install openssh-server
```

2) Now, open up Grsync, which will be in Applications > Internet in Ubuntu, or you can hit Alt+F2 to bring up the run menu and type "grsync".

Click the +Add button and name your new session something like "50words /home" so you can easily get to it again.

In the Source and Destination fields, enter the source--the computer you are going to sync from--in the first field. In my case:

Code:
```
/home/50words/
```

Note: you must add the trailing slash if you want to copy the contents of a directory.

In the destination field--the second field--enter the computer you are going to sync to. You have to do this using the computer's IP address. (If you don't know it, use the ifconfig command in a terminal. Or use System > Administration > Network Tools, and select the Network Device to see your IP Address next in the IPv4 row, if you are using Ubuntu.)

Enter it like so:

Code:
```
192.168.0.10:/home/50words/
```

Now, in order to get SSH to work, you have to click on the Advanced Options tab in Grsync and enter the following in the Additional options field:

Code:
```
-e ssh
```

I also check "Copy symlinks as symlinks", because I want the /home directories to be identical, right down to the links in them.

3) Now, there are almost certainly some files you do not want to sync. For example, it is time-consuming to sync my Firefox cache, so I don't do it; I have a fast internet connection, so it does not really matter to me if it is synced up.

It takes a lot of text to exclude multiple files and folders using the command line. It is easier to use a separate file to identify the files and folders to exclude.

First, in the Additional options field, enter "--exclude" and the text file name in which you will list your files or directories to exclude. For example, here is my path to my exclusion file:

Code:
```
--exclude-from=/home/50words/rsync-exclude.txt
```

In that text file, just identify the files or directories you want excluded. Wildcards work. Remember that rsync will navigate relative to the directory in which it starts (the directory you identified as the source directory). Here is an example of the contents of an exclusion file:

Code:
```
/home/50words/.mozilla/firefox/*/Cache
/home/50words/.beagle
```

So there you go. Before you sync for real, use the "Simulation" button to make sure you don't get any errors, and take a look at the output to make sure you aren't accidentally deleting everything.

Edit: If you want to do a two-way sync, instead of a one-way sync, give Unison a try. It works just as well over SSH, and does a fantastic job of two-way syncing.

*Last edited by 50words; October 10th, 2008 at 04:24 PM.*

Adv Reply

---

July 16th, 2008                            #2

### henriquemaia

**Grande Half-n-Half Cinnamon Ubuntu**

**Join Date:**
Apr 2005

**Location:**
Sintra, Portugal

**Beans:**
835

#### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

Thanks for this post. In my case I use Grsync to make backups over the netword and I don't have to put the -e ssh to achieve that. Also, I'm trying to make an exclusion list, but Grsync is always insisting in copying the folder I specified. I'm still trying to figure out why.
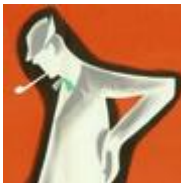
Anyway, thanks for this howto. Very useful.

*Last edited by henriquemaia; July 16th, 2008 at 04:57 PM.*

Adv Reply

---

July 16th, 2008                            #3

### henriquemaia

**Grande Half-n-Half Cinnamon Ubuntu**

**Join Date:**
Apr 2005

**Location:**
Sintra, Portugal

**Beans:**
835

#### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

> 🔖 Originally Posted by **henriquemaia** 🔲
>
> *[...] Also, I'm trying to make an exclusion list, but Grsync is always insisting in copying the folder I specified. I'm still trying to figure out why.*
> *hanks for this post. In my case I use Grsync to make backups over the netword and I don't have to put the -e ssh to achieve that.*
> *Anyway, thanks for this howto. Very useful.*

I figured out why and thanks to you (my fault in understanding, really). The answer is here:

> *Remember that rsync will navigate relative to the directory in which it starts (the directory you identified as the source directory).*

So what I was doing wrong was that I wrote the absolute path to the folders I wanted to exclude from the backup. Anyway, it doesn't make much sense to me that rsync can't understand an absolute path, but I'm happy that it works now.

Thanks for all your help (it was all already there 😃).

Adv Reply

---

July 30th, 2008                                                                                                    #4

**Marelo** 👤
**First Cup of Ubuntu**

🟤 🟤 🟤 🟤 🟤

**Join Date:**
Jul 2008
**Beans:**
1

### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

I followed your instructions, but I'm getting these erros:

luiz@aganp:~$ rsync -r -t -v --progress -e ssh /home/luiz/Música/ 10.1.133.161:/home/marelo/Músicas/
ssh: connect to host 10.1.133.161 port 22: Connection refused
rsync: connection unexpectedly closed (0 bytes received so far) [sender]
rsync error: unexplained error (code 255) at io.c(454) [sender=2.6.9]

Both computers are on the same network and I've shared the "Músicas" folders at the 10.1.133.161 computer with all the permissions granted...

What could be the problem?...
Thanks!

Adv Reply

---

July 30th, 2008                                                                                                    #5

**50words** 👤
**Frothy Coffee!**

🟤 🟤 🟤 🟤 🟤

**Join Date:**
Feb 2007
**Location:**
Minneapolis, MN
**Beans:**
191
**Distro:**
Ubuntu 7.10 Gutsy Gibbon

### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

I am not all that sophisticated at troubleshooting networking issues, but it looks like you may have a network problem to solve, first.

consumer rights attorney | Caveat Emptor | Lawyerist

Adv Reply

---

August 1st, 2008                                                                                                    #6

## RurouniAkira 👤

**First Cup of Ubuntu**

🫘 🫘 🫘 🫘 🫘

**Join Date:**
Jul 2008

**Beans:**
3

---

### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

> 🗨 Originally Posted by **Marelo** 🔳
>
> *I followed your instructions, but I'm getting these erros:*
>
> *luiz@aganp:~$ rsync -r -t -v --progress -e ssh /home/luiz/Música/*
> *10.1.133.161:/home/marelo/Músicas/*
> *ssh: connect to host 10.1.133.161 port 22: Connection refused*
> *rsync: connection unexpectedly closed (0 bytes received so far) [sender]*
> *rsync error: unexplained error (code 255) at io.c(454) [sender=2.6.9]*
>
> *Both computers are on the same network and I've shared the "Músicas" folders at the 10.1.133.161 computer with all the permissions granted...*
>
> *What could be the problem?...*
> *Thanks!*

Seems that the 10.1.133.161 computer might not have SSH installed... try to ssh on to it without rsync !

Adv Reply |

---

August 21st, 2008                                                                                    #7

## arrghhh 👤
**Ubuntu Cappuccino Scuro**

🥤 🍺 🍺 🍺

**Join Date:**
Jun 2007

**Beans:**
1,941

---

### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

Marelo, can you ping 10.1.133.161? if yes, then that is a good sign. now you have to ensure there's nothing blocking ssh (ie firewall or router if it's going across the 'net)

Adv Reply |

---

October 10th, 2008                                                                                   #8

## Skarpen 👤
**First Cup of Ubuntu**

🫘 🫘 🫘 🫘 🫘

**Join Date:**
Oct 2008

**Beans:**
2

---

### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

I'm pretty new to linux, would ssh also work over the internet and not only on the intranet?

**Adv Reply**

---

October 10th, 2008      **#9**

## 50words

**Frothy Coffee!**

**Join Date:**
Feb 2007

**Location:**
Minneapolis, MN

**Beans:**
191

**Distro:**
Ubuntu 7.10 Gutsy Gibbon

### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

> Originally Posted by **Skarpen**
> *I'm pretty new to linux, would ssh also work over the internet and not only on the intranet?*

Yup. SSH is at its best over the internet. The internet is just one giant network.

consumer rights attorney | Caveat Emptor | Lawyerist

**Adv Reply**

---

October 13th, 2008      **#10**

## Skarpen
**First Cup of Ubuntu**

**Join Date:**
Oct 2008

**Beans:**
2

### Re: HowTo: Use Grsync and OpenSSH to sync your /home directory over a network

Thank you!

**Adv Reply**

---

Page 1 of 2   1   2   ▶   Last ▶▶

Quick Navigation    Tutorials   Top

« Previous Thread | Next Thread »

## Tags for this Thread

how to, rsync, ssh
View Tag Cloud

## Bookmarks

Digg

del.icio.us

StumbleUpon

Google

## Posting Permissions

You may not post new threads
You may not post replies
You may not post attachments
You may not edit your posts

**BB code** is On
**Smilies** are On
**[IMG]** code is On
**[VIDEO]** code is Off
HTML code is Off

**Ubuntu Forums Code
of Conduct**

-- Ubuntu vB4.x ▼

Ubuntu Forums  Archive  Top

All times are GMT +1. The time now is 07:09 AM.