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Mount remote Linux SSHFS Filesystem harddisk on Windows Explorer SWISH SSHFS file mounter and a short evaluation on what is available to copy files to SSHFS from Windows PC

Author: admin



I'm forced to use Windows on my workbook and I found it really irritating, that I can't easily share files in a *DropBox*, *Google Drive*, *MS OneDrive*, *Amazon Storage* or other cloud-storage free remote service. etc.

I don't want to use DropBox like non self-hosted Data storage because I want to keep my data private and therefore the only and best option for me was to **make possible share my Linux harddisk storage dir remotely to the Windows notebook.**

I didn't wanted to setup some complex environment such as *Samba Share Server* (which used to be often a common option to share file from Linux server to Windows), neither wanted to bother with installing FTP service and bother with FTP clients, or configuring some other complex stuff such as WebDav - which BTW is an accepted and heavily used solution across corporate clients to access read/write files on a remote Linux servers.

Hence, I made a quick research what else besides could be used to easily share files and data from Windows PC / notebook to a home brew or professional hosting Linux server.

It turned out, there are few of softwares that gives a similar possibility for a home lan small network Linux / Windows hybrid network users such, here is few of the many:

• SyncThing - Syncthing is an open-source file synchronization client/server application, written in Go, implementing its own, equally free Block Exchange Protocol. The source code's content-management repository is hosted on GitHub



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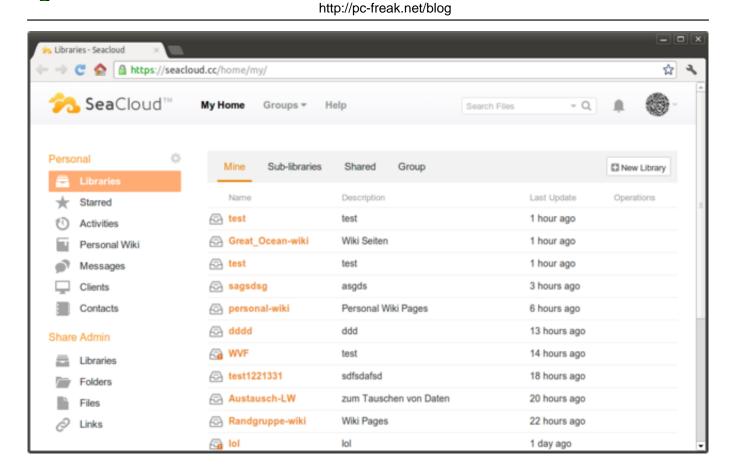
• <u>OwnCloud</u> - ownCloud provides universal access to your files via the web, your computer or your mobile devices



• <u>Seafile</u> - Seafile is a file hosting software system. Files are stored on a central server and can be synchronized with personal computers and mobile devices via the Seafile client. Files can also be accessed via the server's web interface



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I've checked all of them and give a quick try of *Syncthing* which is really easy to start, just download the binary launch it and configure it under https://Localhost:8385 URL from a browser on the Linux server.

Syncthing seemed to be nice and easy to configure solution to be able to Sync files between Server A (Windows) and Server B(Linux) and guess many would enjoy it, if you want to give it a try you can follow this short install syncthing article.

However what I didsliked in both SyncThing and OwnCloud and Seafile and all of the other Sync file solutions was, they only supported synchronization via web and didn't seemed to have a Windows Explorer integration *and did required*

the server to run more services, posing another security hole in the system as such third party softwares are not easily to update and maintain.

Because of that finally after rethinking about some other ways to copy files to a locally mounted Sync directory from the Linux server, I've decided to give SSHFS a try. Mounting SSHFS between two Linux / UNIX hosts is

quite easy task with SSHFS tool

In Windows however the only way I know to transfer files to Linux via SSHFS was with WinSCP client and other SCP clients as well as the experimental:



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- Windows SSHFS Manager
- WinSshFS FiSSH edition
- <u>SFTPNetdriveFree</u>

As well as few others such as ExpandDrive, Netdrive, Dokan SSHFS (mirrored for download here) I should say that I first decided to try copying few dozen of Gigabyte movies, text, books etc. using WinSCP direct connection, but after getting a couple of timeouts I was tired of WinSCP and decided to look for better way to copy to remote Linux SSHFS.

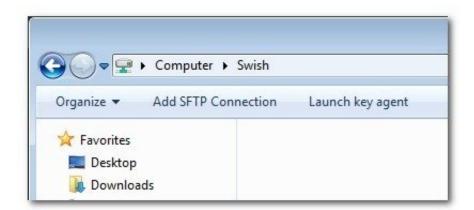
However the best solution I found after a bit of extensive turned to be:

SWISH - Easy SFTP for Windows

<u>Swish</u> is very straight forward to configure compared to all of them you download the .exe which as of time of writting is at version 0.8.0 install on the PC and right in **My Computer** you will get a New Device called Swish next to your local and remote drives C:/D:/, USBs etc.



As you see in below screenshot two new non-standard buttons will Appear in Windows Explorer that lets you configure **SWISH**



Next and final step before you have the SSHFS remote Linux filesystem visible on Windows Xp / 7 / 8 /



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10 is to fill in remote Linux hostname address (or even better fill in IP to get rid of possible DNS issues), UserName (UserID) and Direcory to mount.



Then you will see the SSHFS moutned:

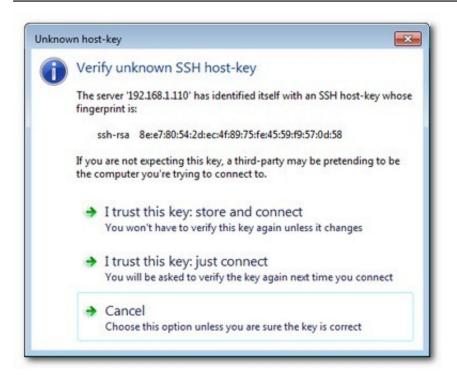


You will be asked to accept the SSH host-key as it used to be unknown so far

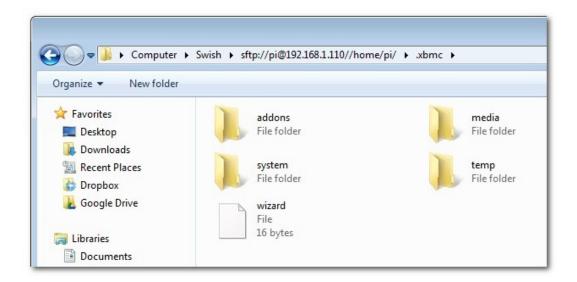


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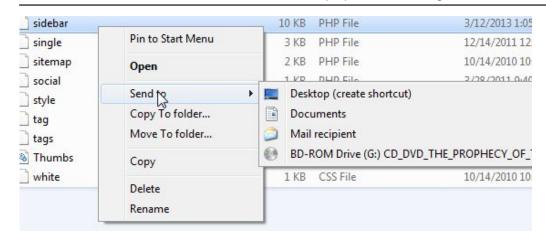
That's it now you will see straight into Windows Explorer the remote Linux SSHFS mounted:



Once setupped a Swish connection to copy files directly to it you can use the **Send to Embedded Windows dialog**, as in below screenshot



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The only 3 problem with SWISH are:

1. It doesn't support Save password, so on every Windows PC reboot when you want to connect to remote Linux SSHFS, you will have to retype remote login user pass.

Fron security stand point this is not such a bad thing, but it is a bit irritating to everytime type the password without an option to save permanently.

The good thing here is you can use Launch Key Agent as visible in above screenshot and set in Putty Key Agent your remote host SSH key so the passwordless login will work without any authentication at all however, this might open a security hole if your Win PC gets infected by virus, which might delete something on remote mounted SSHFS filesystem so I personally prefer to retype password on every boot.

2. it is a bit slow so if you're planning to Transfer large amounts of Data as hundreds of megabytes, expect a very slow transfer rate, even in a Local 10Mbit Network to transfer 20 - 30 GB of data, it took me about 2-3 hours or so.

SWISH is not actively supported and it doesn't have new release since 20th of June 2013, but for the general work I need it is just perfect, as I don't tent to be Synchronizing Dozens of Gigabytes all the time between my notebook PC and the Linux server.

3. If you don't use the established mounted connection for a while or your computer goes to sleep mode after recovering your connection to remote Linux HDD if opened in Windows File Explorer will probably be dead and you will have to re-enable it.

For Mac OS X users who want to mount / attach remote directory from a Linux partitions should look in fugu - A Mac OS X SFTP, SCP and SSH Frontend

I'll be glad to hear from people on other good ways to achieve same results as with SWISH but have a better copy speed while using SSHFS.