



SSHFS-Win is a minimal port of SSHFS to Windows. Under the hood it uses Cygwin for the POSIX environment and WinFsp for the FUSE functionality.

Installation

- Install the latest version of WinFsp.
- Install the latest version of SSHFS-Win. Choose the x64 or x86 installer according to your computer's architecture.

Basic Usage

Once you have installed WinFsp and SSHFS-Win you can map a network drive to a directory on an SSHFS host using Windows Explorer or the net use command.

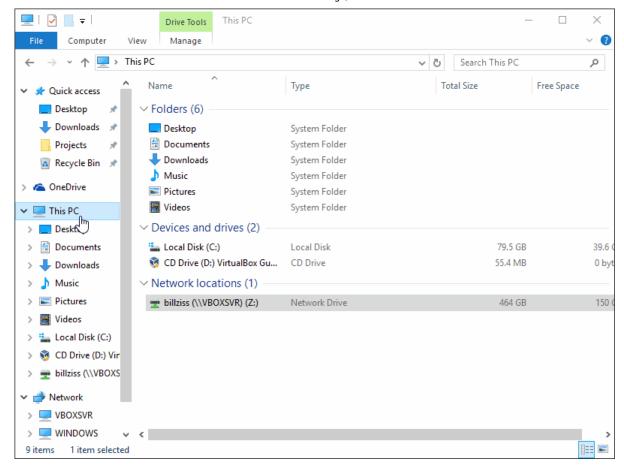
Windows Explorer

In Windows Explorer select This PC > Map Network Drive and enter the desired drive letter and SSHFS path using the following UNC syntax:

\\sshfs\REMUSER@HOST[\PATH]

The first time you map a particular SSHFS path you will be prompted for the SSHFS username and password. You may choose to save these credentials with the Windows Credential Manager in which case you will not be prompted again.

In order to unmap the drive, right-click on the drive icon in Windows Explorer and select Disconnect.



Command Line

You can map a network drive from the command line using the net use command:

```
> net use X: \\sshfs\billziss@mac2018.local
The password is invalid for \\sshfs\billziss@mac2018.local.

Enter the user name for 'sshfs': billziss
Enter the password for sshfs:
The command completed successfully.
```

You can list your net use drives:

Finally you can unmap the drive as follows:

```
$ net use X: /delete
X: was deleted successfully.
```

UNC Syntax

The complete UNC syntax is as follows:

```
\\sshfs\[LOCUSER=]REMUSER@HOST[!PORT][\PATH]
\\sshfs.r\[LOCUSER=]REMUSER@HOST[!PORT][\PATH]
\\sshfs.k\[LOCUSER=]REMUSER@HOST[!PORT][\PATH]
\\sshfs.kr\[LOCUSER=]REMUSER@HOST[!PORT][\PATH]
```

- REMUSER is the remote user (i.e. the user on the SSHFS host whose credentials are being used for access).
- HOST is the SSHFS host.
- PORT is the remote port on the SSHFS host (optional; default is 22).
- PATH is the remote path. This is interpreted as follows:
 - The sshfs prefix maps to HOST:~REMUSER/PATH on the SSHFS host (i.e. relative to REMUSER 's home directory).
 - The sshfs.r prefix maps to HOST:/PATH on the SSHFS host (i.e. relative to the HOST 's root directory).
 - The sshfs.k prefix maps to HOST:~REMUSER/PATH and uses the ssh key in %USERPROFILE%/.ssh/id_rsa (where %USERPROFILE% is the home directory of the local Windows user).
 - The sshfs.kr prefix maps to HOST:/PATH and uses the ssh key in %USERPROFILE%/.ssh/id_rsa.
- LOCUSER is the local Windows user (optional; USERNAME or DOMAIN+USERNAME format).
 - Please note that this functionality is rarely necessary with latest versions of WinFsp.

GUI front ends

There are currently 2 GUI front ends for SSHFS-Win: SiriKali and SSHFS-Win-Manager.

SiriKali

SiriKali is a GUI front end for SSHFS-Win (and other file systems). Instructions on setting up SiriKali for SSHFS-Win can be found at this link. Please report problems with SiriKali in its issues page.

SiriKali supports:

- Password authentication.
- Public key authentication.
- Key Agents and KeePass 2.

SSHFS-Win-Manager

SSHFS-Win-Manager is a new GUI front end specifically for SSHFS-Win with a user-friendly and intuitive interface. SSHFS-Win-Manager integrates well with Windows and can be closed to the system tray. Please report problems with SSHFS-Win-Manager in its issues page.

SSHFS-Win-Manager supports:

- Password authentication.
- Public key authentication.

Advanced Usage

It is possible to use the sshfs-win.exe and sshfs.exe programs directly for advanced usage scenarios. Both programs can be found in the bin subdirectory of the SSHFS-Win installation (usually \Program Files\SSHFS-Win\bin).

The sshfs-win.exe program is useful to launch sshfs.exe from a cmd.exe prompt (sshfs-win cmd) or to launch sshfs.exe under the control of the WinFsp Launcher (sshfs-win svc). The sshfs-win.exe program SHOULD NOT be used from Cygwin. The sshfs-win.exe program has the following usage:

```
LOCUSER local user (DOMAIN+USERNAME)

REMUSER remote user

HOST remote host

PORT remote port

PATH remote path (relative to remote home or root)

X: mount drive

SSHFS_OPTIONS additional options to pass to SSHFS
```

The sshfs.exe program can be used with an existing Cygwin installation, but it requires prior installation of FUSE for Cygwin on that Cygwin installation. FUSE for Cygwin is included with WinFsp and can be installed on a Cygwin installation by executing the command:

```
$ sh "$(cat /proc/registry32/HKEY_LOCAL_MACHINE/SOFTWARE/WinFsp/InstallDir | tr -
d '\0')"/opt/cygfuse/install.sh
FUSE for Cygwin installed.
```

Project Organization

This is a simple project:

- sshfs is a submodule pointing to the original SSHFS project.
- sshfs-win.c is a simple wrapper around the sshfs program that is used to implement the "Map Network Drive" functionality.
- sshfs-win.wxs is a the Wix file that describes the SSHFS-Win installer.
- patches is a directory with a couple of simple patches over SSHFS.
- Makefile drives the overall process of building SSHFS-Win and packaging it into an MSI.

Building

In order to build SSHFS-Win you will need Cygwin and the following Cygwin packages:

- gcc-core
- git
- libglib2.0-devel
- make
- meson
- patch

You will also need:

• FUSE for Cygwin. It is included with WinFsp and can be installed on a Cygwin installation by executing the command:

```
$ sh "$(cat /proc/registry32/HKEY_LOCAL_MACHINE/SOFTWARE/WinFsp/InstallDir |
tr -d '\0')"/opt/cygfuse/install.sh
FUSE for Cygwin installed.
```

Wix toolset. This is a native Windows package that is used to build the SSHFS-Win MSI installer.

To build:

- Open a Cygwin prompt.
- Change directory to the sshfs-win repository.
- Issue make.
- The sshfs-win repository includes the upstream SSHFS project as a submodule; if you have not already done so, you must initialize it with <code>git submodule update --init sshfs</code>.

License

SSHFS-Win uses the same license as SSHFS, which is GPLv2+. It interfaces with WinFsp which is GPLv3 with a FLOSS exception.

It also packages the following components:

- Cygwin: LGPLv3
- GLib2: LGPLv2
- SSH: "all components are under a BSD licence, or a licence more free than that"

Releases 9



+ 8 releases

Packages

No packages published

Contributors 6











Languages

• **C** 69.5%

• Makefile 28.4%

• Shell 2.1%