SIF User guide

Aarhus Universitet, spring 2024

Contents

Registration on SIF for AU employees	3
Create a project	5
Accept project invitation	5
Manage a project	6
Getting started with SIF	6
Manage files/upload and download via Web	7
Use SIF as an external drive/WebDAVS	8
WebDAVS	9
WEBDAVS - Windows file management	9
WebDAVS - Mac OSX file management	13
WebDAVS - Linux file management	15
Secure file transfer via SFTP etc	16
FTP/FTPS/SFTP client WinSCP	17
SSH client PuTTY SFTP	17
Linux File Manager SFTP remote folders	17
SSHFS	18
Support, questions, and comments	18

Registration on SIF for AU employees

REGISTER AS A SIF USER

Employees and students at AU have to register on SIF with 2-factor authentication before they can access a project.

REGISTER WITH AN AU ACCOUNT

REGISTER

Go to https://sif.au.dk/ and click on 'Sign up to SIF using your AU account?' If you are already logged in to your AU account, the next step will happen automatically. Otherwise, you have to approve login via your Microsoft Authenticator app.



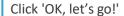
You have now been registered as a user on SIF.

2-FACTOR AUTHENTICATION

Due to the high level of security, SIF always uses *compulsory* 2-factor authentication.

2-factor authentication adds an extra control step to login: besides asking for something you know (username and password), it requires something you have (number key from an app).

The first time you login to SIF, you have to set up 2-factor authentication.





A guide will pop up in SIF, and you should follow this carefully.

STEP 1: DOWNLOAD APP

Open *Microsoft Authenticator*, the app AU uses for 2 factor authentication generally. If you have not downloaded it yet, you can find it in your app store.

Then click 'I've got it installed!' in SIF.



STEP 2. IMPORT PERSONAL 2-FACTOR CODE

Click 'Scan your personal QR code' or 'Enter your personal key code' in SIF. Here we are using 'Scan your personal QR code': Click 'QR code' in SIF.

2. Import Secret in Authenticator App

Open the chosen authenticator app and import your personal 2-factor secret in one of two ways:

- Scan your personal
 Type your personal
 key code
- The latter is usually more cumbersome but may be needed if your app or smart device doesn't s on QR code scanning, but otherwise you can manually enter it.

A QR code similar to the one you can see here will pop up.



Click 'Legitimationsoplysninger' at the bottom right corner of *Microsoft Authenticator*.



Now click 'Scan en QR-kode'



Scan the QR code in SIF: Aim your phone camera at the QR code (the app may need permission to use the camera), and the app will scan the code itself.

Then click 'Done importing' in SIF.



Your app can now generate 6-digit single-use access keys. You can find them on the front page of the *Microsoft Authenticator*, under Aarhus University. In our example, the code is '472 580'.



STEP 3. VERIFY THAT IT WORKS

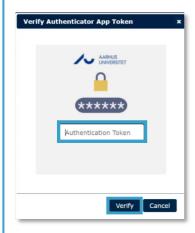
Now you need to test that your 2-factor authentication is correctly set up and that the app supplies the right tokens.

3. Verify the Authenticator App Setup

Please verify that your authenticator app displays correct no locking yoursen out once you enable 2-factor authentication!

SIF will display a pop-up window in which you have to enter the token displayed by the app (if the window does not pop up, click on 'verify'). NB: The token will change after 30 seconds.

Enter the token in SIF and click 'Verify'.



If the 2-factor authentication is successful, you will be taken to the next step.

If it is not successful, please contact your local IT support, and they'll help you.

STEP 4. ENABLE 2FACTOR AUTHENTICATION

Click 'Start Using SIF'

4. Enable 2-Factor Authentication

Now that you've followed the required steps to prepare and verify yo This ensures that your future SIF logins are security-enhanced with \imath

SECURITY NOTE: please immediately contact the SIF admins to rese someone may have gained access to it.

Start Using SIF

YOU ARE NOW REGIS-TERED

Congratulations! Now you are registered on SIF with 2-factor authentication.

You can now login via https://sif.au.dk/

Always click 'Log out' when you have finished working in SIF, so that no one can illicitly access your data.

HELP

You can find more guides at https://sif.au.dk/ and you can get personal help with 2 factor authentication at your local IT support centre.

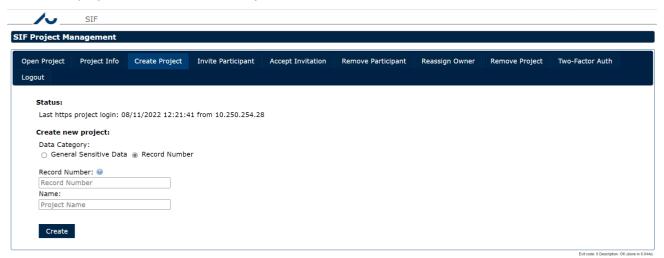
Create a project

When you open SIF, you will automatically be sent to project manager. You can manage and open your projects here. Using the menu on the left, you can open Files and Setup, which we will describe later.

NB. SIF isolates data strictly by project, so you need to carefully consider how to structure your data if you have more than one set.

If you are data controller or data processor in a research project, which treats GDPR data, and you wish to store said data in SIF, you must always first register you project in AUs Record (Register project to the record (au.dk)). When you have registered your project, you will receive a registration number from the Record, which you will need to enter in SIF when you create the project.

To create a project, select the 'Create Project' tab:



Now select a data category:

Record Number: Select this if your project contains personal data and therefore requires registration in AUs Record. You should also select this category if your data is to be transferred from you as a researcher at AU to your external collaboration partner, or vice versa. Read more about <u>Protection of personal data (GDPR)</u> (au.dk) and sharing and forwarding research data on AU net.

General Sensitive Data: Select this if your project does not require registration in the Record.

Click on Create. Remember that the in-house lawyers are automatically notified by SIF, so they can check the Record number and ensure that you are in compliance with any restrictions and have obtained the necessary permissions.

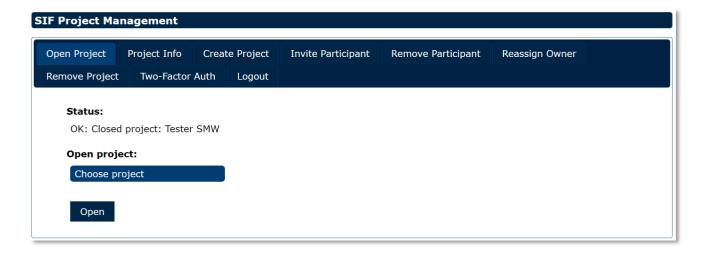
Accept project invitation

If you do not own data but collaborate with the formal owner on SIF, you will probably have received an invitation to participate in a project.

Open the 'Accept Invitation' tab, click Accept Project Invitation.

Now select the project from the drop-down menu and click Accept to get access.

Once you have access to work on a project, you can open it from the *Open project* tab by selecting the project in the fold-out menu and clicking Login. This will take you to the project's Files page.



Manage a project

SIF automatically integrates data-sharing at project level with a high level of transparency so that all participants in a SIF project automatically share all of the project's data folders.

Of course, this makes it important to consider structuring, especially when you set up your projects on SIF, but also if you invite other users to your project, because otherwise you cannot make sure that you only give them access to the data they need and have permission to use.

Getting started with SIF

Invite participants: Click on **Invite Participant** and select the project you want to work on. Note that you can only invite people who already have a SIF account. Select your project from the drop-down menu, click on **Registered Email of Existing User**, and enter your colleague's email address. Finally, click on **Invite**.

View information about SIF projects: Click on **Project Info** under Project Management, select which project you want to see information about, and click Info. The pop-up window will display the creation date, owner, and invitations, etc.

Remove a participant from a SIF project: If a user no longer needs access to the project data, as the project owner you will have to remove them. Click the **Remove Participant** tab and select your project in the drop-down menu **Project**. Select the participant you want to remove from the drop-down menu under **User** and click **Remove**.

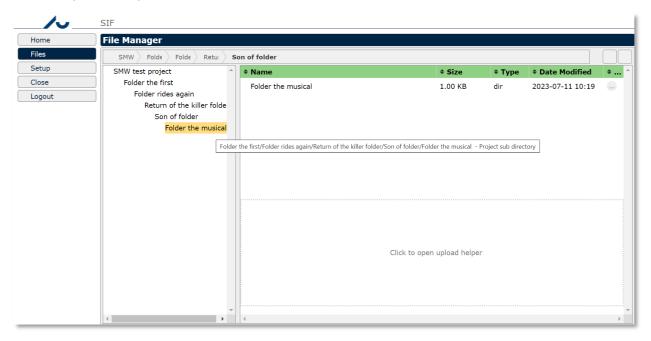
Get access to a SIF project: You have received an email from SIF stating that a project owner has invited you to participate in a project. Log in to SIF and click on the **Accept Invitation** tab. In the drop-down menu under **Accept project invitation**, select the project you are going to work on, and click **Accept**. This will take you to the **Open Project** tab, where you can select the project and start working on it.

Delete a document: Start by opening a project in SIF. Once you are in the project, right-click on what you want to delete and select **Delete** in the menu. A pop-up window will ask you whether you are completely sure, and here you can choose between **Move to Trash** and **Permanently Delete**. If you choose Move to Trash, SIF will create a trash folder and move the document there. Permanently Delete will delete the document completely.

Delete a project: Click **Remove Project** in project manager. Note that you can only delete the projects you own yourself. Click **Choose project** to select the project you want to delete and click **Remove**. A pop-up window will warn you that you cannot undo a deletion, and you must therefore confirm your choice by clicking **Remove**. Note that deletion may take a long time for big projects.

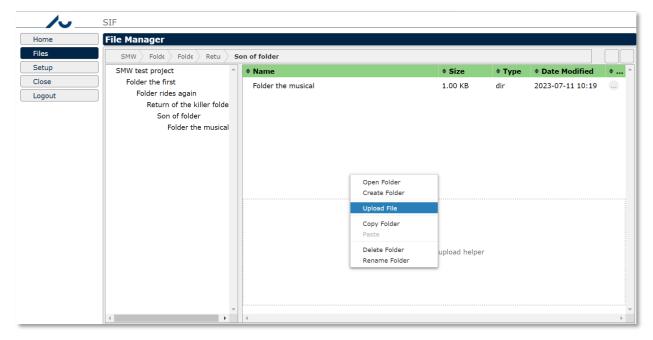
Manage files/upload and download via Web

The file manager is the main page for your SIF projects, where you manage and open your project data. The folder tree to the left gives you quick access to subfolders and the panel to the right displays the contents of the folder you have opened.

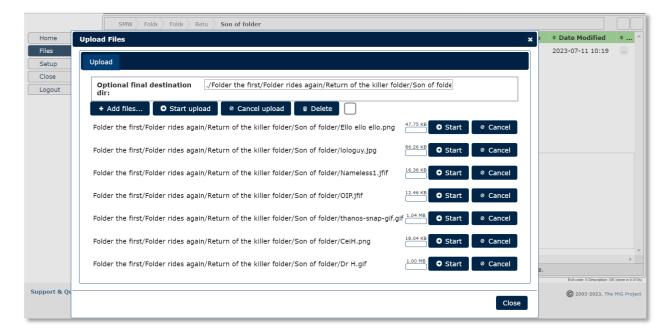


The bar just above the two panels shows the path to the folder you are in, with links to the overlying folders.

Right-click on a folder or a file for a menu with the most common actions. For files, actions include download and rename. Actions for folders include upload files. Right-click in the empty area at the bottom of the right-hand panel to see the folder's right-click menu.



Select **Upload Files** in the right-click menu or click the upload helper link at the bottom to open the upload window, where you can drag and drop files. You can also select files with **Add files...**



NB. The upload will not start automatically. When you have selected your files, you have to click **Start upload**.

Wait until upload is complete or click Cancel if you regret.

Finally, click **Close**, and the files will appear in your SIF folder.

Double-click on files to download them to your computer. NB: any changes you make in a file you have downloaded from SIF will *only* be saved locally. This means that you have to upload the file to SIF again when you have finished with it.

In the sections covering <u>WebDAVS</u> and <u>SFTP</u> we walk through some easy ways you can work directly on files in SIF without downloading and uploading.

Use SIF as an external drive/WebDAVS

Via **Setup** you can set up direct access from your machine to your SIF projects, which means you won't have to upload and download every time you need to work on a file. There are two available clients for this on SIF: SFTP and WebDAVS. Please note that in both cases, a logon will last for 24 hours, provided you log in from the same IP-address.

Please note that in order to use WebDAVS you will need to work quite a bit with your computer's settings. Therefore, we recommend using SFTP instead.



By using advanced access to SIF, you achieve more efficient, transparent and integrated file access. These make it possible to e.g. transfer many and large files more efficiently, and to map files and folders in your SIF projects into your computer, so you can work with the files as if they were stored locally.

Please note that SIF enforces strict project isolation here as well. You can **only** have one project open at a time. Therefore, if you have more than one SIF project, you have to configure efficient access for each of them separately.

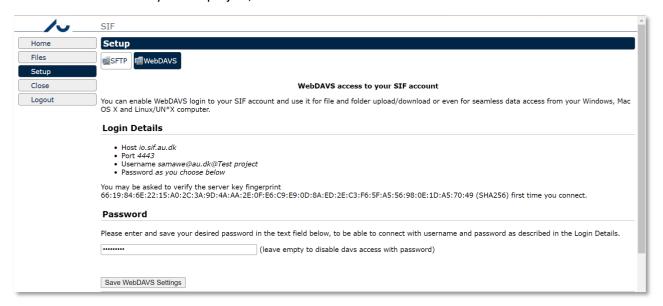
All the advanced accesses discussed here use a secure link to SIF. In other word, they are available if you are online, no matter where in the world you are working from. A VPN is *not* required to use them outside AU. On the other hand, access is further safeguarded through 2-factor authentication.

WebDAVS

WebDAV is a protocol to access remote storage, and it can be secured with TLS/SSL like websites. Here, we call the secured version WebDAVS. Newer versions of Microsoft Windows, Mac OSX and Linux integrate WebDAVS directly, so you can safely open content from remote storage without installing new programs.

Open the **WebDAVS** tab under your **Setup** page on SIF, choose a password for login and click **Save WebDAVS** Settings.

Note that your login details, including your automatic username, which is often a combination of your email and the name of your SIF project, will be shown here.



You need an URL to set up the access, and you can find it under **Login Details** next to **Host** and **Port**. In our example, the URL is https://io.sif.au.dk:4443 and the automatic username is samawe@au.dk@Test project.

WEBDAVS - Windows file management

When you have set up WebDAVS in SIF you have to set up your own machine for access.

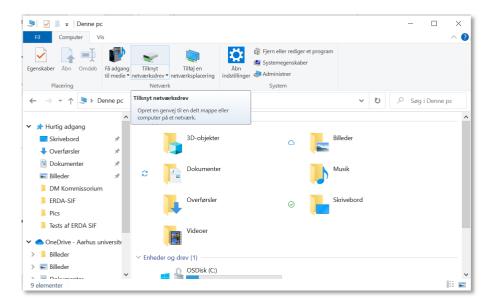
If you're using Windows, you can use the File Manager to open WebDAVS remote folders. Click **Computer** and **Map network drive** or **Add a network location**.

Please note that Windows 7 only shows the latter option if you click on the *Connect to a Web site...* link in the **Map network drive** guide. Windows 8 and newer versions have an independent button.

In our example, we use **Map network drive** in Windows 10 File Manager.

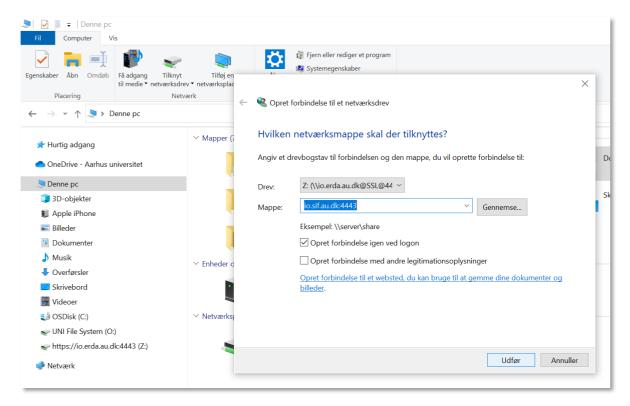
NB: Windows 7 was the first version to fully support WebDAVS. Older versions, such as Windows Vista, **may** work as shown here, but otherwise you can find the functionality in external WebDAVS help programs.

Click on **Map network drive** to start the wizard.



Select a suitable letter for your network drive (Z: in our example), copy paste the SIF server URL from the SIF **WebDAVS** tab and click **Finish**.

Please note that the process may fail if you do prefix the server URL with https://.



Windows Security will now ask you to connect to the WebDAVS remote folder.

Login using your automatic username and the password you selected in the **WebDAVS** tab.

Click OK to login and complete the guide.

You can now see you SIF contents in files under the drive name you selected.

While you are online, you can use these files like you do those on your device.

When you have finished working on the files, you can right-click on the network drive and select **Disconnect** to close the connection.

The next time you start your computer, you only need to open your shortcut to SIF to work on your files, but you still have to login to SIF web and get 2-factor authentication to access the drive.

You can also make the remote folder accessible as a network location by filling in the Folder field with the same server URL as above in the Add network location guide.

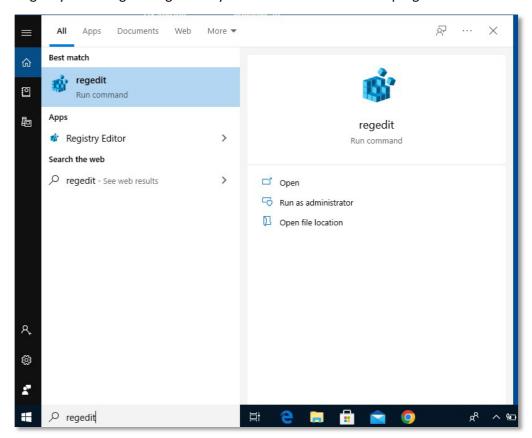
Adjust the size limit for Windows WebDAVS

In order to use WebDAVS effectively, you first have to work quite a bit with your PC's settings. As you may not have the necessary access to make these changes on an AU PC, we recommend using SFTP instead of WebDAVS.

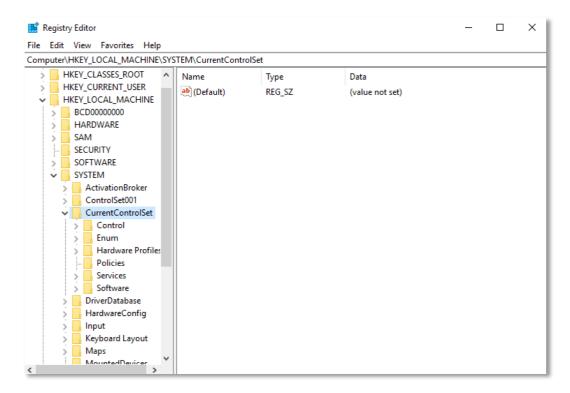
Since Microsoft has imposed a low limit for the size of the files you can download through WebDAVS, you will get an error message if you try to fetch files larger than circa 50MB and above.

You can increase the limit to 4GB through the **Registry Editor**.

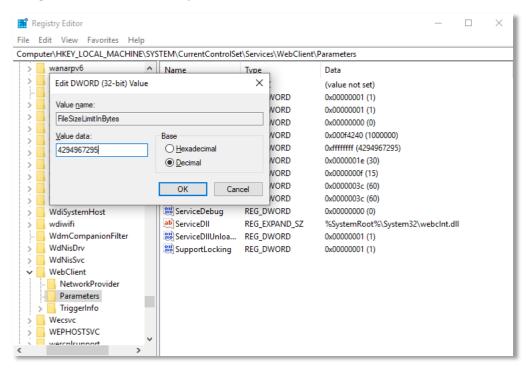
Begin by searching for Regedit on your PC and double-click the programme.



Select the HKEY_LOCAL_MACHINE folder, open SYSTEM, and open CurrentControlSet.



Open **Services**, then **Webclient** and **Parameters**. This will take you to **FilesizeLimitinBytes**, where you can change the value to, for example, 4294967295 in Decimal base.



You can now transfer files of up to 4GB.

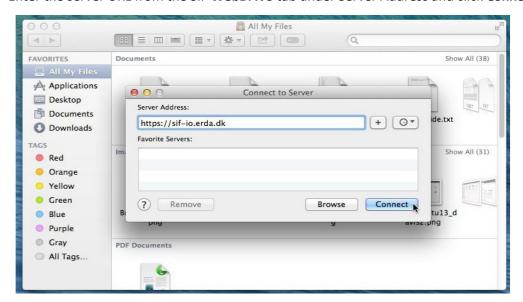
If you work with large amounts of data, or do not have administrator access to your PC, we recommend that you use SFTP instead of WebDAVS.

WebDAVS - Mac OSX file management

On Mac OSX, you can use Finder to open WebDAVS folders.

Select Connect to Server under Go.

Enter the server URL from the SIF WebDAVS tab under Server Address and click Connect.



You will be asked to login using your username and password. Here, we used the automatic username bardino@nbi.ku.dk@TestProject1, but your username will generally be a combination of your registered email and the name of your SIF project.



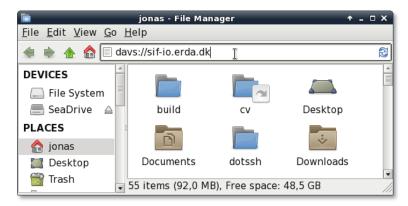
If your login is successful, you will see your SIF folder under your files.

WebDAVS - Linux file management

On most modern Linux distributions, you can open WebDAVS folders with the file manager, regardless of whether it is Nautilus, Konqueror, Dolphin, Thunar or a fifth. You usually click on **Go** and select **Open Location**.

Here, you enter the server URL from the SIF **WebDAVS** page (you may have to replace https with davs in the URL if it fails) and click **Connect**.

In our example, we've used XFCE with Thunar, so we had to use days as prefix instead of https.



Login with the username and password you selected on the **WebDAVS** tab. Your username will generally be a combination of your registered email and the name of your SIF project.



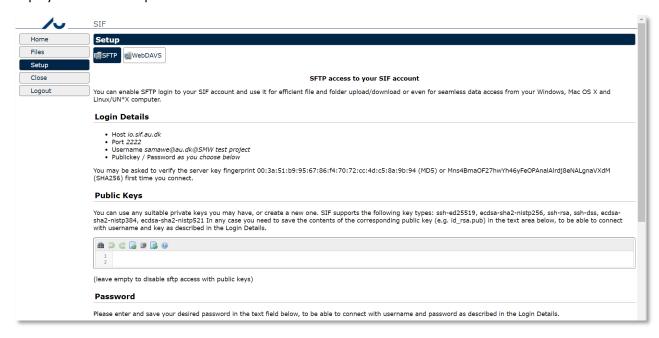
If you manage to login, you will see the remote content in your system.

NB: Nautilus/Thunar use the GNOME gvfs library, older versions of which had a known error. The error meant that file transfers of more than 1GB consistently froze. If you experience this problem, we recommend upgrading to a newer version of gvfs (e.g. 1.22.2) or using a different client.

Secure file transfer via SETP etc.

SFTP is a secure and efficient protocol for file transfers, a little like the old FTP protocol, but with built-in security. SFTP builds on the security infrastructure from the OpenSSH software and is supported by a wide range of clients on the popular platforms – some even integrate the functionality in their file manager, so you won't need to download apps to use it.

To get started, open the **SFTP** tab under SIF **Setup** and configure how you want to identify yourself to our server. Either copy-paste one or more SSH public keys¹ or enter the password you want to use. Click **Save SFTP Settings**. Note that your login details – including your username – will be displayed in the same place.



¹ Read more about how to use SSH public keys here: <u>Git - Generating Your SSH Public Key</u> (git-scm.com)

11 July 2023

When you have set up SIF for SFTP, you must set up your PC for the access, and to do so you need a client.

We recommend one of these, which we know will work with SIF.

FTP/FTPS/SFTP client WinSCP

WinSCP is an FTP/FTPS/SFTP client for Windows, which has a portable version, that can run anywhere without installation and without administrator access. It also has a semi-automatic sync function that makes it easier to synchronise files between your device and SIF.

Find more information on the project's own website: https://winscp.net/

SSH client PuTTY SFTP

PuTTY is an SSH client developed for Windows, but it is now also available on other platforms. It has an SFTP client command line that you can use with SIF.

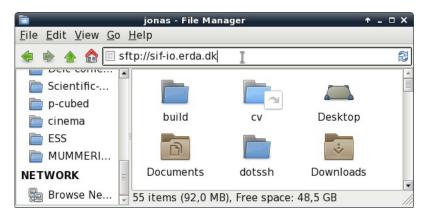
Please note: For security reasons, you must use version 0.67 or newer to SIF. Older versions (at least until 0.64) will refuse to connect, with the error "Couldn't agree a key exchange algorithm: available...". A look at PuTTY <u>Changes</u> shows that there are also a number of security fixes, that themselves are reason enough to upgrade to version 0.68 or newer.

For more information, visit the project's own website: www.chiark.greenend.org.uk/~sgtatham/putty/

Linux File Manager SFTP remote folders

On most modern Linux distributions, you can access SFTP remote folders with the File Manager. The procedure is similar to WebDAVS, but you need to change URL to point to SFTP.

Enter server details from SFTP under setup and click Connect. You may need to replace sftp with ssh in the address if it fails. In our example, we only need to enter sftp://sif-io.erda.dk, as port 22 is implicit.



The rest of the setup is like for WebDAVS, but with login details from your SFTP Setup.

SSHFS

On Mac OSX and Linux you can map remote directories locally with SSHFS, so you can use the content as if it were a local folder.

You can read brief instructions on how to do this in your SFTP tab under Setup, by clicking Show more SFTP client details...

Support, questions, and comments

If you have any ideas for how we can make the user experience better or if you have any questions about SIF, we would very much like to hear from you.

We would also be grateful if you'd let us know if you find something that doesn't work as we have described here. Please include details about your operating system and web browser in your enquiry so we can help you effectively. If you are unsure about the operating system and browser you use, check by visiting www.whatismybrowser.com or detectmybrowser.com. Send us the line under "Your Web browser is:", or if you use detectmybrowser, the line that begins with "You're using".

Screenshots are also very useful in this situation because they let us see exactly what you see.

Please contact us by emailing SIF Support.

Best regards AskOS.