**Managing Files over SFTP with the WinSCP Module**

If you’d prefer not to use the Posh-SSH module for whatever reason, you always have another option; the WinSCP module! The WinSCP module is another handy module that comes from the popular [**WinSCP GUI utility**](https://winscp.net/eng/index.php).

To get started, like the Posh-SSH module, first download and install it from the PowerShell Gallery, as shown below.

Install-Module -Name WinSCP

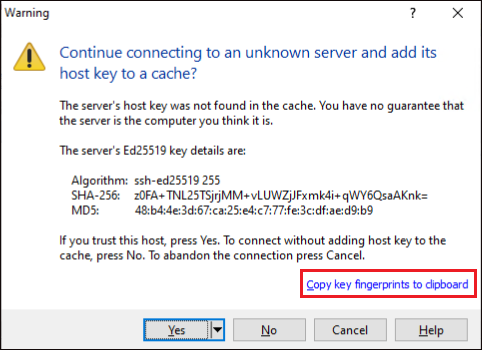
***Related:***[***The WinSCP Command-Line: Ultimate Guide***](https://adamtheautomator.com/winscp-command-line/)

**Inspecting Files and Folders with the WinSCP Module**

Now that you’ve installed the module, you can get started using it. Let’s first make a connection to the server. Like the Posh-SSH module, you must first always establish a connection to the remote server.

The first time you attempt to establish a connection to the SFTP server, the New-WinSCPSession command will prompt you to add the server’s public key to your local certificate repository. You must do this so that the SFTP server will trust your local computer.

Click the **Copy key fingerprints to clipboard** and paste the fingerprint into a text window to add your key. You’ll need this in the next step. Next, copy the line that looks like “ssh-ed25519 255 48:b4:4e:3d:67:ca:25:e4:c7:77:fe:3c:df:ae:d9:b9” anCopy and paste that fingerprint in the script as shown in below script.

nspecting Files and Folders with the WinSCP Module

To establish a connection, below you’ll see an example script. This script creates a PSCredential object that is passed to the Credential parameter of the New-WinSCPSessionOption command and the remote server to connect to and the protocol sftp.

#Enter credentials to connect to FTP server.

$FTPUsername = "UserID"

$FTPPwd = "UserPwd"

$Password = ConvertTo-SecureString $FTPPwd -AsPlainText -Force

$Credential = New-Object System.Management.Automation.PSCredential ($FTPUsername, $Password)

#Import WinSCP module

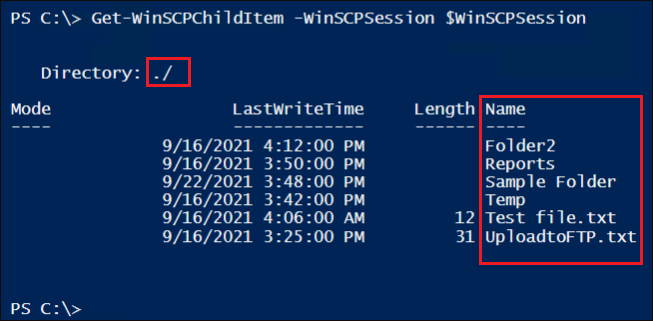
Import-Module WinSCP

#Create WinSCP session to your FTP server. 10.0.0.3 is the FTP server.

$WinSCPSession = PS C:\> New-WinSCPSession -SessionOption (New-WinSCPSessionOption -HostName 10.0.0.3 -Protocol Sftp -Credential $Credential -SshHostKeyFingerprint "ssh-ed25519 255 48:b4:4e:3d:67:ca:25:e4:c7:77:fe:3c:df:ae:d9:b9")

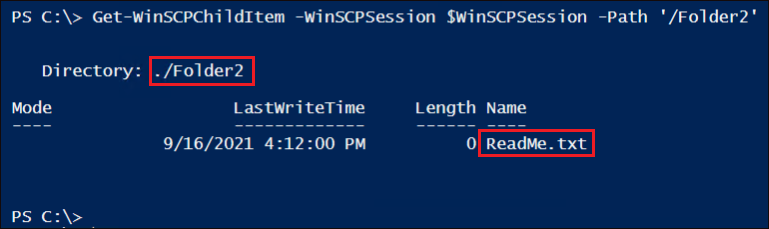
Now that you’ve established a connection to the server run the Get-WinSCPChildItem command and provide the session you just created. This command will enumerate all the files and folders on the remote server from the remote server user’s home directory.

Get-WinSCPChildItem -WinSCPSession $WinSCPSession

Displaying FTP server’s content

To only list files in a particular directory, specify the Path parameter as shown below.

Get-WinSCPChildItem -WinSCPSession $WinSCPSession -Path '/Folder2'

Displaying FTP server’s content in a subfolder

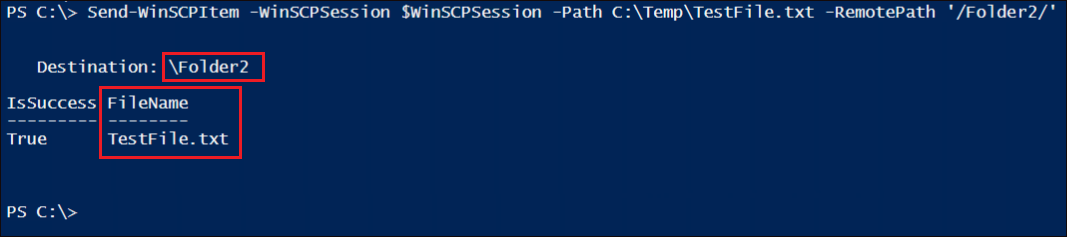
**Uploading Files and Folders with the WinSCP Module**

Uploading files and folders is similar to listing files with the WinSCP module. To do so, run the Send-WinSCPItem command as shown below. By specifying the session (WinSCPSession), the local Path of the file to upload, and the RemotePath to where the file should go, Send-WinSCPItem will upload the file.

By default, if you do not specify a path using -RemotePath parameter, your files and folders will be uploaded to the user’s home directory you authenticated to the server with.

Send-WinSCPItem -WinSCPSession $WinSCPSession -Path C:\Temp\TestFile.txt -RemotePath '/Folder2/'

When the upload completes, you’ll see that Send-WinSCPItem displays the remote folder path containing the file uploaded.

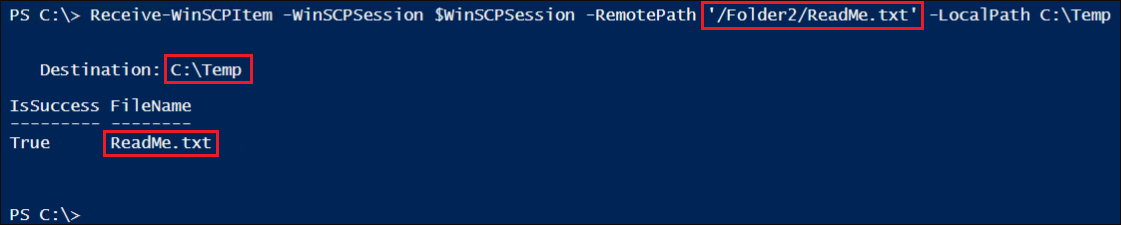
Uploading a file from local PC to FTP server

*You can upload entire folders by providing a path to the Path parameter rather than a single file.*

**Downloading Files and Folders with the WinSCP Module**

Downloading files and files with the WinSCP is possible, too, using the Receive-WinSCPItem command, as shown below. To download files, specify the WinSCPSession again, provide the path to the file or folder you’d like to download via the RemotePath parameter and the local folder you’d like to download to.

Receive-WinSCPItem -WinSCPSession $WinSCPSession -RemotePath '/Folder2/ReadMe.txt' -LocalPath C:\Temp

Downloading file from FTP server to local PC

**Disconnecting the WinSCP Session**

Once you are done using the WinSCP session, disconnect and remove it using the Remove-WinSCPSession.

Remove-WinSCPSession -WinSCPSession $WinSCPSession

**Conclusion**

You should now know how to list, upload and download files via PowerShell SFTP. Thankfully, the community has made modules for everyone to use freely to make this job much more manageable