

SFTP (Secure File Transfer Protocol) – data transfer from/to the shared servers:

### How to Connect to the Ecogenetics SFTP server (Interactive mode)

```
sftp uaccount@share8.univie.ac.at
```

Password: your u:account password.

Once you are connected check the available commands by typing '?' or 'help'.

Typical commands:

	<b>SFTP server</b>	<b><u>L</u>ocal system</b>
List content of directory	ls	lls
Change directory	cd	lcd
Print working directory	pwd	lpwd
Make directory	mkdir	lmkdir

Data transfer

	<b>Uploading data</b>	<b>Downloading data</b>
One file	put FILE1	get FILE1
Multiple files	mput *.txt	mget *.txt

Use the cd command to change to the directory /ecogenetics/bash\_tutorial:

```
cd /ecogenetics/bash_tutorial/
```

Create a directory:

```
mkdir YOUR_NAME
```

Check your local working directory:

```
lpwd
```

If you are not at ~/YOUR\_NAME/

```
lcd ~/YOUR_NAME/
```

List the content of the local directory:

```
lls
```

Upload a file (created in Material 2):

```
put test.txt
ls          #Check if the file was uploaded.
```

Download a file:

```
get camel.pl
lls         #Check if the file was downloaded.
```

Type 'bye' to exit the interactive mode.

Run the program:

```
./camel.pl
```

If it doesn't work make it executable (hint: chmod, Material 2).

### **SFTP Non-interactive mode**

As an alternative, you can download a file directly via the command line (non-interactive mode):

```
cd # Go home, if not at home already [Windows user: cd ~/YOUR_NAME/]
sftp uaccount@share8.univie.ac.at:/ecogenetics/Lab_group_pictures/Bild1.jpg
```

This also works for multiple files. In this case you will download all (= \*) files ending with ".jpg".

```
sftp uaccount@share8.univie.ac.at:/ecogenetics/Lab_group_pictures/*.jpg
```

### **Advanced one-liner to upload:**

This example combines the login to an SFTP server and uploads all (= \*) jpg pictures:

```
sftp uaccount@share8.univie.ac.at:/ecogenetics/bash_tutorial/YOUR_NAME/ <<< '$mput *.jpg'
```