

Connecting to League's SFTP server

Our SFTP server is listening for connections on port **2222** at **sftp.league.com**. Listed below are the requirements on the client side:

- Generate an SSH key pair (RSA) and send the public key to the League team
- Ensure that your firewall allows outbound connections to **sftp.league.com** on port **2222** (since this is a non-standard port)

Generating an SSH Key

SSH Keys can be used to establish a secure connection with League SFTP. SSH keys are strongly recommended over passwords because they remove the need to transmit secrets over insecure mediums such as email, increasing security. SSH keys are also commonly called key pairs, because they come as a pair: a private key portion which should be treated as a secret like passwords, and a public key portion, which can be freely shared.

The easiest way to describe SSH keys is using a **key and lock analogy**. The *public key* is like a lock, whereas the *private key* is like the matching physical key that opens that lock. By sending League the public key to install on League SFTP servers, you are sending League a lock to which you have the key, to install on our SFTP. Your private key never needs to leave the machine which you are using to create the SFTP connection.

Creating SSH Keys on Windows

1. Open the command prompt on windows
2. Run:

```
ssh-keygen -t rsa -b 4096 -C "League SFTP"
```
3. (Optional) Enter a file path where you will save the public key pair
4. (Optional) You can choose to protect your private key with a passphrase
5. After you complete the command, there will be two new files created. The file with at the file path you specified optionally in step 3 is the private key. Keep it secret! There will be an additional file at the file path of the private key with an extension *.pub. That is the public key you will share with League.
6. The output will look somewhat like this:

```
$ ssh-keygen -t rsa -C "League SFTP"
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/league/.ssh/id_rsa):
Created directory '/c/Users/league/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
```

Your identification has been saved in /c/Users/league/.ssh/id_rsa.
Your public key has been saved in /c/Users/league/.ssh/id_rsa.pub.
The key fingerprint is:
e7:94:d1:a3:02:ee:38:6e:a4:5e:26:a3:a9:f4:95:d4 League SFTP

Creating SSH Keys on OSX or Linux

1. Open up your terminal window
2. Run:

```
ssh-keygen -t rsa -C "League SFTP"
```
3. (Optional) Enter a file path where you will save the public key pair
4. (Optional) You can choose to protect your private key with a passphrase
5. After you complete the command, there will be two new files created. The file with at the file path you specified optionally in step 3 is the private key. Keep it secret! There will be an additional file at the file path of the private key with an extension *.pub. That is the public key you will share with League.

6. The output will look something like this:

```
league-mac:~ league$ ssh-keygen -t rsa -b 4096 -C 'League SFTP'
Generating public/private rsa key pair.
Enter file in which to save the key (/Users/league/.ssh/id_rsa):
/tmp/league
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /tmp/league.
Your public key has been saved in /tmp/league.pub.
The key fingerprint is:
SHA256:Z6DrqXbWEcijKMdAZc70uuQIcurA0hyh8c1HQ24BvS8 League SFTP
The key's randomart image is:
+---[RSA 4096]-----+
|  o*                  |
|  .= =               |
|  . = = ..          |
| o.  B +...         |
| +*oB +..S.o        |
| *+@ E ...o         |
| +=.+ ... .         |
| =.  ..o..          |
| .o  ..+o           |
+----[SHA256]-----+
```

Testing the connection

Once the account is created on the League side, the connectivity can be tested. In order to ensure that the file transfer is setup correctly, you need to be able to connect to **sftp.league.com** on port **2222** with user **<company name, all lowercase>** (e.g. sutton, uber, unilever) using the ssh private key generated.

If the SFTP connection is successful, you will have access to 2 directories: dev/ and ftp/. The transfer occurs once a file is uploaded to the ftp/ directory, at which point the League team should be able to download it successfully.