

part of eex group



ECC File Transfer Service

User-Guide

09.04.2024

Leipzig

Rel. 010

Table of Contents

1	GENERAL	3
2	FILE TRANSFER SERVICE VIA FTP	4
2.1	FTPS (FTPES – FTP with explicit TLS)	4
2.1.1	Setting up the FTPS access via FileZilla	4
2.2	SFTP	5
2.2.1	Technical Details	6
2.2.2	Generate a key pair with Windows	6
2.2.3	Example for generation of a key pair with UNIX	7
2.3	Firewall	7
3	CONTACT DETAILS	8

1 GENERAL

ECC's File Transfer Service offers exchanges, clearing members and trading participants a secure access to data and reporting provided by ECC.

Access to the FTP server is provided on user level and is administrated by ECC. The username and password are identical with the access data for the ECC member area. These can be applied for from ECC using the form T10 for private data as well as the T10p for public data (ECCPUBLIC) which can be downloaded from www.ecc.de. Access to the FTP server can be established via

- FTPeS (FTP with explicit TLS) or
- SFTP (Privat-Public-Keypair or user/password)

To generate a directory on the FTP server the respective participant must subscribe reports via channel 'FTP' in the first step. Reports can be subscribed to within the ECC Member Area under the menu item Report Subscription (please refer for a more detailed description to the ECC member area User). After ECC generates a report via this channel for the first time, the directory for the respective company is created automatically. After that the appropriate users will be able to log on to the FTP server with their personal access data.

Trading participants could receive the following subdirectories:

```

\REPORTS\
  \YYYY
    \MM
      \DD
\MISC

```

Additionally, clearing members will have these folders available

```

\CASCADING_FILE
\DEPOSIT RATE
\LIMITS

```

For the ECCPUBLIC FTP the following directories are available

```

\SPANFILES
\RISKPARAMETER
\PRODUCT_INFORMATION
\CONTRACTDETAIL
\OTCPRICERANGE
\CASCADINGFILES

```

The daily as well as the monthly reporting is saved immediately under the respective directive of the issue day upon their generation by ECC.

2 FILE TRANSFER SERVICE VIA FTP

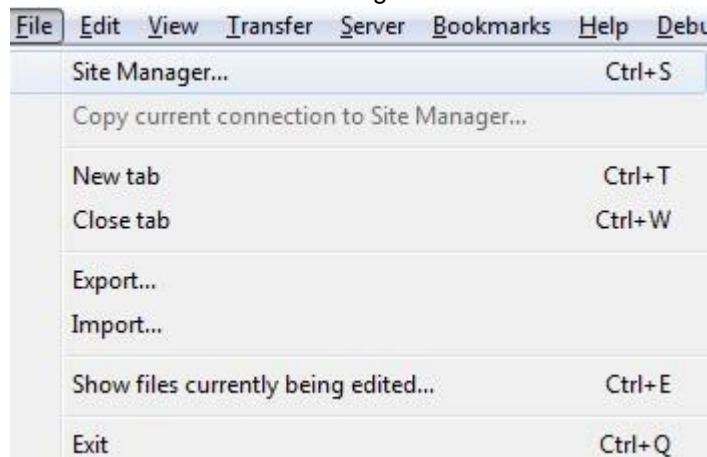
2.1 FTPS (FTPES – FTP with explicit TLS)

One possibility to establish a secure connection is to use the encoded file transfer technology FTP via TLS (short: FTPS) on basis of the file transfer protocol. The Encoding of control- and data channel is possible with TLS authentication.

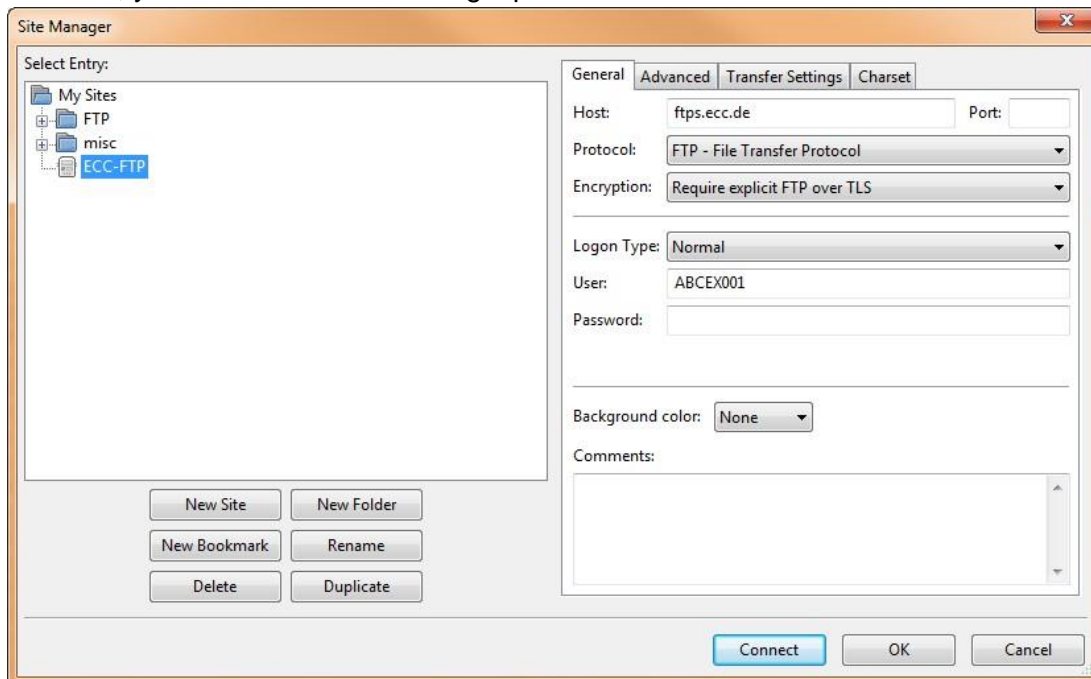
To establish FTPS access an FTP client is required (e.g. FileZilla).

2.1.1 Setting up the FTPS access via FileZilla

Open the FileZilla FTP client and select File > Site manager from the menu.

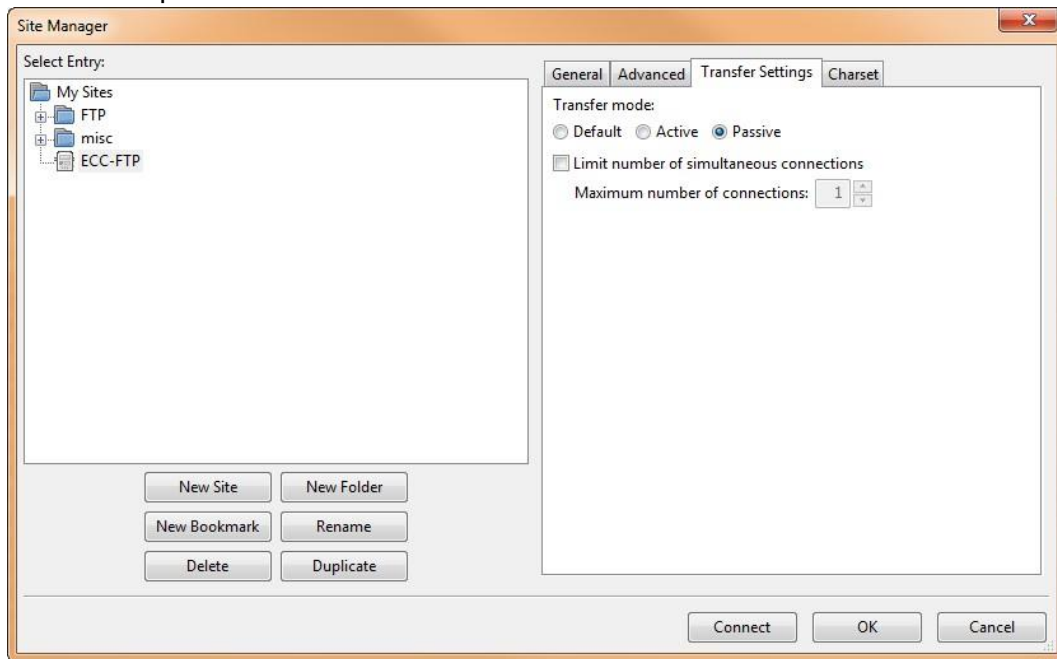


After that, you will reach the following input mask:

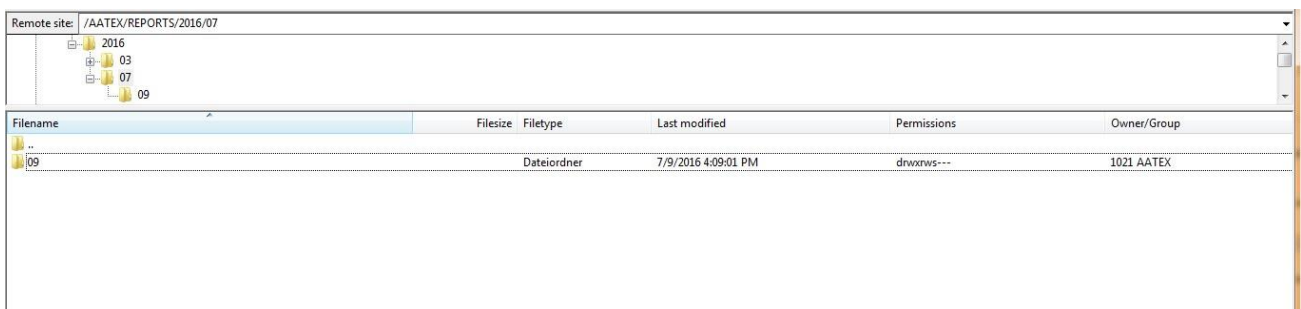


You allocate a server name of your choice via the button 'New Server'. After that, please fill in the section on the right side as shown.

As a user you use the username communicated by ECC (e.g. ABCEX001). The password corresponds to your personal password for the ECC member area. You will receive the initial password with your username from ECC. This password has to be changed once you log on to the member area for the first time. Please make sure that you also use the changed password for the FTP access after you change the password in the ECC member area. For FTPS-transfer you have to choose passive transfer mode.



Push the button ,Connect' for connecting to the FTP server of ECC.



2.2 SFTP

The SSH File Transfer Protocol (short: SFTP) is an additional possibility to transfer data via a secure connection.

2.2.1 Technical Details

Server: ftps.ecc.de

Protokoll: SFTP (SSH-extension) Port: 22

Access via SFTP is possible with user/password as well as with a private/public-key pair. The public key of the participant is stored on the SFTP-server. It has to be generated by the participant; the public key should be provided to ECC.

Accepted key-type is Elliptic Curve Digital Signature Algorithm ECDSA (`-t ecdsa`)

To access the ECC reporting via SFTP, an FTP client is needed. The following applications could be used as FTP clients:

Windows: WinSCP or Filezilla or

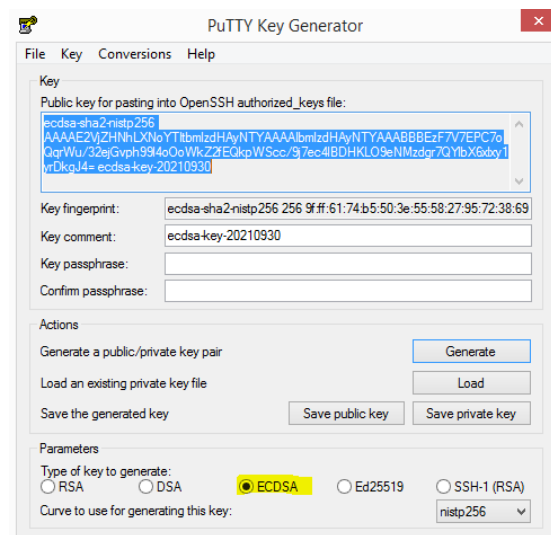
UNIX: scp or sftp

2.2.2 Generate a key pair with Windows

To create a key pair with windows as client software you can use for example the program 'PuTTYgen' of the PuTTY package.

PuTTYgen is a key generator. It generates pairs of public and private keys. When you run PuTTYgen you will see a window where you have two choices. Select 'Generate', to generate a new public/private key pair. Please copy the public key by copying it out of the 'Public key for pasting into authorised keys file' box and send it via e-mail to ECC.

The 'Key fingerprint' box shows you a fingerprint value for the generated key. This needs to be checked with ECC by phone or fax. The key fingerprint is saved and provided to the client program.



2.2.3 Example for generation of a key pair with UNIX

It is possible to generate a key pair as described above not only with Windows, but also with UNIX. Please find a short description about that below.

```
ssh-keygen -t ecdsa -f sftpkey
Generating public/private ecdsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in sftpkey.
Your public key has been saved in sftpkey.pub.
The key fingerprint is:
SHA256:Od79JQa5doUYmnBwNY9juNN6fdlfrxgW0mlXYLCJnaA
The key's randomart image is:
+---[ECDSA 256]---+
|      . o.+o  |
|      + = O .  |
|      E + X . . |
|      - B * o  |
|      S * X o . |
|      . * * * .o|
|      . o B =.=|
|      + * ++  |
|      . o.o  |
+-----[SHA256]-----+
```

The files *,sftpkey'* und *sftpkey.pub'* are generated. You should send only the public file via e-mail to ECC, furthermore tell us the key fingerprint of the public key via phone or fax. You can recover the fingerprint via

```
ssh-keygen -l -f sftpkey.pub
```

As the ECC needs the public key in ssh2-format, you can already transform it using ssh-keygen. For this you use the generated private key myfile and send us the file myfile_rfc4716.pub

```
ssh-keygen -e -m RFC4716 -f myfile>myfile_rfc4716.pub
```

2.3 Firewall

Please ensure that your firewall allows contacting our FTP-server:

Protocol	IP	Ports
FTPeS	ftps.ecc.de	21
SFTP	ftps.ecc.de	22

3 CONTACT DETAILS

As your contacts for setting up access data and establishing ECC's File Transfer Service the team of Clearing & Settlement is on your disposal under the well-known hotline or e-mail address (if needed specialists from the IT departments of the involved companies will be called in).

The public key should be sent via e-mail to ECC, the check of the 'key fingerprint' should be carried out by phone or via fax with an immediate confirmation by telephone.

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