

V 9.0

Crédit Agricole Leasing & Factoring

Transmission of OP files



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I. CHANGING THE FILE FORMATS FOR UPLOADING RECEIVABLES DATA

A. INTRODUCTION

We regularly update our IT systems to improve availability and data security as well as due to regulatory requirements. Our factoring software will be migrated to a new version on 1 June 2024.

In the course of this migration, it is planned to standardise the data exchange formats in order to make data import more stable and also to be able to provide faster error analysis in the event of errors in the files. This requires your system to generate and transfer the files in a format specified by us.

We realised that a changeover to just one format would mean a great deal of effort given the number of existing formats. We therefore analysed the existing formats and defined several data formats that would be permitted in future in order to keep the necessary changes on your part to your previously supplied format to a minimum.

There are 8 different file formats to choose from, which are transferred in CSV format. Please note that files in Microsoft Excel format are no longer supported. The previously used fixed-length formats should also be converted to CSV by separating the individual fields and no longer filling the field values to a fixed width.

Based on the analysis of your previously transferred file, we can recommend the use of a specific future format that is as similar as possible to the format you have previously supplied. However, you are also free to use one of the other formats.

B. TEST PHASE AND SUPPORT

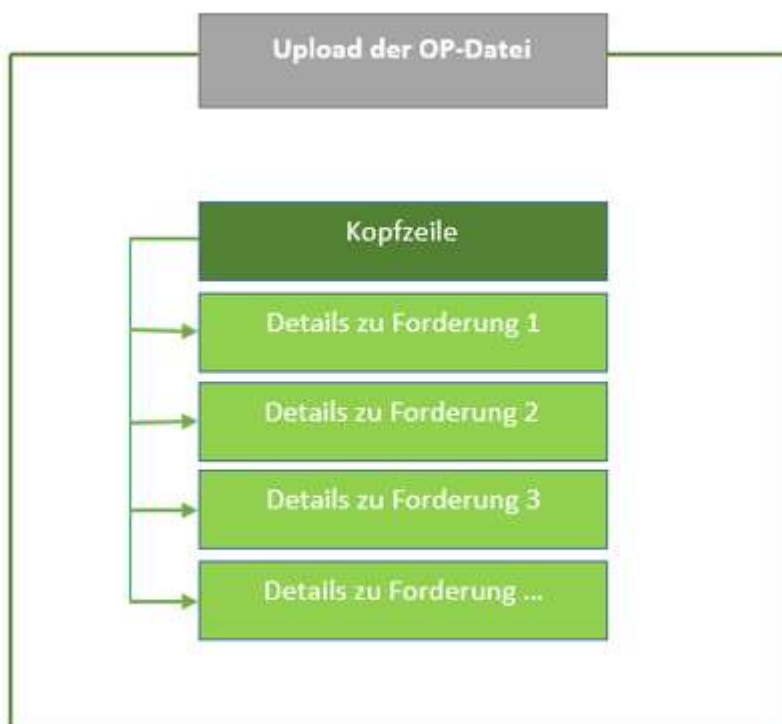
Please start as soon as possible with the customisation to your chosen data format. You are welcome to send us the files you have created for checking. The earlier you start, the more time you have to make adjustments. Our support team will also be able to take more time to answer your questions in the early phase than just before the changeover. If you need an IT service provider to implement the customisations, please contact them as soon as possible to enable a prompt changeover.

II. FORMAT OF THE UPLOAD FILES

A. GENERAL STRUCTURE OF THE OP FILES

We offer various file formats for data exchange with our system. The following describes the general requirements that apply to every transferred OP file.

- ✓ The file name may only be used once. A file is rejected by the system if a file with the same name has already been uploaded.
- ✓ The file name should contain your customer number, an abbreviation for the contract type (INH=Inhouse, FUL=FULL) and the date (e.g. DE12345_INH_20231224.csv)
- ✓ If it becomes necessary for you to deliver a corrected file on a particular day due to an error, please add a suffix before the file extension (e.g. **DE12345_INH_20240117_01**.csv).
- ✓ Please use UTF-8 as character set encoding.
- ✓ The file must be available as a text file in the *.csv file format.
- ✓ Please use - as usual in Microsoft Windows - <CR><LF> (also \r\n) as line separator.
- ✓ Please use the semicolon " ; " to separate the individual data fields.
- ✓ Please use the 10-digit character string in the format dd.MM.yyyy (31.01.2024) for date values.
- ✓ Please use the decimal point as a decimal separator for numerical values and do not use thousand separators.
- ✓ Please use the 3-digit ISO 4217 codes to specify currencies.
- ✓ The file consists of a header or heading line followed by the receivables items.
- ✓ The data of the receivables items must be entered line by line in the file.
- ✓ The formats we offer differ mainly in the fields used and the field sequence within the receivables items.



B. STRUCTURE OF THE HEADER

Please fill in the header from left to right with the following details:

Position	Designation	Comment
1	Recogniser for header	Please always set the value 01 by default to mark the line as a header.
2	Experts for the contract type	Please set the value SAF if you have an in-house contract. If you have contract type Full, please use the value INVOICES .
3	Technical field Factor	Please always set EFAG for German accounts by default. For Belgian EFBE and Dutch EFNL . Your customer advisor will be happy to help you with any questions.
4	Your contract number	Please always state your 7-digit contract number (e.g. DE12345).
5	Your customer ID number	Please always enter your 10-digit customer ID number , which you have received from your customer advisor.
6	Currency	Please note that this must be the currency agreed in the contract . You will be provided with the corresponding 3-digit ISO code for the currency by your customer advisor.
7	Empty technical field	Please leave this field empty . There must be no characters within the surrounding field separators.
8	Date of the upload	Please note the required order day, month and year (DD.MM.YYYY) , e.g. 19.10.2020
9	Number of lines including header	Please enter the total number of lines in the file , i.e. the number of claim lines plus one header line.
10	Total amount of invoices	For the Full contract type, please enter the total of all invoice amounts , whereas for the Inhouse contract type, please enter the total of all outstanding amounts of the invoices contained in the upload, without the use of currency abbreviations, signs and thousand separators. Please use the decimal point as the decimal separator. If you do not have an invoice, please complete this field with "0.00".
11	Total amount of credits	Please enter the total amount of the credits contained in the upload , without using currency abbreviations, signs and thousand separators. Please use the comma as a decimal separator. If you do not have a credit note, please still enter the amount "0.00".

A header line for a German account would look something like this in the CSV file:

```
01;SAF;EFAG;DE12345;2004290276;EUR;;09.10.2020;3;5067164,48;26862,93
```

Meaning of the field values in the example header

01	Marks the line as a header
SAF	Specification of the upload format. SAF => In-house contract
EFAG	Experts in favour of a German contract
DE12345	Your 7-digit contract number
2004290276	Your 10-digit customer number
EUR	Currency
	Empty technical field
09.10.2020	Date of the upload
3	Total number of lines in the file (header plus 2 claim lines)
5067164,48	Total of all open amounts of all invoice items
26862,93	Sum of the amounts of all credit notes

C. STRUCTURE OF THE CLAIM DETAILS

The OP data is inserted per line after the header line. The different formats we offer use different combinations of fields and these must appear in the file in a specific order. Here is a list of the formats and the sequence of the fields:

Format	Sequence of the fields used
1	Customer number; document number; invoice date; due date; currency; invoice amount; open invoice amount; invoice/credit memo identifier;
2	Customer number; document number; invoice date; due date; invoice amount; open invoice amount; currency;
3	Customer number; Document number; Invoice date; Due date; Currency; Invoice amount; Open invoice amount;
4	Invoice/credit note identifier; customer number; document number; invoice date; due date; invoice amount; currency;
5	Customer number; document number; invoice date; due date; invoice amount; currency;
6	Customer number; document number; invoice date; due date; invoice amount; credit amount; currency;
7	Customer number; Document number; Invoice date; Due date; Credit amount; Invoice amount; Open invoice amount; Currency; Invoice/credit memo identifier;
8	Customer number; document number; invoice date; due date; invoice/credit note identifier; invoice amount; currency;
9	Identifier for receivables lines; customer number; customer name; document number; invoice date; due date; currency; invoice amount; open invoice amount; invoice/credit memo identifier;

Please refer to the following table for details of the individual fields:

N°	Designation	Comment	Special feature
1	Identifier for claim lines (technical field)	Please always set the field value 02 by default to mark the line as a claim line.	
2	Debtor number	Please enter the number that you have stored in your accounting system for this customer, e.g. 9990001.	Max. 20 characters
3	Name of the debtor	Please enter the complete company name and insert the appropriate spaces, e.g. TEST TRANSPORT GMBH. You can also leave this field blank, as the customers must already have been created before the OP upload.	Max. 50 characters
4	Document number	Please enter the corresponding document number, e.g. invoice number.	Max. 20 characters
5	Invoice date	Please note the required order day, month, year (DD.MM.YYYY); e.g. 09.10.2020.	
6	Due date	Please also note the required order day, month, year (DD.MM.YYYY); e.g. 19.11.2020. In the case of a credit note, please leave this field blank.	
7	Currency	Please use the listed currency abbreviations (ISO3). Please note that it is possible for different currencies to be specified in one file.	Max. 3 characters
8	Invoice amount (Debit amount)	Please enter the total original (gross) invoice or credit note amount. Please use a comma as decimal separator.	Max. 14 characters (12.2)
9	Amount Credit	Please enter the total payments made by the customer for this claim. Please use a comma as the decimal separator.	Max. 14 characters (12.2)
10	Outstanding invoice amount	Please enter the outstanding balance of the invoice/credit note (gross). Please use a comma as the decimal separator.	Max. 14 characters (12.2)
11	Identifier for invoice or credit note	Please use the abbreviations D for invoice and C for credit note .	D=Debit, C=Credit

A claim line in format 9 could therefore look like this in a CSV file, for example:

```
02;12015;TEST TRANSPORT GMBH;91200423;24.09.2020;24.10.2020;EUR;8101,44;8101,44;D;
```

Meaning of the field values in the example claim line

02	Marks the line as a claim line
12015	Debtor number
TEST TRANSPORT GMBH	Name of the debtor
91200423	Document number
24.09.2020	Invoice date
24.10.2020	Due date
EUR	Currency
8101,44	Invoice amount
8101,44	Outstanding invoice amount
D	D=Debit. This is an invoice

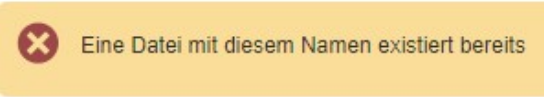
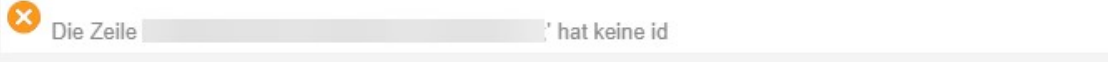
D. IMPORTANT CURRENCY ABBREVIATIONS

Please enter the enclosed abbreviations for the respective currency. The currency code is based on the ISO specifications (https://de.wikipedia.org/wiki/ISO_4217). If you require an additional currency or if the required currency is not included in your contract, please contact your customer advisor.

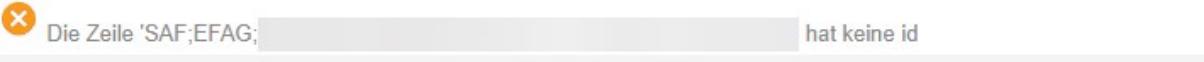

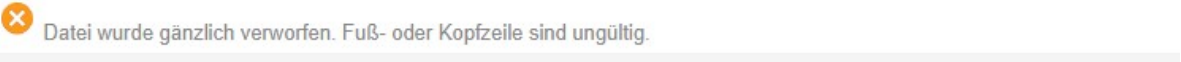

Abbreviation	Currency
CHF	Swiss franc
DKK	Danish krone
EUR	Euro
GBP	British pound
JPY	Japanese yen
NOK	Norwegian krone
PLN	Polish zloty
SEC	Swedish krona
USD	US dollar








III. ERROR MESSAGES AND TROUBLESHOOTING




A. GENERAL NOTES ON UPLOADING

Error	Description of the
Name of the file	<p>Please ensure that the name of the file to be uploaded has not already been used, as the name of the file cannot be uploaded twice. If a name is used twice, the upload will be refused for this reason.</p> <p>Solution: Please rename your file and attach it again.</p>
	
File extension	<p>Please make sure that you upload a CSV file; if you upload an XLS file by mistake, you will receive the following message.</p> <p>Solution: Please save the file as a CSV file and upload it again.</p>
<p>Die Datei wird abgelehnt, keine neuen Vorgänge sind integriert. Bitte führen Sie die entsprechende Aktion durch.</p> <p></p>	



B. ERROR MESSAGES REGARDING THE HEADER












Error in field no.	Description of the
1	<p>If you receive an error message stating that the header is missing, please complete your header with the required identifier "01".</p>
<p></p> <p></p>	
2	<p>As soon as the mandatory field "SAF" has not been entered, the attached error messages will appear. Please complete the header accordingly.</p>
<p></p> <p></p>	


Error in field no.	Description of the
3	You will also receive the enclosed message if you have forgotten to add the required suffix "EFAG" (or "EFBE" or "EFNL" depending on the country).
 Datei wurde gänzlich verworfen. Fuß- oder Kopfzeile sind ungültig.	
 Zeile 1 'SAF; [redacted] - Zeilenlänge und Feldlänge stimmen nicht überein	
4	If you have inadvertently entered the wrong contract number, the following message will appear. Please check and correct it.
 CONTRACT WITH THIS CONTRACT ID DOES NOT EXIST. THE FILE IS REJECTED!	
5	You will also receive a corresponding error message if you have used the wrong ID number.
 Error: Client Account not defined in Contract < [redacted] >. The file is rejected!	
6	In the event that you have used a currency abbreviation that is not specified, you will receive the following message. Please correct your details accordingly.
 Wert von Währung (feld 5) = 'EURO', Zeile '1' ist nicht in der Domain der möglichen Werte	
7	If you have forgotten to define the required internal field by setting the semicolon, the following message appears. Please set the required character.
 Datei wurde gänzlich verworfen. Fuß- oder Kopfzeile sind ungültig.	
8	If you have inadvertently used the wrong date format, you will receive the following message. Please use the appropriate date format.
 Upload date (feld 8)='20201012', Linie '1' ungültiges Format. Linie - ausgelassen!	
9	If the number of lines including header targets is not correct, the following message is displayed automatically.

Error in field no.	Description of the
	 The number of lines in the file is not correct! The file is rejected!
10	If the total amount of the invoices does not match the total of the claim details, you will receive the following message. Please check the data for mathematical accuracy.
	 Total amount of invoices is different than the sum of amounts of invoices! The file is rejected!
11	Even if the total amount of the credit notes does not match the total amount of the individual credit notes, you will receive the following message.
	 Total amount of credit notes is different than the sum of credit notes' amounts! The file is rejected!

C. ERROR MESSAGES REGARDING THE INVOICE DATA

Error in field no.	Description of the
1	If you receive an error message stating that the line does not have an ID, please complete this line with the required ID "02".
	 Die Zeile ' ' hat keine id
2	If no customer number has been entered, the following message will appear asking you to complete this mandatory field.
	 Obligatorisches Feld 2 nicht 'Debitorennummer' auf Linie '2'. Linie - ausgelassen!
3	Please make sure that you either enter the name of the debtor or the required semicolon, otherwise you will receive the following information.

Error in field no.	Description of the
	<p> Fälligkeitsdatum (feld 6)='EUR', Linie '2' ungültiges Format. Linie - ausgelassen!</p> <p> Wert von Währung (feld 6) = '1500,00', Zeile '2' ist nicht in der Domain der möglichen Werte</p> <p> Obligatorisches Feld 10 nicht 'Dokumententyp' auf Linie '2'. Linie - ausgelassen!</p> <p> Wert des Dokumententyp (Feldes 10) = ' ', Linie '2' kann nicht validiert werden. Der Wert ist nicht korrekt.</p>
4	If no document number has been specified, you will receive the same information.
	<p> Fälligkeitsdatum (feld 6)='EUR', Linie '2' ungültiges Format. Linie - ausgelassen!</p> <p> Wert von Währung (feld 6) = '1500,00', Zeile '2' ist nicht in der Domain der möglichen Werte</p> <p> Obligatorisches Feld 10 nicht 'Dokumententyp' auf Linie '2'. Linie - ausgelassen!</p> <p> Wert des Dokumententyp (Feldes 10) = ' ', Linie '2' kann nicht validiert werden. Der Wert ist nicht korrekt.</p>
5	If you have inadvertently used the wrong format for the document date, you will receive the following message. Please use the prescribed format.
	<p> DOC_DATE (feld 5)='20201013', Linie '2' ungültiges Format. Linie - ausgelassen!</p>
6	Please also correct the format if you receive the following message regarding the due date.
	<p> Fälligkeitsdatum (feld 6)='20201118', Linie '2' ungültiges Format. Linie - ausgelassen!</p>
7	In the event that you have used a currency abbreviation that is not specified, you will receive the following message. Please correct your details accordingly.
	<p> Wert von Währung (feld 6) = 'EUR0', Zeile '2' ist nicht in der Domain der möglichen Werte</p>
10	If you have inadvertently used the wrong code for the invoice/credit note, you will receive the following message.

Error in field no.	Description of the
	Total amount of invoices is different than the sum of amounts of invoices! The file is rejected!



Important note!
Please note that you will not receive an error message if the outstanding invoice amount is inadvertently greater than the original invoice amount.

IV. UPLOAD OP FILES VIA SFTP

The changes only affect the format and content of the files. There are no changes to the previous method of transferring files to us. As before, we offer you the option of uploading your data via the SFTP file transfer protocol. You can upload the files manually using an SFTP programme, but we recommend the automated upload

A. CONNECTION PARAMETERS

The parameters required to establish a connection to our server are as follows:

Hostname of the SFTP server	ftp2.eurofactor.com	Please use the host name and not the IP address.
Protocol	SFTP	Please make sure that you select SFTP and not FTPS, which is similar in name
Port	22	The TCP port via which data communication takes place.
Server key fingerprints	<pre>SHA-256 = ssh-rsa 2048 Hk3miUKn6XJdrjobwt1vcHta6oVCvkRsNdtoR9avotw= MD5 = ssh-rsa 2048 3d:23:2b:82:89:95:9f:89:9e:45:a2:a9:dd:2d:b2:de</pre>	Specifying the host key ensures that your SFTP client connects to the correct server.
Upload directory	/in	Please change to the subdirectory <i>in</i> after the connection has been established and save your files there.



Note:

Ask your network administrator to set up a firewall rule that allows outgoing TCP traffic on port 22 to the IP address 158.191.111.176 of our SFTP server.

B. EXAMPLE OF MANUAL UPLOAD WITH WINSCP

WinSCP is a popular and free SFTP and FTP client for Microsoft Windows. The installation file can be downloaded here: <https://winscp.net/eng/download.php>

1. REGISTRATION

The following information is required for registration:

Transfer protocol: **SFTP**

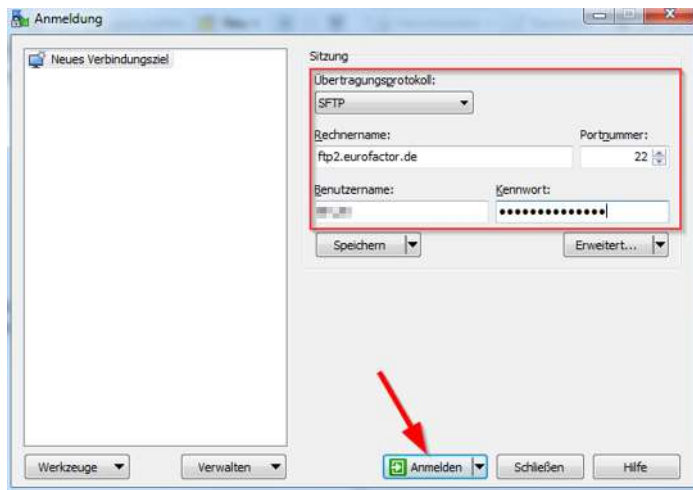
Computer name: **ftp2.eurofactor.de**

Port number: **22**

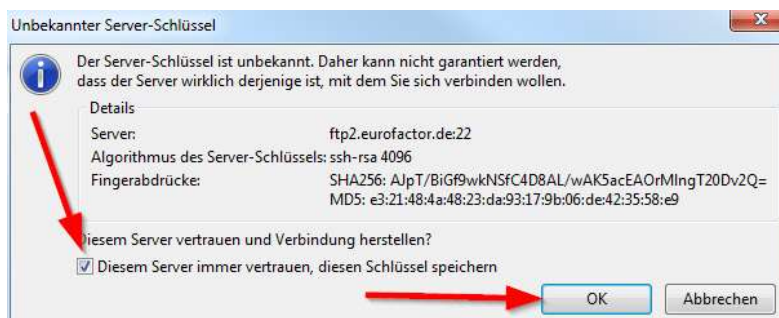
User name: you will receive from your contact person

Password: available from your contact person

When you have filled in everything, click on "Register"



When you connect to our server from a computer for the first time, an "Unknown server key" dialogue will appear.

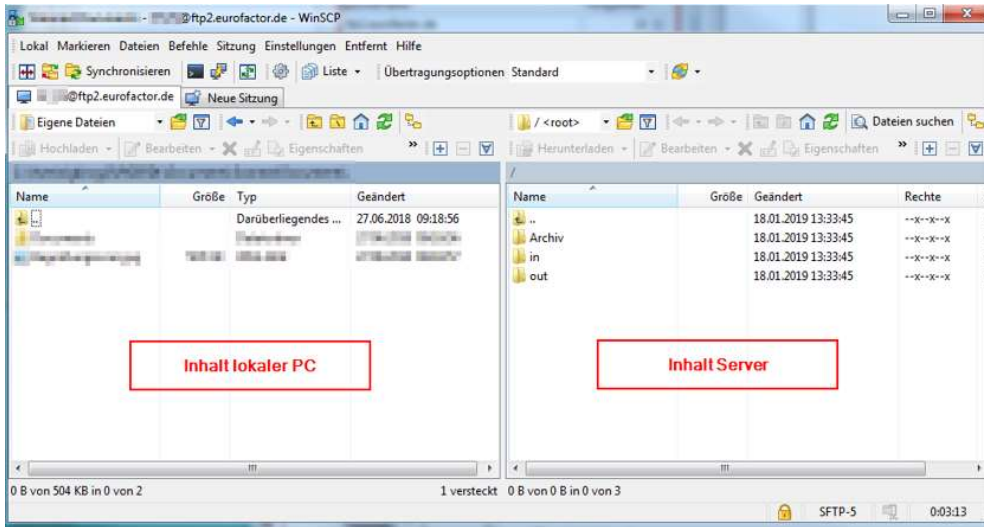


Please compare the strings displayed in the dialogue under *Fingerprints* with the current fingerprints of our server:

SHA-256 = ssh-rsa 2048 Hk3miUKn6XJdrjobwt1vcHta6oVCvkRsNdtoR9avotw=

MD5 = ssh-rsa 2048 3d:23:2b:82:89:95:9f:89:9e:45:a2:a9:dd:2d:b2:de

If the connection is successful, the content of the local PC is displayed on the left-hand side and the content of the server on the right-hand side.



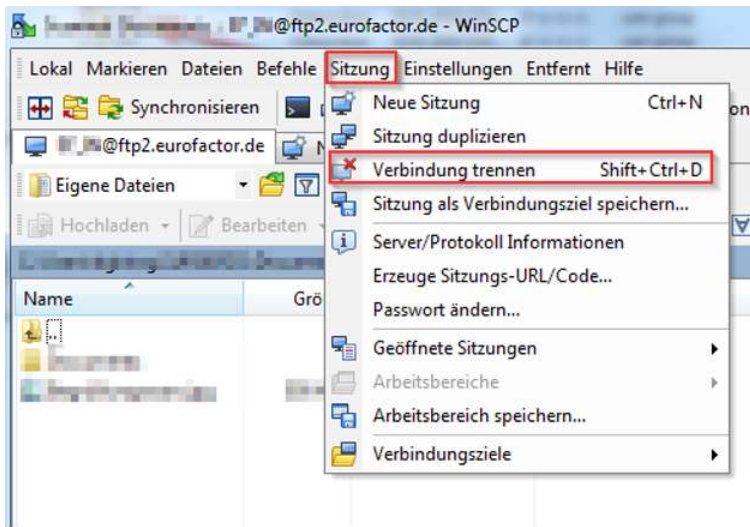
2. UPLOAD THE FILE

To transfer a file from your local computer to the server, you can simply select a file in the left-hand area (local PC content) and drag & drop it **into** the "in" folder on the right (server content). The file is automatically copied to the server. Alternatively, you can first open the "in" folder on the right-hand side by double-clicking and then drag the files into this folder.



3. CANCELLATION

Finally, you must log out of the server by going to "Session" in the main menu and then selecting "Disconnect".



C. EXAMPLE OF MANUAL UPLOAD WITH FILEZILLA

1. REGISTRATION

The following information is required for registration:

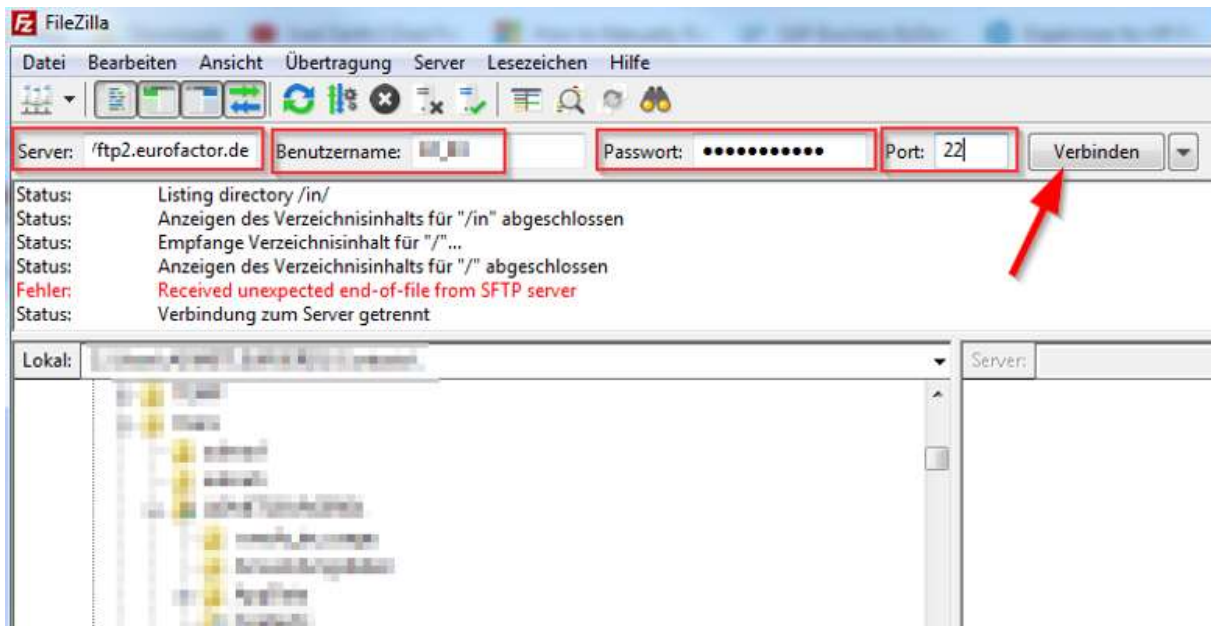
Server: ftp2.eurofactor.de

User name: you will receive from your contact person

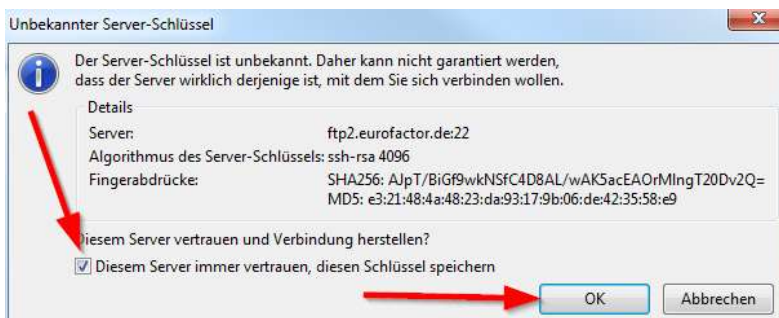
Password: you will receive from your contact person

Port: 22

Once you have filled in everything, click on "Connect"



When you connect to our server from a computer for the first time, an "Unknown server key" dialogue will appear.



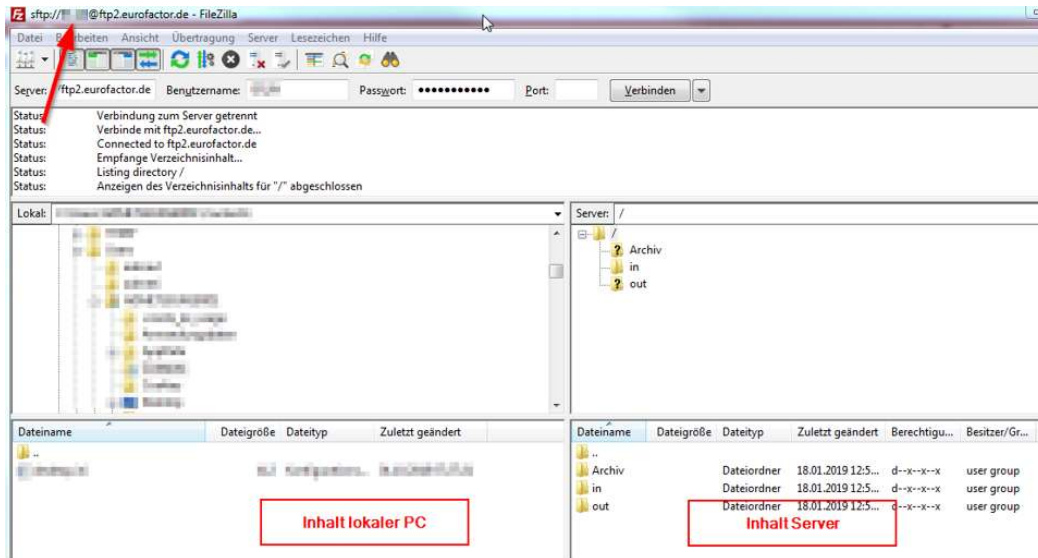
Please compare the character strings displayed in the dialogue under *Fingerprints* with the current fingerprints of our server:

SHA-256 = ssh-rsa 2048 Hk3miUKn6XJdrjobwt1vcHta6oVCvkRsNdtoR9avotw=

MD5 = ssh-rsa 2048 3d:23:2b:82:89:95:9f:89:9e:45:a2:a9:dd:2d:b2:de

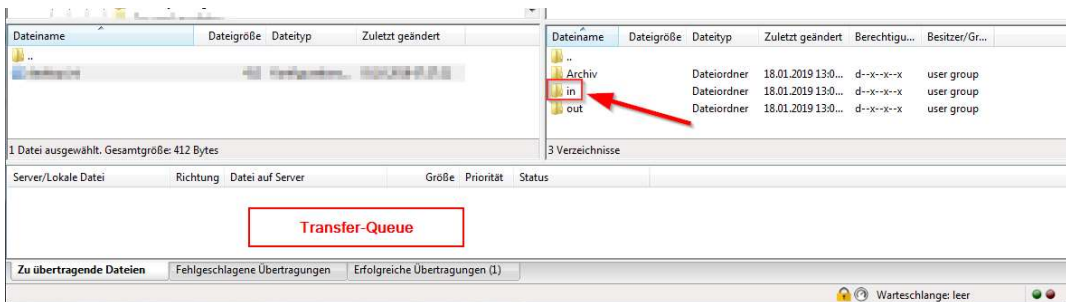
If both match, please tick the box "Always trust this server, save this key" and confirm with OK. This dialogue will then no longer appear the next time a connection is established.

If the connection is successful, the content of the local PC is displayed on the left-hand side and the content of the server on the right-hand side.



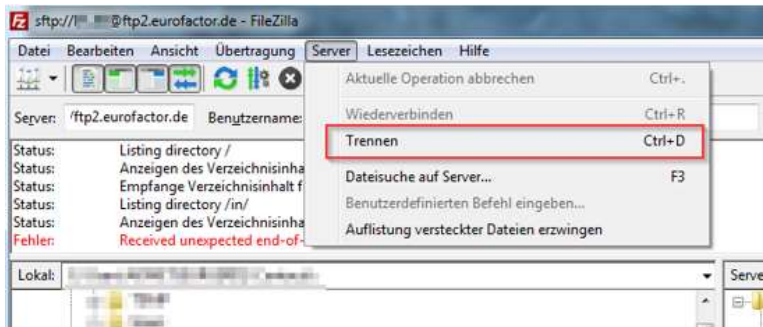
2. UPLOAD THE FILE

To transfer a file from your local computer to the server, you can simply select a file in the left-hand area (Local PC content) and drag & drop it **into** the "in" folder on the right (Server content). The file is automatically copied to the server, as you can see from the transfer below (transfer queue).



3. CANCELLATION

Finally, you must log out of the server by selecting the "Server" tab and then "Disconnect"



D. EXAMPLES FOR THE AUTOMATED UPLOAD

SFTP is a widely used file transfer protocol and almost every programming language offers the option of establishing SFTP connections. A relatively simple type of automation for the Windows platform is the use of the COM library of the open source data transfer programme WinSCP.

Example for the C# programming language

```
// Configure session options
SessionOptions sessionOptions = new SessionOptions
{
    Protocol = Protocol.Sftp,
    HostName = "ftp2.eurofactor.de",
    UserName = "DEXXXXX",
    Password = "pwd",
    SshHostKeyFingerprint = "ssh-rsa 2048 Hk3miUKn6XJdrjobwt1vcHta6oVCvkRsNdtoR9avotw=",
};

using (Session session = new Session())
{
    // Connect
    session.Open(sessionOptions);
    // TODO: Additional code for uploading files
}
```

Example for the VB.NET programming language

```
' Configure session options
Dim sessionOptions As New SessionOptions
With sessionOptions
    .Protocol = Protocol.Sftp
    .HostName = "ftp2.eurofactor.de"
    .UserName = "DEXXXXX"
    .password = "pwd"
    .SshHostKeyFingerprint = "ssh-rsa 2048 Hk3miUKn6XJdrjobwt1vcHta6oVCvkRsNdtoR9avotw="
End With

Using session As New Session
    ' Connect
    session.Open(sessionOptions)
    ' TODO: Additional code for uploading files
End Using
```

Example of the Powershell scripting language

```
# Load WinSCP-.NET-assembly
Add-Type -Path "WinSCPnet.dll"

# Configure session options
$sessionOptions = New-Object WinSCP.SessionOptions -Property @{
    Protocol = [WinSCP.Protocol]:Sftp
    HostName = "ftp2.eurofactor.de"
    UserName = "DEXXXXX"
    Password = "pwd"
    SshHostKeyFingerprint = "ssh-rsa 2048 Hk3miUKn6XJdrjobwt1vcHta6oVCvkRsNdtoR9avotw="
}

$session = New-Object WinSCP.Session

try
{
    # Connect
    $session.Open($sessionOptions)
    # Additional code for uploading the files
}
finally
{
    $session.Dispose()
}
```