Issue: 11/11/2020
Effective: 10/12/2020

Royal Mail Mailmark®

Direct Data – Technical Specification for the download of item level data

Issued:
11 November 2020

Live:
10 December 2020

Version:
1.0

Royal Mail

Contents

1. Introduction 3
2. Onboarding Process 4
3. Accessing Mailmark Direct Data (MDD) files 5
4. Accessing MDD - WinSCP 6
5. Accessing MDD - FileZilla 11
6. Unzipping the Data File(s) 17
7. Adding a Public Key – WinSCP 19
8. Adding a Public Key – FileZilla 21
9. Generating a Public Key 23

Disclaimer

"Whilst every effort has been made to ensure that the guidelines contained in the document are correct, Royal Mail and any other party involved in the creation of the document HEREBY STATE that the document is provided without warranty, either expressed or implied, of accuracy or fitness for purpose, AND HEREBY DISCLAIM any liability, direct or indirect, for damages or loss relating to the use of the document. The document may be modified, subject to developments in technology, changes to the standards, or new legal requirements."

1. Introduction

1. Overview

Royal Mail has developed a solution whereby we will provide Mailmark® customers with details of the performance of their mailings through direct data, known as Mailmark Direct Data (MDD) via a secure file transfer.

Customers wishing to integrate this data into their IT systems can securely access item level data sets in a variable length file, in a format known as CSV (Comma-Separated Variable length) with a header record giving a name to each field.

Through the use of software, purchased or developed in-house, this data can be tailored to provide performance detail at item level for all items listed on an eManifest.

2. Purpose

This document is to provide customers and interested parties guidance on:

- requesting Mailmark Direct Data
- accessing data securely
- the CSV data format structure

3. Intended Audience:

- Any customer who requires access to their Mailmark Data.
- Any provider who wishes to develop a software solution to re-purpose the raw data.
- Any Mailmark user.

4. Important clarifications

- This variable length (CSV) file output, with a header record giving a name to each field, replaces current functionality whereby Mailmark users can access 'exception' level data and save, ready to view, using excel, csv or PDF.
- Item data will continue to be accessible at Supply Chain level and will show all items mailed rather than those with potential issues on the 'exception' reports.
- Data will be transferred through automated access via SFTP systems (Secure File Transfer Protocol).

Classified: RMG – Public

2. Onboarding process

The onboarding process requires the recipient of the Mailmark Direct Data transfer (MDD) to request access from Royal Mail.

The process is as follows:

1. Request Access from Royal Mail
   Customer (Mailmark User) contacts mailmark@royalmail.com and provides;
   a. Mailmark Participant ID(s) and Participant Name(s)
   b. Company / Business name
   c. Contact details including name, email address, contact number, job title
   d. Confirmation that the email address provided has been registered on www.royalmail.com as a business user
   e. If in the event of a customer wishing a password free connection, the SSH Public[1] key must be provided to mailmark@royalmail.com

2. Royal Mail provides access details to Requestor
   Royal Mail will action the request and send to the contact provided;
   a. A unique User name.
   b. A unique password which is formatted as: 9 characters long with letters (capital and small caps), numbers and symbols, randomly sequenced.
   c. A unique directory structure where the ZIP files will be available.

   This directory can only be accessed by the user.
   The directory structure is: /pub/1036/out. The ZIP files are found in the folder "out".

Note:
1. The DNS and IP are common across all customers
2. SFTP Password free connection is an option and not mandatory.
3. The set-up process can take 48 hours

[1] SSH keys are a matching set of cryptographic keys which can be used for authentication. The public key can be shared freely without concern, while a private key is guarded and never exposed to anyone.

3. Accessing Mailmark Direct Data files

The data will be in a variable length file, in a format known as CSV (Comma-Separated Variable length) with a header record giving a name to each field. It and will be transmitted via SFTP. The file will need to be retrieved by the user through;

a. Accessing the SFTP
b. Retrieving the file from the secure host platform
c. Transferring the selected file(s) to the customer's destination of choice

There are a number of opensource tools which can be used to retrieve the Mailmark Direct Data files from the SFTP server.

Options include WinSCP and FileZilla for which, to support customers accessing MDD we have provided some guidance below.

Please note: Royal Mail does not recommend one tool over the other and it is your responsibility to ensure the chosen programme meets your company's security policies.

WinSCP

- Establish connection
  https://winscp.net/eng/docs/guide_connect
- Download the file

  https://winscp.net/eng/docs/task_download

FileZilla

- Download the following link
  https://www.ostraining.com/blog/webdesign/filezilla-beginner/

PuttyGen

- Download the following link
  https://www.ssh.com/ssh/putty/windows/puttygen

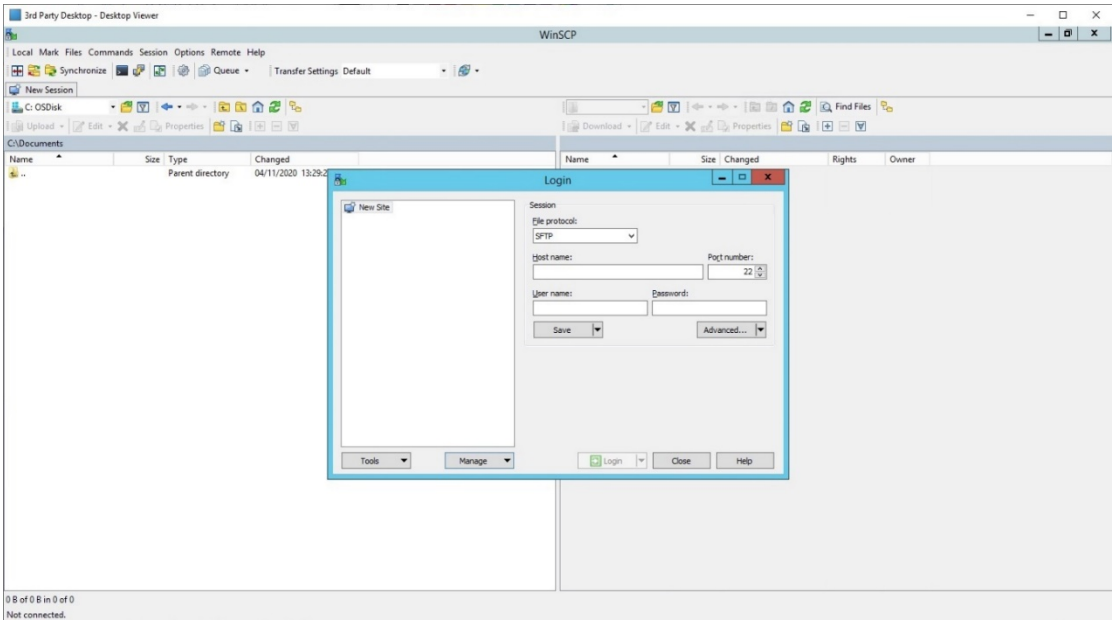
7-ZIP

- Download the following link
  https://www.7-zip.org/

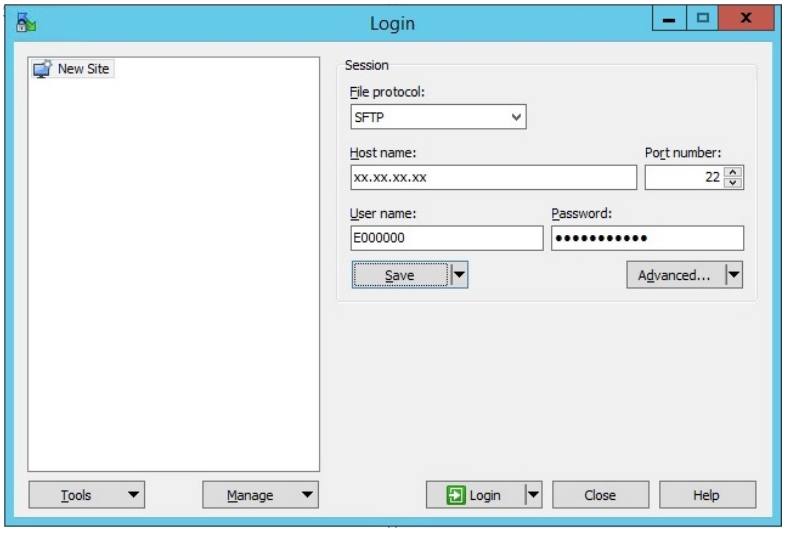
Detailed guidance on each option follows in the next section.

4. Accessing MDD – WinSCP

1. Start **WinSCP** and the *Login* dialog box appears.



2. Add the connection details in the *Login* dialog box:
   i. Select **SFTP** in the *File Protocol* field.
   ii. Type the IP address **xx.xx.xx.xx** in the *Hostname* field.
   iii. Select *Port Number:* **22.**
   iv. Type your customer **E123456** in the *Username* field.
   v. Type your password in the *Password* field.

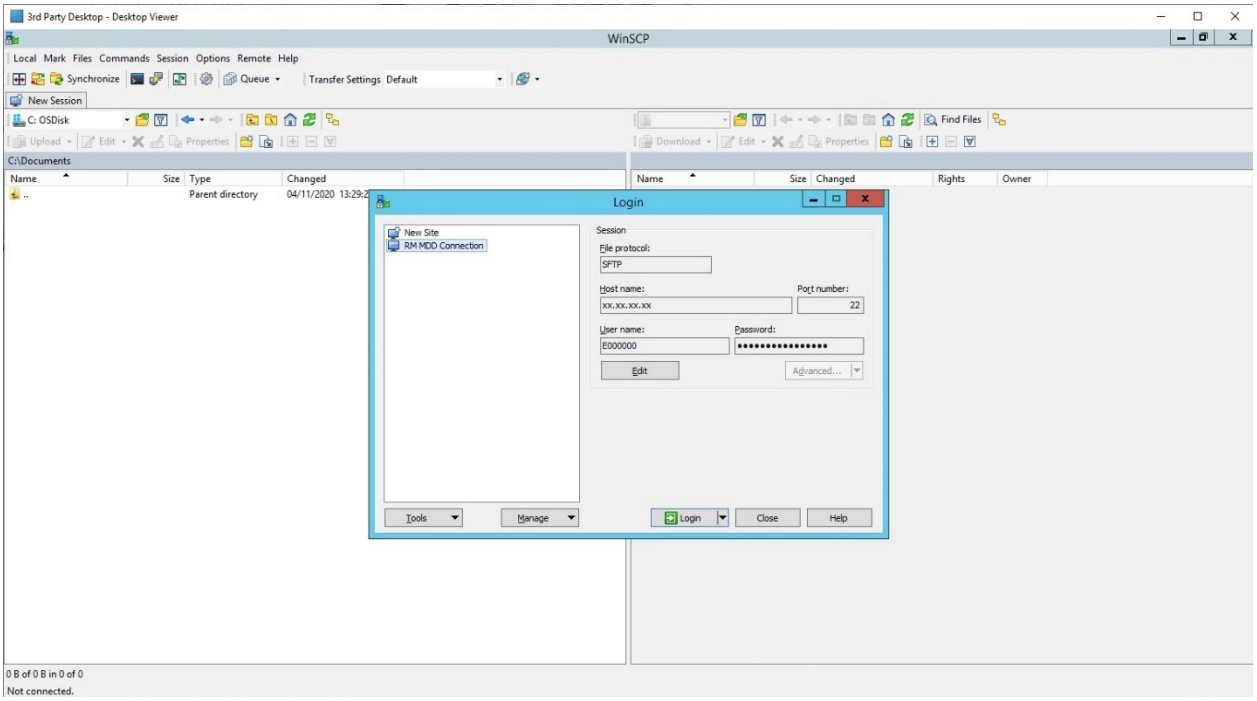


3. Click the **Save** button. The *Save session as site* dialog box appears.

Classified: RMG – Public

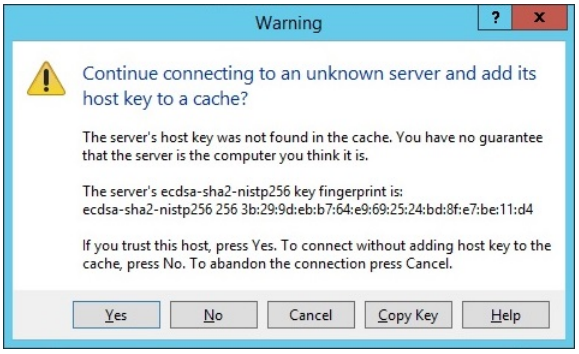
4. Type a connection name, for example **RM MDD Connection.**
5. Optionally, navigate to the **/pub/1036/out** folder in the folder field.
6. You then have the option to *Save password*
   a. Tick if you wish – (*not recommended)* option or,
   b. Do not tick, if unticked the password will have to be typed every time.

7. Click the OK button.
8. The connection details will be saved for future use without needing to repeat step 2.



Classified: RMG – Public

9. Click the Login button.
   A warning dialog box appears.
   You will be requested to save the host key of the FTG Server during the first connection.

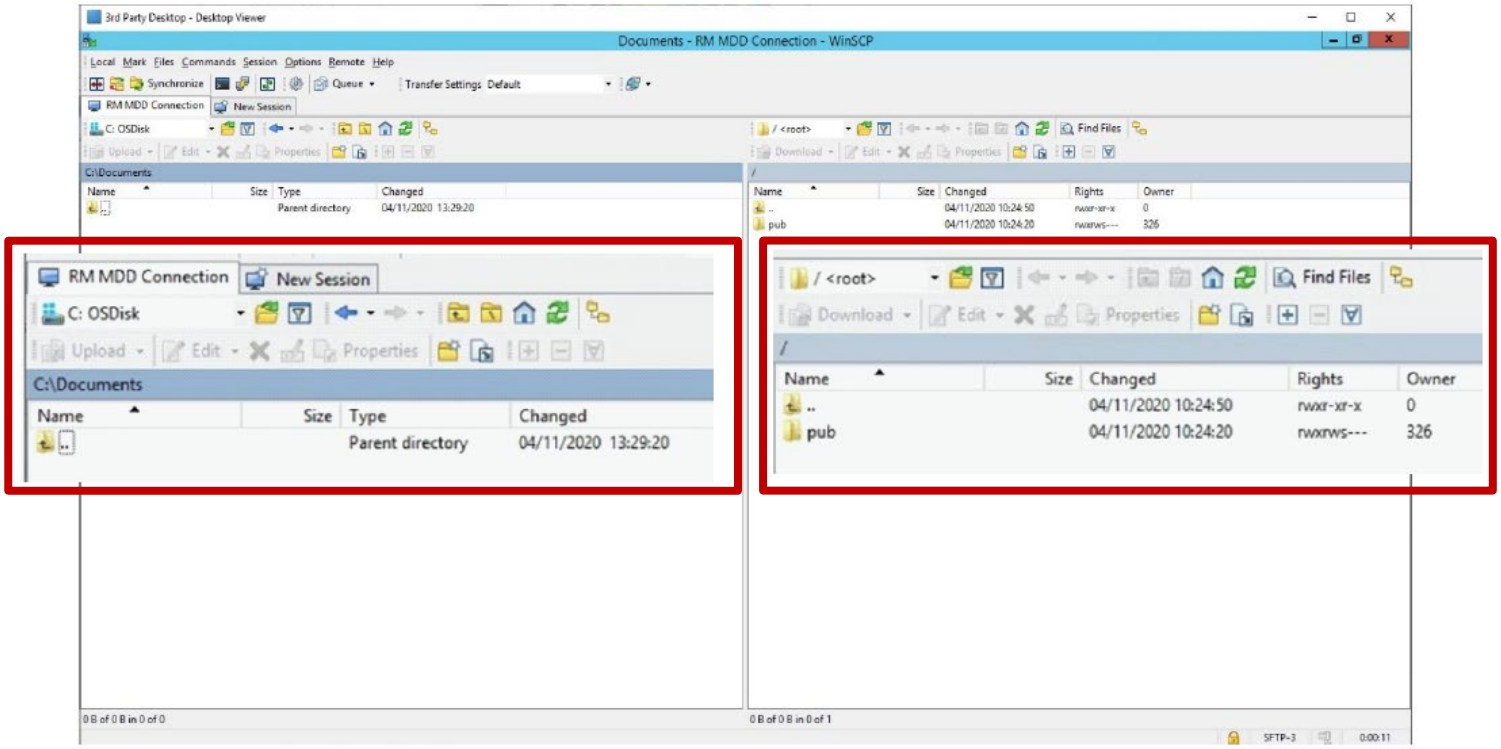


10. You have choice of storing the key
    a. Click the **Yes** button to accept and store the key, or,
    b. Click the **No** button to accept without storing the key.
       If you select **No**, you will be shown this dialog box every time the connection is established.

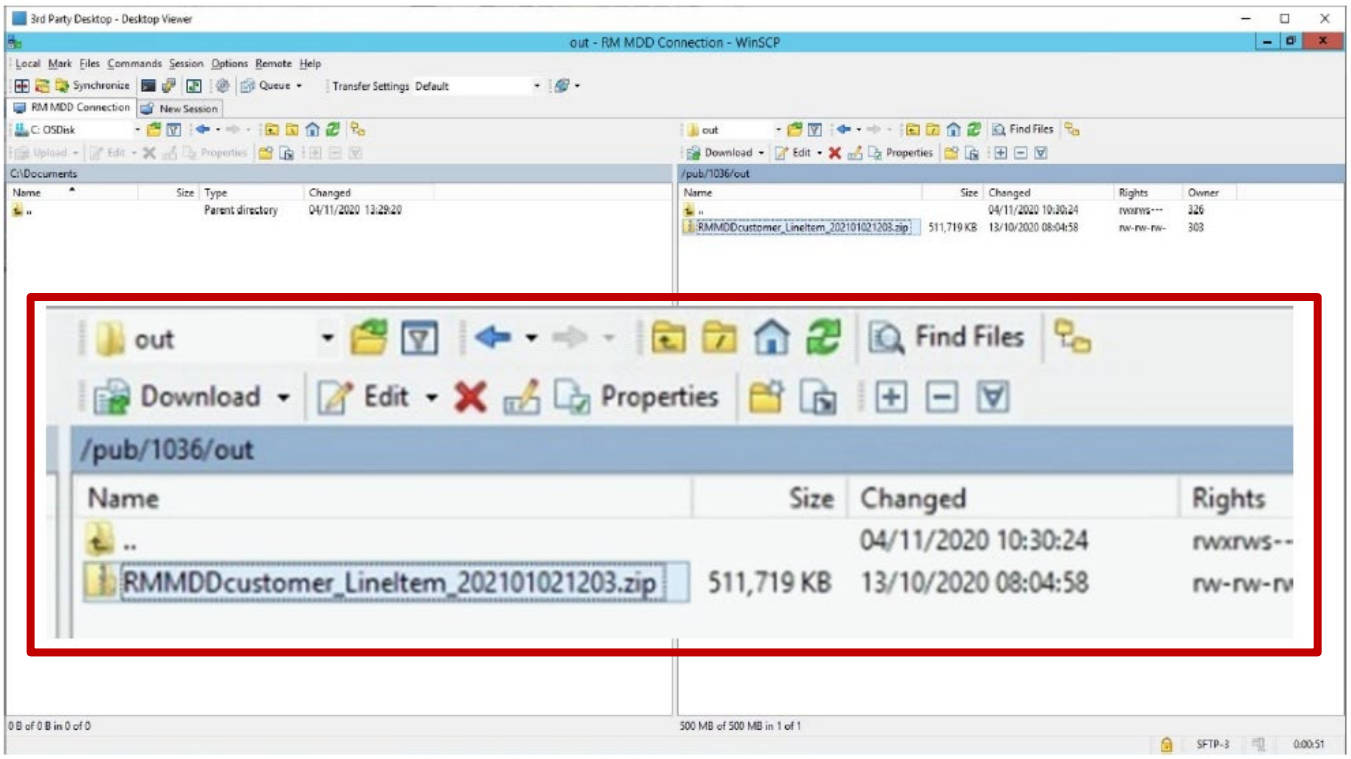
An Authentication Banner dialog box appears.

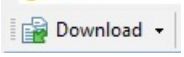
11. Tick the Never show this banner again box.
12. Click the Continue button.
    You will then see a main window area split into two sections.
    on the right, the server you have connected to;
    on the left, your own computer's hard drive.

Classified: RMG – Public

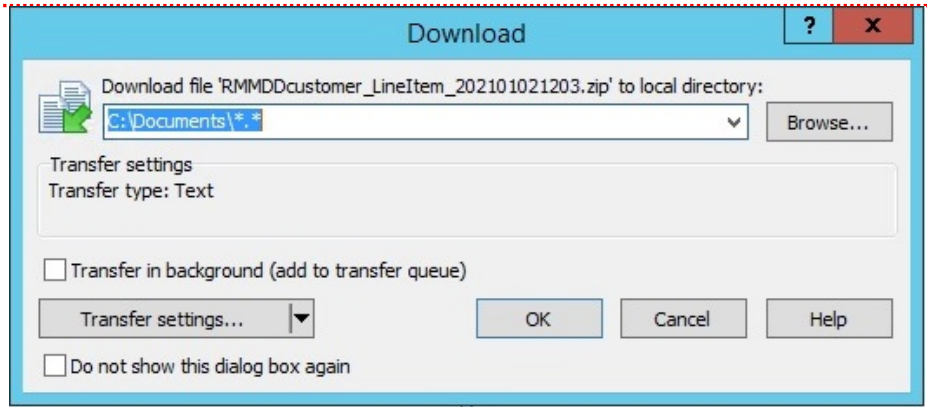


13. Navigate to the folder in your own computer (left pane) where you wish to download the file to.
14. Navigate to /pub/1036/out directory on the remote server where the MDD's files are stored. Click on the folder icons.

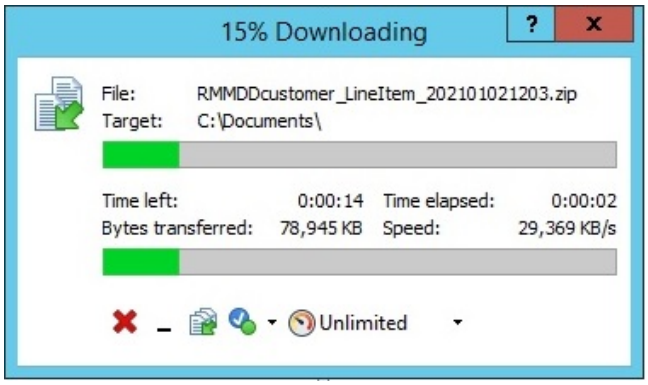


15. Highlight the file(s) to be downloaded.
16. Click the **Download**  button. A *Download* dialog box appears.

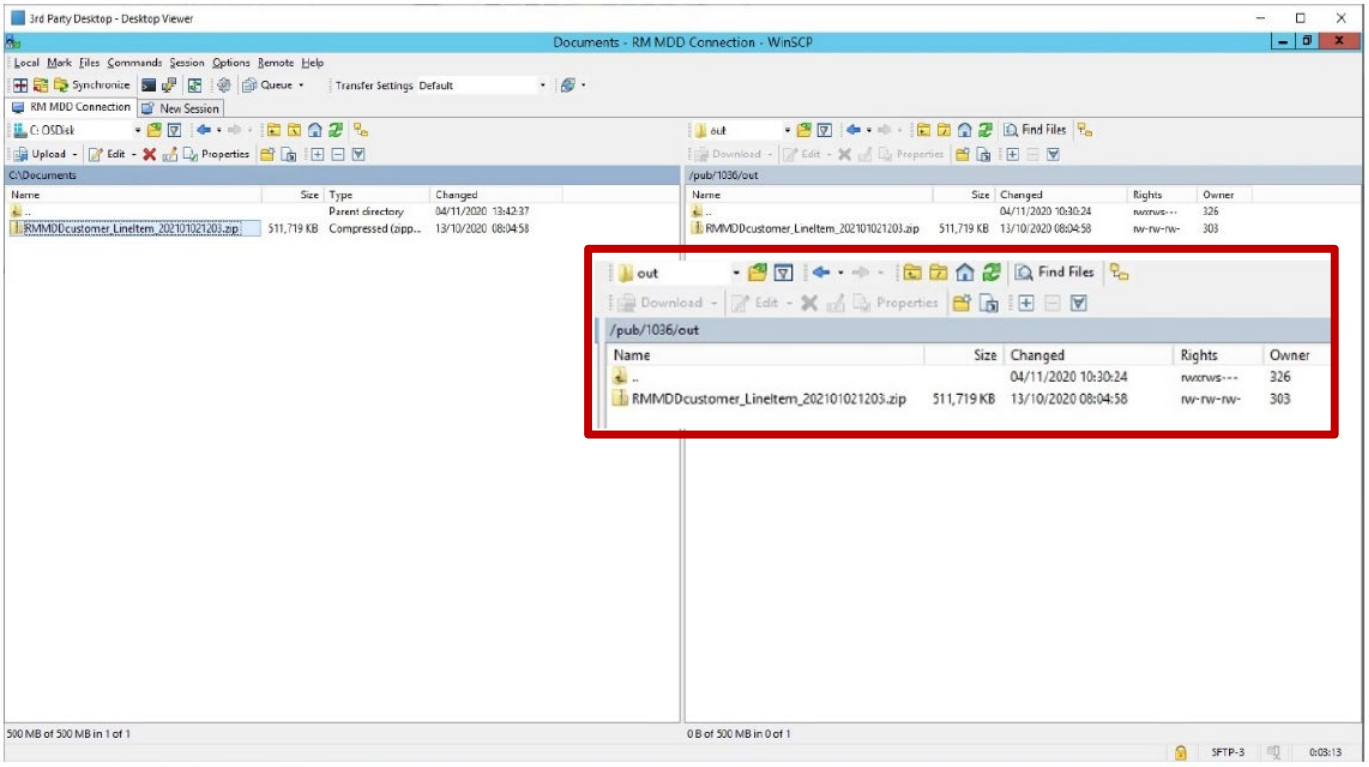
Classified: RMG – Public



17. Navigate to/confirm the location in your computer's hard drive where the file will be stored.
18. Click the **OK** button. A *Downloading* dialog box appears; no action is required from you.



When the file(s) is/are downloaded the file(s) will be visible on the right pane of the screen.

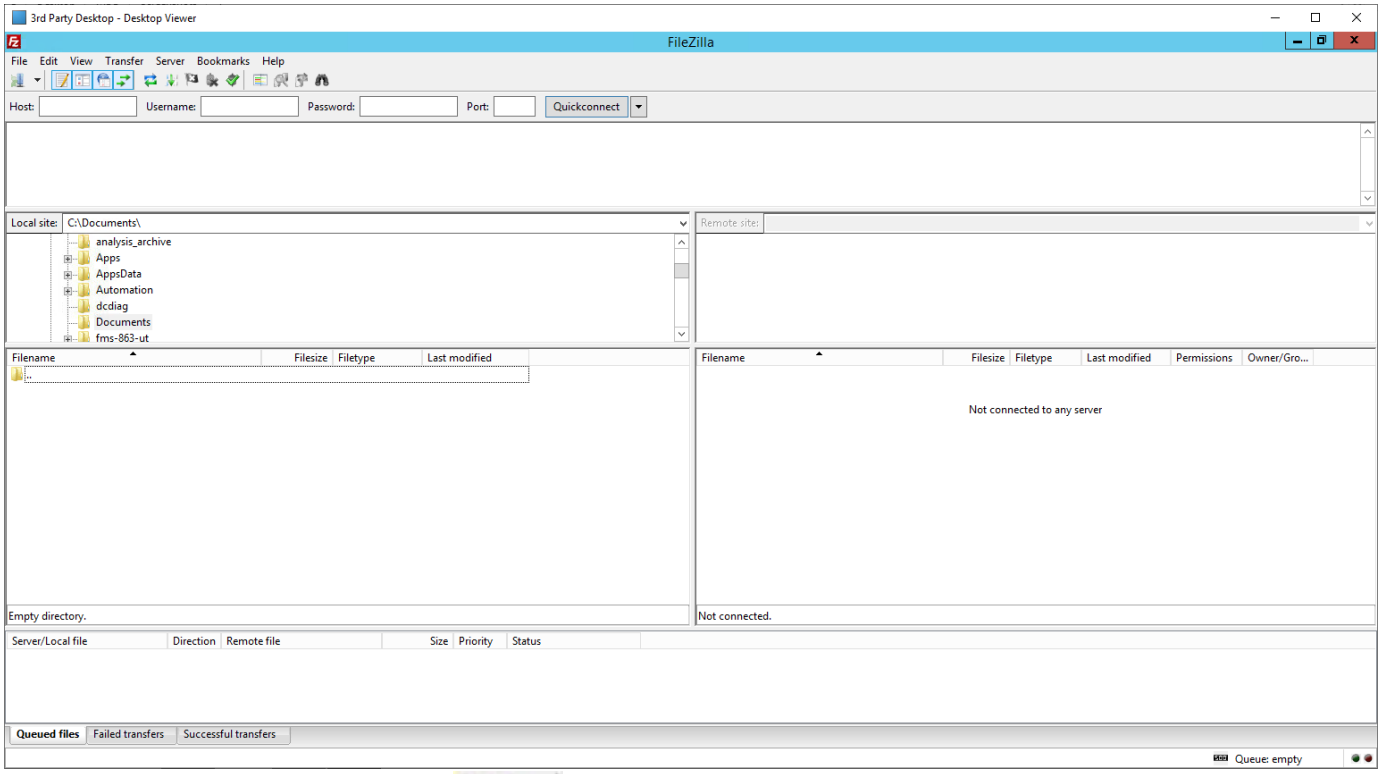


19. The MDD file download is complete.

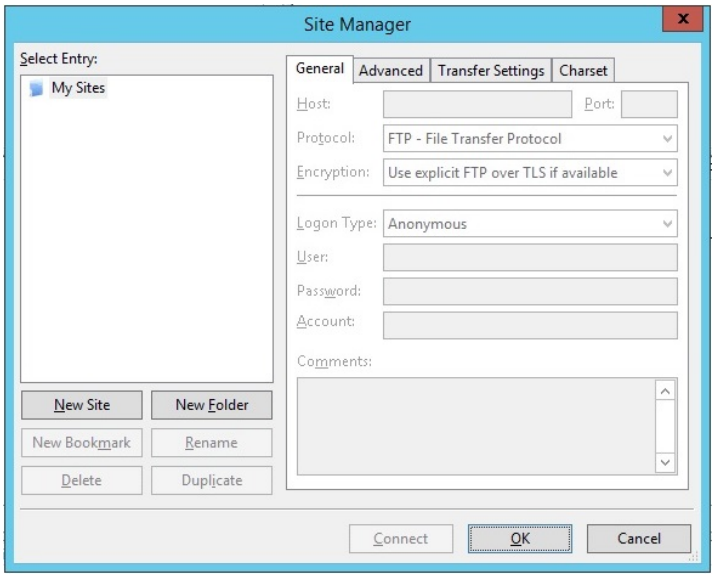
Classified: RMG – Public

5. Accessing MDD – FileZilla

1. Start **FileZilla**.

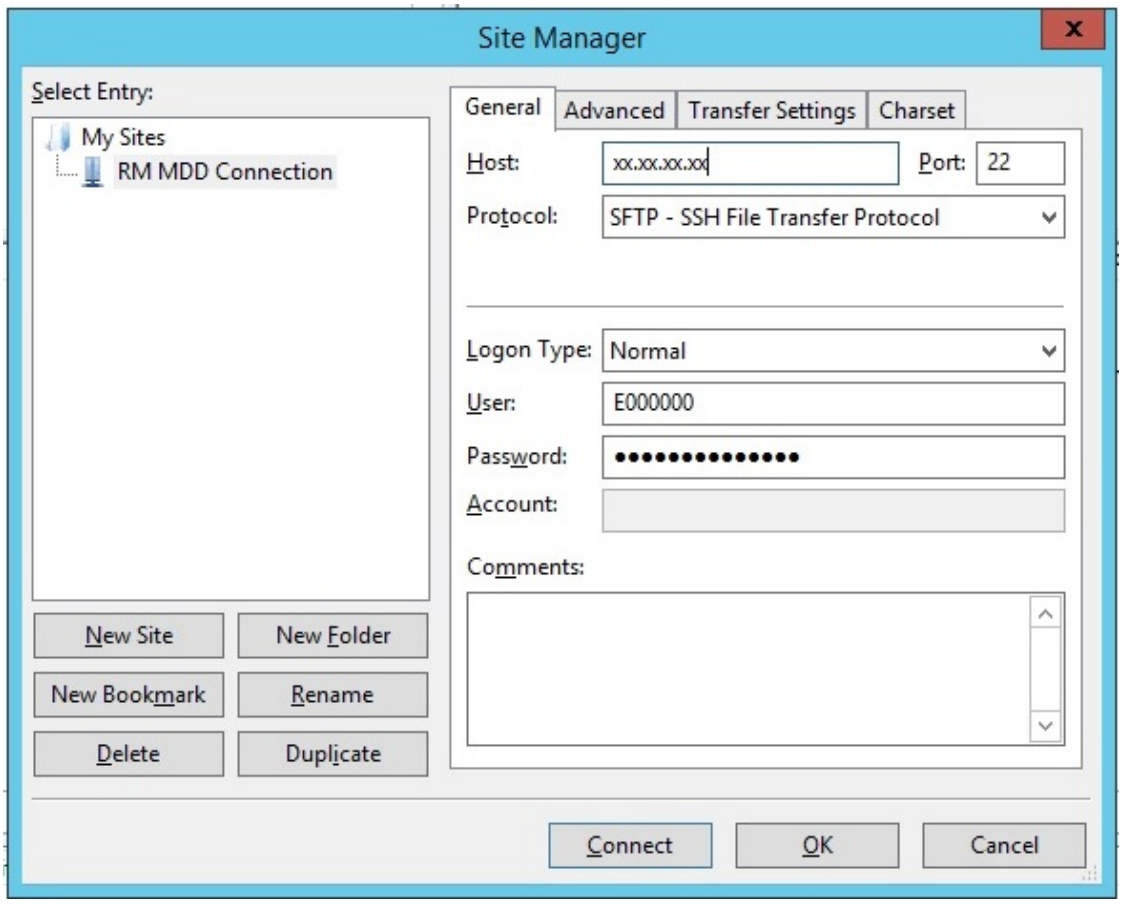


2. Click the **Site Manager** button .
   The *Site Manager* dialog box appears.
   It is necessary to add the connection details.



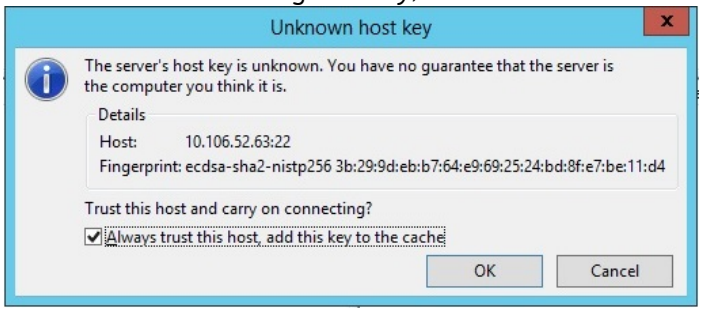
Classified: RMG – Public

3. Click the New Site button.
4. Add the connection details in the Login dialog box:
   i. On the right pane, Rename the site connection name to **RM MDD Connection**
   ii. Type **xx.xx.xx.xx** in the *Host* field.
   iii. Type **22** in the *Port* field.
   iv. Select **SFTP – SSH File Transfer protocol** in the *Protocol* field.
   v. Select the **Normal** option in the *Logon Type* field.
   vi. Type your customer number, for example E123456 in the *User* field.
   vii. Type your Password in the *Password* field.



4. Click the **Connect** button to proceed with the connection.
   It will be required to save the host key of the FTG Server during the first connection.

5. You have the option whether or not to trust the host:
   - To trust the host: Tick the *Always trust this host, add this key to the cache* box.
   - If you wish to proceed without storing the key, do not tick the box

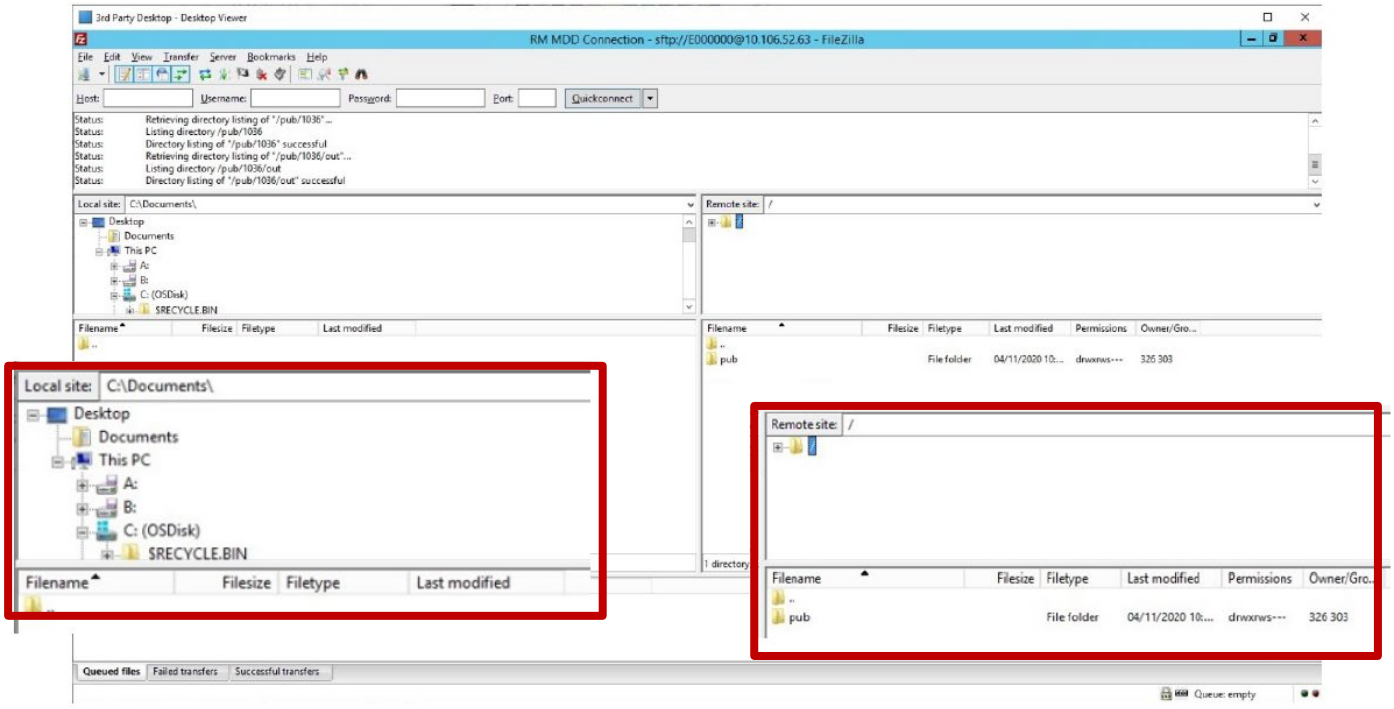


Classified: RMG – Public

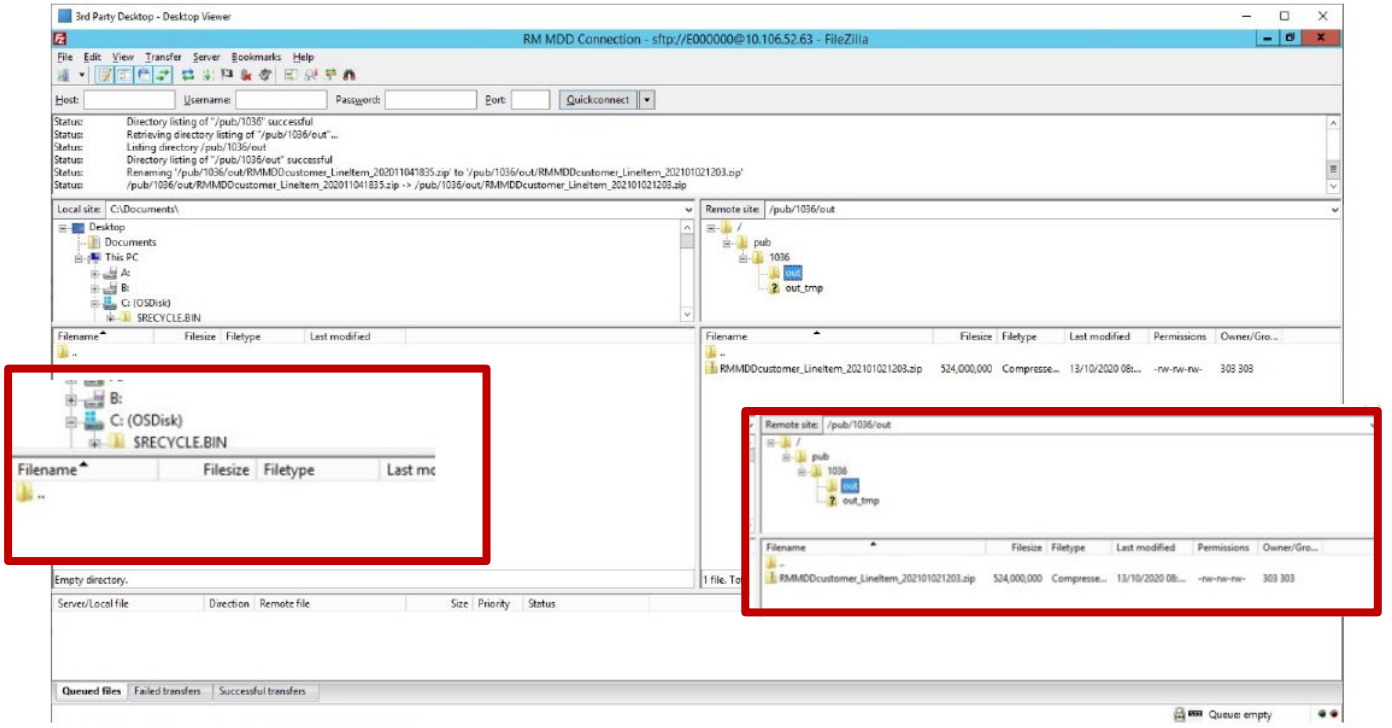
6. Click the OK button.

   The screenshot below shows the main window area split into two sections.

   - on the right, the server you have connect to;
   - on the left, your own computer's hard drive.



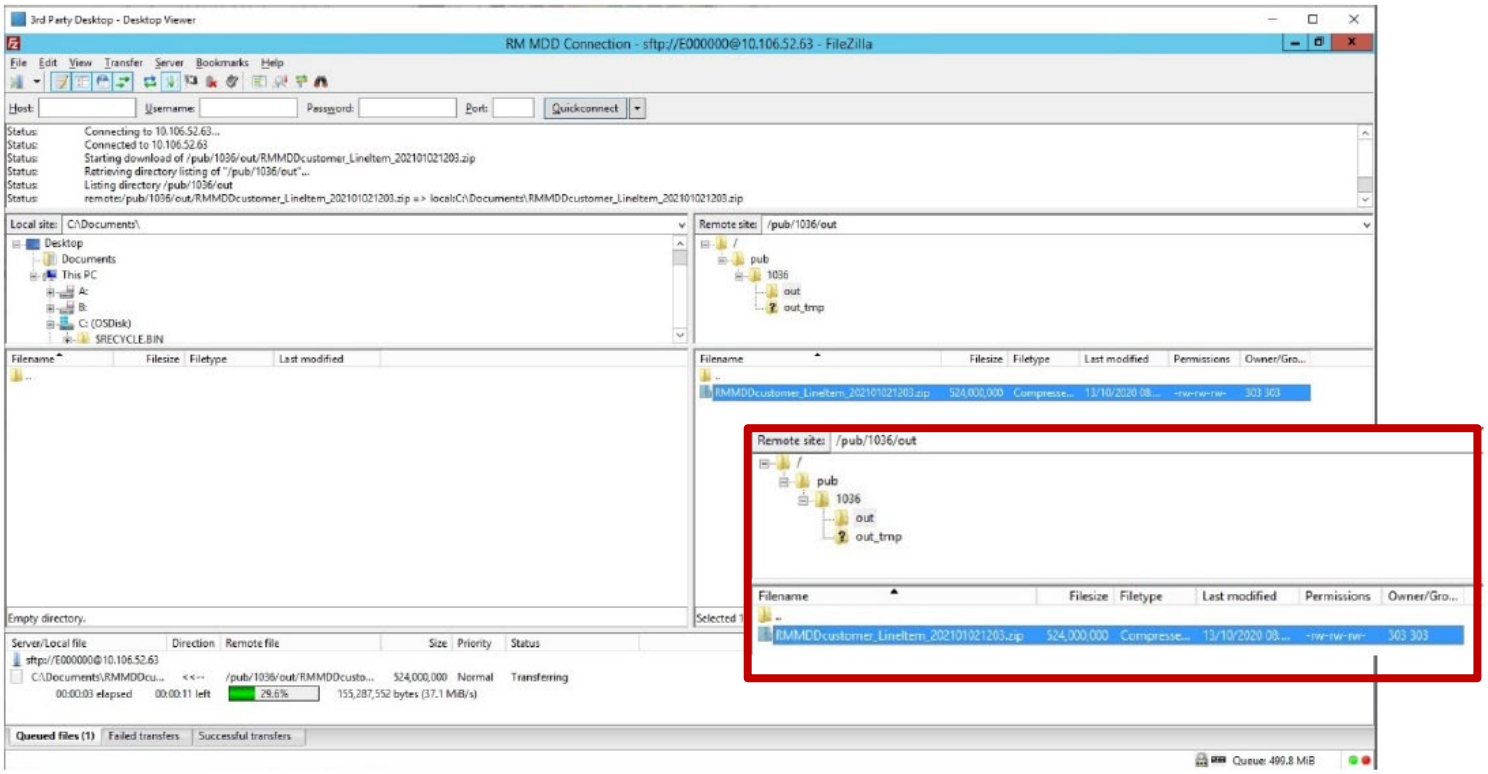
7. Navigate to the folder in your own computer (left pane) where you wish to download the file
8. Navigate to /pub/1036/out directory on the remote server where the MDD's files are stored. Click on the folder icons.



9. Double-click the file(s) to be downloaded.

   The file transfer process will begin.

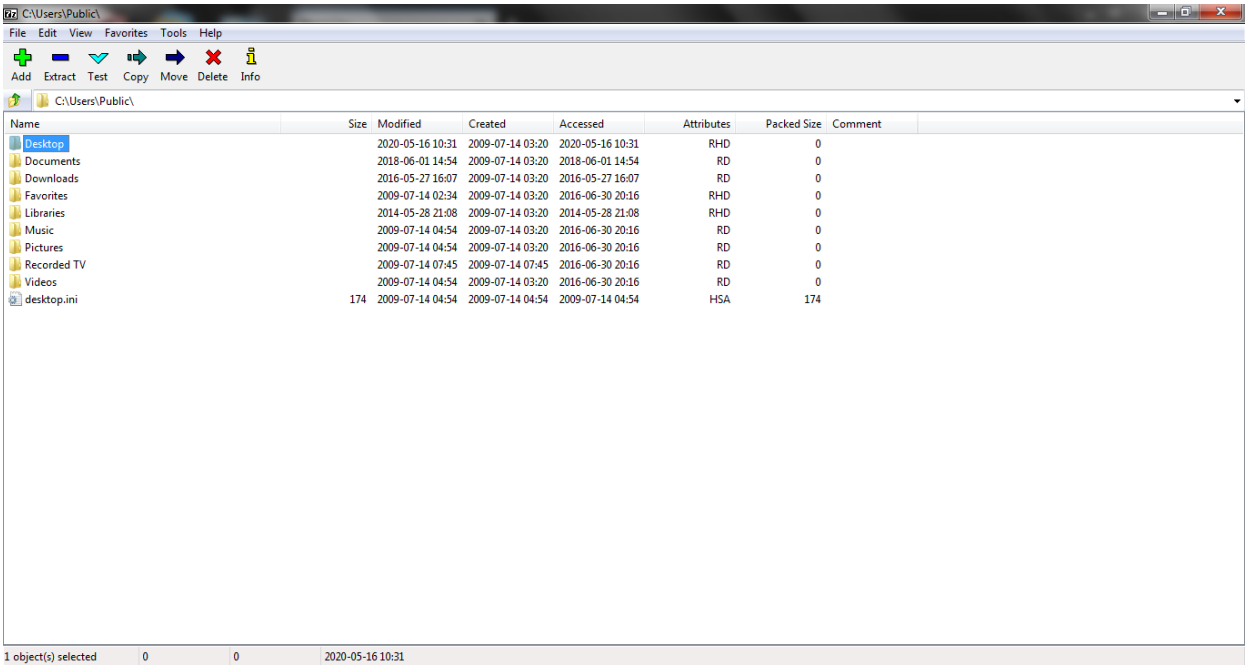
Classified: RMG – Public



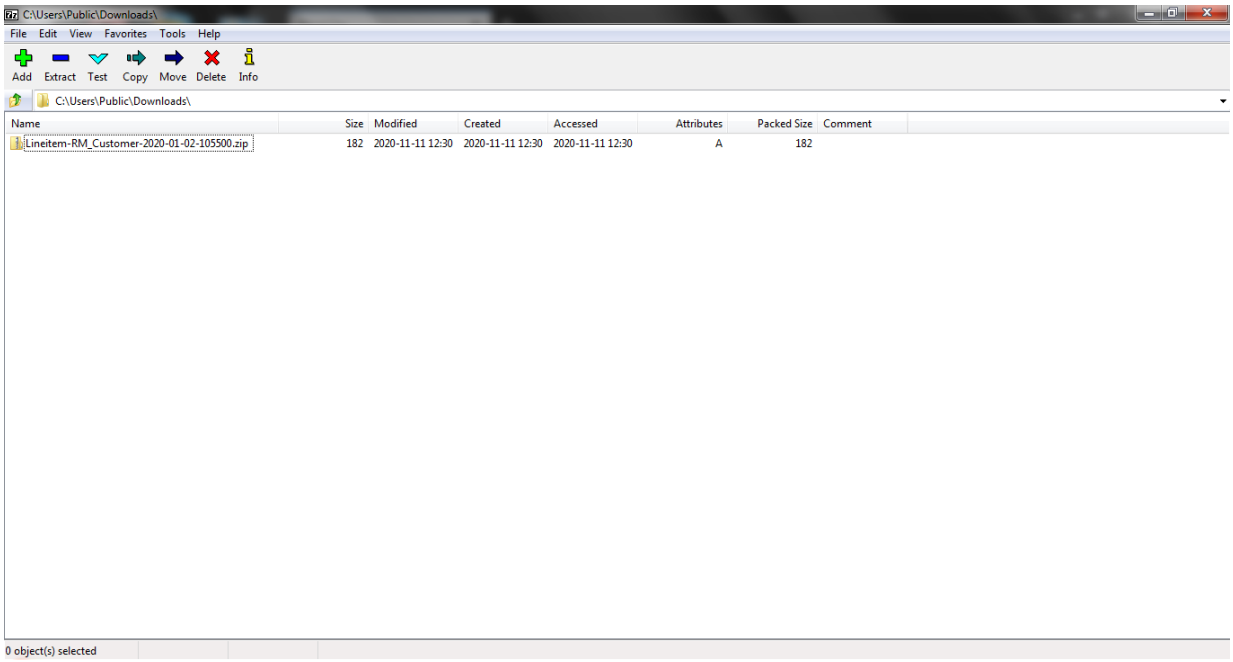
10. When the transfer is completed, the file is available on the local customer hard drive.

6. Unzipping a File

1. Start **7-Zip**.

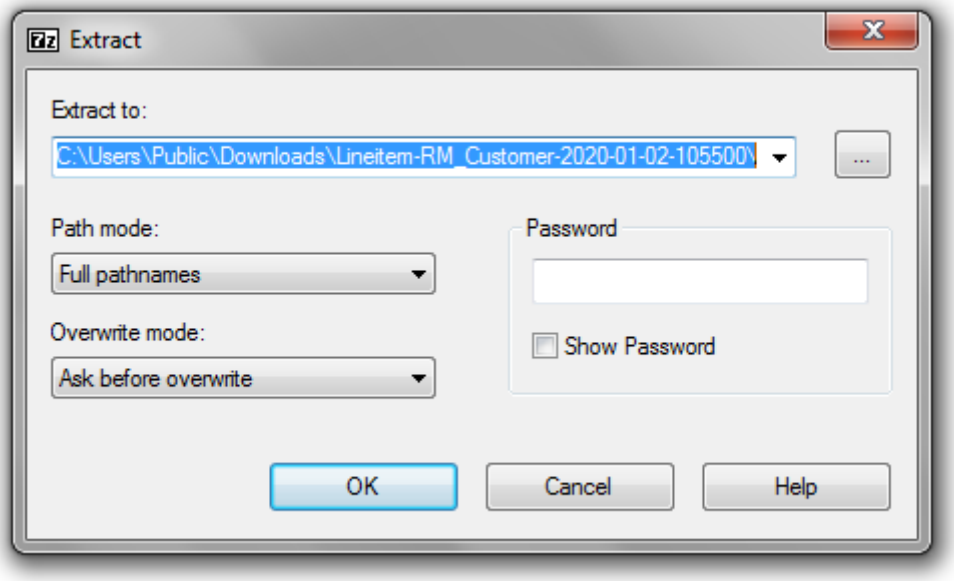


2. Navigate to the folder where you download the file to, in this example C:\user\Public\Downloads.

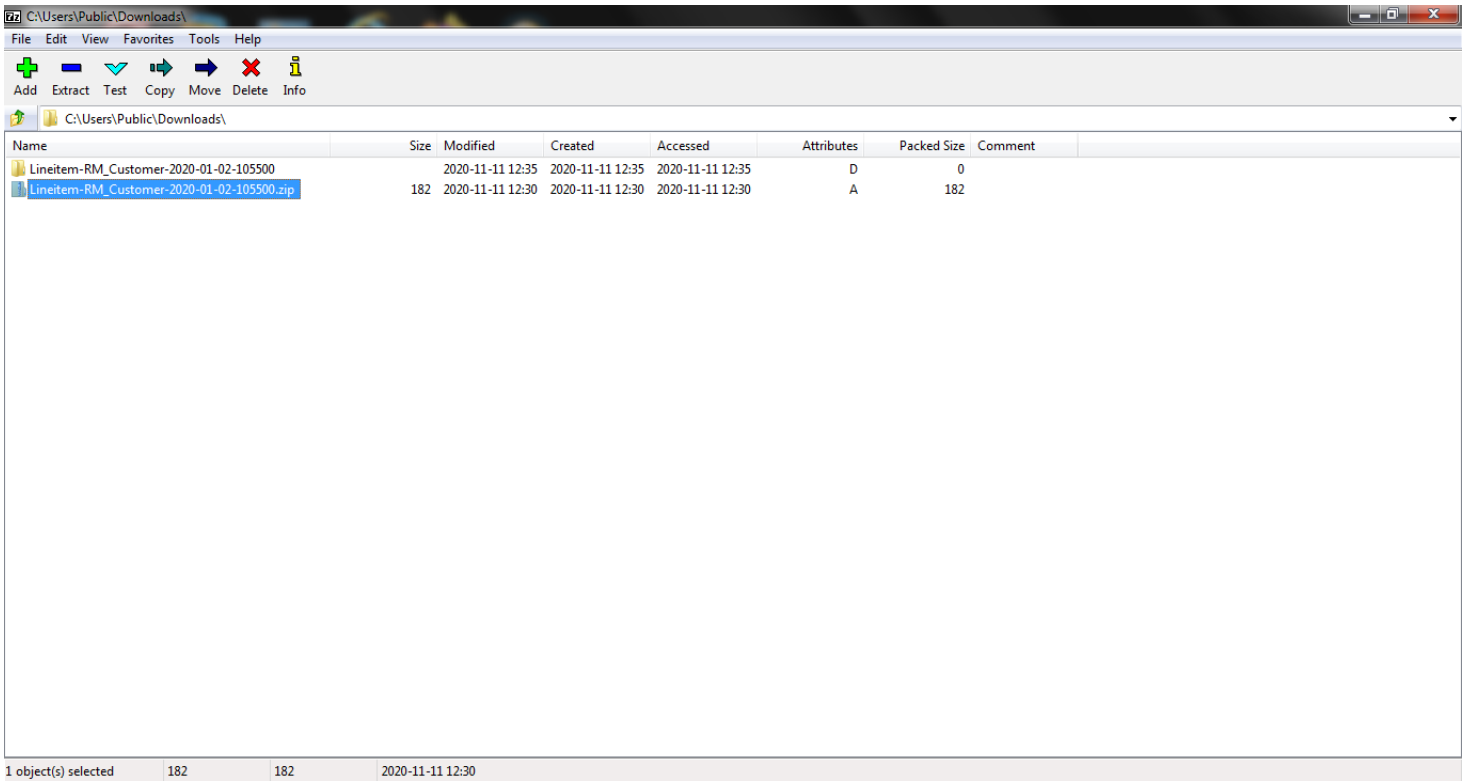


3. Click the file to extract.
4. Click the **Extract** button. The file will be extracted to the same folder it is currently. The file doesn't have a password, so none is required.

Classified: RMG – Public



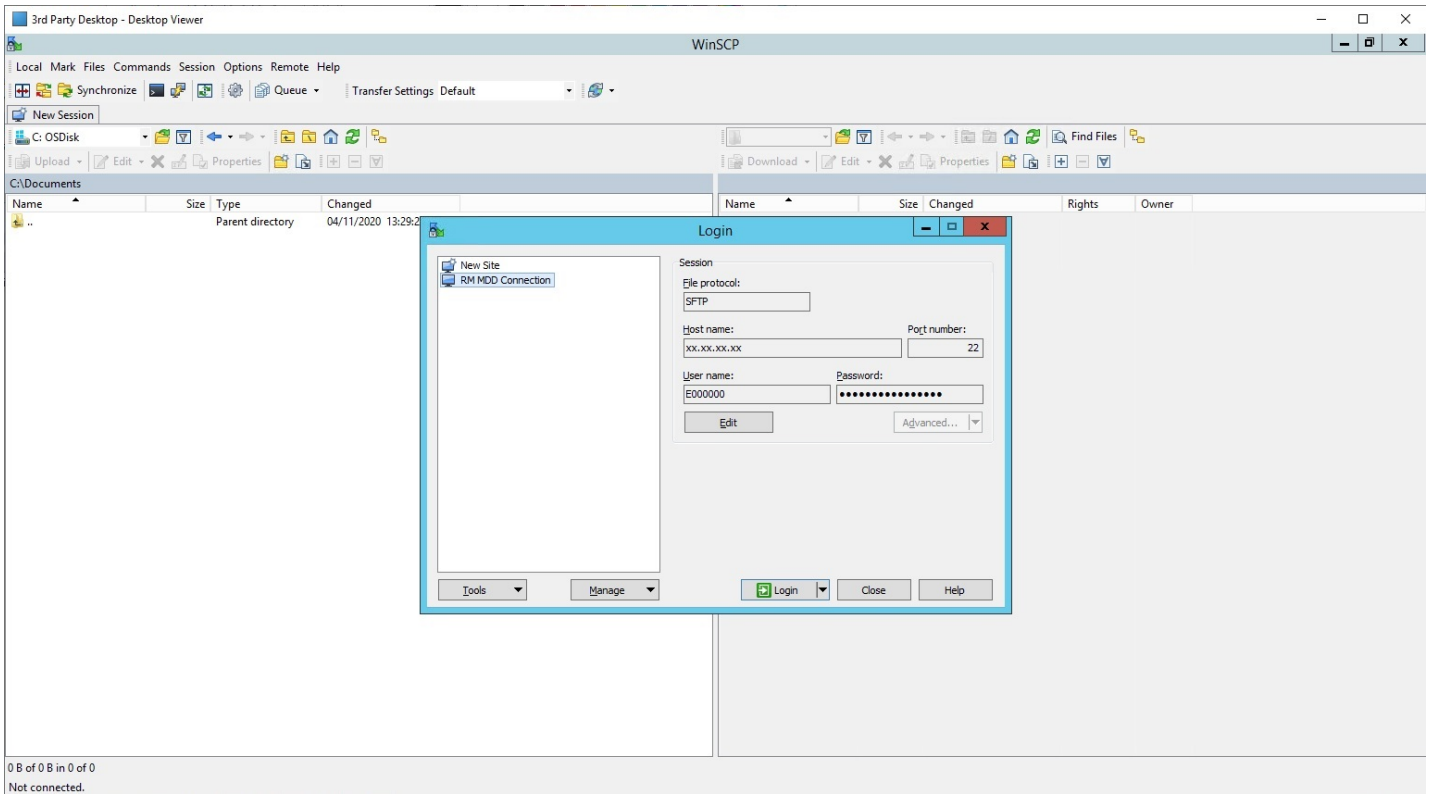
5. Navigate to a new folder location if you wish to; or alternatively
6. Click the **OK** button to extarct the csv file. The file is extract into a new folder with the same file as the file.



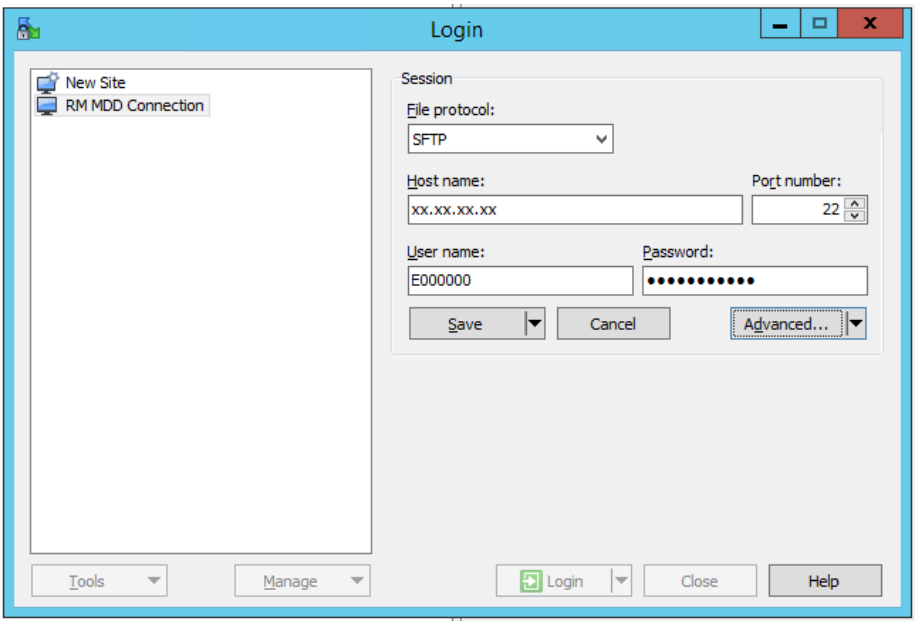
The fle is now ready to be processed.

7. Adding Public Key – WinSCP

1. Start **WinSCP** and the *Login* dialog box appears.

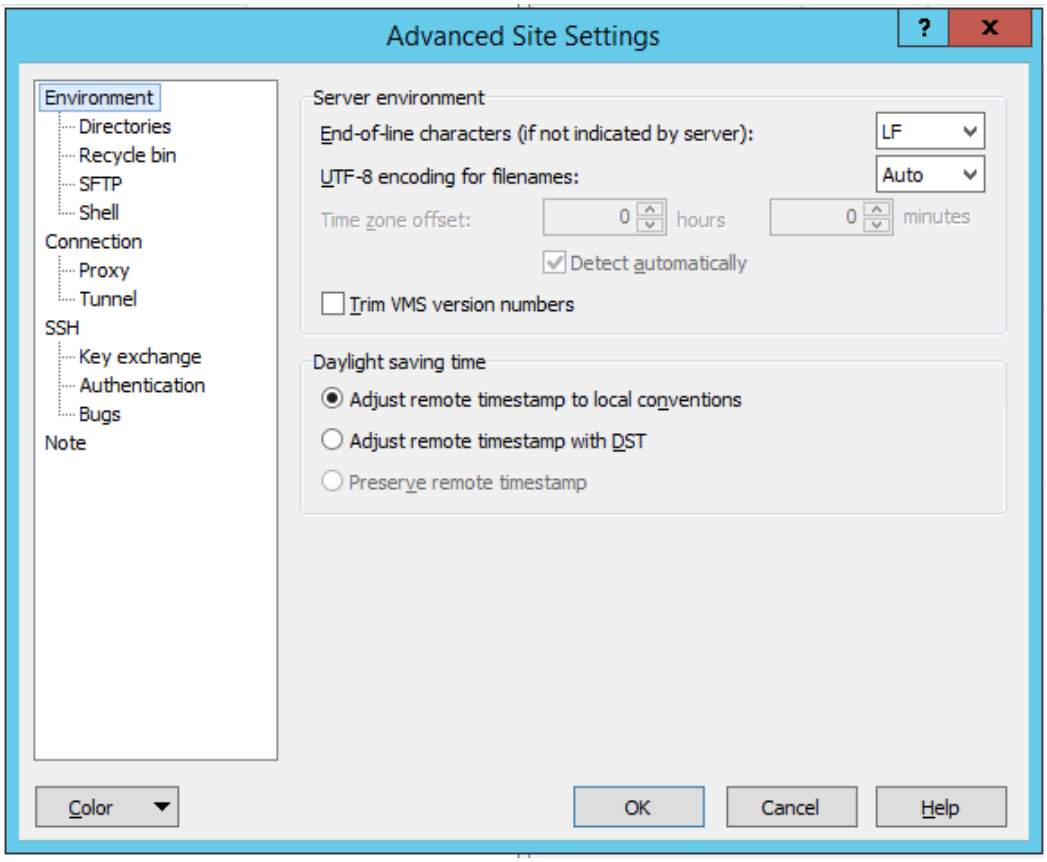


2. Highligh the *RM MDD Connection* onteh left pane.
3. Click the **Edit** button. The *advance* button is now activated.

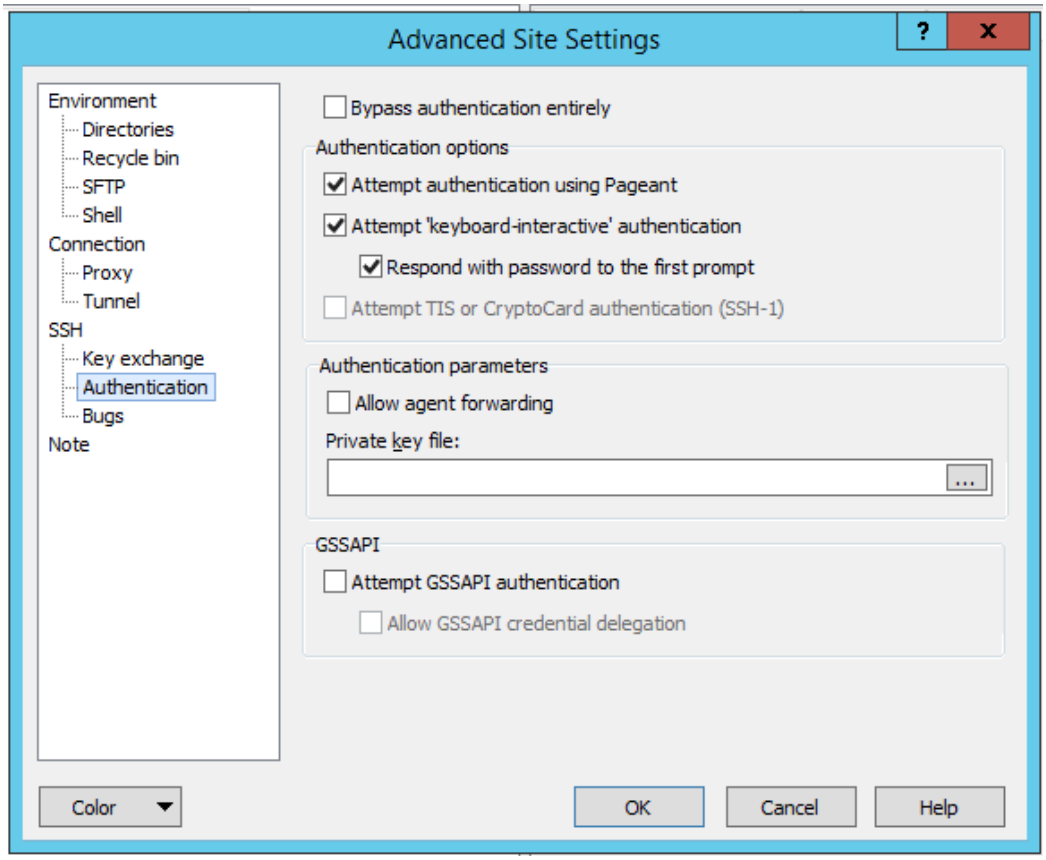


Classified: RMG – Public

4. Click the **Advance** button. The *Advance Site Settings* dialog box appears.

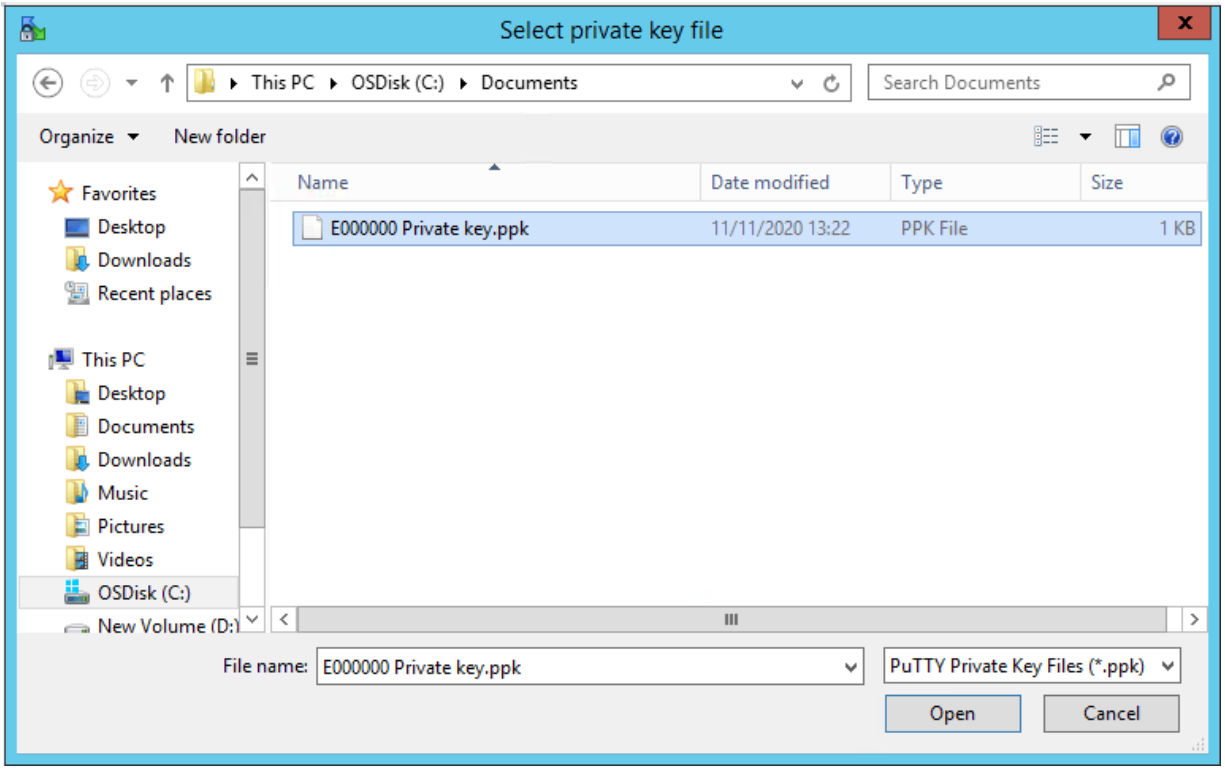


5. Click the **Authentication** option on the left pane.
   The list of settings on the right side of the dialog box will change.

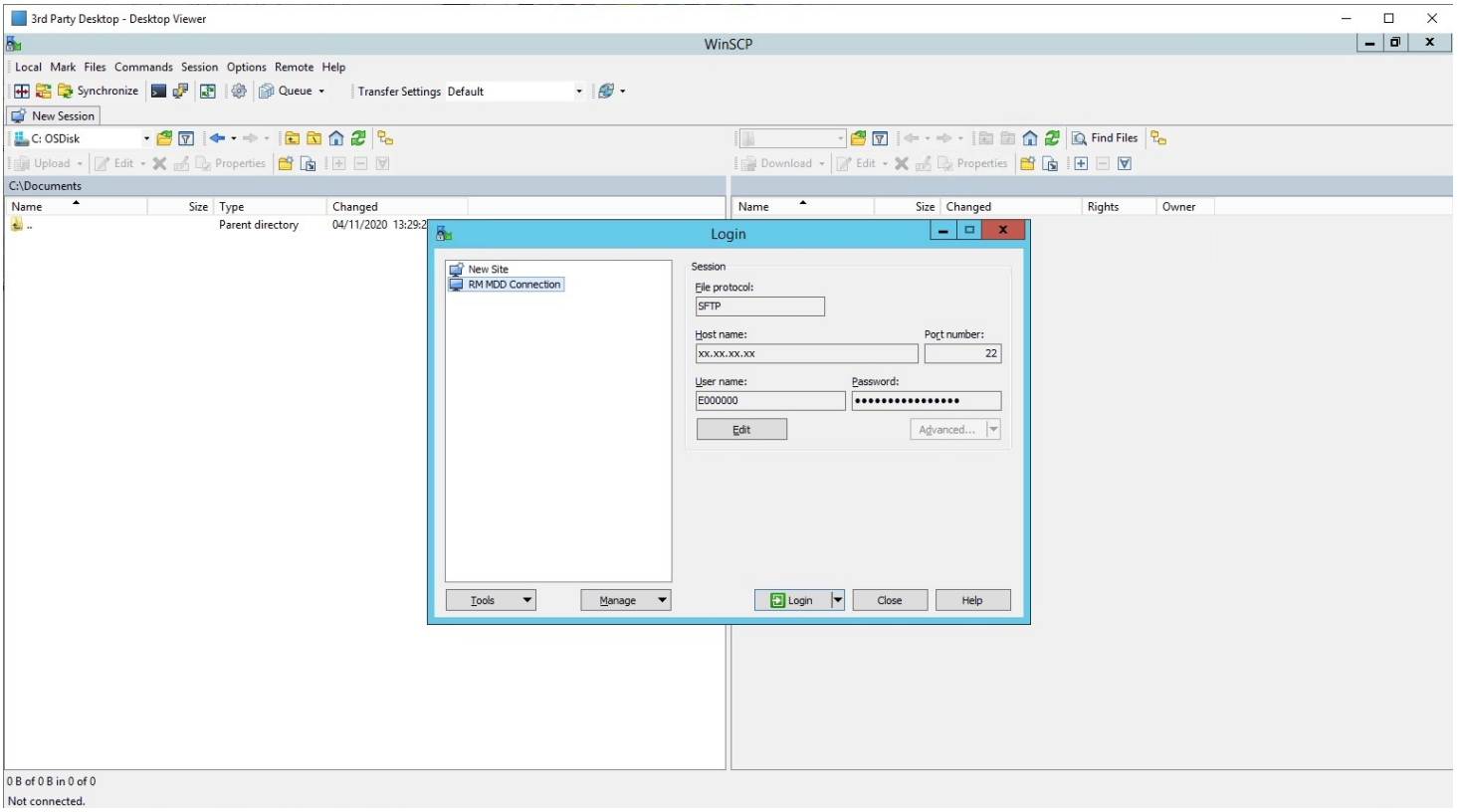


Classified: RMG – Public

6. Click the **Browse** [...] button. The *Select private key file* dialog box appears.



7. Highlight the public Key file. See how to generate a Public Key section.
8. Click the **Open** button. The *Select private key file* dialog box closes.

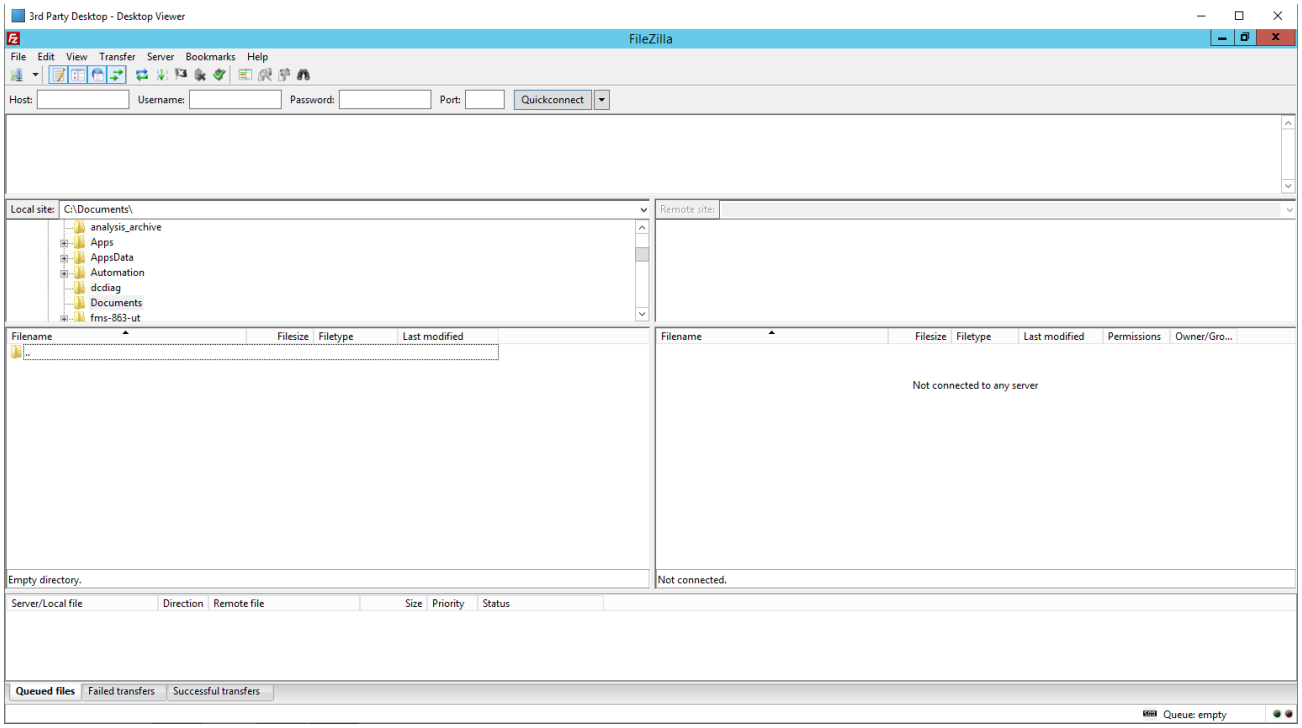


To proceed with the connection, simply click the Login button.

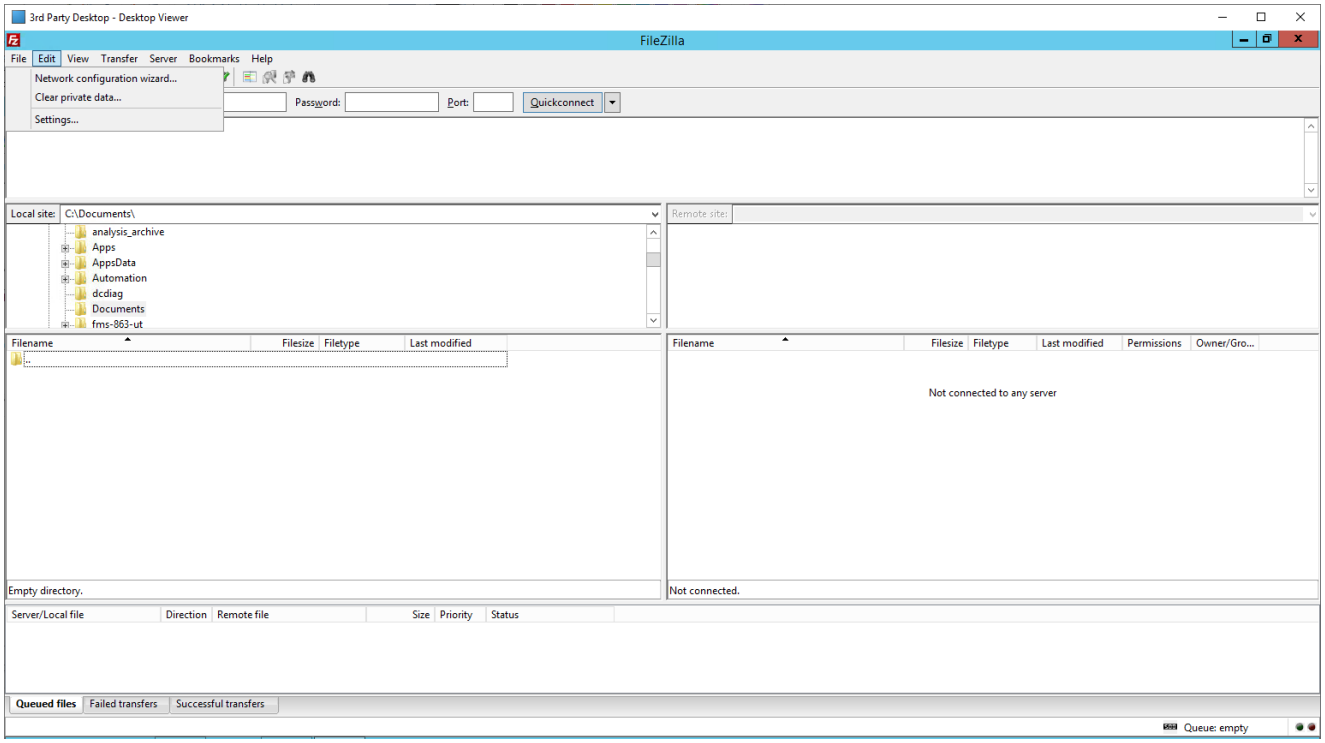
Classified: RMG – Public

8. Adding a Public Key – FileZilla

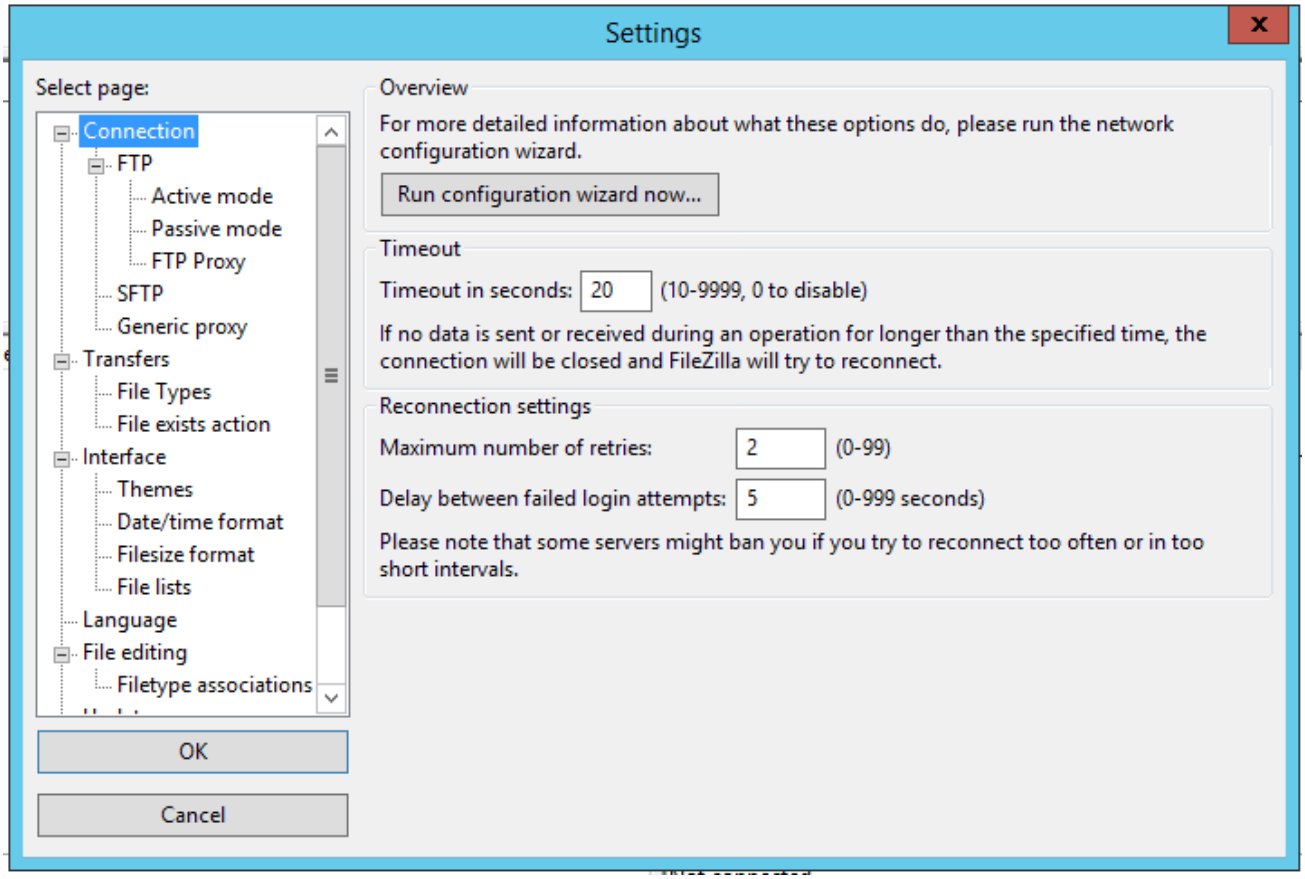
1. Start **FileZilla**.



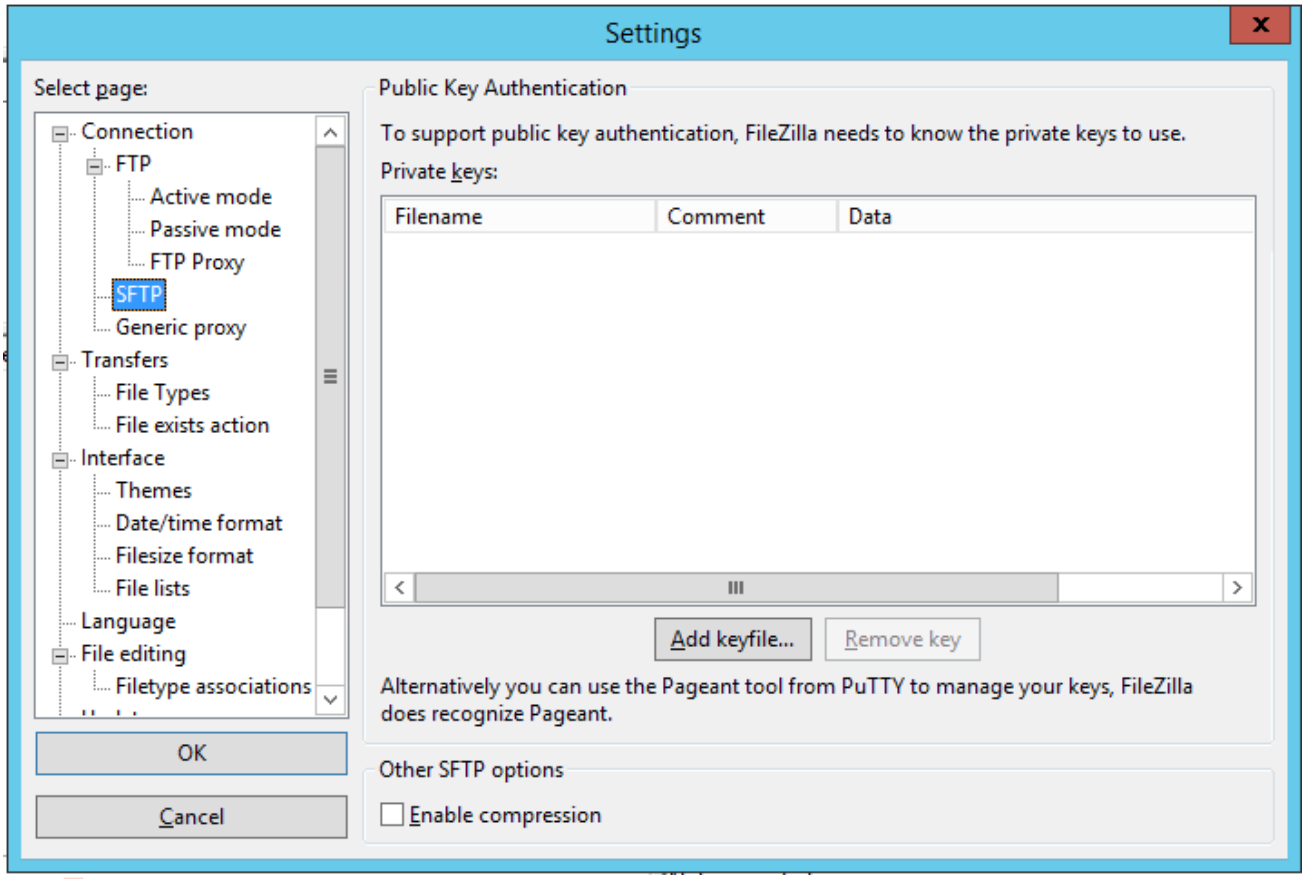
2. Click the **Edit** Menu.



3. Click the **Settings** option from the drop-down menu. The *Settings* dialog box appears.

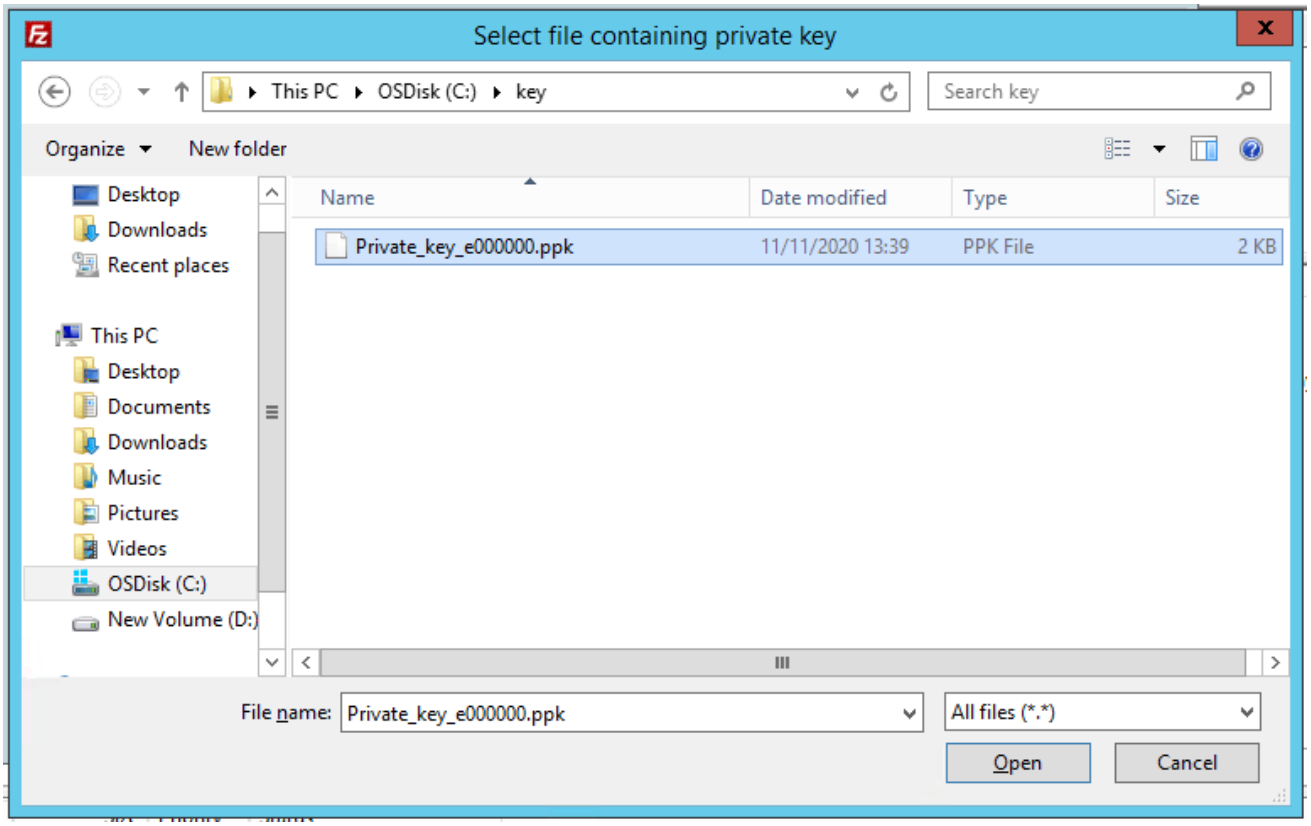


4. Select the **SFTP** option in the left pane. The options on the right pane change.

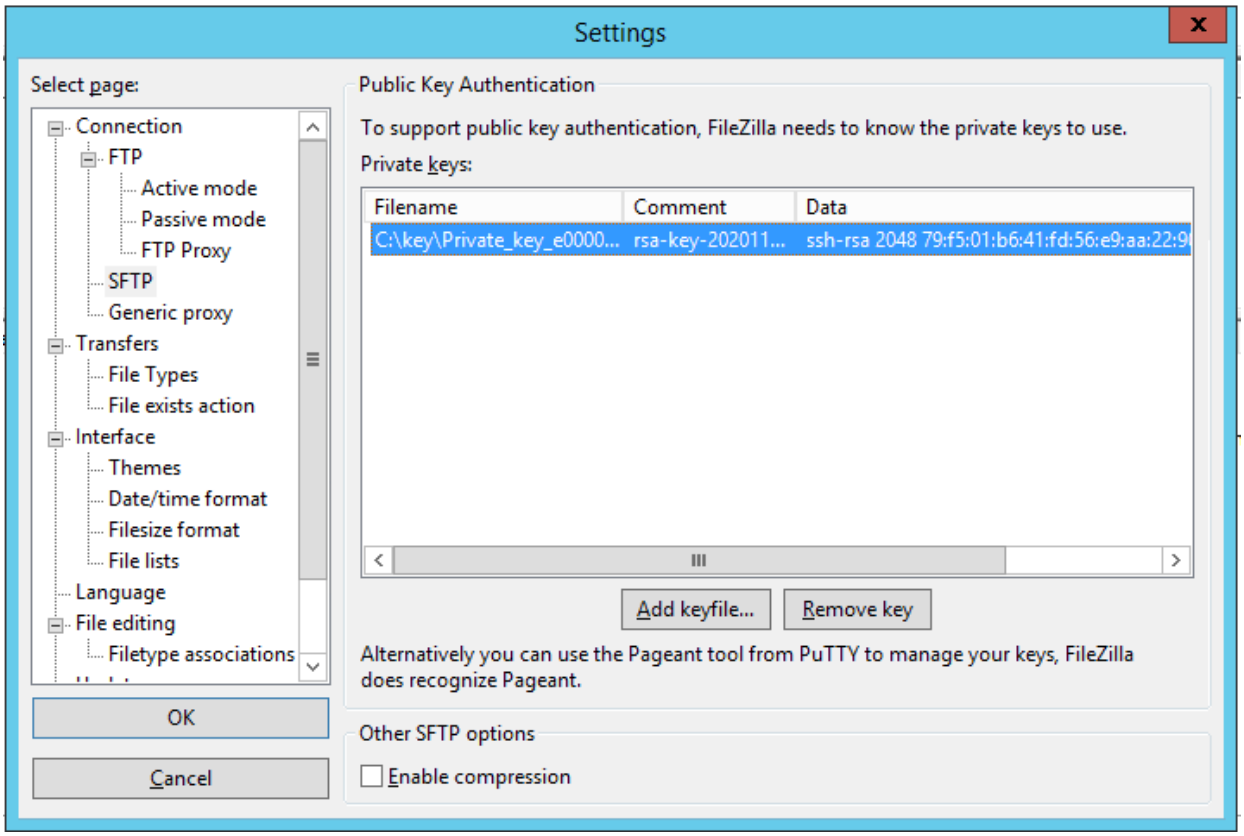


Classified: RMG – Public

5. Click the **Add keyfile** button. The option on the right pane changes.



9. Highlight the public Key file. See how to generate a Public Key section.
10. Click the **Open** button. The *Settings* dialog box now lists the added public key.



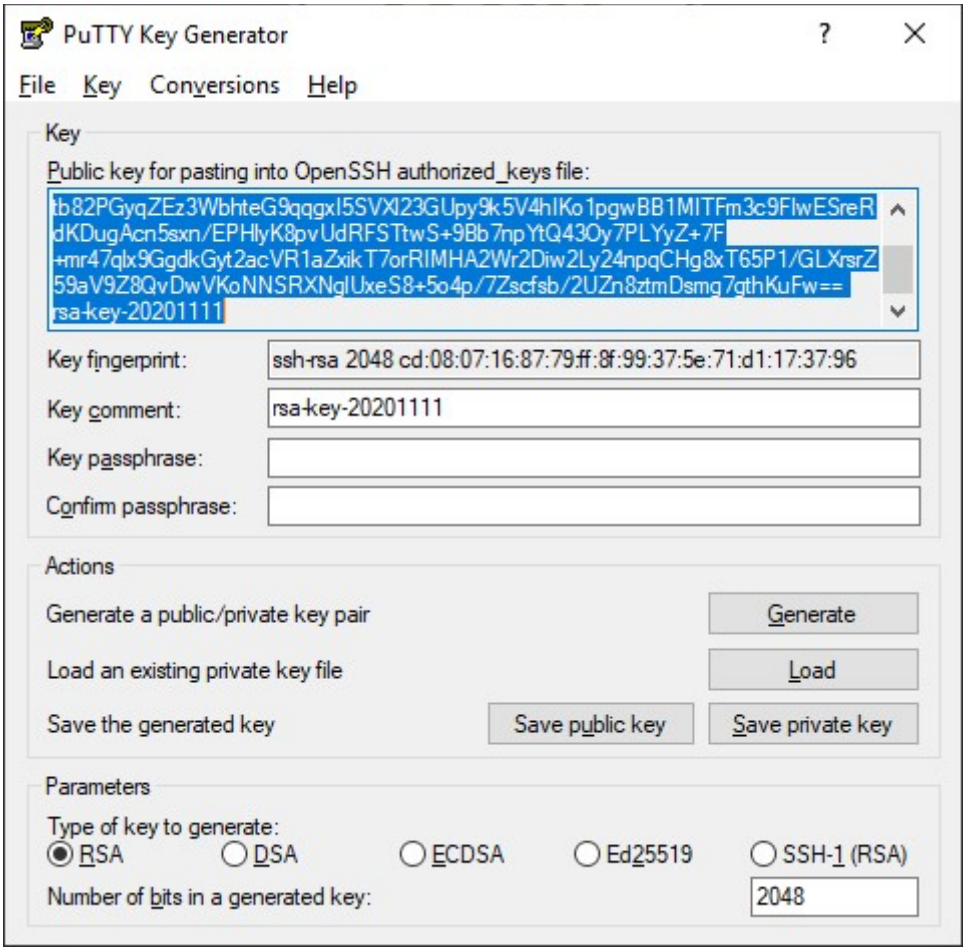
11. Click the **OK** button. The *Settings* dialog box closes and the key is saved.

Classified: RMG – Public

9. Generating a Public Key

We strongly advise you to contact your system administrator or IT support to complete this task.

1. Start **PuttyGen**.
2. Click the **Generate** button.



3. Click the **Save private key** button. Navigate to where you would like to save the public key. This key is not to be provided to anyone else.
4. Click the **Save public key** button. Navigate to where you would like to save the public key. This key needs to be given to Royal Mail.
5. Send by email the public key to mailmark@royalmail.com

Classified: RMG – Public

Royal Mail, the cruciform and all marks indicated with ® are registered trademarks of Royal Mail Group Ltd. Mailmark © Royal Mail Group Ltd 2020. All rights reserved.