What is GPG?

See description here

GPG for Windows users

There are several applications under the Windows operating system which allow you to generate a gpg key pair. Among the best known is Gnu4win with its module called [Kleopatra]. Gpg4win is a free distribution encryption software which allows the encryption of files and the sending of documents through email using public key cryptography for data encryption and digital signatures.

Supports cryptography OpenPGP and S/MIME (X.509) standards.

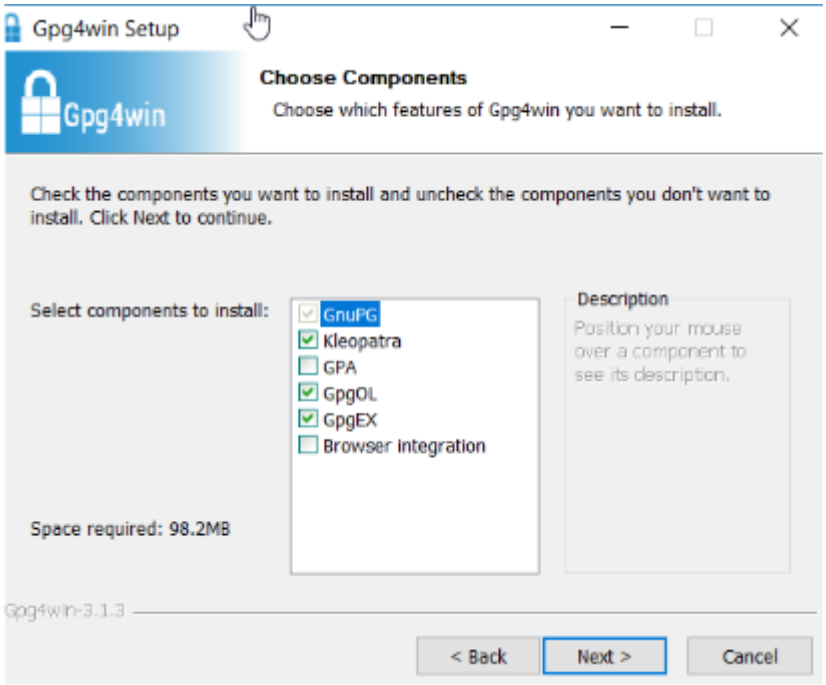
It consists of several modules, including:

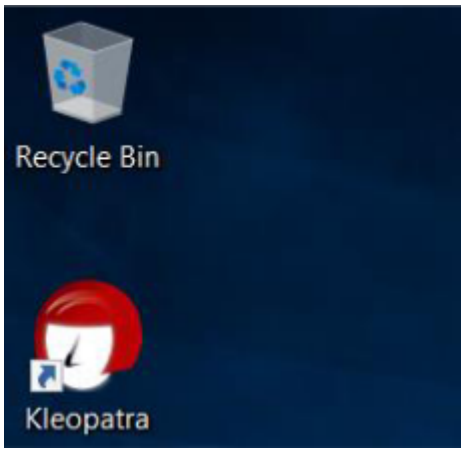
- GnuPG : the basic encryption tool
- Kleopatra : certificate manager for OpenPGP y X.509
- GPA : an alternative certificate manager (GNU) for OpenPGP and X.509

GPG4win installation

On the project website download the latest version of the software. Open the installer and authorize the changes if necessary. Follow the steps indicated with the Next button.

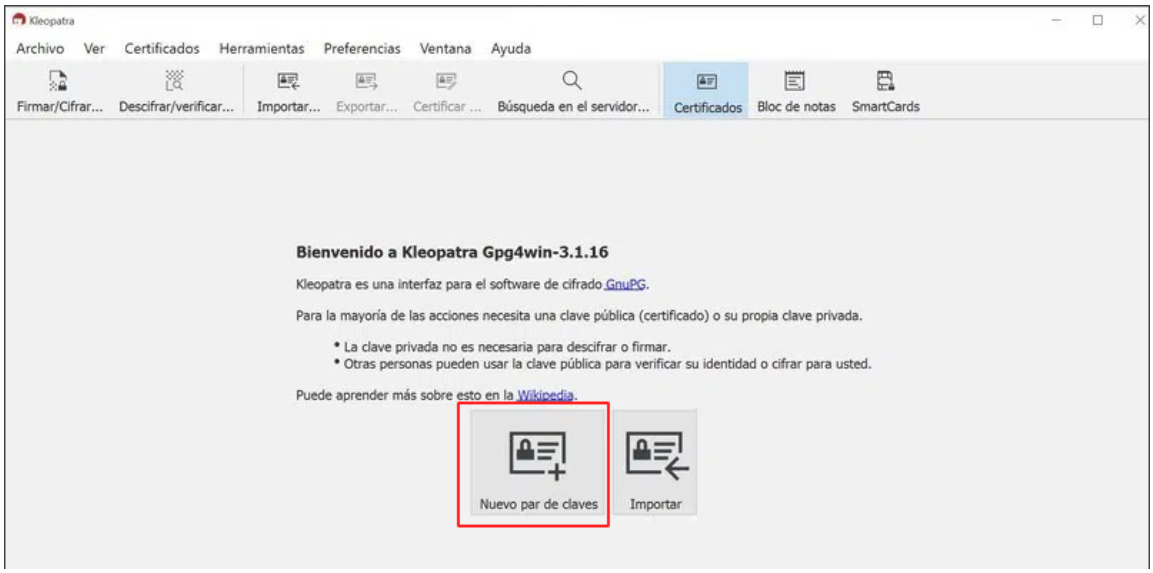

Gpg4win Setup
Gpg4win
GnuPG for Windows
Welcome to the installation of Gpg4win
Gpg4win is an installer package for Windows for EMail and file encryption using the core component GnuPG for Windows. Both relevant cryptography standards are supported, OpenPGP and S/MIME. Gpg4win and the software included with Gpg4win is Free Software.
Click Next to continue.
This is Gpg4win version 3.1.3
Release date 2018-08-31
Next >
Cancel


Gpg4win Setup
Gpg4win
Choose Components
Choose which features of Gpg4win you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.
Select components to install:
GnuPG
Kleopatra
GPA
GpgOL
GpgEX
Browser integration
Description
Position your mouse over a component to see its description.
Space required: 98.2MB
Gpg4win-3.1.3
< Back
Next >
Cancel



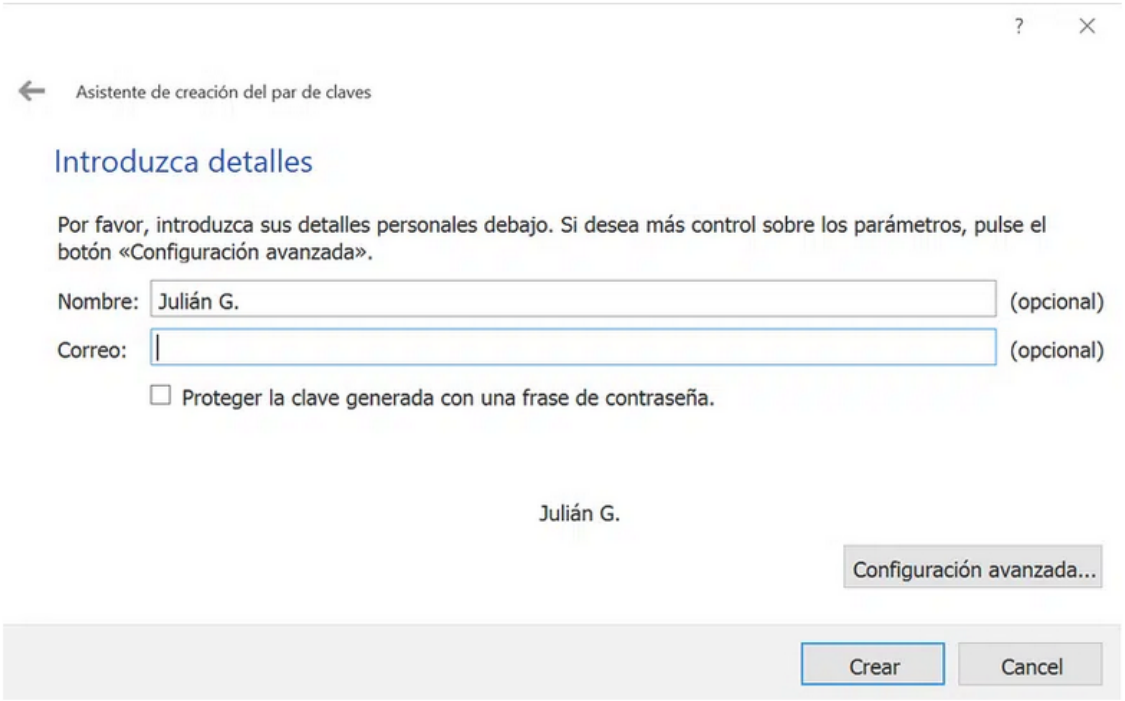
Generate a key pair (public and private)

Once Gpg4win is installed we are going to use the *Kleopatra* module to generate a new gpg key pair. To do this, from the files tab we select *New Certificate* which will open the certificate generation wizard.

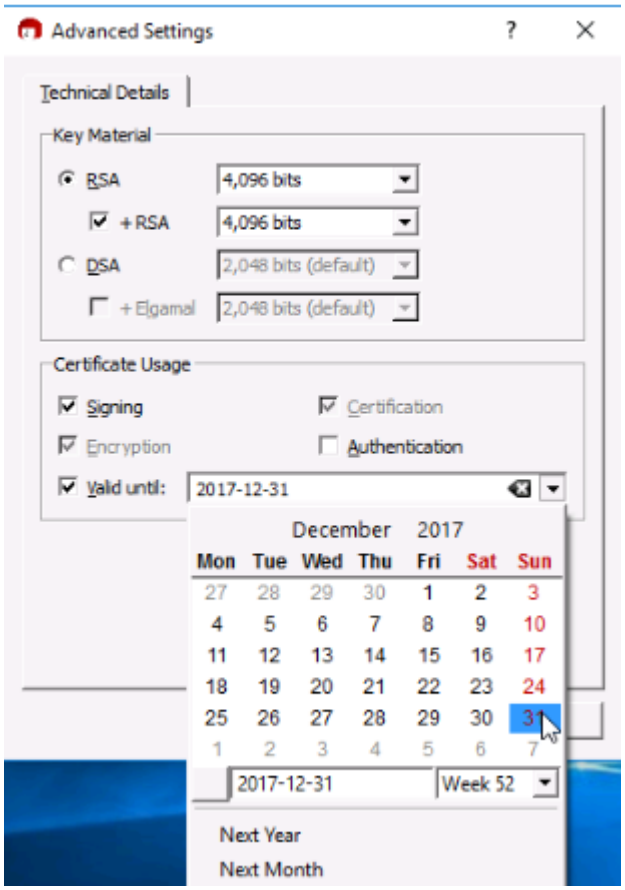


Click on *Create a personal OpenGPG key pair*

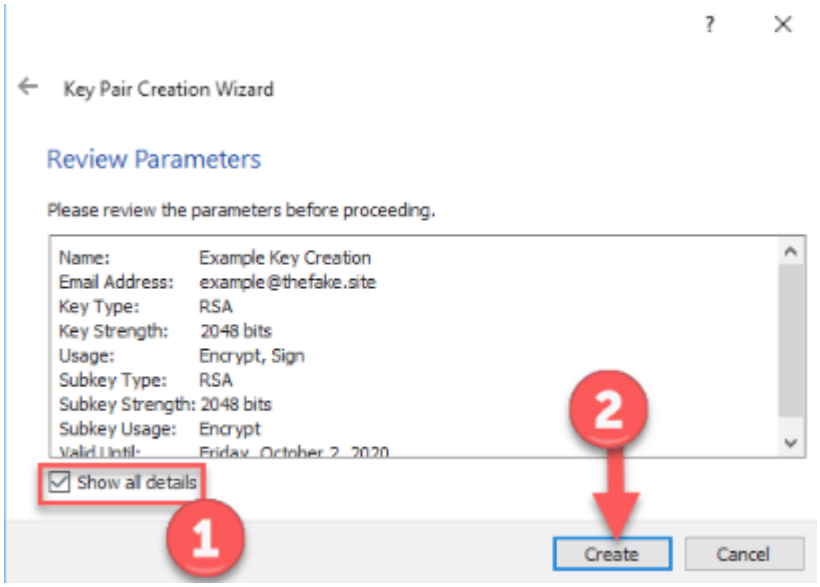
Enter the required data



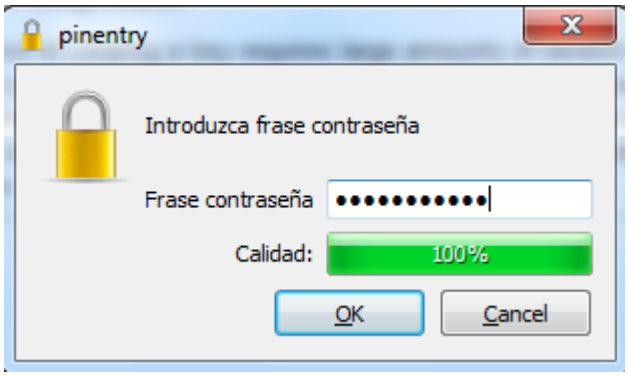
In the *Advanced Settings* tab, indicate a 4096 bits key length and an expiration date no more than 2 years.



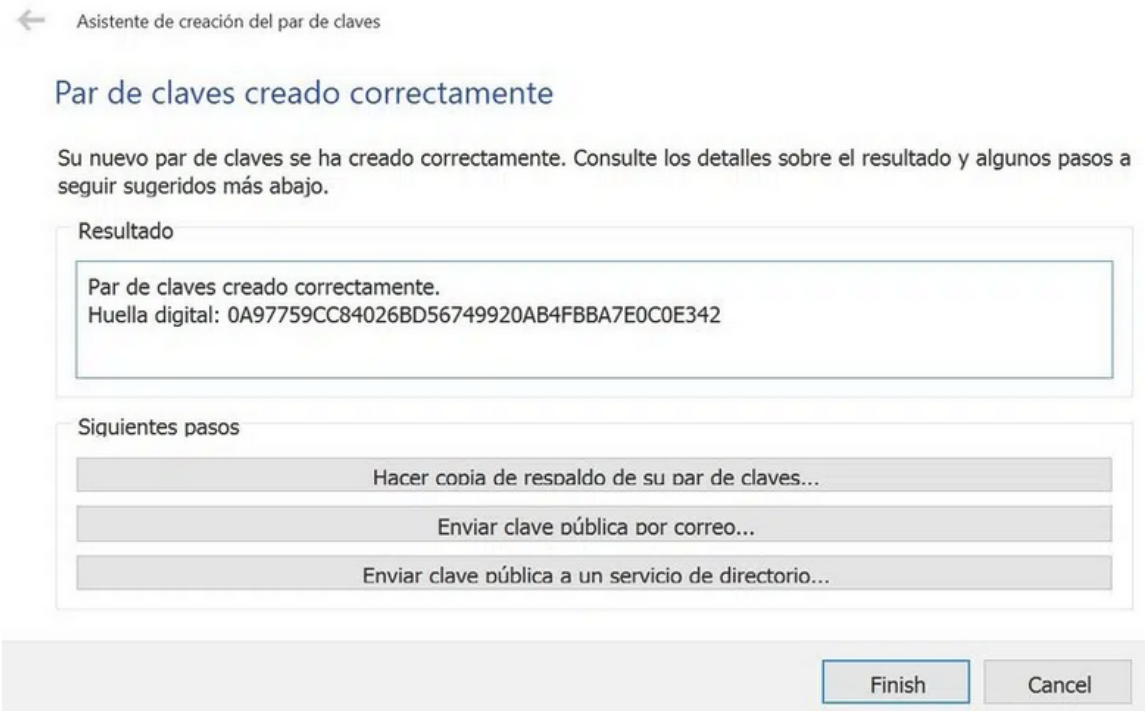
Confirm the entered values and generate key pair by clicking on *Create Key*.



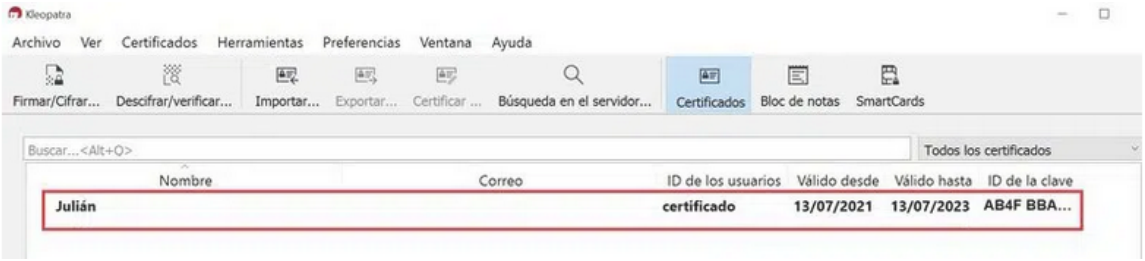
Enter a password that you remember for your private key. This password will be used to decrypt the files that you receive encrypted with your public key.



Clicking **OK** you will see your public / private key pair have been generated correctly.

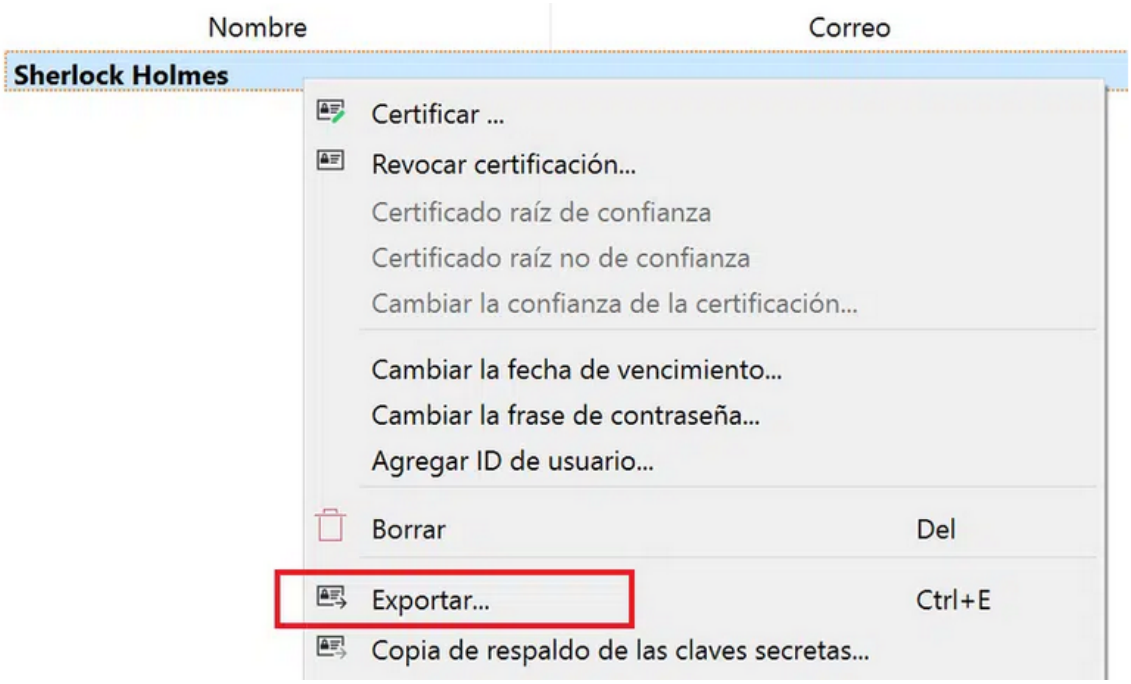


You can check your certificates in the tabs *My Certificates*.



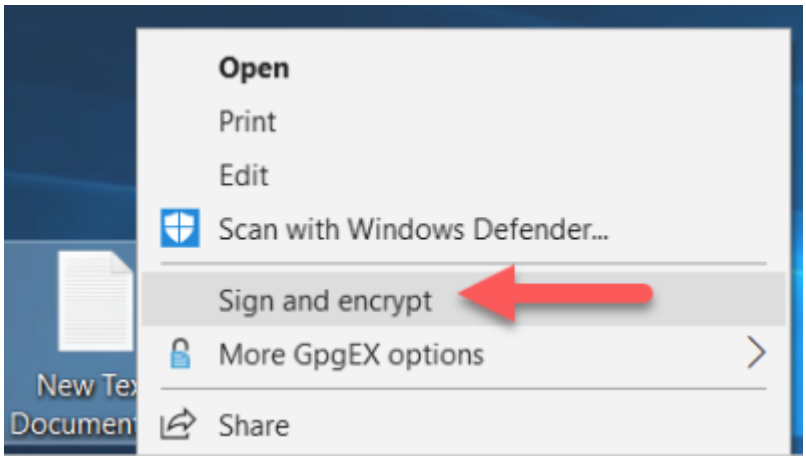
Export the public key

When exporting the public key a text file is generated. As a general rule, it is saved with the extension *.asc*. You can send this file by email or publish it on a public key server as *REDIRIS* where anyone can download it.



You will get a file of this type :

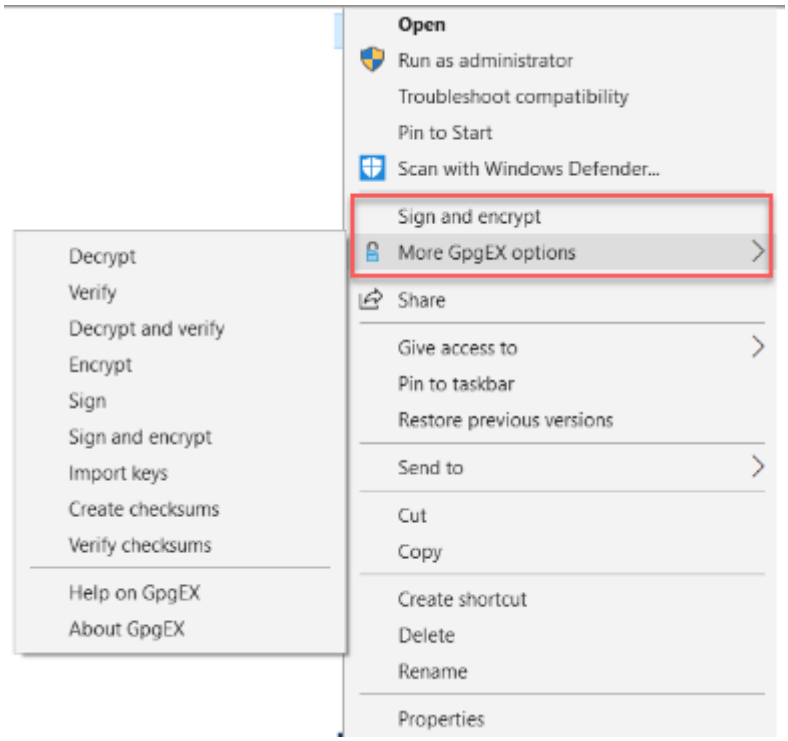
Encrypt files with the public key.



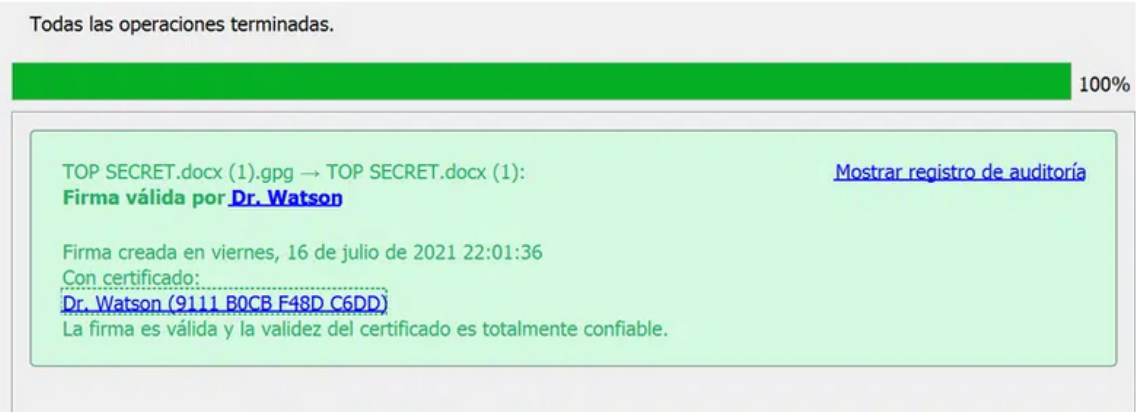
Decrypt files with private key

Only if a * .gpg * file has been encrypted with your public key and has the private key as well as your password, will you be able to decrypt its content .

You can use the context menu *Decrypt and verify* to recover the original file. It is also possible to do this from the Kleopatra.



It will have the same name without the gpg extension.



IMPORTANT NOTE: If you change computers or use a different one, make sure you have your key pair in a safe place. Without them you will not be able to decrypt the content of the file. Therefore, we recommend making a backup of the GPG key pair