



User Guide to **PGP Encryption**

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About this guide

For the purposes of SCV Verification, FSCS accepts SCV files encrypted with its PGP public key. FSCS's public key is available on our website:

https://www.fscs.org.uk/industry-resources/single-customer-view/

For guidance on other available submission methods, please refer to the FSCS Guide to SCV which is also available on our website. There is also a separate user guide available for the SCV Verification Services portal which you can obtain by contacting:

fasterpayoutenquiries@fscs.org.uk

About PGP

PGP is an encryption program that works on most computing platforms. It is fairly easy to use, and there are viable free versions available in addition to the commercial version. The open-source version of PGP, known as the GPG (Gnu Privacy Guard) program, adheres to the OpenPGP standard and is interoperable with all versions of PGP, and is not restricted to non-commercial use. There are numerous front end applications available for GPG to facilitate encryption of files, and it can also be executed completely on the command line. The tools listed in this guide are the most commonly used.

GPG command line (open-source)

GPG is a complete and free implementation of the OpenPGP standard as defined by RFC4880. GPG allows you to encrypt and sign your data and communication. It is a command line tool with features for easy integration with other applications.

Please follow these steps to encrypt your file using the Windows Command Prompt.

- 1. Import FSCS's public key:
 - Download FSCS's public key, entitled "fscs-scv.asc" from our website:

https://www.fscs.org.uk/industry-resources/single-customer-view/

- Create a folder on the C:\ drive entitled "FSCS".
- Copy the "fscs-scv.asc" public key to the "FSCS" folder on the C:\ drive.
- Run the following commands:

```
C:\> cd \FSCS
C:\FSCS>
C:\FSCS>gpg --import "c:\FSCS\fscs-scv.asc"
imported
gpg: Total number processed: 1
gpg: imported: 1 (RSA: 1)
C:\FSCS>
```

- 2. Encrypt your SCV file:
 - Use the command below encrypt the SCV file (replace "YourSCVFile.csv" with the actual name and extension of your file):

```
C:\FSCS > gpg --recipient "FSCS Verification Services
<example@fscs.org.uk>" --armor --output "C:\Temp\YourSCVFile.pgp"
--encrypt "C:\SCV\YourSCVFile.csv"
```

- 3. Submit your SCV file to FSCS:
 - Refer to FSCS SCV Guide and FSCS Verification Services Web Portal User Manual for guidance on the SCV submission process.

GPG graphical user interface (open-source)

GPG is also available as a tool with a graphical user interface.

Please follow these steps to encrypt your file using this version of the tool.

- Import FSCS's public key:
 - Download FSCS's public key, entitled "fscs-scv.asc" from our website:

https://www.fscs.org.uk/industry-resources/single-customer-view/

- Create a folder on the C:\ drive entitled "FSCS".
- Copy the "fscs-scv.asc" public key to the "FSCS" folder on the C:\ drive.
- Right-click on the "fscs-scv.asc" public key in the folder "FSCS" folder and click on "More GpgEX options >", followed by "Import keys".

Name ^		Date modified	Туре	:	Size	
Second Se	Open Decrypt an	d verify	p	Text File	1 KB	
	More GpgE Scan for Vit Share Open with. Give access Zip and Sha Restore pre	X options ruses s to are (WinZip Express) evious versions	> 	Decrypt Verify Decrypt a Encrypt Sign Sign and Import ke Create ch	encrypt exys eecsums	
	Cut Copy Create show Delete Rename Properties	rtcut	> 	Verify che Help on (About Gp	SpgEX ogEX	

• Select "No" on the following dialog box:

👦 You	have imported a new certificate (public key) - Kle	?	×
?	In order to mark the certificate as valid (green) it needs Certifying means that you check the Fingerprint. Some suggestions to do this are:	to be ce	ertified.
	A phone call to the person.		
	Using a business card.		
	Confirming it on a trusted website.		
	Do you wish to start this process now?		
🗌 Do n	ot ask again		
	✓ Yes	\otimes	No

• A dialog box will appear showing that the public key has been successfully imported.

👩 Certil	ficate Import Result – Kleopatra	? ×
1	Detailed results of importing D:/PGP Public Keys/fscs-sc Total number processed: 1 Imported: 1	v.asc
	✓ 0	К

• FSCS-SCV file should now be listed.

0	Kleopatra	3								_		×
File	View	Certificate	s Tools	Settings	Window	/ Help						
Sign	Encrypt	. Decrypt∕	verify	lmport	Export	Certify	Q Lookup on S	erver	Ø Notepad			
s	earch </td <td>Alt+Q></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>All Certificates</td> <td></td> <td>\sim</td>	Alt+Q>								All Certificates		\sim
	Na	me		E-Mail		User-IDs	Valid From	Valid Unti	I	Key-ID		
	FSCS-	SCV	servicedes	k@fscs.org	g.uk no	ot certified	1/6/2020	1/6/2022	FC89	5109 C0CC 6C5	0	

- Encrypt your SCV file:
 - Right-click on the file that you want to encrypt and click "More GpgEX options >" followed by "Encrypt".

Name	^		Date modified	Туре	Size
VourSCVFile	12	Open Print Edit Convert to Adobe PDF Combine files in Acrol Sign and encrypt	- 7/20/2020 0.00 AM	Text Document	0 КВ
	€ € € € € € € € € € € € € €	More GpgEX options Scan for Viruses Share Open with Give access to Zip and Share (WinZip Restore previous versi Send to Cut Copy Create shortcut	> Express)	Decrypt Verify Decrypt and veri Encrypt Sign Sign and encryp Import keys Create checksum Verify checksum Help on GpgEX About GpgEX	fy t s
		Delete Rename Properties			

• Select "Encrypt for others" and type "FSCS-SCV" to select the FSCS key, then click "Encrypt".

👦 Sign/Encrypt Files -	Kleopatra	?	×
Sign / Encrypt Prove authenticity (sign) Sign as:	Files		~
Encrypt			
Encrypt for me:			\sim
Encrypt for others:	FSCS-SCV <servicedesk@fscs.org.uk> (not certified, OpenPGP, created: 1/6/2020)</servicedesk@fscs.org.uk>)I	×
	24 Please enter a name or email address		
	😫 Please enter a name or email address		
Encrypt with passwo	rd. Anyone you share the password with can read the data.		
Output			
Encrypt / Sign each f	ile separately.		
C:/Users/Dow	nloads/YourSCVFile.txt.gpg	×	
	Encrypt	Can	cel

• The following warning can be ignored. Click "Continue".

🕡 Sign/Encrypt Files - Kleopatra			? ×
Sign / Encrypt Files			
Prove authenticity (sign)			
Sign as:			\sim
Encrypt			
Encrypt for me:			\sim
Encrypt for ot To-Self Warning - Kleopatra	?	×	
None of the recipients you are encrypting to seems to be your own. This means that you will not be able to decrypt the data anymore, or Do you want to continue, or cancel to change the recipient selection	nce encr ?	ypted.	
Encrypt with p Output Output	© ci	ancel	
Encrypt / Sign each file separately.			
C:/Users/dfawaz_admin/Downloads/YourSCVFile.txt.gpg		•	8
	Encryp	t	Cancel

• The encryption process will start. Click "Finish" once the Encryption success message is displayed.

7 Sign/Encrypt Files - Kleopatra		?	×
Results Status and progress of the crypto operations is shown here.			
OpenPGP: All operations completed.			
YourSCVFile.txt → YourSCVFile.txt.gpg: Encryption succeeded. Encryption succeeded.			
F	inish	Cance	2

• Your starting folder should now have an encrypted version of your file.

lame	Date modified	Туре
YourSCVFile	7/30/2020 9:09 AM	Text Document
YourSCVFile.txt	7/30/2020 9:15 AM	OpenPGP Binary File

• If you have file extensions view enabled, the file name be suffixed with .pgp.

Name ^	Date modified	Туре
YourSCVFile.txt	7/30/2020 9:09 AM	Text Document
VourSCVFile.txt.gpg	7/30/2020 9:15 AM	OpenPGP Binary File

- Submit your encrypted SCV file to FSCS:
 - Refer to FSCS SCV Guide and FSCS Verification Services Web Portal User Manual for guidance on the SCV submission process.