

eSignTrust Encrypt / Decrypt tool (Quick Start Manual)

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1. Introduction

1.1 Description

The tool includes command line and GUI versions, which uses an eSignTrust certificate to encrypt/decrypt a file or a folder.

2. System requirements

- OS: Windows 10 or 11
- Microsoft .net framework: 3.5 or later version.

3. Install eSignTrust Encrypt / Decrypt tool

1. Open eSignTrust Encrypt/Decrypt tool installation file;



2. Select the language during installation ;

Select Se	etup Language X	
e)	Select the language to use during the installation:	
1	English ~	
	2 OK Cancel	

- (1). Select the language ;
- (2). Press "OK" Button
- 3. Read and agree the license agreement;

🝘 Setup - eCrypto —				
License Agreement Please read the following important information before continuing.				
Please read the following License Agreement. You must accept the terms o agreement before continuing with the installation.	f this			
YOU MUST READ CAREFULLY THE TERMS AND CONDITIONS OF THIS TER USE (HEREINAFTER AGREEMENT), BEFORE APPLYING FOR, ACCEPTING C USING 《eSign Trust Encryption/Decryption tool》 AND GUI APPLICATION(Herein Careto) WHEN YOU DISTALL OF USE Coreto YOU DECONCEPT ACCEPTING	MS OF R hafter	^		
BEING BOUND TO THE AGREEMENT. 1. Object 1. aCompto is free required by CTT and it is only for file eccomption/decomption page	r AND			
a valid eSignTrust Encipherment Certificate. 1.2 Install or Use eCrypto implies you completely recognize agreeing with the Agree	ement.	¥		
1 © I accept the agreement O I do not accept the agreement				
2 <u>N</u> ext >	0	Cancel		

- (1). Select "I accept the agreement";
- (2). Click "Next >" Button

4. Select "Create a desktop shortcut";

🝘 Setup - eCrypto	_		×
Select Additional Tasks Which additional tasks should be performed?		¢	
Select the additional tasks you would like Setup to perform while ins then click Next.	talling eO	rypto,	
Additional shortcuts:			
Create a desktop shortcut			
(2		
< <u>B</u> ack <u>N</u> ex	.t >	Car	ncel

- (1). Select "Create a desktop shortcut";
- (2). Click "Next >" Button •
- 5. Click "Install", then will install the eSignTrust Encrypt/Decrypt tool;

🝘 Setup - eCrypto		_		×
Ready to Install Setup is now ready to begin installing eCrypto on yo	ur computer.			Ì
Click Install to continue with the installation, or click E change any settings.	3ack if you want	to review	or	
Additional tasks: Additional shortcuts: Create a desktop shortcut			^	
<			>	
< <u>B</u>	ack <u>I</u> nst	all	Cano	el

6. Click "Finish", to exit the Setup



7. * Please install the smart cart driver if the driver is not installed

4. Command line version

4.1 Command line usage

eCrypto.exe [-E|-D] [certfile option] [-i|-d] source [overwrite file option] [output option] [password option]

Parameters	Description
-E	Encrypt Mode
-D	Decrypt Mode
[certfile option]	In Encrypt Mode: Should specify the eSignTrust certificate file
	In Decrypt Mode: It's optional to specify the eSignTrust certificate file
-c certfile	
-i	In Encrypt/Decrypt Mode: A single file parameter
-d	In Encrypt/Decrypt Mode: A folder parameter. (<i>please see Important notes 3. 4. 5. for details</i>)
Source	Specify the input path: A single file or a folder
[overwrite file option]	In Encrypt/Decrypt Mode: Optional function for overwriting the output file
-f	If "-f" specifies in the command, then will apply the overwrite file function
[output option]	Only use in a single file syntax: Specify the output path after encryption/decryption
-o output	
[password option]	Only use in Decrypt Mode: Specify eSignTrust certificate password
-p password	

4.2 Command line sample

4.2.1 Encryiption

1) A single file

eCrypto.exe -E -c "c:\cert\eSignTrust.cer" -i "c:\test\test.txt"

The command requires to specify the eSignTrust certificate file to do an encryption process. This tool will add the string "_encrypted" to the end of the filename and also add the .e7e file extension. After encryption, the encrypted file will save in the same directory. In the above command sample, it will encrypt the file and save it in "c:\test\test_encrypted.txt.e7e".

2) A single file with a specified output path

eCrypto.exe -E -c "c:\cert\eSignTrust.cer" -i "c:\test\test.txt" -o "c:\test\test_after_encrypted.txt.e7e" It is almost same as 1), but it is a little difference that it contains a specified output path in 2) command syntax.

3) A folder

eCrypto.exe -E -c "c:\cert\eSignTrust.cer" -d "c:\test"

The command requires to specify the eSignTrust certificate file to do an encryption process. This tool will create a subfolder "output" and the encrypted files will save in the subfolder. The tool only encrypts non .e7e format file. For each encrypted file, it will add the string "_encrypted" to the end of every filename and also add the .e7e file extension.

4.2.2 Decryption

1) A single file

• Without a certificate

eCrypto.exe -D -i "c:\test\test_encrypted.txt.e7e" -p password

• With a certificate

eCrypto.exe -D -c "c:\cert\eSignTrustDecrypt.pfx" -i "c:\test\test_encrypted.txt.e7e" -p password

This tool will add the string "_decrypted" to the end of the filename and also remove the .e7e file extension. After decryption, the decrypted file will save in the same directory. In the above command sample, it will decrypt the file and save it in "c:\test\test_encrypted_decrypted.txt".

2) A single file with a specified output path

• Without a certificate

eCrypto.exe -D -i "c:\test\test_encrypted.txt.e7e" -o "c:\test\test_decrypted.txt" -p password

• With a certificate

eCrypto.exe -D -c "c:\cert\eSignTrustDecrypt.pfx" -i "c:\test\test_encrypted.txt.e7e" -o "c:\test\test_decrypted.txt" -p password

It is almost same as 1), but it is a little difference that it contains a specified output path in 2) command syntax.

3) A folder

- Without a certificate
- eCrypto.exe -D -d "c:\test\encrypted" -p password
- With a certificate

eCrypto.exe -D -c "c:\cert\eSignTrustDecrypt.pfx" -d "c:\test\encrypted" -p password The tool will decrypt all the .e7e format files in the specified folder and all the decrypted files save in the "output" subfolder. For each decrypted file, it will add the string "_decrypted" to the end of every filename and also remove the .e7e file extension. In the above command sample, it will save in "c:\test\encrypted\output"

5. GUI version

5.1 Encryption

- 1. Insert a smart card with an encryption certificate ;
- 2. Open eSignTrust tools Menu;

		開啟(O)		
Medica 1)	eSignTrust tools Menu	2	Encrypt
ordFori		共用對象(H)	\sim	Decrypt
		還原舊版(V)		
		傅送到(N)	F	
		剪下(T)		
		複製(C)		
		建立捷徑(S)		
		刪除(D)		
		重新命名(M)		
		內容(R)		

(1). For the Encrypt file, please right click a mouse and select "eSignTrust tools Menu";(2). Click "Encrypt"

3. Select a source for the certificate ;



(2). Click "Encrypt"

4. Select a certificate for encryption ;

Windows Security	×
Select Certificate Select a certificate from the following list to get information on that certificate	_
Issuer: eSignTrust Government Certific Valid From: 1/23/2017 to 1/24/2020 Click here to view certificate properties	
2 OK Cancel	

- (1). Select a certificate ;
- (2). Click "OK"
- 5. The program will generate an encrypted file (ext. e7e). Please click "OK" to finish the encrypt process.

eCryptoUI	×
Encrypt process completed!	
ОК]

5.2 Decryption

- 1. Insert a smart card with a corresponding certificate for the encrypted file;
- 2. Open SignTrust tools Menu;

	開啟(O)	
Medica	eSignTrust tools Menu 🚬 🕨	Encrypt
- and Form	共用對象(H) 2 →	Decrypt
-	還原酱版(V)	
	傳送到(N) ▶	
	剪下(T)	
	複製(C)	
	建立捷徑(S)	
	刪除(D)	
	重新命名(M)	
	內容(R)	

(1). For the Encrypted file, please right click a mouse and select "eSignTrust tools Menu ;(2). Click "Decrypt"

3. Input the smart card's password ;

Please input the Certificate Password				
Password: ****** 1 2 OK Cancel				

- (1). Input the smart card's password ;
- (2). Click "OK"
- 4. The program will generate a decrypted file. Please click "OK" to finish the decrypt process.



6. Export eSignTrust certificate

- 1. Open Microsoft Edge browser
- 2. From the menu, choose "Settings" -> "Privacy, search and services"



3. Under the category "Security", choose "Manage certificates"

۲	Ô	🗖 🔛 New tab	× 🕄 Settings × +					
\leftarrow	С	C Edge edge://settings/	privacy	☆ 3				
	Set	tings	Personalization & advertising ⁽¹⁾					
	Q	Search settings	Allow Microsoft to save your browsing activity including history, usage, favorites, web content, and other browsing data to personalize Microsoft Edge and Microsoft services like ads, search, shopping and news.					
	8	Profiles	Manage this data and additional advertising settings on the Microsoft privacy dashboard					
	ð	Privacy, search, and services						
	0	Appearance	Security					
	Sidebar		Manage security settings for Microsoft Edge					
		Start, home, and new tab page						
	Ē	Share, copy, and paste	Manage certificates	6				
	.	Cookies and site permissions	manage i i i r-3/350 cel uncates and setungs					
	٦	Default browser	Scareware blocker Preview					
	자	1	Allow Microsoft to use AI to detect potential tech scams. Learn more					
	Al Languages ↓ Downloads		Microsoft Defender SmartScreen					
			Help protect me from malicious sites and downloads with Microsoft Defender SmartScreen					
	M	System and performance	Block potentially unwanted apps					
		Eamily safety	Blocks downloads of low-reputation apps that might cause unexpected behaviors					
	.0	runny surcey						

4. Choose a certificate and press Export button

Certificates		×				
Intended purpose: <a>l>						
Personal Other Pe	ople Intermediate Certification Authorities True	sted Root Certification				
Iss Issued B	у	Expiratio Fr				
K eSignTru	st Government Certification Authority (G03)	1/24/2020 Ki				
K eSignTru	st Government Qualified Certificate CA (G03)	1/24/2020 Ki				
T Thomas		1/15/2117 <				
<	III	Þ				
Import	xport <u>R</u> emove	Advanced				

5. IE will prompt a "Certificate Export Wizard window", then press Next button

Certificate Export Wizard	
	Welcome to the Certificate Export Wizard This ward helps you copy certificates, certificate trust lists and certificate revocation lists from a certificate store to your disk. A certificate, which is issued by a certification authority, is used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept. To continue, dick Next.
	< <u>B</u> ack Next > Cancel

6. Press next button



7. Choose either one of DER encoded binary X.509 (.CER) and Base-64 encoded X.509 (.CER) option, then press Next button

Certificate Export Wizard				
Export File Format Certificates can be exported in a variety of file formats. Select the format you want to use:				
DER encoded binary X.509 (.CER) Bage-64 encoded X.509 (.CER)				
Gryptographic Message Syntax Standard - PKCS #7 Certificates (.P7B) Indude all certificates in the certification path if possible Personal Information Exchange - PKCS #12 (.PFX) Indude all certificates in the certification path if possible Delete the private key if the export is successful Export all extended properties Microsoft Serialized Certificate Store (.SST)				
Learn more about <u>certificate file formats</u>				
< <u>Back</u> Next > Cancel				

8. Specify the certificate output path, for example: c:\test\test.cer



9. Press Finish button to finish the export process

Certificate Export Wizard		×		
	Completing the Certificate Export Wizard			
	You have successfully completed the Certificate Export wizard.			
You have specified the following settings:				
	File Name	c:\test		
	Export Keys	No		
	Include all certificates in the certification path	No		
	File Format	Base64		
	<	ł		
	C Barky Finish	Cancel		

7. Important notes (for command line)

- 1. Only use any non-expired eSignTrust certificate during encryption.
- Please add the double quotation marks (") around the file path of a certificate / file / folder in encryption / decryption syntax. For example: if the file is c:\test\test.txt, then input the syntax "c:\test\test.txt".
- In Encrypt mode, this tool will only encrypt Non .e7e format file. In decrypt mode, the tool will only decrypt .e7e file extension file.
- 4. This tool only encrypts/decrypts all the files under the folder, but it will exclude any files in each subfolder.
- 5. In a folder mode, the tool will auto generate a subfolder "output" and the encrypted/decrypted files will save in the subfolder.
- 6. It is required to input an eSignTrust certificate path in encryption command syntax.
- 7. It is required to input an eSignTrust certificate password in decryption command syntax.

8. Common Error messages (for command line) 8.1 Encryption

- 1. Error: It is not a valid eSignTrust Certificate Please use a non-expired eSignTurst certificate.
- Error: This is not a valid certificate or the certificate file does not exist
 The certificate is not a valid certificate format or the file does not exist.

8.2 Decryption

1. Error: Cannot load any cert!

Please make sure the smart card is inserted on the card reader and check the smart card whether contains the right certificate for the encrypted file. Also, please install the correct drivers of the smartcard and the smartcard reader.

2. Error: The encrypted file is not valid!

Please check the encrypted file whether it was encrypted by the tool.

3. Error: System cannot find a valid smart card, or the drivers of the smartcard and its reader are not installed

Please make sure the smart card is inserted on the card reader and check the smartcard whether contains the right certificate for the encrypted file. Also, please install the correct drivers of the smartcard and the smartcard reader.

4. Error: Cannot access the certificate

Please input the correct smartcard's certificate password and insert the correct smartcard.

-----End-----