# EncrypIT Release 2020

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#### ONE

### **DOWNLOAD LINKS**

These are all the same file, just different locations to download from depending on your preferred or trusted hosting provider

- 1. EncrypIT: GitHub Download
- 2. EncrypIT: SourceForge Download
- 3. EncrypIT: Softpedia Download
- 4. EncrypIT: Major Geeks Download

#### Contributions

This is open source so if you wish to help contribute to the contents of this project feel free to reach out to me at info@osbornepro.com with your thoughts and ideas. For more general information on this feel free to refer to the CONTRIBUTING documentation.

**General Summary for this project can be read at** https://github.com/OsbornePro/EncrypIT/blob/main/README. md

This repo contains the source code used to build the EncrypIT application. EncrypIT is an attempt to simplify the use of Encryption File System (EFS) for the everyday user. The application will allow a user to quickly and easily backup their EFS certificate to a PFX file, modify what domain users have permissions to decrypt their file, and of course encrypt and decrypt files and directories. The instructions are simple which I have included in the topics below. You can verify whether or not EFS is enabled by issuing the below command

```
If ((Get-ItemProperty -Path 'HKLM:\SOFTWARE\Microsoft\Windows NT\CurrentVersion\EFS' -
→Name "EfsConfiguration" -ErrorAction SilentlyContinue) -eq 1) { Write-Output "EFS is_
→Disabled" } Else { Write-Output "EFS is Enabled" }
```

# **IDEAS FOR FUTURE RELEASES**

- 1. Change the backend for granting and removing access to a file. The current method has to utilize a PowerShell window which seems unavoidable.
- 2. Attempt to allow a group to be defined in order to add all members of that group to a files permissions If you have any suggestions feel free to reach out to me at info@osbornepro.com.

### THREE

### DISCLAIMER

This tool was created to make the use of Encrypting File System (EFS) something the every day user can take advantage of. This tool does require the use of certificates to encrypt and decrypt data. I highly recommend following my YouTube instructional video for configuration EFS on your file server. This is to ensure you have an administrative way of decrypting files in the event someone loses their key.

FOUR

### HOW TO INSTRUCTIONS

EncrypIT is a stand alone application and does not require any installation. Once you download the file you can simply open/run the program and it will start right up. You can view the simplicity of the application in the images and instructions below.

### 4.1 How To Encrypt a File or Directory

- 1. Open the application
- 2. Drag and Drop a file(s) or folder(s) from File Explorer into the top white area of the application.
- 3. Tick the "Recursive" button to encrypt the contents of any selected folders
- 4. Click the "Encrypt" button The file(s) are now encrypted using EFS and can only be accessed by the user who performed the encryption.

☑ EncrypIT (Encrypt your files using EFS)							
Drag and Drop a single file or multiple selected files into the top text box. Then click "Encrypt" or "Decrypt" Enter an email address into the lower text box and click "Grant Access or "Revoke Access".							
Recursive (Tick this box to recursive)	y encrypt or decrypt a directory)						
C:\Users\robos\Downloads\MonitorAdminEscalation.ps1 C:\Users\robos\Downloads\svgConverterv0.1.exe C:\Users\robos\Downloads\Installers							
Encrypt	Decrypt	Get Encrypted File Info	Backup Encryption Key				
File location verified. Executing file encryption Completed encryption of C:\Users\robos File location verified. Executing file encryption Completed encryption of C:\Users\robos Directory location verified. Telling C:\Users\robos\Downloads\Insta Encrypting C:\Users\robos\Downloads\ Any New Files added too C:\Users\robos Current folder contents will not be encrypting	\Downloads\svgConverterv0.1.exe Illers to encrypt newly saved files Installers\New folder\test2.bt \Downloads\Installers will be encryp	user1@domain.com user2@domain.com	^				
			>				
<	×	Grant Access	Revoke Access				

# 4.2 How To Decrypt a File or Directory

- 1. Open the application
- 2. Drag and Drop a file(s) or folder(s) from File Explorer into the top white area of the application.
- 3. Tick the "Recursive" button to decrypt the contents of any selected folders
- 4. Click the "Decrypt" button

The file(s) you defined are now decrypted and can be accessed by anyone with appropriate NTFS permissions.

EncrypIT (Encrypt your files using	EFS)		- 🗆 X					
Drag and Drop a single file or multiple selected files into the top text box. Then click "Encrypt" or "Decrypt" Enter an email address into the lower text box and click "Grant Access or "Revoke Access".								
Recursive (Tick this box to recursively encrypt or decrypt a directory)								
C:\Users\robos\Downloads\ C:\Users\robos\Downloads\		\$1	^					
C:\Users\robos\Downloads\	0		~					
			>					
Encrypt	Encrypt Decrypt Get Encrypted File Info Backup Encryption Key							
File location verified.         Executing file decryption         Completed decryption of file C:\Users\vobos\Downloads\MonitorAdminEscala         File location verified.         Executing file decryption         Completed decryption         Completed decryption of file C:\Users\vobos\Downloads\svgConverterv0.1.ex         Directory location verified.								
Telling directory to encrypt newly saved fi New Files added to C:\Users\robos\Dow Current folder contents will NOT be decry	nloads\Installers will NO longer be er		~					
		<	>					
<	ب ۲	Grant Access	Revoke Access					

### 4.3 How to Grant a Domain User Access

- 1. Open the application
- 2. Drag and Drop a file(s) or folder(s) from File Explorer into the top white area of the application.
- 3. Enter a persons email into the smaller text box. Put each new email address on a new line.
- 4. Click the "Grant Access" button

EncrypIT (Encrypt your files using EFS) - C X									
Drag and Drop a single file or multiple selected files into the top text box. Then click "Encrypt" or "Decrypt" After encrypting a file or folder, you will be able to add or remove fellow domain members access to the item you have encrypted. Enter an email address into the lower text box and click "Grant Access or "Revoke Access". Use a new line for each email address you wish to modify access on.									
C:\Users Downloads\cert.crt C:\Users Downloads\priv.key									
Encrypt	Decrypt	Get Encrypted File Info	Backup Encryption Key						
File location verified         Please wait         Verifying         Can be grant         Adding user to files in folder C:\Users         priv.key       [OK]         User was added to 1 file(s) [or directorie(s         Please wait         Verifying         Data be grant         Adding user to files in folder C:\Users         priv.key       [OK]	\Downloads \ )] within 1 directorie(s).								
User was added to 1 file(s) [or directorie(s	User was added to 1 file(s) [or directorie(s)] within 1 directorie(s).								
Please wait Venfying can be Adding user to files in folder C:\Usen <	oranted access Downloads\ >	Grant Access	Revoke Access						

# 4.4 How to Revoke a Domain Users Access

- 1. Open the application
- 2. Drag and Drop a file(s) or folder(s) from File Explorer into the top white area of the application.
- 3. Enter a persons username into the smaller text box. Put each new email address on a new line.
- 4. Click the "Revoke Access" button

EncrypIT (Encrypt your files using EFS) — 🗆 🗙								
Drag and Drop a single file or multiple selected files into the top text box. Then click "Encrypt" or "Decrypt" After encrypting a file or folder, you will be able to add or remove fellow domain members access to the item you have encrypted. Enter an email address into the lower text box and click "Grant Access or "Revoke Access". Use a new line for each email address you wish to modify access on.								
C:\Users Downloads\cert.crt C:\Users Downloads\priv.key								
Encrypt	Decrypt		Get Encrypted File Info	Backup	Encry	otion K	ey	
C:\Users \Downloads\priv.key file location verified Please wait Verifying C:\Users Downloads\priv.key can have access remove Please wait Verifying C:\Users Downloads\priv.key can have access remove Removing user from files in folder C:\Users Downloads\							~	
Removing user from files in folder C:\Us	Removing user from files in folder C:\Use Downloads\							
priv.key [OK]	riv key [OK]							
Jser was removed from 1 file(s) [or directorie(s)] within 2 directorie(s).								
Please wait Verifying C:\Users	ds\priv.key can have access remove		<				>	
Removing user from files in folder C:\Us		•	Grant Access	Rev	oke Ac	cess		
<	>		Grant / 100000					

# 4.5 How to view encryption info of a file(s)

- 1. Open the application
- 2. Drag and Drop a file(s) or folder(s) from File Explorer into the top white area of the application.
- 3. Click the "Get Encrypted File Info" button

EncrypIT (Encrypt your files using EFS) - C ×							
Drag and Drop a single file or multiple selected files into the top text box. Then click "Encrypt" or "Decrypt" Enter an email address into the lower text box and click "Grant Access or "Revoke Access".							
Recursive (Tick this box to recursive)	y encrypt or decrypt a directory)						
C:\Users\robos\Downloads\svgConverterv0.1.exe C:\Users\robos\Downloads\Installers							
Encrypt	Decrypt		Get Encrypted File Info	Backup	Encry	otion K	ey
File existence verified Listing C:\Users\robos\Downloads\ New files added to this directory will not E MonitorAdminEscalation.ps1 Compatibility Level: Windows XP/Server 2003 Users who can decrypt: TOBORDESKTOP\robos [robos(robos Certificate thumbprint: 116A 094D F1E No recovery certificate found. Key Information:	@TOBORDESKTOP)]	^	user1@domain.com user2@domain.com				~
Key Information: Algorithm: AES Key Length: 256 Key Entropy: 256		~	<	Rev	oke Ad	cess	>
<	>						

# 4.6 How To Backup an EFS Certificate

- 1. Open the application
- 2. Click the "Backup Key" button
- 3. Enter a custom password or click "Auto Generate" to have one created for you
- 4. Select a location to save your backup EFS key in PFX file format
- 5. The password you created is now copied to your clipboard. Save it somewhere safe like a password manager

EncrypIT (Encrypt your files using EFS)							
Drag and Drop a single file or multiple selected files into the top text box. Then click "Encrypt" or "Decrypt" Enter an email address into the lower text box and click "Grant Access or "Revoke Access".							
Recursive (Tick this box to recursively encrypt or decrypt a directory)							
Drag and Drop file(s) here. Then click the "Encrypt" or "Decrypt" button							
<	1		>				
Encrypt	Decrypt	Get Encrypted File Info	Backup Encryption Key				
	Password Prompt		×				
	Enter a password to protec	t the private key on your certificate					
	****						
		ОК					
	Aut	to Generate					
			_				
			~				
		<	>				
<	>	Grant Access	Revoke Access				

#### SAVE LOCATION

The **"Status Information"** section of the application will display the password you set as well as the location your backup was saved too.

NOTE: This application discovers the EFS certificate used based on first searching for a template with the name "Basic EFS" in the user's certificate store. If no certificate is found, it next looks for a "Key Usage" value of 32 in the users local certificate store. If you wish to define a different certificate template name to search for, modify line 152's "certTemplateName variable" in the file "Form1.cs" to match your custom EFS template name.

### FIVE

# **INDICES AND TABLES**

- genindex
- modindex
- search