How to Use 7-Zip to Encrypt Files and Folders

7-Zip is an open source software used to compress or zip files secured with encryption. When you send or transfer files that contain Personal Identifiable Information (PII) or other confidential and sensitive data, the files must be encrypted to ensure they are protected from unauthorized disclosure.

For Mac:

- 1. Open the program named Keka from the Applications folder.
- 2. Select 7z from the available options on the top bar. Change the Method of compression to Store by dragging the pointer to the far left option below "Method". Enter the password you wish you use to decrypt the data. "Select Encrypt filenames," "Solid Archive," Exclude Mac resource forks," and "Archive as single files." The window should look like this:

• •	0		Kek	a - 7z		
7z	Zip	Tar	Gzip	Bzip2	Dmg	Iso
	Metho Store	od: No Fast	comp	vression Normal	Slow	
	Split: Passv	vord:	E	xample: 5 M	B Y	
	Repea	at:	•	•••••	0	
	🗹 En 🗹 So	crypt f Ilid arc	filenar hive	nes		
V (Exclude	Mac r	esour	ce forks		
	Delete f	ile(s) a	after c	ompression		
<u> /</u>	Archive	as sin	gle fil	es		

3. Drag and drop the file or files you wish to encrypt into the Keka app, once completed the .7z file will be in the same folder as the original file or files.



For Windows:

- 1. Right click on the file / folder to be encrypted.
- 2. Select "7-Zip" then "Add to archive..."



3. In the Add to Archive window, change the name of the archive you wish to create.

Add to Archive		×
<u>A</u> rchive:		
test_folder.zip	→	

4. Change the Archive format to "**7z**".

Add to Archive				×
Archive:			• 4	•
Archive format:	zip	•	Update mode:	Add and replace files
Compression level:	bzip2		Path mode:	Relative pathnames
Compression method:	tar wim		Options	
Dictionary size:	zip Sz no		Create SFX arc	chive red files
Word size:	32	•	Delete files after	er compression
Solid Block size:		*	Encryption	
Number of CPU threads:	4 •	/4	Enter password:	
Memory usage for Compress	ina:	131 MR		

5. Change the Encryption Method to "AES-256".

Note: There is a trade-off between using AES-256 and ZipCrypto. AES-256 is proven much more secure than ZipCrypto, but if you select AES-256 the recipient of the zip file may have to install 7-zip or another zip program to read the file contents. Selecting ZipCrypto may allow users to open the zip file in Windows without a zip program, but it does not provide adequate protection against attackers with modern cracking tools.

dd to Archive				
Archive: test_folder.7z				
Archive format:	7z 🔹	Update mode:	Add and replace files 🔹	
Compression level:	Normal 👻	Path mode:	Relative pathnames -	
Compression method:	LZMA2 -	Options	chive	
Dictionary size:	16 MB ▼	Compress shared files		
Word size:	32 🔹	🔲 Delete files aft	er compression	
Solid Block size:	ZGB ▼	Encryption		
Number of CPU threads:	4 14	Enter password:		
Memory usage for Compressing: 592 MB Memory usage for Decompressing: 18 MB		Reenter password:		
Split to volumes, bytes:		Show Passwo	rd	
Parameters:		Encrypt file na	AES-256 -	
	_			
	L	ОК	Cancel Help	

It is strongly recommended to use AES-256 to protect sensitive and confidential data.

6. **Enter a Password**. Use a strong password with at least 8 characters containing upper and lowercase letters, and a minimum of one number.

ve					
test_folder.7z				·	
at:	[7z	•	Update mode:	Add and replace files -	
level:	Normal	•	Path mode:	Relative pathnames -	
n method:	LZMA2	•	Options		
ze:	[16 MB	•	Create SFX archive Compress shared files		
	32	•	Delete files after compression		
size:	2 GB	•	Constitue		
PU threads:	4 •] /4	Enter password:		
ge for Compressir	ig:	592 MB			
ge for Decompres	sing:	18 MB		1.	
nes, bytes:			Show Passwor	rd	
			Encryption method	d: AES-256 👻	
		ſ	ок	Cancel Help	
	test_folder.7z at: level: method: ze: size: PU threads: ge for Compressin ge for Decompres nes, bytes:	test_folder.7z at: 7z at: 7z at: 1000000 at: 1000000 biteresting: at: 1000000 biteresting: biter	test_folder.7z at: 7z at: 7z at: Normal a method: LZMA2 ation atio	test_folder.7z at: 7z Vupdate mode: Path mode: Path mode: Options Create SFX an Compress shal 32 PU threads: 4 PU threads: 4 PU threads: 592 MB ge for Compressing: 18 MB nes, bytes: Show Password Encryption method Encrypt file na	

7. Select "Ok" to create the encrypted archive file. The new archive file will be located in the same folder as the original.

Note: Best security practices recommend that you do not email the password with the Zip file as it could be intercepted in transit. It is better to call the recipient of the Zip file and convey the password over the phone or to send the password to the recipient via text/SMS message, not email.