

## How to: Secure Equihash wallet when not being used

Note: The purpose of this document is to provide a workaround for securing a windows based BTCZ wallet while not in use. While this procedure drastically reduces the risk of wallet theft, it does not guarantee security, and it is highly recommended that you run any wallet inside of a VM with updated antivirus to reduce the chances of theft. With that said, this information is provided free of charge, with no warranty whatsoever, and you agree to use at your own risk.

1. Download and run a copy of 7Zip from “<http://www.7-zip.org/download.html>” that is compatible with your CPU / operating system.

The screenshot shows the 7-Zip website's download page. It features a sidebar with navigation links (Home, 7z Format, LZMA SDK, Download, FAQ, Support, Links) and a list of languages. The main content area is titled 'Download' and contains three tables of download links for Windows.

**Download 7-Zip 17.01 beta (2017-08-28) for Windows:**

Link	Type	Windows	Description
<a href="#">Download</a>	.exe	32-bit x86	7-Zip for 32-bit Windows
<a href="#">Download</a>	.exe	64-bit x64	7-Zip for 64-bit Windows x64 (Intel 64 or AMD64)
<a href="#">Download</a>	.7z	x86 / x64	7-Zip Extra: standalone console version, 7z DLL, Plugin for Far Manager
<a href="#">Download</a>	.7z	Any	7-Zip Source code
<a href="#">Download</a>	.7z	Any / x86 / x64	LZMA SDK: (C, C++, C#, Java)
<a href="#">Download</a>	.msi	32-bit x86	(alternative MSI installer) 7-Zip for 32-bit Windows
<a href="#">Download</a>	.msi	64-bit x64	(alternative MSI installer) 7-Zip for 64-bit Windows x64 (Intel 64 or AMD64)

**Download 7-Zip 16.04 (2016-10-04) for Windows:**

Link	Type	Windows	Description
<a href="#">Download</a>	.exe	32-bit x86	7-Zip for 32-bit Windows
<a href="#">Download</a>	.exe	64-bit x64	7-Zip for 64-bit Windows x64 (Intel 64 or AMD64)
<a href="#">Download</a>	.7z	x86 / x64	7-Zip Extra: standalone console version, 7z DLL, Plugin for Far Manager
<a href="#">Download</a>	.7z	Any	7-Zip Source code
<a href="#">Download</a>	.7z	Any / x86 / x64	LZMA SDK: (C, C++, C#, Java)
<a href="#">Download</a>	.msi	32-bit x86	(alternative MSI installer) 7-Zip for 32-bit Windows
<a href="#">Download</a>	.msi	64-bit x64	(alternative MSI installer) 7-Zip for 64-bit Windows x64 (Intel 64 or AMD64)

**Download 7-Zip 9.20 (2010-11-18) for Windows:**


Link	Type	Windows	Description
<a href="#">Download</a>	.exe	32-bit x86	7-Zip for 32-bit Windows
<a href="#">Download</a>	.msi	64-bit x64	7-Zip for 64-bit Windows x64 (Intel 64 or AMD64)
<a href="#">Download</a>	.msi	IA-64	7-Zip for Windows IA-64 (Itanium)
<a href="#">Download</a>	.exe	ARM-WinCE	7-Zip for Windows Mobile / Windows CE (ARM)
<a href="#">Download</a>	.zip	32-bit	7-Zip Command Line Version
<a href="#">Download</a>	.tar.bz2	Any	7-Zip Source code
<a href="#">Download</a>	.7z	32-bit	7-Zip Extra: 7z Library, SFXs for installers, Plugin for Fare Manager

Activate Windows  
Go to Settings to activate Windows.

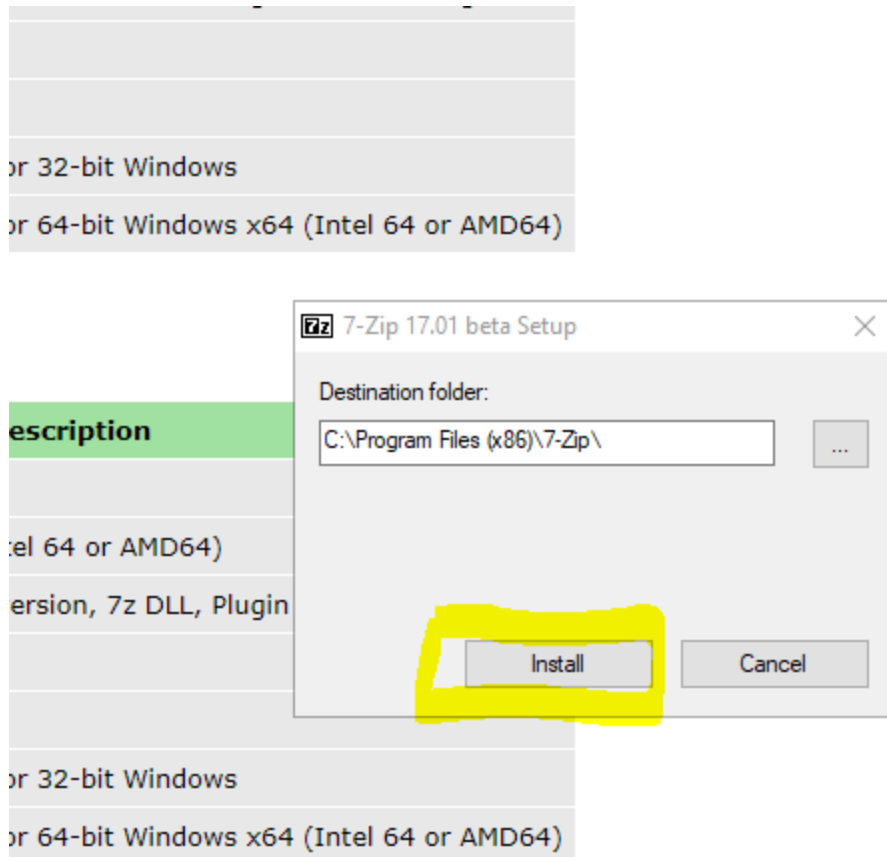
A. If you are unsure of which version, choose the 32 bit version, as it is backwards compatible.

### Download 7-Zip 9.20 (2010-11-18) for Windows:

Link	Type	Windows	
<a href="#">Download</a>	.exe	32-bit x86	7-Zip for 32-bit Wind
<a href="#">Download</a>	.msi		
<a href="#">Download</a>	.msi	64-bit x64	7-Zip for 64-bit Wind
<a href="#">Download</a>	.msi	IA-64	7-Zip for Windows IA
<a href="#">Download</a>	.exe	ARM-WinCE	7-Zip for Windows Mc
<a href="#">Download</a>	.zip	32-bit	7-Zip Command Line
<a href="#">Download</a>	tar.bz2	Any	7-Zip Source code


 7z1701.exe ^

B. Once downloaded, launch the executable to install 7zip on your PC containing your BTCZ wallet. If “User Account Control” dialog pops up, click “Yes” to continue.



C. A dialog screen shall pop up, prompting you to install 7Zip. Click “Install”



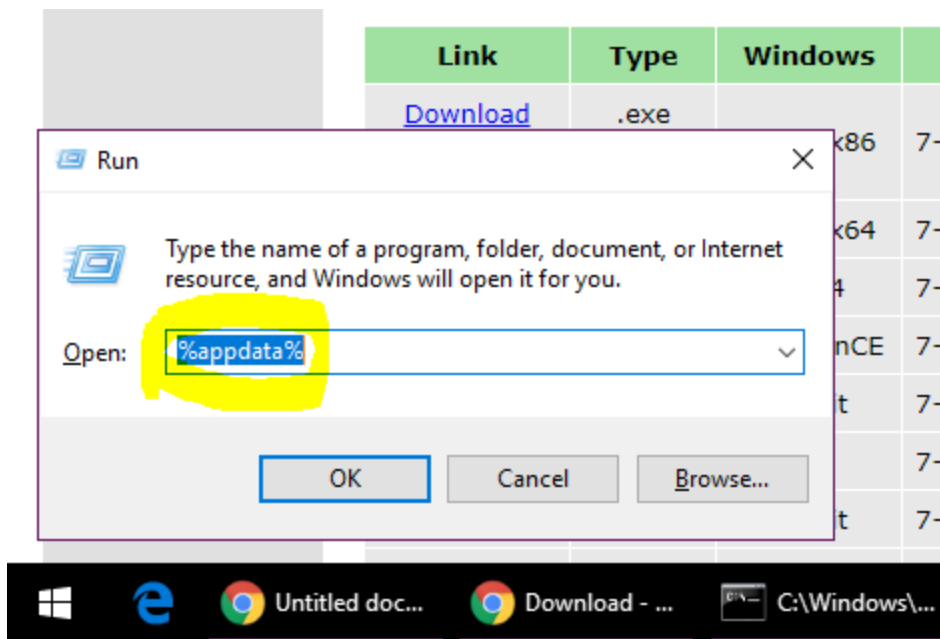


The screenshot shows the Windows Start menu context menu. The 'Run' option is highlighted with a yellow border. The menu items include: Apps and Features, Power Options, Event Viewer, System, Device Manager, Network Connections, Disk Management, Computer Management, Windows PowerShell, Windows PowerShell (Admin), Task Manager, Settings, File Explorer, Search, Run, Shut down or sign out, and Desktop.

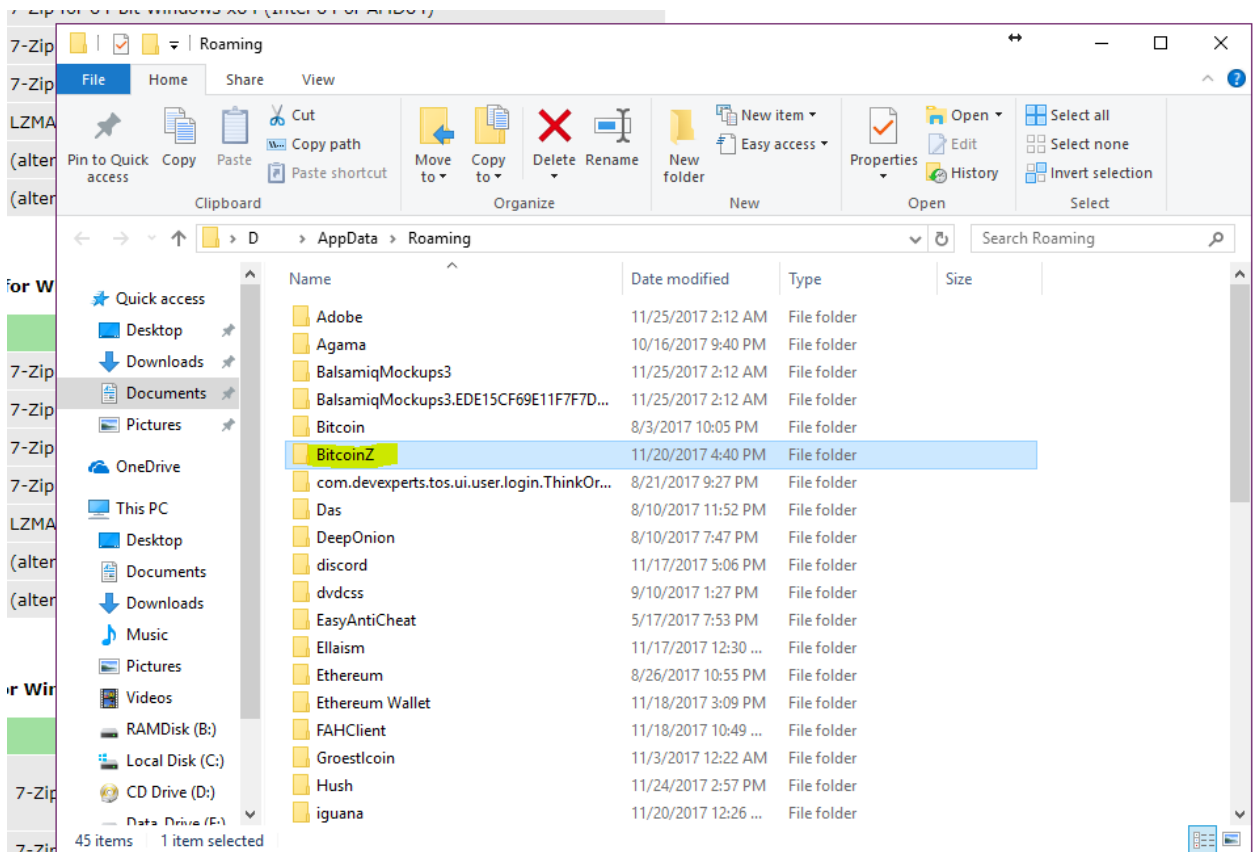
.exe	32-bit x86
.exe	64-bit x64
.7z	x86 / x64
.7z	Any
.7z	Any / x86 / x64
.msi	32-bit x86
.msi	64-bit x64
<b>Tip 9.20 (2010-11-18) fo</b>	
Type	Windows
.exe	32-bit x86
.msi	64-bit x64
.msi	IA-64
.exe	ARM-WinCE
.zip	32-bit
.tar.bz2	Any
.7z	32-bit

Download - ... C:\Windows

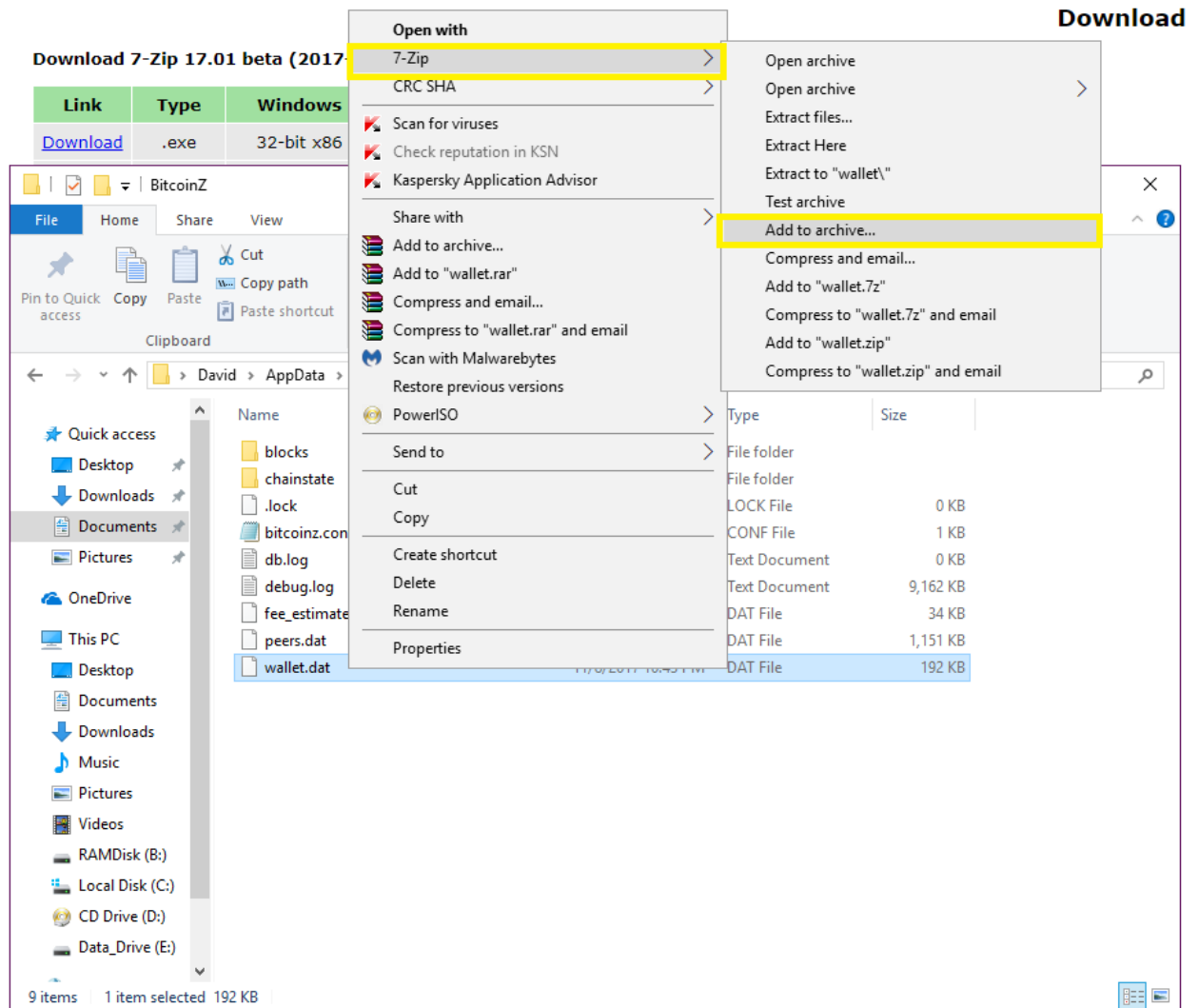
- A. Right-click on the windows button then left-click on “Run” to open the “Run” command window. (Alternatively, you can simply hit “Windows + R” hotkey to access the menu)



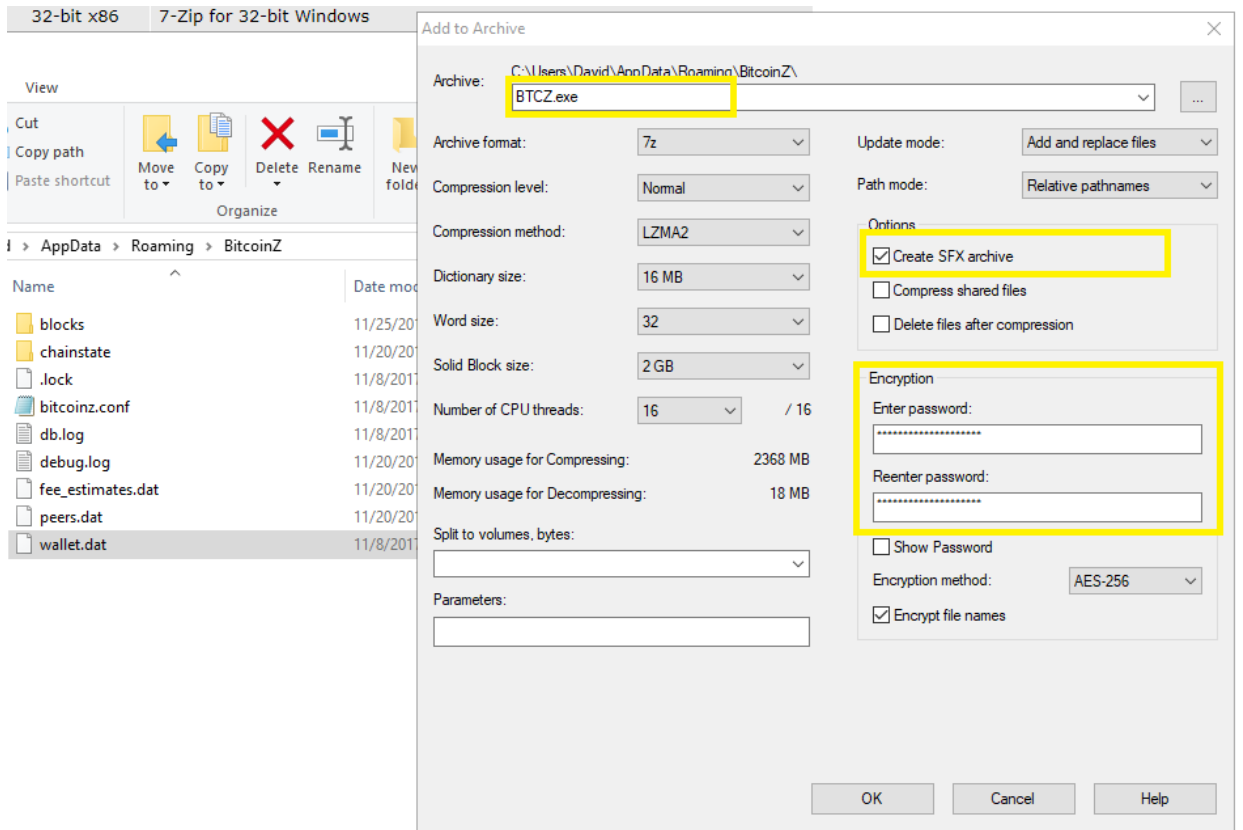
- B. Inside the “Run” command window, type %appdata% inside the “Open” dialog and click “OK” to access the hidden folder where the BTCZ wallet resides.



C. Double-click on “Bitcoinz” folder to access the “wallet.dat” location.



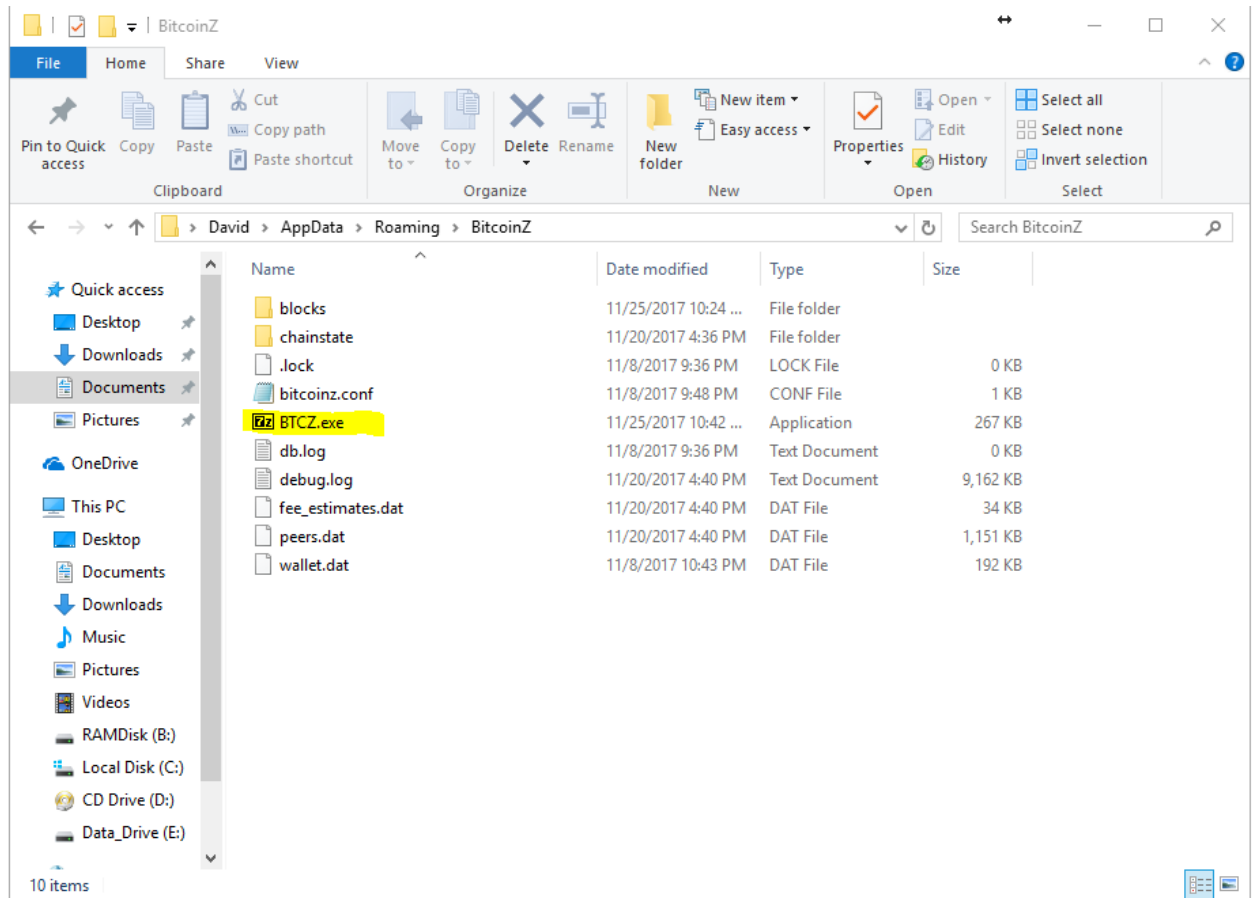
C. Right-click on the “wallet.dat” file inside the “Bitcoinz” folder. Then hover over the “7zip” sub-menu then click on “Add to archive...”



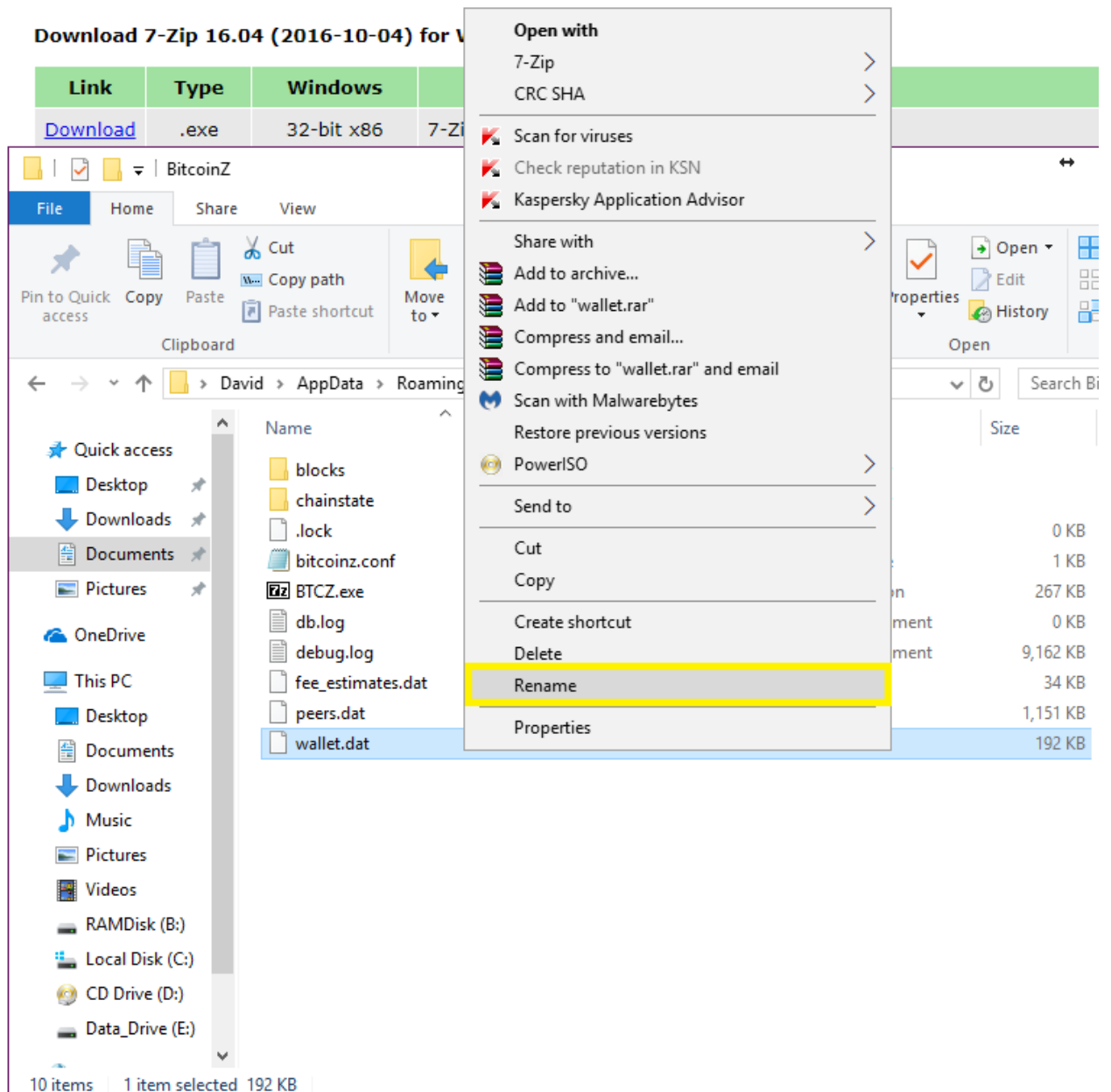
D. You will then be prompted with the 7zip archive creation tool. This tool will create a self extracting encrypted zip file containing your “wallet.dat” file. Be sure to click “Create SFX archive” and to use a secure password, of at least 15 characters using alpha-numeric with symbols. Then click “OK”

(Note: This file will become your repository for the “wallet.dat” so if anyone gets ahold of the file, they will need to crack the encryption first before they can access your wallet and transfer tokens. Guard it well.)

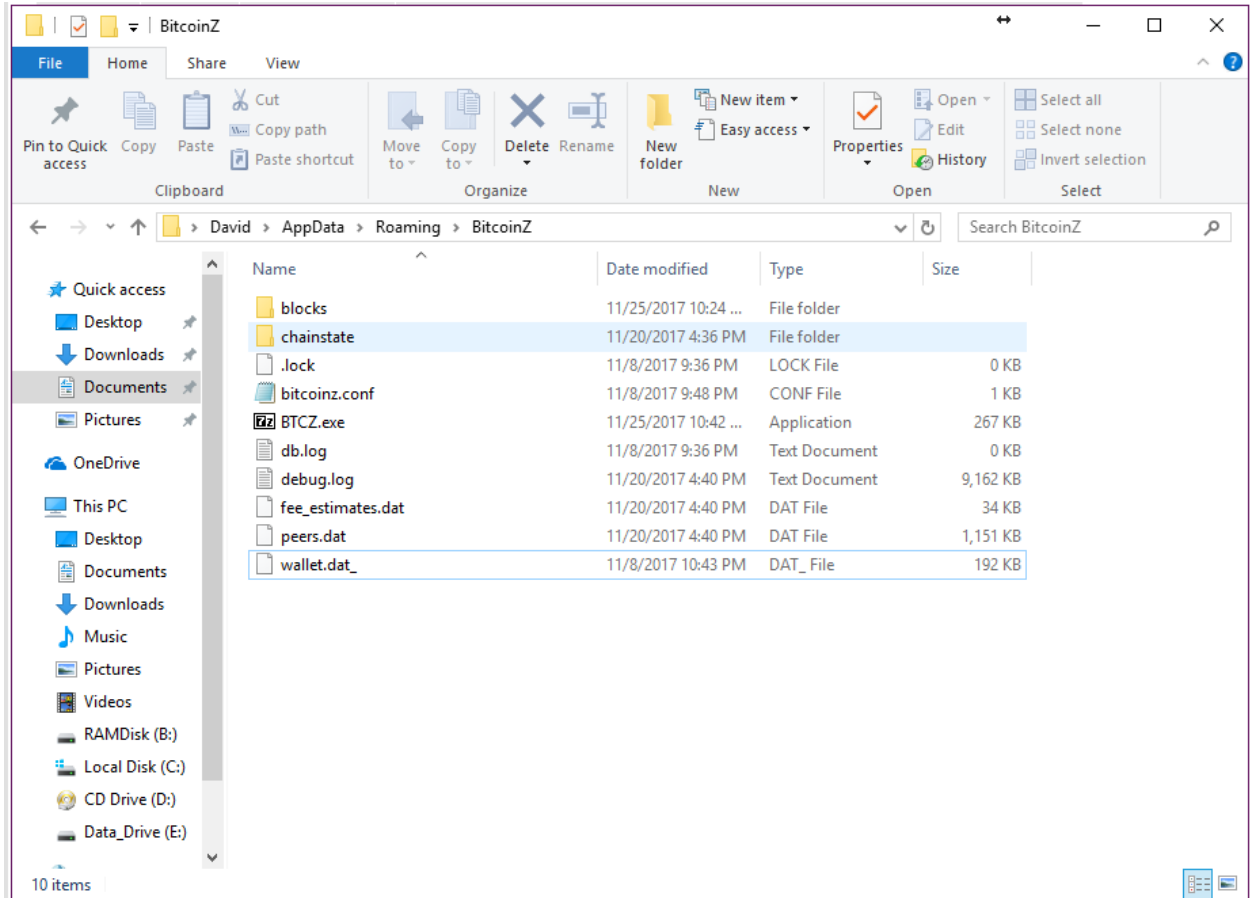




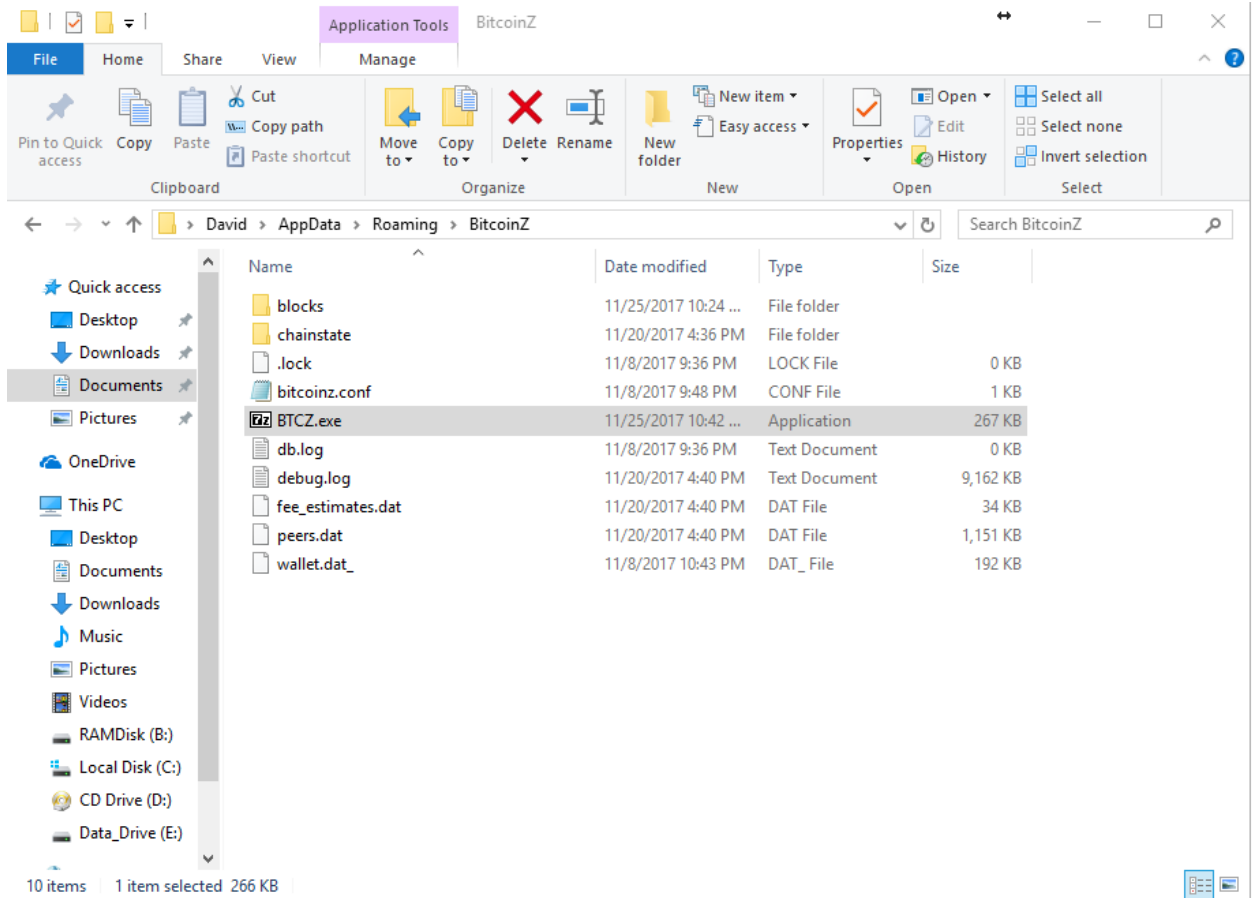
E. You will now notice that a new file has been created within the “BitcoinZ” folder. This is the encrypted zip file containing your “wallet.dat” file. In this case, we named this file “BTCZ.exe” We will now test to confirm that the file was indeed successfully compressed and accessible before deleting the plaintext “wallet.dat”



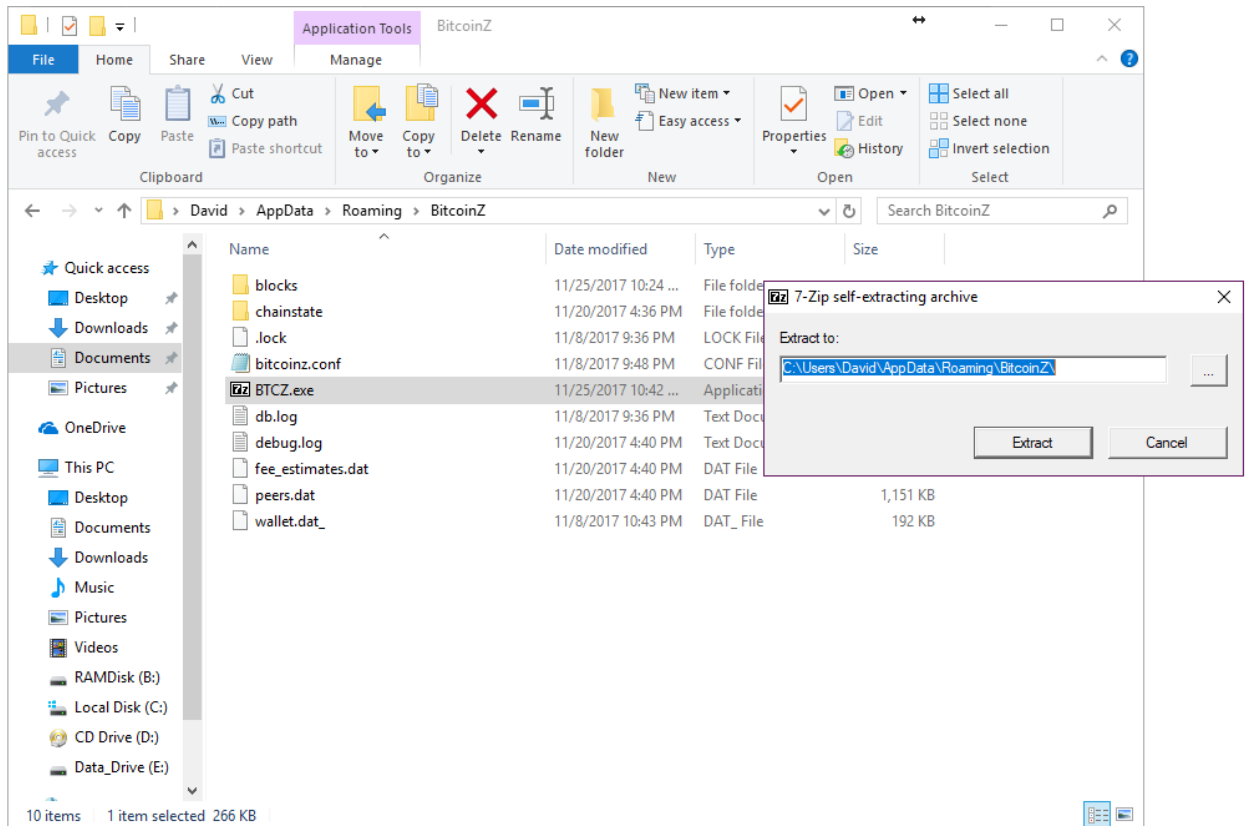
F. Rename the original "wallet.dat" file by right-clicking on the file, and then clicking "Rename" then rename the file to "wallet.dat\_". When prompted to confirm the change, click "Yes". This is to preserve the original wallet while we test the encrypted file and confirm it is working. Should we run into any issue, we can always revert back the "wallet.dat\_" file back to "wallet.dat".



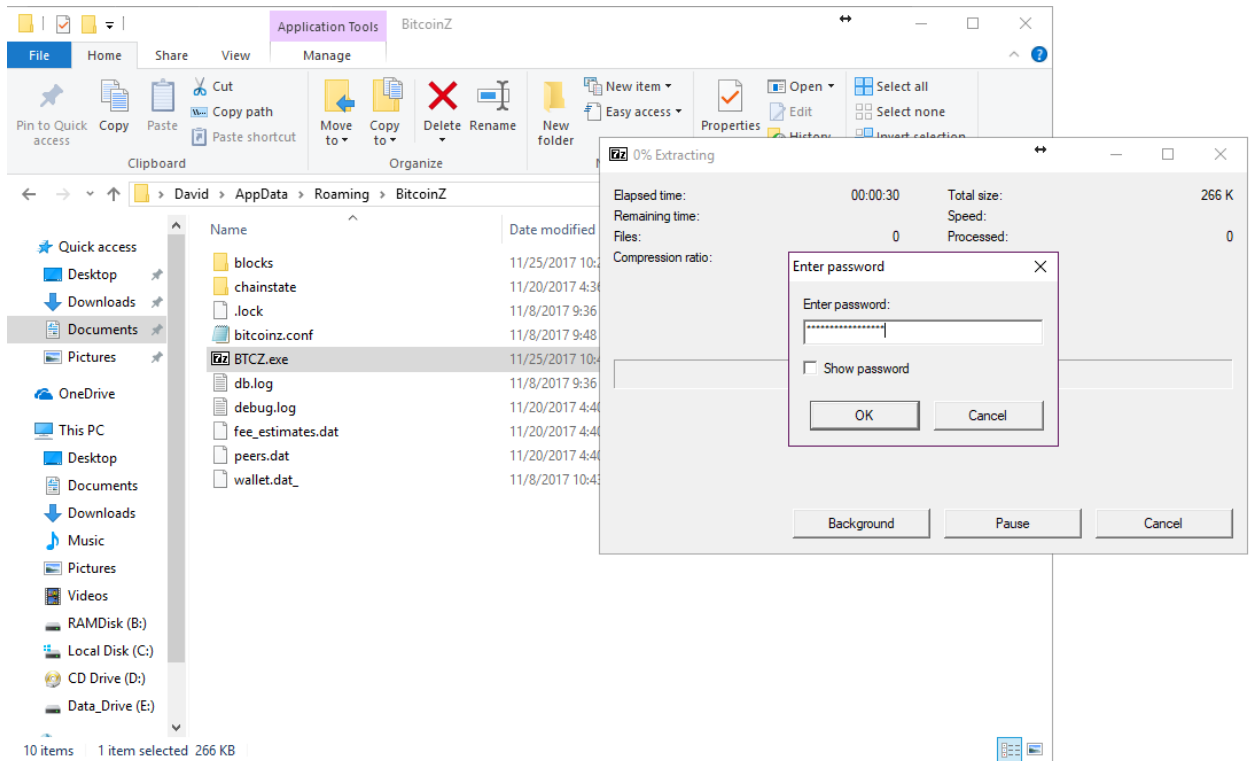
G. Once this is done, we are now ready to test the file. At this point you should only have a "wallet.dat\_" file and not "wallet.dat".



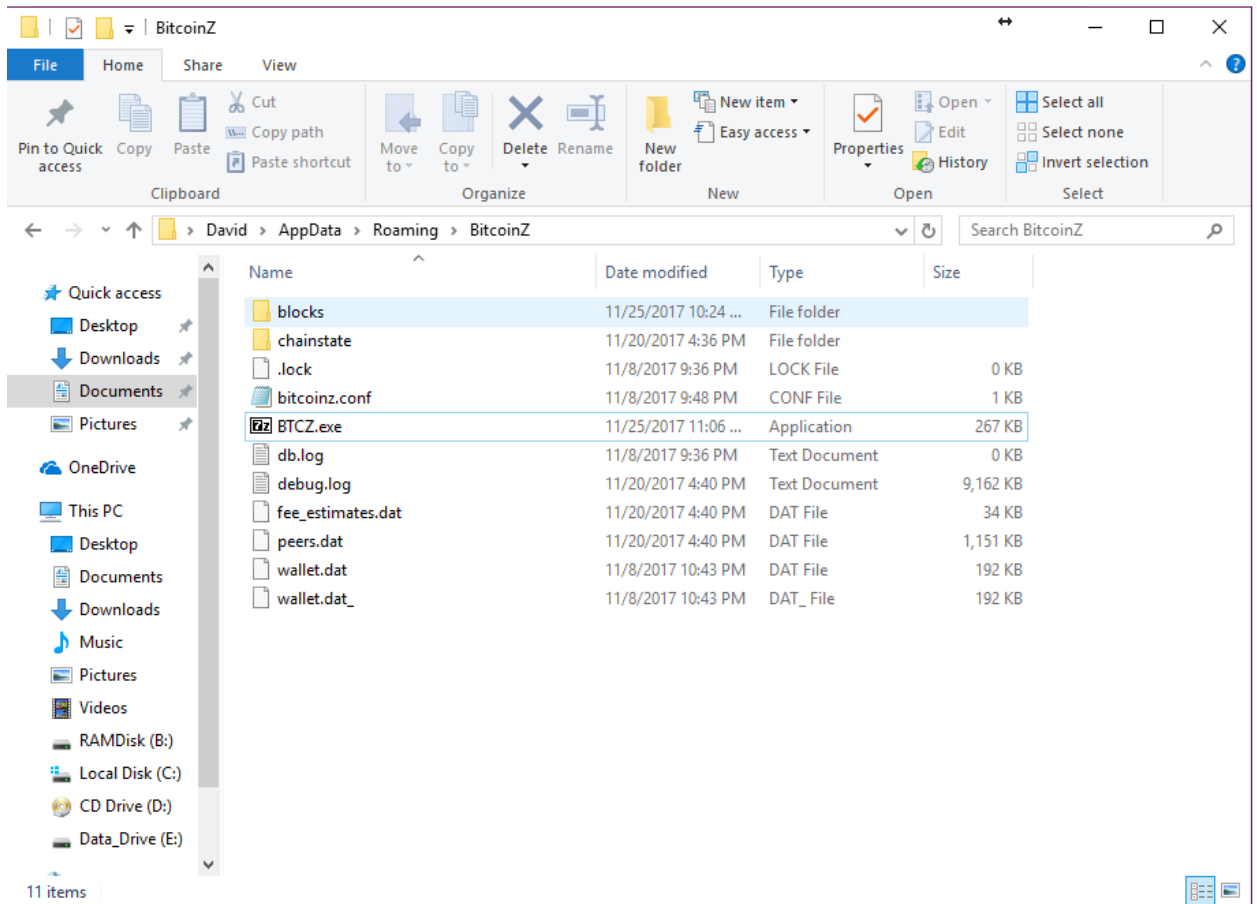
H. Double-click on “BTCZ.exe” to execute the self-extractor and begin the extraction process to restore the compressed “wallet.dat” file.



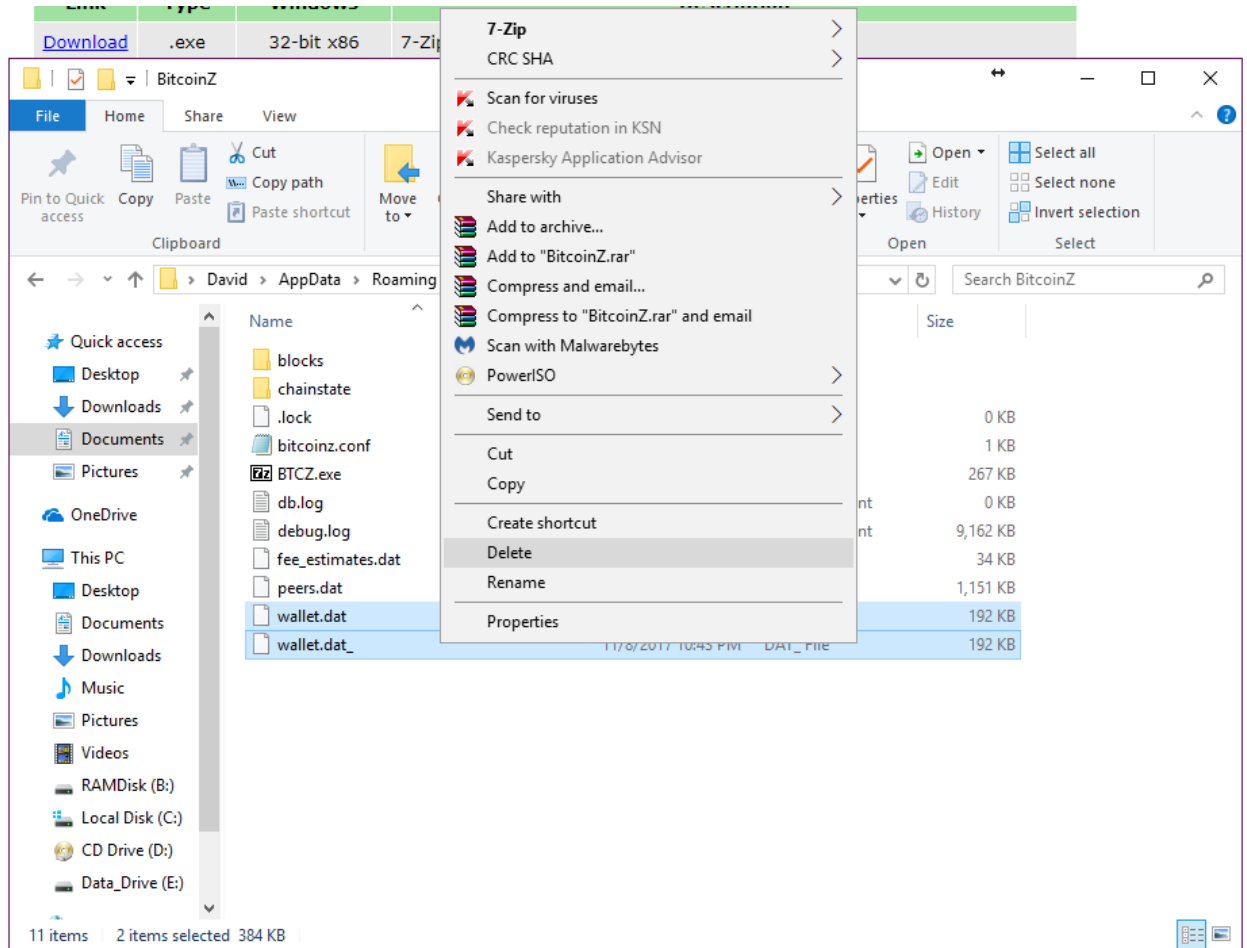
I. You are then prompted with the “Extract to” dialog. Since we are already in the appropriate folder, you do not need to change this. Simply click “Extract”.



J. You will then be prompted with the “Enter password” dialog. Enter your previously used password during the creation of the zip file and click “OK”. If the password is correct you will see a new copy of the “wallet.dat” inside the explorer window along with the original renamed “wallet.dat\_”.



K. If everything is working correctly, as mentioned above, you should see both “wallet.dat” and “wallet.dat\_” inside the folder. Now launch the BitcoinZ wallet, and confirm that the balance, and addresses are correct inside the wallet.



L. If everything is correct, you have successfully created an encrypted zip file. After you have backed up your “BTCZ.exe” file you may now safely close out of the wallet, and delete the unsecure “wallet.dat” and “wallet.dat\_” files.

Please note, that whenever you wish to access your wallet, you will need to go back through and execute steps H-L in order to restore the wallet for use using the “BTCZ.exe” file. During subsequent uses “wallet.dat\_” can be ignored as they will no longer be present.

(Note: It is **HIGHLY** recommended that you store the “BTCZ.exe” in multiple locations to ensure that your wallet can be restored in the event of data loss on your PC. Also be sure to write down the password used to encrypt the zip file and put it in a safe place. You will lose your coin if you lose either the “BTCZ.exe” file or your password. )

(Security Note: While this procedure will most definitely help with protecting your wallet from scripted attacks during times of non-use. It DOES NOT protect against active malware threats that may exist on your computer at the time of creation or unzip. Be sure to confirm that the computer you are on is clean BEFORE unzipping the file, since the file is exposed and vulnerable to compromise during use.)



You have now successfully secured your wallet.dat file when not in use.