



# **Protecting Private Information with TrueCrypt**

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# What Kind of Information Should Be Encrypted?




- **Anything you don't want someone else to see...**
  - **Passwords**
  - **Medical**
  - **Financial**
  - **Insurance**
  - **Sensitive correspondence**
  - **Old boyfriends'/girlfriends' phone numbers**

# What is TrueCrypt?

- **Free, easy to use strong encryption software (open source\*)**
- **Available for Windows (XP, Vista, 7), Mac OS X and Linux**
- **What does TrueCrypt do? Protects folders & files with strong encryption**

\* For information about Open Source, see  

# What is TrueCrypt? (cont.)

- **TrueCrypt Volumes are virtual disk drives within physical drives**
- **TrueCrypt Volumes are also known as “Containers”, or “Safes” or “Vaults”**
- **Available from  or more directly  ; excellent documentation at  \*\***

\*\*See *PCWorld*, p. 88, February 2012

# Four Steps to Digital Safety

- **Install TrueCrypt (or some encryption software)**
- **Create a “Vault” for storage**
- **Put sensitive stuff in the “Vault”**
- **Routinely use the “Vault” & software**

# Installing TrueCrypt

- **Access** 

**Latest Stable Version - 7.1a**

*Windows 7/Vista/XP/2000*

**Left-click ▶**

[Download](#)

TrueCrypt Setup 7.1a.exe (3.3 MB)

[PGP Signature](#)

*Mac OS X*

[Download](#)

.dmg package

[PGP Signature](#)

*Linux*

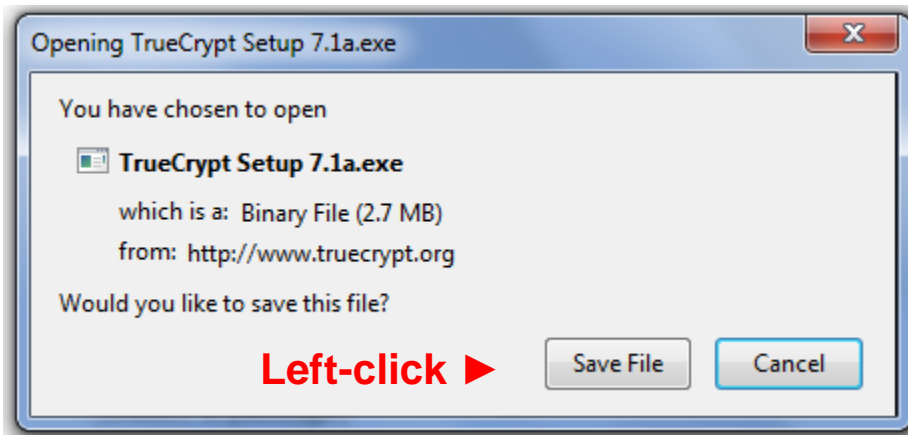
(Select a package) ▼

[Download](#)

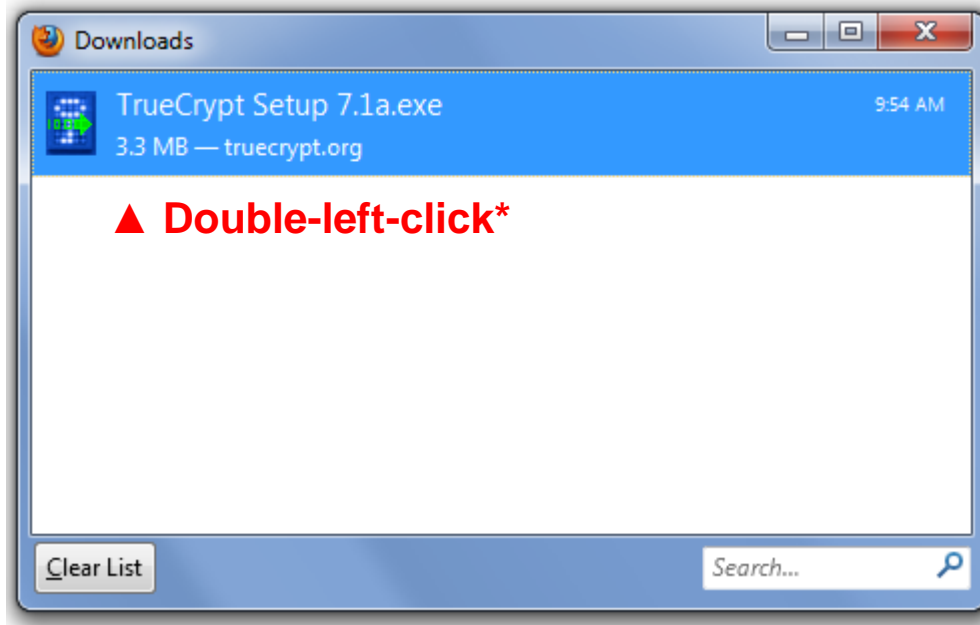
.tar.gz containing an executable setup file

[PGP Signature](#)

# Installing TrueCrypt (cont.)



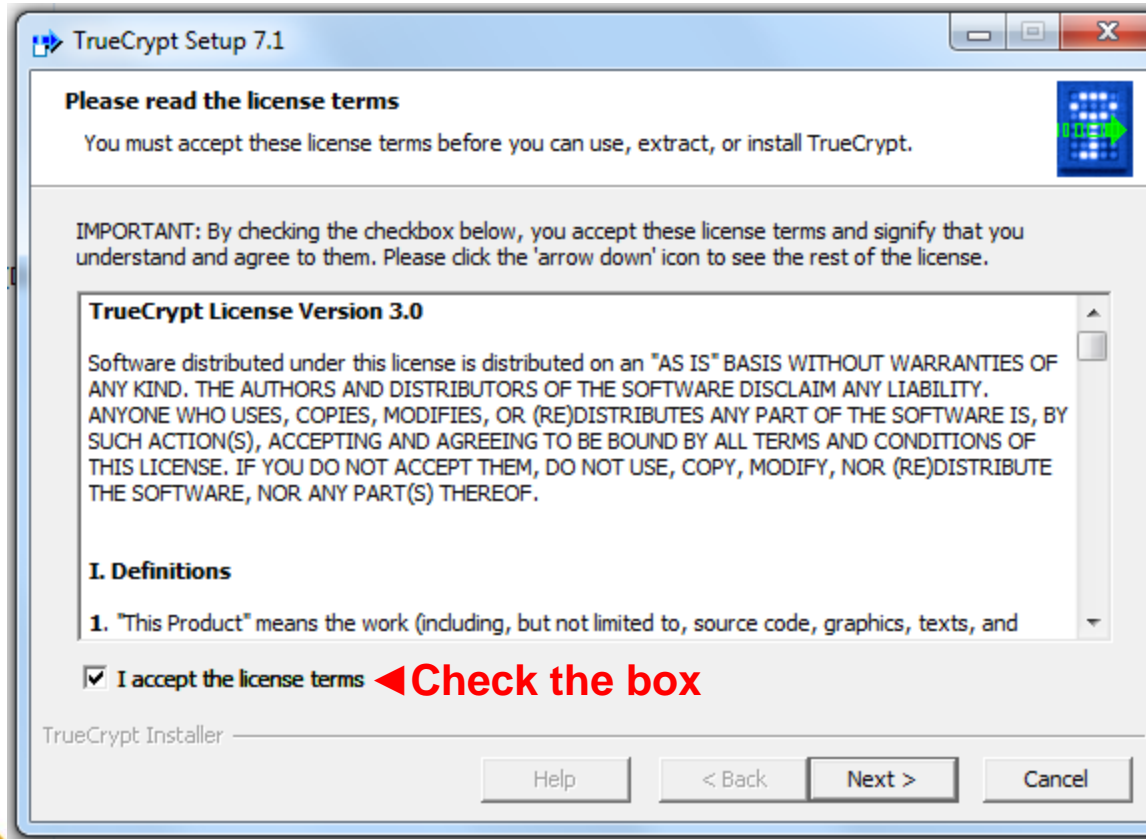
# Installing TrueCrypt (cont.)



\*It may be necessary to enter Administrator password

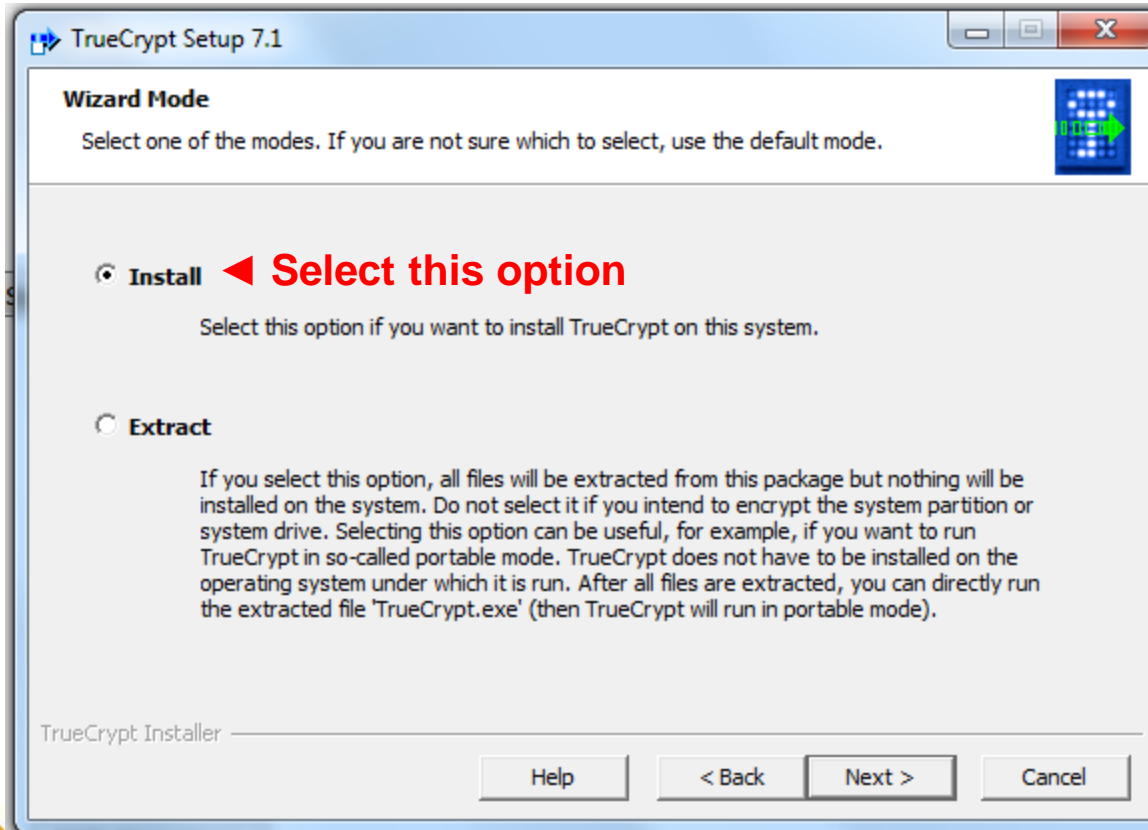


# Installing TrueCrypt (cont.)



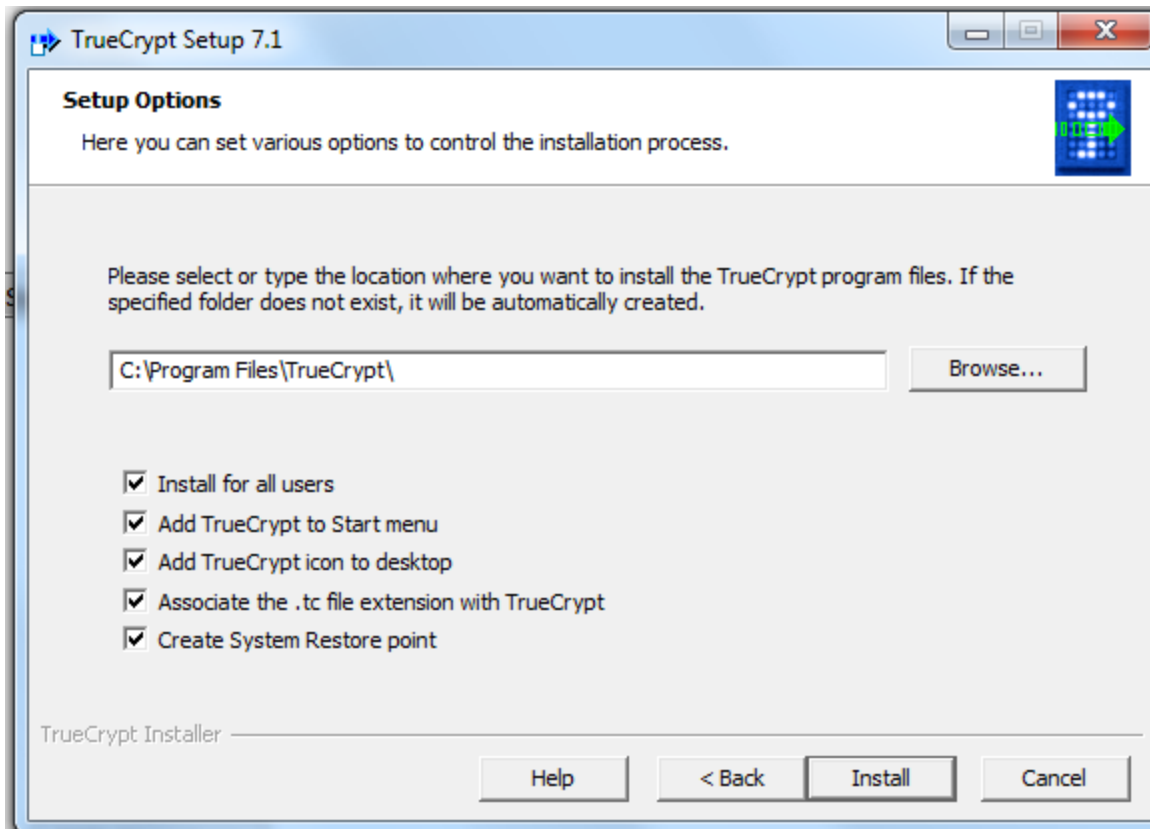
Left-click on "Next" ▲

# Installing TrueCrypt (cont.)



Left-click on "Next" ▲

# Installing TrueCrypt (cont.)



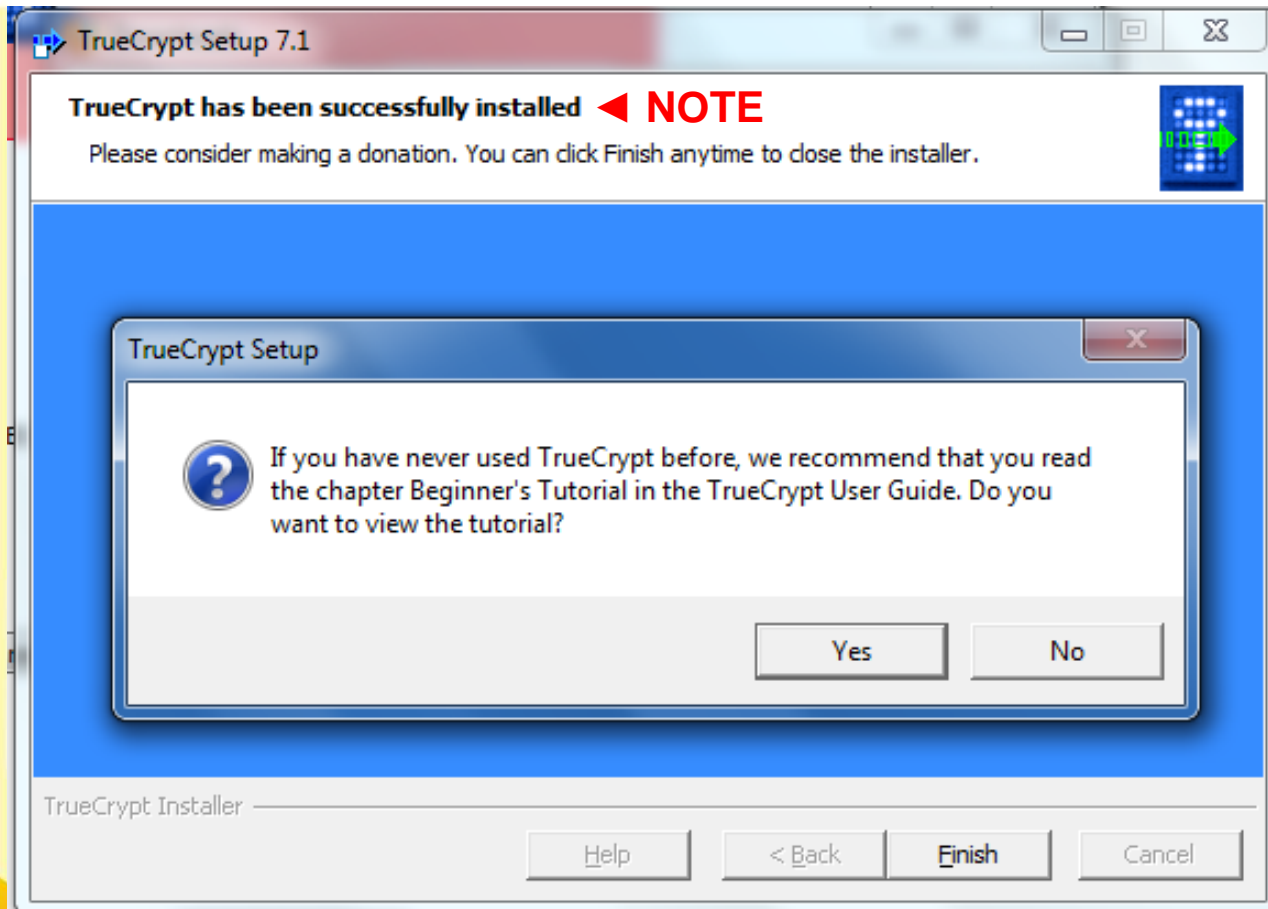
**Left-click on "Install" ▲**

# Installing TrueCrypt (cont.)

**You will notice numerous files being installed in C:\Program Files\TrueCrypt\...**



# Installing TrueCrypt (cont.)



Left-click on "Finish" ▲

## Downloads - Page 2

### TrueCrypt - Free Open-Source Disk Encryption Software

#### Source Code

The complete source code (in C, C++ and assembly) of the latest stable version of TrueCrypt.

Windows (.zip) ▾

Download

PGP Signature

**Not for the faint-hearted!**

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#### TrueCrypt License Version 3.0

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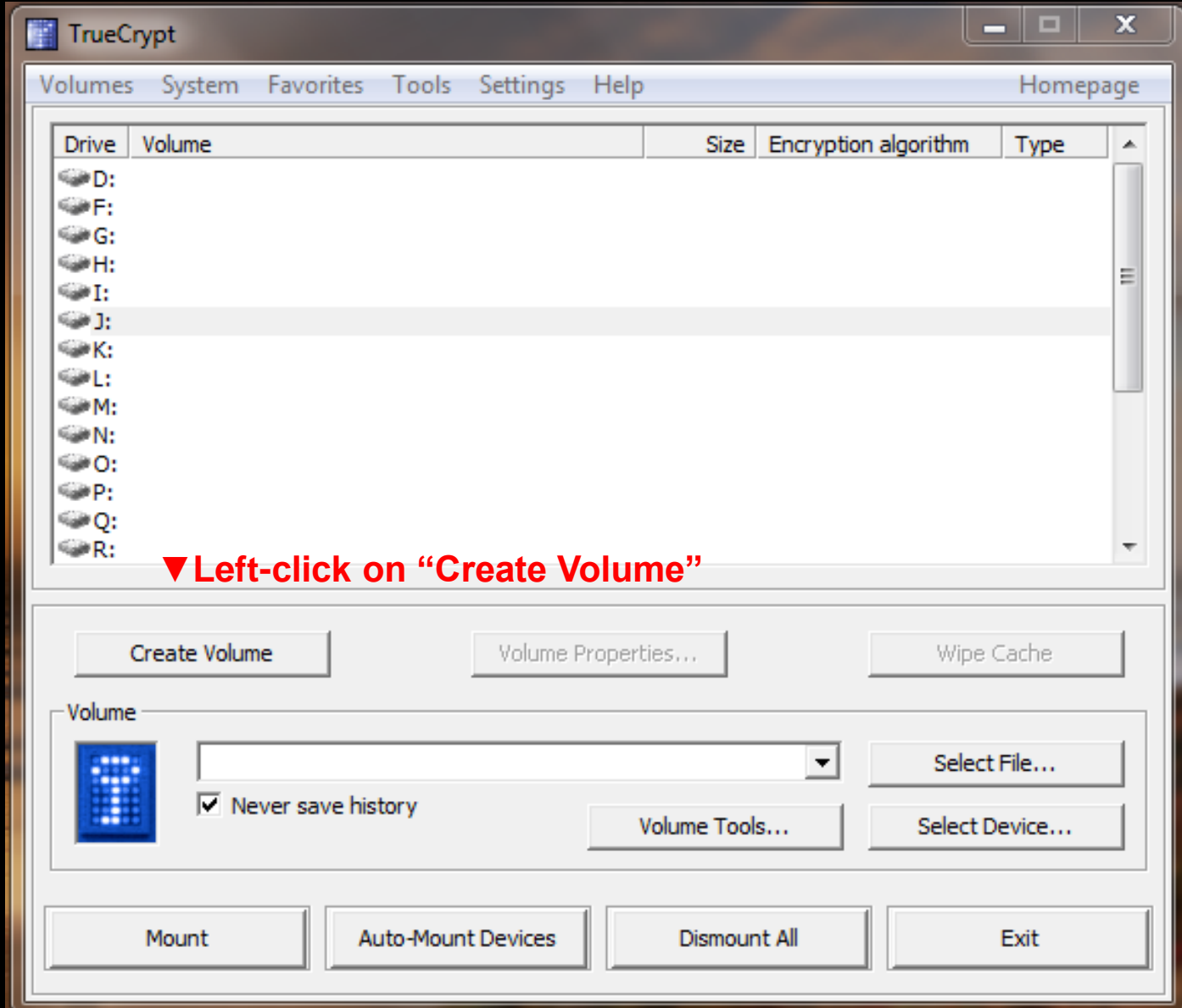
I accept the license terms (above)

[Left-click here to download source code](#)

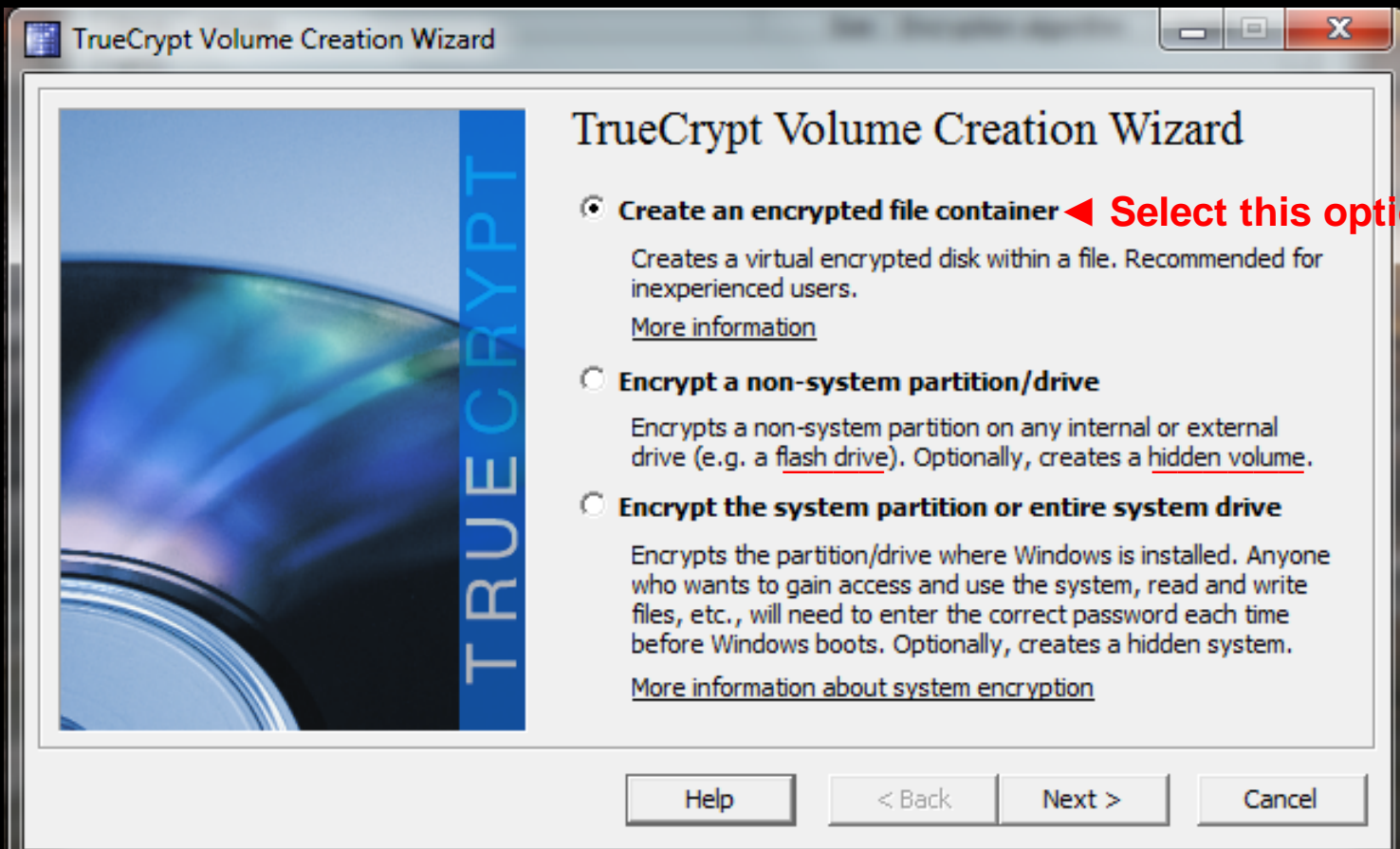


# Creating a TrueCrypt Volume ("Container"/"Safe"/"Vault")

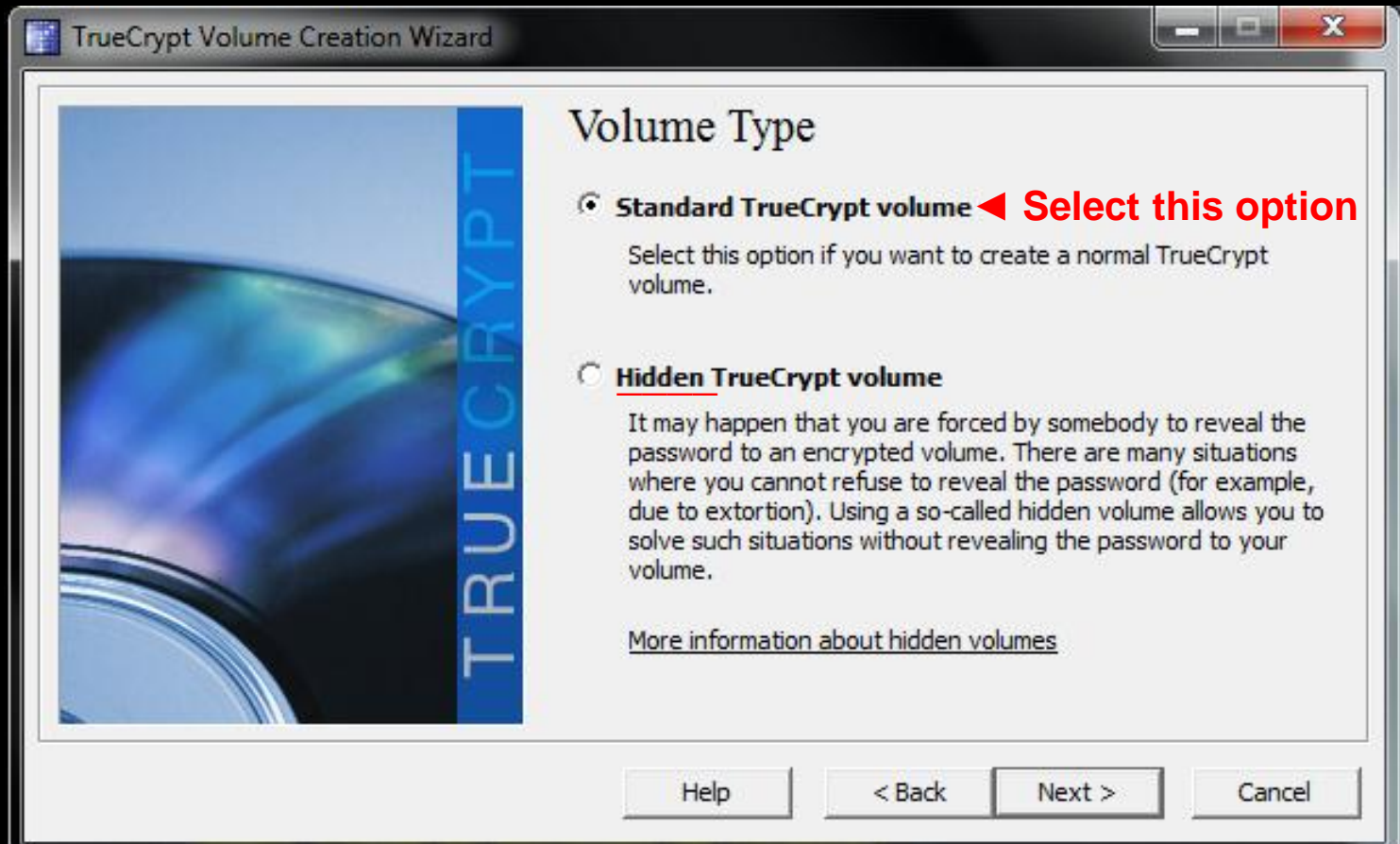
- **Invoke TrueCrypt**
  - From the TrueCrypt shortcut on the desktop
  - From the TrueCrypt object on the Taskbar
  - Start → [key] TrueCrypt → [double-left-click] TrueCrypt



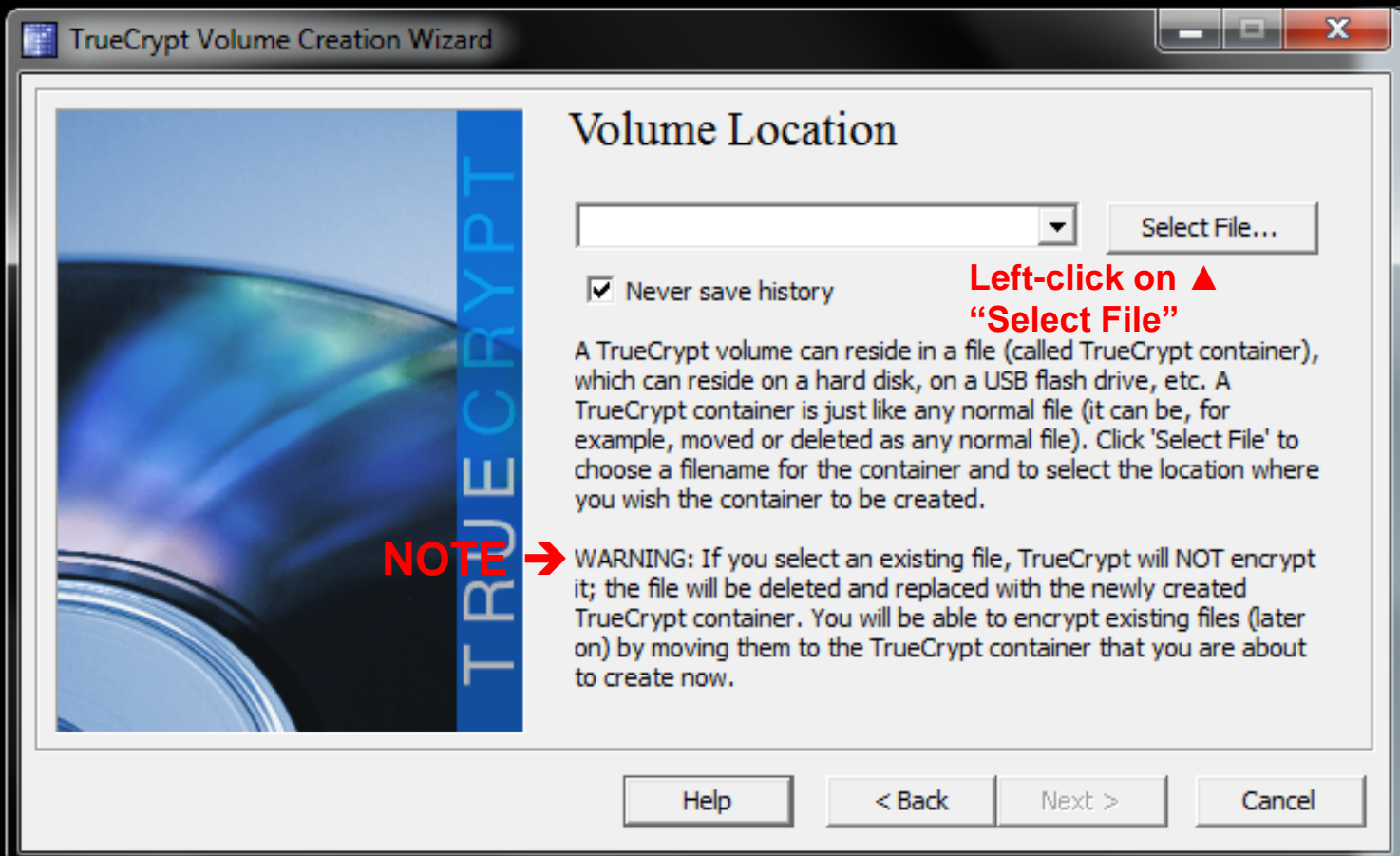


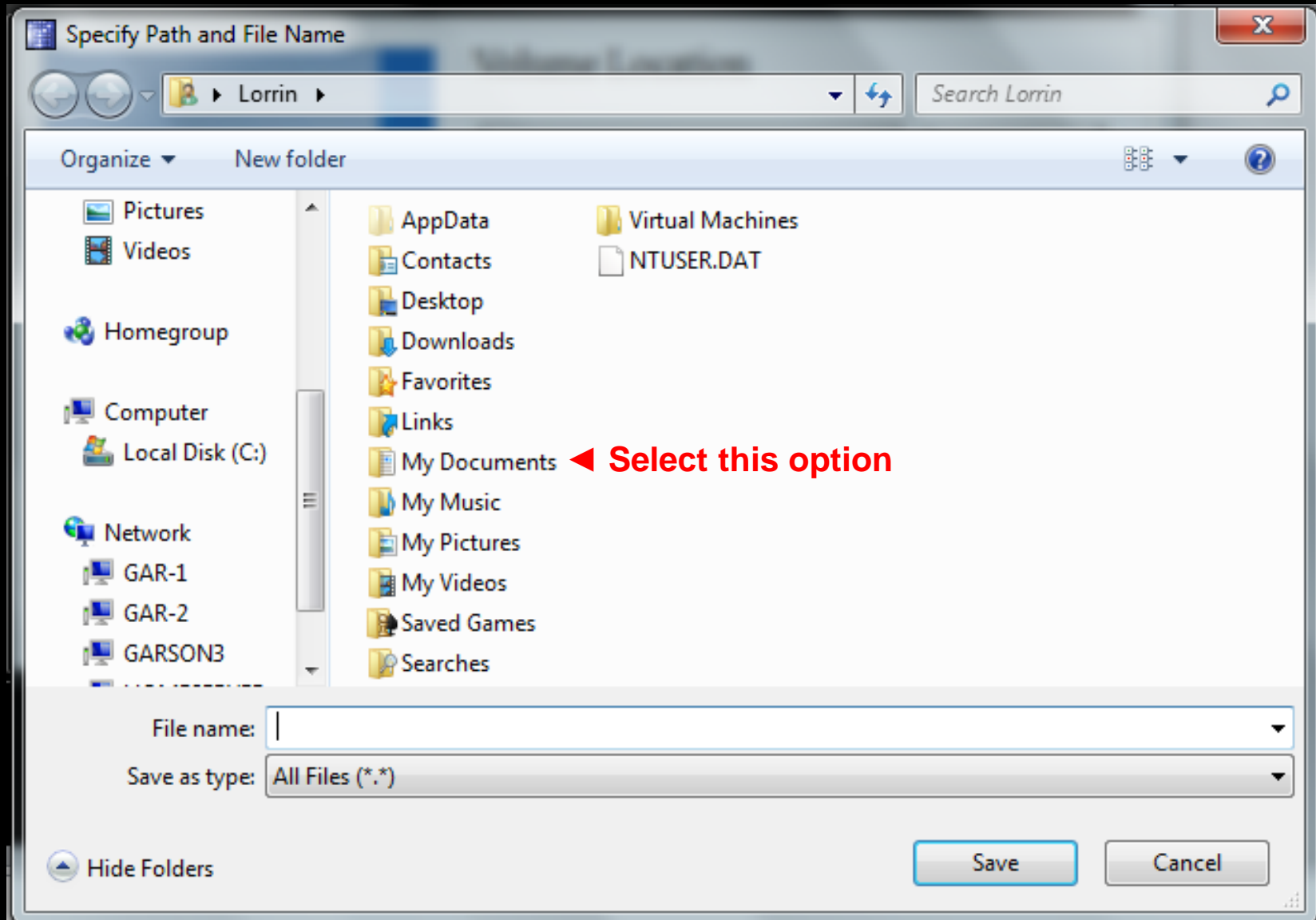


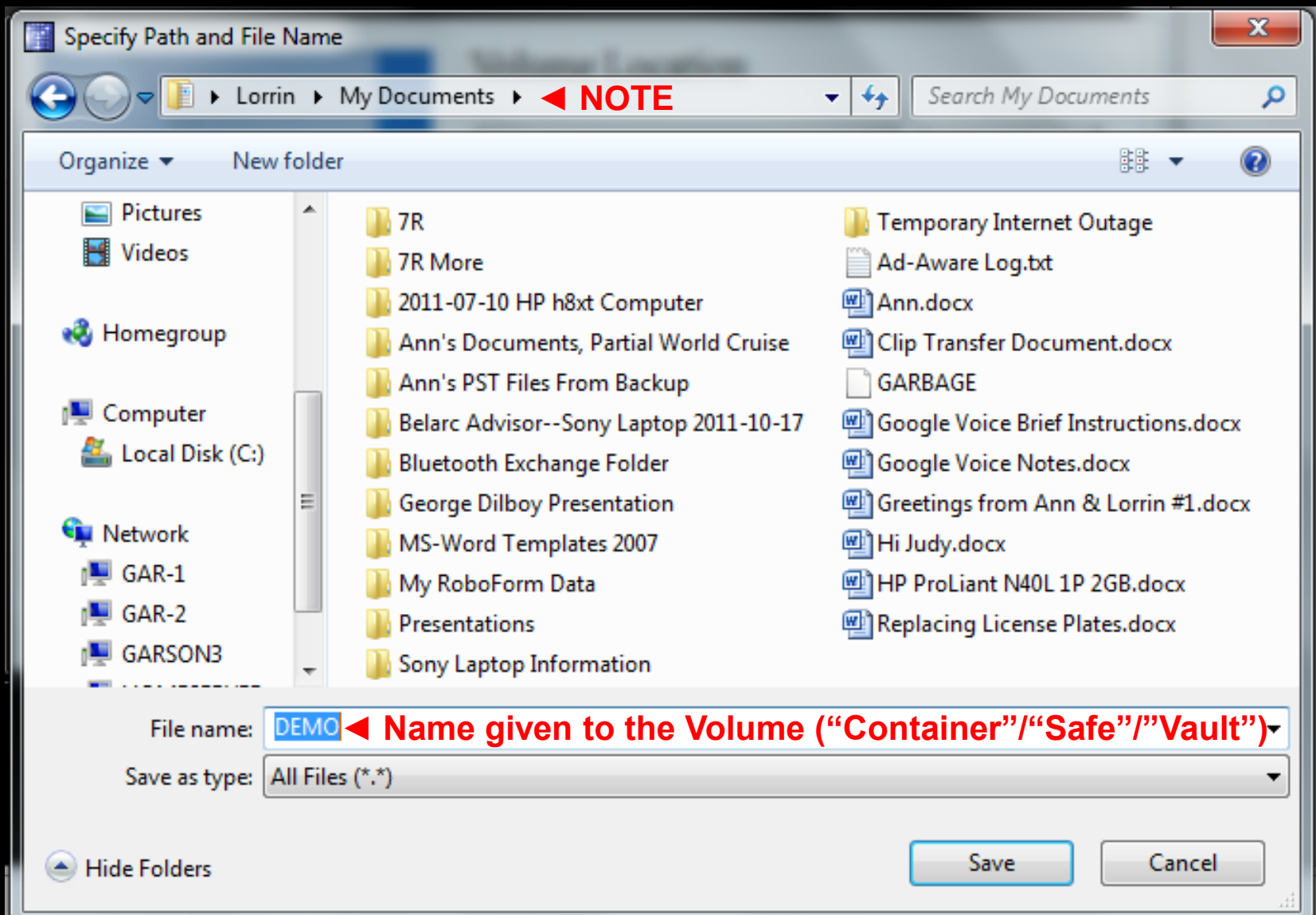
Left-click on "Next" ▲



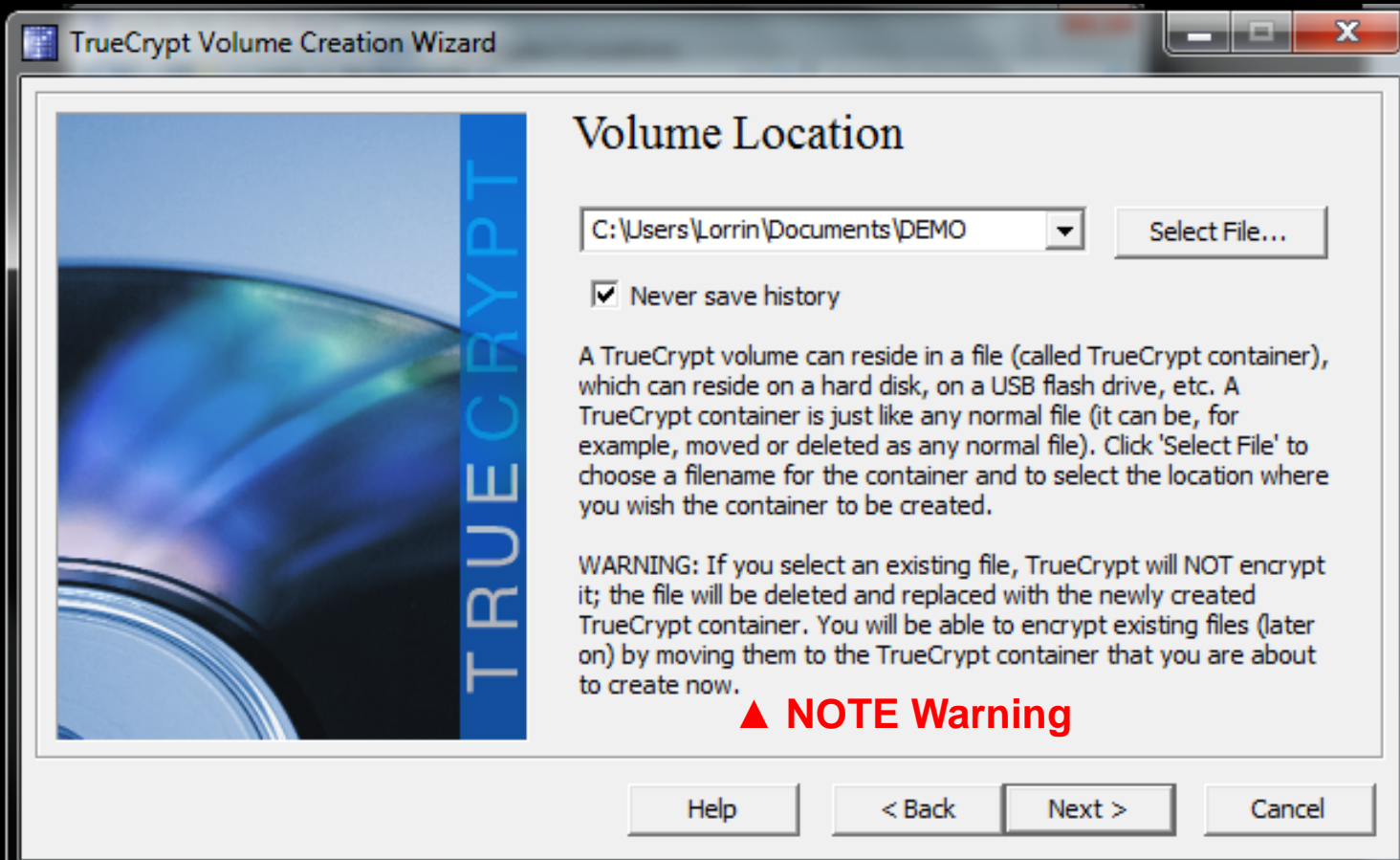
**Left-click on "Next" ▲**



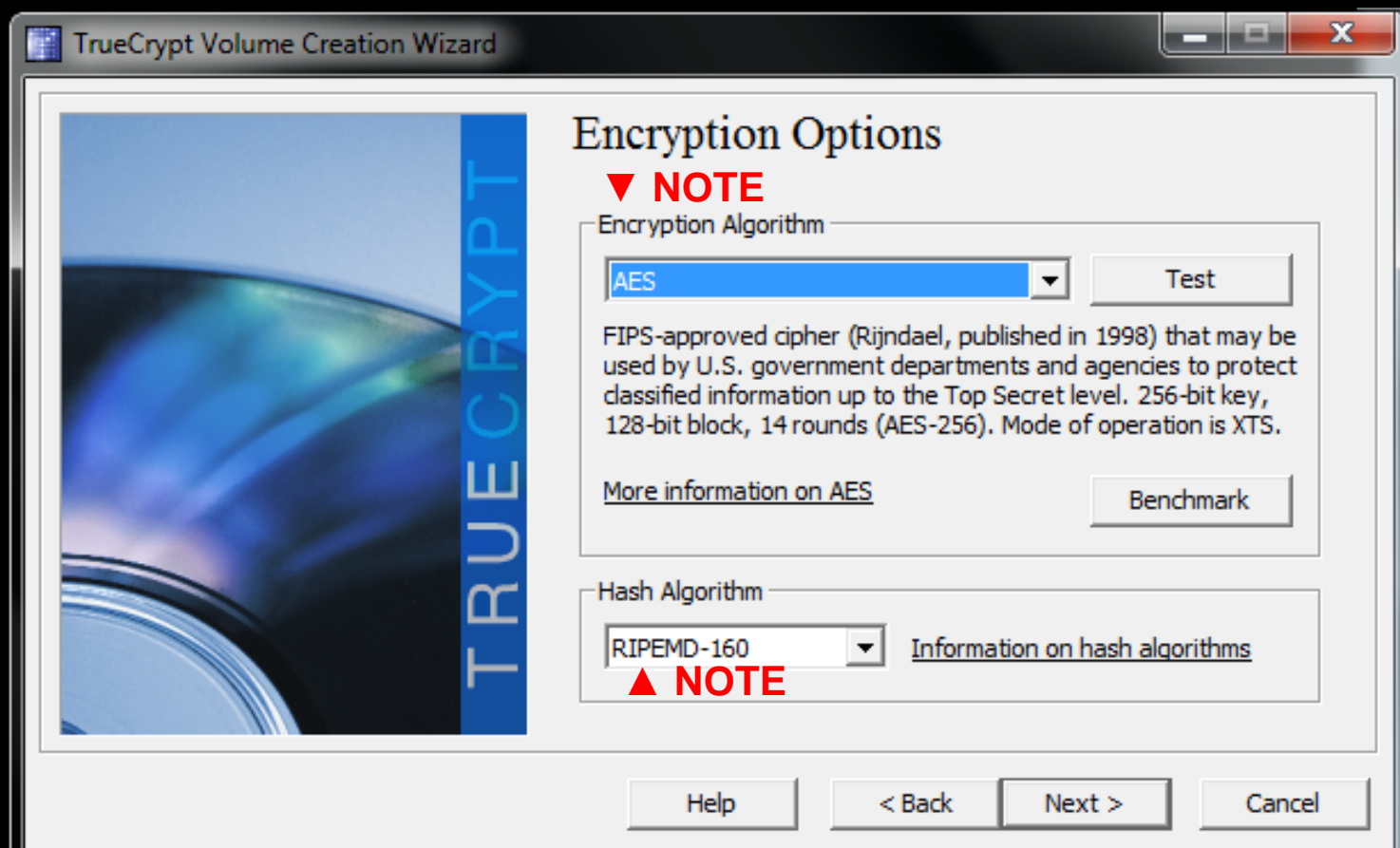




**Left-click on "Save" ▲**

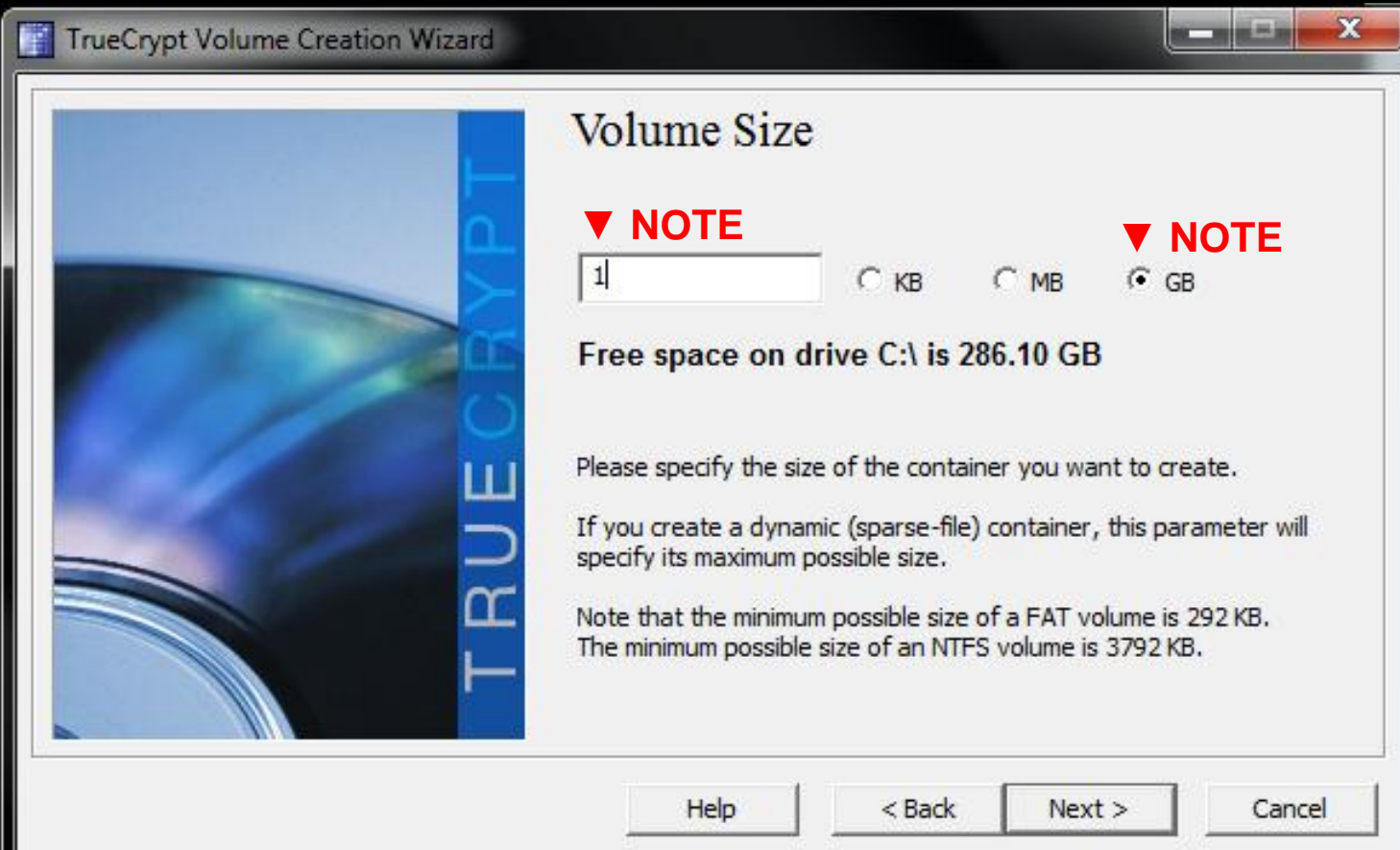


Left-click on "Next" ▲



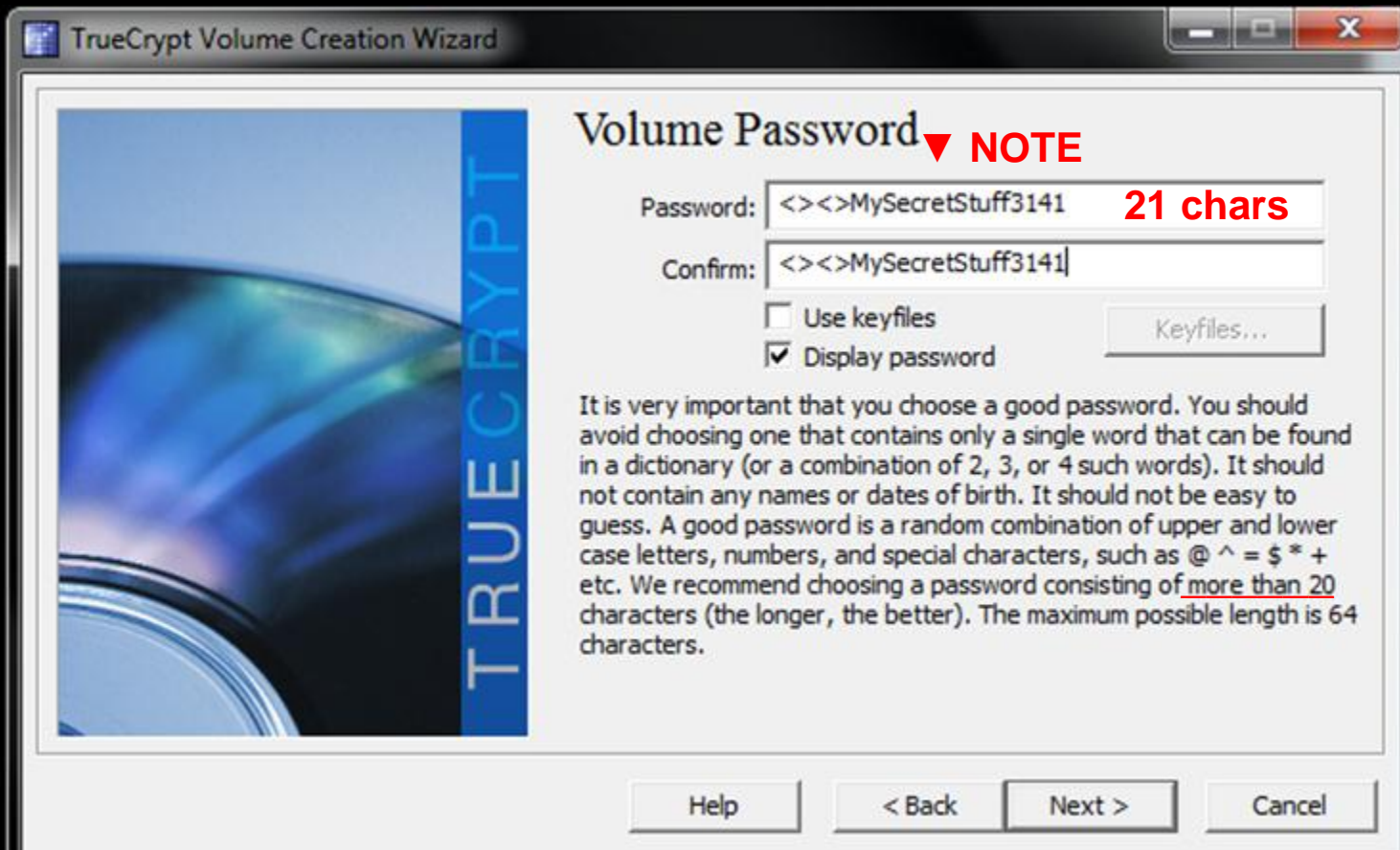
**Left-click on "Next" ▲**

**Encryption Algorithms: AES, Serpent, Twofish + 5 combinations  
Hash Algorithms: RIPEMD-160, SHA-512, Whirlpool**

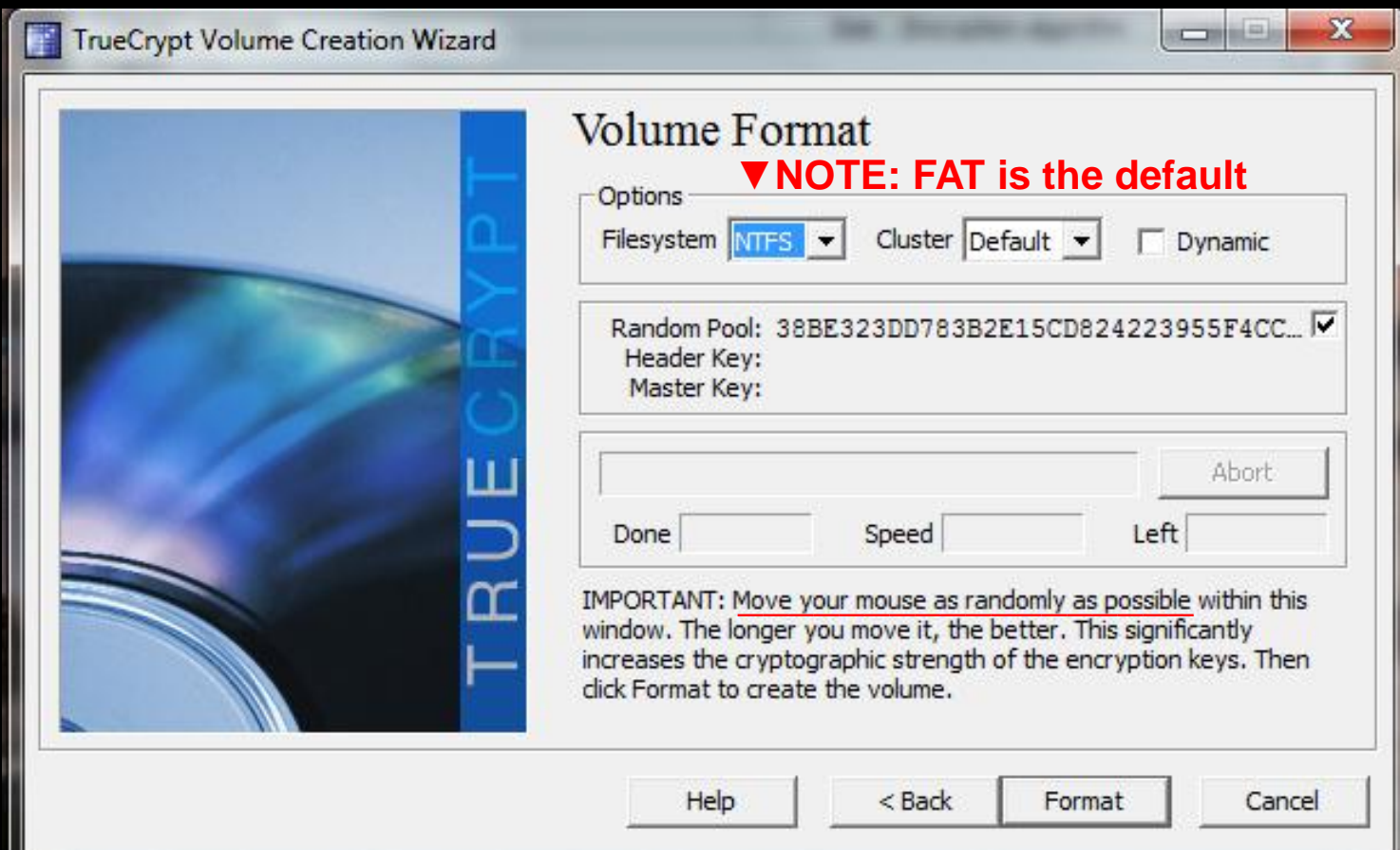


Left-click on "Next" ▲





Left-click on "Next" ▲

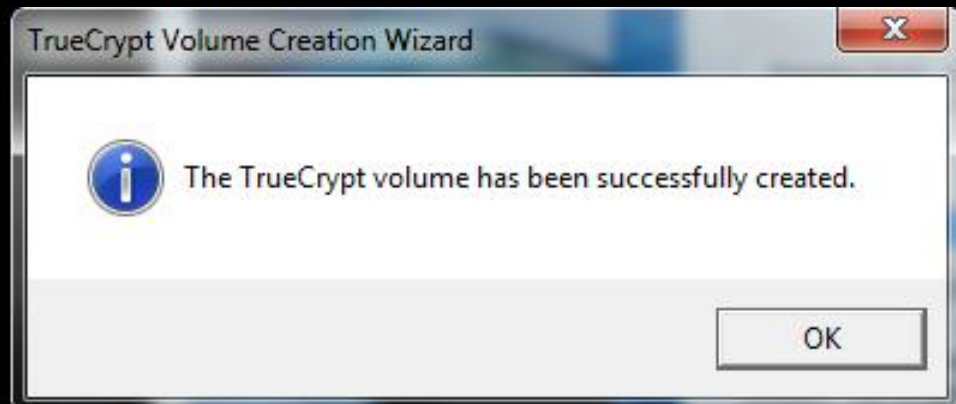


**Left-click on "Format" ▲**

**Move the mouse around as randomly as possible for awhile, then left-click on "Format"**



**Left-click on "Exit" ▲**



**Left-click on "OK" ▲**







# Using TrueCrypt: Demonstration




- **Opening a TrueCrypt volume ("Container"/"Safe"/"Vault")**
  - DEMO, PW = <><>MySecretStuff3141
- **Accessing the contents**
- **Adding a file or folder**
- **Deleting a file or folder**
- **Closing a TrueCrypt volume ("Container"/"Safe"/"Vault")\***

\*Closing a TrueCrypt volume encrypts its contents

# DEMO

# Other Encryption Software

- **Cryptainer; free to \$30, \$45 & \$70. See **
- **Folder Lock; free and \$40. See **
- **SensiGuard; free and \$39. See **
- **SafeHouse; free and \$30 & \$60 **
- **CryptoForge; \$30 to \$40. See **
- **PGP (Pretty Good Privacy\*); free **

\*For information on PGP and the criminal investigation of Phil Zimmermann see    and “Brute Force: Cracking the Data Encryption Standard” by Matt Curtin (2005).

# What now?

**Safety first...**

**Protect your private information  
with encryption!**





**The End**  
**Thank you!**