ENCRYPTION EXERCISE

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ENCRYPTION

- this exercise allows you to create an encrypted storage space on your drive

- encrypt anything you would not send on a postcard
  - for moving files e.g. transcripts
  - for storing files e.g. shared areas, mobile devices

WHAT IS ENCRYPTION?

- **encryption** transforms data to make it unreadable to anyone except those with a key

- **encryption** comes in strengths. A higher key size takes exponentially longer to crack

WHY KEY SIZE MATTERS

Key size	Time estimated to crack using a dedicated super computer	Related experience
8	0 milliseconds	Far, far less than the time needed to read this
56	1 second	Blip
64	5 minutes	Long enough to apologise for accidentally exposing data
128	150 trillion years	Longer than the history of the universe
256	Over a quadrillion years	A number greater than the number of atoms in the universe

ENCRYPTION SOFTWARE

- it is easy to use – honest!
- we will show you how

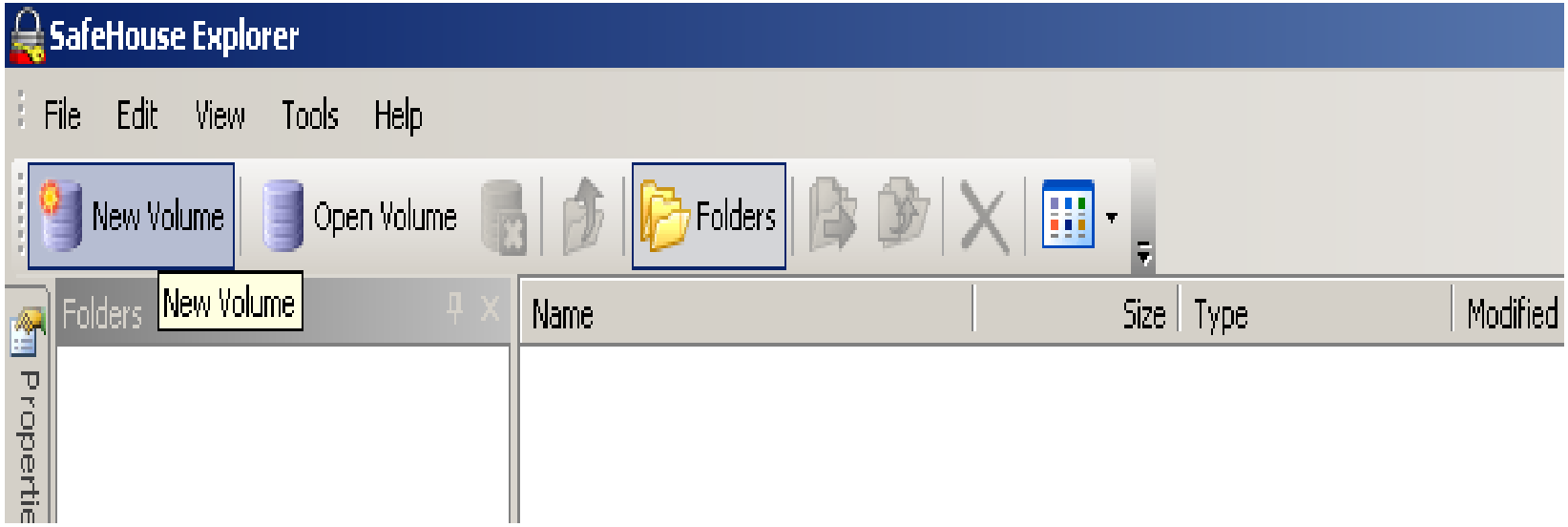
  - SafeHouse
    - good for portable storage
    - doesn’t need administrative rights to install
    - 256-bit encryption
  - TrueCrypt
    - good for hard drives
    - 256-bit encryption
  - AxCrypt

ENCRYPTING A SPACE

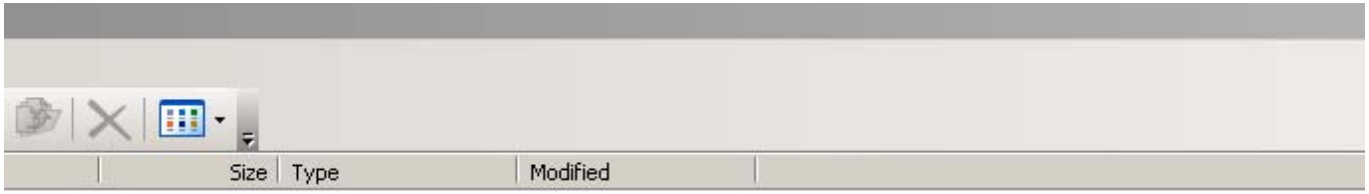
- download SafeHouse explorer from www.safehousesoftware.com/ (Windows only)
- install
- open SafeHouse Explorer

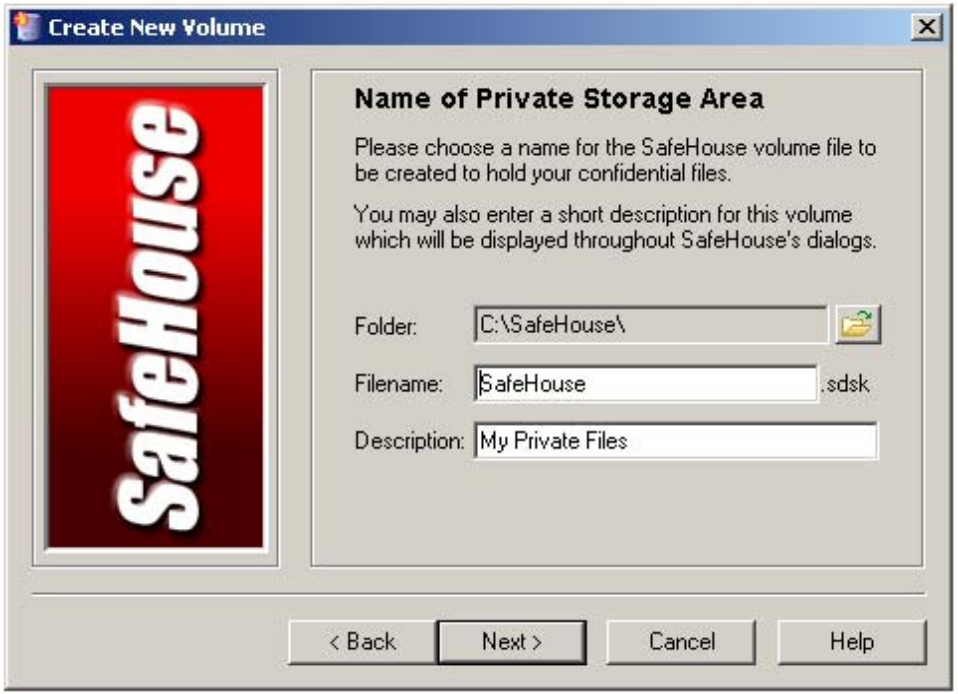
CREATE A NEW VOLUME

- click on ‘New Volume’.
- follow the wizard by clicking ‘Next’



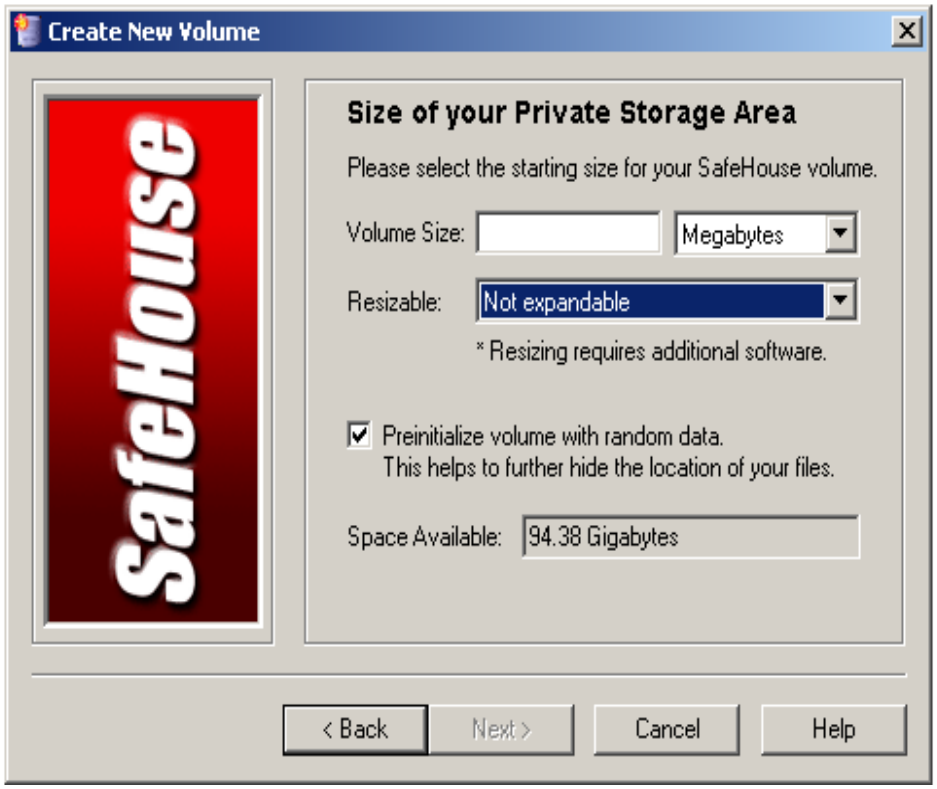
CHOOSE A NAME AND LOCATION





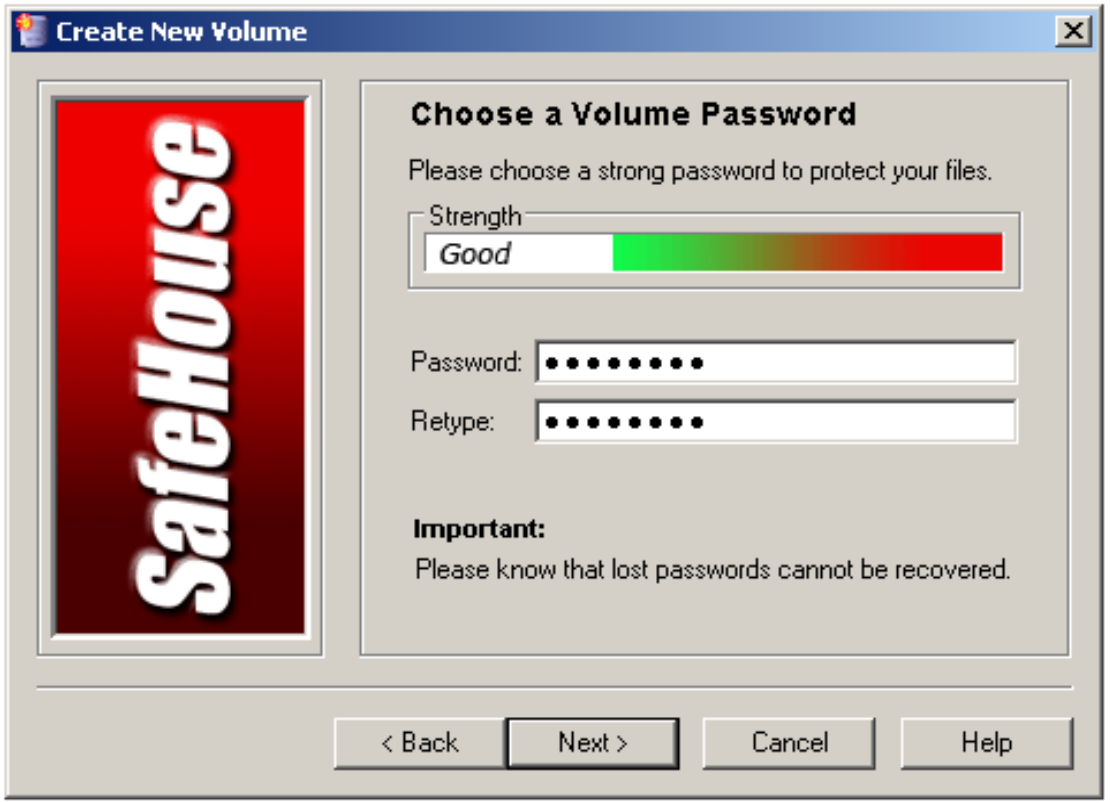
VOLUME SIZE

- set the size you want in kilo/mega/gigabytes
- remember to leave 5mb for the safehouse.exe file



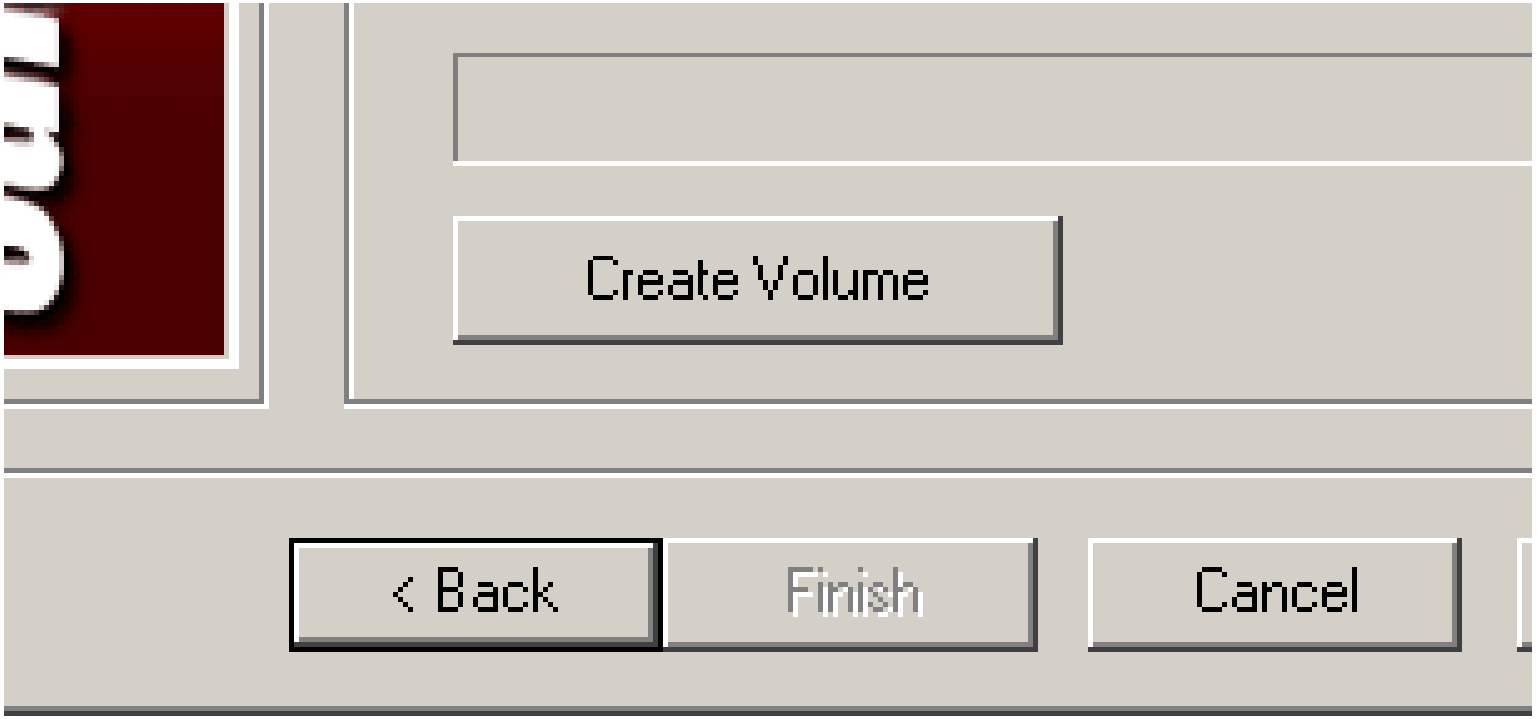
CREATE A PASSWORD/PASSPHRASE

- incorporate a range of upper and lower case letters, number, and other characters
- don’t forget it!



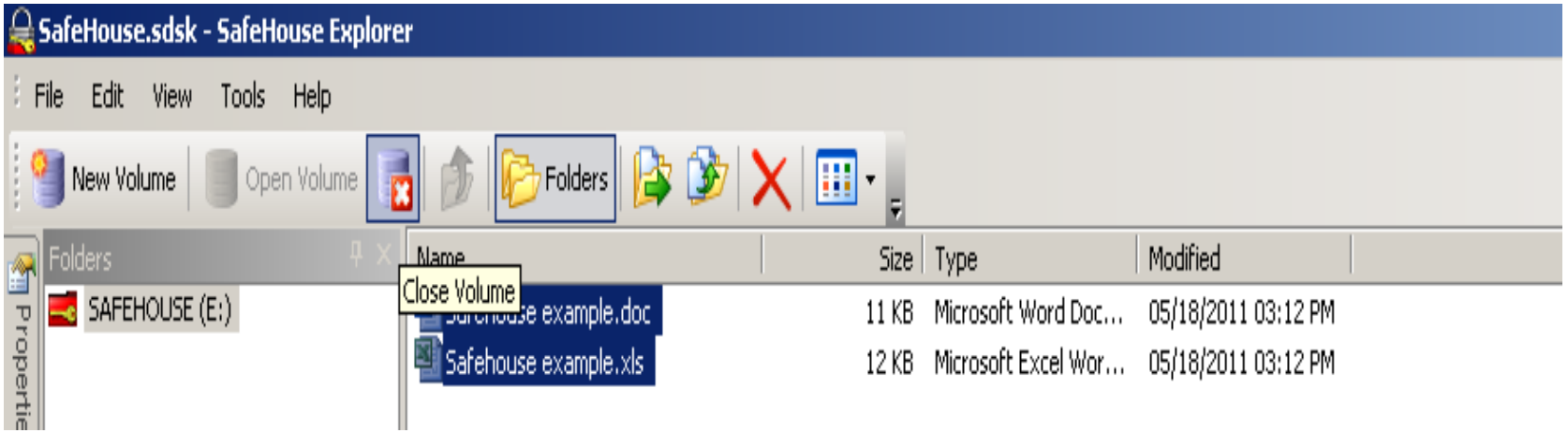
CREATE VOLUME

- create your encrypted area by clicking on ‘Create Volume’



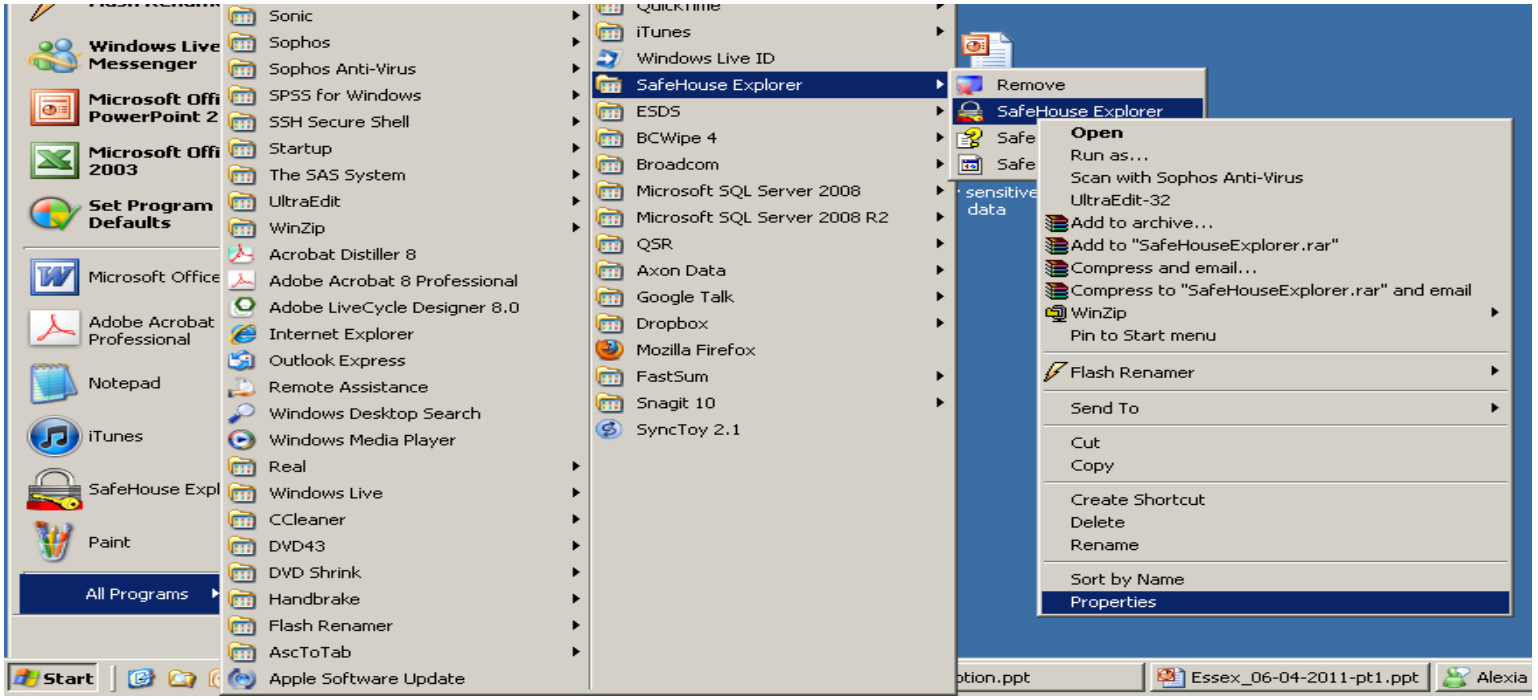
COPY OVER YOUR FILES

- drag in your files
- when done, press the ‘Close Volume’ icon



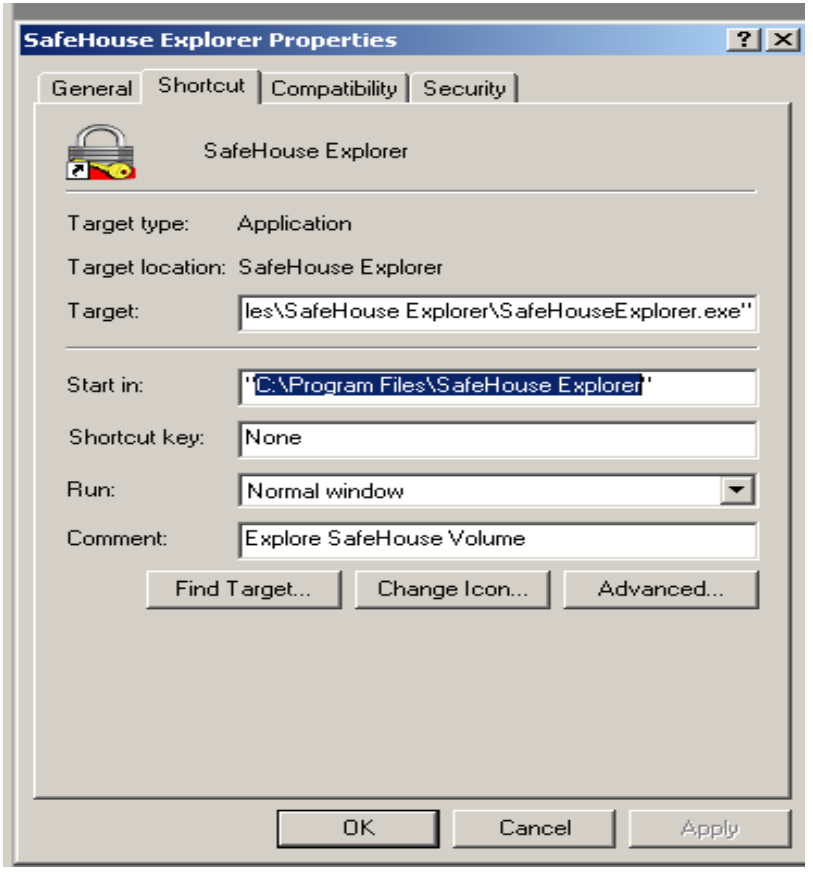
COPYING THE .EXE FILE

- final stage is to copy the .exe file so you can open your encrypted space on other Windows machines
- click on ‘Start’, find the SafeHouse Explorer folder, find SafeHouse Explorer, right click, select ‘Properties’



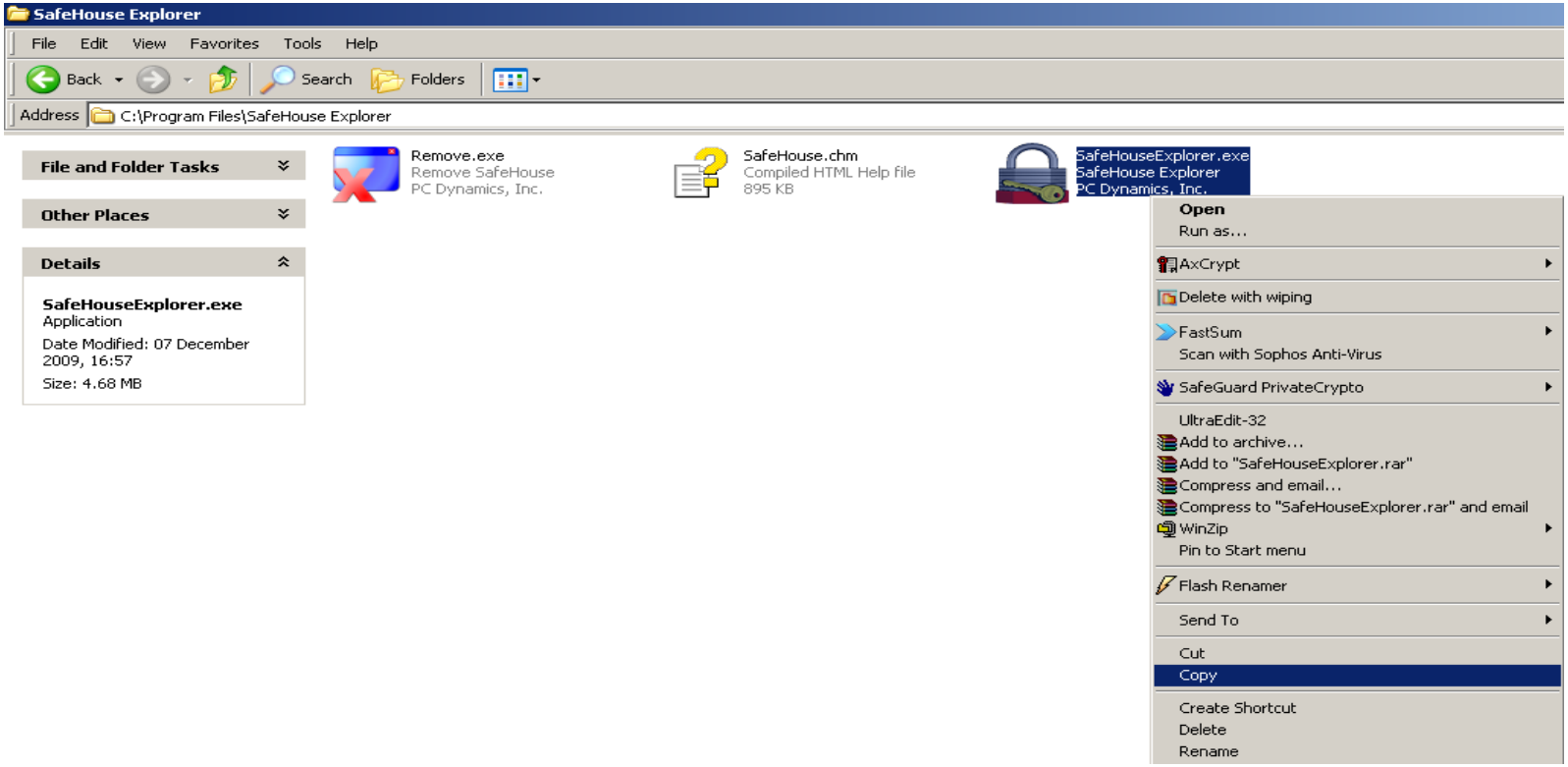
COPYING THE .EXE FILE

- locate the folder location of the .exe file



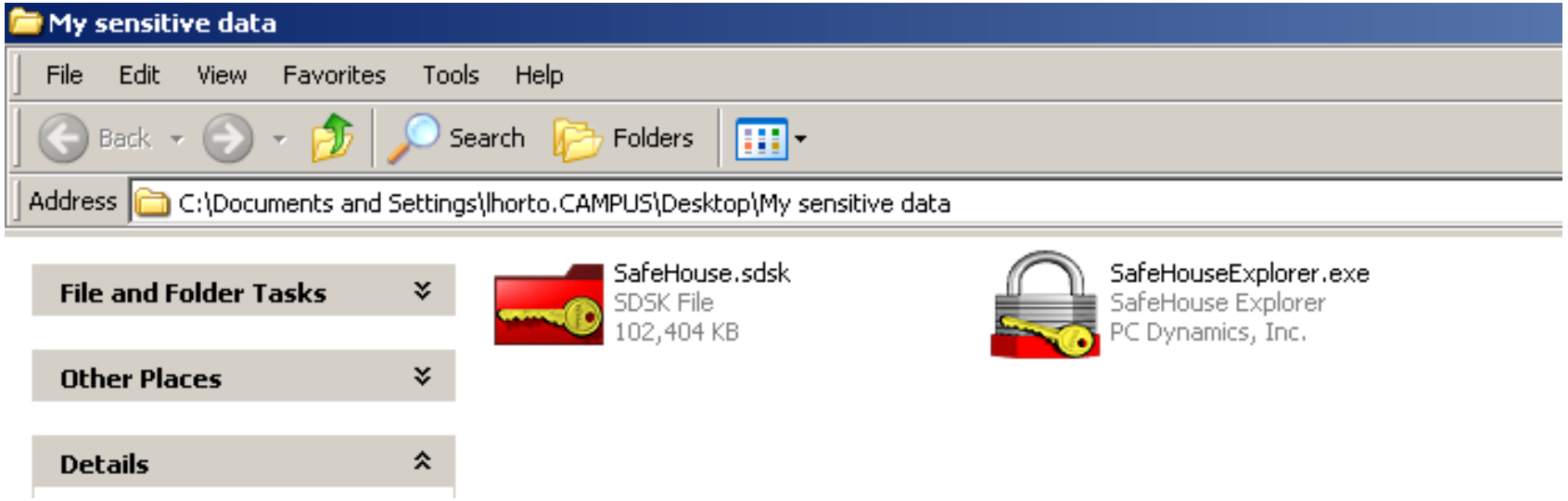
COPYING THE .EXE FILE

- go to the folder location and locate the .exe. file
- highlight SafeHouseExplorer.exe, right click and copy



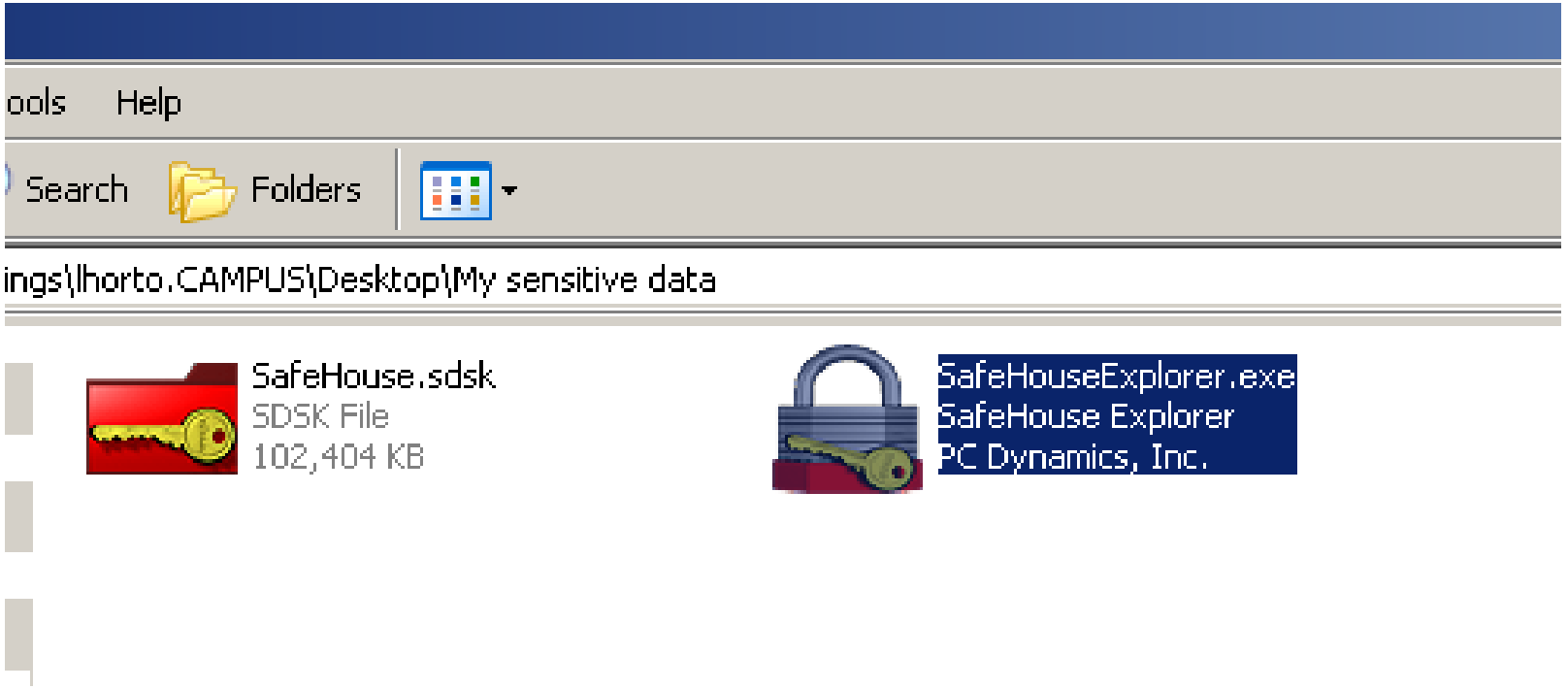
COPYING THE .EXE FILE

- paste into the area where you are storing your Encrypted files. This will allow you to open your area on other Windows machines that don't have SafeHouse installed



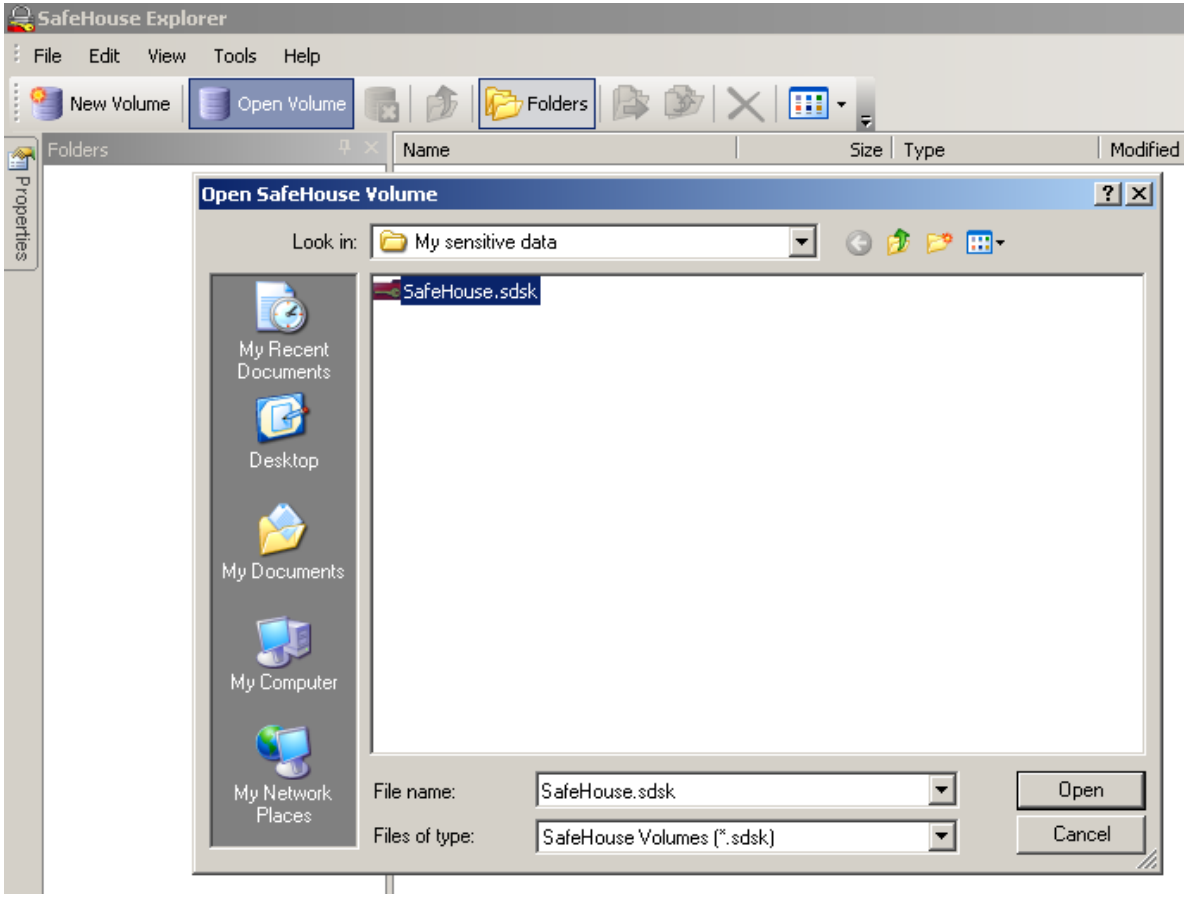
OPENING YOUR ENCRYPTED AREA

- click on the padlock icon - SafeHouseExplorer.exe



OPENING YOUR ENCRYPTED AREA

- click on ‘Open Volume’, Select your area - ‘SafeHouse.sdsk’ in this example. Click on ‘Open’

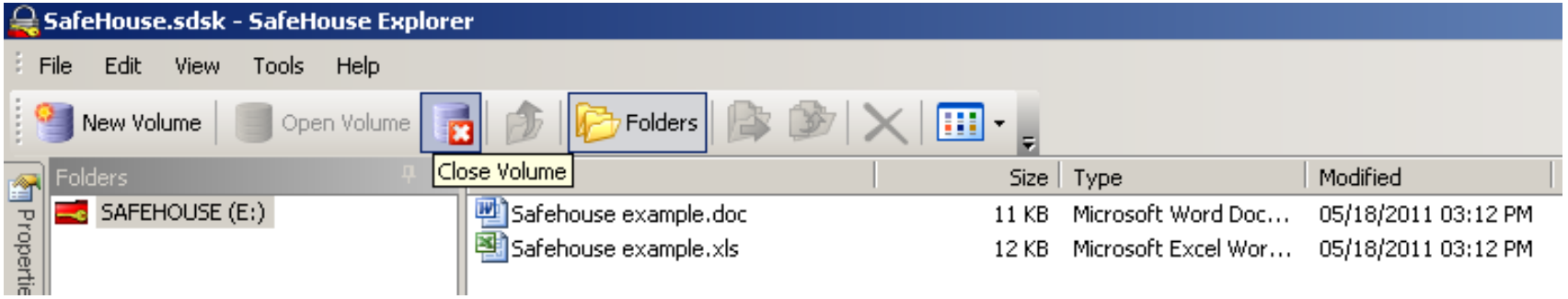


OPENING YOUR ENCRYPTED AREA

- enter your password and click ‘Open’

CLOSING YOUR AREA

- your files should appear. When you've finished, click on 'Close Volume'



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