

# [File vaults essay](https://assignbuster.com/file-vaults-essay/)

File Vault Help

Parisien Research Corporation

Copyright (C) 1996 Harvey Parisien

Email: emailprotected

This software is free to use.

In a recent article in Defense News (Vol 12 No 31) Aug 4-10, 1997

William Crowell, National Security Agency deputy director said “ If

a product of 64-bit strength were used by a military org… it

would take 6, 000 to 7, 000 years to recover just one message.”

1. File Vault – 64-bit (8 bytes) block encryption algorithm

variable length key up to 448 bits

File Vault – Places a number of user selected files in a single

self extracting / self decrypting executable file called a File

Vault. A File Vault can be sent easily to anyone over the

internet and only accessed with your password. The recipient of a

File Vault does not have to have any special software installed to

decrypt or access a file vault. Each File Vault is totally self

contained. This makes for easy attaching, receiving and general

use.

File Vault allows you to open the vault, access the files, then

close the vault which performs a secure wipe of the files from the

disk surface. In an encrypted file vault, filename information is

encrypted too, so if someone examines the vault with a disk

editor, no information on contents is available other than the

optional description line entered during creation. Great for “ Your

Eyes Only” files…

The encryption algorithm is the highly regarded BLOWFISH by Bruce

Schneier, world renowned Cryptographer. See VGP information below

for more detail.

File Vault is available at…www. alcuf. ca/fv

– – – –

A word on compression: When you use Winzip or other compression

utilities from Windows, they often will create temporary files

that can reside on the users system which are complete duplicate

files, or parts of files that you would rather be fully secured.

Therefore, rather than zipping files and containing them in a

vault, build a vault first which securly containes your files, and

then create the zip (or other archive) file. That way any

temporary stuff created by the archiver will be encrypted and

remain secure.

– – – –

2. Other free utilities included with File Vault

———————————————

The following utilities are stand alone utilities that reside

on your File Vault directory. These can be moved or deleted as

you wish.

DISKWIPE. EXE (and diskinfo. dll) – this utility is used to

securly remove deleted information from a hard drive to prevent

undeleting. Let’s say you have a bunch of stuff you just

deleted, and need to make sure nothing that was on the system

can be undeleted and accessed again. This utility creates a

file the size of the free remaining space on your drive and

fills it with space, then deletes it. This means that any

files recovered (by modifying your fat table) will only contain

space.

FILEWIPE. EXE – this utility is used to securly remove a file.

It opens the file, writes it full of space, then closes it and

deletes it. This way any attempt to recover the file will

prove rather uninteresting.

3. Information on VGP the Encryption Editor

—————————————-

VGPWIN Encryption Editor

VGPWIN is a simple WINDOWS editor for text files, much like

NOTEPAD, but offers an optional encryption feature. VGP also uses

clipboard features that allow you to swap text to/from another

application with ease. VGPWIN will also encrypt and decrypt disk

files using the same powerful encryption routines.

The Encryption Method

The Encryption Engine is a multi-pass system by Parisien Research

Corporation. VGP gives you a high level of data protection since

one pass is the highly regarded BLOWFISH algorithm by Bruce

Schneier, world renowned Cryptographer. Because of the

implementation of the Blowfish algorithm, the encryption produced

is several orders of magnitude stronger than DES (Digital

Encryption Standard). Blowfish is a 64-bit (8 bytes) block

encryption algorithm. It uses a variable length key. The key

length can be up to 448 bits. It is extremely fast and is so

secure that it can not be sold outside the U. S. due to federal

export restrictions ITAR.

VGP and File Vault are free to use.

—

How to use File Vault:

1. Select files to place in a vault

2. Describe your vault (optional)

3. Define location (default is last location)

4. Define autoexec command. This is OPTIONAL. If you want the user

to receive 1 or more files and then be forced to run a specific

file (executable or otherwise) you can place that command here.

For example, let’s say I create a vault containing a file called

beach. bmp. If I define the optional autoexec