

PROCEDURES & METHODS OF DATA & HARD DRIVE SANITATION or DESTRUCTION

Four basic methods exist for the purpose of hard drive sanitation and cleaning. Assistant Secretary of Defense prepares the following definitions.

Overwriting – the process of replacing information (data) with meaningless data in such a way that meaningful information cannot be recovered from the hard drive. Overwriting of data means replacing effectively renders data unrecoverable, but the process must be correctly understood and carefully implemented. Overwriting consists of recording data onto magnetic media by writing a pattern of fluxes or pole changes that represent binary ones (1) and zeros (0). The patterns then can be read back and overwritten (e.g., "111111" followed by "00000") the magnetic flux will physically change and the drives read/write heads will only detect the new pattern and previous data will be efficiently erased. To purge the hard drive ACCESS SYSTEMS or ACCESS PROJECT follows the U.S. Department of Defense requirements overwriting with a pattern, and then its complement, and finally with another pattern (e.g., overwrites first with "0110101" followed by "10010111". Sanitation is not complete until all six passes of the three cycles are completed. Overwriting software merely that reformats or repartitions a hard drive is not acceptable for us here at ACCESS SYSTEMS or ACCESS PROJECT.

Software meeting the following specifications should be employed:

- ✓ The ability to purge all data or information, including operating system (OS) from the physical or virtual drives, thereby making it impossible to recover any meaningful data by the keyboard or laboratory attack.
- ✓ A compatibility with or the capability to run independent of the OS loaded on the hard drive.
- ✓ A compatibility with or the capability to run independent of the type of hard drives being sanitized (e.g., ZTI/IDE or SCSI type hard drives).
- ✓ A compatibility to overwrite the entire hard disk drive independent of any BIOS or firmware capability limitations the system may have.
- ✓ A compatibility to overwrite using a minimal of three cycles of the data pattern on all sectors, blocks, tracks and slack or unusual disk space on the entire hard disk medium.
- ✓ A method to verify that all the data has been removed from the entire hard disk and to view the overwriting pattern.
- ✓ Provide the donor or user a certification if requested indicating that the overwriting procedure was completed properly. (There is a five dollar administrative fee required if you request a certified receipt with Make of hard drive, serial number, and date received on our in office invoice). (When a certified document is needed the charge is \$35.00 and takes two weeks for this process to be completed.)

ACCESS SYSTEMS or ACCESS PROJECT utilizes software that currently is certified by the U.S Department of Defense and is recognized as having these specifications.

Overwriting is the preferred method of data destruction by ACCESS SYSTEMS or ACCESS PROJECT since it provides a means of complete, secure and cost-effective data destruction, yet leaving the physical drive undamaged so that we can reuse it.

Physical Destruction The process of physically damaging the medium so that it is not useable in a computer and so that no known exploitation method can retrieve data from the medium. For damaged, unusable, or obsolete hard drives physical destruction is the most secure and most cost-effective method of disposal.

Here at ACCESS SYSTEMS or ACCESS PROJECT we provide this method of disposal. To insure that this method of physical destruction is implemented after we have made all

attempts to overwrite (wipe) or sanitize all hard drives that come into our facility. The following process is employed.

- ✓ We remove all hard drives from the chase or computer. Remove all shielding material, mounting brackets, and cut any electric connections within the hard drive.
- ✓ In a suitable facility individuals wearing appropriate safety equipment, subject the hard drive total dismantlement.
- ✓ Individuals wearing appropriate safety equipment, subject the media platters (e.g., media storage plates within the hard drive) with physical force (e.g., pounding with a hammer) that will disfigure, bend, mangle, or otherwise mutilate platters that they cannot be reused in a functional hard drive.
- ✓ Suitable force and or efforts are used on the platters (e.g., media storage plates within the hard drive) causing shock or damage to the platter surface. Therefore no data can be recovered.
- ✓ All Destroyed / dismantled hard drives should be sent to an approved metal destruction facility. (i.e., smelting, disintegration, pulverization).

ACCESS SYSTEMS or ACCESS PROJECT applies extreme care to ensure that total destruction of non-usable hard drives cannot be recovered, rebuilt, or reconnected in any usual way.

Degaussing – (e.g., demagnetizing) the procedure reduces the magnetic flux of the medium to virtual zero by applying a reversed magnetic field. Properly applied, degaussing renders any previously stored data on magnetic media unusable. A person performing degaussing renders any magnetic stored data unusable. Persons performing the degaussing function must be properly trained and certified. Furthermore, supervisory personnel must closely monitor the degaussing process. Degaussing hard drives most often destroys the drive timing tracks and servomotor, and usually demagnetizes. In addition, due to the variation of media formats and their corresponding magnetic densities, a correct and effective degaussing process is most often difficult to achieve. Usually this destroys the drive and makes it un-reusable for our reuse.

For these reasons ACCESS SYSTEMS or ACCESS PROJECT does not utilize degaussing as a method of data or drive destruction.

Deleting Files – the process by which data is cleared from storage media in a manner that restricts unreadable useless special utility software or techniques are used to recover the cleared data. However, acceptable methods of sanitizing hard disk storage. Furthermore, simply deleting files does not destroy the operating system where sensitive data may also be stored.

For these reasons ACCESS SYSTEMS or ACCESS PROJECT does not utilize degaussing as a method of data or drive destruction.

In conclusion when ACCESS SYSTEMS or ACCESS PROJECT receives your old computer or hard drive as a donation, we remove and sanitize the hard drive. With this you are guaranteed that your personal data and all operating system and programs are permanently removed from your hard drive. This is the most secure way of protecting you.

Thank you for donating to ACCESS SYSTEMS or ACCESS PROJECT.
Access Systems - www.accesssystems.ws OR Access Project - www.accessproject.us

(937) 837-5481

Copyright 2002 Access Systems - All Rights Reserved.
Access Project is a subsidiary user group of Access Systems