

Humboldt State University Standards, Guidelines and Practices:

Storage Media and Secure Data Disposal-Disk Wiping

Overview of Hard Drive Tool “Wipe Process”

- Boot from DBAN disk
- Select drive(s) to be wiped
- Verify selection; past this step data WILL be unrecoverable
- Perform Department of Defense Quick wipe (3-pass)

Procedures to For Using “Darik’s Nuke and Boot” (DBAN) Hard Drive Tool

Step 1 - Download and Create the DBAN tool image

Download the DBAN ISO image from <http://dban.sourceforge.net/> and use Roxio Easy CD Creator to burn the image (standard software in Workstation Program images). From the “File” pull-down menu, select “Record CD” from ISO image.

Step 2 - Run DBAN

NOTE: Ensure that you are not using the DBAN tool with existing “production” hard drives that may result in complete data loss (e.g. reformatting of master drive with your personal data).

It is HIGHLY RECOMMENDED that the DBAN tool be used in a controlled environment to minimize possibility for error.

Boot the computer

Boot the computer with the DBAN CD; the following screen will appear:

Darik's Boot and Nuke

Warning: This software irrecoverably destroys data.

This software is provided without any warranty; without even the warranty of merchantability or fitness for a particular purpose. shall the software authors or contributors be liable for any damage from the use of this software. This software is provided "as is"

<http://dban.sourceforge.net/>

- * Press the F2 key to learn about DBAN
- * Press the F3 key for a list of quick commands.
- * Press the ENTER key to start DBAN in interactive mode.
- * Enter autonuke at this prompt to start DBAN in automatic mode.

boot: _

Step 3 - Wipe the Disk

At the DBAN title screen, press the Enter key and DBAN will boot to the configuration console:

Darik's Boot and Nuke: Quick Commands

You may enter these commands at the boot prompt. In each case, all disks in the computer will be wiped automatically without confirmation.

| | |
|---------|---|
| dod | Wipe all disks with the DoD 5220-22.M method. |
| ops2 | Wipe all disks with the RCMP TSSIT OPS-II method. |
| gutmann | Wipe all disks with the Gutmann method. |
| prng | Wipe all disks with the PRNG Stream method. |
| quick | Wipe all disks with the Quick Erase method. |

Edit the `syslinux.cfg` file on the floppy disk to change the default behavior of DBAN.

boot: _

Select “dod” then the “short” command.

“DOD-Short” is the HSU minimum standard which equates to the US Department of Defense 5220-22.M short wipe and uses passes 1, 2, 7 from DoD standard method.

Use the up and down arrows to scroll through the available drives and use the Enter or space key to select a drive to be wiped.

Once all drives to be wiped have been selected, press the ‘M’ key to select the method that will be used to wipe the disk(s).

```
Darik's Boot and Nuke 1.0.4

Options
Entropy: Linux Kernel (urandom)
PRNG:    Mersenne Twister (mt19937ar-cok)
Method:  DoD Short
Verify:  Last Pass
Rounds:  1

Statistics
Runtime:    00:00:34
CPU Time:   1%
Load Averages: 1.08 0.29 0.10
Throughput: 56016 KB/s
Errors:     0

(SCSI 0,0,0,0,-) VMware, VMware Virtual S
[08.87%, round 1 of 1, pass 1 of 3] [writing] [56016 KB/s]
```

While DBAN is wiping the hard drive, the following screen will appear:

Step 4 – Disposition of the Disk

Once the DBAN process has completed and the hard drive reformatted, it may be disposed of or re-assigned as needed.

NOTE: If the hard drive itself is tagged as State Property, survey (or transfer) forms must be completed.

APPENDIX – DBAN Technical Overview

| Name | Description | Security Level | Number of Passes |
|-----------|---|----------------|------------------|
| DoD Short | US Department of Defense 5220-22.M short wipe. Uses | Medium | 3 |

| Name | Description | Security Level | Number of Passes |
|---------------|---|----------------|------------------|
| | passes 1,2, 7 from DoD standard method above | | |
| DoD 5220-22.M | US Department of Defense 5220-22.M standard wipe. Uses same algorithm as Heidi Eraser product | Medium | 7 |