
Darik's Boot and Nuke

(DBAN)

This document contains information on how to sanitize a machine that will be put into the Greensheet , to migrate to a new user, or to allow for Federal/State laws.

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Table of Contents

Table of Contents	2
Introduction	3
Where to get the program?.....	3
Basic Operation	3
1. Start up.....	3
2. The progress screen	4
Squeegee.....	4
How to use Squeegee?	4
References	5

Introduction

This document is written so that the target audience has good knowledge of how to make a boot cd-rom from an .iso file or a boot floppy disk along with basic typing. The document also takes into account that the user acknowledges that all data on the hard drive will be lost and recovery will be expensive and time consuming.

Rice University now requires the destruction of all data in computers or electronic storage devices prior to the surplus or disposal of these items, to ensure compliance with federal and state statutes associated with disclosure of confidential information. Some laws that mandate this are the Health Information Portability and Accountability Act of 1996 (HIPAA) and the Family Educational Rights and Privacy Act (FERPA). Another requirement has to deal with compliance with software license agreements.

Any data that is left on a storage medium has the ability to be retrieved. Again this oversight can lead to conflicts with software license agreements and/or result in unauthorized access to University documents or breach of contracts for grants.

It is your department's responsibility to ensure that all computers and electronic storage devices including but not limited to hard drives, laptops, servers, have all personal and confidential University files removed.

This document will help provide a tool to clean the PC's and Machintosh's.

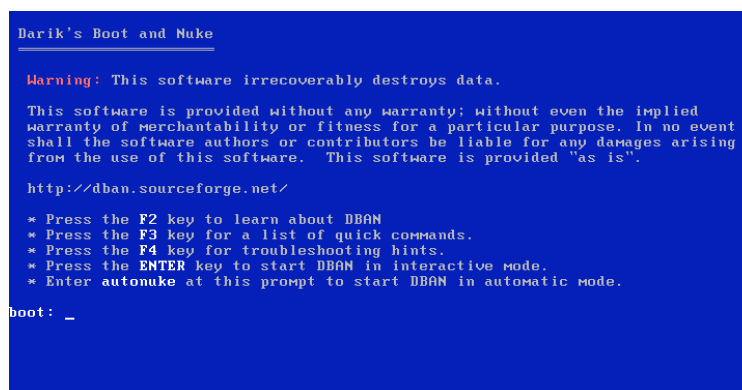
Where to get the program?

The software is located at <http://dban.sourceforge.net/>. There are 2 platforms supported, i386 and PPC. Choose the version that suits your platform. The 2 options given for the i386 platform are a boot floppy and a boot cd-rom.

Basic Operation

1. Start up

Once the boot media has been created and inserted the initial screen will show various options:



```
Darik's Boot and Nuke
-----
Warning: This software irrecoverably destroys data.

This software is provided without any warranty; without even the implied
warranty of merchantability or fitness for a particular purpose. In no event
shall the software authors or contributors be liable for any damages arising
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 F4 key for troubleshooting hints.
* Press the ENTER key to start DBAN in interactive mode.
* Enter autonuke at this prompt to start DBAN in automatic mode.

boot: _
```

The easiest and quickest way to make sure the data has been erased is to type “autonuke” at the “boot:” prompt.

2. The progress screen

To make sure that the system is actually performing sanitation check the status screen. The screen will look like this screen shot depending on amount and types of drives or devices being wiped.

```

Darik's Boot and Nuke 1.0.5
----- Options -----
Entropy: Linux Kernel (urandom)
PRNG:   Mersenne Twister (mt19937ar-cok)
Method: DoD Short
Verify: Last Pass
Rounds: 1
----- Statistics -----
Runtime:
CPU Time:
Load Averages:
Throughput:
Errors:

----- Disks and Partitions -----
▶ [ 1 ] (IDE 0,0,0,-,-) VMware Virtual IDE Hard Drive

M=Method U=Verify R=Rounds, J=Up K=Down Space=Select, F10=Start

```

Squeegee

Squeegee is a computer, located in Operations, designed to clean hard disk drives. Squeegee can currently clean 4 PATA drives and 2 SATA drives at once. When the hardware comes available, Squeegee will be able to handle raid enclosures and SCSI drives.

How to use Squeegee?

Make sure all PATA drives are configured in “Cable Select Mode”. This is handled by the jumper on the back of the drive according to the manufacturer of the drive. Once this jumper has been set then install the drive into the enclosure, use the key to lock it into place. Power the machine up and confirm that the drives have been recognized by the system. Squeegee has been configured to be a completely automatic process less the install of the hard disk drives.

References

HIPAA Compliance :

<http://www.hipaadvisory.com/tech/disksan.htm>

Simson L Garfinkel and Abhi Shelat study from MIT

<http://www.cs.unibo.it/~montreso/doc/papers/AStudyOfDiskSanitizationPractices.pdf>

University of Missouri-Columbia

<http://iatservices.missouri.edu/techknowledge/06-2003/ghosts.html>

O&O Group Study on Ebay Hard Disk Drives

http://www.oo-software.com/en/study/study_ddd2005_en.pdf

Joe St. Sauver, Ph. D. from University of Oregon

<http://cc.uoregon.edu/cnews/summer2005/summer05.pdf>