# How to wipe a hard disk with Darik's Boot and Nuke (DBAN)

### Darik's Boot and Nuke tool



<u>Darik's Boot And Nuke (DBAN)</u> is one of the most popular tools that can be used to wipe a hard drive of all contents. For drives that have contained sensitive data, this is a critical step if the drive is to be sold, returned, or otherwise leaves your possession.

DBAN is a free tool and is distributed as a CD-ROM .ISO image. Download the .ISO image from the DBAN website and write it to an optical disk.

## Select a disk for wiping



DBAN interactive mode allows you select a disk for the wipe operation. In this example, a 146GB hard drive is connected to this system. For safety reasons, I created this gallery example using a virtual machine, and that is why the identified disk is listed as a VMware virtual disk. Press the spacebar to select a disk, which will indicate the "wipe" action in the box next to the disk.

Be careful when using DBAN with RAID arrays or special disk controllers, it may not recognize all disk types.

## Select a method for wiping

DROBO-DBAN-Demo on esxi.rwvdev.intra		
<u>E</u> ile Vie <u>w</u> <u>V</u> M <b>1 11 1 15 15 15 15 15</b>		
Darik's Boot and Nuke 2.2.6 (beta)		
Options Entropy: Linux Kernel (urandom) PRNG: Mersenne Twister (mt19937ar-cok) Method: DoD Short Verify: Last Pass Rounds: 1	Statistics — Runtime: Remaining: Load Averages: Throughput: Errors:	
Wipe Method Quick Erase syslinux.cfg: nuke="dwipemethod dodshort" RCMP TSSIT OPS-II Security Level: Medium (3 passes) ▶ DoD Short DoD 5220.22-M Gutmann Wipe PRNG Stream		
The American Department of Defense 5220.22-M short wipe. This method is composed of passes 1,2,7 from the standard wipe.		
J=Up K=Down Space=Select		

One important step for issuing a DBAN command is the method. Pressing [M] will identify the method for the wipe activity. Here, DBAN enumerates the methods that are available for the wipe function. DBAN's implementation of these <u>standards</u> isn't guaranteed, but this is a fair trade off for the free price tag.

## Consider level of security needed



The various methods available in DBAN offer various levels of wipes and data erasure security. The Gutmann Wipe implementation on the DBAN boot CD performs 35 different write sequences over the disk. This includes random sequences, all zeroes, all ones, and predefined pattern writes.

Depending on the wipe method selected, the time required will vary widely. Obviously, a 35sequence wipe operation will take longer than the single-pass Quick Erase option. Factor in also the size of the drive, and these options can take a long time.

# Begin the wipe operation

DROBO-DBAN-Demo on esxi.rwvdev.intra		
<u>F</u> ile Vie <u>w</u> <u>V</u> M		
Darik's Boot and Nuke 2.2.6 (beta)		
Options Entropy: Linux Kernel (urandom) PRNG: Mersenne Twister (mt19937ar-cok) Method: Gutmann Wipe Verify: Last Pass Rounds: 1	Statistics Runtime: 00:02:26 Remaining: 100:40:16 Load Averages: 0.95 0.40 0.15 Throughput: 15998 KB/s Errors: 0	
SCSI Disk VMware Virtual disk 1.0 146GB [00.04%, round 1 of 1, pass 1 of 35] [wr	iting] [15998 KB/s]	

From the main stream, the F10 key will issue the command to DBAN to start the wipe operation. A status page is displayed to identify the write throughput rate, runtime, estimated remaining time, and which pass the task is currently on.

#### Autonuke



The other main option in using DBAN is to use the Autonuke option on the boot screen. This starts DBAN automatically, and requires the word "autonuke" to be typed on the boot screen. Again as a warning, this step will destroy data on the disk.

### **DoD Short Method**

DROBO-DBAN-Demo on esxi.rwvdev.intra		
<u>F</u> ile Vie <u>w</u> <u>V</u> M		
Darik's Boot and Nuke 2.2.6 (beta)		
Patronut Linux Pornal (unandou)	Durative: Revel:57	
PRNG: Mersenne Twister (mt19937ar-cok)	Remaining: 13:18:34	
Method: DoD Short	Load Averages: 0.86 0.33 0.12	
Verify: Last Pass	Throughput: 16319 KB/s	
Rounds: 1	Errors: Ø	
SPSI Dick UMusee Uistusl dick 1 0 14500		
[00.24%, round 1 of 1, pass 1 of 3] [writing] [16319 KB/s]		

When the Autonuke mode starts, the enumerated devices are automatically sent the wipe command with the DoD Short Method. This is a triple-pass wipe taking sequences 1, 2, and 7 from the standard DoD 5220.22-M wipe.

#### Using commands to begin wipe operation



Aside from Autonuke and Interactive mode, pressing F3 will show some additional one-liners to enter for a quick start on a wipe task. These include each of the methods available on the disk available as a command to enter from the boot prompt to start a wipe. For example, to select DBAN's implementation of the DoD 5220.22-M method, simply type "dod" to perform the wipe on all enumerated disks.