System Rescue CD v1.5.4 x86

SECURE DELETION OF DATA

SHRED from the GNU coreutils (Fileutils) see http://www.gnu.org/software/coreutils/ or http://www.gnu.org/software/fileutils/doc/manual/html/fileutils.html#shred

You can use shred to securely delete simple files but also entire partitions or harddisks. Shred uses by default 25 overwriting passes, you can increase and decrease the number of overwriting passes. Therefore shred is faster than wipe (see below).

For example securely deleting all data on the first IDE harddrive:

```
shred -v  /dev/hda.
```

WIPE from Sourceforge see http://wipe.sourceforge.net Similar to shred you can use wipe to securely delete simple files but also entire partitions or harddisks. Wipe uses by default 35 overwriting passes according to the Paper by Peter Gutmann http://www.cs.auckland.ac.nz/pgut001/pubs/secure_del.html. Wipe is slower than shred, because it uses by default more overwriting passes and therefore it is more secure. For example securely deleting the Windows 98 Swap File from a mounted (FAT) windows partition using 35 overwriting passes:

```
wipe -D  /mnt/windows/win386.swp
```

PXE-SERVER

- Boot SystemRescueCd from the CD/USB/HDD on a computer
- Configure the network settings with ipconfig and route. Here is a typical example:
  - ifconfig eth0 192.168.1.5/24
  - route add default gw 192.168.1.254
- Edit your pxe/network settings in /etc/conf.d/pxebootsrv
- Start the service with /etc/init.d/pxebootsrv start. In case of errors, check the /var/log/messages file for more details.
- Cd /tftpboot then ln -s /livemnt/boot/sysrcd.* .
- Add APPEND netboot=tftp://192.168.10.103/sysrcd.dat cdroot to the file /tftpboot/pxelinux.cfg/default
- The computer should be ready to act as a PXE boot server

BACK UP ACROSS NETWORK If you have network access

```
rsync -a --partial --inplace /home/bigfiles/ 192.168.1.1:mybackups/bigfiles
```

BACK UP TO DVD

```
root@sysresccd % ls -l /dev/cd*
```

lrwxrwxrwx 1 root root 3 May 19 2007 /dev/cdrom2 -> hdd

lrwxrwxrwx 1 root root 3 May 19 2007 /dev/cdrw2 -> hdd

It means on this computer /dev/hdd is the device that burns CD/DVD, and we will use it.

To format the disc, type the following command (replace the device name with yours):

```
root@sysrescd % dvd+rw-format -force=full /dev/hdd
```

It can take several minutes. Here is the output of the command:

* BD/DVD±RW/-RAM format utility by <appro@fy.chalmers.se>, version 7.0.

* 4.7GB DVD+RW media detected.

* formatting

Step-3: Make the UDF filesystem

Once the disc is formatted, you can create the UDF filesystem on the disc:

```
root@sysrescd % mkudffs --lvid="dvd-backup" --udfrev=0x0150 /dev/hdd
```

You can add your own options but it's a good thing to use UDF revision 1.50 since it can avoid compatibility problems with several operating systems. Of course, you should change the volume ID. Here is an example of the output of mkudffs

start=2295103, blocks=1, type=ANCHOR

Linux-2.6 supports UDF (if the option was enabled in the kernel, of course SystemRescueCd has it enabled). Windows 2000 and previous versions cannot read UDF discs. Windows XP, 2003 and Vista supports UDF.

Step-4: Mount the DVD

The media is formatted with UDF. Create a mount point and mount it in read-write mode.

```
root@sysresccd % mkdir -p /mnt/DVD
root@sysresccd % mount -t udf -o rw,noatime /dev/hdd /mnt/DVD
```

Step-5: Write the data

Now you can write files to the DVD as you would copy files to a mounted partition of your hard disk.

I. First use du (Disk Usage) to check the size of a directory you are planning to save

```
root@sysresccd % du -sh /home
```

4.3G /home

Be careful not to attempt to exceed the space available on a DVD (4.7 GB for a single layer disc).

Then copy the directory and all subdirectories preserving the original timestamps etc.

```
root@sysresccd % cp -R -p /home /mnt/DVD
```

The copy will be slow since it's not a hard disk.

When you have finished copying data, unmount the DVD, and run sync to cause the data to be written:

```
root@sysresccd % umount /mnt/DVD
root@sysresccd % sync
root@sysresccd % eject
```

NTFS R/W SUPPORT If you really need NTFS Write support, you will have to use Ntfs-3g. It's very easy to use:

```
ntfs-3g /dev/sda1 /mnt/windows
```

INSTALL SYSTEM RESCUE CD TO A THUMB DRIVE

Download the most recent SystemRescueCd ISO image

Burn it on a cdrom. You can use software such as Nero on Windows or cdrecord under Linux.

Boot on that cdrom with the default boot options.

Plug your USB-stick and wait 5 seconds to leave enough time for the system to detect it

Run `sysresccd-usbstick listdev` to see which devices are seen as USB-sticks

Run `sysresccd-usbstick writembr xxxx` where xxx is the name of the usb device

Run `sysresccd-usbstick format xxx` where xxx is the name of the partition on your device

Run `sysresccd-usbstick copyfiles xxx` where xxx is the name of the partition on your device

Run `sysresccd-usbstick syslinux xxx` where xxx is the name of the partition on your device

An alternative method is to just use `sysresccd-usbstick dialog` which can replace all steps from 5 to 9. It provides a semi-graphical interface where you can choose the USB device to use and then it runs all the sysresccd-usbstick subcommands for you.

PLUS MUCH MORE!

http://www.sysresccd.org/Main_Page