Supporting Debian machines for friends and family

Notes and tricks from an amateur sysadmin

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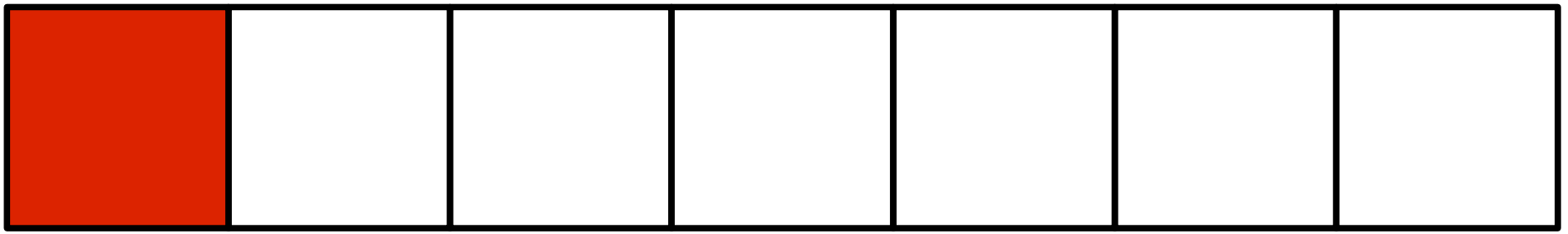
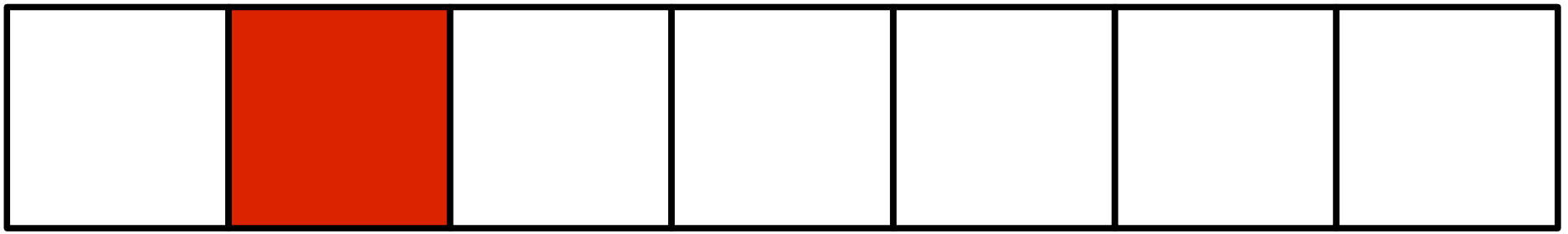
“providing an enjoyable computing environment so that they can fully experience the benefits of Free Software...”

“... without using up all of our precious spare time”

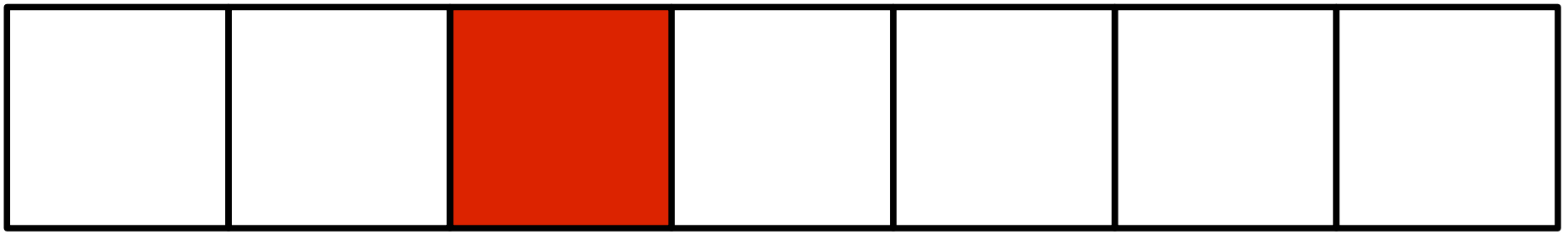
hardware



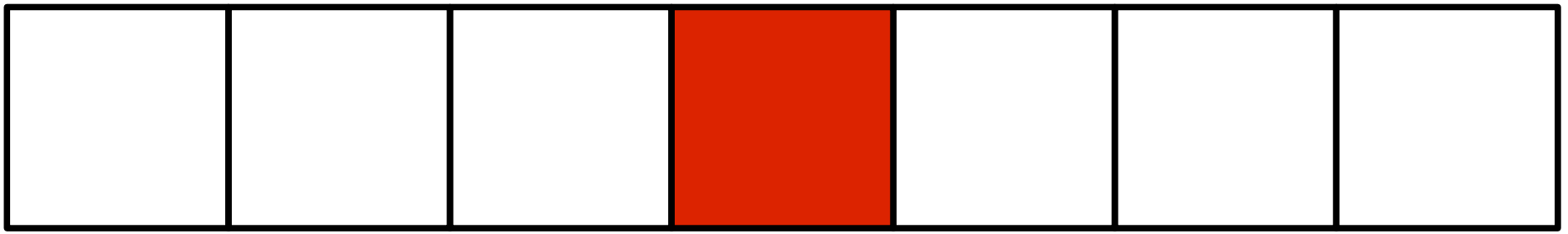
package updates



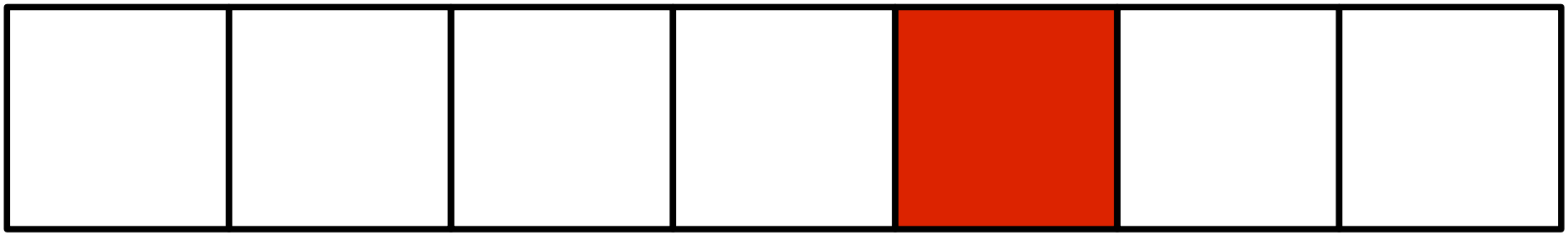
monitoring



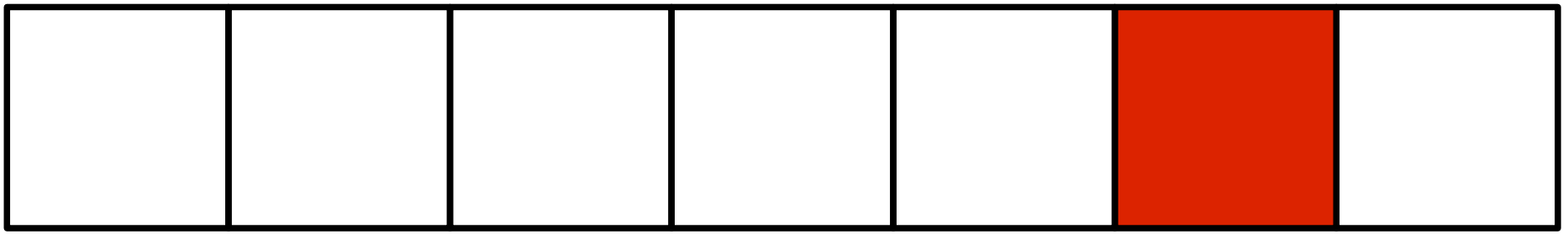
safety



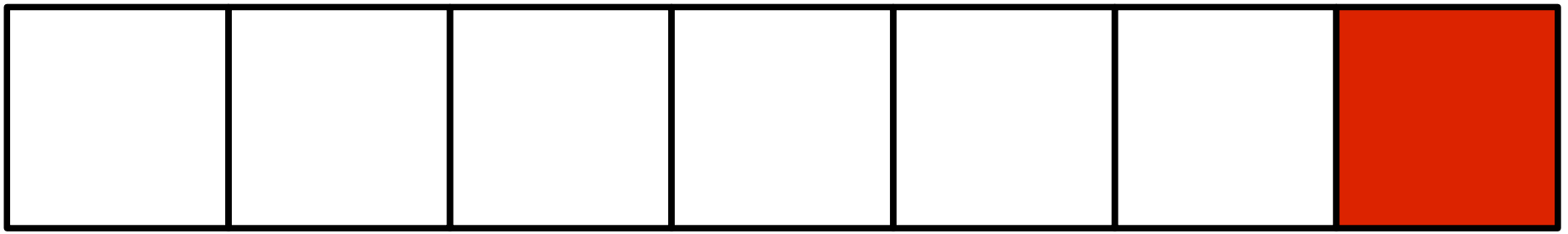
security



remote access

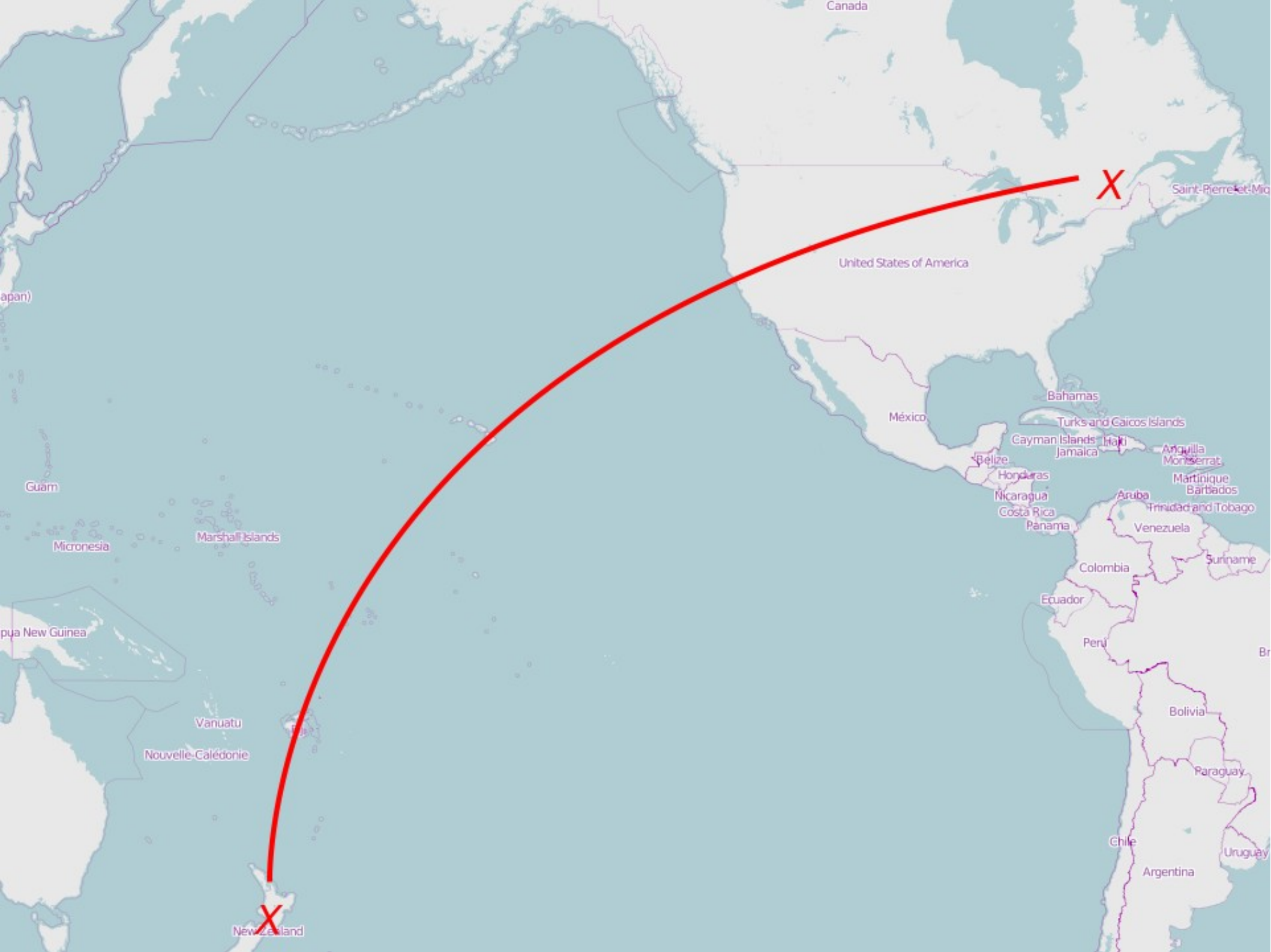


backups



example

[ ]

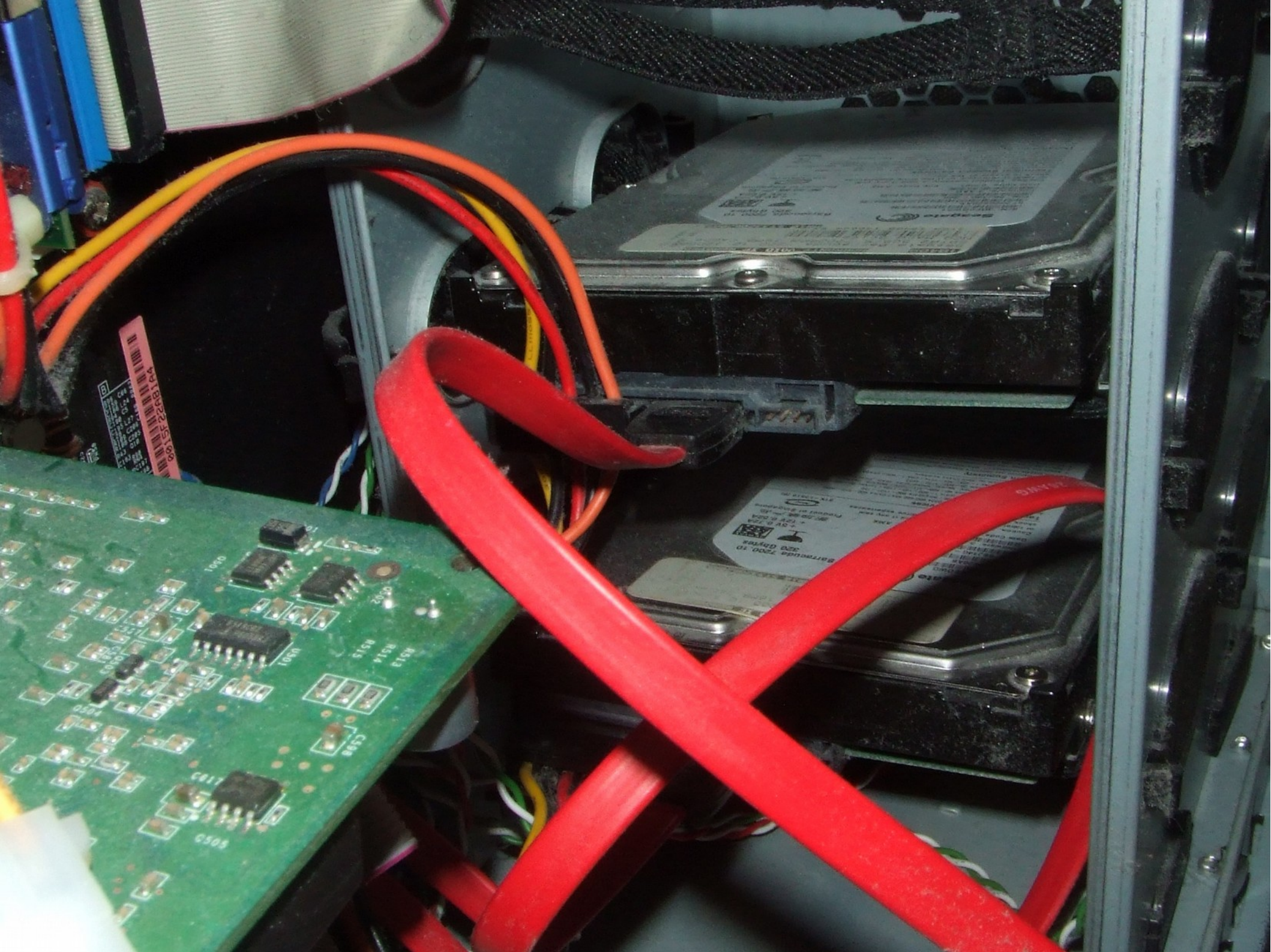

Canada
United States of America
México
Bahamas
Turks and Caicos Islands
Cayman Islands
Haiti
Jamaica
Anguilla
Belize
Honduras
Nicaragua
Costa Rica
Panama
Aruba
Trinidad and Tobago
Venezuela
Colombia
Suriname
Ecuador
Peru
Bolivia
Paraguay
Chile
Argentina
Uruguay
Guam
Micronesia
Marshall Islands
Vanuatu
Nouvelle-Calédonie
New Zealand

keflavik


akureyri
Joe's


SAMSUNG

hardware



memtest86+

```
badblocks -swo out /dev/sdX
```

package updates

[==========]

apticron

unattended-upgrades


deborphan
debfoster

debian-security-support

monitoring

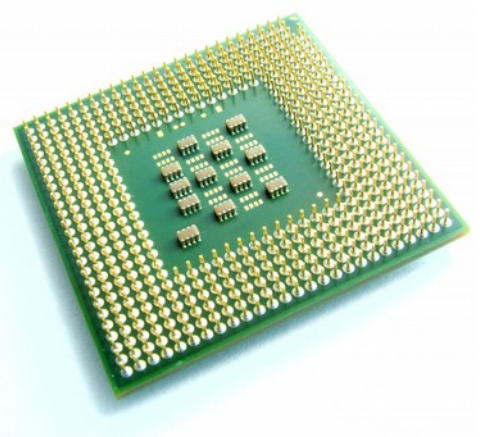
[==========]

logcheck

smartmontools

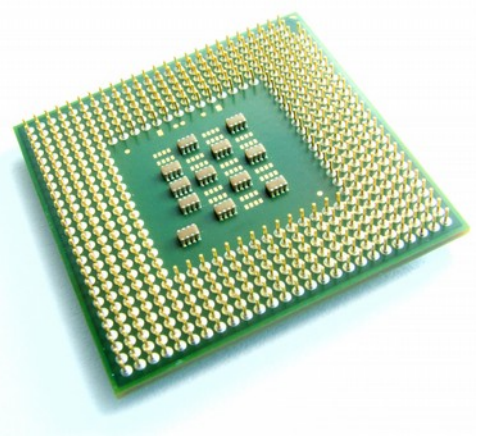
smartmontools

mcelog



smartmontools

mcelog



lm-sensors

```
$ sar -A
Linux 2.6.32-23-generic   2010-07-08   _x86_64_

00:00:01        CPU      %usr     %nice      %sys   %iowait    %steal
00:05:01          0     44,23      1,07      4,20      9,74      0,00
00:15:01          0     40,83      0,18      1,85      0,61      0,00
00:25:01          0     39,14      0,18      2,26      0,68      0,00
00:35:02          0     46,30      4,86      9,16     11,44      0,00
00:45:01          0     43,13      2,19      7,26      6,30      0,00
00:55:01          0     36,73      0,22      2,12      0,75      0,00
01:05:01          0     24,21      9,15     19,56      5,90      0,00
01:15:02          0      1,17     14,03     38,30     11,95      0,00
01:25:02          0      1,22      8,72     22,72      8,75      0,00
01:35:01          0      1,11      0,31      2,19      0,28      0,00
01:45:01          0      1,09      0,25      2,16      0,21      0,00
01:55:01          0      1,03      0,40      2,17      0,23      0,00
02:05:01          0      1,19      1,86      3,28      0,99      0,00
02:15:01          0      1,03      0,28      2,15      0,25      0,00
02:25:01          0      1,13      0,43      2,26      0,27      0,00
02:35:01          0      0,98      0,41      2,09      0,46      0,00
02:45:01          0      1,07      0,25      2,04      0,21      0,00
02:55:01          0      1,01      0,27      2,25      0,24      0,00
03:05:01          0      1,92      2,28      2,76      1,13      0,00
03:15:01          0      1,02      0,26      2,19      0,22      0,00
03:25:01          0      1,12      0,26      2,14      0,27      0,00
03:35:01          0      1,06      0,28      2,34      0,28      0,00
03:45:01          0      1,08      0,26      2,26      0,26      0,00
03:55:01          0      1,06      0,39      2,15      0,22      0,00
04:05:01          0      1,04      1,75      2,70      0,40      0,00
                  0      1,10      0,30      2,33      0,26      0,00
                  0      1,09      0,31      2,29      0,21      0,00
                  0      1,16      9,76     13,21      6,99      0,00
                  0      1,24      8,53     15,61      8,30      0,00
```

sysstat

safety

[===================]


molly-guard

safe-rm

```
$ rm -rf /usr/lib/libfoo.so
```

safe-rm

```
$ rm -rf /usr/lib /libfoo.so
```

safe-rm

```
$ rm -rf /usr/lib /libfoo.so
/bin/rm: cannot remove `/libfoo.so':
No such file or directory
```

safe-rm

```
$ rm -rf /usr/lib /libfoo.so
/bin/rm: cannot remove `/libfoo.so':
No such file or directory
```

```
$ ls /usr/lib
ls: cannot access /usr/lib: No such
file or directory
```

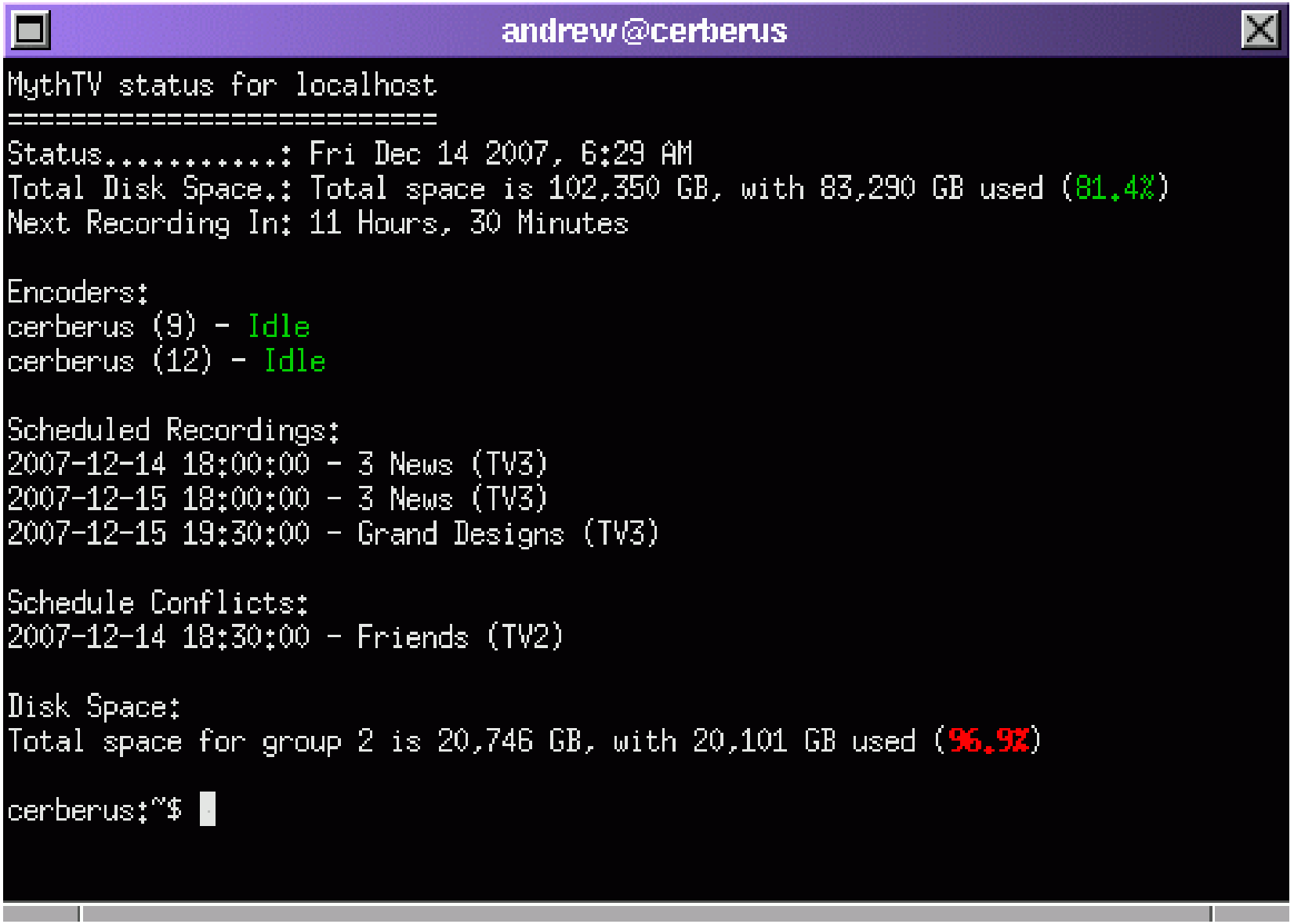
/
/etc
/usr
/var/lib
...

safe-rm

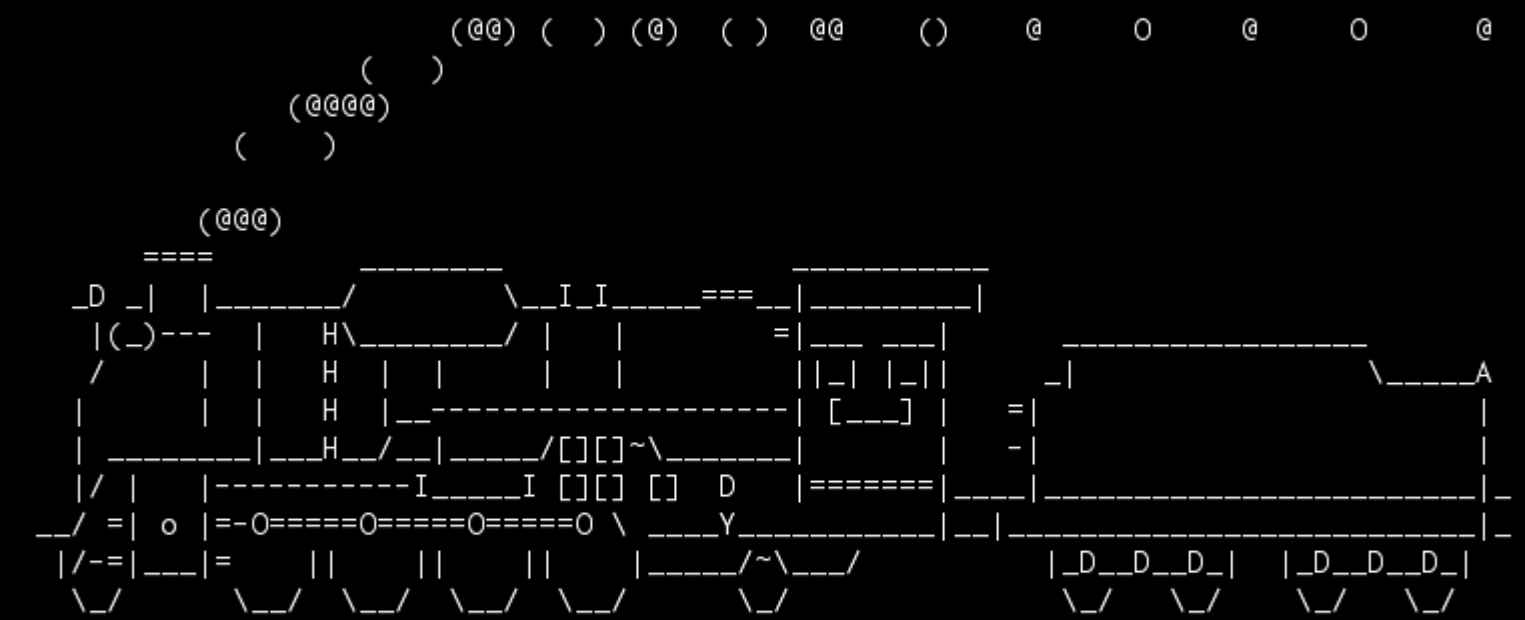
```
$ rm -rf /usr/lib
safe-rm: skipping /usr/lib
```

etckeeper

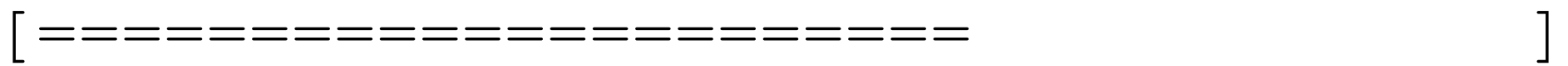
mythtv-status



sl



security



20
30
40
50
SCALE


LOCKWOOD
120/50

apparmor

apparmor-profiles

apparmor-profiles-extra

debsums

fcheck

chkrootkit

checksecurity

rkhunter

tiger

remote access

[==========   ]

openssh-server

mosh

http://feeding.cloud.geek.nz/posts/hardening-ssh-servers/

iptables

```
$ cat /etc/network/iptables.up.rules
*filter
:INPUT DROP [0:0]
:FORWARD DROP [0:0]
:OUTPUT DROP [0:0]

-A OUTPUT -j ACCEPT
-A INPUT -i lo -j ACCEPT
-A INPUT -p icmp -j ACCEPT
-A INPUT -m conntrack --ctstate RELATED,
  ESTABLISHED -j ACCEPT



:LOGDROP - [0:0]
-A LOGDROP -j LOG --log-level 6
-A LOGDROP -j DROP
-A INPUT -j LOGDROP
COMMIT
```

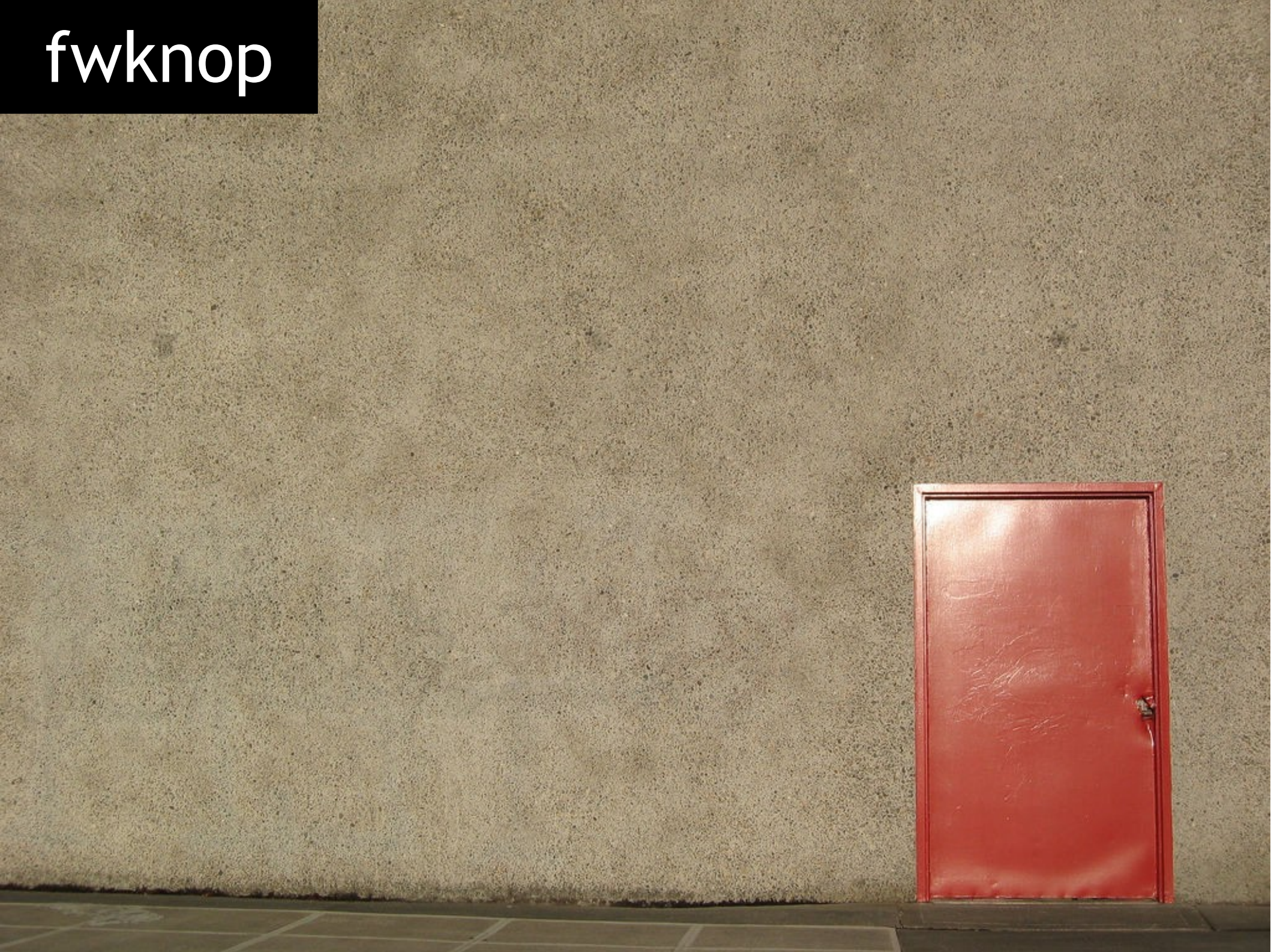
```
$ cat /etc/network/iptables.up.rules
*filter
:INPUT DROP [0:0]
:FORWARD DROP [0:0]
:OUTPUT DROP [0:0]

-A OUTPUT -j ACCEPT
-A INPUT -i lo -j ACCEPT
-A INPUT -p icmp -j ACCEPT
-A INPUT -m conntrack --ctstate RELATED,
  ESTABLISHED -j ACCEPT
```

```
-A INPUT -s 192.168.1.0/24
  -p tcp --dport 22 -j ACCEPT
```

```
:LOGDROP - [0:0]
-A LOGDROP -j LOG --log-level 6
-A LOGDROP -j DROP
-A INPUT -j LOGDROP
COMMIT
```


fwknop


fwknop

ipcheck

x11vnc

ssvnc

http://feeding.cloud.geek.nz/posts/high-latency-vnc-tech-support/

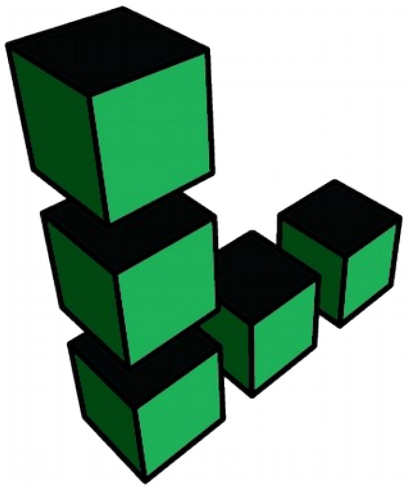
backups

[==============================   ]

1. config files
2. important documents
3. non-critical data

1. config files

duplicity



linode

1. config files

all of /etc

installed packages

Myth TV DB dump

2. important documents

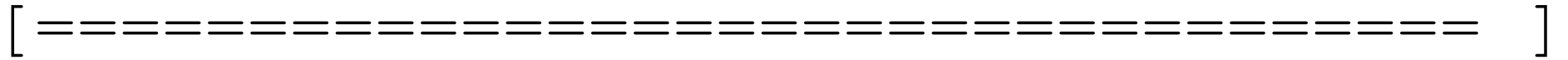
~/documents/safe

emails

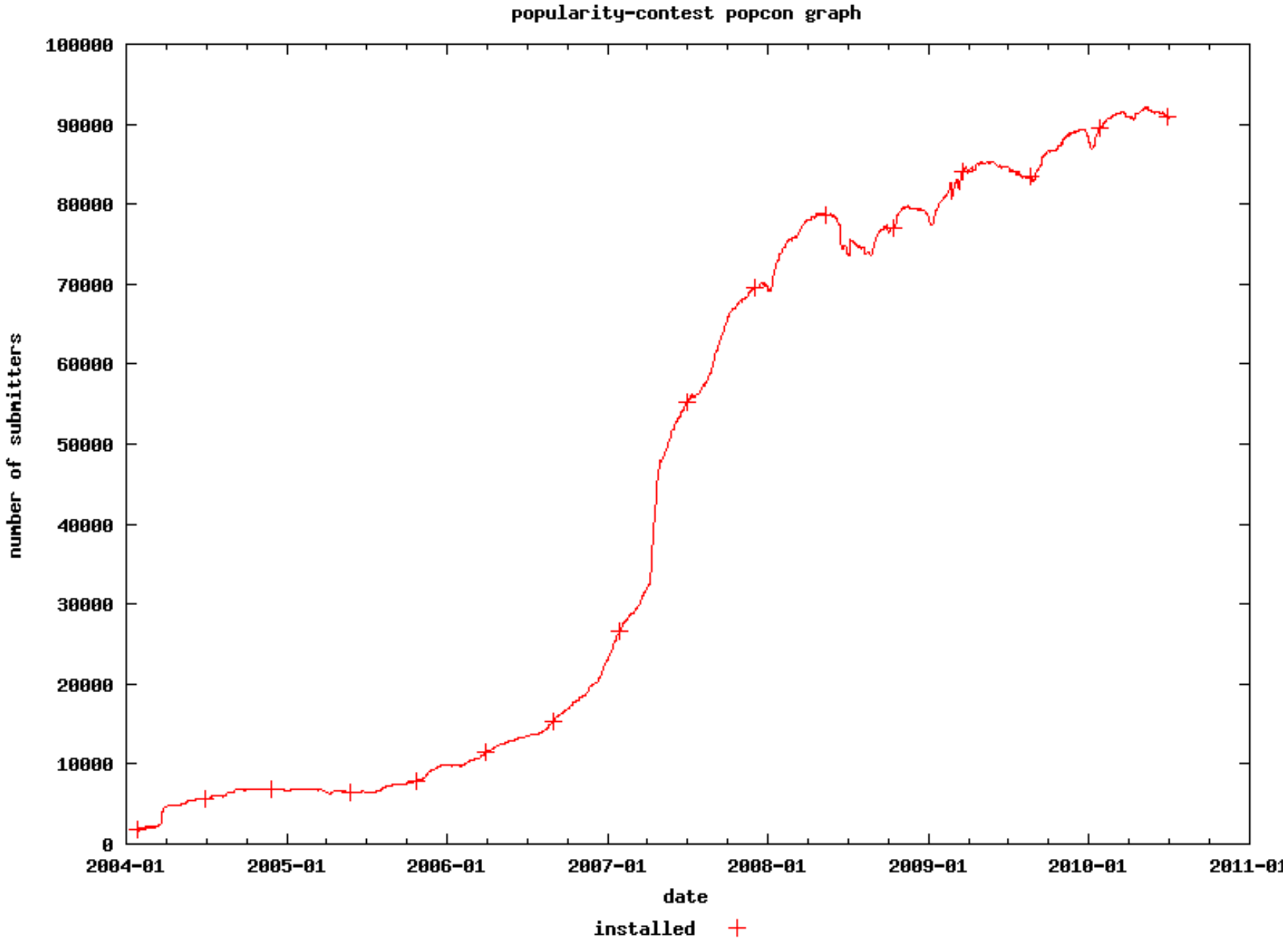
bookmarks

3. non-critical data

“giving back”



popularity-contest



kerneloops

921 oopses reported

run_timer_softirq	45
intel_opregion_video_event	32
lirc_register_driver	26
drm_ioctl	19
audit_inc_name_count	17
ttm_tt_swapout	16
radeon_set_pcigart	16
hiddev_ioctl	15
__do_softirq	15
fb_release	14
list_del	13
firegl_trace (P)	11
_nv005370rm	10
ttm_bo_pci_offset	10
nouveau_gem_ioctl_pushbuf	9

919 BUG/BUG_ON's reported

__slab_alloc	329	
b43_dma_handle_txstatus	181	
acpi_idle_enter_bm	133	Dell Laptops oops in idle
acpi_idle_enter_simple	51	
shrink_dcache_for_umount_subtree	36	
_raw_spin_unlock	32	
__do_softirq	7	
ext4_get_blocks	7	
mntput_no_expire	5	
mwait_idle	5	
synchronize_irq	4	
_spin_unlock_irqrestore	4	
iput	4	
inode_reserved_space	4	
ext4_da_get_block_prep	4	

hardware

package updates

monitoring

safety

security

remote access

backups

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igloo: http://www.flickr.com/photos/zuc123/426508881/
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intel cpu: http://www.flickr.com/photos/andresrueda/3274875773/
thermometer: http://www.flickr.com/photos/andresrueda/3407340937/
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ram: http://www.flickr.com/photos/detodounpoquito/2481060491/
baby hay stack: http://www.flickr.com/photos/nerdcoregirl/2959701240/
safe: http://www.flickr.com/photos/pong/288491653/
padlock: http://www.flickr.com/photos/shelleygibb/3396463409/
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old modem: http://www.flickr.com/photos/rexroof/3302978710/
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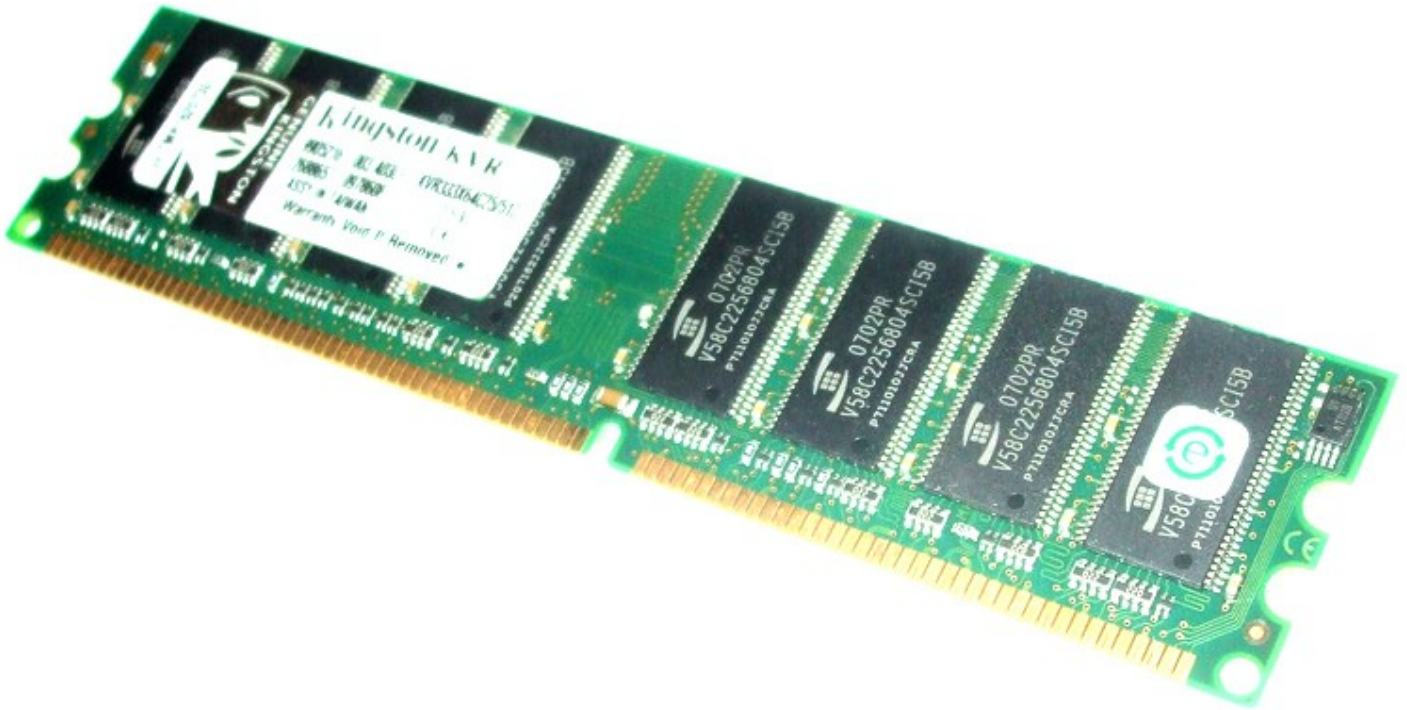
dvd on cat: http://www.flickr.com/photos/suzanneandsimon/84038024/
uncle sam: http://www.flickr.com/photos/notionscapital/2942067553/

/* TODO */

[==========]

ECC memory



https://blogs.oracle.com/ksplice/entry/attack_of_the_cosmic_rays1