power loss not too much data is lost. My raspberry stores temperature data in a rrdtool database

First, you create two directories somewhere on the sd card. One is the backup location for the d
the mount point of the ramdisk (*/home/andreas/rrd*). Set this up by editing */etc/fstab*. How to cre

Then we need a script to backup and restore the ramdisk data. We use an init script called *persi*
and shutdown:

```
#!/bin/bash
#
### BEGIN INIT INFO
# Provides:          persist-ramdisk
# Default-Start:     2 3 4 5
# Default-Stop:      0 1 6
# Required-Start:
# Required-Stop:
# Short-Description: Backup / restore ram disk contents during boot / shutdown.
# Description:       Backup / restore ram disk contents during boot / shutdown.
### END INIT INFO

PERSIST_STORE=/home/andreas/persist
RAMDISK=/home/andreas/rrd

case "$1" in
  start)
    echo "Restoring ramdisk contents"
    rsync --quiet --archive ${PERSIST_STORE}/ ${RAMDISK}
    ;;
  sync|stop)
    echo "Persisting ramdisk contents"
    rsync --quiet --archive --delete --recursive --force ${RAMDISK}/ ${PERSIST_S
    ;;
  *)
    echo "Usage: /etc/init.d/ramdisk {start|stop|sync}"
    exit 1
    ;;
esac

exit 0
```

The script can be called with three different parameters: *start*, *stop* and *sync*. *start* copies the da
be mounted before the script is called). The parameters *stop* and *sync* copy the data from the ra

Both copy operations are done by rsync. Rsync does not copy all files but does a synchronizatio
destination and not changed. So there are as few write operations to the sd card as possible.

the *service* tool and discards all console output of the script by redirecting it to */dev/null*. If the ou
if you have This entry was posted in Uncategorized and tagged linux, raspberry_pi by andreas. B

2 THOUGHTS ON "PERSISTENT STORAGE WITH RAMDISKS"

Marcos
on **June 22, 2013 at 09:58** said:

if rsync and cron are not reliable then do this:
edit /etc/rc.local
add;
mke2fs -t ext2 /dev/ram1 2048000
mount /dev/ram1 /mnt/ram1

this formats 2gb ramdisk at boot…change for 1gb or 4gb 1024000 or 4096000 r
or 'mkdir /mnt/'your choice' and mount it there.

next after login in term create a ramdisk save directory on harddisk
mkdir /home/ramdisksave

next open a text editor – geany – gedit – or leafpad, open new file. Type;

#copies ramdisksave contents to ramdisk
cp -a /home/ramdisksave/. /mnt/ram1

save as 'copy to ramdisk.sh' in /home folder; then change permissions to make e
next in editor open another new fil., Type;

#saves ramdisk contents to ramdisksave folder
cp -a /mnt/ram1/. /home/ramdisksave/

save as 'save ramdisk to HD.sh' in /home folder; change permissions to executab

Corrected

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Now you have a ramdisk created and mounted at boot and scripts to load and sa
ramdisk. You could also add script texts to rc.shutdown and rc.sysinit to occur at
option to perform these tasks manually at will is reassuring. Two more scripts cou
ramdisk save

#deletes ramdisk contents
cd /mnt && rm -rf ram1/*