Start in RamRoot mode

TS-WXL

Start TS-WXL with RAM Root.

Mount initrd

```
Mount the initrd taken out the other day.
```

```
root@TS-WXL3B3:~# cd /mnt/disk1/tmp/
root@TS-WXL3B3:/mnt/disk1/tmp# mkdir /tmp/root
root@TS-WXL3B3:/mnt/disk1/tmp# ls -l /dev/loop*
            1 root
                       root
                                  7,
                                       0 Jan 31 23:09 /dev/loop0
root@TS-WXL3B3:/mnt/disk1/tmp# mount -o loop initrd /tmp/root
root@TS-WXL3B3:/mnt/disk1/tmp# ls /tmp/root
                       lost+found root
                                               share
                                                           usr
bin
           etc
debugtool lib
                                   rootfs
                       mnt
                                                           var
                                               SVS
           linuxrc
                       proc
                                   sbin
                                                           www
                                               tmp
root@TS-WXL3B3:/mnt/disk1/tmp#
```

linuxre fix

```
root@TS-WXL3B3:/mnt/disk1/tmp# cd /tmp/root
root@TS-WXL3B3:/tmp/root# mv linuxrc linuxrc.orig
root@TS-WXL3B3:/tmp/root# cp linuxrc.orig linuxrc
root@TS-WXL3B3:/tmp/root# ls -l linuxrc*
-rwxr-xr-x 1 root
-rwxr-xr-x 1 root
                        root
                                     10133 Feb 22 22:31 linuxrc
                        root
                                     10133 Nov 30 09:46 linuxrc.orig
root@TS-WXL3B3:/tmp/root# vi linuxrc
echo "linuxrc:choose operation (timeout 4[s])"
echo -n " 1:RamRoot 2:sda1 2:sda2 other:HddRoot ? "
## timeout is 4[s]
#ANSWER=`/usr/local/bin/keyinput -t 4`
ANSWER=1
/usr/local/sbin/miconapl -a serialmode_console
case "$ANSWER" in

 RamdiskRoot;;
```

Check miconapl

There is.

```
By the way, is there miconapl?
root@TS-WXL3B3:/tmp/root# ls -l usr/local/sbin/miconapl
-rwxr-xr-x
             1 root
                        root
                                     73880 Nov 24 17:09 usr/local/sbin/miconapl
root@TS-WXL3B3:/tmp/root#
```

expunge root password

```
root@TS-WXL3B3:/tmp/root# cd etc/
root@TS-WXL3B3:/tmp/root/etc# mv shadow shadow.orig
\verb|root@TS-WXL3B3:/tmp/root/etc#| sed -e 's/^root:[^:][^:]*:\\ |(.*\)$/root::\\ |1/' | shadow.orig > 
root@TS-WXL3B3:/tmp/root/etc# ls -l shadow*
                                                                                                                                                                                                 344 Feb 23 22:14 shadow
-rw-r--r-- 1 root
                                                                                                                       root
                                                                    1 root
                                                                                                                                                                                                 370 Nov 16 16:49 shadow.orig
                                                                                                                          root
root@TS-WXL3B3:/tmp/root/etc# grep root shadow
root::11009:0:99999:7:::
root@TS-WXL3B3:/tmp/root/etc#
The mode must be 400, but ...
root@TS-WXL3B3:/tmp/root/etc# chmod 400 shadow
```

unmount initrd

```
root@TS-WXL3B3:/tmp/root/etc# cd /
root@TS-WXL3B3:/# umount /tmp/root
root@TS-WXL3B3:/#
```

Create initrd.buffalo

root@TS-WXL3B3:/tmp/root/etc#

```
root@TS-WXL3B3:/# cd /mnt/disk1/tmp/
root@TS-WXL3B3:/mnt/disk1/tmp# ls
root@TS-WXL3B3:/mnt/disk1/tmp# gzip initrd
```

```
root@TS-WXL3B3:/mnt/disk1/tmp#
```

The prompt has returned. root@TS-WXL3B3:/mnt/disk1/tmp# mkimage -l /boot/initrd.buffalo Image Name: initrd Thu Dec 3 23:18:19 2009 Created: Created(epoc):1259849899 Image Type: ARM Linux RAMDisk Image (gzip compressed)
Data Size: 9291425 Bytes = 9073.66 kB = 8.86 MB Load Address: 0x00000000 Entry Point: 0x00000000 root@TS-WXL3B3:/mnt/disk1/tmp# /mnt/disk1/share/hackkit/mkimage -A ARM -O Linux -T ramdisk -C gzip -a 0x000000000 -e 0x00000000 -n initrd -d initrd.gz initr Image Name: initrd Created: Tue Feb 23 22:21:54 2010 Image Type: ARM Linux RAMDisk Image (gzip compressed) Data Size: 9239808 Bytes = 9023.25 kB = 8.81 MB Load Address: 0x0000000 Entry Point: 0x00000000 root@TS-WXL3B3:/mnt/disk1/tmp#

Replace /boot/initrd.buffalo

```
root@TS-WXL3B3:/mnt/disk1/tmp# pushd /boot
/boot /mnt/disk1/tmp
root@TS-WXL3B3:/boot# 1s
                                u-boot-mv78100.buffalo
builddate.txt
                                u-boot.buffalo
conf save.tgz
hddrootfs.buffalo.updated.done u-boot.buffalo.org
initrd.buffalo
                                uImage-88f6281.buffalo
                                uImage-mv78100.buffalo
u-boot-88f6281.buffalo
                                uImage.buffalo
root@TS-WXL3B3:/boot# mv initrd.buffalo initrd.buffalo.orig
root@TS-WXL3B3:/boot# popd
/mnt/disk1/tmp
root@TS-WXL3B3:/mnt/disk1/tmp# tar cf - initrd.buffalo |(cd /boot/; tar xvf -)
initrd.buffalo
root@TS-WXL3B3:/mnt/disk1/tmp#
```

Restart

```
root@TS-WXL3B3:/mnt/disk1/tmp# shutdown -r now
System halted.
BuffaloChangePowerStatusBeforeHalt > Check power status. MagicKey = 0x02
BuffaloGpio_ChangePowerStatus > Writing 0x7a
BuffaloChangePowerStatusBeforeHalt > Changed to 0x7a from 0x02
>miconCntl_PowerOff
>miconCntl_ShutdownWait
Hmm? It doesn't restart even though -r is set.
Press the power button
CPU = MV78
Checking DATA BUS OK!
Checking ADDRESS BUS OK!
   Image Name:
                 initrd
                 2010-02-23 13:21:54 UTC
   Created:
   Image Type:
                 ARM Linux RAMDisk Image (gzip compressed)
   Data Size:
                 9239808 Bytes = 8.8 MB
   Load Address: 00000000
   Entry Point: 00000000
---- in linuxrc ---
Version 1.00 2008/ 7/ 1
Tue Feb 23 22:26:40 JST 2010
LibSys GetUsbDiskStartNum : Usb device not found(/sys/block/sdb/device). Returning 2
grep: /var/tmp/devlink: No such file or directory linuxrc:choose operation (timeout 4[s])
1:RamRoot 2:sda1 2:sda2 other:HddRoot ? -RamdiskRoot-
starting pid 1403, tty '': '/sbin/getty'
BUFFALO INC. TeraStation series
TS-WXL-EM3B3 login:
EM has been started. \ ^ ^/
```

Log in as root

BUFFALO INC. TeraStation series TS-WXL-EM3B3 login: root root@TS-WXL-EM3B3:~# df

Filesystem 1K-blocks Used Available Use% Mounted on /dev/root.old 31729 23518 8211 74% /

/dev/ram1 15360 568 14792 4% /mnt/ram

root@TS-WXL-EM3B3:~#

Dan.



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TS-WXL

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 Hack of record

 How to use serial console ???
 LinkStation / KuroBox trying to hack

ar and wget

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