Straighten

[TS-WXL](#)

Make an experimental HDD to prevent it from being tinkered and broken.
TS-WXL / 1D is also in the product lineup, and only one is enough.

Delete RAID1

If it is RAID1, it will be troublesome later. On the web management screen of the standard firmware
, on the "Shared folder ー" screen, release the share,
and on the "Disk" screen, delete the RAID array 1.
Well, isn't it important to do it further?

Extract files needed for tftp boot

Transfer initrd.buffalo and uImage.buffalo to tftp server by ftp.

```
BUFFALO INC. TeraStation series
TS-WXL3B3 login: admin
Password:
Last login: Sat Jan 16 13:40:41 JST 2010 on ttyS0
-sh: /etc/profile: Permission denied
-sh-3.2$ cd /boot
-sh-3.2$ ftp 192.168.2.38
-sh: ftp: command not found
-sh-3.2$
```

Gah.

Because there is no
help for it , create a share called share on the management screen, put initrd.buffalo and uImage.buffalo there

```
-sh-3.2$ cp initrd.buffalo uImage.buffalo /mnt/disk1/share/
-sh-3.2$
```

Transfer from TS-WXL to LS-GL which is a tftp server with Windows Explorer,
and put it in the specified place with LS-GL

```
yasunari@ude:/mnt/tmp$ cp initrd.buffalo uImage.buffalo !$
cp initrd.buffalo uImage.buffalo /srv/tftp/TS-WXL_1.06
yasunari@ude:/mnt/tmp$ cd /srv/tftp/
yasunari@ude:/srv/tftp$ rm initrd.buffalo uImage.buffalo
yasunari@ude:/srv/tftp$ ln TS-WXL_1.06/* .
yasunari @ ude: / srv / tftp $
```

Initialization of experimental HDD

Connect HDP7250GLA (250GB SATA HDD) used for experiment to LS-GL by USB, and delete the partition by fdisk.

```
out: ~ # fdisk / dev / sdb

The number of cylinders for this disk is set to 60801.
There is nothing wrong with that, but this is larger than 1024,
and could in certain setups cause problems with:
1) software that runs at boot time (e.g., old versions of LILO)
2) booting and partitioning software from other OSs
   (eg, DOS FDISK, OS / 2 FDISK)

Command (m for help): p

Disk /dev/sdb: 500.1 GB, 500107862016 bytes
255 heads, 63 sectors/track, 60801 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Disk identifier: 0x00000000

   Device Boot      Start         End      Blocks   Id  System
/dev/sdb1               1         125     1004031   83  Linux
/dev/sdb2             126         748     5004247+  83  Linux
/dev/sdb4             749       60801   482375722+   5  Extended
/dev/sdb5             749         873     1004031   82  Linux swap / Solaris
/dev/sdb6             874       60690   480480021   83  Linux

Command (m for help): d
Partition number (1-6): 4

Command (m for help): d
Partition number (1-4): 2

Command (m for help): d
Selected partition 1

Command (m for help): p

Disk /dev/sdb: 500.1 GB, 500107862016 bytes
255 heads, 63 sectors/track, 60801 cylinders
```

```
Units = cylinders of 16065 * 512 = 8225280 bytes
Disk identifier: 0x00000000
```

```
   Device Boot      Start         End      Blocks   Id  System

Command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.
Out: ~ #
```

Replace HDD

Shut down TS-WXL and disconnect the outlet.
Remove the HDD of TS-WXL standard firmware from the slot.
Set the experimental HDD on the remaining LS-QL mounter and stab it into TS-WXL

Power ON

Insert TS-WXL into outlet and power on

```
CPU =  MV78

Checking DATA BUS OK!
Checking ADDRESS BUS OK!

Checking DATA BUS
Checking ADDRESS BUS
BUFFALO U-BOOT Start !!!
 ** LOADER **
 ** BUFFALO BOARD: DB-MV78100-A-BP LE (CFG_ENV_ADDR=fff80000)


U-Boot 1.1.4 (Jun  4 2009 - 11:11:38) Marvell version: 3.3.5
Buffalo Version: 2.06-1.00

U-Boot code: 00600000 -> 0066FFF0  BSS: -> 00684D34

Soc: MV78100 A0 (DDR2)
CPU running @ 800Mhz L2 running @ 266Mhz
SysClock = 400Mhz , TClock = 166Mhz

DRAM CAS Latency = 5 tRP = 5 tRAS = 19 tRCD=5
DRAM CS[0] base 0x00000000   size 512MB
DRAM Total size 512MB  64bit width
[512kB@fff80000] Flash: 512 kB
Addresses 8M - 0M are saved for the U-Boot usage.
Mem malloc Initialization (8M - 7M): Done
NAND: 512 MB

CPU 0: ARM926 (Rev 0)

Streaming enabled
Write allocate disabled
FPU initialized to Run Fast Mode.
enaDCPref <NULL>
enaICPref <NULL>
setL2CacheWT no
setL2Size256K no
disL2Ecc no
disL2Prefetch yes
disL2Cache no
env finished


USB 0: host mode
USB 1: host mode
USB 2: host mode
PEX 0: interface detected no Link.
PEX 4: interface detected no Link.
Net: egiga0 [PRIME], egiga1
buffalo_change_power_status > Read 0x7a(swpoff_reached_halt)
buffalo_change_power_status > Writing 0x5c(swpoff_uboot_passed)

Marvell Serial ATA Adapter
Integrated Sata device found
[0 0 0]: Enable DMA mode
  Device 0 @ 0 0:
Model: Hitachi HDP725050GLA360              Firm: GM4OA5CA Ser#:        GEC534RF37924E
          Type: Hard Disk
          Supports 48-bit addressing
          Capacity: 476940.0 MB = 465.7 GB (976773168 x 512)

MAC Address on eth0  : 00:1d:73:e7:23:b3

Signature version    : 1263749444.2610
Signature MACAddress:

   This is not my HDD!!!
   Anyway load images...
** Bad partition 1 **
serch_boot_drv (528)>No kernel_file 0
** Bad partition 1 **
```

serch_boot_drv (608)>No init_file 0

** Something is wrong, because of dev_desc->blksz is 0!!!
disk1 is not found!

** Something is wrong, because of dev_desc->blksz is 0!!!
disk2 is not found!

** Something is wrong, because of dev_desc->blksz is 0!!!
disk3 is not found!

  ***** Debug *****
diskinfo [0] .IsMyDisk = 0
diskinfo[0].uImage_date = 0
diskinfo[0].initrd_date = 0
diskinfo [1] .IsMyDisk = 0
diskinfo[1].uImage_date = 0
diskinfo[1].initrd_date = 0
diskinfo [2] .IsMyDisk = 0
diskinfo[2].uImage_date = 0
diskinfo[2].initrd_date = 0
diskinfo [3] .IsMyDisk = 0
diskinfo[3].uImage_date = 0
diskinfo[3].initrd_date = 0

All disks are don't have signature or not mine!

All MyDisks don't have FW!!!
Anyway, try to load from FW from not MyDisks.Lost all init_rd
Trying NAND boot
partition changed to nand0,0
JFFS2 loading 'uImage.buffalo' to 0x2000000
Scanning JFFS2 FS: . done.
JFFS2 load complete: 2294752 bytes loaded to 0x2000000

    Image Name: Linux-2.6.22.18
    Created: 2009-07-17   4:57:28 UTC
    Image Type: ARM Linux Kernel Image (uncompressed)
    Data Size: 2294688 Bytes = 2.2 MB
    Load Address: 00008000
    Entry Point: 00008000

JFFS2 loading 'initrd.buffalo' to 0x900000
JFFS2 load complete: 8857821 bytes loaded to 0x900000

    Image Name: initrd
    Created: 2009-07-17   4:58:52 UTC
    Image Type: ARM Linux RAMDisk Image (gzip compressed)
    Data Size: 8857757 Bytes = 8.4 MB
    Load Address: 00000000
    Entry Point: 00000000

hit any key to switch tftp boot.
Hit any key to stop autoboot: 0
Hit any key to stop autoboot: 0
partition changed to nand0,0
JFFS2 loading 'uImage.buffalo' to 0x2000000
JFFS2 load complete: 2294752 bytes loaded to 0x2000000
JFFS2 loading 'initrd.buffalo' to 0x900000
JFFS2 load complete: 8857821 bytes loaded to 0x900000
<<stop_sound>>
Booting image at 02000000 ...
    Image Name: Linux-2.6.22.18
    Created: 2009-07-17   4:57:28 UTC
    Image Type: ARM Linux Kernel Image (uncompressed)
    Data Size: 2294688 Bytes = 2.2 MB
    Load Address: 00008000
    Entry Point: 00008000
    Verifying Checksum ... OK
OK
call do_bootm_linux
Loading Ramdisk Image at 00900000 ...
    Image Name: initrd
    Created: 2009-07-17   4:58:52 UTC
    Image Type: ARM Linux RAMDisk Image (gzip compressed)
    Data Size: 8857757 Bytes = 8.4 MB
    Load Address: 00000000
    Entry Point: 00000000
    Verifying Checksum ... OK

Starting kernel ...

CONFIG_BUFFALO_PLATFORM ---
Uncompressing Linux..
Linux version 2.6.22.18 (root@build2.dd-hot24.nas.buffalo.local) (gcc version 4.2.0 20070413 (prerelease)) #539 Fri Jul 17 13:57:12 JST 2009
CPU: ARM926EJ-S [41159260] revision 0 (ARMv5TE), cr=00053977
Machine: Feroceon-MV78XX0
Using UBoot passing parameters structure
u.mv_uboot.env_addr is 0xfff80000. Using tag's value.
Memory policy: ECC disabled, Data cache writeback
CPU0: D VIVT write-back cache
CPU0: I cache: 32768 bytes, associativity 4, 32 byte lines, 256 sets
CPU0: D cache: 32768 bytes, associativity 4, 32 byte lines, 256 sets
Built 1 zonelists. Total pages: 130048

```
Kernel command line: console=ttyS0,115200 mtdparts=physmapped-flash.0:32m(root)
PID hash table entries: 2048 (order: 11, 8192 bytes)
Console: colour dummy device 80x30
Dentry cache hash table entries: 65536 (order: 6, 262144 bytes)
Inode-cache hash table entries: 32768 (order: 5, 131072 bytes)
Memory: 512MB 0MB 0MB 0MB = 512MB total
Memory: 506368KB available (4180K code, 319K data, 128K init)
Mount-cache hash table entries: 512
CPU: Testing write buffer coherency: ok
NET: Registered protocol family 16

CPU 0, CPU Interface
-------------
SDRAM_CS0.... ....base 00000000, size 512MB
SDRAM_CS1.... ....disable
SDRAM_CS2.... ....disable
SDRAM_CS3.... ....disable
DEVICE_CS0... ....base f8000000, size   32MB
DEVICE_CS1... ....base fe000000, size    1MB
DEVICE_CS2... ....base fc000000, size    1MB
DEVICE_CS3... ....no such
DEV_BOOCS.... ....base fff00000, size 512KB
DEVICE_SPI... ....base fff00000, size 512KB
PEX0_IO...... ....base f2000000, size    8MB
PEX0_MEM0.... ....base c8000000, size   64MB
PEX1_IO...... ....base f3000000, size    8MB
PEX1_MEM0.... ....base cc000000, size   64MB
PEX2_IO...... ....no such
PEX2_MEM0.... ....no such
PEX3_IO...... ....base f5000000, size    8MB
PEX3_MEM0.... ....base d4000000, size   64MB
PEX4_IO...... ....base f6000000, size    8MB
PEX4_MEM0.... ....base d8000000, size   64MB
PEX5_IO...... ....no such
PEX5_MEM0.... ....no such
PEX6_IO...... ....no such
PEX6_MEM0.... ....no such
PEX7_IO...... ....no such
PEX7_MEM0.... ....no such
CRYPT_ENG..... ....base f7000000, size    2MB
INTER_REGS... ....base f1000000, size    1MB

   Marvell Development Board (LSP Version 2.0.2_MV78XX0)-- DB-MV78100-A-BP-BUFFALO  Soc: MV78100 A0 LE


 Detected Tclk 166666667 and SysClk 400000000
Marvell USB EHCI Host controller #0: 8118c600
Marvell USB EHCI Host controller #1: 8118c400
Marvell USB EHCI Host controller #2: 8118c200
PEX0 interface detected no Link.
PEX4 interface detected no Link.
SCSI subsystem initialized
NET: Registered protocol family 2
Time: orion_clocksource clocksource has been installed.
IP route cache hash table entries: 16384 (order: 4, 65536 bytes)
TCP established hash table entries: 65536 (order: 7, 524288 bytes)
TCP bind hash table entries: 65536 (order: 6, 262144 bytes)
TCP: Hash tables configured (established 65536 bind 65536)
TCP reno registered
checking if image is initramfs...it isn't (no cpio magic); looks like an initrd
Freeing initrd memory: 8650K
RTC registered.
MICON ctrl (C) BUFFALO INC. V.1.00 installed.
Buffalo Gpio Control Driver (C) BUFFALO INC. Ver.0.02 installed.
>BuffaloCpuInterrupts_init
Buffalo CPU Inerupts Driver (C) BUFFALO INC. Ver.0.01 alpha1 installed.
MICON V2 (C) BUFFALO INC. V.1.00 installed.
UPSDRV (C) BUFFALO INC. V.1.00 installed.
  OMRON contact type ups shutdown support enabled!
Kernel event proc (C) BUFFALO INC. V.1.00 installed.
Buffalo RTC Driver (C) BUFFALO INC. Ver.1.00 (RS5C372) installed.
Buffalo GPIO SATA Hotplug Event Driver (C) BUFFALO INC. Ver.1.00 installed.
Use the XOR engines (acceleration) for enhancing the following functions:
   or RAID 5 Xor calculation
   o kernel memcpy
   o kenrel memzero
Number of XOR engines to use: 2
cesadev_init(8001237c)
mvCesaInit: sessions=640, queue=64, pSram=f7000000
VFS: Disk quotas dquot_6.5.1
Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
JFFS2 version 2.2. (NAND) 謹 ·001-2006 Red Hat, Inc.
SGI XFS with ACLs, large block numbers, no debug enabled
SGI XFS Quota Management subsystem
io scheduler noop registered (default)
io scheduler anticipatory registered
io scheduler deadline registered
io scheduler cfq registered
Serial: 8250/16550 driver $Revision: 1.90 $ 4 ports, IRQ sharing disabled
serial8250.0: ttyS0 at MMIO 0xf1012000 (irq = 12) is a 16550A
serial8250.0: ttyS1 at MMIO 0xf1012100 (irq = 13) is a 16550A
serial8250.2: ttyS2 at MMIO 0xf1012200 (irq = 14) is a 16550A
RAMDISK driver initialized: 3 RAM disks of 32768K size 1024 blocksize
loop: module loaded
Load Marvell Ethernet Driver
   o Cached descriptors in DRAM
   o DRAM SW cache-coherency
   o Single RX Queue support - ETH_DEF_RXQ=0
   o Single TX Queue support - ETH_DEF_TXQ = 0
```

```
    o TCP segmentation offload enabled
    o Receive checksum offload enabled
    o Transmit checksum offload enabled
    o Network Fast Processing (Routing) supported
    o Proc tool API enabled
    o Rx descripors: q0=128
    o Tx descriptors: q0 = 532
    o Loading network interface:
eth0 eth1
Network Fast Processing Disabled
mvFpRuleDb (80ad0000): 16384 entries, 65536 bytes
Integrated Sata device found
mvSataInitAdapter : regVal changed(0x00000010)
scsi0 : Marvell SCSI to SATA adapter
scsi1 : Marvell SCSI to SATA adapter
** BUFFALO Disable Command Queuing Function [0 0] **
scsi 0:0:0:0: Direct-Access     Hitachi  HDP725050GLA360  GM4O PQ: 0 ANSI: 5
Linux IAL (ERROR) [0 0 0]: set device max sectors to 2048
Linux IAL (ERROR) : retry command host=0, bus=0 SCpnt = 80ae9ba0
sd 0:0:0:0: [sda] 976773168 512-byte hardware sectors (500108 MB)
sd 0:0:0:0: [sda] Write Protect is off
sd 0:0:0:0: [sda] Write cache: enabled, read cache: enabled, doesn't support DPO or FUA
sd 0:0:0:0: [sda] 976773168 512-byte hardware sectors (500108 MB)
sd 0:0:0:0: [sda] Write Protect is off
sd 0:0:0:0: [sda] Write cache: enabled, read cache: enabled, doesn't support DPO or FUA
 sda:
sd 0:0:0:0: [sda] Attached SCSI disk
sd 0:0:0:0: Attached scsi generic sg0 type 0
SPI Serial flash detected @ 0xfff00000, 512KB (8sec x 64KB)
cmdlinepart partition parsing not available
    Write size      : 0x00000800
    OOB size        : 0x00000040
    Erase size      : 0x00020000
NAND device: Manufacturer ID: 0x20, Chip ID: 0xdc (ST Micro NAND 512MiB 3,3V 8-bit)
Scanning device for bad blocks
Bad eraseblock 298 at 0x02540000
Bad eraseblock 369 at 0x02e20000
Bad eraseblock 371 at 0x02e60000
Bad eraseblock 480 at 0x03c00000
Bad eraseblock 1176 at 0x09300000
Bad eraseblock 3864 at 0x1e300000
Bad eraseblock 3866 at 0x1e340000
cmdlinepart partition parsing not available
Using static partition definition
Creating 2 MTD partitions on "nand_mtd":
0x00000000-0x02000000 : "nboot"
0x02000000-0x20000000 : "nroot"
mice: PS/2 mouse device common for all mice
md: raid0 personality registered for level 0
md: raid1 personality registered for level 1
raid6: int32x1     115 MB/s
raid6: int32x2     130 MB/s
raid6: int32x4     133 MB/s
raid6: int32x8      98 MB/s
raid6: using algorithm int32x4 (133 MB/s)
md: raid6 personality registered for level 6
md: raid5 personality registered for level 5
md: raid4 personality registered for level 4
raid5: measuring checksumming speed
    arm4regs  :    824.400 MB/sec
    8regs     :    742.400 MB/sec
    32regs    :    822.400 MB/sec
raid5: using function: arm4regs (824.400 MB/sec)
device-mapper: ioctl: 4.11.0-ioctl (2006-10-12) initialised: dm-devel@redhat.com
dm_crypt using the OCF package.
ip_tables: (C) 2000-2006 Netfilter Core Team
TCP cubic registered
NET: Registered protocol family 1
NET: Registered protocol family 17
VFP support v0.3: implementor 41 architecture 1 part 10 variant 9 rev 0
md: Autodetecting RAID arrays.
md: autorun ...
md: ... autorun DONE.
RAMDISK: Compressed image found at block 0
EXT2-fs warning: checktime reached, running e2fsck is recommended
VFS: Mounted root (ext2 filesystem).
---- in linuxrc ---
Version 1.00 2008/ 7/ 1
Sun Jan 17 11:33:42 JST 2010
CheckDevices
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? -HddRoot-
-- rebuild mdadm.conf for BOOT, ROOTFS --
mdadm: cannot open /dev/disk?_1: No such file or directory
mdadm: cannot open /dev/disk?_2: No such file or directory
mdadm: cannot open /dev/disk?_5: No such file or directory
mdadm: No devices listed in conf file were found.
-- setup max error counts --
/sys/block/md0/md/maxerr_cnt is setted to 20
Starting :fsck_disks(boot) ...         [Failed. ]
Starting :mount(boot) ...              EXT3-fs: unable to read superblock
EXT2-fs: unable to read superblock
EXT3-fs: unable to read superblock
EXT2-fs: unable to read superblock
[Failed. ]
```

```
-- rebuild mdadm.conf for BOOT, ROOTFS --
mdadm: cannot open /dev/disk?_1: No such file or directory
mdadm: cannot open /dev/disk?_2: No such file or directory
mdadm: cannot open /dev/disk?_5: No such file or directoEXT3-fs: unable to read superblock
ry
mdadm: No deEXT2-fs: unable to read superblock
vices listed in conf file were found.
-- setup max error counts --
/sys/block/EXT3-fs: unable to read superblock
md0/md/maxerr_cnEXT2-fs: unable to read superblock
t is setted to 20
/sys/block/md1/md/maxerr_cnt is setted to 20
/usr/local/lib/libmd: line 278: /sys/block/md1/md/maxerr_cnt: No such file or directory
/sys/block/md10/md/maxerr_cnt is setted to 20
/usr/local/lib/libmd: line 278: /sys/block/md10/md/maxerr_cnt: No such file or directory
mount: mounting /dev/md1 on /mnt failed: Input/output error
mount: mounting /dev/md1 on /mnt failed: Input/output error
md: md0 stopped.
mdadm: stopped /md: md1 stopped.
dev/md0
md: md10 stopped.
mdadm: stopped /dev/md1
mdadm: stopped /dev/md10
umount: cannot open /proc/mounts
Freeing init memory: 128K
init started: BusyBox v1.7.0 (2007-10-15 19:49:46 IST)
starting pid 398, tty '': '/etc/init.d/rcS'
--- rcStart (initrd) ---
=== checkroot.sh ===
chmod: /home: No such file or directory
grep: /var/tmp/devlink: No such file or directory
Unable to find swap-space signature
swapon: /dev/md10: Invalid argument
create dir : /home
create dir: / var / www
=== create_devlink.sh ===
=== startSysMd.sh ===
-- rebuild mdadm.conf for BOOT, ROOTFS --
mdadm: cannot open /dev/disk?_1: No such file or directory
mdadm: cannot open /dev/disk?_2: No such file or directory
mdadm: cannot open /dev/disk?_5: No such file or directory
mdadm: No devices listed in conf file were found.
-- setup max error counts --
/sys/block/md0/md/maxerr_cnt is setted to 20
/sys/block/md1/md/maxerr_cnt is setted to 20
/sys/block/md10/md/maxerr_cnt is setted to 20
=== fwupdate.sh ===
umount: cannot umount /boot: Invalid argument
mkdir: cannot create directory '/boot': File exists
EXT3-fs: unable to read superblock
EXT2-fs: unable to read superblock
mount: mounting /dev/md0 on /boot failed: Input/output error
=== closeSysMd.sh ===
md: md0 stopped.
mdadm: stopped /md: md1 stopped.
dev/md0
md: md10 stopped.
mdadm: stopped /dev/md1
mdadm: stopped /dev/md10
=== sethostname.sh ===
configure files from Buffalo parameters.
=== restore_config.sh ===
-- rebuild mdadm.conf for BOOT, ROOTFS --
mdadm: cannot open /dev/disk?_1: No such file or directory
mdadm: cannot open /dev/disk?_2: No such file or directory
mdadm: cEXT3-fs: unable to read superblock
annot open /dev/EXT2-fs: unable to read superblock
disk?_5: No such file or directory
mdadm: No devices listed in conf file were found.
-- setup max error counts --
/sys/block/md0/md/maxerr_cnt is setted to 20
mount: mounting /dev/md0 on /boot failed: Input/output error
Restore previous configuration files
/bin/tar: /boot/conf_save.tgz: Cannot open: No such file or directory
/bin/tar: Error is not recoverable: exiting now
/bin/tar: Child returned status 2
/bin/tar: Error exit delayed from previous errors
/bin/tar: /boot/conf_save.tgz: Cannot open: No such file or directory
/bin/tar: Error is not recoverable: exiting now
/bin/tar: Child retmd: md0 stopped.
urned status 2
md: md1 stopped.
/bin/tar: Error md: md10 stopped.
exit delayed from previous errors
unzip  fail.
umount: cannot umount /boot: Invalid argument
rootfs on / type rootfs (rw)
/dev/root.old on / type ext2 (rw)
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
devpts on /dev/pts type devpts (rw)
/dev/ram1 on /mnt/ram type tmpfs (rw)
  PID  Uid        VSZ Stat Command
    1 root       3364 S   init
    2 root            SW< [kthreadd]
    3 root            SWN [ksoftirqd/0]
    4 root            SW< [events/0]
    5 root            SW< [khelper]
```

```
   35 root         SW< [kblockd/0]
   50 root         SW  [crypto]
   51 root         SW  [crypto ret]
   54 root         SW  [pdflush]
   55 root         SW  [pdflush]
   56 root         SW< [kswapd0]
   57 root         SW< [aio/0]
   58 root         SW< [xfslogd/0]
   59 root         SW< [xfsdatad/0]
  251 root         SW< [scsi_eh_0]
  252 root         SW< [scsi_eh_1]
  261 root         SW< [mtdblockd]
  278 root         SW< [kcryptd/0]
  397 root   3364 S   init
  398 root   2444 S   /bin/sh /etc/init.d/rcS
  694 root   2896 R   /bin/sh /etc/init.d/restore_config.sh start
  710 root   1020 R   grep -v atalk
  715 root   3368 R   ps
mdadm: stopped /dev/md0
mdadm: stopped /dev/md1
mdadm: stopped /dev/md10
=== EnablingAutoip.sh ===
=== networking.sh ===
/etc/init.d/networking.sh : Clear /etc/dhcpc/dhcpcd-eth0.pid eth0
/etc/init.d/networking.sh : Clear /etc/dhcpc/dhcpcd-eth1.pid eth1
/etc/init.d/networking.sh : Clear /etc/dhcpc/dhcpcd-bond0.pid bond0
/etc/init.d/networking.sh : Read dhcpc file
/etc/init.d/networking.sh : configure :
create network files.. (eth0)
IP=[dhcp], netmask=[], dgw=[], dns1=[], dns2=[]
create network files.. (eth1)
IP=[dhcp], netmask=[], dgw=[]
killall: dhcpcd: no process killed
/etc/init.d/networking.sh: line 87: /etc/init.d/networking.sh : Delete /etc/dhcpc/dhcpcd-.pid: No such file or directory
Configuration network interface: lo eth0 eth1
/ sbin / ifconfig eth0 person 1500 multicast
/sbin/ifconfig eth1 mtu 1500 multicast
requesting DHCP  tout=30[s]
networking.sh: dhcp requesting...
DontDownIface
alwaysFork
eth1: started
sendto:  count 6   sync 1
sendto:  count 5   sync 1
sendto:  count 4   sync 1
sendto:  count 3   sync 1
sendto:  count 2   sync 1
sendto:  count 1   sync 1
sendto:  count 0   sync 1
dhcpInit call AutoipBound
setAutoIP eth1 called
MAC address = 00:1d:73:e7:23:b4
file name /etc/dhcpc/autoip-eth1.info
/sbin/ifconfig eth1 169.254.112.134 netmask 255.255.0.0 up
Arp result 0
/etc/init.d/rService
** eth1 : networking.sh dhcp fin.
requesting DHCP  tout=30[s]
networking.sh: dhcp requesting...
DontDownIface
alwaysFork
eth0: link down
eth0: started
eth0: link up, full duplex, speed 1 Gbps
sendto:  count 6   sync 1
sendto:  count 5   sync 0
sendto:  count 6   sync 0
dhcpcd.exe: interface eth0 has been configured with new IP=192.168.2.70 GATEWAY=192.168.2.1,192.168.2.97
** eth0 : networking.sh dhcp fin.
Checking network address for each network device
configure files from Buffalo parameters.
=== syslog.sh ===
Starting system logger: load_info ItemValue = off
LoadConfFileString:key=[ad_dns] not found in /etc/melco/info.
LoadConfFileOnOff:key=[info_visible] not found in /etc/melco/info.
LoadConfFileString:key=[array2] not found in /etc/melco/diskinfo.

Starting kernel logger:
=== kernelmon.sh ===
Starting kernelmon:=== miconmon.sh ===
miconmon 1.05 started (Builddate Jun 22 2009 17:49:47)
=== usb.sh ===
KERNELMOn (SATA 0 plugged)
KERNELMOn (SATA 1 unplugged)
KERNELMOn (SATA 2 unplugged)
KERNELMOn (SATA 3 unplugged)
usbcore: registered new interface driver usbfs
usbcore: registered new interface driver hub
usbcore: registered new device driver usb
ehci_marvell ehci_marvell.70059: Marvell Orion EHCI
ehci_marvell ehci_marvell.70059: new USB bus registered, assigned bus number 1
KERNELMOn (lanact 0 full eth0)
ehci_marvell ehci_marvell.70059: irq 16, io base 0xf1050100
ehci_marvell ehci_marvell.70059: USB 2.0 started, EHCI 1.00, driver 10 Dec 2004
usb usb1: configuration #1 chosen from 1 choice
hub 1-0:1.0: USB hub found
hub 1-0:1.0: 1 port detected
KERNELMOn (lanact 1000 full eth0)
```

```
ehci_marvell ehci_marvell.168472: Marvell Orion EHCI
ehci_marvell ehci_marvell.168472: new USB bus registered, assigned bus number 2
ehci_marvell ehci_marvell.168472: irq 17, io base 0xf1051100
ehci_marvell ehci_marvell.168472: USB 2.0 started, EHCI 1.00, driver 10 Dec 2004
usb usb2: configuration #1 chosen from 1 choice
hub 2-0:1.0: USB hub found
hub 2-0:1.0: 1 port detected
ehci_marvell ehci_marvell.336244: Marvell Orion EHCI
ehci_marvell ehci_marvell.336244: new USB bus registered, assigned bus number 3
ehci_marvell ehci_marvell.336244: irq 18, io base 0xf1052100
ehci_marvell ehci_marvell.336244: USB 2.0 started, EHCI 1.00, driver 10 Dec 2004
usb usb3: configuration #1 chosen from 1 choice
hub 3-0:1.0: USB hub found
hub 3-0:1.0: 1 port detected
USB Universal Host Controller Interface driver v3.0
Initializing USB Mass Storage driver...
usbcore: registered new interface driver usb-storage
USB Mass Storage support registered.
usbcore: registered new interface driver usblp
drivers/usb/class/usblp.c: v0.13: USB Printer Device Class driver
=== clientUtil_servd.sh ===
Starting clientUtil_server:
  ->Starting on eth1
  ->Starting on eth0
=== daemonwatch.sh ===
Starting daemonwatch:daemonwatch Ver.1.01
watch list file : /etc/daemonwatch.list
=== bootcomplete.sh ===
No need to run drivecheck.sh
BuffaloGpio_ChangePowerStatus > Writing 0x71
/etc/init.d/bootcomplete.sh: line 52: /usr/local/bin/sendmail.sh: No such file or directory
=== micon_setup.sh ===
/usr/local/bin/change_notify.sh:LCD display message setted to [EMERGENCY MODE  NO ARRAY INFO]
=== late_inspection_phase.sh ===
starting pid 1219, tty '': '/sbin/getty'

BUFFALO INC. TeraStation series
TS-WXL-EM3B3 login:
```

I intended
to boot via tftp, but booted from NAND Flash.
The ERROR LED is on and the LCD screen is red.

Login from serial console?

I tried accessing http://192.168.2.70//cgi-bin/task.cgi?task=console¶m=on&uuu=admin&ppp=password, but could not access.
I cannot log in from the serial console.

Execute firmware updater

Download TeraStation X Series Firmware Updater Ver.1.20 and execute tsx120.exe.
As with LinkStation, a browser starts up and runs "TSUpdater.exe" linked there.

The firmware updater screen is displayed.

"The partition information of the HDD could not be confirmed. The
   firmware cannot be

   updated . The update will be cancelled."

When.

Modify TSUpdater.ini

Open TSUpdater.ini at c: / Documents and Settings / yasunari / Desktop / tsx-120 / TS-X_FW1.20 / and delete the NoFormatting line.

```
[Application]
Title = BUFFALO TS-XL / TS-WXL / TS-RXL / TS-XEL Series Updater Ver.1.20
WaitReboot = 800
WaitFormat = 500

[Target]
ProductID = 0x0000200B
ProductID2 = 0x0000200C
ProductID3 = 0x0000200D
ProductID4 = 0x00002010
Name = TeraStation

[Flags]
VersionCheck = 1
```

Rerun updater

Run TSUpdater.exe again.
Next time,

"The partition information of the
   HDD could not be confirmed. Format the HDD and update the firmware

Are you sure you want to format the HDD? "

Of course "Yes (Y)"

Immediately after

"Format failed (ACP_STATE_FILURE) Aborting
   update"

When.

Rakuten Ichiba
Amazon
Yahoo Shopping
Livedoor Department Store

TS-WXL

←
Serial console

Hack of record
LinkStation / **KuroBox** trying to hack

→
Partition