

Advantech AE Technical Share Document

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Category	☐ FAQ ☒ SOP	Related OS	N/A
Abstract	How to Change Read-only system to Read-Write_ECU-1000&ADAM-3600		
Keyword	Read-only Read-Write		
Related Product	ADAM-3600, ECU1251, ECU-1051, ECU-1152		

■ Problem Description:

After 2.6.1, the system partition is changed to read-only state to prevent system file damage caused by illegal power failure. By default, the folder /home/ is Read-Write. If necessary, all the system partition can be modified to read-write status.

■ Answer:

1) Temporary modify to read-write (restart invalid)

View current status

```
root@adam3600:~# cat /proc/mounts
/dev/root / ext3 ro,relatime,data=ordered 0 0
devtmpfs /dev devtmpfs rw,relatime,size=99192k,nr_inodes=24798,mode=755 0 0
proc /proc proc rw,relatime 0 0
sysfs /sys sysfs rw,relatime 0 0
debugfs /sys/kernel/debug debugfs rw,relatime 0 0
tmpfs /var/volatile tmpfs rw,relatime,size=16384k 0 0
tmpfs /media tmpfs rw,relatime,size=16384k 0 0
/dev/mmcblk0p4 /home ext4 rw,relatime,data=ordered 0 0
/dev/mmcblk0p1 /media/mmcblk0p1 vfat
rw,relatime,fmask=0022,dmask=0022,codepage=437,ioccharset=iso8859-
1,shortname=mixed,errors=remount-ro 0 0
/dev/mmcblk0p3 /media/mmcblk0p3 ext4 rw,relatime,data=ordered 0 0
devpts /dev/pts devpts rw,relatime,gid=5,mode=620,ptmxmode=000 0 0
```

Change to read / write status

```
# mount -o remount,rw /
```

View status after modifying

```
# cat /proc/mounts
```

```
/dev/root / ext3 rw,relatime,data=ordered 0 0
devtmpfs /dev devtmpfs rw,relatime,size=99192k,nr_inodes=24798,mode=755 0 0
proc /proc proc rw,relatime 0 0
sysfs /sys sysfs rw,relatime 0 0
debugfs /sys/kernel/debug debugfs rw,relatime 0 0
tmpfs /var/volatile tmpfs rw,relatime,size=16384k 0 0
tmpfs /media tmpfs rw,relatime,size=16384k 0 0
/dev/mmcbk0p4 /home ext4 rw,relatime,data=ordered 0 0
/dev/mmcbk0p1 /media/mmcbk0p1 vfat
rw,relatime,fmask=0022,dmask=0022,codepage=437,ioccharset=iso8859-
1,shortname=mixed,errors=remount-ro 0 0
/dev/mmcbk0p3 /media/mmcbk0p3 ext4 rw,relatime,data=ordered 0 0
devpts /dev/pts devpts rw,relatime,gid=5,mode=620,ptmxmode=000 0 0
```

2) Permanent Read-Write

```
# mount -o remount,rw /
# vi /etc/fstab
```

stock fstab - you probably want to override this with a machine specific one

rootfs	/	auto	ro	1	1
proc	/proc	proc	defaults	0	0
devpts	/dev/pts	devpts	mode=0620,gid=5	0	0
usbfs	/proc/bus/usb	usbfs	defaults	0	0
tmpfs	/var/volatile	tmpfs	defaults,size=16M	0	0
tmpfs	/dev/shm	tmpfs	mode=0777	0	0
tmpfs	/media/	tmpfs	defaults,size=16M	0	0
tmpfs	/media/ram	tmpfs	defaults,size=16M	0	0

uncomment this if your device has a SD/MMC/Transflash slot

```
#/dev/mmcbk0p1 /media/card auto defaults,sync,noauto 0 0
```

```
/dev/mmcbk0p4 /home auto defaults 0 2
```

Change the red words “ro” to “defaults” like below.

stock fstab - you probably want to override this with a machine specific one

```

rootfs      /                  auto      defaults      1  1
proc        /proc              proc       defaults      0  0
devpts      /dev/pts          devpts     mode=0620,gid=5 0  0
usbfs       /proc/bus/usb        usbfs      defaults      0  0
tmpfs       /var/volatile      tmpfs      defaults,size=16M 0  0
tmpfs       /dev/shm          tmpfs      mode=0777      0  0
tmpfs       /media/           tmpfs      defaults,size=16M 0  0
tmpfs       /media/ram         tmpfs      defaults,size=16M 0  0

```

uncomment this if your device has a SD/MMC/Transflash slot

```

#/dev/mmcblk0p1    /media/card    auto      defaults,sync,noauto 0  0

/dev/mmcblk0p4     /home         auto      defaults          0  2

```

3) # vi /etc/init.d/utlcheck.sh

Change the red words to “rw” like below

```

#!/bin/sh
### BEGIN INIT INFO
# Provides: banner
# Required-Start:
# Required-Stop:
# Default-Start:    S
# Default-Stop:
### END INIT INFO

#check whether  is first run

TAGLINK_PATH=/home/sysuser
export TAGLINK_PATH

#set device config
mount -o remount,rw /

/usr/sbin/update-modules

sync

```

```
sync  
mount -o remount,rw /  
exit 0
```

4) Execute **sync**

5) After the modification is completed, it will effect after reboot.

#reboot