

ACG1000-M软件版本丢失导致设备启动不了，一直停留在如下界面

```

Bootloader v1.4.1(Build time: Aug 18 2014 - 14:12:35)
Flash: 4 MB

Press Ctrl+C to stop auto start : 0
Loading serial.no
** Unable to read "serial.no" from ide 0:1 **

***** load serial.no failed
Loading startup.cfg .
Loading vmlinuz.64 .....

Bootloader v1.4.1(Build time: Aug 18 2014 - 14:12:35)
Flash: 4 MB

Press Ctrl+C to stop auto start : 03
Semptian cn50MC1100#
Unknown command '-' - try 'help'
Semptian cn50MC1100#

```

可能由于设备异常掉电或者误操作，导致软件版本丢失。

重新灌装软件版本，操作如下：

1.修改脚本基本参数

用网线连接tftp服务器PC机和待测试的设备的ge0或者mgt0网口，并启动PC机上的TFTP/FTP服务软件，将版本SecPathACG1000-IMW110-R6605P01-ALL.BIN和menuboot.bin镜像文件复制到TFTP/FTP服务器软件目录下。

右键点击附件中的脚本文件（ACG1000自动灌装脚本v4.0\_20151225.js），选择写字板打开编辑脚本文件(如果使用记事本打开可能存在未分行的情况，不利于编辑)，修改脚本文件内参数，设置如下(请勿修改以下参数以外的内容)：

```

# $language = "JScript"

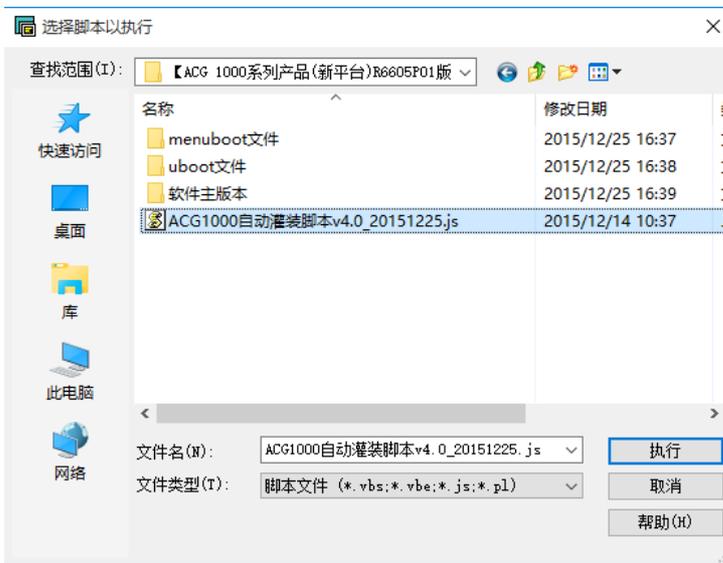
/*
*作者：刘声明
*版本：V2.0
  添加了硬盘格式化及老平台startup.cfg的配置参数
版本说明：主要是方便灌装人员灌装系统，减少参数设置错误导致不必要的问题及灌装慢的问题
*/

var serverip="192.168.3.222" //根据需要配置成TFTP或FTP服务器所在PC的IP地址。
var ipaddr="192.168.3.230/24" //根据需要配置设备的IP地址，需要和serverip在同一个网段。
var gateway="192.168.3.1" //配置和serverip、ipaddr的网关地址
var osimage="SecPathACG1000-IMW110-R6605P01-ALL.BIN" //系统镜像文件名，根据实际文件名修改
var disk2log = 1; //设备是否带硬盘存日志；有硬盘时该变量赋值"1",没有硬盘时变量赋值"0"
var mc1xx0_ports=12; //对于MC1100、MC1210、MC1220设备，6口写6,8口写8,10口写10,12口写12
var ver_menuboot="V4.0-20151124" //每次发布版本时，需要更改该变量的取值。
var filling_by_usb = 0; //从U盘灌装版本和menuboot将其置1，否则置0；从U盘一般是出厂灌装使用，会强制做老化测试。
var clear_syscfg = 1; //清除系统的配置，当需要清除时，将变量置1。

```

/\*以下代码及参数尽量别修改,碰到脚本不能执行等问题请联系相关人员\*/

2.在设备uboot界面，选择Script—>Run打开CRT脚本执行工具，选择自动灌装脚本文件：



脚本会自动设置uboot参数、启动menuboot程序、格式化硬盘、灌装版本文件、升级menuboot文件、设置启动参数，流程自动执行至序列号输入界面，此过程无需人工干预，如出现报错请参考以下说明

### 2.1 脚本自动设备环境参数

在脚本开始执行后，首先会清空历史uboot设置参数：

```

Semptian cn50MC1100#
Semptian cn50MC1100#
Semptian cn50MC1100#
Unknown command '' - try 'help'
Semptian cn50MC1100# run nuke_env
Un-Protected 1 sectors
. done
Erased 1 sectors
Semptian cn50MC1100#
Un-Protected 1 sectors
. done
Erased 1 sectors
Semptian cn50MC1100#
Un-Protected 1 sectors
. done
Erased 1 sectors
Semptian cn50MC1100# reset

Bootloader V1.4.1(Build time: Aug 18 2014 - 14:12:35)
Flash: 4 MB
Press Ctrl+C to stop auto start : 03
Semptian cn50MC1100#

```

脚本会自动重新设置uboot基本参数，并检测设备与服务器之间的网络连通性，如下：

```

Bootloader V1.4.1(Build time: Aug 18 2014 - 14:12:35)
Flash: 4 MB
Press Ctrl+C to stop auto start : 03
Semptian cn50MC1100#
Unknown command '' - try 'help'
Semptian cn50MC1100# date
date: 2015-07-03 (Fri)av Time: 11:04:40
Semptian cn50MC1100# setenv serverip 192.168.3.90
Semptian cn50MC1100# setenv ipaddr 192.168.3.230/24
Semptian cn50MC1100# setenv ethact octeth0
Semptian cn50MC1100# setenv loadaddr 336870912
Semptian cn50MC1100# tlm 0x50 0x2c 0xff
Semptian cn50MC1100# setenv elf_addr 536876032
Semptian cn50MC1100# setenv loadfile menuboot.bin
Semptian cn50MC1100# askenv menuboot
Please enter 'menuboot': tftp ${loadaddr} ${loadfile};bootoctlinux ${loadaddr} quiet console=ttyS0,$(baudrate) numcores=${numcores} $(mtdparts)
Semptian cn50MC1100# askenv image
Please enter 'image': tftp ${loadaddr} ${loadfile};bootoctlinux ${elf_addr} quiet console=ttyS0,$(baudrate) numcores=${numcores} $(mtdparts)
Semptian cn50MC1100# askenv menuboot_cf
Please enter 'menuboot_cf': fatload ide 0 ${loadaddr} menuboot;bootoctlinux ${loadaddr} console=ttyS0,$(baudrate) numcores=${numcores}
Semptian cn50MC1100# saveenv
Saving environment to Flash...
Un-Protected 1 sectors
Erasing Flash...
. done
Erased 1 sectors
writing to Flash... .done
Protected 1 sectors

```

如果设备与TFTP/FTP服务器连通性异常，则会有弹窗提示错误，并停止脚本执行，请排查网络情况：



如果设备与TFTP/FTP服务器网络连通正常，则正常进入启动menuboot步骤。

### 2.2 脚本自动启动menuboot并格式化硬盘

脚本会自动从TFTP服务器download menuboot程序并启动程序：

```

Semptian cn50MC1100#
Semptian cn50MC1100#
Semptian cn50MC1100# ping 192.168.3.50
Using octeth0 device
octeth0: Up 100 Mbps Full duplex (port 0)
host 192.168.3.50 is alive
Semptian cn50MC1100# run menuboot
Using octeth0 device
TFTP from server 192.168.3.50; our IP address is 192.168.3.230
Filename 'menuboot.bin'.
Load address: 0x36870912
Loading: #####
#####
done
Bytes transferred = 27449760 (1a2d9a0 hex), 2235 Kbytes/sec
[ 2.990578] tmp42i 0-004c: Could not read configuration register (-5)
/sbin/rc starting
Mounting file systems
Setting up loopback
CVMX_SHARED: 0x1209e0000-0x120d50000
Active coremask = 0x1
Interface 0 has 3 ports (RGMII)
Page size 16384 bytes, memory regions:
open file /tmp/log_shareinfo failed
0: 0x800000000ff30000 -> 0x800000000fffc000 (835584 bytes)
open file /tmp/log_shareinfo failed
1: 0x8000000032000000 -> 0x8000000040000000 (234881024 bytes)
open file /tmp/log_shareinfo failed
2: 0x80000000410000000 -> 0x80000000420000000 (268435456 bytes)
open file /tmp/log_shareinfo failed
Buddy initialized
open file /tmp/log_shareinfo failed
Slub initialized
open file /tmp/log_shareinfo failed
ge0 MAC address is : 00:21:45:01:19:20
ge1 MAC address is : 00:21:45:01:19:21
ge2 MAC address is : 00:21:45:01:19:22
ge3 MAC address is : 00:21:45:01:19:23
ge4 MAC address is : 00:21:45:01:19:24
ge5 MAC address is : 00:21:45:01:19:25
ge6 MAC address is : 00:21:45:01:19:26

```

脚本会自动运行menuboot内的磁盘检测工具检测设备磁盘是否正确识别，如果正确识别将自动进行格式化，格式化过程比较漫长，请勿中断操作：

```

* 7. Input device macbase.
* e. Exit.
*****
Please input your choice[1-e]:4
smartctl 6.1 2013-03-16 r3800 [mips64-linux-2.6.32.61-cavium-octeon] (local build)
Copyright (C) 2002-13, Bruce Allen, Christian Franke, www.smartmontools.org

== START OF ENABLE/DISABLE COMMANDS SECTION ==
SMART Enabled.

hard disk check success
==Do you want to reformat hard disk[Y/N]?==Y

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
   (e.g., DOS FDISK, OS/2 FDISK)

Command (m for help):
Disk /dev/sda: 500.1 GB, 500107862016 bytes
255 heads, 63 sectors/track, 60801 cylinders
Units = cylinders of 16065 * 512 = 8223280 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1            1         60801    488384001   83  Linux

Command (m for help): Selected partition 1

Command (m for help): command (m for help): command (m for help): Command action
  e extended
  p primary partition (1-4)
Partition number (1-4): First cylinder (1-60801, default 1): Using default value 1

```

硬盘格式化完成：

```

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1            1         60801    488384001   83  Linux

Command (m for help): Command (m for help): The partition table has been altered.
Calling ioctl() to re-read partition table
mkfs 1.42.7 (21-Jan-2013)
Filesystem label=
OS type: Linux
Block size=4096 (log=2)
Fragment size=4096 (log=2)
Stride=0 blocks, stripe width=0 blocks
30531584 inodes, 122096000 blocks
6104800 blocks (5.00%) reserved for the super user
First data block=0
Maximum filesystem blocks=4294967296
327 block groups
32768 blocks per group, 32768 fragments per group
8192 inodes per group
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208,
    4096000, 7962624, 11239424, 20480000, 23887872, 71663616, 78675968,
    102400000

Allocating group tables: done
Writing inode tables: done
Creating journal (32768 blocks): done
Writing superblocks and filesystem accounting information: done

[ 186.612693] EXT3 fs: sda1: couldn't mount because of unsupported optional features (240).
mount hard disk success.

*****
*                               *
*   ADVANCE FUNCTION MENU:     *
* 1. Clear current configure file. *
* 2. Clear all files in flash card. *
* 3. Configure control plane memory. *
* 4. Format the Hard Disk. *
* 5. Input software serial number. *
* 6. Input hardware serial number. *
* 7. Input device macbase. *
* e. Exit. *
*****

```

2.3 脚本会自动清除并升级版本文件和menuboot。

脚本自动清除配置：





```
Please input your choice[0-8]:8
Advance Password:
*****
*
*          ADVANCE FUNCTION MENU:
* 1. Clear current configure file.
* 2. Clear all files in flash card.
* 3. Configure control plane memory.
* 4. Format the Hard Disk.
* 5. Input software serial number.
* 6. Input hardware serial number.
* 7. Input device macbase.
* e. Exit.
*****

Please input your choice[1-e]:5
Please input serial number:110100100114101414572479
serial number update success !
Please input device macbase[0021453FDE9A]:586AB13ADC34
device macbase update success !
Please input hardware serial number[219801A0QQ914AP00001]:
```

如果MAC地址已提前写入，menuboot程序将跳过此步骤并提升，请务必在4.2.1章节软件界面检查M AC定制化的正确。跳过截图如下：

```
Please input your choice[0-8]:8
Advance Password:
*****
*
*          ADVANCE FUNCTION MENU:
* 1. Clear current configure file.
* 2. Clear all files in flash card.
* 3. Configure control plane memory.
* 4. Format the Hard Disk.
* 5. Input software serial number.
* 6. Input hardware serial number.
* 7. Input device macbase.
* e. Exit.
*****

Please input your choice[1-e]:5
Please input serial number:110100000115070250328885
serial number update success !
device basemac already set.
Please input hardware serial number[219801A0QQ914AP00001]:219801A0QQ914AP00001
device hardware serial update success !
*****
*
*          ADVANCE FUNCTION MENU:
* 1. Clear current configure file.
* 2. Clear all files in flash card.
```

MAC地址输入正确会自动进入输入客户硬件序列号界面，硬件序列号根据客户要求规则填入：

```
Please input your choice[0-8]:8
Advance Password:
*****
*
*          ADVANCE FUNCTION MENU:
* 1. Clear current configure file.
* 2. Clear all files in flash card.
* 3. Configure control plane memory.
* 4. Format the Hard Disk.
* 5. Input software serial number.
* 6. Input hardware serial number.
* 7. Input device macbase.
* e. Exit.
*****

Please input your choice[1-e]:5
Please input serial number:110100000115070250328885
serial number update success !
device basemac already set.
Please input hardware serial number[219801A0QQ914AP00001]:219801A0QQ914AP00001
device hardware serial update success !
*****
*
*          ADVANCE FUNCTION MENU:
* 1. Clear current configure file.
* 2. Clear all files in flash card.
```

至此，脚本灌装软件版本文件全部完成，输入e返回menuboot主菜单，选择0重启系统，启动过程不做任何操作系统将自动进入到主系统中。

注：由于menuboot.bin镜像文件过大，上传有问题，如果有需要可以联系我。