

MTK Android系统卡刷Update.zip刷机包制作教程

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一 基础知识和工具准备

1 linux基础知识, 文件目录权限知识

2 官方的ROM, 制作卡刷就只需要两个文件boot.img和system.img

以g6i最新的Android2.2官方ROM为例

官方编号: 10HX1_HVGA_AND_V22_V01_101222_COM

```
-rw-r--r-- 1 spring spring 2.3M 2010-12-22 17:15 boot.img
-rw-r--r-- 1 spring spring 21K 2010-12-22 17:15 logo.bin
-rw-r--r-- 1 spring spring 164 2010-12-22 17:15 MT6516_Android_scatter.txt
-rw-r--r-- 1 spring spring 42K 2010-12-22 17:15 preloader_bird16_a10y.bin
-rw-r--r-- 1 spring spring 317K 2010-12-22 17:15 ramdisk.img
-rw-r--r-- 1 spring spring 551K 2010-12-22 17:15 ramdisk-recovery.img
-rw-r--r-- 1 spring spring 2.6M 2010-12-22 17:15 recovery.img
-rw-r--r-- 1 spring spring 29K 2010-12-22 17:15 secro.img
-rw-r--r-- 1 spring spring 112M 2010-12-22 17:15 system.img
-rw-r--r-- 1 spring spring 124K 2010-12-22 17:15 uboot_bird16_a10y.bin
-rw-r--r-- 1 spring spring 1.5M 2010-12-22 17:15 userdata.img
```

```
weiqk@ubuntu:~/mobile/rom/10HX1_HVGA_AND_V22_V01_101222_COM_G6i/10HX1_HVGA_AND_V22_V01_101222_COM/BIN$ ls -lh
总计 119M
-rw-r--r-- 1 weiqk weiqk 2.3M 2010-12-22 17:15 boot.img
-rw-r--r-- 1 weiqk weiqk 21K 2010-12-22 17:15 logo.bin
-rw-r--r-- 1 weiqk weiqk 164 2010-12-22 17:15 MT6516_Android_scatter.txt
-rw-r--r-- 1 weiqk weiqk 42K 2010-12-22 17:15 preloader_bird16_a10y.bin
-rw-r--r-- 1 weiqk weiqk 317K 2010-12-22 17:15 ramdisk.img
-rw-r--r-- 1 weiqk weiqk 551K 2010-12-22 17:15 ramdisk-recovery.img
-rw-r--r-- 1 weiqk weiqk 2.6M 2010-12-22 17:15 recovery.img
-rw-r--r-- 1 weiqk weiqk 29K 2010-12-22 17:15 secro.img
-rw-r--r-- 1 weiqk weiqk 112M 2010-12-22 17:15 system.img
-rw-r--r-- 1 weiqk weiqk 124K 2010-12-22 17:15 uboot_bird16_a10y.bin
-rw-r--r-- 1 weiqk weiqk 1.5M 2010-12-22 17:15 userdata.img
weiqk@ubuntu:~/mobile/rom/10HX1_HVGA_AND_V22_V01_101222_COM_G6i/10HX1_HVGA_AND_V22_V01_101222_COM/BIN$
```

2.1 其中三个bin文件

```
-rw-r--r-- 1 spring spring 21K 2010-12-22 17:15 logo.bin
-rw-r--r-- 1 spring spring 42K 2010-12-22 17:15 preloader_bird16_a10y.bin
-rw-r--r-- 1 spring spring 124K 2010-12-22 17:15 uboot_bird16_a10y.bin
```

```
weiqk@ubuntu:~/mobile/rom/10HX1_HVGA_AND_V22_V01_101222_COM_G6i/10HX1_HVGA_AND_V22_V01_101222_COM/BIN$ ls -lh
-rw-r--r-- 1 weiqk weiqk 21K 2010-12-22 17:15 logo.bin
-rw-r--r-- 1 weiqk weiqk 42K 2010-12-22 17:15 preloader_bird16_a10y.bin
-rw-r--r-- 1 weiqk weiqk 124K 2010-12-22 17:15 uboot_bird16_a10y.bin
weiqk@ubuntu:~/mobile/rom/10HX1_HVGA_AND_V22_V01_101222_COM_G6i/10HX1_HVGA_AND_V22_V01_101222_COM/BIN$
```

是需要通过刷机线才能升级的

2.2 剩下的img文件，Android刷机时用到就五个，这几个img文件都是可以用MTK官方提供的刷机软件Flash_tool通过usb线直接刷机的

```
-rw-r--r-- 1 spring spring 2.3M 2010-12-22 17:15 boot.img
-rw-r--r-- 1 spring spring 2.6M 2010-12-22 17:15 recovery.img
-rw-r--r-- 1 spring spring 29K 2010-12-22 17:15 secro.img
-rw-r--r-- 1 spring spring 112M 2010-12-22 17:15 system.img
-rw-r--r-- 1 spring spring 1.5M 2010-12-22 17:15 userdata.img
```

```
boot.img ramdisk.img ramdisk-recovery.img recovery.img secro.img system.img userdata.img
weiqk@ubuntu:~/mobile/rom/10HX1_HVGA_AND_V22_V01_101222_COM_G6i/10HX1_HVGA_AND_V22_V01_101222_COM/BIN$ ls *.img -alh
-rw-r--r-- 1 weiqk weiqk 2.3M 2010-12-22 17:15 boot.img
-rw-r--r-- 1 weiqk weiqk 317K 2010-12-22 17:15 ramdisk.img
-rw-r--r-- 1 weiqk weiqk 551K 2010-12-22 17:15 ramdisk-recovery.img
-rw-r--r-- 1 weiqk weiqk 2.6M 2010-12-22 17:15 recovery.img
-rw-r--r-- 1 weiqk weiqk 29K 2010-12-22 17:15 secro.img
-rw-r--r-- 1 weiqk weiqk 112M 2010-12-22 17:15 system.img
-rw-r--r-- 1 weiqk weiqk 1.5M 2010-12-22 17:15 userdata.img
weiqk@ubuntu:~/mobile/rom/10HX1_HVGA_AND_V22_V01_101222_COM_G6i/10HX1_HVGA_AND_V22_V01_101222_COM/BIN$
```

2.3 这两个镜像其实是boot.img和recovery.img镜像的文件压缩部分,学名ramdisk。需要更加深入研究手机怎么引导的同学可以研究。

```
-rw-r--r-- 1 spring spring 317K 2010-12-22 17:15 ramdisk.img
-rw-r--r-- 1 spring spring 551K 2010-12-22 17:15 ramdisk-recovery.img
```

3 yaffs压缩格式解压工具unyaffs,

3.1 yaffs是什么格式？

yaffs是第一个专门为NAND Flash存储器设计的嵌入式文件系统，适用于大容量的存储设备；并且是在GPL（General Public License）协议下发布的。

4 签名java jar包已经java环境。这个在mtk的机器上可以不用做，移动叔叔的Recovery已经绕过签名执行安装脚本了。

二 工作环境的建立

1 建立一个自己的工作目录，如 ~/mobile/diy/g6i/diyrom, ~在linux系统中代表用户自己的目录。比如你的用户名是mobileuncle，那么~就代表/home/mobileuncle

2 把unyaffs复制到~/bin目录，这个bin是一个可以执行的目录，里面放一些你自己常用的命令或者脚本，赋予unyaffs可以执行权限chmod 755 ~/bin/unyaffs

3 再在~/mobile/diy/g6i/diyrom目录下建立一个zip目录, 将你需要制作的boot.img复制到~/mobile/diy/g6i/diyrom/zip目录。

4 在~/mobile/diy/g6i/diyrom/zip/system目录下在建立一个system目录, 将你需要制作的system.img复制到~/mobile/diy/g6i/diyrom/zip/system目录。

5 进入~/mobile/diy/g6i/diyrom/zip/system目录,执行 unyaffs system.img解开system的文件包

6 删除system.img

```
spring@ubuntu:~/mobile/diy/g6i/diyrom/zip/system$ unyaffs system.img
```

```
end of image
```

```
spring@ubuntu:~/mobile/diy/g6i/diyrom/zip/system$ ls -alh
```

```
总计 112M
```

```
drwxr-xr-x 12 spring spring 4.0K 2010-12-31 06:25 .
drwxr-xr-x  3 spring spring 4.0K 2010-12-31 06:24 ..
drwxr-xr-x  2 spring spring 4.0K 2010-12-31 06:25 app
drwxr-xr-x  2 spring spring 4.0K 2010-12-31 06:25 bin
-rw-r--r--  1 spring spring 3.4K 2010-12-31 06:25 build.prop
drwxr-xr-x  8 spring spring 4.0K 2010-12-31 06:25 etc
drwxr-xr-x  2 spring spring 4.0K 2010-12-31 06:25 fonts
drwxr-xr-x  2 spring spring 4.0K 2010-12-31 06:25 framework
drwxr-xr-x  5 spring spring 12K 2010-12-31 06:25 lib
drwxr-xr-x  4 spring spring 4.0K 2010-12-31 06:25 media
drwxr-xr-x  3 spring spring 4.0K 2010-12-31 06:25 res
-rw-r--r--  1 spring spring 112M 2010-12-31 06:24 system.img
drwxr-xr-x  6 spring spring 4.0K 2010-12-31 06:25 usr
drwxr-xr-x  2 spring spring 4.0K 2010-12-31 06:25 xbin
```

```
spring@ubuntu:~/mobile/diy/g6i/diyrom/zip/system$ rm system.img
```

```
spring@ubuntu:~/mobile/diy/g6i/diyrom/zip$ ls -al
```

```
总计 2352
```

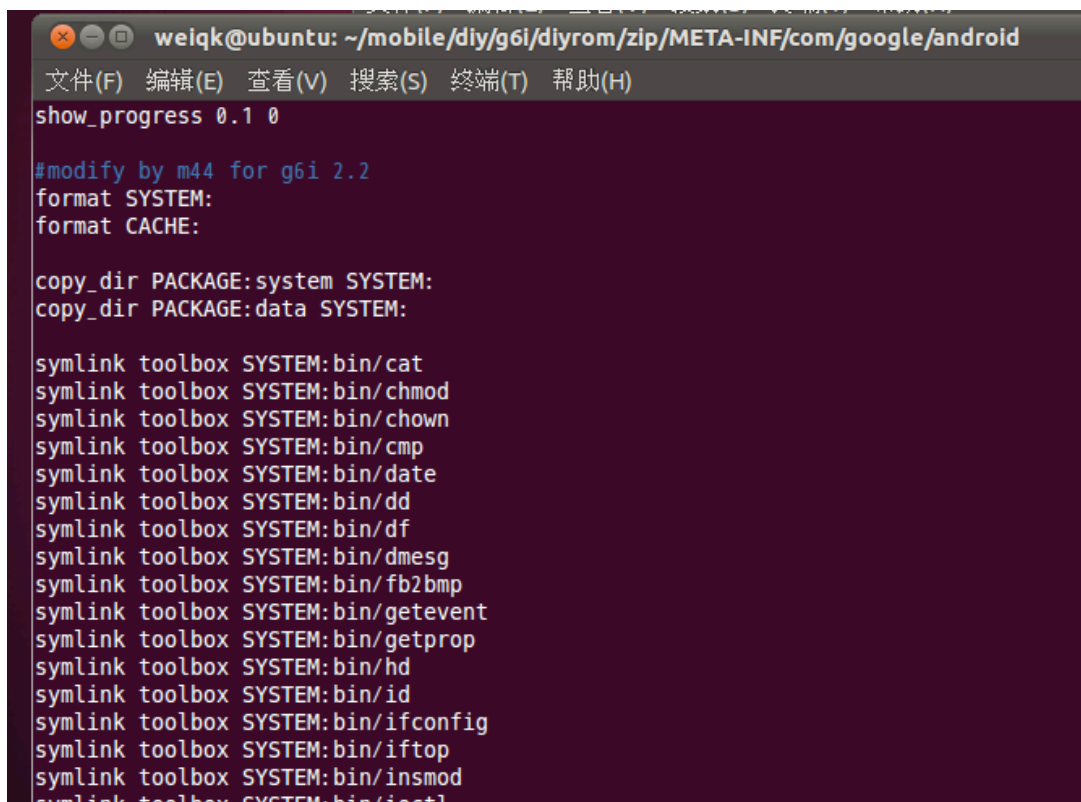
```
drwxr-xr-x  3 spring spring  4096 2010-12-31 06:24 .
drwxr-xr-x  3 spring spring  4096 2010-12-31 06:19 ..
-rw-r--r--  1 spring spring 2394112 2010-12-31 06:24 boot.img
drwxr-xr-x 12 spring spring  4096 2010-12-31 06:26 system
```

```
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system$ ls -alh
总计 112M
drwxr-xr-x  2 weiqk weiqk 4.0K 2010-12-31 06:24 .
drwxr-xr-x  3 weiqk weiqk 4.0K 2010-12-31 06:24 ..
-rw-r--r--  1 weiqk weiqk 112M 2010-12-31 06:24 system.img
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system$ unyaffs system.img
end of image
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system$ ls -alh
总计 112M
drwxr-xr-x 12 weiqk weiqk 4.0K 2010-12-31 06:25 .
drwxr-xr-x  3 weiqk weiqk 4.0K 2010-12-31 06:24 ..
drwxr-xr-x  2 weiqk weiqk 4.0K 2010-12-31 06:25 app
drwxr-xr-x  2 weiqk weiqk 4.0K 2010-12-31 06:25 bin
-rw-r--r--  1 weiqk weiqk 3.4K 2010-12-31 06:25 build.prop
drwxr-xr-x  8 weiqk weiqk 4.0K 2010-12-31 06:25 etc
drwxr-xr-x  2 weiqk weiqk 4.0K 2010-12-31 06:25 fonts
drwxr-xr-x  2 weiqk weiqk 4.0K 2010-12-31 06:25 framework
drwxr-xr-x  5 weiqk weiqk 12K 2010-12-31 06:25 lib
drwxr-xr-x  4 weiqk weiqk 4.0K 2010-12-31 06:25 media
drwxr-xr-x  3 weiqk weiqk 4.0K 2010-12-31 06:25 res
-rw-r--r--  1 weiqk weiqk 112M 2010-12-31 06:24 system.img
drwxr-xr-x  6 weiqk weiqk 4.0K 2010-12-31 06:25 usr
drwxr-xr-x  2 weiqk weiqk 4.0K 2010-12-31 06:25 xbin
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system$ rm system.img
```

7 到这一步update.zip的文件结构已经出来了,zip目录就是我们以后要刷机的目录了。现在就是增加刷机脚本了,在zip目录下建立一个META-INF/com/google/android/目录
mkdir -p META-INF/com/google/android

```
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip$ mkdir -p META-INF/com/google/android/  
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip$ ls -alh  
总计 2.4M  
drwxr-xr-x  4 weiqk weiqk 4.0K 2010-12-31 06:53 .  
drwxr-xr-x  3 weiqk weiqk 4.0K 2010-12-31 06:19 ..  
-rw-r--r--  1 weiqk weiqk 2.3M 2010-12-31 06:24 boot.img  
drwxr-xr-x  3 weiqk weiqk 4.0K 2010-12-31 06:53 META-INF  
drwxr-xr-x 12 weiqk weiqk 4.0K 2010-12-31 06:26 system  
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip$
```

如图



```
weiqk@ubuntu: ~/mobile/diy/g6i/diyrom/zip/META-INF/com/google/android  
文件(F) 编辑(E) 查看(V) 搜索(S) 终端(T) 帮助(H)  
show_progress 0.1 0  
  
#modify by m44 for g6i 2.2  
format SYSTEM:  
format CACHE:  
  
copy_dir PACKAGE:system SYSTEM:  
copy_dir PACKAGE:data SYSTEM:  
  
symlink toolbox SYSTEM:bin/cat  
symlink toolbox SYSTEM:bin/chmod  
symlink toolbox SYSTEM:bin/chown  
symlink toolbox SYSTEM:bin/cmp  
symlink toolbox SYSTEM:bin/date  
symlink toolbox SYSTEM:bin/dd  
symlink toolbox SYSTEM:bin/df  
symlink toolbox SYSTEM:bin/dmesg  
symlink toolbox SYSTEM:bin/fb2bmp  
symlink toolbox SYSTEM:bin/getevent  
symlink toolbox SYSTEM:bin/getprop  
symlink toolbox SYSTEM:bin/hd  
symlink toolbox SYSTEM:bin/id  
symlink toolbox SYSTEM:bin/ifconfig  
symlink toolbox SYSTEM:bin/iftop  
symlink toolbox SYSTEM:bin/insmod  
symlink toolbox SYSTEM:bin/iostat
```

8 在META-INF/com/google/android/目录下建立update-script脚本，可以从其他已经做好的rom里提取这个脚本来编辑。通过recovery卡刷系统的时候执行的就是这个脚本，做自己的android卡刷rom要做的通常就是编辑这个脚本和增减apk程序，移动叔叔的recovery已经把签名绕过了

```

weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system/app$ ls -a
.
..
AccountAndSyncSettings.apk
AcwfDialog.apk
ApplicationsProvider.apk
Bluetooth.apk
Browser.apk
Calculator.apk
Calendar.apk
CalendarProvider.apk
Calibrator.apk
CameraOpen.apk
CertInstaller.apk
Contacts.apk
ContactsProvider.apk
DataDialog.apk
DefaultContainerService.apk
DeskClock.apk
DownloadProvider.apk
DrmProvider.apk
Email.apk
EngineerMode.apk
ES_filemanager.apk
FancyWidget.apk
FMRadio.apk
Gallery.apk
GenieWidget.apk
Gmail.apk
GoogleBackupTransport.apk
GoogleCalendarSyncAdapter.apk
GoogleContactsSyncAdapter.apk
GoogleFeedback.apk
GooglePartnerSetup.apk
GoogleServicesFramework.apk
googlevoice.apk
HTMLViewer.apk
KaiXinAccountService.apk
kickback.apk
LatinIME.apk
LatinImeGoogle.apk
LatinImeTutorial.apk
Launcher2.apk
LiveWallpapers.apk
LiveWallpapersPicker.apk
MagicSmokeWallpapers.apk
Maps.apk
MarketUpdater.apk
MediaProvider.apk
MediaUploader.apk
Mms.apk
MtkBt.apk
Music.apk
NetworkLocation.apk
OneTimeInitializer.apk
PackageInstaller.apk
Phone.apk
PicoTts.apk
PinyinIME.apk
Protips.apk
Provision.apk
QQ.apk
QuickSearchBox.apk
RenRenAccountService.apk
Settings.apk
SettingsProvider.apk
SetupWizard.apk
SNSCommon.apk
SnsContentProvider.apk
SnsWidget24.apk
SnsWidget.apk
soundback.apk
SoundRecorder.apk
Stk1.apk
Stk2.apk
Street.apk
Talk.apk
talkback.apk
TelephonyProvider.apk
Term.apk
TtsService.apk
UserDictionaryProvider.apk
Vending.apk
VisualizationWallpapers.apk
VoiceSearch.apk
VolumeControl.apk
VpnServices.apk
YGPS.apk
ZhuyincangjieIME.apk
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system/app$

```

```

weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system/bin$ ls
acdktest      dalvikvm      geomagneticd  linker        netcfg        rild          start
am            date          getevent      ln            netd          rm            stop
applypatch    dbus-daemon   getprop       log           netstat      rmdir         surfaceflinger
applypatch_static dd            gsm0710muxd  logcat        newfs_msdos  rmmod        svc
app_process   debuggerd     gzip          logwrapper    notify       route        sync
audioloop     dexopt        hd            ls            nvram_daemon run-as        system_server
bmgr          df            id            lsmod         omx_tests    schedtest    tc
bootanimation dhcpcd        ifconfig      mediaserver   orientationd schedtop      testid3
boot_logo_updater dmesg         iftop         memorydumper  ping         sendevent    toolbox
btlogmask     dnsmasq      ime           meta_tst      pm           sensorTest   top
bugreport     dumpstate    input         mkdir         pppd         service      umount
camkey        dumpsys      insmod        monkey        printenv     servicemanager updater
cat           dvz          installld    mount         ps           setconsole   vdc
ccaptest      eptest       ioctl         mtk_agpsd    qemud        setprop      vmstat
ccci_fsd      factory      ionice        mtkbt        qemu-props   sh           vold
ccci_mdinit   fb2bmp       iptables     mtpd         racoon       showlease    watchprops
check_prereq  flash_image  keystore     muxreport    reboot       skia_test    wipe
chmod         fsck_msdos   keystore_cli mv            nandread     record       sleep        wpa_supplcant
chown         gdbjithelper kill          ndc           recovery     smd
cmp           gdbserver    kpd_auto     ndc           renice        stagefright
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system/bin$

```



```

weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system/bin$ ls
acdktest      ccci_fsd      factory       keystore_cli  ndc           recovery      system_server
am            ccci_mdinit   flash_image   kpd_auto      netcfg        rild          tc
applypatch    check_prereq  fsck_msdos    linker        netd          run-as        testid3
applypatch_static dalvikvm      gdbjithelper  logcat        nvram_daemon  schedtest     toolbox
app_process   dbus-daemon   gdbserver     logwrapper    omx_tests     sensorTest    updater
audioloop     debuggerd     geomagneticd  mediaserver    orientationd  service       vdc
bmgr          dexopt        gsm0710muxd  memorydumper  ping          servicemanager vold
bootanimation dhcpcd        gzip          meta_tst      pm            sh            wpa_supplcant
boot_logo_updater dnsmasq       ime           monkey        pppd          showlease
btlogmask     dumpstate     input         mtk_agpsd     qemud         skia_test
bugreport     dumpsys       installld     mtkbt         qemu-props    stagefright
camkey        dvz           iptables      mtpd          racoon        surfaceflinger
ccaptest      eptest       keystore      muxreport     record        svc
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip/system/bin$

```

三 ROM文件的自定义

1 APK程序的自定义

在system/app目录下就是ROM默认自带的apk应用程序，我们可以根据自己的需求来精简和添加我们的apk程序。

2 bin目录的软链删除

由于我们是从官方的压缩包里提取的系统，在bin目录下有很多可以执行的软链接,用rm命令吧所有软链删除。rm date getevent ln.....

已经删除完事的bin目录

我们可以根据自己的需求来增加脚本或者扩展程序，比如busybox，然后在安装脚本里添加软链

四 update-script安装脚本的编写和修改

update-script是整个update.zip刷机包工作的起点，Recovery程序执行的就是这个脚本。

需要我们来添加一些我们自己的个性化rom安装脚本

参考代码如下：

```
show_progress 0.1 0
```

```
#modify by m44 for g6i 2.2
```

```
format SYSTEM:
```

```
format CACHE:
```

```
copy_dir PACKAGE:system SYSTEM:
```

```
copy_dir PACKAGE:data SYSTEM:
```

symlink toolbox SYSTEM:bin/cat
symlink toolbox SYSTEM:bin/chmod
symlink toolbox SYSTEM:bin/chown
symlink toolbox SYSTEM:bin/cmp
symlink toolbox SYSTEM:bin/date
symlink toolbox SYSTEM:bin/dd
symlink toolbox SYSTEM:bin/df
symlink toolbox SYSTEM:bin/dmesg
symlink toolbox SYSTEM:bin/fb2bmp
symlink toolbox SYSTEM:bin/getevent
symlink toolbox SYSTEM:bin/getprop
symlink toolbox SYSTEM:bin/hd
symlink toolbox SYSTEM:bin/id
symlink toolbox SYSTEM:bin/ifconfig
symlink toolbox SYSTEM:bin/iftop
symlink toolbox SYSTEM:bin/insmod
symlink toolbox SYSTEM:bin/ioctl
symlink toolbox SYSTEM:bin/ionice
symlink toolbox SYSTEM:bin/kill
symlink toolbox SYSTEM:bin/lm
symlink toolbox SYSTEM:bin/log
symlink toolbox SYSTEM:bin/ls
symlink toolbox SYSTEM:bin/lsmmod
symlink toolbox SYSTEM:bin/mkdir
symlink toolbox SYSTEM:bin/mount
symlink toolbox SYSTEM:bin/mv
symlink toolbox SYSTEM:bin/nandread
symlink toolbox SYSTEM:bin/netstat
symlink toolbox SYSTEM:bin/newfs_msdos
symlink toolbox SYSTEM:bin/notify
symlink toolbox SYSTEM:bin/printenv
symlink toolbox SYSTEM:bin/ps
symlink toolbox SYSTEM:bin/reboot
symlink toolbox SYSTEM:bin/renice
symlink toolbox SYSTEM:bin/rm
symlink toolbox SYSTEM:bin/rmdir
symlink toolbox SYSTEM:bin/rmmod
symlink toolbox SYSTEM:bin/route
symlink toolbox SYSTEM:bin/schedtop
symlink toolbox SYSTEM:bin/sendevent
symlink toolbox SYSTEM:bin/setconsole
symlink toolbox SYSTEM:bin/setprop
symlink toolbox SYSTEM:bin/sleep
symlink toolbox SYSTEM:bin/smd
symlink toolbox SYSTEM:bin/start
symlink toolbox SYSTEM:bin/stop

```
symlink toolbox SYSTEM:bin/sync
symlink toolbox SYSTEM:bin/top
symlink toolbox SYSTEM:bin/umount
symlink toolbox SYSTEM:bin/vmstat
symlink toolbox SYSTEM:bin/watchprops
symlink toolbox SYSTEM:bin/wipe
```

```
set_perm_recursive 0 0 0755 0644 SYSTEM:
set_perm_recursive 0 2000 0755 0755 SYSTEM:bin
set_perm 0 3003 02755 SYSTEM:bin/netcfg
set_perm 0 3004 02755 SYSTEM:bin/ping
set_perm 0 2000 06755 SYSTEM:bin/reboot
set_perm_recursive 0 2000 0755 0755 SYSTEM:etc/ppp
set_perm 1002 1002 0440 SYSTEM:etc/dbus.conf
set_perm 1014 2000 0550 SYSTEM:etc/dhcpd/dhcpd-run-hooks
set_perm 0 2000 0550 SYSTEM:etc/init.goldfish.sh
set_perm 0 0 04755 SYSTEM:xbinsu
symlink /system/xbinsu SYSTEM:binsu
show_progress 0.1 10
```

```
show_progress 0.2 0
format BOOT:
write_raw_image PACKAGE:boot.img BOOT:
show_progress 0.2 10
```

会不会很迷茫，那么多命令，下面我们来总结一下脚本的语法

1 delete 分区:目标文件路径

删除文件，如：

```
delete DATA:data/com.android.vending
delete SYSTEM:app/QQ.apk
```

2 copy_dir PACKAGE:目录 分区：

从update包内复制文件到手机分区，如：

```
copy_dir PACKAGE:system SYSTEM:
```

3 delete_recursive 分区:子目录路径

删除目录，如：

```
delete_recursive DATA:dalvik-cache
```

4 format 分区

格式化分区,如

format BOOT:

5 show_progreess x.x x

显示刷机进度,如

show_progress 0.2 0

6 symlink 命令 分区:文件

建立软链 如:

symlink toolbox SYSTEM:bin/wipe

7 write_raw_image 刷img镜像

8 set_perm 设置权限

google的update-script脚本英文解析

1 copy_dir

Syntax: copy_dir <src-dir> <dst-dir> [<timestamp>]

Copy the contents of <src-dir> to <dst-dir>. The original contents of <dst-dir> are preserved unless something in <src-dir> overwrote them.

Ex: copy_dir PACKAGE:system SYSTEM:

2 format

Syntax: format <root>

Format a partition

Ex: format SYSTEM:, will format entire /system . Note: formatting erases data irreversibly.

3 delete

Syntax: delete <file1> [... <fileN>]

Delete file.

EX: delete SYSTEM:app/Calculator.apk, will delete Calculator.apk from system/app directory.

4 delete_recursive

Syntax: delete_recursive <file-or-dir1> [... <file-or-dirN>]

Delete a file or directory with all of it's contents recursively

Ex: delete_recursive DATA:dalvik-cache, will delete /data/dalvik-cache directory with all of it's contents

5 run_program

Syntax: run_program <program-file> [<args> ...]

Run an external program included in the update package.

Ex: run_program PACKAGE:install_busybox.sh, will run install_busybox.sh script (shell command) included in the update package.

6 set_perm

Syntax: set_perm <uid> <gid> <mode> <path> [... <pathN>]

Set ownership and permission of single file or entire directory trees, like 'chmod', 'chown', and 'chgrp' all in one

Ex: set_perm 0 2000 0550 SYSTEM:etc/init.goldfish.sh

7 set_perm_recursive

Syntax: set_perm_recursive <uid> <gid> <dir-mode> <file-mode> <path> [... <pathN>]

Set ownership and permission of a directory with all of it's contents recursively

Ex: set_perm_recursive 0 0 0755 0644 SYSTEM:app

8 show_progress

Syntax: show_progress <fraction> <duration>

Use of the on-screen progress meter for the next operation, automatically advancing the meter over <duration> seconds (or more rapidly if the actual rate of progress can be determined).

Ex: show_progress 0.1 0

9 symlink

Syntax: symlink <link-target> <link-path>

Create a symlink (like 'ln-s'). The <link-path> is in root:path format, but <link-target> is for the target filesystem (and may be relative)

参考知识, MT6516, 以g6i为例的分区

```
# cat /proc/mtd
```

```
dev:  size  erasesize name
```

```
mtd0: 00020000 00020000 "preloader"
```

```
mtd1: 00300000 00020000 "nvram"
```

```
mtd2: 00020000 00020000 "seccnfg"
```

```
mtd3: 00060000 00020000 "uboot"
```

```
mtd4: 00600000 00020000 "boot"
```

```
mtd5: 00600000 00020000 "recovery"
```

```
mtd6: 00120000 00020000 "secstatic"
```

```
mtd7: 00060000 00020000 "misc"
```

```
mtd8: 07800000 00020000 "system"
```

```
mtd9: 03c00000 00020000 "cache"
```

```
mtd10: 00300000 00020000 "logo"
```

```
mtd11: 000a0000 00020000 "expdb"
```

```
mtd12: 13740000 00020000 "userdata"
```

五 打包update.zip

在zip目录使用命令

```
zip -r ../my-update.zip .
```

将会把zip目录下的boot.img META-INF system 压缩到diyrom目录

```
weiqk@ubuntu:~/mobile/diy/g6i/diyrom/zip$ zip -r ../my-update.zip .
updating: boot.img (deflated 1%)
updating: META-INF/ (stored 0%)
updating: META-INF/com/ (stored 0%)
updating: META-INF/com/google/ (stored 0%)
updating: META-INF/com/google/android/ (stored 0%)
updating: META-INF/com/google/android/update-script (deflated 77%)
updating: system/ (stored 0%)
updating: system/fonts/ (stored 0%)
updating: system/fonts/DroidSansFallback.ttf (deflated 52%)
updating: system/fonts/DroidSans.ttf (deflated 46%)
updating: system/fonts/DroidSerif-Regular.ttf (deflated 42%)
updating: system/fonts/DroidSansArabic.ttf (deflated 45%)
updating: system/fonts/DroidSerif-Bold.ttf (deflated 41%)
updating: system/fonts/DroidSerif-BoldItalic.ttf (deflated 42%)
updating: system/fonts/DroidSans-Bold.ttf (deflated 45%)
updating: system/fonts/DroidSansMono.ttf (deflated 35%)
updating: system/fonts/DroidSerif-Italic.ttf (deflated 41%)
updating: system/fonts/DroidSansHebrew.ttf (deflated 44%)
updating: system/fonts/Clockopia.ttf (deflated 39%)
updating: system/fonts/DroidSansThai.ttf (deflated 47%)
```

命令结束会在zip的上一级目录生成我们自己制作的刷机包my-update.zip

```
weiqk@ubuntu:~/mobile/diy/g6i/diyrom$ ls -alh
总计 78M
drwxr-xr-x 3 weiqk weiqk 4.0K 2010-12-31 08:13 .
drwxr-xr-x 9 weiqk weiqk 4.0K 2010-12-31 05:53 ..
-rwxr-xr-x 1 weiqk weiqk 325 2010-12-31 07:49 build.sh
-rw-r--r-- 1 weiqk weiqk 78M 2010-12-31 08:13 my-update.zip
drwxr-xr-x 4 weiqk weiqk 4.0K 2010-12-31 06:53 zip
weiqk@ubuntu:~/mobile/diy/g6i/diyrom$
```

可以看到有个build.sh，这个是春哥自己做的自动打包和签名脚本。里面是这样的

```
cd zip
```

```
zip -r ../my-update.zip .
```

```
cd ..
```

```
java -jar ~/tools/testsign.jar my-update.zip m44-update-signed.zip
```

最后一行是签名，这个没有研究过。可以绕过就是了。到这里刷机包就制作完成了

```
updating: system/usr/share/zoneinfo/ (stored 0%)
updating: system/usr/share/zoneinfo/zoneinfo.idx (deflated 75%)
updating: system/usr/share/zoneinfo/zoneinfo.dat (deflated 68%)
updating: system/usr/share/zoneinfo/zoneinfo.version (stored 0%)
updating: system/usr/keychars/ (stored 0%)
updating: system/usr/keychars/qwerty2.kcm.bin (deflated 53%)
updating: system/usr/keychars/mt6516-kpd.kcm.bin (deflated 52%)
updating: system/usr/keychars/qwerty.kcm.bin (deflated 50%)
updating: system/usr/keylayout/ (stored 0%)
updating: system/usr/keylayout/qwerty.kl (deflated 63%)
updating: system/usr/keylayout/AVRCP.kl (deflated 57%)
updating: system/usr/keylayout/mt6516-kpd.kl (deflated 63%)
weiqk@ubuntu:~/mobile/diy/g6i/diyrom$ ls -alh
总计 155M
drwxr-xr-x 3 weiqk weiqk 4.0K 2010-12-31 08:42 .
drwxr-xr-x 9 weiqk weiqk 4.0K 2010-12-31 08:37 ..
-rwxr-xr-x 1 weiqk weiqk 113 2010-12-31 08:41 build.sh
-rw-r--r-- 1 weiqk weiqk 78M 2010-12-31 08:43 my-update-signed.zip
-rw-r--r-- 1 weiqk weiqk 78M 2010-12-31 08:42 my-update.zip
drwxr-xr-x 4 weiqk weiqk 4.0K 2010-12-31 06:53 zip
weiqk@ubuntu:~/mobile/diy/g6i/diyrom$
```

最后生成的my-update.signed.zip就可以放到sd卡刷机了

四 刷机

1 刷移动叔叔的中文Recovery，现在的版本是0.9.1，进入Recovery模式

2 使用第一项U盘模式，把做好的my-update.signed.zip通过usb模式复制到sd卡上

3 选择从SD卡用ZIP包刷机

4 等待几分钟，叔叔的Recovery会自动跳过签名执行刷机脚本的

5 用Recovery菜单的“重启手机”重启，这里要注意，如果不用这个菜单重启而是用别的方法手机重启后还是Recovery模式

6 刷机完成，因为只格式化了System分区，DATA分区没有动，所以用户数据没有丢失包括之前安装的软件都没丢

