Huawei sign tool Manual

1.Install the python package available in folder for no errors

2.Get appropriate information of signing package you intended to use

The working of sign tool is as follows

VersionDefine.bat > Make(firmware type) > Make (update type) > Packet (firmware type) > Output (firmware type)

* All files in bin directory contains the output signed firmware
* All firmware necessary to be signed are placed in images folder if extracted or balong if packed (use auto or make all for simplification)
* Bat folder contains all the necessary batch files for operation of singing
* Resources folder contains files for gzip file generation
* Xml folder contains files to to re-sign extracted bin files (merge/sign)
* Zlib is temporary directory used for generation of gzip firmware

# MakeUpdate\_FW\_V4\_T1.bat

@if "%1" =="" goto usage1 **# error he denotes the versiondefine.bat#**

@if "%2" =="" goto usage2 **# error he denotes the versiondefine.bat#**

@if "%3" =="" goto usage3 **# error he denotes the versiondefine.bat#**

del /f /q \*.bin **# used to delete previously generated files in root folder#**

cd ./Images **# used to change to images directory for files required to sign fulfillment#**

@REM determines if the number of images is complete

set FILE\_NAME=00-00110000-Fastboot.bin

@if not exist %FILE\_NAME% goto usage7 **# usage7 is called upon renaming if files are not available #**

set FILE\_NAME=01-00200000-M3Boot\_R11.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=02-00010000-M3Boot-ptable.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=03-00090000-Kernel\_R11.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=04-00220000-VxWorks\_R11.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=05-00230000-M3Image\_R11.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=06-00240000-DSP\_R11.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=07-00250000-Nvdload\_R11.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=08-00590000-System.bin

@if not exist %FILE\_NAME% goto usage7

set FILE\_NAME=09-005a0000-APP.bin

@if not exist %FILE\_NAME% goto usage7

:usage7  **#Usage& is double checked to verify if the used have renamed earlier while interchanging version of firmware #**

@echo off

@ren \*Fastboot\*.bin 00-00110000-Fastboot.bin

@ren \*M3Boot\*.bin 01-00200000-M3Boot\_R11.bin

@ren \*M3Boot-ptable\*.bin 02-00010000-M3Boot-ptable.bin

@ren \*Kernel\*.bin 03-00090000-Kernel\_R11.bin

@ren \*VxWorks\*.bin 04-00220000-VxWorks\_R11.bin

@ren \*M3Image\*.bin 05-00230000-M3Image\_R11.bin

@ren \*DSP\*.bin 06-00240000-DSP\_R11.bin

@ren \*Nvdload\*.bin 07-00250000-Nvdload\_R11.bin

@ren \*System\*.bin 08-00590000-System.bin

@ren \*APP\*.bin 09-005a0000-APP.bin

@REM determines if the number of images is complete  **#after the verification of files required double check if it's available #**

@echo on

set FILE\_NAME=00-00110000-Fastboot.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=01-00200000-M3Boot\_R11.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=02-00010000-M3Boot-ptable.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=03-00090000-Kernel\_R11.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=04-00220000-VxWorks\_R11.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=05-00230000-M3Image\_R11.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=06-00240000-DSP\_R11.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=07-00250000-Nvdload\_R11.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=08-00590000-System.bin

@if not exist %FILE\_NAME% goto usage6

set FILE\_NAME=09-005a0000-APP.bin

@REM Back to previous directory

@echo off

cd ../  **# after files are verified sign files is used by sign tool#**

@REM component signature first

sign.exe ./xml/packet\_fw\_V4\_T1.xml -p %1 %2

**^{**

**<?xml version="1.0" encoding="UTF-8"?>**

**<packet>**

**<sign>**

**<signVer>1.3</signVer> #auth version denotes v4#**

**<append>**

**<input>./Images/00-00110000-Fastboot.bin</input> # fastboot is taken as boot and first part to sign #**

**<output>./Images/00-00110000-Fastboot-s.bin</output> #fastboot signed is used used to output signed version#**

**</append>**

**<versionInfo>**

**<!--note>**

**<note: type的值需按照当前文件类型配置,参考《HUAWEI MBB 安全升级方案v2.02》文档>**

**</note-->**

**<type>3</type>**

**<productID>%1</productID>**

**<versionNum>%2</versionNum>**

**<ISOVersion>%3</ISOVersion>**

**<WebUIVersion>%4</WebUIVersion>**

**<algorithm>0</algorithm>**

**<deltaVer></deltaVer>**

**</versionInfo>**

**<group name="own">**

**<list>**

**<component fileId="0x00110000">./images/00-00110000-Fastboot.bin</component>**

**<component fileId="0x00200000">./images/01-00200000-M3Boot\_R11.bin</component>**

**<component fileId="0x00010000">./images/02-00010000-M3Boot-ptable.bin</component>**

**<component fileId="0x00090000">./images/03-00090000-Kernel\_R11.bin</component>**

**<component fileId="0x00220000">./images/04-00220000-VxWorks\_R11.bin</component>**

**<component fileId="0x00230000">./images/05-00230000-M3Image\_R11.bin</component>**

**<component fileId="0x00240000">./images/06-00240000-DSP\_R11.bin</component>**

**<component fileId="0x00250000">./images/07-00250000-Nvdload\_R11.bin</component>**

**<component fileId="0x00590000">./images/08-00590000-System.bin</component>**

**<component fileId="0x005a0000">./images/09-005a0000-APP.bin</component>**

**<component fileId="0x000b0000">./images/10-000b0000-CDROMISO.bin</component>**

**</list>**

**<encryption>**

**<privateKey type="der">private.key</privateKey>**

**<publicKey type="der">public.key</publicKey>**

**</encryption>**

**</group>**

**<!--group name="3rdparty">**

**<list>**

**<component fileId="0x00590000">hilink.bin</component>**

**<component fileId="0x005A0000">hilink.bin</component>**

**<component fileId="0x00130000">hilink.bin</component>**

**</list>**

**<encryption>**

**<privateKey type="der"></privateKey>**

**<certification></certification>**

**</encryption>**

**</group-->**

**</sign>**

**<merge>**

**<input>**

**<component fileId="0x00110000" desc="%1" seccode="0x4857455731312e31">./images/00-00110000-Fastboot-s.bin</component>**

**<component fileId="0x00200000" desc="%1" seccode="0x4857455731312e31">./images/01-00200000-M3Boot\_R11.bin</component>**

**<component fileId="0x00010000" desc="%1" seccode="0x4857455731312e31">./images/02-00010000-M3Boot-ptable.bin</component>**

**<component fileId="0x00090000" desc="%1" seccode="0x4857455731312e31">./images/03-00090000-Kernel\_R11.bin</component>**

**<component fileId="0x00220000" desc="%1" seccode="0x4857455731312e31">./images/04-00220000-VxWorks\_R11.bin</component>**

**<component fileId="0x00230000" desc="%1" seccode="0x4857455731312e31">./images/05-00230000-M3Image\_R11.bin</component>**

**<component fileId="0x00240000" desc="%1" seccode="0x4857455731312e31">./images/06-00240000-DSP\_R11.bin</component>**

**<component fileId="0x00250000" desc="%1" seccode="0x4857455731312e31">./images/07-00250000-Nvdload\_R11.bin</component>**

**<component fileId="0x00590000" desc="%1" seccode="0x4857455731312e31">./images/08-00590000-System.bin</component>**

**<component fileId="0x005A0000" desc="%1" seccode="0x4857455731312e31">./images/09-005a0000-APP.bin</component>**

**<component fileId="0x000b0000" desc="%1" seccode="0x4857455731312e31">./images/10-000b0000-CDROMISO.bin</component>**

**</input>**

**<output type="3" signed="true" algorithm="0" pid="" deltaVer="">%2</output>**

**</merge>**

**</packet>**

**}**

@REM packages a one-click upgrade image into zlib compression format and deletes all zlib files in the zlib\_temp directory.

set ZLIB\_FILE\_TEMP=zlib\_temp

@if not exist %ZLIB\_FILE\_TEMP% mkdir %ZLIB\_FILE\_TEMP%

@if exist %ZLIB\_FILE\_TEMP% del /q /f %ZLIB\_FILE\_TEMP%\\*.\*

C:\Python25\python compress.py c ./Images/00-00110000-Fastboot-s.bin ./%ZLIB\_FILE\_TEMP%/00-00110000-Fastboot-s.zlib 9

C:\Python25\python compress.py c ./Images/01-00200000-M3Boot\_R11.bin ./%ZLIB\_FILE\_TEMP%/01-00200000-M3Boot\_R11.zlib 9

C:\Python25\python compress.py c ./Images/02-00010000-M3Boot-ptable.bin ./%ZLIB\_FILE\_TEMP%/02-00010000-M3Boot-ptable.zlib 9

C:\Python25\python compress.py c ./Images/03-00090000-Kernel\_R11.bin ./%ZLIB\_FILE\_TEMP%/03-00090000-Kernel\_R11.zlib 9

C:\Python25\python compress.py c ./Images/04-00220000-VxWorks\_R11.bin ./%ZLIB\_FILE\_TEMP%/04-00220000-VxWorks\_R11.zlib 9

C:\Python25\python compress.py c ./Images/05-00230000-M3Image\_R11.bin ./%ZLIB\_FILE\_TEMP%/05-00230000-M3Image\_R11.zlib 9

C:\Python25\python compress.py c ./Images/06-00240000-DSP\_R11.bin ./%ZLIB\_FILE\_TEMP%/06-00240000-DSP\_R11.zlib 9

C:\Python25\python compress.py c ./Images/07-00250000-Nvdload\_R11.bin ./%ZLIB\_FILE\_TEMP%/07-00250000-Nvdload\_R11.zlib 9

C:\Python25\python compress.py c ./Images/08-00590000-System.bin ./%ZLIB\_FILE\_TEMP%/08-00590000-System.zlib 9

C:\Python25\python compress.py c ./Images/09-005a0000-APP.bin ./%ZLIB\_FILE\_TEMP%/09-005a0000-APP.zlib 9

@REM delete all mbn, bin files in the current directory

@if exist \*.mbn del /f /a \*.mbn

@if exist \*.bin del /f /a \*.bin

merge.exe ./xml/packet\_fw\_V4\_T1.xml -p :%1:%2 %3\_UPDATE\_%2.BIN

merge.exe ./xml/packet\_fw\_V4\_zip\_T1.xml -p :%1:%2 %3\_UPDATE\_%2.ZIP

@REM delete the mbn file of the current directory

@if exist \*.mbn del /f /a \*.mbn

@if exist MOBILE\_CONNECT\_HD.bin del /f /a MOBILE\_CONNECT\_HD.bin

@echo on

WizGen.exe "%3"

@move %3\_update\_%2.bin %FILE\_FIRMWARE\_PATH%

@move %3\_update\_%2.zip %FILE\_FIRMWARE\_PATH%

@move %3\_update\_\*.exe %FILE\_FIRMWARE\_PATH%

@echo off

@echo ##########################################################

@echo #### Congratulations, the package is successful.

@echo #### please check %FILE\_FIRMWARE\_PATH% Get the upgrade package

@echo ##########################################################

@echo #### Upgrade package version number %SOFTWARE\_VER%

@echo #### Background version number %DASHBOARD\_VER%

@echo #### Upgrade package ID %FILE\_DLOAD\_ID%

@echo #### Productroduct name %FILE\_PRODUCT\_NAME%

@echo ##########################################################

timeout 5

exit

exit

:usage1

@echo off

echo Error: Please provide the dload\_id

:usage2

@echo off

echo Error: Please provide the firmware version

:usage3

@echo off

echo Error: Please provide the product name

:usage4

@echo off

echo Error: Please provide the %FILE\_NAME% image,thanks!

timeout 5

exit