PalmTool User Manual

LIST

ONE	PALMTOOL APPLICATION SUMMARIZE4
1.1 DOW	NLOAD AND RUN4
1.2 MAIN	I USER INTERFACE4
TWO	PALMTOOL FUNCTION8
2.1 UPD/	ATE PROGRAM8
2.2 UPD/	ATE PFLASH8
2.3 PHOI	NE SETTING9
2.4 MUS	IC RING12
2.4.1 C	Freate Music Ring12
2.4.2 U	Ipdate Ring15
2.5 LOAE	O SDRAM AND EXPORT SDRAM15
2.5.1 D	PSP Test
2.5.2 R	Remote Debug19
2.6 DEBU	JG INFORMATION19
2.7 UPD/	ATE CALL RULE21
2.8 CON	VERT FILES23
2.8.1 N	Merge Upgrade File23
2.8.2 T	ransform Other Files
2.9 UPD/	ATE APPEND SETTING29
2.10 GEN	NERATE HTTP FILES30
2 10 1	Source HTML files 31

Centrality

PalmTool User Manual

2.10.2 Interface	33
2.10.3 Modify Source HTML Files	34
2.10.4 Transfrom Files	35
2.11 PHONE LIST	36
2.12 EXPORT AND IMPORT PHONE SETTING	37

One PalmTool Application Summarize

PalmTool is a Phone tool Software written by Centrality for updating the VoIP product's software and transforming file

1.1 Download and Run

The user can download the latest the PalmTool tool from http://www.aredfox.com/cdownloadstech.htm. Please decompress the PalmTool.zip. After decompressing it, the files include PalmTool.exe application software and some DLLs. Click the Palmtool.exe to run it.

PalmTool support two languages: (Chinese and English). If running on the Chinese OS, the UI is Chinese, otherwise the UI is English.

1.2 Main User Interface

Run PalmTool.exe, Popup a main windows as Figure 1-1-1. The main windows includes the function controls and the parameter controls.

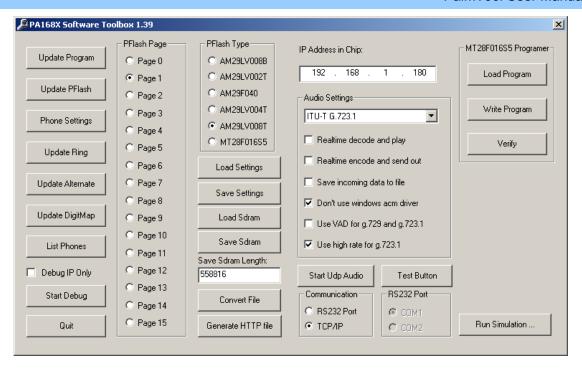


Figure 1-1-1

Update Program

Update the phone program.

Update PFlash

This control function is updating page flash of the phone.

Phone Settings

According the phone's IP Address, connect and open the setting page of the phone.

Update Ring

This control's function is updating the ring of the phone.

Update Alternate

This control's function is updating the multi system configure file of the phone.

Update Digitmap

This control's function is updating the call rule file.

List Phones

This control's function is showing the data information on line, such as phone code, mac address and ip address.

Debug IP Only

This control can limit the information of the debug window.

Start debug

This control can open the debug window.

PFlash Page

This area include all page option, Main function is to update each page.

PFlash Type

This area includes all flash type of the phone.

PFlash type	phone
AM29LV008B	PA168FB, iPH-E00, H2001
AM29LV002T	PA168B, PA168C, PA168E
AM29F040	SM168D, YUNXIN, UNISEN_D
AM29LV004T	PA168F, PA168FS, PINGHE
AM29LV008T	PA168S, PA168Q, 5111PHONE, iPH-E00-8B_F/NF
MT28F016S5	PA168T/H/R/U/V/W

Load Sdram

Load the information into the phone.

Save Sdram

Export the information form the phone.

Convert File

This control can into the transform file module.

Generate HTTP File

This control can into the HTTP page transform module.

Load Settings

This control's function can load the config of the phone into Sdram.

Save Settings

Save data of phone settings from SDRAM.

IP Address in Chip

This option is the IP Address of the phone.

Audio Setting

This list control includes all the audio codec.

• Run Simulation...

Run SimIPPhone Simulation, Please read the 《SimIPPhone User Manual》。

Two PalmTool Function

2.1 Update Program

This function can update the program of the phone. Here is the example of

PA168F.

Step one: Set IP Address

Press the key board's Local IP key of the phone, get the IP Address of the

Phone, and input the IP Address in Local IP.

Step two: The phone's program is a binary file. Please see the creating

binary file of the 2.8.1 section to know how to create the binary file. Click the

Update program button, select the correct the program file on the popup

window then open it.

Step three: Finish the Updating

After transmitting the program, the screen will show the message

"Updating...please wait until the update led stop on and off". There is a long

time in the updating the phone's program. After success, the LCD screen will

show "Ready for Call" if the phone has LCD. The network LED flashes, the

other two LED don't light.

2.2 Update PFlash

This function is implemented by the *Update PFlash* control. This control

can update the page flash. When compiling the program, every page creates

Page 8

a .hex program file. Please see below.

Step one: Set Parameter

First, input the IP address of the phone which you wanted to update. Then, select the page which needs update in the *PFlash Page* and the flash type in the *PFlash area*. According the phone's hardware type, some page flash need to read the config of the phone firstly, and then you can update the PFlash. Please see below.

PFLASH Type	Update Page
AM29LV008B	Page0
AM29LV002T	Page3
AM29LV004T/F040	Page7
AM29LV008T	Page15

Step two: Update PFlash

Click *Update PFlash* button, select the updating file on the popup window. Such as page0.hex, page7.hex, click *Open*. After "Loading data..." and "Write program...", The checking whether updating is success or failed is same as Update Program.

2.3 Phone Setting

Input the phone's IP Address, click the Phone Setting, the screen will popup the phone setting window as Figure 2-3-1.



Figure 2-3-1

The interface shows the basic the phone's setting. Click *protocol setting,* call setting and parameter, you can get other parameter of the phone.

Notice: the option parameter of the phone, please read the 《Phone Setting Manual》。

1. Modify Phone's Setting

After modifying the Phone's Setting, Click the *OK* button. If you want to update the phone's setting, please select *Yes* button, otherwise select *No* button.

2. Address Book

You can save 100 phone number and name into address book. It simplifies to dial up when you use address book and fast dial up function.

The address book's window wills popup when you click the *Address Book* botton. Double click *Name* or *Phone Number* to edit.

There are three controls at the bottom of the window:

Save/Return: Save the address book and retrun to *Phone Setting* window;

Empty: Empty all data in address book;

Cancel: Donn't save modify and return to *Phone Setting* window;

Number	Name	Phone Number	Number	Name	Phone Number	
1	102ip	192*168*1*102	2	phone102	102	Ī
3	pcip	192*168*1*88	4			
5			6			
7			8			
9			10			
11			12			
13			14			
15			16			
17			18			
19			20			
21			22			
23			24			
25			26			
27			28			
29			30			
31			32			
33			34			
35			36			
37			38			
39			40			
41			42			
43			44			
45			46			
47			48			
49			50			
51			52			
53			54			
55			56			

Figure 2-3-2

3. Parameter

According to the hardware type and other function of the phone, the user can read the correlative parameter. Now, it include some below some states:

The control can't be used

If the hardware type of the phone is PA168P or A168Q, the parameter control is gray and can't be used.

PA168V's Parameter

If the phone is the gateway PA168V, when the user clicks the parameter,

the double mode parameter (the double setting and the double prefixion)

information will be shown.

• IP Phone Parameter

If the phone is IP phone and isn't PA168P, PA168V or PA168Q, when

the user click the parameter, the ring type and the volumes of the output and

input of the hand free.

4. Protocol Setting

There are different parameters for different protocols; we support 7

protocols now, viz. H323、SIP、MGCP、Net2Phone、IAX2、WP and EPN, This

window includes the protocol setting and the high-level setting.

2.4 Music Ring

The Phone which uses AM29LV004T、AM29LV008T、AM29LV800T and

MT28F016 Flash can use the Music as ring voice, except gateway. The user

can download ring from www.aredfox.com/cdownlodasring.htm or create it self.

The procedure is first record a 8K sample 16 bit pcm music, then compress it

with G723 and G.729 codec, last merge the two compressed file into a file,.

This file is ring file which can download into the phone. Now list detailed

procedure.

2.4.1 Create Music Ring

Step one: Record ring voice

Page 12

We recommend the Cool Edit tool.

1) Run Cool Edit , click menu *File* , select *New...*, Set in the popup window as follow. Figure 2-4-1

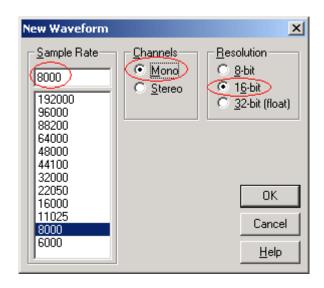


图 2-4-1

2) Play a music , click "record button. After recording, tail the ring and save a .pcm file, as bells.pcm. Now, the ring length must be between 7.680~7.689 second.

If you want to hear the ring, please the music file bells.pcm, set the parameter in the popup window as figure 2-4-1 and figure 2-4-2.

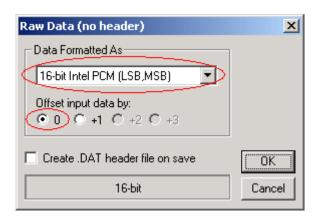


图 2-4-2

Step two: Encode

The musical ring voide include G723 and G729 condec. After recording, encode with G723 and G729.

- 1) G723 encode:
- Run PalmTool.exe , select ITU-T G.723.1 in audio encode setting.

Donn't check g.729 and g723 with VAD, Figure 2-4-3



图 2-4-3

- Click *Transform File*, select *audio file encode*.... Open file bells.pcm in popup window, and save as .dat file, such as bells_3.dat.
 - 2) G729 encode:
- Same as G723 , and select *ITU-T G.729.1 with Annex A&B* in *audio file* setting.
- Click *Transform File*, select *audio file encode*.... Open file bells.pcm in popup window, and save as .dat file, such as bells_9.dat
 - 3) Merge ring file

Run copy /B bells_3.dat+bells_9.dat bells.dat, and generate bells.dat.

2.4.2 Update Ring

Step one: Update ring

Input the ip address which phone you want to update in "IP Address", click

Update Ring, select the right file "bells, date", and open it.

Step two: Parameter Setting

Settings as *user define* in *Ring Type*.

2.5 Load SDRAM and Export SDRAM

Loading SDRAM is writing the data into the phone. Exporting is reading

the data from the phone and saving it. This function is used to the DSP test

and the remote debug.

2.5.1 DSP Test

Please test the G.723 and G.729 codec function to check the PCB layout

under the different speed. The detailed procedure is:

1. Test Data

We need to input the two kind standard test file for the testing.

g723in.dat file and the g729in.dat file are the standard file to be loading into

the phone. The g723out.dat file and the g729out.dat file are the standard file to

check the output result.

G.723 the standard input file: g723in.dat

G.723 the standard output file: g723out.dat

G.729 the standard input file: g729in.dat

G.729 the standard output file: g729out.dat

Page 15

2. Test Method

G.723 codec test

Step one: Run PalmTool.exe , input the IP address of the phone you want to test, select the *ITU-T G.723.1* in *audio codec setting*. Set "558816" in *Export SDRAM Length*.

Step two: Click *Begin Test*, the *Udp Debug Output* Window will be popuped, please press the digital "1234" continuously until the debug window shows the message"Page0 running". The phone is the page0 state.

Step three: Click Stop Test, close the Udp Debug Output window.

Step four: Click *Load SDRAM*, select the g723in.dat file in the popup window. The length of the g723in.dat file is 558816.

Step five: Click *Start Debug* after finishing importing data, open *Udp Debug Output* window, and enter "#8*9" in turn with phone's keypad, then the chip's DSP start testing G.723.1 encoding and decoding at various frequencies. When **22.2Mhz** appears in *Udp Debug Output* window, encoding and decoding finish, as figure=2-5-1, 2-5-2.

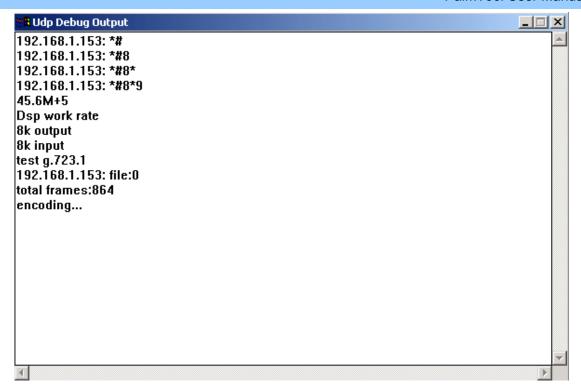


Figure 2-5-1

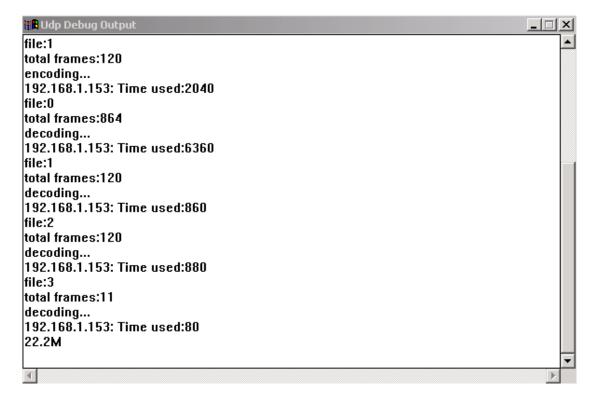


Figure 2-5-2

Step 6: Click Stop Debug, close Udp Debug Output window.

Step 7: Click Export SDRAM, export the codec data from phone's SDRAM

and save as a .dat file, such as g723testout.dat.

Step 8: Run DOS command window, goto the directory where save export file and golden result file, and compare the two file using command FC, like:

C:\ Dsptest>fc g723out.dat g723testout.dat

It means DSP working correctly at this frequency if there is no different, as

figure2-5-3.

```
🚾 命令提示符
                                                           驱动器 C_中的卷是 BOOTDISK
 卷的序列号是 20D6—1818
 C:、DSPTest 的目录
2002-12-12
           15:24
                             499,080 g723in.dat
2001-10-11
           10:37
                             558,816 g723out.dat
2003-05-13
           13:22
                             558,816 g723out_0513.dat
2003-05-18
           18:01
                             558,816 g723testout.dat
2002-12-12
           15:24
                             368,428 g729in.dat
2002-12-12
           15:24
                             519,092 g729out.dat
           13:25
2003-05-13
                             519,092 g729out_0513.dat
                       6,424,236,544 可用字节
C:\DSPTest>fc g723out.dat g723testout.dat
正在比较文件 g723out.dat 和 G723TESTOUT.DAT
FC: 找不到相异处
C:\DSPTest>_
```

图 2-5-3

G.729 Codec Test

It is same to test G.729's codec with test G.723's codec except next two:

- 1. First setting operation, you should select *ITU-T G.729 with Annex A&B* in *Audio Encode Setting*, and enter "519092" in *Export DSRAM Length.*
- 2. Fifth testing operation ,ou should enter "#8*0" with phone's keypad and start testing G.729 encoding and decoding , there will appear "Test g729" in

Udp Debug Output window, Then enter "#8*9", to make the chip's DSP run at different frequencies, and testing G.729 encoding and decoding.

2.5.2 Remote Debug

When you select *the remote debug* in the *Debug Level* in PalmTool, you can export the debug data from the SDRAM of the phone For example, hook off-dial- talking-hook on, press "local IP" button, which finish the debug. To get the debug information:

Step 1: Input ip address in "IP Address". Input the length of information in "Export Sdram Length"

Step 2: Press "Export Sdram" to export debug information and save as a .dat file like test.dat.

Step 3: Press "Transform File", Press "Transform Debug Information File...", open the exported file test.dat, and save as a .txt file like convert.txt which include all debug information. If there is some problem with the phone, user can send this file to us, and we will analyze it.

2.6 Debug Information

Clicking the *Begin Dbug* will the debug window named *Udp Debug Output*, The *Begin Debug* button will change to the *Stop Debug* button. The user can see the text message and the data message. Clicking the *Stop Debug* button will close the debug window. If there are multi IP Phone, the entire IP Phone debug message will show in the debug window. You can input the IP address of the IP Phone in the IP Address of the Palmtool and select the *Debug IP*

Only.

The debug level of the IP Phone will control the the message "Debug Level "includes the five option: The IP Phone will send degug information to IP broadcast address (255.255.255.255.255:8225) through UDP protocol. The Palmtool can receive these broadcast messages and show this information. "Debug Level "includes the five option:

Disable

Close debug output, when select this iption the PalmTool can't connect the IP Phone and can't do any operation, The user can through telnet http or menu mode to change the "Debug Level".

Output

In debug window, output the state of IP Phone, the key up and down as

Figure 2-6-1.

```
😘 Udp Debug Output
192.168.1.153: 1
192.168.1.153: 12
192.168.1.153: 123
192.168.1.153: 1234
192.168.1.153: handset down
task restart
PA168FB V1.08
Ready For Calls
192.168.1.153: PA168FB V1.08
Ready For Calls
192.168.1.153: 1
192.168.1.153: 19
192.168.1.153: 192
192.168.1.153: 192*
192.168.1.153: 192*1
192.168.1.153: 192*16
192.168.1.153: 192*168
192.168.1.153: 192*168*
192.168.1.153: 192*168*1
192.168.1.153: 192*168*1*
192.168.1.153: 192*168*1*1
192.168.1.153: 192*168*1*15
```

Figure 2-6-1

Output all

In the debug window, Output the text debug message and data messages send by phone or received by phone. See Figure 2-6-2, the red lines are the data information. The user can send all debug information to us, we will analyse this message.

```
Udp Debug Output
                                                                               00 47 00 4b 00 c0 a8 01 fa 06 b7
192.168.1.153: ras reg cfm
gk h323 version:4
153
RVGK
logon success
Ready For Calls
PA168FB V1.08
12 c0 18 f9 06 00 08 91 4a 00 04 01 00 c0 a8 01
fa 06 b8 02 01 00 48 64 02 00 31 00 35 00 33 06
00 52 00 56 00 47 00 4b 50 00 30 00 30 00 30 00
30 00 30 00 30 00 39 00 33 00 34 00 35 00 30 00
30 00 37 00 34 00 31 00 39 00 34 00 34 00 31 00
32 00 37 00 33 00 36 00 31 00 37 00 32 00 30 00
32 00 35 00 36 00 37 00 30 00 32 00 32 00 37 00
38 00 34 00 31 00 37 00 34 00 30 20 8e 00 03 40
Q1 2b 01 00 01 00 01 00
192.168.1.153: PA168FB V1.08
```

图 2-6-2

Remote Debug

Please refer section 2.5.2.

No check

Doesn't check the update file version and the hardware type? It should not been used as usually.

2.7 Update Call Rule

This function is updating the call rule of the phone by the update call rule

contral. The VOIP procedure's operation is same as the normal phone with the digital call map rule function. As example, you only press key "01082866902" to call a Beijing's phone, and you don't need press key "#" or "Call" key.

The detail operation is:

Step 1: Call Rule File

According the user's need, the call rule is saved in a test file. The length of the mobile's number is 11 bits and the prefixion of the mobile's number is 13 in China, the prefixion of the Chinese phone is 0, so, the rule is 013xxxxxxxxx. As Figure 2-7-1 is a Digitmap file. The length of the digitmap file can't execeed 2K.

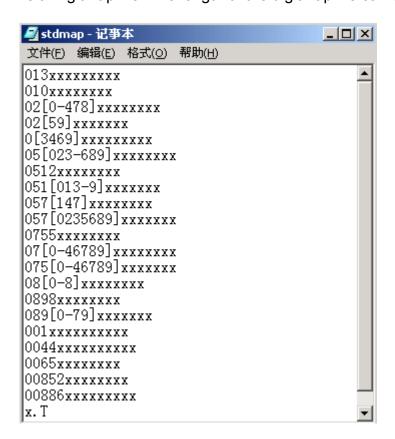


Figure 2-7-1

Step 2: Update File

Click the *Update Call Rule button*, open the call rule file(.txt) in the poup

window to update the file.

Step 3: Set Parameter

Run PalmTool, Select the *Use Call Map*.

2.8 Convert Files

It will pop up window as figure 2-7-1 when you click *Transform Files*, each button can transform and merge many kinds of files.

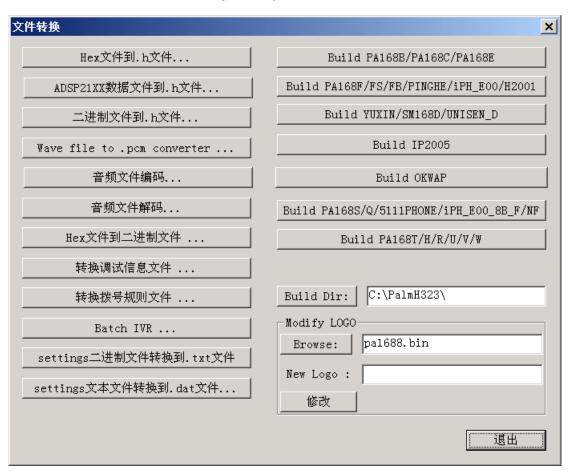


Figure 2-8-1

2.8.1 Merge Upgrade File

The method of the merging of the phone's program is the compiling and merging or the compiling. It can generate upgrade/burn file when building time after version 1.39(include 1.39), refer to 《PA1688 IP Phone Develop

Manual》's chapter 4. Before version 1.39 (not include 1.39), we can only generate .hex file during building time, and you can transform and merge all .hex file into upgrade/burn file with Palmtool. There are two methods to merge upgrade/burn file:

1. Fast Generate

In figure 2-7-1, the buttons at the right part of the interface are used to generate upgrade/burn file, each button is used for corresponding type of phone.

Click the button after you have finished building the program, it will generate two binary files into C:\Palmh323, .bin file is upgrade file, _all.bin is burn file.

2. Manual Generate

This method is more agility, you can select .hex files to generate program file. You can use this method to generate program file if you have modified the order of generating program files. Example for PA168F, as follow:

Step 1: Build programs, generate .hex files. How to build program refer to V1.38 and older versions's 《PA1688 IP Phone Develop Manual》's chapter 4; Step 2: Generate program file PA168F.bin

Run Palmtool, select *Transform Files*, then click *Hex File to Binary File* in popup window, create program file PA168F.bin in this folder, and click *Save*, as figure 2-7-2.

Step 3: Generate binary file

Adding page files into the created program file PA168F.bin in turn depending on the PFLASH type, the sequence is: g729misc.hex - g723.hex - g723misc.hex - page4.hex - page5.hex - g729.hex - page7.hex, you must add then in order, viz. select corresponding hex file and click *Open*, as figure 2-7-3.

Note: The order of page mergeing refer to V1.38 and older versions's 《PA1688 IP Phone Develop Manual》's chapter 4.

Click *Cancel* after you have added all .hex files, and there have generated PA168F.bin file into corresponding directory.

2.8.2 Transform Other Files

1. Transform debug information file...

It transforms the debug information .dat file which has exported from SDRAM during remote debug time to a .txt file.

2. Transform dial rule file...

It transforms the dial rule .txt file to .h file, which can be included by the program, and be the default dial rule file. C:/Palmh323/inc/stdmap.h is an .h file which has been transformed. You should not transform the .txt file to .h file when you want to update dial rule file, and use .txt file directly. Please refer the section 2.8.

3. Batch IVR

The IVR is the voice sending out after you pressed the function button.

They are composed of some basic voice files, such as "Local IP" is composed "Local" and "IP"., then convert it to a ... h head file with the *Batch IVR* control.

The detail operation is:

Step 1: Verify the Path

Open the project C:/Palmh323/PalmTool/PalmTool.dsw. Open the ConvertFileDlg.cpp file , the OnBatchWork() function calls the Pcm2H_All(CString strDstPath, CString strSrcPath) , The "strDstPath" is the .h file path after converting . the "strSrcPath" is the path of the source voice file. Such as the Chinese voice: Pcm2H_All (m_strSourceDir + _T("data\\ivr_cn\\"), m_strSourceDir + _T("data\\p_voice\\cn_m\\")) , the default of the m_strSourceDir is C:\\PalmH323\\ , so the path of the destination is C:\\PalmH323\\ data\\ivr_cn\\ , it is also the path of the .h file 's destination, the path of the voice file is C:\\PalmH323\\ data\\p_voice\\cn_m\\ , it is also the source path of the Chinese voice file. The user can modify the path parameter if the user need.

Step 2: Verify the names of the voice files

The names of the voice files and the names in the function Pcm2H_All() of the theConvertFileDlg.cpp file must be coherent. After converting, the same name of .h file will be created. As pcm2H_2(strDstPath, strSrcPath, _T("local")), the name of the voice file is local.pcm, the coherent .h name is local.h. The meaning of the voice file is:

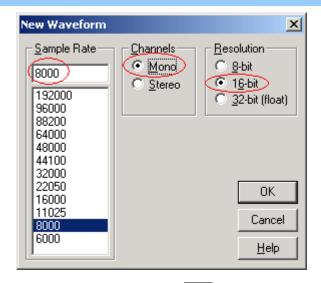
.h file name	.pcm file name	New words
0.H~10.H	0.pcm~10.pcm	One, two, three, four, five, six,
		seven, eight, nine, ten

BLANK.H	blank.pcm	No voice, silence
DOT.H	dot.pcm	dot
GATEWAY.H	gateway.pcm	gateway
HUNDRED.H	hundred.pcm	hundred
IP.H	ip.pcm	IP
LOCAL.H	local.pcm	local
MASK.H	mask.pcm	mask
NUMBER.H	number.pcm	number
ONE.H	one.pcm	one
SERVICE.H	service.cpm	service
SIGNAL.H	signal.pcm	
SUBNET.H	subnet.pcm	subnet
TWO.H	two.pcm	two

Step 3: Create the voice file

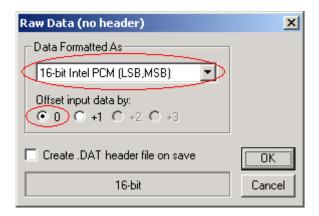
The example of the"本机", Record the voice of the "本机" with the Cool Edit tool. The max length of the voice file is 640 ms.

1. Run Cool Edit , Click the menu *File* , select *New...* option , Set parameter as the below figure.



2. Play the voice on the PC, click" record button. The max length of the voice file is 640 ms. After recording, please tail and name it local.pcm, then save in the C:\\PalmH323\\ data\\p_voice\\cn_m\\ directory.

According to the above operation, create all the voice file respectively, which is the languages that are included in function Pcm2H_All() in file ConvertFileDlg.cpp.



Step 4: Transform files

Run Palmtool.exe after you have finished creating all voice files, select *Transform Files*, and click *Batch IVR*, it will generate all .h files in corresponding directory, such as Chinese voices in C:\\PalmH323\\ data\\ivr_cn\\, English voices in C:\\PalmH323\\ data\\ivr_us\\, etc.

Step 5: Transform setting file to text file...

It can transform the setting information file (.dat) which gets from SDRAM to a text file (.txt).

Step 6: Transform setting file to binary file...

It can transform a text file (.txt) which includes the setting information to a binary file (.dat), which can be updated into phone's SDRAM.

2.9 Update Append Setting

There are four sets of system parameters of phone except current setting, and we can update them separately. Here are the two updating methods:

One: Using setting file for updating system parameters;

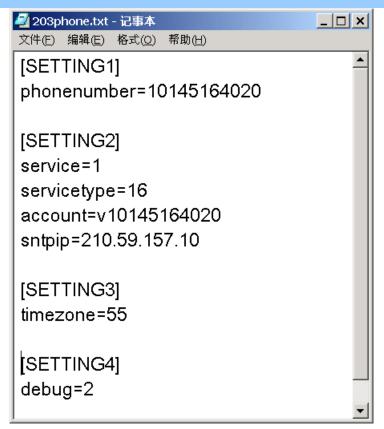
Two: Operating via telnet, You can refer to 《Phone User Guide》;

The detail operating of the first methos:

Step 1: Edit setting file

There are five sets of system parameter stored in IP phone, one of them is for current use. You can edit and save the other four system parameters in text file depending on your requirements. Detail requirements:

- 1. Imput system mark in "[]", such as [SETTING1], mark of first set of system parameters. Note: It must be capital letters in "[]";
 - 2. Paramter's names must be same with displayed in telnet;



Step 2: Select updating file

Run Palmtool.ext, click *Update Append Setting*, select and open file in popup window, such as setting.txt, do updating.

We can't examine whether the updating has been successful in Palmtool, until we telnet with the phone and examine it, you can do it refer to appendix one.

2.10 Generate HTTP Files

All Pa1688's phone and gateway can modify setting, look over phone book, update program... via web page. User can modify web page, and translate the web page which have been modified to .h file for program to use, the rebuild and generate the new program to update phone. You will see the new web page after updating.

2.10.1 Source HTML files

All source HTML files are putted in C:\PalmH323\PalmTool\HTTP_DOC\, and been grouped into four type (standard, dlink, ngtel, huawei3com) based on consumer's requirements, they are putted in sub directory \html_common\, \html_dlink\, \html_ngtel\, \html_huawei3com\, each type is include some different language versions, and layed in sub directories \cn(Chinese), \us(English), \de(Dermanic).

The detail of each standard HTML files:

1) Public Page

Public page is all pages except setting pages. They are same to all kinds of phone and gateway.

Public pages are composed of 7 pages:

page0.htm: Input password.

page1.htm: Update successfully.

page2.htm: Wrong password

page3.htm: Updating program, dial map and music ring, which popup when you press *update program and etc* in setting page.

page4a.htm、page5b.htm 和 page6c.htm:Three parts of address page, page4a.htm is address head index, page5b.htm is phone information, and page6c.htm is control.

2) Setting Page

Setting page is used for setting parameters, entering address book page

and updating program page. The setting pages are different for different hardware and protocol. They are divided into several parts by separator (note: don't modify the separators when modifying the HTML files):

<!--begin=[settings_head]-->.....<!--end--> : Including the begin, networking setting, voice setting. This is always displayed.

<!--begin=[settings_phoneonly]-->.....<!--end-->: Include ring type, hand free input and output. This is only for phone, and not supported by gateway.

<!--begin=[settings_pa168v]--><!--end-->: Including dual mode setting and dual mode prefix. This is only supported by PA168V gateway.

<!--begin=[settings_dialplan]--><!--end-->: Including setting of dial rules, call transfer, dial mapping. This is supported except using MGCP protocol.

- <!--begin=[settings_h323]--><!--end-->: Setting H323 protocol.
- <!--begin=[settings_sip]--><!--end-->: Setting SIP protocol.
- <!--begin=[settings_mgcp]--><!--end-->: Setting MGCP protocol.
- <!--begin=[settings_n2p]--><!--end-->: Setting Net2Phone protocol.
- <!--begin=[settings_iax2]--><!--end-->: Setting IAX2 protocol.
- <!--begin=[settings_epn]--><!--end-->:Setting EPN protocol.
- <!--begin=[settings_wp]--><!--end-->: Setting WP protocol.

There is only displaying the protocol setting in web page which the phone used. Protocol setting will not be shown when you set *Debug Level* as *no output* and log in use common password.

<!--begin=[settings_tail]--><!--end-->: Other phone setting and control,
This is always displayed.

2.10.2 Interface

Palmtool's *Generate HTTP Page* can transform HTML file to .h file. It wills popup the window as follows after click *Generate HTTP Page*.



1) Inpute Info

Web Type: type of Web page

Common: common web type;

dlink: DLINK web type;

huawei3com: huawei3com web type;

ngtel: NGTEL web type;

• Language: Web page's language, including Chinese(cn), English(us)

and Germanic(de) now;

 Replace title: Replace the title on the top of the page with "LOGO+software version";

- Hidden Password: Hidden all password in the web page, display them as "*" or"."
 - Output Folder: Output folder of converted files;
 - 2) Generate Public Page
 - Page Number: The number of public pages;
 - Browse source .htm files: Open each public page in turn;
- Start Generate Public Page: Click it to start generate the .h file for public pages into output directory;
 - 3) Generate Setting Page
- Browse source .htm files: Select the source HTML file for generate setting page;
- Start Generate Setting Page: Click it to start generate the .h file for setting page into output directory;

2.10.3 Modify Source HTML Files

You should notice follows when modifying source HTML files:

- 1) The summation of all .htm and picture files can't be larger than 64K byte;
- 2) You can only modify the .htm file in current framework, and can't add any file. The PalmH323 is need to modify if you want to add files;

3) You can't change all contents in <INPUT...> and <SELECT...>. You can delete the useless items;

- 4) You can't change <!--begin=[settings_xxxxx]--> and <!--end--> in setting page;
 - 5) You can't change page5b.htm;
 - 6) You can't change all "action=..." in <form method=POST action=/b>
- 7) You can't add any hyperlink or picture's which need more process, otherwise you should modify PalmH323's source code;

You can modify the mode of the page, the font, the background color to form your owner style other than above restricting.

You can modify the code in annotate as your need. And then modify the code of Palmtool after finish changing the setting page's http file.

2.10.4 Transfrom Files

You can run PalmTool to convert HTML file to .h file after you finish modifying HTML files. The naming rule of generated .h files refers to readme.txt in C:\PalmH323\Palmtool\HTTP_DOC\html_CN. Step by step as follows:

Step 1: Run palmtool, click *Generate Http Files*

Step 2: Input web page type, language, etc

Step 3: Generate public pages

You can skip this step if there is no public page

Page Number: 7;

Browse source .htm files: Browse each public page's source HTML file in turn. Example for standard Chinese, click *Browse Source .htm Files*, select C:\PalmH323\Palmtool\HTTP_DOC\html_CN in popup window, then click page0.htm – page1.htm – page2.htm – page3.htm – page4a.htm – page5b.htm – page6c.htm in turn. Click *Start Generate Public Page*, it will generate web_common_cn_i.h and web_common_cn_m.h into output directory.

Step 4: Generate setting page

you can skip this step if there is no setting page.

Click *Browse Source .htm Files*, select the directory such as C:\PalmH323\Palmtool\HTTP_DOC\html_CN in popup window, select settings.htm; Then click *Start Generate Setting Page* to generate the .h file for setting files.

Step 5: Copy all .h files to the corresponding sub directory of C:\PalmH323\Inc\web\.

Step 6: Build PalmH323, generate new program, updating phone.

2.11 Phone List

You can see all phones and gateways in the same sub network after click *Phone List*. The phone list contains: phone ip address, MAC address, phone type and version, how to get ip address, phone number, phone log on status and phone busy status, as figure 2-11-1.

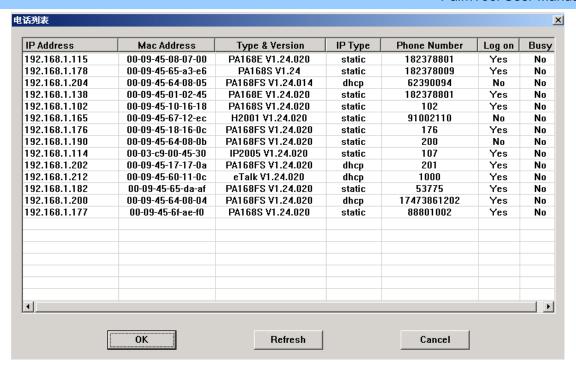


Figure 2-11-1

You can refresh the phone's information by clicking *Refresh* button. Select one of the lists, and click OK, the ip address of this one will be filled into *Client IP Address* automatically.

2.12 Export and Import Phone Setting

Export and Import the phone's parameters. We can simplify the setting of the phone using the two controls.

Processing as follows:

1. Export Phone Setting

Run Palmtool.exe, enter local ip address into *IP Address*, then click *Export Phone Setting*, and save the phone setting's parameter as a .txt file, such as settings.txt. The setting.txt includes all setting parameters except TCP/IP's parameters.

2. Import Phone Setting

You can get the setting file after operation 1, and you can import the setting into other phones which need the same setting.

Processing as follows:

Run Palmtool.ext, enter local ip address into *IP Address*, and then click *Import Phone Setting*, select setting file settings.txt, after reboot, the new settings become effective.