

HanPhone Configuration Manual



Document History

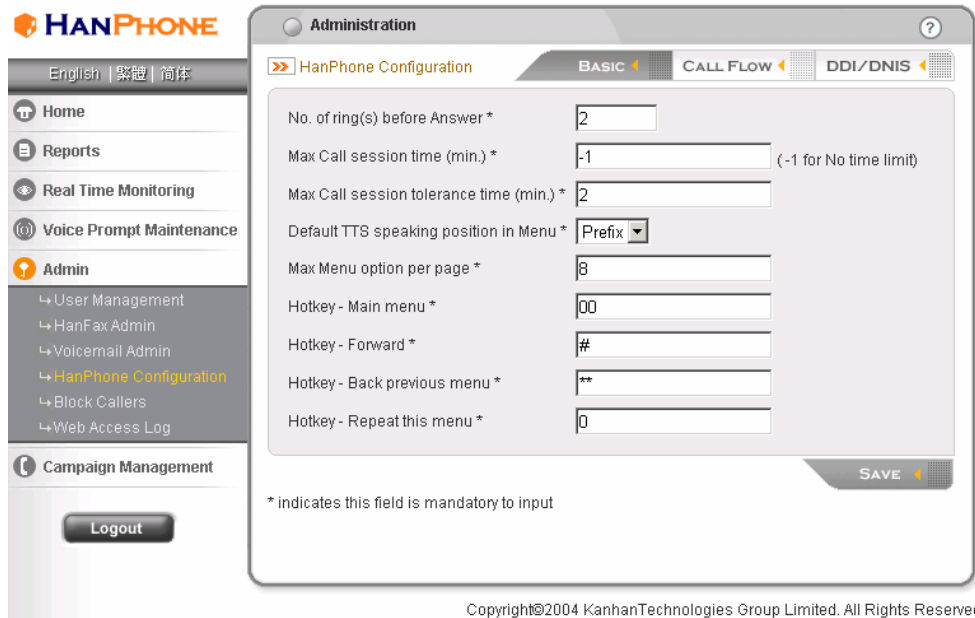
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1. Introduction

Although some parameters of HanPhone can be set in the HanPhone interface, there are still a lot of parameters can be set. The purpose of this document is to show how to have the advance setting of HanPhone of version 3.x.



HanPhone Interface

All configuration files are put under the “properties” directory located in the installation directory of HanPhone. Usually, the installation directory of HanPhone will be

C:\Program Files\HanPhone (version)

where (version) is the version number of HanPhone. Therefore, the location of the configuration files is:

C:\Program Files\HanPhone (version)\properties

There are 29 configuration files in total. They are all with extension “.properties”. There are 2 types of content in the properties files. The lines, which begin with “#”, are comments and the others are the parameter values of HanPhone. You can open and edit these properties files with any text editor. Both back slash (“\”) and forward slash (“/”) can be used in path value, but back slash must escape with back slash.

Example

```
# This is a comment, which starts with “#”  
  
# Both “path” value is the same, but  
# Back slash must escape with backslash  
path=C://temp  
path=C:\temp
```

The following table gives you a summary of the properties files.

Properties File	Purpose	Section
AdminConfig.properties	Call flow and channel mapping	2.8.1
asr.properties	Specify the sample ResourceBundle for each ASR engine	2.11.1
asr_grammar.properties	Map the content-type to java class handler	2.11.2
BlockedANI.properties	Specify the blocked caller ID (Abolished)	2.14.1
CleanFileSchedule.properties	Schedule for removing the temp HTML and XML files	2.5.1
CleanTTSFileSchedule.properties	Schedule for removing the cache files	2.5.1
DDIConfig.properties	Call flow and DDI mapping for digital line	2.8.2
hanphone_en.properties	Default voice scripting for English	2.2.3
hanphone_ja.properties	Default voice scripting for Japanese	2.2.4
hanphone_zh_CN.properties	Default voice scripting for Putonghua	2.2.2
hanphone_zh_HK.properties	Default voice scripting for Cantonese	2.2.1
HanphoneConfig.properties	Main configuration file	2.1.1
HanPhoneH2XConfig.properties	Define the path of exclude list and leaf list	2.9.2
HanPhoneH2XSelectTimeout.properties	Control URI-based <select> timeout settings.	2.9.1
HanPhoneOutboundServer.properties	Outbound server setting	2.4.2
HanphoneServer.properties	HanPhone server related setting	2.4.1
Infotalk_asr.properties	InfoTalk ASR setting	2.11.3
Infotalk_tts.properties	InfoTalk TTS setting	2.7.1
LineConfig.properties	Channel function setting	2.3.1
LineProtocol.properties	Digital line protocol setting	2.6.1
logging.properties	Log configuration file	2.12.1
ServiceMonitor.propertes	Define the setting for monitoring service in HanPhone command prompt mode	2.13.1
ServiceMonitor_service.properties	Define the setting for monitoring service in HanPhone service mode	2.13.1
Scansoft_tts.properties	Scansoft TTS duel engine setting	2.7.1
ScansoftSingle_tts.properties	Scansoft TTS single engine setting	2.7.1
Sinovoice_tts.properties	Sinovoice TTS engine setting	2.7.2
tts.properties	Specify the ResourceBundle for each TTS engine	2.7.3
VirtualDirectoryMapping.properties	Alias mapping	2.10.1

In this document, the flag and its default value will be bolded and some explanations will be followed. The support format, name and value for the flag will be enclosed by a box. All examples will be grey in background.

2. HanPhone Properties File

2.1. Principal Configuration

2.1.1. HanphoneConfig.properties

It is the main configuration file. It enables to control the setting of TTS Engine, debug, key etc.

1. HanPhone Document Root

DocumentRoot= ./root

Specify HanPhone's document root location. When "voice://hanphone/" comes across in HanPhone, HanPhone will map "voice://hanphone/" to this value.

2. Disconnect Tone Learning

TelephoneDisconnectTone=480,20,620,20,50,3,50,3,2

For analog line, HanPhone needs to know what is the disconnect tone properties, such as frequency, on/off tone length etc., but not for digital line. These disconnect tone properties allow HanPhone to determine when to perform the disconnection of a phone line. The disconnect tone properties may be different in different countries.

For example, in Hong Kong, the value should be "480,20,620,20,50,3,50,3,2"; whereas in China GZ, the value should be "430,30,0,0,40,10,40,10,2"

TelephoneDisconnectTone=A,B,C,D,E,F,G,H,I

This group of numbers is divided into 3 groups

Group 1: A, B and C, D

Group 2: E, F and G, H

Group 3: I

Group 1 is the tone frequency setting. All are measured as Hz.

"A" and "C" are the tone frequency. "B" and "D" are the frequency range, i.e. the acceptable tone frequency is from value A-B to A+B. Usually either "A" and "B" or "C" and "D" are set.

Group 2 is the ON/OFF tone length setting. All are measured as ms.

"E" is the ON tone length, "G" is the OFF tone length. "F" and "H" are length range, i.e. the acceptable tone length is from value E-F to E+F. All "E", "F", "G" and "H" are needed to be set.

Group 3, "I" is number of repeated tone period. The combination of ON and OFF tone signal is called a period. If a period with the properties as the same as the setting in group 1 and 2, after the period repeated "I" times, HanPhone will disconnect that phone line.

3. TTS engine

You must set these 2 flags for starting the TTS engine.

TTSEngineName=infotalk

```
[support engine name] = infotalk | scansoft | sinovoice
```

Specify the name of TTS engine used by HanPhone. The name should be separated by comma, if there are more than one TTS engine names.

TTSEngineMap=english:infotalk,cantonese:infotalk,Putonghua:infotalk

```
[support language] = cantonese | putonghua | english |  
                    Japanese | korean  
[support format] = [support language]:[support engine name],...
```

Map language with TTS engine name. This flag can map multiple TTS engine name together.

4. TTS Cache

EnableTTSCache=1

```
[support value] = 0 (disable) | 1 (enable)
```

Enable the TTS Cache

TTSCacheDirectory=./cache

Specify the path of Voice cache directory

5. Debug Files

EnableDebug=1

```
[support value] = 0 (disable) | 1 (enable)
```

Enable to output the XML/HTML files read by Hanphone

DebugTempFileDirectory=./debug_files

Specify the path for the above XML/HTML files

6. Database Setting

This specifies the location of the database log, if it is not correctly set, HanPhone monitoring report system will not work.

```
[support format] = [driver];[url];[user];[password]
[driver] = JDBC drivers for mysql (usually "com.mysql.jdbc.Driver")
[url] = a database url of the form jdbc:subprotocol:subname
[user] = the database user on whose behalf the connection is being made
[password] = the user's password
```

DatabaseLog=

Specify the location of the database log
(Default=com.mysql.jdbc.Driver;jdbc:mysql://localhost/hanphone_access;root)

DatabaseConfig=

com.mysql.jdbc.Driver;jdbc:mysql://localhost/hanphone_config;root
Specify the location of the database configuration

7. ASR engine

As this is an optional function, if you want to use the ASR function, the following flags should be specified.

EnableASREngine=0

```
[support value] = 0 (disable) | 1 (enable)
```

Enable ASR function

ASREngineName=infotalk

```
[ASR engine name] = infotalk
```

Specify the name of ASR Engine, and only InfoTalk is supported at this moment.

8. Speech Setting

This specifies the default speech speed and volume setting.

DefaultSpeechSpeed=0

```
-10 <= [support value] <= 5
```

Specify the default speech speed value

DefaultSpeechVolume=0

```
-10 <= [support value] <= 5
```

Specify the default speech volume value

DefaultMenuOptionSpeechPosition=suffix

```
[support value] = suffix | prefix
```

Specify the position of DefaultMenuOption

9. Connection Setting

This specifies the upper time limit for connecting the phone line.

MaxConnectionTime=-1

Specify the time limit in minute for connecting the phone. A connection time of -1 is interpreted as unlimited connection time.

MaxConnectionToleranceTime=5

Specify the time tolerance in minute after MaxConnectionTime

WebConnectionTimeout=30

Specify the timeout until a connection is established, in unit of sec. A value of zero means the timeout is not used.

SocketConnectionTimeout=30

Specify the maximum socket connection time, in unit of sec. A timeout value of zero is interpreted as an infinite timeout.

10. Wait Call Setting

This specifies the default wait call setting.

WaitCallRing=2

Specify the number of ring for wait call operation. If you have "Call name display" function, you need to set this flag at least to 2.

WaitCallAtBeginning=1

[support value] = 0 (disable) 1 (enable)
--

Enable the wait call after system initialization, this flag should be set to 0 for dial out survey.

11. Prefix setting

This specifies the prefix setting.

DialPrefix=

Specify the prefix before dialing out any number (no default value)

CallTransferPrefix=&

Specify the prefix key before call transferring. When doing call transfer, HanPhone may require to dial a prefix first. & - hook flash key, which is like dialing prefix '9'

12. Http callflow setting

This specifies the http callflow setting.

SendDnisAni=0

[support value] = 0 (disable) 1 (enable)
--

ANI = caller id , DNIS = called number

Specify the setting whether enable add sender and caller number in the link.

MaxOptionPerPage=8

Specify the maximum option in XML for HTML to XML

NavigationKeysEnable=1

[support value] = 0 (disable) 1 (enable)
--

Determine whether navigation keys should be use or not in <content>

13. Dialogue setting

This specifies the default dialogue setting in phone. All the music files should be in 8 bit mulaw 8khz wav format.

WarningMusic=./root/notify.wav

Specify the warning music path

PendingMusic=./root/music2.wav

Specify the waiting music file path

14. Playing Key Setting

This specifies the keys to set the playing characteristics.

KEY_INCREASE_SPEED=6

Specify the key to increase the playing speed

KEY_DECREASE_SPEED=4

Specify the key to decrease the playing speed

KEY_INCREASE_VOLUME=2

Specify the key to increase the playing volume

KEY_DECREASE_VOLUME=8

Specify the key to decrease the playing volume

KEY_RESET_SPEED=5

Specify the key to set the normal playing speed

KEY_RESET_VOLUME=5

Specify the key to set the normal playing volume

KEY_TOPMENU=00

Specify the key mapping to jump to the front page

KEY_BACKMENU=**

Specify the key mapping to go back 1 level

KEY_REPEAT=N/A
Specify the key to repeat the current menu

KEY_PAUSE=N/A
Specify the key to pause the voice file playback

KEY_FW_10_SEC=1
Specify the key to fast forward the playing 10 sec

KEY_FW_20_SEC=N/A
Specify the key to fast forward the playing 20 sec

KEY_FW_30_SEC=3
Specify the key to fast forward the playing 30 sec

KEY_FW_1_MIN=N/A
Specify the key to fast forward the playing 1 min

KEY_FW_2_MIN=N/A
Specify the key to fast forward the playing 2 min

KEY_FW_3_MIN=N/A
Specify the key to fast forward the playing 3 min

KEY_FW_10_MIN=7
Specify the key to fast forward the playing 10 min

KEY_FW_20_MIN=N/A
Specify the key to fast forward the playing 20 min

KEY_FW_30_MIN=9
Specify the key to fast forward the playing 30 min

KEY_BW_10_SEC=*1
Specify the key to back forward the playing 10 sec

KEY_BW_20_SEC=N/A
Specify the key to key to back forward 20 sec

KEY_BW_30_SEC=*3
Specify the key to back forward 30 sec

KEY_BW_1_MIN=*4
Specify the key to back forward 1 min

KEY_BW_2_MIN=N/A
Specify the key to back forward 2 min

KEY_BW_3_MIN=*6
Specify the key to back forward 3 min

KEY_BW_10_MIN=*7
Specify the key to back forward 10 min

KEY_BW_20_MIN=N/A
Specify the key to back forward 20 min

KEY_BW_30_MIN=*9
Specify the key to back forward 30 min

Example

```
#####
# 1. Document Root
DocumentRoot=./root

#####
# 2. Disconnect Tone
TelephoneDisconnectTone=480, 20, 620, 20, 50, 3, 50, 3, 2

#####
# 3. TTS Engine
# Support infotalk, scansoft, sinovoice
TTSEngineName=infotalk,scansoft,sinovice

# English => infotalk, cantonese => scansoft, putonghua => sinovoice
TTSEngineMap=english:infotalk,cantonese:scansoft,putonghua:sinovoice

#####
# 4. TTS Cache
EnableTTSCache=1
TTSCacheDirectory=./cache

#####
# 5. Debug files
EnableDebug=1
DebugTempFileDirectory=./debug_files

#####
# 6. Database Setting
DatabaseLog=
DatabaseConfig=com.mysql.jdbc.Driver;jdbc:mysql://192.168.1.24/hanphone_
config;root;root

#####
# 7. ASR Engine
EnableASREngin=1
ASREngineName=infotalk

#####
# 8. Speech Setting
DefaultSpeechSpeed=0
DefaultSpeechVolume=0
DefaultMenuOptionSpeechPosition=suffix

#####
# 9. Connection Setting
MaxConnectionTime=-1
MaxConnectionToleranceTime=5
WebConnectionTimeout=30
SocketConnectionTimeout=30

#####
# 10. Wait Call Setting
WaitCallRing=2
WaitCallAtBeginning=1

#####
# 11. Prefix Setting
CallTransferPrefix=&
DialPrefix=
```

```
#=====
# 12. Http call flow setting
MaxOptionPerPage=8
SendDnisAni=0
NavigationKeysEnable=1

#=====
# 13. Music setting
PendingMusic=./root/notify.wav
WarningMusic=./root/music2.wav

#=====
# 14. Playing key setting
KEY_TOPMENU=00
KEY_BACKMENU=**
KEY_REPEAT=N/A
KEY_PAUSE= N/A

KEY_FW_10_SEC=1
KEY_FW_20_SEC=N/A
KEY_FW_30_SEC=3
KEY_FW_1_MIN=N/A
KEY_FW_2_MIN=N/A
KEY_FW_3_MIN=N/A
KEY_FW_10_MIN=7
KEY_FW_20_MIN=N/A
KEY_FW_30_MIN=9

KEY_BW_10_SEC=*1
KEY_BW_20_SEC=N/A
KEY_BW_30_SEC=*3
KEY_BW_1_MIN=*4
KEY_BW_2_MIN=N/A
KEY_BW_3_MIN=*6
KEY_BW_10_MIN=*7
KEY_BW_20_MIN=N/A
KEY_BW_30_MIN=*9

KEY_INCREASE_SPEED=6
KEY_DECREASE_SPEED=4
KEY_INCREASE_VOLUME=2
KEY_DECREASE_VOLUME=8
KEY_RESET_SPEED=5
KEY_RESET_VOLUME=5
```

Some of the above settings can also be configured in the HanPhone interface, if **DatabaseConfig** is set.

Name in HanPhone interface	Name in HanPhoneConfig.properties
No. of ring(s) before Answer	WaitCallRing
Max Call session time (min.)	MaxConnectionTime
Max Call session tolerance time (min.)	MaxConnectionToleranceTime
Default TTS speaking position in Menu	DefaultMenuOptionSpeechPosition
Max Menu option per page	MaxOptionPerPage
Hotkey - Forward	KEY_FORWARD
Hotkey - Repeat this menu	KEY_REPEAT
Hotkey - Main menu	KEY_TOPMENU
Hotkey - Back previous menu	KEY_BACKMENU

2.2. Default Prompting Scripts

These files enable you to define the speech of the instructions or events. The ISO 8859-1 character encoding is used. For characters that cannot be directly represented in this encoding, Unicode escapes are used

2.2.1. hanphone_zh_HK.properties

It defines HanPhone speech in Cantonese words or phrases.

2.2.2. hanphone_zh_CN.properties

It defines HanPhone speech in Putonghua words or phrases.

2.2.3. hanphone_en.properties

It defines HanPhone speech in English words or phrases.

2.2.4. hanphone_ja.properties

It defines HanPhone speech in Japanese words or phrases.

2.3. Line Configuration

2.3.1. LineConfig.properties

It defines the wait call channels, call transfer channels and outbound channels. The channel number should start from 0. Also, -1 means any available channel and N/A means disable.

```
[support format] = [channel number] | [channel number]-[channel number]
```

WaitCallChannel=-1

Specify the channel number for call waiting.

CallTransferChannel=-1

Specify the channel number for call transferring

OutboundCallChannel=-1

Specify the channel number for outbound call.

Example

```
# Channel 0, 1, 4, 5, 6, 7, 8, 9, 10  
WaitCallChannel=0, 1, 4-10
```

```
# All Channel
```

```
CallTransferChannel=-1
```

```
# Channel 21, 22
```

```
OutboundCallChannel=21, 22
```

2.4. HanPhone Server Configuration

2.4.1. HanphoneServer.properties

It defines the server setting such as IP, port number, number of concurrent user, timeout etc.

server.ip=

Specify the IP of server (Empty value means all value)

server.port=2003

Specify the port number

server.users=20

Specify number of concurrent user

server.timeout=0

Specify the timeout time in seconds

server.accept.ip=

Specify the accept IP connection (Empty value means all IP is accepted. No domain name is accepted. Wild card can be used.)

server.deny.ip=

Specify the deny IP connection (Empty value means no denied IP. No domain name is accepted.)

server.authentication=0

[support value]= 0 (disable) 1 (enable)

Set whether need authenticate the connected client. This prevents anonymous user to perform HanPhone operation, such as start or stop channels. If this setting is enabled, username and password should be defined in format "user.username=password". For example, if username is "abc" with password "123", you need to add "user.abc=123"

Example

```
# Accept all ip if empty
server.ip=

# Port used by HanPhone
server.port=2003

# Number of admin user at most
server.users=20

# No timeout
server.timeout=0

# Accept from anywhere
server.accept.ip=

# No deny ip
server.deny.ip=

#
server.authentication=1

# username=abc; password=123
user.abc=123
```

2.4.2. HanPhoneOutboundServer.properties

It defines the outbound server setting such as IP, port number etc.

server.ip=

Specify the IP of server (Empty value means all value)

server.port=2005

Specify the port number

CheckOutboundJobDuration=3

Specify the duration of after each outbound job in second

Example

```
# Accept all ip if empty
server.ip=

# Port used by HanPhone
server.port=2004

# Pause for 2 seconds
CheckOutboundJobDuration=2
```

2.5. Temporary File Removal Schedule

2.5.1. CleanFileSchedule.properties and CleanTTSSchedule.properties

These files help you to set the schedule for cleaning the temporary file automatically. These two files have the same flag:

CleanFileSchedule is for cleaning the temp html and xml files. The temp files are located in "debug_files" under HanPhone installation directory.

CleanTTSSchedule is for cleaning the TTS cache files. The caches files are located in "cache" under HanPhone installation directory.

ScheduleType=1

```
[support value] = 0 (daily) | 1 (weekly)
```

Specify the schedule type

Weekday=1

```
[support value] = 1 (Sunday) | 2 (Monday) | 3 (Tuesday) |  
4 (Wednesday) | 5 (Thursday) | 6 (Friday) | 7 (Saturday)
```

Specify the weekly repeated day for cleaning

Time=00:00:00

```
[support format] = HH:MM:SS  
HH = 24-hour format of an hour with leading zeros  
MM = Minutes, with leading zeros  
SS = Seconds, with leading zeros
```

Specify the time for cleaning

Example

```
# Weekly cleansing  
ScheduleType=1  
  
# Weekly cleansing will be performed on every Monday.  
Weekday=2  
  
# Weekly cleansing will be performed at 15:00:00.  
Time=15:00:00
```

2.6. Digital Line Protocol Configuration

2.6.1. LineProtocol.properties

This configuration file is only used for T1 and E1 digital lines only. T1 signal consists of IDAP and IDAM.

Default=isdn

```
[support value] = isdn (IDAP in HK) | us_mf_io (IDAM in HK) |  
pdk_cn_r2_io (IDAM in CHINA)
```

Specify the signal type for digital line

Example

```
# IDAM T1 in Hong Kong  
Default=isdn
```

2.7. TTS Engine Configuration

2.7.1. Infotalk_tts.properties

This configuration file specifies the TTS setting for InfoTalk.

TTSEnginPath=C:\\Program Files\\InfoTalk\\Config\\TTS_can_put.cfg

Specify the location of InfoTalk speaker configuration file

TTSFormat=4

```
[support value] = 0(TTS_LINEAR_16BIT) | 1(TTS_MULAW_8BIT) |  
2(TTS_ALAW_8BIT) | 3(TTS_PCM_WAVE_16BIT) | 4(TTS_MULAW_WAVE_8BIT)
```

Specify the generated speech audio file format

TTSFrequency=8

Specify the sound frequency

TTSSpeed=200

```
100 <= [support value] <= 400
```

Specify the speech speed of the audio file

TTSSpeed_English=

Specify the speech speed of the audio file in English, it overrides **TTSSpeed**

TTSSpeed_Cantonese=

Specify the speech speed of the audio file in Cantonese, it overrides **TTSSpeed**

TTSSpeed_Putonghua=

Specify the speech speed of the audio file in Putonghua, it overrides **TTSSpeed**

TTSVolume=1

```
1 <= [support value] <= 4
```

Specify the volume of the audio file

TTSVolume_English=

Specify the volume of the audio file in English and it overrides **TTSVolume**

TTSVolume_Cantonese=

Specify the volume of the audio file in Cantonese and it overrides **TTSVolume**

TTSVolume_Putonghua=

Specify the volume of the audio file in Putonghua and it overrides **TTSVolume**

TTSDictionary=

```
[support format] = [language],[dictionary];...  
[language] = 0 (English) | 1 (Cantonese) | 2 (Putonghua) |  
              7 (Japanese) | 8 (Korean)  
[dictionary] = path of the dictionary file
```

Specify the user dictionary used by the TTS engine in format: <language>,<dictionary>;

TTSPreprocessor=1

[support value] = 0 (disable) 1 (enable)
--

Specify the TTS Preprocessor. TTS Preprocessor will try to correct the pronunciation for special text, such as date format, time format, etc.

TTSPreprocessorMapPath=./data

Specify the folder which stores the configuration file of the TTS Preprocessor

2.7.2. Scansoft_tts.properties and ScansoftSingle_tts.properties

Infotalk_tts.properties, Scansoft_tts.properties and ScansoftSingle_tts.properties have the following flags, but some of the flags may have different input range.

Scansoft_tts and ScansoftSingle_tts have the same ranges, but ScansoftSingle_tts.properties is for Japanese, Korean TTS and Scansoft_tts.properties is for Cantonese, English and Putonghua.

TTSEnginPath=C:\\Program Files\\ScanSoft\\Tts\\engine

Specify the folder location which contains ttsengine.dll

TTSFormat=4

```
[support value] = 0(TTS_LINEAR_16BIT) | 1(TTS_MULAW_8BIT) |  
2(TTS_ALAW_8BIT) | 3(TTS_PCM_WAVE_16BIT) | 4(TTS_MULAW_WAVE_8BIT)
```

Specify the generated speech audio file format

TTSFrequency=8

Specify the sound frequency

TTSSpeed=5

```
1 <= [support value] <= 9
```

Specify the speech speed of the audio file

TTSSpeed_English=

Specify the speech speed of the audio file in English, it overrides **TTSSpeed**

TTSSpeed_Cantonese=

Specify the speech speed of the audio file in Cantonese, it overrides **TTSSpeed**

TTSSpeed_Putonghua=

Specify the speech speed of the audio file in Putonghua, it overrides **TTSSpeed**

TTSVolume=8

```
1 <= [support value] <= 9
```

Specify the volume of the audio file

TTSVolume_English=

Specify the volume of the audio file in English and it overrides **TTSVolume**

TTSVolume_Cantonese=

Specify the volume of the audio file in Cantonese and it overrides **TTSVolume**

TTSVolume_Putonghua=

Specify the volume of the audio file in Putonghua and it overrides **TTSVolume**

TTSDictionary=

```
[support format] = [language],[dictionary];...  
[language] = 0 (English) | 1 (Cantonese) | 2 (Putonghua) |  
7 (Japanese) | 8 (Korean)  
[dictionary] = path of the dictionary file
```

Specify the user dictionary used by the TTS engine in format: <language>,<dictionary>;

TTSPreprocessor=1

[support value] = 0 (disable) 1 (enable)
--

Specify the TTS Preprocessor. TTS Preprocessor will try to correct the pronunciation for special text, such as date format, time format, etc.

TTSPreprocessorMapPath=./data

Specify the folder which stores the configuration file of the TTS Preprocessor

2.7.3. Sinovoice_tts.properties

Sinovoice_tts properties has similar flags to the above files.

-

TTSEnginPath

Specify the location of the TTS Engine

TTSFormat=4

```
[support value] = 0(TTS_LINEAR_16BIT) | 1(TTS_MULAW_8BIT) |  
2(TTS_ALAW_8BIT) | 3(TTS_PCM_WAVE_16BIT) | 4(TTS_MULAW_WAVE_8BIT)
```

Specify the generated speech audio file format

TTSFrequency=8

Specify the sound frequency

TTSSpeed=5

```
1 <= [support value] <= 9
```

Specify the speech speed of the audio file

TTSVolume=5

```
1 <= [support value] <= 9
```

Specify the volume of the audio file

TTSDictionary=

Specify any special words or phrases that need to play attention (no default value)

TTSPreprocessor=1

```
[support value] = 0 (disable) | 1 (enable)
```

Specify the TTS Preprocessor. TTS Preprocessor will try to correct the pronunciation for special text, such as date format, time format, etc.

TTSPreprocessorMapPath=./data

Specify the folder which stores the configuration file of the TTS Preprocessor

TTSPitch=5

```
1 < [support value] < 9
```

Specify the pitch

TTSBackgroundAudio=-1

Specify the background music. -1 for no background music (default = -1)

TTSBackgroundAudioVolume=50

```
0 <= [support value] <= 100
```

Specify the background music volume, 0-100 (default = 50)

TTSVoiceStyle=1

```
[support value] = 0 (cadence) | 1 (flat)
```

Specify the voice style

TTSVoiceDomain=0

```
[support value] = 0 (common) | 1 (finance) | 2 (weather) |  
3 (sport) | 4 (traffic) | 5 (travel)
```

Specify the domain setting

TTSGender=0

[support value] = 0 (female) 1 (male)

Specify the gender voice (0 - female, 1 - male)

TTSVoiceName=

Specify the voice library name, it is set empty for using default library

2.7.4. tts.properties

This file should not be modified.

2.8. Voice Index XML Mapping

2.8.1. AdminConfig.properties

It maps a voice XML page to every channel. That means that both analog and digital line will use this voice XML page as index file. DDICongfig.properties has a higher priority to be referenced.

DefaultIndex=voice://hanphone/index.xml

Specify a URL of call flow for all channels. For assigning a URL of call flow to a channel, you need to add the following line:

```
ChannelIndex_[n]=[URL]
[n] = channel number, starting from 0
[URL] = URL of the call flow
```

The above setting overrides **DefaultIndex**.

Example

```
# Default call flow
DefaultIndex=voice://hanphone/index.xml

# Call flow URL for channel 0
ChannelIndex_0=http://localhost/demo.html
```

In HanPhone webpage, user can also configure the channel:

The screenshot shows the HanPhone Administration web interface. The left sidebar contains navigation menus for Home, Reports, Real Time Monitoring, Voice Prompt Maintenance, Admin (with sub-items like User Management, HanFax Admin, Voicemail Admin, HanPhone Configuration, Block Callers, Web Access Log, Server Profile), Campaign Management, and Customization. The main content area is titled 'Administration' and shows 'Call flow configuration' with tabs for BASIC, CALL FLOW, and DDI/DNIS. The 'CALL FLOW' tab is active, displaying a 'Default Call flow' field with the value 'voice://hanphone/index/index.php?num=34208'. Below this is an 'Individual line setting' section with a 'Channel No.' field (marked as mandatory), a 'Call flow' field, and a 'Remark' text area. A table at the bottom lists channel numbers 15, 16, and 17, each with a checkbox and the remark 'outbound'. A note at the bottom states '* indicates this field is mandatory to input'.

2.8.2. DDIconfig.properties

It is used by digital line only. You can map a specific phone number to a call flow URL. It will override the setting in the AdminConfig.properties.

```
[support format] = [phone number]=[URL]
[phone number] = phone number of the digital line
[URL] = URL of call flow
```

Example

```
34208200=voice://hanPhone/test2.xml
```

In HanPhone webpage, user can also configure the DDI:

The screenshot shows the HanPhone Administration web interface. The left sidebar contains navigation links: Home, Reports, Real Time Monitoring, Voice Prompt Maintenance, and Admin. The Admin section is expanded, showing sub-links for User Management, HanFax Admin, Voicemail Admin, and HanPhone Configuration. The main content area is titled 'Administration' and shows the 'DDI/DNIS configuration' page. The page has three tabs: 'BASIC', 'CALL FLOW', and 'DDI/DNIS'. The 'DDI/DNIS' tab is active. The form contains three fields: 'DDI/DNIS no. *' (a text input field), 'Mapping URL *' (a text input field with a note '(Max. 255 characters)'), and 'Remark' (a text area). A 'SAVE' button is located at the bottom right of the form. A note at the bottom of the page states '* indicates this field is mandatory to input'.

2.9. HTML to XML Configuration

2.9.1. HanPhoneH2XSelectTimeout.properties

This file controls URI-based <select> timeout setting. Links will become <select> & <option> thus timeout value for specified domain name can be defined. The key represents the URI's and the value is the timeout. A key is considered matched if it appears as a substring in the URI.

Example

```
# the timeout of selection menu is 60 sec
# for the pages come from http://www.kanhan.com,
# this including http://www.kanhan.com/xxx/xxx.
www.kanhan.com=60
```

2.9.2. HanPhoneH2XConfig.properties

This file defines the path of list files. All the list files contain regular expressions. If the incoming URL is written in HTML and matches the regular express in the list files, HanPhone will handle the content of the URL in a special way.

DefaultExclList= ./data/excl_list.txt

Specify the path of the default exclude list. The list contains regular expressions for matching URLs. If URL is matched, HanPhone will read the URL content which is enclosed by "<KHTTS_INCL>" only.

DefaultLeafList= ./data/leaf_list.txt

Specify the path of the default leaf list. The list contains regular expressions for matching URLs. If URL is matched, HanPhone will read the content as plain text, which has no selection menu.

NoDefaultSpeechAndMenuList=

Specify the path of the default speech and menu list. The list contains regular expressions for matching URLs. If URL is matched, no default speech and menu list for in the selection menu.

Example of default leaf list

```
# Will read the content as plain text if the URL ends with "result.htm"
.*result\.htm$
```

2.10. Virtual Directory Mapping

2.10.1. VirtualDirectoryMapping.properties

Virtual directory mapping lets user create alias for “voice://hanphone/”. By default, “voice://hanphone/” will map to “DocumentRoot”. If “DocumentRoot” is set to “C:\”, “voice://hanphone/temp/” will refer to “C:/temp/”. User can point “voice://hanphone/temp/” to another location in this setting. The virtual path must start with '/’.

```
[support format] = [virtual directory path]=[absolute path]
[virtual directory path] = an alias name
[absolute path] = URL of call flow
```

Example

```
# alias voice://hanphone/lcsd/ for P:/
/lcsd=P:/
```

For the above example,
When HanPhone encounter “voice://hanphone/lcsd/” this URL, it will try to go to “P: /” to find the file, instead of go to “DocumentRoot/lcsd/”.

2.11. Automatic Speech Recognition Configuration

2.11.1. asr.properties

It maps the ASR engine name to java class name. This file should not be modified.

Infotalk=com.kanhan.asr.InfotalkASREngineFactory
Specify the java class name for InfoTalk ASR engine

2.11.2. asr_grammar.properties

It maps the content-type to java class name and defines the "type" for "<grammar>" in call flow. The corresponding java class will be called if the type is matched. This file should not be modified.

<code>[support format] = [content-type]=[java class name]</code>
--

application/gdl=com.kanhan.asr.InfotalkASRGrammar

The type can be used in "<grammar>" is "application/gdl" and it will call "com.kanhan.asr.InfotalkASRGrammar" class to do ASR operation.

2.11.3. Infotalk_asr.properties

ASRInstances=1

This setting is specified for InfoTalk ASR engine only. This flag specifies the number of concurrent ASR instances (objects) can be initialized. It depends on the license. Normally, it is 1.

**ConfigFilePath=C:\\Program
Files\\InfoTalk\\Sample\\Config\\Country_cs.cfg**
Specify the configuration file path of InfoTalk ASR engine

2.12. Logging

2.12.1. Logging.properties

It is a logging configuration file. More information can be found in:
<http://java.sun.com/j2ee/javaserverfaces/docs/README>

2.13. Service Monitoring

2.13.1. ServiceMonitor.properties and ServiceMonitor_service.properties

ServiceMonitor.properties is used for HanPhone in command prompt mode, while ServiceMonitor_service.properties is used for HanPhone in service mode.

1. Multiple server monitoring configuration

It is the setting for multiple server monitoring service. This monitoring service keeps track on the response on any specified host and port. If the server does not have response, an alert email will be sent.

servers.interval=0

Specify the checking interval in second, setting 0 to disable

servers.timeout=10

Specify the server response timeout

servers.hostport=localhost:3306,www.kanhan.com:80

Specify a list of servers in comma-separated "host:port" format

servers.mail.from="Server sender" <sample@kanhan.com>

Specify the sender in "From"

servers.mail.recipients.TO="Server receiver" <sample@kanhan.com>

Specify the recipient in "TO"

servers.mail.subject=Server unreachable

Specify the email subject

servers.mail.content=%s is unreachable within %t seconds.

Specify the email content. %s stands for server and %t stands for timeout value

2. Channel usage real time monitoring configuration

It is the setting for channel usage real time monitoring service. This monitoring service keeps track on the call duration in real time. If the call duration is greater than the maximum connection time, the monitoring service will restart that channel and an alert email will be sent.

channels.rtm.interval=20

Specify the checking interval in second, setting 0 to disable

channels.rtm.max.connection.time=60

Specify the maximum connection time for each call in HanPhone..

channels.rtm.server.ip=localhost

Specify the IP of HanPhone, it should be the same as HanphoneServer.properties.

channels.rtm.server.port=2003

Specify the port of HanPhone, it should be the same as HanphoneServer.properties.

channels.rtm.server.user=

Specify the user of HanPhone, it should be the same as HanphoneServer.properties.

channels.rtm.server.password=

Specify the password of HanPhone, it should be the same as HanphoneServer.properties.

channels.rtm.mail.from="Server sender" <sample@kanhan.com>

Specify the sender in "From"

channels.rtm.mail.recipients.TO="Server receiver" <sample@kanhan.com>

Specify the recipient in "TO"

channels.rtm.mail.subject=Unexpected call duration is found

Specify the email subject

channels.rtm.mail.content=The call duration for %c is greater than %n.

Specify the email content. %c stands for channel name and %n stands for expected call duration

3. Channel usage monitoring configuration

It is the setting for channel usage monitoring service. This monitoring service keeps track on the log information in the database. If the number of calls per interval cannot pass the rules defined in "channels.profile", an alert email will be sent.

channels.interval=0

Specify the checking interval in second, setting 0 to disable

channels.profile=profiles.txt

Specify the path of the profile. The profile defines the rules for the number of calls per interval. More information can be found in example of "profile.specification.txt".

channels.db.driver=com.mysql.jdbc.Driver

Specify the JDBC drivers for MySQL

channels.db.url=jdbc:mysql://localhost/hanphone_access

Specify a database URL of the form jdbc:subprotocol:subname

channels.db.user=root

Specify the user name of database

channels.db.password=

Specify the password corresponding to the user name

channels.db.db_name=

a database URL of the form jdbc:subprotocol:subname

channels.db.tbl_name=

a database URL of the form jdbc:subprotocol:subname

channels.mail.from="Channel sender" <sample@kanhan.com>

Specify the sender in "From"

channels.mail.recipients.TO="Channel receiver" <sample@kanhan.com>

Specify the recipient in "TO"

channels.mail.subject=Expected number of calls not reached

Specify the email subject

channels.mail.content=The number of calls for %c is smaller than %n.

Specify the email content. %c stands for channel name and %n stands for expected call duration

4. Logger configuration

The default output log file is located in ". /log". More information can be found in <http://logging.apache.org/log4j/docs/manual.html>

5. Mail server configuration

It is the setting for the mail server. The alert email will send through this server.

mail.smtp.host=mail.kanhan.com

Specify the host address of the mail server.

mail.smtp.port=25

Specify the TCP port used by the mail server

mail.from="Default sender" <sample@kanhan.com>

Specify the default sender in "From"

6. HanPhone monitoring configuration

It is the setting for HanPhone monitoring service. This monitoring service keeps track on the response on the port used by HanPhone. It will ping the port with that IP in a regular interval. If HanPhone does not have any response, an alert email will be send and it will try to restart HanPhone.

monitor.interval=0

Specify the checking interval in second, setting 0 to disable

monitor.timeout=10

Specify the response timeout in second

service.ip=localhost

Specify the IP of HanPhone, it should be the same as HanphoneServer.properties.

service.port=2003

Specify the port used by HanPhone, it should be the same as HanphoneServer.properties.

mail.sender="Process sender" <sample@kanhan.com>

Specify the sender email information

mail.recipients.TO="Process receiver" <sample@kanhan.com>

Specify the recipient in "TO"

mail.recipients.CC=

Specify the recipient in "CC"

mail.recipients.BCC=

Specify the recipient in "BCC"

mail.subject=Hanphone Server process is unreachable

Specify the email subject

mail.content=HanPhone Server process has been restarted.

Specify the email content

service.start.command.directory=.

Specify the directory of the **service.start.command**

service.start.command=run_server.bat

Specify the command for restarting HanPhone if the monitoring service detects HanPhone is not alive. For ServiceMonitor_service.properties, the following should be set:

service.start.command=nt_service.exe -s

Example of "profile.specification.txt"

```
# Profile definition syntax defined in augmented BNF (see RFC2612)
#
# Basic augmented BNF rules:
#
# UPALPHA = <any US-ASCII uppercase letter "A".."Z">
# LOALPHA = <any US-ASCII lowercase letter "a".."z">
# ALPHA   = UPALPHA | LOALPHA
# DIGIT   = <any US-ASCII digit "0".."9">
# CR      = <US-ASCII CR, carriage return (13)>
# LF      = <US-ASCII LF, linefeed (10)>
# SP      = <US-ASCII SP, space (32)>
# "<"     = <US-ASCII double-quote mark (34)>
# ALNUM   = ALPHA | DIGIT
# BR      = CR | LF | CR LF
#
# Definition of a monitor profile:
#
# profile   = dates ";" time-range ";" calls
#
# dates     = 1#(date | date-file | day-of-week) | "*"
# date      = 4DIGIT "-" 2DIGIT "-" 2DIGIT
# date-file = <"> <any valid file name> <">
# day-of-week = "sun" | "mon" | "tue" | "wed" | "thu" | "fri" | "sat"
#
# time-range = time "-" time | "*"
# time       = 2DIGIT ":" 2DIGIT
#
# calls     = 1*DIGIT
#
# A date-file is the name of a file containing exact dates in the
# yyyy-MM-dd format, each on its own line.
#
# The monitor selects a profile based on the following algorithm:
#
# foreach (profiles as profile) {
#   if (current_date == profile.date) {
#     if (current_time == profile.time) {
#       return profile;
#     }
#   }
# }
#
# See examples below:
# Weekdays
# (expect 8 calls per interval from Mon to Fri between 9AM and 6PM)
# (expect 4 calls per interval from Mon to Fri any time)
mon,tue,wed,thu,fri; 09:00-18:00; 8
mon,tue,wed,thu,fri; *; 4
# Saturday
# (expect 2 calls per interval on Saturday between 9AM and 1 PM)
sat; 09:00-13:00; 2
# Holiday
# (expect 1 call per interval on holidays)
sun,"holiday"; *; 1
```

2.14. Abolished properties

2.14.1. BlockedANI.properties (Abolished)

ANI, Automatic Number Identification, is more commonly known as caller ID or Calling Party Number. This file is used to forbid those specified caller ID to dial in the phone system. It has the same function as “Block Callers” in HanPhone interface.

2006-01-18 09:39:4

HANPHONE

English | 繁體 | 简体

- Home
- Reports
- Real Time Monitoring
- Voice Prompt Maintenance
- Admin**
 - User Management
 - HanFax Admin
 - Voicemail Admin
 - HanPhone Configuration
 - Block Callers**
 - Web Access Log
 - Server Profile
- Campaign Management
- Customization

Administration

>> Block Callers

Enter Caller ID *

Remark

SAVE

* indicates this field is mandatory to input

Select	Caller ID	Remark
Remove		

generated on 2006-01-18 09:39:44 AM

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