

Configuration

Configuration file: vxml.conf

The configuration file is /etc/asterisk/vxml.conf. It is editable by typing:

```
# vi /etc/asterisk/vxml.conf
```

The vxml.conf file is divided in serveral sections to set different group of parameters and functions:

```
; commented text starts with a ";"

[general]
...

[control]
...

[license]
...

[account1]
...

[account2]
...

[accountn]
...
```

NOTE:

Please note that before configuring the Asterisk Module, you should make a backup copy of vxml.conf. Vxi upgrade process keep the current configuration but some specific updates can be mandatory for future releases.

General Section [general]

The following section covers general functions of VoiceXML Asterisk module.

| Key | Values | Default | Purpose |
|------------|-----------------|---------|---|
| msqkey* | decimal number | 1973 | Message queue ID. |
| msqfactor* | value in Kbytes | 10 | Size by VoiceXML channel allocated for the message queue. |

| Key | Values | Default | Purpose |
|------------------|----------------------------------|---------|--|
| msqfirsttimeout* | value in milisecondes | 100 | First timeout, the next ones are set to 0.5s, setting lower value can increase the reactivity of the browser. |
| msqtimeout* | value in secondes | 30 | Timeout when the module not receive commands from the VoiceXML browser (can stop the Asterisk if autoexit set to yes). |
| msqsize* | auto or value in Kbytes | auto | Size of the message queue or if auto msqfactor x number of VoiceXML channels. |
| msqlock* | yes/no | no | Force to wait and disable the timeouts. |
| debug | yes/no/full | no | Enable or disable the logs from the Asterisk module and the VoiceXML Browser. |
| paramseparator* | character | , | Separator for Asterisk application parameters. |
| systemname | auto/value string name | (empty) | Empty not change the systemname (used in the uniqueID for the CDR), auto use the hostname of the server or set a string to define the system name. |
| autoanswer | yes/no/prompt/recognize/ringing/ | yes | yes, answer the call with the vxml() execution, no never answer the call you need to call the Answer() application from the VoiceXML, prompt answer before first prompt/audio play, recognize answer before first recognize action, ringing no answer send a single audio frame to cancel the ringing tone. |
| autohangup | yes/no/soft/exit | no | yes execute hangup() a the end of the vxml() execution, soft execute softhangup(), exit execute hangup() and set the variable VXML_EXIT with the VoiceXML exit value. |

| Key | Values | Default | Purpose |
|--------------------------|----------------------------|----------------------|---|
| autoexit | yes/no | no | Stop the Asterisk with return code -1, if VXL interpreter no answer (msq timeouts). |
| monitor | yes/no/old/1..100 | no | yes execute mixmonitor() (or monitor() if old) before starting the VoiceXML session. You can set a random value (using a %). |
| monitordirectory | directory | mixmonitor directory | Set the mixmonitor() monitor() directory or use the default one (/var/lib/asterisk/monitor). |
| monitorformat | wav/gsm/pcm/ulaw/alaw | wav | Set the format for the mixmonitor recording. |
| defaulttimeout | value in milisecondes | 5000 | Default timeout if not set in the VoiceXML syntax. |
| defaultinterdigittimeout | value in milisecondes | 3000 | Default interdigit timeout if not set in the VoiceXML syntax. |
| priorityevents | yes/no | yes | If using single DTMF events and DTMF inputs/grammars, yes force to check the first DTMF to the DTMF events as soon as it is receive, no will wait full entering or a timeout. |
| tdd* | yes/no | no | yes enable TDD () to send and receive text messages. |
| keepcontext* | yes/no | yes | yes force to keep the VoiceXML channel during the consultation transfer. |
| video | yes/no | no | refer to Lience options |
| speech | yes/no/automatic/emulation | no | refer to Lience options |
| video | yes/no | no | refer to Lience options |
| dialer | | | refer to Lience options |
| rtmp | | | refer to Lience options |
| voicexml | | | refer to Lience options |
| messaging* | yes/no/database | no | yes allows to control the messaging counters as local context value. database use the Asterisk internal database to store the counters values. |
| priority* | value priority | 0 | if set us the priority at the end od the vxml() execution. |

| Key | Values | Default | Purpose |
|-----------------|---------------------------|-------------------|--|
| removeprompts* | yes/no | yes | yes allows remove the prompts after their play or processing. no is for debugging. |
| autoreload | yes/no | no | yes Can for to automatically reload the configuration if the configuration file date has changed. |
| recordsendaudio | yes/no | no | yes force the VoiceXML module to send audio silence during the recording. Some operators can close the call is there is no audio traffic during the recording. |
| recordsendvideo | yes/no | no | yes forec the VoiceXML module to send back to the user its own video during the video recording (as an echo test). |
| recordsilence | yes/no/value milliseconds | yes(300) | yes allows to record this time before the VAD detection. no force to record all the audio without waiting for the voice detection. You can set a value in miliseconds. |
| recordtotext* | url | empty | If record type="text/plain", use this URL to convert speech to text (as Google) |
| recorddirectory | directory | /tmp/cacheContent | Default temporary directory for recording |
| recordrewind | yes/no | yes | Strip off the last 1/4 second of the audio records. |
| threshold | dsp/default/number | default | Set the default threshold for silence detection. |
| videoupdate | yes/no | yes | Request a video update before recording. |
| audiosilence* | no/file | no | Play an audio file during silences. |
| cachedirectory | directory | /tmp/cacheContent | Cache directory for audio memory, MRCPsynth, record, builtin grammars... |

| Key | Values | Default | Purpose |
|--------------------|------------------------------------|--------------------|---|
| ttsdirectory | directory | /tmp/cacheContent/ | TTS cache directory, used to purge old files (greater the maxage parameter). |
| videosilence* | no/file | no | Play an video file during silences. |
| wavcodec | pcm/gsm | | Codec use for record |
| videocodec* | h263/h263p | | Deprecated |
| dialformat | string | %s | Format string used to generate outgoing calls (allows to set the channel type and peer for example) |
| dialformatvideo | string | %s | Format string used to generate outgoing video calls (allows to set the channel type and peer for example) |
| dialnumbersonly | yes/no | no | Filter to suppress non numeric charaters |
| nomaskerade | yes/no | no | For video calls add /nj for video calls |
| videoprofile | string | empty | Set the variable VXML_VIDEO_CODEC used by the default transcoder dialplan |
| blindapplication | transfer/ | none | To generate a SIP REFER, set a <transfer bridge="false" .../> and this parameter to "transfer" |
| localformat | spawn/bridge/nooptimization/jitter | spawn | Set the mode to transfer to local the dialplan |
| localextension | string | vxml | Set the default extension for local transfers |
| conferenceformat | string | empty | Specific parameter for the conference application. |
| celudanurl* | | | deprecated |
| speechprovider | unimrcp/verbio/lumenvox/string | empty | Set the Speech module (ASR) provider. |
| speechdirectory | directory | /tmp/cacheContent | Directory to generate temporary grammars (buitins for example). |
| speechscore | 1-100 | 20 | Minimal score to forward the speech result o the interpreter. |
| speechfactor | -x/+x | 0 | Parameter to multiply or divide the result from the speech engine. |
| speechforcescore* | 0-100 | 0 | Force a speech score (debug only) |
| speechforceresult* | string | empty | Force a speech value (debug only) |

| Key | Values | Default | Purpose |
|-----------------------|------------------------|-------------------|--|
| speechforcename* | yes/no | no | Add a 'V' for the grammar name, only for old Vestec engines |
| speechhotwordscore | 0-100 | 0 | If score is lower than this value, the module restart the recognition |
| speechbargin | yes/no/forced/enhanced | no | Force the prompt bargin mode for the speech. |
| speechmaxresults | number | 1 | Max results returned when it use Asterisk speech module. |
| speechtimeout | | | |
| speechmaxtimeout | | | |
| speechconcatenate | yes/no | no | Concatenate multiple speech results for Verbio. |
| speechrecord | yes/no | no | Record Speech sessions (wav) and results (txt) (for debug) |
| speechrecorddirectory | directory | /tmp/cacheContent | Directory to generate temporary speech recordings. |
| speechunload | yes/no | yes | Disable the Speech unload (some ASR engine not support to set empty grammars contents to free the loaded grammars. |
| speechurl* | url | empty | not implemented |
| speechbeepstart* | file | empty | not implemented |
| speechbeepstop* | file | empty | not implemented |
| cli | yes/no | no | Allows to execute CLI commands form the VoiceXML syntax (audio src="cli:command") |
| urldecode | yes/no | no | Decode VoiceXML first URL. |
| cdrupdate | yes/no | no | Allows to modify all the CDR fields |
| cdrexist | yes/no | no | Use the VoiceXML exit value to set the CDR userfield |
| cdrdial | yes/no | no | Generate a CDR with the transfered call. |
| cdroverwrite | yes/no | no | Overwrite the local/remote call numbers (with the values managed the VoiceXML VXML_LOCAL, VXML_REMOTE...) |
| cdrparam | yes/no | no | Use the VXML_PARAM to set the CDR userfield |

| Key | Values | Default | Purpose |
|-----------------|---------|---------|--|
| cachetimeout | number | 60 | Execute the cache process each x seconds. |
| cachehour | number | -1 | Execute the cache process at a definided hour. |
| cachemaxage | number | -1 | Remove cache file older than maxage seconds. |
| cachemaxremoves | number | -1 | Max removed files for each execution process. |
| loadlibrary* | library | | Deprecated |
| loadcli | string | empty | Execute a specific CLI command when the module is loaded. |
| originatedelay | number | 10000 | Time to wait before dial in miliseconds. |
| originatedelay2 | number | 10000 | Time to wait before dial the second time n miliseconds. |
| requesturl* | URL | empty | URL for the billing HTTP/API. |
| countermax* | number | | Deprecated |
| countermin* | number | | Deprecated |
| counterval* | number | | Deprecated |
| audiowait | file | empty | Plays this file and waits for a free VoiceXML channel. |
| mrcpsynthparams | string | empty | Add extra parameters for the MRCPsynth application (volume, keep session...) |

License Section [license]

The following section covers license information and keys of Vxi. To obtain a commercial valid license key for your copy of VoiceXML browser (for use more than one session), you should run asterisk and get your code by typing the following commands:

```
*CLI> vxml show license
```

Default License section (no key) allow to run any VoiceXML application with one free port.

Example:

```
[license]
max=1
key=
```

Example:

```
[license]
```

```
max=30
key=yourkey
```

| Key | Values | Default | Purpose |
|--------------|--------------------|---------|---|
| max | number of channels | 1 | Max number of VoiceXML channels for this license. |
| texttospeech | yes/no | yes | Allows to use Text to Speech prompts. |
| video | yes/no | no | Allows to use Video options. |
| speech | yes/no | no | Allows to use ASR/Speech options. |
| dialer | yes/no | no | Allows to use the VoiceXML with external Dialer. |
| voicexml | yes/no | yes | A allows to use the VoiceXML browser execution. |
| expiration | date YYMMDD | | Optional expiration date of the license |
| key | License key | | Key after purchasing a official commercial license. If not set or wrong key, you have 1 trial VoiceXML channel. |

Control Section [control]

The control section describes the control functions that allow you to configure DTMF commands that stream a file with fast forward, pause, reverse, restart, etc. To enable a control during a prompt, you must first set the VoiceXML property name to equal "control, with a value of "yes."

```
<property name="control" value="yes" />
```

This works only with GSM and WAV files - in all other cases the property is ignored.

| Key | Values | Default | Purpose |
|---------|--------|------------|---|
| forward | dtmf | # | Fast-forward when this DTMF digit is received. |
| reverse | dtmf | empty | Rewind when this DTMF digit is received. |
| stop | dtmf | 0123456789 | Stop when this DTMF digit is received. |
| pause | dtmf | empty | Pause playback when this DTMF digit is received. |
| restart | dtmf | empty | Restart playback when this DTMF digit is received. |
| skipms | number | 5000 | This is the number of milliseconds to skip when rewinding or fast-forwarding. |

Account Section [account_]

The Vxi VoiceXML browser is designed to manage hosted VoiceXML services and share different applications thru different Inbound / Outbound phone lines. This will allow you to manage customers' accounts for VoiceXML hosted applications and control easily the capacity you need to assign to each one.

To create accounts, you need to add an [accountX] section (where "X" is a number 1-100) in the bottom part of the /etc/asterisk/vxml.conf file. Please find here three added accounts to manage different port capacity per application/URI:

Examples:


```
[account1]
name=voiceportal1
local=0099090
url=http://www.i6net.com/vxml/voiceportal1.vxml
max=25

[account2]
name=helloworld
local=0099090
url=http://www.i6net.com/vxml/helloword/index.vxml
max=10

[account3]
name=localservice
local=0099090
url=http://localhost/vxml/test.vxml
max=51
```

The account properties are defined within sections. Each account has a specific section. The sections are named and numbered from account1 to account99 (maximun 100 accounts). The example below shows the functions in each account section.

```
[account1]
name=example
number=*3
url=http://.../index.vxml
urlvideo=http://.../index.vxml
max=5
speech=no
dialformat=SIP/%s
dialformatvideo=SIP/%s
```

| Key | Values | Default | Purpose |
|-----------------|--|---------|---|
| name | string | | The name or designation of the account. This reference can be used to identify the account used by the VXML application, Vxml(name of the account). |
| number | number/expression | | The identification of an account with the called number, signaling information from the ANI function, CALLERID(). You can use the “*”, the wildcard character, to specify a substring such as *03 or 014612* , that the number function will contain. You can start the number with “ ” to use Asterisk Diaplan Patterns too (see : http://www.voip-info.org/wiki/view/Asterisk+Dialplan+Patterns).The function can also be used to identify the account, like the name, Vxml(number of the account). You can start the number with “@” to match the caller number to the account number (use the same syntax as the called number There is a way to) |
| url | URL | | The VoiceXML URL of the account. |
| urlvideo | URL | | The VoiceXML video URL of the account. |
| max | number | max | The maximum number of sessions allowed to this account. If there are not enough sessions then the VoiceXML application will generate an error. |
| dialformat | string | empty | This is similar to the general function, but for the account only. If not set, use the general value. |
| dialformatvideo | string empty | | The same purpose as the dialformat, only for video sessions. |
| dialnumbersonly | yes/no | no | |
| force | yes/nno/video/audio/ulaw/alaw/flash/ringing/vxml/h263/h263p/h264 | | If set to video, set the Transfercapability to VIDEO (and enable the h324m processing). If set to audio, the Vxml application execute directly the account URL and bypass the redirection execution (parameter with '@'). |
| videoprofile | | | |
| speech | yes/no/emulation/automatic/debug | general | As the general function, but for the account only. If not set, use the general value. |

| Key | Values | Default | Purpose |
|----------------|--------|---------|--|
| speechprovider | string | general | As the general function, but for the account only. If not set, use the general value. |
| speechscore | | | As the general function, but for the account only. If not set, use the general value. |
| mark | string | empty | Set a string mark in the VoiceXML browser traces. The session ID and this string will be added to the channel number column (3rd) in the traces (Example : ...33... → ...33_1_user1...). Four redirection exist : @remote : @remote : caller number, local : called number, @id : VoieXML id parameter value, @param : VoiceXML parameter value |
| durationlimit | number | 0 | The maximum duration in seconds for the session using this account. The call will be hangup after this maximal duration. |
| maxtime | | | |
| param | | | |
| application | | | |
| app | | | |
| wait | | | |
| volumetx | | | |
| volumerx | | | |
| audiodenied | | | |
| audiowait | | | |

LogsSection [logs] (deprecated)

| Key | Values | Default | Purpose |
|---------------|--------|---------|---------|
| enable | | | |
| statsfilename | | | |
| logsdirectory | | | |
| split | | | |

Configuration example

Example:

```
; VoiceXML Configuration
;
[general]
wav_codec=gsm
videosilence=;silence
audiosilence=;silence
debug=4
video=yes

[license]
max=100
key=...

[account1]
name=Test1
url=http://host.i6net.com/vxml/links/vxml/index.php
max=1

[account2]
name=Test2
```

```
url=http://www.mdfactory.com/mpm/camp/index.vxml
max=3
dialformat=SIP/%s@voztele-out
```

To assign an extension to a VXML account just follow this example, where we are assigning the previous account to three extensions number in your `/etc/asterisk/extension.conf` asterisk:

```
[default]

exten => 981001001,1,Vxml(Test1)
exten => 981001002,1,Vxml(Test2)
exten => 981001003,1,Vxml(Test3)
```

NOTE: When you update your `vxml.conf` file, remember to refresh configuration making a command `"vxml reload"` in your `CLI*>` prompt. If you have added SIP, PRI or new extensions you must launch `"sip reload"`, `"extensions reload"`, `"dialplan reload"` or reload asterisk/openvxi processes. Use the command `"vxml show accounts"` to dump your accounts.

```
CLI*> extensions reload
CLI*> vxml reload
CLI*> vxml show accounts
```

Example:

Add extensions to the Asterisk dial plan `/etc/asterisk/extensions.conf`, if you want to set the URL in the dialplan:

```
exten => 888,1,Answer
exten => 888,n,Wait(3)
exten => 888,n,Vxml(file:///root/example.vxml)
exten => 888,n,Hangup
```

You can create and edit the file `/root/example.vxml` with the GNU text editor, VI, for example.

This example will work if you have text-to-speech configured. If not, use a pre-recorded wav or gsm file to replace the "Hello world!" text by an `<audio>` tag. For more information, see the format extensions supported by Asterisk.

```
<?xml version="1.0"?>
<vxml version = "2.0" xmlns="http://www.w3.org/2001/vxml">
  <form>
    <block><audio src="hello.wav"/></block>
  </form>
</vxml>
```

Save the file in the same directory as the VoiceXML script (relative reference in this example). Reload the extensions configuration with:

```
*CLI> extensions reload
```

Call the service by calling:

Last
update:
2017/07/31 16:17 vxi_installation_guide:configuration:start https://wiki.voximal.com/doku.php?id=vxi_installation_guide:configuration:start&rev=1501517851

SIP:888@<your server address>

From:
<https://wiki.voximal.com/> - **Voximal documentation**

Permanent link:
https://wiki.voximal.com/doku.php?id=vxi_installation_guide:configuration:start&rev=1501517851

Last update: **2017/07/31 16:17**

