Contents

1 pyagi 3
2 Indices and tables 9
Python Module Index 11
An Asterisk AGI library for humans.

class `pyagi.pyagi.AGI`  
An Asterisk AGI protocol wrapper.

An instance of this class handles command processing and communication between Asterisk and python.

- **Attr int DEFAULT_TIMEOUT**  The default timeout (in ms) to use for methods that take a timeout argument.
- **Attr int DEFAULT_RECORD**  The default allowed recording time (in ms) to use for methods that take a record time argument.

**answer ()**
Answers channel if not already in answer state.

See: http://www.voip-info.org/wiki/view/answer

- **Return type int**
- **Returns**  -1 on channel failure, or 0 if successful.

**appexec (application, options='')**
Executes application with given options.

See: http://www.voip-info.org/wiki/view/exec

- **Return type int**
- **Returns**  Whatever the application returns, or -2 on failure to find application.

TODO: Rename this application to `exec`, to comply with AGI standard.

**asyncagi_break ()**
Interrupts expected flow of Async AGI commands and returns control to previous source (typically, the PBX dialplan).

**channel_status (channel='')**
Returns the status of the specified channel. If no channel name is given then returns the status of the current channel.
See: http://www.voip-info.org/wiki/view/channel-status

**Return type** int

**Returns** 0 - Channel is down and available. 1 - Channel is down, but reserved. 2 - Channel is off hook. 3 - Digits (or equivalent) have been dialed. 4 - Line is ringing. 5 - Remote end is ringing. 6 - Line is up. 7 - Line is busy.

**control_stream_file**(filename, escape_digits='', skipms=3000, fwd='', rew='', pause='')

Send the given file, allowing playback to be controlled by the given digits, if any. Use double quotes for the digits if you wish none to be permitted.


**Return type** int

**Returns** 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed, or -1 on error or if the channel was disconnected.

**database_del**(family, key)

Deletes an entry in the Asterisk database for a given family and key.

See: http://www.voip-info.org/wiki/view/database+del

**Return type** int

**Returns** 1 if successful, 0 otherwise.

**database_deltree**(family, key='')

Deletes a family or specific keytree within a family in the Asterisk database.

See: http://www.voip-info.org/wiki/view/database+deltree

**Return type** int

**Returns** 1 if successful, 0 otherwise.

**database_get**(family, key)

Retrieves an entry in the Asterisk database for a given family and key.

See: http://www.voip-info.org/wiki/view/database+get

**Return type** str

**Returns** The database entry (if one exists), or an empty string.

**database_put**(family, key, value)

Adds or updates an entry in the Asterisk database for a given family, key, and value.

See: http://www.voip-info.org/wiki/view/database+put

**Return type** int

**Returns** 1 if successful, 0 otherwise.

**get_data**(filename, timeout=2000, max_digits=255)

Stream the given file, and receive DTMF data.

See: http://www.voip-info.org/wiki/view/get-data

**Return type** str

**Returns** Digits received from the channel at the other end.

**get_full_variable**(name, channel=None)

Retrieve a channel variable. Understands complex variable names and builtin variables, unlike get_variable.
See: http://www.voip-info.org/wiki/view/get+full+variable

Return type  str

Returns  The variable, or an empty string if the variable doesn’t exist.

**get_option** *(filename, escape_digits='', timeout=0)*
Behaves similar to STREAM FILE but used with a timeout option.

See: http://www.voip-info.org/wiki/view/get+option

**get_result** *(stdin=<open file '<stdin>' , mode 'r'>)*
Read the result of a command from Asterisk

**get_variable** *(name)*
Get a channel variable.

See: http://www.voip-info.org/wiki/view/get+variable

Return type  str

Returns  The variable, or an empty string if the variable isn’t set.

**gosub** ()
Cause the channel to execute the specified dialplan subroutine, returning to the dialplan with execution of a Return().

**hangup** *(channel=''*)*
Hangs up the specified channel. If no channel name is given, hangs up the current channel.

See: http://www.voip-info.org/wiki/view/hangup

**noop** ()
Does nothing.

See: http://www.voip-info.org/wiki/view/noop

**receive_char** *(timeout=2000)*
Receives a character of text on a channel. Most channels do not support the reception of text.

See: http://www.voip-info.org/wiki/view/receive+char

Return type  int

Returns  The decimal value of the character if one is received, or 0 if the channel does not support text reception. Returns -1 only on error/hangup.

**receive_text** ()
Receives a string of text on a channel. Most channels do not support the reception of text.

See: http://www.voip-info.org/wiki/view/receive+text

Return type  str

Returns  The string received, or an empty string on failure.

**record_file** *(filename, format='gsm', escape_digits='#', timeout=20000, offset=0, beep='beep'*)
Record to a file until a given dtmf digit in the sequence is received.

See: http://www.voip-info.org/wiki/view/record+file

Return type  int

Returns  -1 on hangup or error.
say_alpha (characters, escape_digits='')
Say a given character string, returning early if any of the given DTMF digits are received on the channel.
See: http://www.voip-info.org/wiki/view/say+alpha

Return type int
Returns 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed. Returns -1 on error/hangup.

say_date (seconds, escape_digits='')
Say a given date, returning early if any of the given DTMF digits are received on the channel.
See: http://www.voip-info.org/wiki/view/say+date

Return type int
Returns 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed or -1 on error/hangup.

say_datetime (seconds, escape_digits='', format='', zone='')
Say a given time, returning early if any of the given DTMF digits are received on the channel.
See: http://www.voip-info.org/wiki/view/say+datetime

Return type int
Returns 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed or -1 on error/hangup.

say_digits (digits, escape_digits='')
Say a given digit string, returning early if any of the given DTMF digits are received on the channel.
See: http://www.voip-info.org/wiki/view/say+digits

Return type int
Returns 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed or -1 on error/hangup.

say_number (number, escape_digits='')
Say a given number, returning early if any of the given DTMF digits are received on the channel.
See: http://www.voip-info.org/wiki/view/say+number

Return type int
Returns 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed or -1 on error/hangup.

say_phonetic (characters, escape_digits='')
Say a given character string with phonetics, returning early if any of the given DTMF digits are received on the channel.
See: http://www.voip-info.org/wiki/view/say+phonetic

Return type int
Returns 0 if playback completes without a digit pressed, the ASCII numerical value of the digit if one was pressed, or -1 on error/hangup.

say_time (seconds, escape_digits='')
Say a given time, returning early if any of the given DTMF digits are received on the channel.
See: http://www.voip-info.org/wiki/view/say+time

Return type int
**Returns** 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed or -1 on error/hangup.

`send_command(command, *args)`  
Send a command to Asterisk

`send_image(filename)`  
Sends the given image on a channel. Most channels do not support the transmission of images.  
See: http://www.voip-info.org/wiki/view/send+image

**Return type** int

**Returns** 0 if image is sent, or if the channel does not support image transmission. Returns -1 only on error/hangup.  
Image names should not include extensions.

`send_text(text='')`  
Sends the given text on a channel. Most channels do not support the transmission of text.  
See: http://www.voip-info.org/wiki/view/send+text

**Return type** int

**Returns** 0 if text is sent, or if the channel does not support text transmission. Returns -1 only on error/hangup.

`set_autohangup(secs)`  
Cause the channel to automatically hangup at time seconds in the future. Of course it can be hungup before then as well. Setting to 0 will cause the autohangup feature to be disabled on this channel.  
See: http://www.voip-info.org/wiki/view/set+autohangup

`set_callerid(number)`  
Changes the callerid of the current channel.  
See: http://www.voip-info.org/wiki/view/set+callerid

`set_context(context)`  
Sets the context for continuation upon exiting the application.  
See: http://www.voip-info.org/wiki/view/set+context

`set_extension(extension)`  
Changes the extension for continuation upon exiting the application.  
See: http://www.voip-info.org/wiki/view/set+extension

`set_music()`  
Enables/disables the music on hold generator. If class is not specified, then the ‘default’ music on hold class will be used.  
See: http://www.voip-info.org/wiki/view/set+music

`set_priority(priority)`  
Changes the priority for continuation upon exiting the application. The priority must be a valid priority or label.  
See: http://www.voip-info.org/wiki/view/set+priority

`set_variable(name, value)`  
Sets a variable to the current channel.  
See: http://www.voip-info.org/wiki/view/set+variable
speech_activate_grammar()  
Activates the specified grammar on the speech object.

speech_create()  
Create a speech object to be used by the other Speech AGI commands.

speech_deactivate_grammar()  
Deactivates the specified grammar on the speech object.

speech_destroy()  
Destroy the speech object created by ‘SPEECH CREATE’.

speech_load_grammar()  
Loads the specified grammar as the specified name.

speech_recognize()  
Plays back given prompt while listening for speech and dtmf.

speech_set()  
Set an engine-specific setting.

speech_unload_grammar()  
Unloads the specified grammar.

stream_file (filename, escape_digits='', sample_offset=0)  
Send the given file, allowing playback to be interrupted by the given digits, if any.

See: http://www.voip-info.org/wiki/view/stream+file

Return type int

Returns 0 if playback completes without a digit being pressed, or the ASCII numerical value of the digit if one was pressed, or -1 on error or if the channel was disconnected.

tdd_mode (mode='off')  
Enable/disable TDD transmission/reception on a channel.

See: http://www.voip-info.org/wiki/view/tdd+mode

Return type int

Returns 1 if successful, or 0 if channel is not TDD-capable.

verbose (message, level=1)  
Sends message to the console via verbose message system. level is the verbose level (1-4).

See: http://www.voip-info.org/wiki/view/verbose

wait_for_digit (timeout=2000)  
Waits up to timeout milliseconds for channel to receive a DTMF digit.

See: http://www.voip-info.org/wiki/view/wait+for+digit

Return type chr

Returns -1 on channel failure, 0 if no digit is received in the timeout, or the numerical value of the ASCII of the digit if one is received. Use -1 for the timeout value if you desire the call to block indefinitely.
CHAPTER 2

Indices and tables

• genindex
• modindex
• search
p
pyagi.pyagi, 3
A
AGI (class in pyagi.pyagi), 3
answer() (pyagi.pyagi.AGI method), 3
appexec() (pyagi.pyagi.AGI method), 3
asyncagi_break() (pyagi.pyagi.AGI method), 3

C
channel_status() (pyagi.pyagi.AGI method), 3
ccontrol_stream_file() (pyagi.pyagi.AGI method), 4

D
database_del() (pyagi.pyagi.AGI method), 4
database_deltree() (pyagi.pyagi.AGI method), 4
database_get() (pyagi.pyagi.AGI method), 4
database_put() (pyagi.pyagi.AGI method), 4

g
get_data() (pyagi.pyagi.AGI method), 4
get_full_variable() (pyagi.pyagi.AGI method), 4
get_option() (pyagi.pyagi.AGI method), 5
get_result() (pyagi.pyagi.AGI method), 5
get_variable() (pyagi.pyagi.AGI method), 5
gosub() (pyagi.pyagi.AGI method), 5

H
hangup() (pyagi.pyagi.AGI method), 5

N
noop() (pyagi.pyagi.AGI method), 5

P
pyagi.pyagi (module), 3

R
receive_char() (pyagi.pyagi.AGI method), 5
receive_text() (pyagi.pyagi.AGI method), 5
record_file() (pyagi.pyagi.AGI method), 5

S
say_alpha() (pyagi.pyagi.AGI method), 5
say_date() (pyagi.pyagi.AGI method), 6
say_datetime() (pyagi.pyagi.AGI method), 6
say_digits() (pyagi.pyagi.AGI method), 6
say_number() (pyagi.pyagi.AGI method), 6
say_phonetic() (pyagi.pyagi.AGI method), 6
say_time() (pyagi.pyagi.AGI method), 6
send_command() (pyagi.pyagi.AGI method), 7
send_image() (pyagi.pyagi.AGI method), 7
send_text() (pyagi.pyagi.AGI method), 7
set_autohangup() (pyagi.pyagi.AGI method), 7
set_callerid() (pyagi.pyagi.AGI method), 7
set_context() (pyagi.pyagi.AGI method), 7
set_extension() (pyagi.pyagi.AGI method), 7
set_music() (pyagi.pyagi.AGI method), 7
set_priority() (pyagi.pyagi.AGI method), 7
set_variable() (pyagi.pyagi.AGI method), 7
speech_activate_grammar() (pyagi.pyagi.AGI method), 7
speech_create() (pyagi.pyagi.AGI method), 7
speech_deactivate_grammar() (pyagi.pyagi.AGI method), 8
speech_destroy() (pyagi.pyagi.AGI method), 8
speech_load_grammar() (pyagi.pyagi.AGI method), 8
speech_recognize() (pyagi.pyagi.AGI method), 8
speech_set() (pyagi.pyagi.AGI method), 8
speech_unload_grammar() (pyagi.pyagi.AGI method), 8
stream_file() (pyagi.pyagi.AGI method), 8

T
tdd_mode() (pyagi.pyagi.AGI method), 8

V
verbose() (pyagi.pyagi.AGI method), 8

W
wait_for_digit() (pyagi.pyagi.AGI method), 8