

Asterisk 1.8 Reference

Asterisk Development Team <asteriskteam@digium.com>

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Overview

A listing of new capabilities in Asterisk 1.8

In Brief

Asterisk 1.8 introduces a number of new features since the previous 1.6.2 release. Highlights include:

- Secure RTP (SRTP)
- IPv6 Support for SIP
- · Connected Party Identification Support COLP and CONP.
- · Calendaring Integration for CalDAV, iCal, Exchange or EWS calendars
- A new call logging system, Channel Event Logging (CEL)
- Distributed Device State, including Message Waiting Indicator using Jabber/XMPP PubSub
- Call Completion Supplementary Services (CCSS) Support, including Call Completion on Busy Subscriber (CCBS) and Call Completion on No Response (CCNR)
- · Advice of Charge, including AOC-S, AOC-D, and AOC-E Support
- Multicast RTP
- ISDN Q.SIG Call Rerouting and Call Deflection
- Google Talk and Google Voice integration
- · Audio Pitch Shifting (for fun and profit)

Detailed Listing

SIP Changes

- Added preferred_codec_only option in sip.conf. This feature limits the joint codecs sent in response to an INVITE to the single most preferred codec.
- Added SIP_CODEC_OUTBOUND dialplan variable which can be used to set the codec to be used for the outgoing call. It must be one of the codecs configured

- for the device.
- Added tlsprivatekey option to sip.conf. This allows a separate .pem file
 to be used for holding a private key. If tlsprivatekey is not specified,
 tlscertfile is searched for both public and private key.
- Added tlsclientmethod option to sip.conf. This allows the protocol for outbound client connections to be specified.
- The sendrpid parameter has been expanded to include the options 'rpid' and 'pai'. Setting sendrpid to 'rpid' will cause Remote-Party-ID header to be sent (equivalent to setting sendrpid=yes) and setting sendrpid to 'pai' will cause P-Asserted-Identity header to be sent.
- The 'ignoresdpversion' behavior has been made automatic when the SDP received is in response to a T.38 re-INVITE that Asterisk initiated. In this situation, since the call will fail if Asterisk does not process the incoming SDP, Asterisk will accept the SDP even if the SDP version number is not properly incremented, but will generate a warning in the log indicating that the SIP peer that sent the SDP should have the 'ignoresdpversion' option set.
- The 'nat' option has now been been changed to have yes, no, force_rport, and comedia as valid values. Setting it to yes forces RFC 3581 behavior and enables symmetric RTP support. Setting it to no only enables RFC 3581 behavior if the remote side requests it and disables symmetric RTP support. Setting it to force_rport forces RFC 3581 behavior and disables symmetric RTP support. Setting it to comedia enables RFC 3581 behavior if the remote side requests it and enables symmetric RTP support.
- Slave SIP channels now set HASH(SIP_CAUSE,<slave-channel-name>) on each response. This permits the master channel to know how each channel dialled in a multi-channel setup resolved in an individual way.
- Added 'externtcpport' and 'externtlsport' options to allow custom port configuration for the externip and externhost options when tcp or tls is used.
- Added support for message body (stored in content variable) to SIP NOTIFY message accessible via AMI and CLI.
- Added 'media_address' configuration option which can be used to explicitly specify the IP address to use in the SDP for media (audio, video, and text) streams.
- Added 'unsolicited_mailbox' configuration option which specifies the virtual mailbox that the new/old count should be stored on if an unsolicited MWI NOTIFY message is received.
- Added 'use_q850_reason' configuration option for generating and parsing
 if available Reason: Q.850;cause=<cause code> header. It is implemented
 in some gateways for better passing PRI/SS7 cause codes via SIP.
- When dialing SIP peers, a new component may be added to the end of the dialstring to indicate that a specific remote IP address or host should be used when dialing the particular peer. The dialstring format is SIP/peer/exten/host or IP.
- SRTP SDES support for encrypting calls to/from Asterisk over SIP. The
 ability to selectively force bridged channels to also be encrypted is also
 implemented. Branching in the dialplan can be done based on whether or not
 a channel has secure media and/or signaling.
- Added directmediapermit/directmediadeny to limit which peers can send direct media to each other
- Added the 'snom_aoc_enabled' option to turn on support for sending Advice of Charge messages to snom phones.
- Added support for G.719 media streams.
- Added support for 16khz signed linear media streams.
- SIP is now able to bind to and communicate with IPv6 addresses. In addition, RTP has been outfitted with the same abilities.
- Added support for setting the Max-Forwards: header in SIP requests. Setting is available in device configurations as well as in the dial plan.
- Addition of the 'subscribe_network_change' option for turning on and off res_stun_monitor module support in chan_sip.
- Addition of the 'auth_options_requests' option for turning on and off authentication for OPTIONS requests in chan_sip.

IAX2 Changes

- Added rtsavesysname option into iax.conf to allow the systname to be saved on realtime updates.
- Added the ability for chan_iax2 to inform the dialplan whether or not encryption is being used. This interoperates with the SIP SRTP implementation so that a secure SIP call can be bridged to a secure IAX call when the dialplan requires bridged channels to be "secure".
- Addition of the 'subscribe_network_change' option for turning on and off res_stun_monitor module support in chan_iax.

MGCP Changes

- Added ability to preset channel variables on indicated lines with the setvar configuration option. Also, clearvars=all resets the list of variables back to none
- PacketCable NCS 1.0 support has been added for Docsis/Eurodocsis Networks.
 See configs/res_pktccops.conf for more information.

XMPP Google Talk/Jingle changes

- · Added the externip option to gtalk.conf.
- Added the stunaddr option to gtalk.conf which allows for the automatic retrieval of the external ip from a stun server.

Applications

- Added 'p' option to PickupChan() to allow for picking up channel by the first match to a partial channel name.
- Added .m3u support for Mp3Player application.
- Added progress option to the app_dial D() option. When progress DTMF is
 present, those values are sent immediately upon receiving a PROGRESS message
 regardless if the call has been answered or not.
- Added functionality to the app_dial F() option to continue with execution at the current location when no parameters are provided.
- Added the 'a' option to app_dial to answer the calling channel before any announcements or macros are executed.
- Modified app_dial to set answertime when the called channel answers even if the called channel hangs up during playback of an announcement.
- Modified app_dial 'r' option to support an additional parameter to play an indication tone from indications.conf
- Added c() option to app_chanspy. This option allows custom DTMF to be set to cycle through the next available channel. By default this is still '*'.
- Added x() option to app_chanspy. This option allows DTMF to be set to exit the application.
- The Voicemail application has been improved to automatically ignore messages that only contain silence.
- If you set maxmsg to 0 in voicemail.conf, Voicemail will consider the associated mailbox(es) to be greetings-only.
- The ChanSpy application now has the 'S' option, which makes the application automatically exit once it hits a point where no more channels are available to spy on.
- The ChanSpy application also now has the 'E' option, which spies on a single channel and exits when that channel hangs up.
- The MeetMe application now turns on the DENOISE() function by default, for each participant. In our tests, this has significantly decreased background noise (especially noisy data centers).
- Voicemail now permits storage of secrets in a separate file, located in the spool directory of each individual user. The control for this is located in

- the "passwordlocation" option in voicemail.conf. Please see the sample configuration for more information.
- The ChanlsAvail application now exposes the returned cause code using a separate variable, AVAILCAUSECODE, instead of overwriting the device state in AVAILSTATUS.
- Added 'd' option to app_followme. This option disables the "Please hold" announcement.
- Added 'y' option to app_record. This option enables a mode where any DTMF digit received will terminate recording.
- Voicemail now supports per mailbox settings for folders when using IMAP storage.
 Previously the folder could only be set per context, but has now been extended using the imapfolder option.
- Voicemail now supports per mailbox settings for nextaftercmd and minsecs.
- Voicemail now allows the pager date format to be specified separately from the email date format.
- New applications JabberJoin, JabberLeave, and JabberSendGroup have been added to allow joining, leaving, and sending text to group chats.
- MeetMe has a new option 'G' to play an announcement before joining a conference.
- Page has a new option 'A(x)' which will playback an announcement simultaneously
 to all paged phones (and optionally excluding the caller's one using the new
 option 'n') before the call is bridged.
- The 'f' option to Dial has been augmented to take an optional argument. If no argument is provided, the 'f' option works as it always has. If an argument is provided, then the connected party information of all outgoing channels created during the Dial will be set to the argument passed to the 'f' option.
- Dial now inherits the GOSUB_RETVAL from the peer, when the U() option runs a
 Gosub on the peer.
- The OSP lookup application adds in/outbound network ID, optional security, number portability, QoS reporting, destination IP port, custom info and service type features.
- Added new application VMSayName that will play the recorded name of the voicemail user if it exists, otherwise will play the mailbox number.
- Added custom device states to ConfBridge bridges. Use 'confbridge:<name>' to retrieve state for a particular bridge, where <name> is the conference name
- app_directory now allows exiting at any time using the operator or pound key.
- Voicemail now supports setting a locale per-mailbox.
- Two new applications are provided for declining counting phrases in multiple languages. See the application notes for SayCountedNoun and SayCountedAdj for more information.
- Voicemail now runs the externnotify script when pollmailboxes is activated and notices a change.
- Voicemail now includes rdnis within msgXXXX.txt file.
- · Added 'D' command to ExternalIVR full details in http://wiki.asterisk.org

Dialplan Functions

- SRVQUERY and SRVRESULT functions added. This can be used to query and iterate
 over SRV records associated with a specific service. From the CLI, type
 'core show function SRVQUERY' and 'core show function SRVRESULT' for more
 details on how these may be used.
- PITCH_SHIFT dialplan function added. This function can be used to modify the pitch of a channel's tx and rx audio streams.
- Added new dialplan functions CONNECTEDLINE and REDIRECTING which permits setting various connected line and redirecting party information.
- CALLERID and CONNECTEDLINE dialplan functions have been extended to support ISDN subaddressing.
- The CHANNEL() function now supports the "name" and "checkhangup" options.
- For DAHDI channels, the CHANNEL() dialplan function now allows the dialplan to request changes in the configuration of the active echo canceller on the channel (if any), for the current call only. The syntax is:

exten => s,n,Set(CHANNEL(echocan mode)=off)

The possible values are:

on - normal mode (the echo canceller is actually reinitialized)

fax - FAX/data mode (NLP disabled if possible, otherwise completely disabled)

voice - voice mode (returns from FAX mode, reverting the changes that were made when FAX mode was requested)

- Added new dialplan function MASTER_CHANNEL(), which permits retrieving
 and setting variables on the channel which created the current channel.
 Administrators should take care to avoid naming conflicts, when multiple
 channels are dialled at once, especially when used with the Local channel
 construct (which all could set variables on the master channel). Usage
 of the HASH() dialplan function, with the key set to the name of the slave
 channel, is one approach that will avoid conflicts.
- Added new dialplan function MUTEAUDIO() for muting inbound and/or outbound audio in a channel.
- func_odbc now allows multiple row results to be retrieved without using
 mode=multirow. If rowlimit is set, then additional rows may be retrieved
 from the same query by using the name of the function which retrieved the
 first row as an argument to ODBC_FETCH().
- Added JABBER_RECEIVE, which permits receiving XMPP messages from the dialplan. This function returns the content of the received message.
- Added REPLACE, which searches a given variable name for a set of characters, then either replaces them with a single character or deletes them.
- Added PASSTHRU, which literally passes the same argument back as its return value. The intent is to be able to use a literal string argument to functions that currently require a variable name as an argument.
- HASH-associated variables now can be inherited across channel creation, by prefixing the name of the hash at assignment with the appropriate number of underscores, just like variables.
- GROUP_MATCH_COUNT has been improved to allow regex matching on category
- CHANNEL(secure_bridge_signaling) and CHANNEL(secure_bridge_media) to set/get
 whether or not channels that are bridged to the current channel will be
 required to have secure signaling and/or media.
- CHANNEL(secure_signaling) and CHANNEL(secure_media) to get whether or not the current channel has secure signaling and/or media.
- For DAHDI/ISDN channels, the CHANNEL() dialplan function now supports the "no_media_path" option.

Returns "0" if there is a B channel associated with the call.

Returns "1" if no B channel is associated with the call. The call is either on hold or is a call waiting call.

- Added option to dialplan function CDR(), the 'f' option allows for high resolution times for billsec and duration fields.
- FILE() now supports line-mode and writing.
- Added FIELDNUM(), which returns the 1-based offset of a field in a list.
- FRAME_TRACE(), for tracking internal ast_frames on a channel.

Dialplan Variables

- Added DYNAMIC_FEATURENAME which holds the last triggered dynamic feature.
- Added DYNAMIC_PEERNAME which holds the unique channel name on the other side and is set when a dynamic feature is triggered.
- Added PARKINGLOT which can be used with parkeddynamic feature.conf option to dynamically create a new parking lot matching the value this varible is set to.
- Added PARKINGDYNAMIC which represents the template parkinglot defined in features.conf that should be the base for dynamic parkinglots.
- Added PARKINGDYNCONTEXT which tells what context a newly created dynamic

- parkinglot should have.
- Added PARKINGDYNPOS which holds what parking positions a dynamic parkinglot should have.

Queue changes

- Added "ready" option to QUEUE_MEMBER counting to count free agents whose wrap-up timeout has expired.
- Added 'R' option to app_queue. This option stops moh and indicates ringing
 to the caller when an Agent's phone is ringing. This can be used to indicate
 to the caller that their call is about to be picked up, which is nice when
 one has been on hold for an extened period of time.
- A new config option, penaltymemberslimit, has been added to queues.conf.
 When set this option will disregard penalty settings when a queue has too few members.
- A new option, 'I' has been added to both app_queue and app_dial.
 By setting this option, Asterisk will not update the caller with connected line changes or redirecting party changes when they occur.
- A 'relative-peroidic-announce' option has been added to queues.conf. When
 enabled, this option will cause periodic announce times to be calculated
 from the end of announcements rather than from the beginning.
- The autopause option in queues.conf can be passed a new value, "all." The
 result is that if a member becomes auto-paused, he will be paused in all
 queues for which he is a member, not just the queue that failed to reach
 the member.
- Added dialplan function QUEUE_EXISTS to check if a queue exists
- The queue logger now allows events to optionally propagate to a file, even when realtime logging is turned on. Additionally, realtime logging supports sending the event arguments to 5 individual fields, although it will fallback to the previous data definition, if the new table layout is not found.

mISDN channel driver (chan_misdn) changes

- Added display_connected parameter to misdn.conf to put a display string in the CONNECT message containing the connected name and/or number if the presentation setting permits it.
- Added display_setup parameter to misdn.conf to put a display string in the SETUP message containing the caller name and/or number if the presentation setting permits it.
- Made misdn.conf parameters localdialplan and cpndialplan take a -1 to indicate the dialplan settings are to be obtained from the asterisk channel.
- Made misdn.conf parameter callerid accept the "name" <number> format used by the rest of the system.
- Made use the nationalprefix and internationalprefix misdn.conf
 parameters to prefix any received number from the ISDN link if that
 number has the corresponding Type-Of-Number. NOTE: This includes
 comparing the incoming call's dialed number against the MSN list.
- Added the following new parameters: unknownprefix, netspecificprefix, subscriberprefix, and abbreviatedprefix in misdn.conf to prefix any received number from the ISDN link if that number has the corresponding Type-Of-Number.
- Added new dialplan application misdn_command which permits controlling the CCBS/CCNR functionality.
- Added new dialplan function mISDN_CC which permits retrieval of various values from an active call completion record.
- For PTP, you should manually send the COLR of the redirected-to party for an incomming redirected call if the incoming call could experience further redirects. Just set the REDIRECTING(to-num,i) = \${EXTEN} and

- set the REDIRECTING(to-pres) to the COLR. A call has been redirected if the REDIRECTING(from-num) is not empty.
- For outgoing PTP redirected calls, you now need to use the inhibit(i) option on all of the REDIRECTING statements before dialing the redirected-to party. You still have to set the REDIRECTING(to-xxx,i) and the REDIRECTING(from-xxx,i) values. The PTP call will update the redirecting-to presentation (COLR) when it becomes available.
- Added outgoing_colp parameter to misdn.conf to filter outgoing COLP information.

thirdparty mISDN enhancements

mISDN has been modified by Digium, Inc. to greatly expand facility message support to allow:

- Enhanced COLP support for call diversion and transfer.
- CCBS/CCNR support.

The latest modified mISDN v1.1.x based version is available at: http://svn.digium.com/svn/thirdparty/mISDN/trunk http://svn.digium.com/svn/thirdparty/mISDN/trunk http://svn.digium.com/svn/thirdparty/mISDN/trunk

Tagged versions of the modified mISDN code are available under: http://svn.digium.com/svn/thirdparty/mISDN/tags http://svn.digium.com/svn/tags http://svn/tags http://svn

libpri channel driver (chan_dahdi) DAHDI changes

- The channel variable PRIREDIRECTREASON is now just a status variable and it is also deprecated. Use the REDIRECTING(reason) dialplan function to read and alter the reason.
- For Q.SIG and ETSI PRI/BRI-PTP, you should manually send the COLR of the
 redirected-to party for an incomming redirected call if the incoming call
 could experience further redirects. Just set the
 REDIRECTING(to-num,i) = CALLERID(dnid) and set the REDIRECTING(to-pres)
 to the COLR. A call has been redirected if the REDIRECTING(count) is not
 zero.
- For outgoing Q.SIG and ETSI PRI/BRI-PTP redirected calls, you need to
 use the inhibit(i) option on all of the REDIRECTING statements before
 dialing the redirected-to party. You still have to set the
 REDIRECTING(to-xxx,i) and the REDIRECTING(from-xxx,i) values. The call
 will update the redirecting-to presentation (COLR) when it becomes available.
- Added the ability to ignore calls that are not in a Multiple Subscriber Number (MSN) list for PTMP CPE interfaces.
- Added dynamic range compression support for dahdi channels. It is configured via the rxdrc and txdrc parameters in chan dahdi.conf.
- Added support for ISDN calling and called subaddress with partial support for connected line subaddress.
- Added support for BRI PTMP NT mode. (Requires latest LibPRI.)
- Added handling of received HOLD/RETRIEVE messages and the optional ability to transfer a held call on disconnect similar to an analog phone.
- Added CallRerouting/CallDeflection support for Q.SIG, ETSI PTP, ETSI PTMP.
 Will reroute/deflect an outgoing call when receive the message.
 Can use the DAHDISendCallreroutingFacility to send the message for the supported switches.
- Added standard location to add options to chan_dahdi dialing: Dial(DAHDI/q1[/extension[/options]])

Current options:

K(<keypad_digits>)

R Reverse charging indication

Added Reverse Charging Indication (Collect calls) send/receive option.
 Send reverse charging in SETUP message with the chan_dahdi R dialing option.
 Dial(DAHDI/g1/extension/R)

- Access received reverse charge in SETUP message by: \${CHANNEL(reversecharge)} (requires latest LibPRI)
- Added ability to send/receive keypad digits in the SETUP message.
 Send keypad digits in SETUP message with the chan_dahdi K(<keypad_digits>) dialing option. Dial(DAHDI/g1/[~mdavenport:extension]/K(<keypad_digits>))
 Access any received keypad digits in SETUP message by: \${CHANNEL(keypad_digits)} (requires latest LibPRI)
- Added ability to send and receive ETSI Explicit Call Transfer (ECT) messages
 to eliminate tromboned calls. A tromboned call goes out an interface and comes
 back into the same interface. Tromboned calls happen because of call routing,
 call deflection, call forwarding, and call transfer.
- Added the ability to send and receive ETSI Advice-Of-Charge messages.
- Added the ability to support call waiting calls. (The SETUP has no B channel assigned.)
- Added Malicious Call ID (MCID) event to the AMI call event class.
- Added Message Waiting Indication (MWI) support for ISDN PTMP endpoints (phones).

Asterisk Manager Interface

- The Hangup action now accepts a Cause header which may be used to set the channel's hangup cause.
- sslprivatekey option added to manager.conf and http.conf. Adds the ability
 to specify a separate .pem file to hold a private key. By default sslcert
 is used to hold both the public and private key.
- Options in manager.conf and http.conf with the 'ssl' prefix have been replaced
 for options containing the 'tls' prefix. For example, 'sslenable' is now
 'tlsenable'. This has been done in effort to keep ssl and tls options consistent
 across all .conf files. All affected sample.conf files have been modified to
 reflect this change. Previous options such as 'sslenable' still work,
 but options with the 'tls' prefix are preferred.
- Added a MuteAudio AMI action for muting inbound and/or outbound audio in a channel. (res_mutestream.so)
- The configuration file manager.conf now supports a channelvars option, which specifies a list of channel variables to include in each channel-oriented event.
- The redirect command now has new parameters ExtraContext, ExtraExtension, and ExtraPriority to allow redirecting the second channel to a different location than the first.
- Added new event "JabberStatus" in the Jabber module to monitor buddies status
- Added a "MixMonitorMute" AMI action for muting inbound and/or outbound audio in a MixMonitor recording.
- The 'iax2 show peers' output is now similar to the expected output of 'sip show peers'.
- Added Advice-Of-Charge events (AOC-S, AOC-D, and AOC-E) in the new aoc event class.
- Added Advice-Of-Charge manager action, AOCMessage, for generating AOC-D and AOC-E messages on a channel.
- A DBGetComplete event now follows a DBGetResponse, to make the DBGet action conform more closely to similar events.
- Added a new eventfilter option per user to allow whitelisting and blacklisting of events.
- Added optional parkinglot variable for park command.

Channel Event Logging

 A new interface, CEL, is introduced here. CEL logs single events, much like the AMI, but it differs from the AMI in that it logs to db backends much like CDR does; is based on the event subsystem introduced by Russell, and can share in all its benefits; allows multiple backends to operate like CDR; is specialized to event data that would be of concern to billing sytems, like CDR. Backends for logging and accounting calls have been produced, but a new CDR backend is still in development.

CDR

- 'linkedid' and 'peeraccount' are new CDR fields available to CDR aficionados.
 linkedid is based on uniqueID, but spreads to other channels as transfers, dials,
 etc are performed. Thus the pieces of CDR can be grouped into multilegged sets.
- Multiple files and formats can now be specified in cdr_custom.conf.
- cdr_syslog has been added which allows CDRs to be written directly to syslog.
 See configs/cdr_syslog.conf.sample for more information.
- A 'sequence' field has been added to CDRs which can be combined with linkedid or uniqueid to uniquely identify a CDR.
- Handling of billsec and duration field has changed. If your table definition specifies those fields as float, double or similar they will now be logged with microsecond accuracy instead of a whole integer.

Calendaring for Asterisk

A new set of modules were added supporing calendar integration with Asterisk.
 Dialplan functions for reading from and writing to calendars are included,
 as well as the ability to execute dialplan logic upon calendar event notifications.
 iCalendar, CalDAV, and Exchange Server calendars (via res_calendar_exchange for
 Exchange Server 2003 with no write or attendee support, and res_calendar_ews for
 Exchange Server 2007+ with full write and attendee support) are supported (Exchange
 2003 support does not support forms-based authentication).

Call Completion Supplementary Services for Asterisk

Call completion support has been added for SIP, DAHDI/ISDN, and DAHDI/analog.
 DAHDI/ISDN supports call completion for the following switch types:
 Eurolsdn(ETSI) for PTP and PTMP modes, and Qsig.
 See http://wiki.asterisk.org for details.

Multicast RTP Support

A new RTP engine and channel driver have been added which supports Multicast RTP.
The channel driver can be used with the Page application to perform multicast RTP
paging. The dial string format is: MulticastRTP/<type>/<destination>/<control address>
Type can be either basic or linksys.

Destination is the IP address and port for the RTP packets.

Control address is specific to the linksys type and is used for sending the control packets unique to them.

Security Events Framework

Asterisk has a new C API for reporting security events. The module res_security_log sends these events to the "security" logger level. Currently, AMI is the only Asterisk component that reports security events. However, SIP support will be coming soon. For more information on the security events framework, see the "Security Events" chapter of the included documentation - doc/AST.pdf.

Fax

- A technology independent fax frontend (res_fax) has been added to Asterisk.
- A spandsp based fax backend (res_fax_spandsp) has been added.
- The app_fax module has been deprecated in favor of the res_fax module and

- the new res_fax_spandsp backend.
- The SendFAX and ReceiveFAX applications now send their log messages to a 'fax' logger level, instead of to the generic logger levels. To see these messages, the system's logger.conf file will need to direct the 'fax' logger level to one or more destinations; the logger.conf.sample file includes an example of how to do this. Note that if the 'fax' logger level is not directed to at least one destination, log messages generated by these applications will be lost, and that if the 'fax' logger level is directed to the console, the 'core set verbose' and 'core set debug' CLI commands will have no effect on whether the messages appear on the console or not.

Miscellaneous

- The transmit_silence_during_record option in asterisk.conf.sample has been removed.
 Now, in order to enable transmitting silence during record the transmit_silence option should be used. transmit_silence_during_record remains a valid option, but defaults to the behavior of the transmit_silence option.
- Addition of the Unit Test Framework API for managing registration and execution
 of unit tests with the purpose of verifying the operation of C functions.
- SendText is now implemented in chan_gtalk and chan_jingle. It will simply send XMPP text messages to the remote JID.
- Modules.conf has a new option "require" that marks a module as critical for the execution of Asterisk.
 - If one of the required modules fail to load, Asterisk will exit with a return code set to 2.
- An 'X' option has been added to the asterisk application which enables #exec support.
 This allows #exec to be used in asterisk.conf.
- jabber.conf supports a new option auth_policy that toggles auto user registration.
- A new lockconfdir option has been added to asterisk.conf to protect the configuration directory (/etc/asterisk by default) during reloads.
- The parkeddynamic option has been added to features.conf to enable the creation of dynamic parkinglots.
- chan_dahdi now supports reporting alarms over AMI either by channel or span via the reportalarms config option.
- chan_dahdi supports dialing configuring and dialing by device file name.
 DAHDI/span-name!local!1 will use /dev/dahdi/span-name/local/1. Likewise it may appear in chan_dahdi.conf as 'channel => span-name!local!1'.
- A new options for chan_dahdi.conf: 'ignore_failed_channels'. Boolean.
 False by default. If set, chan_dahdi will ignore failed 'channel' entries.
 Handy for the above name-based syntax as it does not depend on initialization order.
- The Realtime dialplan switch now caches entries for 1 second. This provides a significant increase in performance (about 3X) for installations using this switchtype.
- Distributed devicestate now supports the use of the XMPP protocol, in addition to AIS. For more information, please see http://wiki.asterisk.org
- The addition of G.719 pass-through support.
- Added support for 16khz Speex audio. This can be enabled by using 'allow=speex16' during device configuration.
- The UNISTIM channel driver (chan_unistim) has been updated to support devices that have less than 3 lines on the LCD.
- Realtime now supports database failover. See the sample extconfig.conf for details.
- The addition of improved translation path building for wideband codecs. Sample rate changes during translation are now avoided unless absolutely necessary.
- The addition of the res_stun_monitor module for monitoring and reacting to network changes while behind a NAT.

CLI Changes

The 'core set debug' and 'core set verbose' commands, in previous versions, could
optionally accept a filename, to apply the setting only to the code generated from

that source file when Asterisk was built. However, there are some modules in Asterisk that are composed of multiple source files, so this did not result in the behavior that users expected. In this version, 'core set debug' and 'core set verbose' can optionally accept **module** names instead (with or without the .so extension), which applies the setting to the entire module specified, regardless of which source files it was built from.

- New 'manager show settings' command showing the current settings loaded from manager.conf.
- Added 'all' keyword to the CLI command "channel request hangup" so that you can send the channel hangup request to all channels.
- Added a "core reload" CLI command that executes a global reload of Asterisk.

Asterisk Command Reference

This page is the top level page for all of the Asterisk applications, functions, manager actions, and AGI commands that are kept in the XML based documentation that is included with Asterisk.

AGI Commands

AGICommand_answer

ANSWER

Synopsis

Answer channel

Description

Answers channel if not already in answer state. Returns -1 on channel failure, or 0 if successful.

Syntax

ANSWER

Arguments

See Also

• AGICommand_hangup

Import Version

AGICommand_asyncagi break

ASYNCAGI BREAK

Synopsis

Interrupts Async AGI

Description

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

Syntax

ASYNCAGI BREAK

Arguments

See Also

• AGICommand_hangup

Import Version

AGICommand_channel status

CHANNEL STATUS

Synopsis

Returns status of the connected channel.

Description

Returns the status of the specified channelname. If no channel name is given then returns the status of the current channel.

Return values:

- 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.

Syntax

CHANNEL STATUS CHANNELNAME

Arguments

• channelname

Import Version

AGICommand_control stream file

CONTROL STREAM FILE

Synopsis

Sends audio file on channel and allows the listener to control the stream.

Description

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. 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.

Syntax

CONTROL STREAM FILE FILENAME ESCAPE_DIGITS SKIPMS FFCHAR REWCHR PAUSECHR

Arguments

- filename The file extension must not be included in the filename.
- escape_digits
- skipms
- ffchar Defaults to *
- rewchr Defaults to #
- pausechr

Import Version

AGICommand_database del

DATABASE DEL

Synopsis

Removes database key/value

Description

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

Returns 1 if successful, 0 otherwise.

Syntax

DATABASE DEL FAMILY KEY

Arguments

- family
- key

Import Version

AGICommand_database deltree

DATABASE DELTREE

Synopsis

Removes database keytree/value

Description

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

Returns 1 if successful, 0 otherwise.

Syntax

DATABASE DELTREE FAMILY KEYTREE

Arguments

- family
- keytree

Import Version

AGICommand_database get

DATABASE GET

Synopsis

Gets database value

Description

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

Returns 0 if key is not set. Returns 1 if key is set and returns the variable in parenthesis.

Example return code: 200 result=1 (testvariable)

Syntax

DATABASE GET FAMILY KEY

Arguments

- family
- key

Import Version

AGICommand_database put

DATABASE PUT

Synopsis

Adds/updates database value

Description

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

Returns 1 if successful, 0 otherwise.

Syntax

DATABASE PUT FAMILY KEY VALUE

Arguments

- family
- key
- value

Import Version

AGICommand_exec

EXEC

Synopsis

Executes a given Application

Description

Executes application with given options.

Returns whatever the application returns, or -2 on failure to find application.

Syntax

EXEC APPLICATION OPTIONS

Arguments

- \bullet application
- options

Import Version

AGICommand_get data

GET DATA

Synopsis

Prompts for DTMF on a channel

Description

Stream the given file, and receive DTMF data.

Returns the digits received from the channel at the other end.

Syntax

GET DATA FILE TIMEOUT MAXDIGITS

Arguments

- ullet file
- timeout
- maxdigits

Import Version

AGICommand_get full variable

GET FULL VARIABLE

Synopsis

Evaluates a channel expression

Description

Returns 0 if variablename is not set or channel does not exist. Returns 1 if variablename is set and returns the variable in parenthesis. Understands complex variable names and builtin variables, unlike GET VARIABLE.

Example return code: 200 result=1 (testvariable)

Syntax

GET FULL VARIABLE VARIABLENAME CHANNEL NAME

Arguments

- variablename
- channel name

Import Version

AGICommand_get option

GET OPTION

Synopsis

Stream file, prompt for DTMF, with timeout.

Description

Behaves similar to STREAM FILE but used with a timeout option.

Syntax

GET OPTION FILENAME ESCAPE_DIGITS TIMEOUT

Arguments

- filename
- escape_digits
- ullet timeout

See Also

• AGICommand_stream file

Import Version

AGICommand_get variable

GET VARIABLE

Synopsis

Gets a channel variable.

Description

Returns 0 if variablename is not set. Returns 1 if variablename is set and returns the variable in parentheses.

Example return code: 200 result=1 (testvariable)

Syntax

GET VARIABLE VARIABLENAME

Arguments

• variablename

Import Version

AGICommand_gosub

GOSUB

Synopsis

Cause the channel to execute the specified dialplan subroutine.

Description

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

Syntax

GOSUB CONTEXT EXTENSION PRIORITY OPTIONAL-ARGUMENT

Arguments

- context
- extension
- priority
- ullet optional-argument

Import Version

AGICommand_hangup

HANGUP

Synopsis

Hangup a channel.

Description

Hangs up the specified channel. If no channel name is given, hangs up the current channel

Syntax

HANGUP CHANNELNAME

Arguments

• channelname

Import Version

AGICommand_noop

NOOP

Synopsis

Does nothing.

Description

Does nothing.

Syntax

NOOP

Arguments

Import Version

AGICommand_receive char

RECEIVE CHAR

Synopsis

Receives one character from channels supporting it.

Description

Receives a character of text on a channel. Most channels do not support the reception of text. 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.

Syntax

RECEIVE CHAR TIMEOUT

Arguments

• timeout - The maximum time to wait for input in milliseconds, or 0 for infinite. Most channels

Import Version

AGICommand_receive text

RECEIVE TEXT

Synopsis

Receives text from channels supporting it.

Description

Receives a string of text on a channel. Most channels do not support the reception of text. Returns -1 for failure or 1 for success, and the string in parenthesis.

Syntax

RECEIVE TEXT TIMEOUT

Arguments

• timeout - The timeout to be the maximum time to wait for input in milliseconds, or 0 for infinite.

Import Version

AGICommand_record file

RECORD FILE

Synopsis

Records to a given file.

Description

Record to a file until a given dtmf digit in the sequence is received. Returns -1 on hangup or error. The format will specify what kind of file will be recorded. The *timeout* is the maximum record time in milliseconds, or -1 for no *timeout*. *offset samples* is optional, and, if provided, will seek to the offset without exceeding the end of the file. *silence* is the number of seconds of silence allowed before the function returns despite the lack of dtmf digits or reaching *time out*. *silence* value must be preceded by s= and is also optional.

Syntax

RECORD FILE FILENAME FORMAT ESCAPE_DIGITS TIMEOUT OFFSET SAMPLES BEEP S=SILENCE

Arguments

- filename
- format
- escape_digits
- timeout
- offset samples
- BEEP
- s=silence

Import Version

AGICommand_say alpha

SAY ALPHA

Synopsis

Says a given character string.

Description

Say a given character string, returning early if any of the given DTMF digits are received on the channel. 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.

Syntax

SAY ALPHA NUMBER ESCAPE_DIGITS

Arguments

- number
- escape_digits

Import Version

AGICommand_say date

SAY DATE

Synopsis

Says a given date.

Description

Say a given date, returning early if any of the given DTMF digits are received on the channel. 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.

Syntax

SAY DATE DATE ESCAPE_DIGITS

Arguments

- date Is number of seconds elapsed since 00:00:00 on January 1, 1970. Coordinated Universal Time (UTC).
- escape_digits

Import Version

AGICommand_say datetime

SAY DATETIME

Synopsis

Says a given time as specified by the format given.

Description

Say a given time, returning early if any of the given DTMF digits are received on the channel. 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.

Syntax

SAY DATETIME TIME ESCAPE_DIGITS FORMAT TIMEZONE

Arguments

- time Is number of seconds elapsed since 00:00:00 on January 1, 1970, Coordinated Universal Time (UTC)
- escape_digits
- format Is the format the time should be said in. See voicemail.conf (defaults to ABdY 'digits/at' IMp).
- timezone Acceptable values can be found in /usr/share/zoneinfo Defaults to machine default.

Import Version

AGICommand_say digits

SAY DIGITS

Synopsis

Says a given digit string.

Description

Say a given digit string, returning early if any of the given DTMF digits are received on the channel. 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.

Syntax

SAY DIGITS NUMBER ESCAPE_DIGITS

Arguments

- ullet number
- escape_digits

Import Version

AGICommand_say number

SAY NUMBER

Synopsis

Says a given number.

Description

Say a given number, returning early if any of the given DTMF digits are received on the channel. 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.

Syntax

SAY NUMBER NUMBER ESCAPE_DIGITS GENDER

Arguments

- number
- escape_digits
- gender

Import Version

AGICommand_say phonetic

SAY PHONETIC

Synopsis

Says a given character string with phonetics.

Description

Say a given character string with phonetics, returning early if any of the given DTMF digits are received on the channel. 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.

Syntax

SAY PHONETIC STRING ESCAPE_DIGITS

Arguments

- ullet string
- escape_digits

Import Version

AGICommand_say time

SAY TIME

Synopsis

Says a given time.

Description

Say a given time, returning early if any of the given DTMF digits are received on the channel. 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.

Syntax

SAY TIME TIME ESCAPE_DIGITS

Arguments

- time Is number of seconds elapsed since 00:00:00 on January 1, 1970. Coordinated Universal Time (UTC).
- escape_digits

Import Version

AGICommand_send image

SEND IMAGE

Synopsis

Sends images to channels supporting it.

Description

Sends the given image on a channel. Most channels do not support the transmission of images. 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.

Syntax

SEND IMAGE IMAGE

Arguments

• image

Import Version

AGICommand_send text

SEND TEXT

Synopsis

Sends text to channels supporting it.

Description

Sends the given text on a channel. Most channels do not support the transmission of text. Returns 0 if text is sent, or if the channel does not support text transmission. Returns -1 only on error/hangup.

Syntax

SEND TEXT TEXT TO SEND

Arguments

• text to send - Text consisting of greater than one word should be placed in quotes since the command only accepts a single argument.

Import Version

AGICommand_set autohangup

SET AUTOHANGUP

Synopsis

Autohangup channel in some time.

Description

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.

Syntax

SET AUTOHANGUP TIME

Arguments

• time

Import Version

AGICommand_set callerid

SET CALLERID

Synopsis

Sets callerid for the current channel.

Description

Changes the callerid of the current channel.

Syntax

SET CALLERID NUMBER

Arguments

• number

Import Version

AGICommand_set context

SET CONTEXT

Synopsis

Sets channel context.

Description

Sets the context for continuation upon exiting the application.

Syntax

SET CONTEXT DESIRED CONTEXT

Arguments

• desired context

Import Version

AGICommand_set extension

SET EXTENSION

Synopsis

Changes channel extension.

Description

Changes the extension for continuation upon exiting the application.

Syntax

SET EXTENSION NEW EXTENSION

Arguments

• new extension

Import Version

AGICommand_set music

SET MUSIC

Synopsis

Enable/Disable Music on hold generator

Description

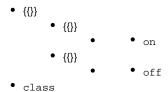
Enables/Disables the music on hold generator. If class is not specified, then the default music on hold class will be used. This generator will be stopped automatically when playing a file.

Always returns 0.

Syntax

SET MUSIC CLASS

Arguments



Import Version

AGICommand_set priority

SET PRIORITY

Synopsis

Set channel dialplan priority.

Description

Changes the priority for continuation upon exiting the application. The priority must be a valid priority or label.

Syntax

SET PRIORITY PRIORITY

Arguments

• priority

Import Version

AGICommand_set variable

SET VARIABLE

Synopsis

Sets a channel variable.

Description

Sets a variable to the current channel.

Syntax

SET VARIABLE VARIABLENAME VALUE

Arguments

- variablename
- value

Import Version

AGICommand_speech activate grammar SPEECH ACTIVATE GRAMMAR

-						
61	/n	0	n	C	IC	2
\mathbf{v}	/	$\mathbf{\circ}$	м	J	10	2

Activates a grammar.

Description

Activates the specified grammar on the speech object.

Syntax

SPEECH ACTIVATE GRAMMAR GRAMMAR NAME

Arguments

• grammar name

Import Version

AGICommand_speech create

SPEECH CREATE

Synopsis

Creates a speech object.

Description

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

Syntax

SPEECH CREATE ENGINE

Arguments

• engine

Import Version

AGICommand_speech deactivate grammar

SPEECH DEACTIVATE GRAMMAR

Synopsis

Deactivates a grammar.

Description

Deactivates the specified grammar on the speech object.

Syntax

SPEECH DEACTIVATE GRAMMAR GRAMMAR NAME

Arguments

• grammar name

Import Version

AGICommand_speech destroy

SPEECH DESTROY

Synopsis

Destroys a speech object.

Description

Destroy the speech object created by SPEECH CREATE.

Syntax

SPEECH DESTROY

Arguments

See Also

• AGICommand_speech create

Import Version

AGICommand_speech load grammar

SPEECH LOAD GRAMMAR

Synopsis

Loads a grammar.

Description

Loads the specified grammar as the specified name.

Syntax

SPEECH LOAD GRAMMAR GRAMMAR NAME PATH TO GRAMMAR

Arguments

- grammar name
- ullet path to grammar

Import Version

AGICommand_speech recognize

SPEECH RECOGNIZE

Synopsis

Recognizes speech.

Description

Plays back given prompt while listening for speech and dtmf.

Syntax

SPEECH RECOGNIZE PROMPT TIMEOUT OFFSET

Arguments

- prompt
- timeout
- offset

Import Version

AGICommand_speech set

SPEECH SET

Synopsis

Sets a speech engine setting.

Description

Set an engine-specific setting.

Syntax

SPEECH SET NAME VALUE

Arguments

- \bullet name
- value

Import Version

AGICommand_speech unload grammar

SPEECH UNLOAD GRAMMAR

-						
61	/n	0	n	C	IC	2
\mathbf{v}	/	$\mathbf{\circ}$	м	J	10	2

Unloads a grammar.

Description

Unloads the specified grammar.

Syntax

SPEECH UNLOAD GRAMMAR GRAMMAR NAME

Arguments

• grammar name

Import Version

AGICommand_stream file

STREAM FILE

Synopsis

Sends audio file on channel.

Description

Send the given file, allowing playback to be interrupted by the given digits, if any. 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. If musiconhold is playing before calling stream file it will be automatically stopped and will not be restarted after completion.

Syntax

STREAM FILE FILENAME ESCAPE_DIGITS SAMPLE OFFSET

Arguments

- filename File name to play. The file extension must not be included in the filename.
- escape_digits Use double quotes for the digits if you wish none to be permitted.
- sample offset If sample offset is provided then the audio will seek to sample offset before play starts.

See Also

• AGICommand_control stream file

Import Version

AGICommand_tdd mode

TDD MODE

Synopsis

Toggles TDD mode (for the deaf).

Description

Enable/Disable TDD transmission/reception on a channel. Returns 1 if successful, or 0 if channel is not TDD-capable.

Syntax

TDD MODE BOOLEAN

Arguments

- boolean
 - on
 - off

Import Version

AGICommand_verbose

VERBOSE

Synopsis

Logs a message to the asterisk verbose log.

Description

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

Syntax

VERBOSE MESSAGE LEVEL

Arguments

- message
- level

Import Version

AGICommand_wait for digit

WAIT FOR DIGIT

Synopsis

Waits for a digit to be pressed.

Description

Waits up to *timeout* milliseconds for channel to receive a DTMF digit. 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.

Syntax

WAIT FOR DIGIT TIMEOUT

Arguments

• timeout

Import Version

AGI Command Template Page

AGI COMMAND

Synop	osys		
Descr	iptio	n	
Synta	X		
•	AGI	COMMAND	<arg></arg>

Arguments

- arg
- something
- options
- option 'a' is asdfadf
- k
- option 'b' is asdfasdfadf
- c
- option 'c' is for cookie

Runs Dead

Yes / No

See Also

Dialplan Function Template Page Dialplan Application Template Page AMI Action Template Page

Import Version

This documentation was imported from Asterisk version ${\tt VERSION}$ ${\tt STRING}$ ${\tt HERE}.$

AMI Actions

AMI Action Template Page

ManagerAction

Synopsys
.....
Description

Syntax

Action: ManagerAction RequiredHeader: Value [OptionalHeader:] Value

Arguments

- RequiredHeader
 - This header is something that is required.
- OptionalHeader
 - This is some optional header

See Also

Dialplan Application Template page Dialplan Function Template page AGI Command Template Page

Import Version

This documentation was imported from Asterisk version ${\tt VERSION}$ ${\tt STRING}$ ${\tt HERE}.$

ManagerAction_AbsoluteTimeout

AbsoluteTimeout

Synopsis

Set absolute timeout.

Description

Hangup a channel after a certain time. Acknowledges set time with Timeout Set message.

Syntax

```
Action: AbsoluteTimeout
ActionID: <value>
Channel: <value>
Timeout: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel name to hangup.
- Timeout Maximum duration of the call (sec).

Import Version

ManagerAction_AgentLogoff

AgentLogoff

Synopsis

Sets an agent as no longer logged in.

Description

Sets an agent as no longer logged in.

Syntax

```
Action: AgentLogoff
ActionID: <value>
Agent: <value>
Soft: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Agent Agent ID of the agent to log off.
- Soft Set to true to not hangup existing calls.

Import Version

ManagerAction_Agents

Agents

Synopsis

Lists agents and their status.

Description

Will list info about all possible agents.

Syntax

Action: Agents ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_AGI

AGI

Synopsis

Add an AGI command to execute by Async AGI.

Description

Add an AGI command to the execute queue of the channel in Async AGI.

Syntax

```
Action: AGI
ActionID: <value>
Channel: <value>
Command: <value>
CommandID: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel that is currently in Async AGI.
- Command Application to execute.
- CommandID This will be sent back in CommandID header of AsyncAGI exec event notification.

Import Version

ManagerAction_AOCMessage

AOCMessage

Synopsis

Generate an Advice of Charge message on a channel.

Description

Generates an AOC-D or AOC-E message on a channel.

Syntax

```
Action: AOCMessage
ActionID: <value>
Channel: <value>
ChannelPrefix: <value>
MsgType: <value>
ChargeType: <value>
UnitAmount(0): <value>
UnitType(0): <value>
CurrencyName: <value>
CurrencyAmount: <value>
CurrencyMultiplier: <value>
TotalType: <value>
AOCBillingId: <value>
ChargingAssociationId: <value>
ChargingAssociationNumber: <value>
ChargingAssociationPlan: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel name to generate the AOC message on.
- ChannelPrefix Partial channel prefix. By using this option one can match the beginning part of a channel name without having to put the entire name in. For example if a channel name is SIP/snom-00000001 and this value is set to SIP/snom, then that channel matches and the message will be sent. Note however that only the first matched channel has the message sent on it.
- MsgType Defines what type of AOC message to create, AOC-D or AOC-E
 - D
 - E
- \bullet $\,$ Charge Type Defines what kind of charge this message represents.
 - NA
 - FREE
 - Currency
 - Unit
- UnitAmount(0) This represents the amount of units charged. The ETSI AOC standard specifies that this value along with the optional UnitType value are entries in a list. To accommodate this these values take an index value starting at 0 which can be used to generate this list of unit entries. For Example, If two unit entires were required this could be achieved by setting the parameter UnitAmount(0)=1234 and UnitAmount(1)=5678. Note that UnitAmount at index 0 is required when ChargeType=Unit, all other entries in the list are optional.
- UnitType(0) Defines the type of unit. ETSI AOC standard specifies this as an integer value between 1 and 16, but this value is left
 open to accept any positive integer. Like the UnitAmount parameter, this value represents a list entry and has an index parameter that
 starts at 0.
- CurrencyName Specifies the currency's name. Note that this value is truncated after 10 characters.
- CurrencyAmount Specifies the charge unit amount as a positive integer. This value is required when ChargeType==Currency.
- CurrencyMultiplier Specifies the currency multiplier. This value is required when ChargeType==Currency.
 - OneThousandth
 - OneHundredth
 - OneTenth
 - One
 - Ten
 - Hundred
 - Thousand
- TotalType Defines what kind of AOC-D total is represented.
 - Total

- SubTotal
- AOCBillingId Represents a billing ID associated with an AOC-D or AOC-E message. Note that only the first 3 items of the enum are valid AOC-D billing IDs
 - Normal
 - ReverseCharge
 - CreditCard
 - ullet CallFwdUnconditional
 - CallFwdBusy
 - CallFwdNoReply
 - CallDeflection
 - CallTransfer
- ChargingAssociationId Charging association identifier. This is optional for AOC-E and can be set to any value between -32768
 and 32767
- ChargingAssociationNumber Represents the charging association party number. This value is optional for AOC-E.
- ChargingAssociationPlan Integer representing the charging plan associated with the ChargingAssociationNumber. The value is bits 7 through 1 of the Q.931 octet containing the type-of-number and numbering-plan-identification fields.

Import Version

ManagerAction_Atxfer

Atxfer

Synopsis

Attended transfer.

Description

Attended transfer.

Syntax

```
Action: Atxfer
ActionID: <value>
Channel: <value>
Exten: <value>
Context: <value>
Priority: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Transferer's channel.
- Exten Extension to transfer to.
- Context Context to transfer to.
- Priority Priority to transfer to.

Import Version

ManagerAction_Bridge

Bridge

Synopsis

Bridge two channels already in the PBX.

Description

Bridge together two channels already in the PBX.

Syntax

```
Action: Bridge
ActionID: <value>
Channel1: <value>
Channel2: <value>
Tone: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel1 Channel to Bridge to Channel2.
- Channel 2 Channel to Bridge to Channel 1.
- Tone Play courtesy tone to Channel 2.
 - yes
 - no

Import Version

ManagerAction_Challenge

Challenge

Synopsis

Generate Challenge for MD5 Auth.

Description

Generate a challenge for MD5 authentication.

Syntax

```
Action: Challenge
ActionID: <value>
AuthType: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- AuthType Digest algorithm to use in the challenge. Valid values are:
 - MD5

Import Version

ManagerAction_ChangeMonitor

ChangeMonitor

Synopsis

Change monitoring filename of a channel.

Description

This action may be used to change the file started by a previous 'Monitor' action.

Syntax

```
Action: ChangeMonitor
ActionID: <value>
Channel: <value>
File: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Used to specify the channel to record.
- File Is the new name of the file created in the monitor spool directory.

Import Version

ManagerAction_Command

Command

Synopsis

Execute Asterisk CLI Command.

Description

Run a CLI command.

Syntax

```
Action: Command
ActionID: <value>
Command: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Command Asterisk CLI command to run.

Import Version

ManagerAction_CoreSettings

CoreSettings

Synopsis

Show PBX core settings (version etc).

Description

Query for Core PBX settings.

Syntax

Action: CoreSettings ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_CoreShowChannels

CoreShowChannels

Synopsis

List currently active channels.

Description

List currently defined channels and some information about them.

Syntax

Action: CoreShowChannels ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_CoreStatus

CoreStatus

Synopsis

Show PBX core status variables.

Description

Query for Core PBX status.

Syntax

Action: CoreStatus ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_CreateConfig

CreateConfig

Synopsis

Creates an empty file in the configuration directory.

Description

This action will create an empty file in the configuration directory. This action is intended to be used before an UpdateConfig action.

Syntax

```
Action: CreateConfig
ActionID: <value>
Filename: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Filename The configuration filename to create (e.g. foo.conf).

Import Version

${\bf Manager Action_DAHDIDial Offhook}$

DAHDIDialOffhook

Synopsis

Dial over DAHDI channel while offhook.

Description

Generate DTMF control frames to the bridged peer.

Syntax

Action: DAHDIDialOffhook ActionID: <value> DAHDIChannel: <value> Number: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- DAHDIChannel DAHDI channel number to dial digits.
- Number Digits to dial.

Import Version

ManagerAction_DAHDIDNDoff

DAHDIDNDoff

Synopsis

Toggle DAHDI channel Do Not Disturb status OFF.

Description

Equivalent to the CLI command "dahdi set dnd channel off".



Note

Feature only supported by analog channels.

Syntax

Action: DAHDIDNDoff ActionID: <value> DAHDIChannel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- DAHDIChannel DAHDI channel number to set DND off.

Import Version

ManagerAction_DAHDIDNDon

DAHDIDNDon

Synopsis

Toggle DAHDI channel Do Not Disturb status ON.

Description

Equivalent to the CLI command "dahdi set dnd channel on".



Note

Feature only supported by analog channels.

Syntax

Action: DAHDIDNDon ActionID: <value> DAHDIChannel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- DAHDIChannel DAHDI channel number to set DND on.

Import Version

ManagerAction_DAHDIHangup

DAHDIHangup

Synopsis

Hangup DAHDI Channel.

Description

Simulate an on-hook event by the user connected to the channel.



Note

Valid only for analog channels.

Syntax

Action: DAHDIHangup ActionID: <value> DAHDIChannel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- DAHDIChannel DAHDI channel number to hangup.

Import Version

ManagerAction_DAHDIRestart

DAHDIRestart

Synopsis

Fully Restart DAHDI channels (terminates calls).

Description

Equivalent to the CLI command "dahdi restart".

Syntax

Action: DAHDIRestart ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_DAHDIShowChannels

DAHDIShowChannels

Synopsis

Show status of DAHDI channels.

Description

Similar to the CLI command "dahdi show channels".

Syntax

Action: DAHDIShowChannels ActionID: <value> DAHDIChannel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- DAHDIChannel Specify the specific channel number to show. Show all channels if zero or not present.

Import Version

ManagerAction_DAHDITransfer

DAHDITransfer

Synopsis

Transfer DAHDI Channel.

Description

Simulate a flash hook event by the user connected to the channel.



Note

Valid only for analog channels.

Syntax

Action: DAHDITransfer ActionID: <value> DAHDIChannel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- DAHDIChannel DAHDI channel number to transfer.

Import Version

ManagerAction_DataGet

DataGet

Synopsis

Retrieve the data api tree.

Description

Retrieve the data api tree.

Syntax

Action: DataGet ActionID: <value> Path: <value> Search: <value> Filter: <value>

Arguments

- \bullet $\mbox{\tt ActionID}$ $\mbox{\tt ActionID}$ for this transaction. Will be returned.
- Path
- Search
- ullet Filter

Import Version

ManagerAction_DBDel

DBDel

Synopsis

Delete DB entry.

Description

Syntax

```
Action: DBDel
ActionID: <value>
Family: <value>
Key: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- ullet Family
- Key

Import Version

ManagerAction_DBDelTree

DBDelTree

Synopsis

Delete DB Tree.

Description

Syntax

```
Action: DBDelTree
ActionID: <value>
Family: <value>
Key: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- ullet Family
- Key

Import Version

ManagerAction_DBGet

DBGet

Synopsis

Get DB Entry.

Description

Syntax

```
Action: DBGet
ActionID: <value>
Family: <value>
Key: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- ullet Family
- Key

Import Version

ManagerAction_DBPut

DBPut

Synopsis

Put DB entry.

Description

Syntax

Action: DBPut
ActionID: <value>
Family: <value>
Key: <value>
Val: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Family
- Key
- Val

Import Version

ManagerAction_Events

Events

Synopsis

Control Event Flow.

Description

Enable/Disable sending of events to this manager client.

Syntax

```
Action: Events
ActionID: <value>
EventMask: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- EventMask
 - on If all events should be sent.
 - off If no events should be sent.
 - $system, call, log, \ldots$ To select which flags events should have to be sent.

Import Version

ManagerAction_ExtensionState

ExtensionState

Synopsis

Check Extension Status.

Description

Report the extension state for given extension. If the extension has a hint, will use devicestate to check the status of the device connected to the extension.

Will return an Extension Status message. The response will include the hint for the extension and the status.

Syntax

Action: ExtensionState ActionID: <value> Exten: <value> Context: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Exten Extension to check state on.
- Context Context for extension.

Import Version

ManagerAction_GetConfig

GetConfig

Synopsis

Retrieve configuration.

Description

This action will dump the contents of a configuration file by category and contents or optionally by specified category only.

Syntax

```
Action: GetConfig
ActionID: <value>
Filename: <value>
Category: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Filename Configuration filename (e.g. foo.conf).
- Category Category in configuration file.

Import Version

ManagerAction_GetConfigJSON

GetConfigJSON

Synopsis

Retrieve configuration (JSON format).

Description

This action will dump the contents of a configuration file by category and contents in JSON format. This only makes sense to be used using rawman over the HTTP interface.

Syntax

```
Action: GetConfigJSON
ActionID: <value>
Filename: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Filename Configuration filename (e.g. foo.conf).

Import Version

ManagerAction_Getvar

Getvar

Synopsis

Gets a channel variable.

Description

Get the value of a global or local channel variable.



Note

If a channel name is not provided then the variable is global.

Syntax

```
Action: Getvar
ActionID: <value>
Channel: <value>
Variable: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel to read variable from.
- Variable Variable name.

Import Version

ManagerAction_Hangup

Hangup

Synopsis

Hangup channel.

Description

Hangup a channel.

Syntax

```
Action: Hangup
ActionID: <value>
Channel: <value>
Cause: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel The channel name to be hangup.
- Cause Numeric hangup cause.

Import Version

ManagerAction_IAXnetstats

IAXnetstats

Synopsis

Show IAX Netstats.

Description

Show IAX channels network statistics.

Syntax

Action: IAXnetstats

Arguments

Import Version

${\bf Manager Action_IAX peer list}$

IAXpeerlist

Synopsis

List IAX Peers.

Description

List all the IAX peers.

Syntax

Action: IAXpeerlist ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_IAXpeers

IAXpeers

Synopsis

List IAX peers.

Description

Syntax

Action: IAXpeers
ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_IAXregistry

IAXregistry

Synopsis

Show IAX registrations.

Description

Show IAX registrations.

Syntax

Action: IAXregistry ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_JabberSend

JabberSend

Synopsis

Sends a message to a Jabber Client.

Description

Sends a message to a Jabber Client.

Syntax

```
Action: JabberSend
ActionID: <value>
Jabber: <value>
JID: <value>
Message: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Jabber Client or transport Asterisk uses to connect to JABBER.
- JID XMPP/Jabber JID (Name) of recipient.
- Message Message to be sent to the buddy.

Import Version

ManagerAction_ListCategories

ListCategories

Synopsis

List categories in configuration file.

Description

This action will dump the categories in a given file.

Syntax

```
Action: ListCategories
ActionID: <value>
Filename: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Filename Configuration filename (e.g. foo.conf).

Import Version

ManagerAction_ListCommands

ListCommands

Synopsis

List available manager commands.

Description

Returns the action name and synopsis for every action that is available to the user.

Syntax

Action: ListCommands ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_LocalOptimizeAway

LocalOptimizeAway

Synopsis

Optimize away a local channel when possible.

Description

A local channel created with "/n" will not automatically optimize away. Calling this command on the local channel will clear that flag and allow it to optimize away if it's bridged or when it becomes bridged.

Syntax

Action: LocalOptimizeAway ActionID: <value> Channel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel The channel name to optimize away.

Import Version

ManagerAction_Login

Login

Synopsis

Login Manager.

Description

Login Manager.

Syntax

```
Action: Login
ActionID: <value>
Username: <value>
Secret: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Username Username to login with as specified in manager.conf.
- Secret Secret to login with as specified in manager.conf.

Import Version

ManagerAction_Logoff

Logoff

Synopsis

Logoff Manager.

Description

Logoff the current manager session.

Syntax

Action: Logoff ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_MailboxCount

MailboxCount

Synopsis

Check Mailbox Message Count.

Description

Checks a voicemail account for new messages.

Returns number of urgent, new and old messages.

Message: Mailbox Message Count

Mailbox: mailboxid

UrgentMessages: count

NewMessages: count

OldMessages: count

Syntax

Action: MailboxCount ActionID: <value> Mailbox: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Mailbox Full mailbox ID mailbox@vm-context.

Import Version

ManagerAction_MailboxStatus

MailboxStatus

Synopsis

Check mailbox.

Description

Checks a voicemail account for status.

Returns whether there are messages waiting.

Message: Mailbox Status.

Mailbox: mailboxid.

Waiting: 0 if messages waiting, 1 if no messages waiting.

Syntax

```
Action: MailboxStatus
ActionID: <value>
Mailbox: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Mailbox Full mailbox ID mailbox@vm-context.

Import Version

ManagerAction_MeetmeList

MeetmeList

Synopsis

List participants in a conference.

Description

Lists all users in a particular MeetMe conference. MeetmeList will follow as separate events, followed by a final event called MeetmeListComplete.

Syntax

```
Action: MeetmeList
ActionID: <value>
[Conference:] <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Conference Conference number.

Import Version

ManagerAction_MeetmeMute

MeetmeMute

Synopsis

Mute a Meetme user.

Description

Syntax

```
Action: MeetmeMute
ActionID: <value>
Meetme: <value>
Usernum: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Meetme
- Usernum

Import Version

ManagerAction_MeetmeUnmute

MeetmeUnmute

Synopsis

Unmute a Meetme user.

Description

Syntax

```
Action: MeetmeUnmute
ActionID: <value>
Meetme: <value>
Usernum: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Meetme
- Usernum

Import Version

ManagerAction_MixMonitorMute

MixMonitorMute

Synopsis

Mute / unMute a Mixmonitor recording.

Description

This action may be used to mute a MixMonitor recording.

Syntax

Action: MixMonitorMute ActionID: <value> Channel: <value> Direction: <value> State: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Used to specify the channel to mute.
- Direction Which part of the recording to mute: read, write or both (from channel, to channel or both channels).
- State Turn mute on or off : 1 to turn on, 0 to turn off.

Import Version

ManagerAction_ModuleCheck

ModuleCheck

Synopsis

Check if module is loaded.

Description

Checks if Asterisk module is loaded. Will return Success/Failure. For success returns, the module revision number is included.

Syntax

Action: ModuleCheck Module: <value>

Arguments

• Module - Asterisk module name (not including extension).

Import Version

ManagerAction_ModuleLoad

ModuleLoad

Synopsis

Module management.

Description

Loads, unloads or reloads an Asterisk module in a running system.

Syntax

```
Action: ModuleLoad
ActionID: <value>
Module: <value>
LoadType: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Module Asterisk module name (including .so extension) or subsystem identifier:
 - cdr
 - dnsmgr
 - extconfig
 - enum
 - manager
 - http
 - logger
 - features
 - dsp
 - udptl
 - indications
 - cel
 - plc
- LoadType The operation to be done on module. Subsystem identifiers may only be reloaded.
 - load
 - ullet unload
 - reload

If no module is specified for a reload loadtype, all modules are reloaded.

Import Version

ManagerAction_Monitor

Monitor

Synopsis

Monitor a channel.

Description

This action may be used to record the audio on a specified channel.

Syntax

Action: Monitor
ActionID: <value>
Channel: <value>
File: <value>
Format: <value>
Mix: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Used to specify the channel to record.
- File Is the name of the file created in the monitor spool directory. Defaults to the same name as the channel (with slashes replaced with dashes).
- Format Is the audio recording format. Defaults to wav.
- Mix Boolean parameter as to whether to mix the input and output channels together after the recording is finished.

Import Version

ManagerAction_Originate

Originate

Synopsis

Originate a call.

Description

Generates an outgoing call to a Extension/Context/Priority or Application/Data

Syntax

```
Action: Originate
ActionID: <value>
Channel: <value>
Exten: <value>
Context: <value>
Priority: <value>
Application: <value>
Data: <value>
Timeout: <value>
CallerID: <value>
Variable: <value>
Acount: <value>
Acount: <value>
Acount: <value>
Acount: <value>
Codecs: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel name to call.
- Exten Extension to use (requires Context and Priority)
- Context Context to use (requires Exten and Priority)
- Priority Priority to use (requires Exten and Context)
- Application Application to execute.
- Data Data to use (requires Application).
- Timeout How long to wait for call to be answered (in ms.).
- CallerID Caller ID to be set on the outgoing channel.
- Variable Channel variable to set, multiple Variable: headers are allowed.
- Account Account code.
- Async Set to true for fast origination.
- Codecs Comma-separated list of codecs to use for this call.

Import Version

ManagerAction_Park

Park

Synopsis

Park a channel.

Description

Park a channel.

Syntax

```
Action: Park
ActionID: <value>
Channel: <value>
Channel2: <value>
Timeout: <value>
Parkinglot: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel name to park.
- Channel 2 Channel to return to if timeout.
- Timeout Number of milliseconds to wait before callback.
- Parkinglot Specify in which parking lot to park the channel.

Import Version

ManagerAction_ParkedCalls

ParkedCalls

Synopsis

List parked calls.

Description

List parked calls.

Syntax

Action: ParkedCalls ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_PauseMonitor

PauseMonitor

Synopsis

Pause monitoring of a channel.

Description

This action may be used to temporarily stop the recording of a channel.

Syntax

Action: PauseMonitor ActionID: <value> Channel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Used to specify the channel to record.

Import Version

ManagerAction_Ping

Ping

Synopsis

Keepalive command.

Description

A 'Ping' action will ellicit a 'Pong' response. Used to keep the manager connection open.

Syntax

Action: Ping ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_PlayDTMF

PlayDTMF

Synopsis

Play DTMF signal on a specific channel.

Description

Plays a dtmf digit on the specified channel.

Syntax

```
Action: PlayDTMF
ActionID: <value>
Channel: <value>
Digit: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel name to send digit to.
- Digit The DTMF digit to play.

Import Version

ManagerAction_QueueAdd

QueueAdd

Synopsis

Add interface to queue.

Description

Syntax

Action: QueueAdd
ActionID: <value>
Queue: <value>
Interface: <value>
Penalty: <value>
Paused: <value>
MemberName: <value>
StateInterface: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Queue
- ullet Interface
- Penalty
- Paused
- MemberName
- StateInterface

Import Version

ManagerAction_QueueLog

QueueLog

Synopsis

Adds custom entry in queue_log.

Description

Syntax

```
Action: QueueLog
ActionID: <value>
Queue: <value>
Event: <value>
Uniqueid: <value>
Interface: <value>
Message: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Queue
- Event
- Uniqueid
- Interface
- Message

Import Version

ManagerAction_QueuePause

QueuePause

Synopsis

Makes a queue member temporarily unavailable.

Description

Syntax

```
Action: QueuePause
ActionID: <value>
Interface: <value>
Paused: <value>
Queue: <value>
Reason: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Interface
- Paused
- Queue
- Reason

Import Version

ManagerAction_QueuePenalty

QueuePenalty

Synopsis

Set the penalty for a queue member.

Description

Syntax

```
Action: QueuePenalty
ActionID: <value>
Interface: <value>
Penalty: <value>
Queue: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Interface
- Penalty
- Queue

Import Version

ManagerAction_QueueReload

QueueReload

Synopsis

Reload a queue, queues, or any sub-section of a queue or queues.

Description

Syntax

```
Action: QueueReload
ActionID: <value>
Queue: <value>
Members: <value>
Rules: <value>
Parameters: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Queue
- Members
 - yes
 - no
- Rules
 - yes
 - no
- Parameters
 - yes
 - no

Import Version

ManagerAction_QueueRemove

QueueRemove

Synopsis

Remove interface from queue.

Description

Syntax

```
Action: QueueRemove
ActionID: <value>
Queue: <value>
Interface: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Queue
- Interface

Import Version

ManagerAction_QueueReset

QueueReset

Synopsis

Reset queue statistics.

Description

Syntax

Action: QueueReset ActionID: <value> Queue: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Queue

Import Version

ManagerAction_QueueRule

QueueRule

Synopsis

Queue Rules.

Description

Syntax

Action: QueueRule ActionID: <value> Rule: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Rule

Import Version

ManagerAction_Queues

Queues

Synopsis

Queues.

Description

Syntax

Action: Queues

Arguments

Import Version

ManagerAction_QueueStatus

QueueStatus

Synopsis

Show queue status.

Description

Syntax

```
Action: QueueStatus
ActionID: <value>
Queue: <value>
Member: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Queue
- Member

Import Version

ManagerAction_QueueSummary

QueueSummary

Synopsis

Show queue summary.

Description

Syntax

Action: QueueSummary ActionID: <value> Queue: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Queue

Import Version

ManagerAction_Redirect

Redirect

Synopsis

Redirect (transfer) a call.

Description

Redirect (transfer) a call.

Syntax

Action: Redirect
ActionID: <value>
Channel: <value>
ExtraChannel: <value>
ExtraExten: <value>
Context: <value>
ExtraContext: <value>
Priority: <value>
ExtraPriority: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel to redirect.
- ExtraChannel Second call leg to transfer (optional).
- Exten Extension to transfer to.
- ExtraExten Extension to transfer extrachannel to (optional).
- Context Context to transfer to.
- ExtraContext Context to transfer extrachannel to (optional).
- Priority Priority to transfer to.
- ExtraPriority Priority to transfer extrachannel to (optional).

Import Version

ManagerAction_Reload

Reload

Synopsis

Send a reload event.

Description

Send a reload event.

Syntax

```
Action: Reload
ActionID: <value>
Module: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Module Name of the module to reload.

Import Version

ManagerAction_SendText

SendText

Synopsis

Send text message to channel.

Description

Sends A Text Message to a channel while in a call.

Syntax

```
Action: SendText
ActionID: <value>
Channel: <value>
Message: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel to send message to.
- Message Message to send.

Import Version

ManagerAction_Setvar

Setvar

Synopsis

Set a channel variable.

Description

Set a global or local channel variable.



Note

If a channel name is not provided then the variable is global.

Syntax

Action: Setvar ActionID: <value> Channel: <value> Variable: <value> Value: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Channel to set variable for.
- Variable Variable name.
- Value Variable value.

Import Version

ManagerAction_ShowDialPlan

ShowDialPlan

Synopsis

Show dialplan contexts and extensions

Description

Show dialplan contexts and extensions. Be aware that showing the full dialplan may take a lot of capacity.

Syntax

```
Action: ShowDialPlan
ActionID: <value>
Extension: <value>
Context: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Extension Show a specific extension.
- Context Show a specific context.

Import Version

ManagerAction_SIPnotify

SIPnotify

Synopsis

Send a SIP notify.

Description

Sends a SIP Notify event.

All parameters for this event must be specified in the body of this request via multiple Variable: name=value sequences.

Syntax

```
Action: SIPnotify
ActionID: <value>
Channel: <value>
Variable: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Peer to receive the notify.
- Variable At least one variable pair must be specified. name=value

Import Version

ManagerAction_SIPpeers

SIPpeers

Synopsis

List SIP peers (text format).

Description

Lists SIP peers in text format with details on current status. Peerlist will follow as separate events, followed by a final event called PeerlistComplete.

Syntax

Action: SIPpeers ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_SIPqualifypeer

SIPqualifypeer

Synopsis

Qualify SIP peers.

Description

Qualify a SIP peer.

Syntax

Action: SIPqualifypeer ActionID: <value> Peer: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Peer The peer name you want to qualify.

Import Version

ManagerAction_SIPshowpeer

SIPshowpeer

Synopsis

show SIP peer (text format).

Description

Show one SIP peer with details on current status.

Syntax

Action: SIPshowpeer ActionID: <value> Peer: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Peer The peer name you want to check.

Import Version

ManagerAction_SIPshowregistry

SIPshowregistry

Synopsis

Show SIP registrations (text format).

Description

Lists all registration requests and status. Registrations will follow as separate events. followed by a final event called RegistrationsComplete.

Syntax

Action: SIPshowregistry ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_SKINNYdevices

SKINNYdevices

Synopsis

List SKINNY devices (text format).

Description

Lists Skinny devices in text format with details on current status. Devicelist will follow as separate events, followed by a final event called DevicelistComplete.

Syntax

Action: SKINNYdevices ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_SKINNYlines

SKINNYlines

Synopsis

List SKINNY lines (text format).

Description

Lists Skinny lines in text format with details on current status. Linelist will follow as separate events, followed by a final event called LinelistComplete.

Syntax

Action: SKINNYlines ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

${\bf Manager Action_SKINNY} show device$

SKINNYshowdevice

Synopsis

Show SKINNY device (text format).

Description

Show one SKINNY device with details on current status.

Syntax

```
Action: SKINNYshowdevice
ActionID: <value>
Device: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Device The device name you want to check.

Import Version

ManagerAction_SKINNYshowline

SKINNYshowline

Synopsis

Show SKINNY line (text format).

Description

Show one SKINNY line with details on current status.

Syntax

Action: SKINNYshowline ActionID: <value> Line: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Line The line name you want to check.

Import Version

ManagerAction_Status

Status

Synopsis

List channel status.

Description

Will return the status information of each channel along with the value for the specified channel variables.

Syntax

```
Action: Status
ActionID: <value>
Channel: <value>
Variables: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel The name of the channel to query for status.
- \bullet Variables Comma , separated list of variable to include.

Import Version

ManagerAction_StopMonitor

StopMonitor

Synopsis

Stop monitoring a channel.

Description

This action may be used to end a previously started 'Monitor' action.

Syntax

Action: StopMonitor ActionID: <value> Channel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel The name of the channel monitored.

Import Version

ManagerAction_UnpauseMonitor

UnpauseMonitor

Synopsis

Unpause monitoring of a channel.

Description

This action may be used to re-enable recording of a channel after calling PauseMonitor.

Syntax

Action: UnpauseMonitor ActionID: <value> Channel: <value>

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Channel Used to specify the channel to record.

Import Version

ManagerAction_UpdateConfig

UpdateConfig

Synopsis

Update basic configuration.

Description

This action will modify, create, or delete configuration elements in Asterisk configuration files.

Syntax

```
Action: UpdateConfig
ActionID: <value>
SrcFilename: <value>
DstFilename: <value>
Reload: <value>
Action-XXXXXX: <value>
Cat-XXXXXX: <value>
Var-XXXXXX: <value>
Value-XXXXXX: <value>
Line-XXXXXXX: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- SrcFilename Configuration filename to read (e.g. foo.conf).
- DstFilename Configuration filename to write (e.g. foo.conf)
- Reload Whether or not a reload should take place (or name of specific module).
- Action-XXXXXX Action to take.

X's represent 6 digit number beginning with 000000.

- NewCat
- RenameCat
- DelCat
- EmptyCat
- Update
- Delete
- Append
- Insert
- Cat-XXXXXX Category to operate on.

X's represent 6 digit number beginning with 000000.

Var-XXXXXX - Variable to work on.

X's represent 6 digit number beginning with 000000.

• Value-XXXXXX - Value to work on.

X's represent 6 digit number beginning with 000000.

• Match-XXXXXX - Extra match required to match line.

X's represent 6 digit number beginning with 000000.

• Line-XXXXXX - Line in category to operate on (used with delete and insert actions).

X's represent 6 digit number beginning with 000000.

Import Version

ManagerAction_UserEvent

UserEvent

Synopsis

Send an arbitrary event.

Description

Send an event to manager sessions.

Syntax

```
Action: UserEvent
ActionID: <value>
UserEvent: <value>
Header1: <value>
HeaderN: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- UserEvent Event string to send.
- Header1 Content1.
- HeaderN ContentN.

Import Version

ManagerAction_VoicemailUsersList

VoicemailUsersList

Synopsis

List All Voicemail User Information.

Description

Syntax

Action: VoicemailUsersList ActionID: <value>

Arguments

• ActionID - ActionID for this transaction. Will be returned.

Import Version

ManagerAction_WaitEvent

WaitEvent

Synopsis

Wait for an event to occur.

Description

This action will ellicit a Success response. Whenever a manager event is queued. Once WaitEvent has been called on an HTTP manager session, events will be generated and queued.

Syntax

```
Action: WaitEvent
ActionID: <value>
Timeout: <value>
```

Arguments

- ActionID ActionID for this transaction. Will be returned.
- Timeout Maximum time (in seconds) to wait for events, -1 means forever.

Import Version

Dialplan Applications

Application_AddQueueMember

AddQueueMember()

Synopsis

Dynamically adds queue members.

Description

Dynamically adds interface to an existing queue. If the interface is already in the queue it will return an error.

This application sets the following channel variable upon completion:

- AQMSTATUS The status of the attempt to add a queue member as a text string.
 - ADDED
 - MEMBERALREADY
 - NOSUCHQUEUE

Syntax

AddQueueMember(queuename,interface,penalty,options,membername,stateinterface)

Arguments

- queuename
- interface
- penalty
- options
- membername
- stateinterface

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Application_ADSIProg

ADSIProg()

Synopsis

Load Asterisk ADSI Scripts into phone

Description

This application programs an ADSI Phone with the given script

Syntax

ADSIProg([script])

Arguments

• script - adsi script to use. If not given uses the default script asterisk.adsi

See Also

- Application_GetCPEID
- adsi.conf

Import Version

Application_AELSub

AELSub()

Synopsis

Launch subroutine built with AEL

Description

Execute the named subroutine, defined in AEL, from another dialplan language, such as extensions.conf, Realtime extensions, or Lua.

The purpose of this application is to provide a sane entry point into AEL subroutines, the implementation of which may change from time to time.

Syntax

AELSub(routine[,args])

Arguments

- routine Named subroutine to execute.
- args

Import Version

Application_AgentLogin

AgentLogin()

Synopsis

Call agent login.

Description

Asks the agent to login to the system. Always returns -1. While logged in, the agent can receive calls and will hear a beep when a new call comes in. The agent can dump the call by pressing the star key.

Syntax

AgentLogin(AgentNo,options)

Arguments

- AgentNo
- options
 - s silent login do not announce the login ok segment after agent logged on/off

See Also

- Application_Queue
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_AGENT
- agents.conf
- queues.conf

Import Version

Application_AgentMonitorOutgoing

AgentMonitorOutgoing()

Synopsis

Record agent's outgoing call.

Description

Tries to figure out the id of the agent who is placing outgoing call based on comparison of the callerid of the current interface and the global variable placed by the AgentCallbackLogin application. That's why it should be used only with the AgentCallbackLogin app. Uses the monitoring functions in chan_agent instead of Monitor application. That has to be configured in the agents.conf file.

Normally the app returns 0 unless the options are passed.

Syntax

AgentMonitorOutgoing(options)

Arguments

- options
 - d make the app return -1 if there is an error condition.
 - c change the CDR so that the source of the call is Agent/agent_id
 - n don't generate the warnings when there is no callerid or the agentid is not known. It's handy if you want to have one context for agent and non-agent calls.

See Also

• agents.conf

Import Version

Application_AGI

AGI()

Synopsis

Executes an AGI compliant application.

Description

Executes an Asterisk Gateway Interface compliant program on a channel. AGI allows Asterisk to launch external programs written in any language to control a telephony channel, play audio, read DTMF digits, etc. by communicating with the AGI protocol on **stdin** and **stdout**. As of 1.6.0, this channel will not stop dialplan execution on hangup inside of this application. Dialplan execution will continue normally, even upon hangup until the AGI application signals a desire to stop (either by exiting or, in the case of a net script, by closing the connection). A locally executed AGI script will receive SIGHUP on hangup from the channel except when using DeadAGI. A fast AGI server will correspondingly receive a HANGUP inline with the command dialog. Both of theses signals may be disabled by setting the AGI SIGHUP channel variable to no before executing the AGI application.

Use the CLI command agi show commands to list available agi commands.

This application sets the following channel variable upon completion:

- AGISTATUS The status of the attempt to the run the AGI script text string, one of:
 - SUCCESS
 - FAILURE
 - NOTFOUND
 - HANGUP

Syntax

AGI(commandarglarg2[...])

Arguments

- command
- args
 - arg1
 - arg2

See Also

- Application_EAGI
- Application_DeadAGI

Import Version

Application_AlarmReceiver

AlarmReceiver()

Synopsis

Provide support for receiving alarm reports from a burglar or fire alarm panel.

Description

This application should be called whenever there is an alarm panel calling in to dump its events. The application will handshake with the alarm panel, and receive events, validate them, handshake them, and store them until the panel hangs up. Once the panel hangs up, the application will run the system command specified by the eventcmd setting in alarmreceiver.conf and pipe the events to the standard input of the application. The configuration file also contains settings for DTMF timing, and for the loudness of the acknowledgement tones.



Note

Only 1 signalling format is supported at this time: Ademco Contact ID.

Syntax

AlarmReceiver()

Arguments

See Also

• alarmreceiver.conf

Import Version

Application_AMD

AMD()

Synopsis

Attempt to detect answering machines.

Description

This application attempts to detect answering machines at the beginning of outbound calls. Simply call this application after the call has been answered (outbound only, of course).

When loaded, AMD reads amd.conf and uses the parameters specified as default values. Those default values get overwritten when the calling AMD with parameters.

This application sets the following channel variables:

- · AMDSTATUS This is the status of the answering machine detection
 - MACHINE
 - HUMAN
 - NOTSURE
 - HANGUP
- AMDCAUSE Indicates the cause that led to the conclusion
 - TOOLONG Total Time.
 - INITIALSILENCE Silence Duration Initial Silence.
 - HUMAN Silence Duration afterGreetingSilence.
 - LONGGREETING Voice Duration Greeting.
 - MAXWORDLENGTH Word Count maximum number of words.

Syntax

```
AMD([initialSilence[,greeting[,afterGreetingSilence[,totalAnalysis
Time[,miniumWordLength[,betweenWordSilence[,maximumNumberOfWords[,silenceThreshold[,maximumWordLength]]]]]]]))
```

Arguments

• initialSilence - Is maximum initial silence duration before greeting.

If this is exceeded set as MACHINE

• greeting - is the maximum length of a greeting.

If this is exceeded set as MACHINE

• afterGreetingSilence - Is the silence after detecting a greeting.

If this is exceeded set as HUMAN

 \bullet total Analysis Time - Is the maximum time allowed for the algorithm

to decide HUMAN or MACHINE

- miniumWordLength Is the minimum duration of Voice considered to be a word
- betweenWordSilence Is the minimum duration of silence after a word to consider the audio that follows to be a new word
- maximumNumberOfWords Is the maximum number of words in a greeting

If this is exceeded set as MACHINE

- ${}^{\bullet}\,$ silenceThreshold How long do we consider silence
- \bullet ${\tt maximumWordLength}$ Is the maximum duration of a word to accept.

If exceeded set as MACHINE

See Also

- · Application_WaitForSilence
- Application_WaitForNoise

Import Version

Application_Answer

Answer()

Synopsis

Answer a channel if ringing.

Description

If the call has not been answered, this application will answer it. Otherwise, it has no effect on the call.

Syntax

Answer(delay,nocdr)

Arguments

- delay Asterisk will wait this number of milliseconds before returning to the dialplan after answering the call.
- nocdr Asterisk will send an answer signal to the calling phone, but will not set the disposition or answer time in the CDR for this call.

See Also

Application_Hangup

Import Version

Application_Authenticate

Authenticate()

Synopsis

Authenticate a user

Description

This application asks the caller to enter a given password in order to continue dialplan execution.

If the password begins with the / character, it is interpreted as a file which contains a list of valid passwords, listed 1 password per line in the file.

When using a database key, the value associated with the key can be anything.

Users have three attempts to authenticate before the channel is hung up.

Syntax

Authenticate(password[,options[,maxdigits[,prompt]]])

Arguments

- password Password the user should know
- options
 - a Set the channels' account code to the password that is entered
 - d Interpret the given path as database key, not a literal file.
 - m Interpret the given path as a file which contains a list of account codes and password hashes delimited with :, listed one per line in the file. When one of the passwords is matched, the channel will have its account code set to the corresponding account code in the file.
 - r Remove the database key upon successful entry (valid with d only)
- maxdigits maximum acceptable number of digits. Stops reading after maxdigits have been entered (without requiring the user to
 press the # key). Defaults to 0 no limit wait for the user press the # key.
- prompt Override the agent-pass prompt file.

See Also

- Application_VMAuthenticate
- Application_DISA

Import Version

Application_BackGround

BackGround()

Synopsis

Play an audio file while waiting for digits of an extension to go to.

Description

This application will play the given list of files (do not put extension) while waiting for an extension to be dialed by the calling channel. To continue waiting for digits after this application has finished playing files, the WaitExten application should be used.

If one of the requested sound files does not exist, call processing will be terminated.

This application sets the following channel variable upon completion:

- BACKGROUNDSTATUS The status of the background attempt as a text string.
 - SUCCESS
 - FAILED

Syntax

BackGround(filename1&filename2[&...],options,langoverride,context)

Arguments

- filenames
 - filename1
 - filename2
- options
 - s Causes the playback of the message to be skipped if the channel is not in the up state (i.e. it hasn't been answered yet). If this happens, the application will return immediately.
 - n Don't answer the channel before playing the files.
 - m Only break if a digit hit matches a one digit extension in the destination context.
- langoverride Explicitly specifies which language to attempt to use for the requested sound files.
- context This is the dialplan context that this application will use when exiting to a dialed extension.

See Also

- Application_ControlPlayback
- Application_WaitExten
- Application_BackgroundDetect
- Function_TIMEOUT

Import Version

Application_BackgroundDetect

BackgroundDetect()

Synopsis

Background a file with talk detect.

Description

Plays back *filename*, waiting for interruption from a given digit (the digit must start the beginning of a valid extension, or it will be ignored). During the playback of the file, audio is monitored in the receive direction, and if a period of non-silence which is greater than *min* ms yet less than *max* ms is followed by silence for at least *sil* ms, which occurs during the first *analysistime* ms, then the audio playback is aborted and processing jumps to the *talk* extension, if available.

Syntax

BackgroundDetect(filename,sil,min,max,analysistime)

Arguments

- filename
- sil If not specified, defaults to 1000.
- min If not specified, defaults to 100.
- max If not specified, defaults to infinity.
- analysistime If not specified, defaults to infinity.

Import Version

Application_Bridge

Bridge()

Synopsis

Bridge two channels.

Description

Allows the ability to bridge two channels via the dialplan.

This application sets the following channel variable upon completion:

- BRIDGERESULT The result of the bridge attempt as a text string.
 - SUCCESS
 - FAILURE
 - LOOP
 - NONEXISTENT
 - INCOMPATIBLE

Syntax

Bridge(channel,options)

Arguments

- channel The current channel is bridged to the specified channel.
- options
 - p Play a courtesy tone to channel.
 - h Allow the called party to hang up by sending the *DTMF digit.
 - H Allow the calling party to hang up by pressing the *DTMF digit.
 - k Allow the called party to enable parking of the call by sending the DTMF sequence defined for call parking in features.con f.
 - K Allow the calling party to enable parking of the call by sending the DTMF sequence defined for call parking in features.con f.
 - L(xyz) Limit the call to x ms. Play a warning when y ms are left. Repeat the warning every z ms. The following special variables can be used with this option:
 - LIMIT_PLAYAUDIO_CALLER Play sounds to the caller. yes|no (default yes)
 - LIMIT_PLAYAUDIO_CALLEE Play sounds to the callee. yes|no
 - LIMIT_TIMEOUT_FILE File to play when time is up.
 - LIMIT_CONNECT_FILE File to play when call begins.
 - LIMIT_WARNING_FILE File to play as warning if y is defined. The default is to say the time remaining.
 - sX Hang up the call after x seconds **after** the called party has answered the call.
 - t Allow the called party to transfer the calling party by sending the DTMF sequence defined in features.conf.
 - T Allow the calling party to transfer the called party by sending the DTMF sequence defined in features.conf.
 - w Allow the called party to enable recording of the call by sending the DTMF sequence defined for one-touch recording in feat ures.conf.
 - W Allow the calling party to enable recording of the call by sending the DTMF sequence defined for one-touch recording in feat ures.conf.
 - x Cause the called party to be hung up after the bridge, instead of being restarted in the dialplan.

Import Version

Application_Busy

Busy()

Synopsis

Indicate the Busy condition.

Description

This application will indicate the busy condition to the calling channel.

Syntax

Busy(timeout)

Arguments

• timeout - If specified, the calling channel will be hung up after the specified number of seconds. Otherwise, this application will wait until the calling channel hangs up.

See Also

- Application_Congestion
- Application_Progress
- Application_Playtones
- Application_Hangup

Import Version

Application_CallCompletionCancel

CallCompletionCancel()

Synopsis

Cancel call completion service

Description

Cancel a Call Completion Request.

This application sets the following channel variables:

- CC_CANCEL_RESULT This is the returned status of the cancel.
 - SUCCESS
 - FAIL
- CC_CANCEL_REASON This is the reason the cancel failed.
 - NO_CORE_INSTANCE
 - NOT_GENERIC
 - UNSPECIFIED

Syntax

CallCompletionCancel()

Arguments

Import Version

Application_CallCompletionRequest

CallCompletionRequest()

Synopsis

Request call completion service for previous call

Description

Request call completion service for a previously failed call attempt.

This application sets the following channel variables:

- CC_REQUEST_RESULT This is the returned status of the request.
 - SUCCESS
 - FAIL
- CC_REQUEST_REASON This is the reason the request failed.
 - NO_CORE_INSTANCE
 - NOT_GENERIC
 - TOO_MANY_REQUESTS
 - UNSPECIFIED

Syntax

CallCompletionRequest()

Arguments

Import Version

Application_CELGenUserEvent

CELGenUserEvent()

Synopsis

Generates a CEL User Defined Event.

Description

A CEL event will be immediately generated by this channel, with the supplied name for a type.

Syntax

CELGenUserEvent(event-name[extra])

Arguments

- event-name
 - event-name
 - extra Extra text to be included with the event.

Import Version

Application_ChangeMonitor

ChangeMonitor()

Synopsis

Change monitoring filename of a channel.

Description

Changes monitoring filename of a channel. Has no effect if the channel is not monitored.

Syntax

ChangeMonitor(filename_base)

Arguments

• filename_base - The new filename base to use for monitoring this channel.

Import Version

Application_ChanlsAvail

ChanlsAvail()

Synopsis

Check channel availability

Description

This application will check to see if any of the specified channels are available.

This application sets the following channel variables:

- AVAILCHAN The name of the available channel, if one exists
- AVAILORIGCHAN The canonical channel name that was used to create the channel
- AVAILSTATUS The device state for the device
- AVAILCAUSECODE The cause code returned when requesting the channel

Syntax

ChanIsAvail(Technology2/Resource2[&...][,options])

Arguments

- Technology/Resource ** Technology2/Resource2 Optional extra devices to check
 If you need more then one enter them as Technology2/Resource2&Technology3/Resourse3&.....

 Specification of the device(s) to check. These must be in the format of Technology/Resource, where Technology represents a particular channel driver, and Resource represents a resource available to that particular channel driver.
- options
 - a Check for all available channels, not only the first one
 - $\bullet\ \ _{\rm S}$ Consider the channel unavailable if the channel is in use at all
 - t Simply checks if specified channels exist in the channel list

Import Version

Application_ChannelRedirect

ChannelRedirect()

Synopsis

Redirects given channel to a dialplan target

Description

Sends the specified channel to the specified extension priority

This application sets the following channel variables upon completion

- CHANNELREDIRECT_STATUS Are set to the result of the redirection
 - NOCHANNEL
 - SUCCESS

Syntax

ChannelRedirect(channel[,context[,extension,priority]])

Arguments

- channel
- context
- ullet extension
- priority

Import Version

Application_ChanSpy

ChanSpy()

Synopsis

Listen to a channel, and optionally whisper into it.

Description

This application is used to listen to the audio from an Asterisk channel. This includes the audio coming in and out of the channel being spied on. If the chan prefix parameter is specified, only channels beginning with this string will be spied upon.

While spying, the following actions may be performed:

- Dialing # cycles the volume level.
- Dialing * will stop spying and look for another channel to spy on.
- Dialing a series of digits followed by # builds a channel name to append to 'chanprefix'. For example, executing ChanSpy(Agent) and then dialing the digits '1234#' while spying will begin spying on the channel 'Agent/1234'. Note that this feature will be overridden if the 'd' option is used



The X option supersedes the three features above in that if a valid single digit extension exists in the correct context ChanSpy will exit to it. This also disables choosing a channel based on chanprefix and a digit sequence.

Syntax

ChanSpy(chanprefix,options)

Arguments

- chanprefix
- options
 - b Only spy on channels involved in a bridged call.
 - B Instead of whispering on a single channel barge in on both channels involved in the call.
- digit Specify a DTMF digit that can be used to spy on the next available channel.
- · d Override the typical numeric DTMF functionality and instead use DTMF to switch between spy modes.
 - 4 spy mode
 - 5 whisper mode
 - 6 barge mode
- e Enable enforced mode, so the spying channel can only monitor extensions whose name is in the ext: delimited list.
- E Exit when the spied-on channel hangs up.
- grp Only spy on channels in which one or more of the groups listed in grp matches one or more groups from the SPYG ROUP variable set on the channel to be spied upon.
- n Say the name of the person being spied on if that person has recorded his/her name. If a context is specified, then that voicemail context will be searched when retrieving the name, otherwise the default context be used when searching for the name (i.e. if SIP/1000 is the channel being spied on and no mailbox is specified, then 1000 will be used when searching for the name).
 - mailbox
 - context
- o Only listen to audio coming from this channel.
- q Don't play a beep when beginning to spy on a channel, or speak the selected channel name.
- r Record the session to the monitor spool directory. An optional base for the filename may be specified. The default is chansp у.
 - basename

- s Skip the playback of the channel type (i.e. SIP, IAX, etc) when speaking the selected channel name.
- S Stop when no more channels are left to spy on.
- v Adjust the initial volume in the range from -4 to 4. A negative value refers to a quieter setting.
 - value
- w Enable whisper mode, so the spying channel can talk to the spied-on channel.
- W Enable private whisper mode, so the spying channel can talk to the spied-on channel but cannot listen to that channel.
- _v
- digit Specify a DTMF digit that can be used to exit the application.
- X Allow the user to exit ChanSpy to a valid single digit numeric extension in the current context or the context specified by the S PY_EXIT_CONTEXT channel variable. The name of the last channel that was spied on will be stored in the SPY_CHANNEL variable.

See Also

Application_ExtenSpy

Import Version

Application_ClearHash

ClearHash()

Synopsis

Clear the keys from a specified hashname.

Description

Clears all keys out of the specified hashname.

Syntax

ClearHash(hashname)

Arguments

• hashname

Import Version

Application_ConfBridge

ConfBridge()

Synopsis

Conference bridge application.

Description

Enters the user into a specified conference bridge. The user can exit the conference by hangup only.

The join sound can be set using the CONFBRIDGE_JOIN_SOUND variable and the leave sound can be set using the CONFBRIDGE_LEAVE_SOUND variable. These can be unique to the caller.



Note

This application will not automatically answer the channel.

Syntax

ConfBridge(confno,options)

Arguments

- confno The conference number
- options
 - a Set admin mode.
 - A Set marked mode.
 - c Announce user(s) count on joining a conference.
 - m Set initially muted.
 - M Enable music on hold when the conference has a single caller. Optionally, specify a musiconhold class to use. If one is not provided, it will use the channel's currently set music class, or default.
 - class
 - 1 Do not play message when first person enters
 - s Present menu (user or admin) when # is received (send to menu).
 - w Wait until the marked user enters the conference.
 - q Quiet mode (don't play enter/leave sounds).

Import Version

Application_Congestion

Congestion()

Synopsis

Indicate the Congestion condition.

Description

This application will indicate the congestion condition to the calling channel.

Syntax

Congestion(timeout)

Arguments

• timeout - If specified, the calling channel will be hung up after the specified number of seconds. Otherwise, this application will wait until the calling channel hangs up.

See Also

- Application_Busy
- Application_Progress
- Application_Playtones
- Application_Hangup

Import Version

Application_ContinueWhile

ContinueWhile()

Synopsis

Restart a While loop.

Description

Returns to the top of the while loop and re-evaluates the conditional.

Syntax

ContinueWhile()

Arguments

See Also

- Application_While
- Application_EndWhile
- Application_ExitWhile

Import Version

Application_ControlPlayback

ControlPlayback()

Synopsis

Play a file with fast forward and rewind.

Description

This application will play back the given filename.

It sets the following channel variables upon completion:

- . CPLAYBACKSTATUS Contains the status of the attempt as a text string
 - SUCCESS
 - USERSTOPPED
 - ERROR
- CPLAYBACKOFFSET Contains the offset in ms into the file where playback was at when it stopped. -1 is end of file.
- CPLAYBACKSTOPKEY If the playback is stopped by the user this variable contains the key that was pressed.

Syntax

ControlPlayback(filename, skipms, ff, rew, stop, pause, restart, options)

Arguments

- filename
- skipms This is number of milliseconds to skip when rewinding or fast-forwarding.
- ff Fast-forward when this DTMF digit is received. (defaults to #)
- rew Rewind when this DTMF digit is received. (defaults to *)
- stop Stop playback when this DTMF digit is received.
- pause Pause playback when this DTMF digit is received.
- restart Restart playback when this DTMF digit is received.
- options
 - 0
- time Start at time ms from the beginning of the file.

Import Version

Application_DAHDIAcceptR2Call

DAHDIAcceptR2Call()

Synopsis

Accept an R2 call if its not already accepted (you still need to answer it)

Description

This application will Accept the R2 call either with charge or no charge.

Syntax

DAHDIAcceptR2Call(charge)

Arguments

charge - Yes or No.
 Whether you want to accept the call with charge or without charge.

Import Version

Application_DAHDIBarge

DAHDIBarge()

Synopsis

Barge in (monitor) DAHDI channel.

Description

Barges in on a specified DAHDI *channel* or prompts if one is not specified. Returns -1 when caller user hangs up and is independent of the state of the channel being monitored.

Syntax

DAHDIBarge(channel)

Arguments

• channel - Channel to barge.

Import Version

Application_DAHDIRAS

DAHDIRAS()

Synopsis

Executes DAHDI ISDN RAS application.

Description

Executes a RAS server using pppd on the given channel. The channel must be a clear channel (i.e. PRI source) and a DAHDI channel to be able to use this function (No modem emulation is included).

Your pppd must be patched to be DAHDI aware.

Syntax

DAHDIRAS(args)

Arguments

• args - A list of parameters to pass to the pppd daemon, separated by , characters.

Import Version

Application_DAHDIScan

DAHDIScan()

Synopsis

Scan DAHDI channels to monitor calls.

Description

Allows a call center manager to monitor DAHDI channels in a convenient way. Use # to select the next channel and use * to exit.

Syntax

DAHDIScan(group)

Arguments

• group - Limit scanning to a channel group by setting this option.

Import Version

Application_DAHDISendCallreroutingFacility

DAHDISendCallreroutingFacility()

Synopsis

Send an ISDN call rerouting/deflection facility message.

Description

This application will send an ISDN switch specific call rerouting/deflection facility message over the current channel. Supported switches depend upon the version of libpri in use.

Syntax

 ${\tt DAHDIS end Callrerouting Facility (destination, original, reason)}$

Arguments

- destination Destination number.
- original Original called number.
- reason Diversion reason, if not specified defaults to unknown

Import Version

Application_DAHDISendKeypadFacility

DAHDISendKeypadFacility()

Synopsis

Send digits out of band over a PRI.

Description

This application will send the given string of digits in a Keypad Facility IE over the current channel.

Syntax

DAHDISendKeypadFacility(digits)

Arguments

• digits

Import Version

Application_DateTime

DateTime()

Synopsis

Says a specified time in a custom format.

Description

Say the date and time in a specified format.

Syntax

DateTime(unixtime,timezone,format)

Arguments

- unixtime time, in seconds since Jan 1, 1970. May be negative. Defaults to now.
- $\bullet \ \ \, \texttt{timezone-timezone}, see \ / \texttt{usr/share/zoneinfo} \ \, \text{for a list. Defaults to machine default.}$
- format a format the time is to be said in. See voicemail.conf. Defaults to ABdY "digits/at" IMp

Import Version

Application_DBdel

DBdel()

Synopsis

Delete a key from the asterisk database.

Description

This application will delete a key from the Asterisk database.



Note

This application has been DEPRECATED in favor of the DB_DELETE function.

Syntax

DBdel(family/key)

Arguments

- ullet family
- key

See Also

- Function_DB_DELETE
- Application_DBdeltree
- Function_DB

Import Version

Application_DBdeltree

DBdeltree()

Synopsis

Delete a family or keytree from the asterisk database.

Description

This application will delete a family or keytree from the Asterisk database.

Syntax

DBdeltree(family/keytree)

Arguments

- family
- keytree

See Also

- Function_DB_DELETE
- Application_DBdel
- Function_DB

Import Version

Application_DeadAGI

DeadAGI()

Synopsis

Executes AGI on a hungup channel.

Description

Executes an Asterisk Gateway Interface compliant program on a channel. AGI allows Asterisk to launch external programs written in any language to control a telephony channel, play audio, read DTMF digits, etc. by communicating with the AGI protocol on **stdin** and **stdout**. As of 1.6.0, this channel will not stop dialplan execution on hangup inside of this application. Dialplan execution will continue normally, even upon hangup until the AGI application signals a desire to stop (either by exiting or, in the case of a net script, by closing the connection). A locally executed AGI script will receive SIGHUP on hangup from the channel except when using DeadAGI. A fast AGI server will correspondingly receive a HANGUP inline with the command dialog. Both of theses signals may be disabled by setting the AGI SIGHUP channel variable to no before executing the AGI application.

Use the CLI command agi show commands to list available agi commands.

This application sets the following channel variable upon completion:

- AGISTATUS The status of the attempt to the run the AGI script text string, one of:
 - SUCCESS
 - FAILURE
 - NOTFOUND
 - HANGUP

Syntax

DeadAGI(commandarg1arg2[...])

Arguments

- command
- args
 - arg1
 - arg2

See Also

- Application_AGI
- Application_EAGI

Import Version

Application_Dial

Dial()

Synopsis

Attempt to connect to another device or endpoint and bridge the call.

Description

This application will place calls to one or more specified channels. As soon as one of the requested channels answers, the originating channel will be answered, if it has not already been answered. These two channels will then be active in a bridged call. All other channels that were requested will then be hung up.

Unless there is a timeout specified, the Dial application will wait indefinitely until one of the called channels answers, the user hangs up, or if all of the called channels are busy or unavailable. Dialplan executing will continue if no requested channels can be called, or if the timeout expires. This application will report normal termination if the originating channel hangs up, or if the call is bridged and either of the parties in the bridge ends the call.

If the OUTBOUND_GROUP variable is set, all peer channels created by this application will be put into that group (as in Set(GROUP()=...). If the OUTBOUND_GROUP_GROUP_ONCE variable is set, all peer channels created by this application will be put into that group (as in Set(GROUP()=...). Unlike OUTBOUND_GROUP, however, the variable will be unset after use.

This application sets the following channel variables:

- DIALEDTIME This is the time from dialing a channel until when it is disconnected.
- ANSWEREDTIME This is the amount of time for actual call.
- DIALSTATUS This is the status of the call
 - CHANUNAVAIL
 - CONGESTION
 - NOANSWER
 - BUSY
 - ANSWER
 - CANCEL
 - DONTCALL For the Privacy and Screening Modes. Will be set if the called party chooses to send the calling party to the 'Go Away' script.
 - TORTURE For the Privacy and Screening Modes. Will be set if the called party chooses to send the calling party to the 'torture' script.
 - INVALIDARGS

Syntax

Dial(Technology/Resource[&Technology2/Resource2[&...]][,timeout[,options,URL]])

Arguments

- Technology/Resource
 - Technology/Resource Specification of the device(s) to dial. These must be in the format of Technology/Resource,
 where Technology represents a particular channel driver, and Resource represents a resource available to that particular
 channel driver.
 - Technology2/Resource2 Optional extra devices to dial in parallel
 If you need more then one enter them as Technology2/Resource2&Technology3/Resourse3&.....
- timeout Specifies the number of seconds we attempt to dial the specified devices
 If not specified, this defaults to 136 years.
- options
 - A Play an announcement to the called party, where x is the prompt to be played
 - x The file to play to the called party
 - a Immediately answer the calling channel when the called channel answers in all cases. Normally, the calling channel is
 answered when the called channel answers, but when options such as A() and M() are used, the calling channel is not answered
 until all actions on the called channel (such as playing an announcement) are completed. This option can be used to answer the
 calling channel before doing anything on the called channel. You will rarely need to use this option, the default behavior is
 adequate in most cases.
 - C Reset the call detail record (CDR) for this call.

- c If the Dial() application cancels this call, always set the flag to tell the channel driver that the call is answered elsewhere.
- d Allow the calling user to dial a 1 digit extension while waiting for a call to be answered. Exit to that extension if it exists in the current context, or the context defined in the EXITCONTEXT variable, if it exists.
- D Send the specified DTMF strings **after** the called party has answered, but before the call gets bridged. The *called* DTMF string is sent to the called party, and the *calling* DTMF string is sent to the calling party. Both arguments can be used alone. If *pro gress* is specified, its DTMF is sent immediately after receiving a PROGRESS message.
 - called
 - calling
 - progress
- e Execute the h extension for peer after the call ends
- f If x is not provided, force the CallerID sent on a call-forward or deflection to the dialplan extension of this Dial() using a dialplan hint. For example, some PSTNs do not allow CallerID to be set to anything other than the numbers assigned to you. If x is provided, force the CallerID sent to x.
 - x
- F When the caller hangs up, transfer the called party to the specified destination and start execution at that location.
 - context
 - exten
 - priority
- F When the caller hangs up, transfer the **called** party to the next priority of the current extension and **start** execution at that location
- g Proceed with dialplan execution at the next priority in the current extension if the destination channel hangs up.
- G If the call is answered, transfer the calling party to the specified priority and the called party to the specified priority plus one.
 - context
 - exten
 - priority
- h Allow the called party to hang up by sending the DTMF sequence defined for disconnect in features.conf.
- H Allow the calling party to hang up by sending the DTMF sequence defined for disconnect in features.conf.
- i Asterisk will ignore any forwarding requests it may receive on this dial attempt.
- I Asterisk will ignore any connected line update requests or any redirecting party update requests it may receive on this dial attempt.
- k Allow the called party to enable parking of the call by sending the DTMF sequence defined for call parking in features.con f.
- K Allow the calling party to enable parking of the call by sending the DTMF sequence defined for call parking in features.con
- L Limit the call to x milliseconds. Play a warning when y milliseconds are left. Repeat the warning every z milliseconds until time expires.

This option is affected by the following variables:

- LIMIT_PLAYAUDIO_CALLER If set, this variable causes Asterisk to play the prompts to the caller.
 - YES default: (true)
 - NO
- LIMIT_PLAYAUDIO_CALLEE If set, this variable causes Asterisk to play the prompts to the callee.
 - YES
 - NO default: (true)
- LIMIT_TIMEOUT_FILE If specified, filename specifies the sound prompt to play when the timeout is reached. If not
 set, the time remaining will be announced.
 - FILENAME
- LIMIT_CONNECT_FILE If specified, filename specifies the sound prompt to play when the call begins. If not set, the
 time remaining will be announced.
 - FILENAME
- LIMIT_WARNING_FILE If specified, *filename* specifies the sound prompt to play as a warning when time *x* is reached. If not set, the time remaining will be announced.
 - FILENAME
- x Maximum call time, in milliseconds
- y Warning time, in milliseconds
- z Repeat time, in milliseconds
- m Provide hold music to the calling party until a requested channel answers. A specific music on hold *class* (as defined in musiconhold.conf) can be specified.
 - class
- M Execute the specified macro for the called channel before connecting to the calling channel. Arguments can be specified to

the Macro using ^ as a delimiter. The macro can set the variable MACRO_RESULT to specify the following actions after the macro is finished executing:

- MACRO_RESULT If set, this action will be taken after the macro finished executing.
 - ABORT Hangup both legs of the call
 - . CONGESTION Behave as if line congestion was encountered
 - · BUSY Behave as if a busy signal was encountered
 - CONTINUE Hangup the called party and allow the calling party to continue dialplan execution at the next priority
 - GOTO:[[<CONTEXT>^]<EXTEN>^]<PRIORITY> Transfer the call to the specified destination.
- macro Name of the macro that should be executed.
- arg Macro arguments
- n This option is a modifier for the call screening/privacy mode. (See the p and P options.) It specifies that no introductions are to be saved in the priv-callerintros directory.
 - delete With delete either not specified or set to 0, the recorded introduction will not be deleted if the caller hangs up
 while the remote party has not yet answered.

With delete set to 1, the introduction will always be deleted.

- N This option is a modifier for the call screening/privacy mode. It specifies that if Caller*ID is present, do not screen the call.
- o If x is not provided, specify that the CallerID that was present on the **calling** channel be stored as the CallerID on the **called** c hannel. This was the behavior of Asterisk 1.0 and earlier. If x is provided, specify the CallerID stored on the **called** channel. Note that o(\${CALLERID(all)}) is similar to option o without the parameter.
 - x
- O Enables **operator services** mode. This option only works when bridging a DAHDI channel to another DAHDI channel only. if specified on non-DAHDI interfaces, it will be ignored. When the destination answers (presumably an operator services station), the originator no longer has control of their line. They may hang up, but the switch will not release their line until the destination party (the operator) hangs up.
 - mode With mode either not specified or set to 1, the originator hanging up will cause the phone to ring back immediately.

With mode set to 2, when the operator flashes the trunk, it will ring their phone back.

- p This option enables screening mode. This is basically Privacy mode without memory.
- P Enable privacy mode. Use x as the family/key in the AstDB database if it is provided. The current extension is used if a database family/key is not specified.
 - >
- r Default: Indicate ringing to the calling party, even if the called party isn't actually ringing. Pass no audio to the calling party until the called channel has answered.
 - tone Indicate progress to calling party. Send audio 'tone' from indications.conf
- s Hang up the call x seconds **after** the called party has answered the call.
 - x
- s Force the outgoing callerid tag parameter to be set to the string x.
 Works with the f option.
 - x
- t Allow the called party to transfer the calling party by sending the DTMF sequence defined in features.conf. This setting does not perform policy enforcement on transfers initiated by other methods.
- T Allow the calling party to transfer the called party by sending the DTMF sequence defined in features.conf. This setting does not perform policy enforcement on transfers initiated by other methods.
- U Execute via Gosub the routine x for the **called** channel before connecting to the calling channel. Arguments can be specified to the Gosub using ^ as a delimiter. The Gosub routine can set the variable GOSUB_RESULT to specify the following actions after the Gosub returns.
 - GOSUB_RESULT
 - ABORT Hangup both legs of the call.
 - CONGESTION Behave as if line congestion was encountered.
 - BUSY Behave as if a busy signal was encountered.
 - CONTINUE Hangup the called party and allow the calling party to continue dialplan execution at the next priority.
 - GOTO:[[<CONTEXT>^]<EXTEN>^]<PRIORITY> Transfer the call to the specified destination.
 - x Name of the subroutine to execute via Gosub
 - arg Arguments for the Gosub routine
- u Works with the f option.
 - x Force the outgoing callerid presentation indicator parameter to be set to one of the values passed in x allowed_no t_screened allowed_passed_screen allowed_failed_screen allowed prohib_not_screened prohib_p

${\tt assed_screen\ prohib_failed_screen\ prohib\ unavailable}$

- w Allow the called party to enable recording of the call by sending the DTMF sequence defined for one-touch recording in feat ures.conf.
- W Allow the calling party to enable recording of the call by sending the DTMF sequence defined for one-touch recording in feat ures.conf.
- x Allow the called party to enable recording of the call by sending the DTMF sequence defined for one-touch automixmonitor in features.conf.
- x Allow the calling party to enable recording of the call by sending the DTMF sequence defined for one-touch automixmonitor in features.conf.
- $\bullet\ \ z$ On a call forward, cancel any dial timeout which has been set for this call.
- URL The optional URL will be sent to the called party if the channel driver supports it.

Import Version

Application_Dictate

Dictate()

Synopsis

Virtual Dictation Machine.

Description

Start dictation machine using optional base_dir for files.

Syntax

Dictate(base_dir,filename)

Arguments

- base_dir
- filename

Import Version

Application_Directory

Directory()

Synopsis

Provide directory of voicemail extensions.

Description

This application will present the calling channel with a directory of extensions from which they can search by name. The list of names and corresponding extensions is retrieved from the voicemail configuration file, voicemail.conf.

This application will immediately exit if one of the following DTMF digits are received and the extension to jump to exists:

- 0 Jump to the 'o' extension, if it exists.
 - - Jump to the 'a' extension, if it exists.

Syntax

Directory(vm-context[,dial-context[,options]])

Arguments

- vm-context This is the context within voicemail.conf to use for the Directory. If not specified and searchcontexts=no in voicemail.conf, then default will be assumed.
- dial-context This is the dialplan context to use when looking for an extension that the user has selected, or when jumping to the o o r a extension. If not specified, the current context will be used.
- options
 - e In addition to the name, also read the extension number to the caller before presenting dialing options.
 - £ Allow the caller to enter the first name of a user in the directory instead of using the last name. If specified, the optional number argument will be used for the number of characters the user should enter.
 - n
 - 1 Allow the caller to enter the last name of a user in the directory. This is the default. If specified, the optional number argument will be used for the number of characters the user should enter.
 - n
 - b Allow the caller to enter either the first or the last name of a user in the directory. If specified, the optional number argument will be used for the number of characters the user should enter.
 - n
 - m Instead of reading each name sequentially and asking for confirmation, create a menu of up to 8 names.
 - n Read digits even if the channel is not answered.
 - p Pause for n milliseconds after the digits are typed. This is helpful for people with cellphones, who are not holding the receiver to their ear while entering DTMF.
 - n



Note

Only one of the f, l, or b options may be specified. **If more than one is specified**, then Directory will act as if b was specified. The number of characters for the user to type defaults to 3.

Import Version

Application_DISA

DISA()

Synopsis

Direct Inward System Access.

Description

The DISA, Direct Inward System Access, application allows someone from outside the telephone switch (PBX) to obtain an **internal** system dialtone and to place calls from it as if they were placing a call from within the switch. DISA plays a dialtone. The user enters their numeric passcode, followed by the pound sign #. If the passcode is correct, the user is then given system dialtone within *context* on which a call may be placed. If the user enters an invalid extension and extension i exists in the specified *context*, it will be used.

Be aware that using this may compromise the security of your PBX.

The arguments to this application (in extensions.conf) allow either specification of a single global *passcode* (that everyone uses), or individual passcodes contained in a file (*filename*).

The file that contains the passcodes (if used) allows a complete specification of all of the same arguments available on the command line, with the sole exception of the options. The file may contain blank lines, or comments starting with # or :.

Syntax

DISA(passcode|filename,context,cidmailbox[@context],options)

Arguments

- passcode | filename If you need to present a DISA dialtone without entering a password, simply set passcode to no-password
 You may specified a filename instead of a passcode, this filename must contain individual passcodes
- context Specifies the dialplan context in which the user-entered extension will be matched. If no context is specified, the DISA
 application defaults to the disa context. Presumably a normal system will have a special context set up for DISA use with some or a lot
 of restrictions.
- cid Specifies a new (different) callerid to be used for this call.
- mailbox Will cause a stutter-dialtone (indication dialrecall) to be used, if the specified mailbox contains any new messages.
 - ullet mailbox
 - context
- options
 - n The DISA application will not answer initially.
 - p The extension entered will be considered complete when a # is entered.

See Also

- Application_Authenticate
- Application_VMAuthenticate

Import Version

Application_DumpChan

DumpChan()

Synopsis

Dump Info About The Calling Channel.

Description

Displays information on channel and listing of all channel variables. If *level* is specified, output is only displayed when the verbose level is currently set to that number or greater.

Syntax

DumpChan(level)

Arguments

• level - Minimun verbose level

See Also

- Application_NoOp
- Application_Verbose

Import Version

Application_EAGI

EAGI()

Synopsis

Executes an EAGI compliant application.

Description

Using 'EAGI' provides enhanced AGI, with incoming audio available out of band on file descriptor 3.

Executes an Asterisk Gateway Interface compliant program on a channel. AGI allows Asterisk to launch external programs written in any language to control a telephony channel, play audio, read DTMF digits, etc. by communicating with the AGI protocol on **stdin** and **stdout**. As of 1.6.0, this channel will not stop dialplan execution on hangup inside of this application. Dialplan execution will continue normally, even upon hangup until the AGI application signals a desire to stop (either by exiting or, in the case of a net script, by closing the connection). A locally executed AGI script will receive SIGHUP on hangup from the channel except when using DeadAGI. A fast AGI server will correspondingly receive a HANGUP inline with the command dialog. Both of theses signals may be disabled by setting the AGISIGHUP channel variable to no before executing the AGI application.

Use the CLI command ${\tt agi\ show\ commands}$ to list available agi commands.

This application sets the following channel variable upon completion:

- AGISTATUS The status of the attempt to the run the AGI script text string, one of:
 - SUCCESS
 - FAILURE
 - NOTFOUND
 - HANGUP

Syntax

EAGI(commandarglarg2[...])

Arguments

- command
- args
 - arg1
 - arg2

See Also

- Application_AGI
- Application_DeadAGI

Import Version

Application_Echo

Echo()

Synopsis

Echo media, DTMF back to the calling party

Description

Echos back any media or DTMF frames read from the calling channel back to itself. This will not echo CONTROL, MODEM, or NULL frames. Note: If '#' detected application exits.

This application does not automatically answer and should be preceded by an application such as Answer() or Progress().

Syntax

Echo()

Arguments

Import Version

Application_EndWhile

EndWhile()

Synopsis

End a while loop.

Description

Return to the previous called While().

Syntax

EndWhile()

Arguments

See Also

- Application_While
- Application_ExitWhile
- Application_ContinueWhile

Import Version

Application_Exec

Exec()

Synopsis

Executes dialplan application.

Description

Allows an arbitrary application to be invoked even when not hard coded into the dialplan. If the underlying application terminates the dialplan, or if the application cannot be found, Exec will terminate the dialplan.

To invoke external applications, see the application System. If you would like to catch any error instead, see TryExec.

Syntax

Exec(arguments)

Arguments

- appname Application name and arguments of the dialplan application to execute.
 - arguments

Import Version

Application_Execlf

Execlf()

Synopsis

Executes dialplan application, conditionally.

Description

If expr is true, execute and return the result of appiftrue(args).

If expr is true, but appiftrue is not found, then the application will return a non-zero value.

Syntax

ExecIf(expressionappiftrue[:appiffalse])

Arguments

- ullet expression
- execapp
 - appiftrue
 - args
 - appiffalse
 - args

Import Version

Application_ExeclfTime

ExeclfTime()

Synopsis

Conditional application execution based on the current time.

Description

This application will execute the specified dialplan application, with optional arguments, if the current time matches the given time specification.

Syntax

ExecIfTime(timesweekdaysmdaysmonths[timezone]appargs)

Arguments

- day_condition
 - times
 - weekdays
 - mdays
 - months
 - timezone
- appname
 - appargs

See Also

- Application_Exec
- Application_Execlf
- Application_TryExec
- Application_GotolfTime

Import Version

Application_ExitWhile

ExitWhile()

Synopsis

End a While loop.

Description

Exits a While() loop, whether or not the conditional has been satisfied.

Syntax

ExitWhile()

Arguments

See Also

- Application_While
- Application_EndWhile
- Application_ContinueWhile

Import Version

Application_ExtenSpy

ExtenSpy()

Synopsis

Listen to a channel, and optionally whisper into it.

Description

This application is used to listen to the audio from an Asterisk channel. This includes the audio coming in and out of the channel being spied on. Only channels created by outgoing calls for the specified extension will be selected for spying. If the optional context is not supplied, the current channel's context will be used.

While spying, the following actions may be performed:

- Dialing # cycles the volume level.
- Dialing * will stop spying and look for another channel to spy on.



The X option supersedes the three features above in that if a valid single digit extension exists in the correct context ChanSpy will exit to it. This also disables choosing a channel based on chanprefix and a digit sequence.

Syntax

ExtenSpy(exten@context,options)

Arguments

- - exten Specify extension.
 - context Optionally specify a context, defaults to default.
- options
 - b Only spy on channels involved in a bridged call.
 - B Instead of whispering on a single channel barge in on both channels involved in the call.
- digit Specify a DTMF digit that can be used to spy on the next available channel.
- d Override the typical numeric DTMF functionality and instead use DTMF to switch between spy modes.
 - 4 spy mode
 - 5 whisper mode
 - 6 barge mode
- e Enable enforced mode, so the spying channel can only monitor extensions whose name is in the ext: delimited list.
 - ext.
- E Exit when the spied-on channel hangs up.
- q
- grp Only spy on channels in which one or more of the groups listed in grp matches one or more groups from the SPYG ROUP variable set on the channel to be spied upon.
- n Say the name of the person being spied on if that person has recorded his/her name. If a context is specified, then that voicemail context will be searched when retrieving the name, otherwise the default context be used when searching for the name (i.e. if SIP/1000 is the channel being spied on and no mailbox is specified, then 1000 will be used when searching for the name).
 - mailbox
 - context
- o Only listen to audio coming from this channel.
- q Don't play a beep when beginning to spy on a channel, or speak the selected channel name.
- r Record the session to the monitor spool directory. An optional base for the filename may be specified. The default is chansp у.
 - basename

- s Skip the playback of the channel type (i.e. SIP, IAX, etc) when speaking the selected channel name.
- S Stop when there are no more extensions left to spy on.
- v Adjust the initial volume in the range from -4 to 4. A negative value refers to a quieter setting.
 - value
- w Enable whisper mode, so the spying channel can talk to the spied-on channel.
- W Enable private whisper mode, so the spying channel can talk to the spied-on channel but cannot listen to that channel.
- x
- digit Specify a DTMF digit that can be used to exit the application.
- X Allow the user to exit ChanSpy to a valid single digit numeric extension in the current context or the context specified by the S PY_EXIT_CONTEXT channel variable. The name of the last channel that was spied on will be stored in the SPY_CHANNEL variable.

 e.

See Also

Application_ChanSpy

Import Version

Application_ExternalIVR

ExternalIVR()

Synopsis

Interfaces with an external IVR application.

Description

Either forks a process to run given command or makes a socket to connect to given host and starts a generator on the channel. The generator's play list is controlled by the external application, which can add and clear entries via simple commands issued over its stdout. The external application will receive all DTMF events received on the channel, and notification if the channel is hung up. The received on the channel, and notification if the channel is hung up. The application will not be forcibly terminated when the channel is hung up. For more information see doc/AST.pdf.

Syntax

ExternalIVR(arglarg2[...],options)

Arguments

- command|ivr://host
 - arg1
 - arg2
- options
 - n Tells ExternalIVR() not to answer the channel.
 - i Tells ExternalIVR() not to send a hangup and exit when the channel receives a hangup, instead it sends an I informative message meaning that the external application MUST hang up the call with an H command.
 - d Tells ExternalIVR() to run on a channel that has been hung up and will not look for hangups. The external application must exit with an E command.

Import Version

Application_Festival

Festival()

Synopsis

Say text to the user.

Description

Connect to Festival, send the argument, get back the waveform, play it to the user, allowing any given interrupt keys to immediately terminate and return the value, or any to allow any number back (useful in dialplan).

Syntax

Festival(text,intkeys)

Arguments

- text
- ullet intkeys

Import Version

Application_Flash

Flash()

Synopsis

Flashes a DAHDI Trunk.

Description

Performs a flash on a DAHDI trunk. This can be used to access features provided on an incoming analogue circuit such as conference and call waiting. Use with SendDTMF() to perform external transfers.

Syntax

Flash()

Arguments

See Also

Application_SendDTMF

Import Version

Application_FollowMe

FollowMe()

Synopsis

Find-Me/Follow-Me application.

Description

This application performs Find-Me/Follow-Me functionality for the caller as defined in the profile matching the *followmeid* parameter in followme.conf. If the specified *followmeid* profile doesn't exist in followme.conf, execution will be returned to the dialplan and call execution will continue at the next priority.

Returns -1 on hangup.

Syntax

FollowMe(followmeid,options)

Arguments

- followmeid
- options
 - a Record the caller's name so it can be announced to the callee on each step.
 - d Disable the 'Please hold while we try to connect your call' announcement.
 - I Asterisk will ignore any connected line update requests it may receive on this dial attempt.
 - n Playback the unreachable status message if we've run out of steps or the callee has elected not to be reachable.
 - s Playback the incoming status message prior to starting the follow-me step(s)

Import Version

Application_ForkCDR

ForkCDR()

Synopsis

Forks the Call Data Record.

Description

Causes the Call Data Record to fork an additional cdr record starting from the time of the fork call. This new cdr record will be linked to end of the list of cdr records attached to the channel. The original CDR has a LOCKED flag set, which forces most cdr operations to skip it, except for the functions that set the answer and end times, which ignore the LOCKED flag. This allows all the cdr records in the channel to be 'ended' together when the channel is closed.

The CDR() func (when setting CDR values) normally ignores the LOCKED flag also, but has options to vary its behavior. The 'T' option (described below), can override this behavior, but beware the risks.

First, this app finds the last cdr record in the list, and makes a copy of it. This new copy will be the newly forked cdr record. Next, this new record is linked to the end of the cdr record list. Next, The new cdr record is RESET (unless you use an option to prevent this)

This means that:

- 1. All flags are unset on the cdr record
- 2. the start, end, and answer times are all set to zero.
- 3. the billsec and duration fields are set to zero.
- 4. the start time is set to the current time.
- 5. the disposition is set to NULL.

Next, unless you specified the v option, all variables will be removed from the original cdr record. Thus, the v option allows any CDR variables to be replicated to all new forked cdr records. Without the v option, the variables on the original are effectively moved to the new forked cdr record.

Next, if the s option is set, the provided variable and value are set on the original cdr record.

Next, if the a option is given, and the original cdr record has an answer time set, then the new forked cdr record will have its answer time set to its start time. If the old answer time were carried forward, the answer time would be earlier than the start time, giving strange duration and billsec times.

If the d option was specified, the disposition is copied from the original cdr record to the new forked cdr. If the D option was specified, the destination channel field in the new forked CDR is erased. If the e option was specified, the 'end' time for the original cdr record is set to the current time. Future hang-up or ending events will not override this time stamp. If the A option is specified, the original cdr record will have it ANS_LOCKED flag set, which prevent future answer events from updating the original cdr record's disposition. Normally, an ANSWERED event would mark all cdr records in the chain as A NSWERED. If the T option is specified, the original cdr record will have its DONT_TOUCH flag set, which will force the cdr_answer, cdr_end, and cdr_setvar functions to leave that cdr record alone.

And, last but not least, the original cdr record has its LOCKED flag set. Almost all internal CDR functions (except for the funcs that set the end, and answer times, and set a variable) will honor this flag and leave a LOCKED cdr record alone. This means that the newly created forked cdr record will be affected by events transpiring within Asterisk, with the previously noted exceptions.

Syntax

ForkCDR(options)

Arguments

- options
 - a Update the answer time on the NEW CDR just after it's been inited. The new CDR may have been answered already. The reset that forkcdr does will erase the answer time. This will bring it back, but the answer time will be a copy of the fork/start time. It will only do this if the initial cdr was indeed already answered.
 - A Lock the original CDR against the answer time being updated. This will allow the disposition on the original CDR to remain the same
 - d Copy the disposition forward from the old cdr, after the init.
 - D Clear the dstchannel on the new CDR after reset.
 - e End the original CDR. Do this after all the necessary data is copied from the original CDR to the new forked CDR.

- r Do NOT reset the new cdr.
- s(name=val) Set the CDR var name in the original CDR, with value val.
- T Mark the original CDR with a DONT_TOUCH flag. setvar, answer, and end cdr funcs will obey this flag; normally they don't honor the LOCKED flag set on the original CDR record.
- v When the new CDR is forked, it gets a copy of the vars attached to the current CDR. The vars attached to the original CDR are removed unless this option is specified.

See Also

- Function_CDR
- Application_NoCDR
- Application_ResetCDR

Import Version

Application_GetCPEID

GetCPEID()

Synopsis

Get ADSI CPE ID.

Description

Obtains and displays ADSI CPE ID and other information in order to properly setup dahdi.conf for on-hook operations.

Syntax

GetCPEID()

Arguments

Import Version

Application_Gosub

Gosub()

Synopsis

Jump to label, saving return address.

Description

Jumps to the label specified, saving the return address.

Syntax

Gosub(context,extenarg1[...]argN)

Arguments

- context
- exten
- priority
 - arg1
 - argN

See Also

- Application_GosubIf
- Application_Macro
- Application_Goto
- Application_Return
- Application_StackPop

Import Version

Application_Gosublf

Gosublf()

Synopsis

Conditionally jump to label, saving return address.

Description

If the condition is true, then jump to labeliftrue. If false, jumps to labeliffalse, if specified. In either case, a jump saves the return point in the dialplan, to be returned to with a Return.

Syntax

GosubIf(conditionlabeliftrue:labeliffalse)

Arguments

- condition
- destination
 - labeliftrue Continue at labeliftrue if the condition is true. Takes the form similar to Goto() of [[context,]extension,]priority.
 - arg1
 - argN
 - labeliffalse Continue at labeliffalse if the condition is false. Takes the form similar to Goto() of [[context,]extension,]priority.
 - ardi
 - argN

See Also

- Application_Gosub
- Application_Return
- Application_Macrolf
- Function_IF
- Application_Gotolf
- Application_Goto

Import Version

Application_Goto

Goto()

Synopsis

Jump to a particular priority, extension, or context.

Description

This application will set the current context, extension, and priority in the channel structure. After it completes, the pbx engine will continue dialplan execution at the specified location. If no specific *extension*, or *extension* and *context*, are specified, then this application will just set the specified *priority* of the current extension.

At least a *priority* is required as an argument, or the goto will return a -1, and the channel and call will be terminated.

If the location that is put into the channel information is bogus, and asterisk cannot find that location in the dialplan, then the execution engine will try to find and execute the code in the i (invalid) extension in the current context. If that does not exist, it will try to execute the h extension. If neither the h nor i extensions have been defined, the channel is hung up, and the execution of instructions on the channel is terminated. What this means is that, for example, you specify a context that does not exist, then it will not be possible to find the h or i extensions, and the call will terminate!

Syntax

Goto(context, extensions, priority)

Arguments

- context
- extensions
- priority

See Also

- Application_Gotolf
- Application_GotolfTime
- Application_Gosub
- Application_Macro

Import Version

Application_Gotolf

Gotolf()

Synopsis

Conditional goto.

Description

This application will set the current context, extension, and priority in the channel structure based on the evaluation of the given condition. After this application completes, the pbx engine will continue dialplan execution at the specified location in the dialplan. The labels are specified with the same syntax as used within the Goto application. If the label chosen by the condition is omitted, no jump is performed, and the execution passes to the next instruction. If the target location is bogus, and does not exist, the execution engine will try to find and execute the code in the \pm (invalid) extension in the current context. If that does not exist, it will try to execute the \pm extension. If neither the \pm nor \pm extensions have been defined, the channel is hung up, and the execution of instructions on the channel is terminated. Remember that this command can set the current context, and if the context specified does not exist, then it will not be able to find any 'h' or 'i' extensions there, and the channel and call will both be terminated!

Syntax

GotoIf(conditionlabeliftrue:labeliffalse)

Arguments

- condition
- destination
 - labeliftrue Continue at labeliftrue if the condition is true. Takes the form similar to Goto() of [[context,]extension,]priority.
 - labeliffalse Continue at labeliffalse if the condition is false. Takes the form similar to Goto() of [[context,]extension,]priority.

See Also

- Application_Goto
- Application_GotolfTime
- Application_GosubIf
- Application_Macrolf

Import Version

Application_GotolfTime

GotolfTime()

Synopsis

Conditional Goto based on the current time.

Description

This application will set the context, extension, and priority in the channel structure based on the evaluation of the given time specification. After this application completes, the pbx engine will continue dialplan execution at the specified location in the dialplan. If the current time is within the given time specification, the channel will continue at *labeliftrue*. Otherwise the channel will continue at *labeliffalse*. If the label chosen by the condition is omitted, no jump is performed, and execution passes to the next instruction. If the target jump location is bogus, the same actions would be taken as for Goto. Further information on the time specification can be found in examples illustrating how to do time-based context includes in the dialplan.

Syntax

GotoIfTime(timesweekdaysmdaysmonths[timezone]labeliftrue:labeliffalse)

Arguments

- condition
 - times
 - weekdays
 - mdays
 - months
 - timezone
- destination
 - labeliftrue Continue at labeliftrue if the condition is true. Takes the form similar to Goto() of [[context,]extension,]priority.
 - labeliffalse Continue at labeliffalse if the condition is false. Takes the form similar to Goto() of [[context,]extension,]priority.

See Also

- Application_Gotolf
- Application_Goto
- Function_IFTIME
- Function TESTTIME

Import Version

Application_Hangup

Hangup()

Synopsis

Hang up the calling channel.

Description

This application will hang up the calling channel.

Syntax

Hangup(causecode)

Arguments

• causecode - If a causecode is given the channel's hangup cause will be set to the given value.

See Also

- Application_Answer
- Application_Busy
- Application_Congestion

Import Version

Application_IAX2Provision

IAX2Provision()

Synopsis

Provision a calling IAXy with a given template.

Description

Provisions the calling IAXy (assuming the calling entity is in fact an IAXy) with the given template. Returns -1 on error or 0 on success.

Syntax

IAX2Provision(template)

Arguments

• template - If not specified, defaults to default.

Import Version

Application_ICES

ICES()

Synopsis

Encode and stream using 'ices'.

Description

Streams to an icecast server using ices (available separately). A configuration file must be supplied for ices (see contrib/asterisk-ices.xml).



Note

ICES version 2 client and server required.

Syntax

ICES(config)

Arguments

• config - ICES configuration file.

Import Version

Application_ImportVar

ImportVar()

Synopsis

Import a variable from a channel into a new variable.

Description

This application imports a *variable* from the specified *channel* (as opposed to the current one) and stores it as a variable (*newvar*) in the current channel (the channel that is calling this application). Variables created by this application have the same inheritance properties as those created with the Set applic ation.

Syntax

ImportVar(newvarchannelnamevariable)

Arguments

- newvar
- vardata
 - channelname
 - variable

See Also

Application_Set

Import Version

Application_Incomplete

Incomplete()

Synopsis

Returns AST_PBX_INCOMPLETE value.

Description

Signals the PBX routines that the previous matched extension is incomplete and that further input should be allowed before matching can be considered to be complete. Can be used within a pattern match when certain criteria warrants a longer match.

Syntax

Incomplete(n)

Arguments

• n - If specified, then Incomplete will not attempt to answer the channel first.



Note

Most channel types need to be in Answer state in order to receive DTMF.

Import Version

Application_IVRDemo

IVRDemo()

Synopsis

IVR Demo Application.

Description

This is a skeleton application that shows you the basic structure to create your own asterisk applications and demonstrates the IVR demo.

Syntax

IVRDemo(filename)

Arguments

• filename

Import Version

Application_JabberJoin

JabberJoin()

Synopsis

Join a chat room

Description

Allows Asterisk to join a chat room.

Syntax

JabberJoin(Jabber,RoomJID[,Nickname])

Arguments

- Jabber Client or transport Asterisk uses to connect to Jabber.
- ROOMJID XMPP/Jabber JID (Name) of chat room.
- Nickname The nickname Asterisk will use in the chat room.



Note

If a different nickname is supplied to an already joined room, the old nick will be changed to the new one.

Import Version

Application_JabberLeave

JabberLeave()

Synopsis

Leave a chat room

Description

Allows Asterisk to leave a chat room.

Syntax

JabberLeave(Jabber,RoomJID[,Nickname])

Arguments

- Jabber Client or transport Asterisk uses to connect to Jabber.
- ROOMJID XMPP/Jabber JID (Name) of chat room.
- Nickname The nickname Asterisk uses in the chat room.

Import Version

Application_JabberSend

JabberSend()

Synopsis

Sends an XMPP message to a buddy.

Description

Sends the content of message as text message from the given account to the buddy identified by jid

Example: JabberSend(asterisk,bob@domain.com,Hello world) sends "Hello world" to bob@domain.com as an XMPP message from the account asterisk, configured in jabber.conf.

Syntax

JabberSend(account,jid,message)

Arguments

- account The local named account to listen on (specified in jabber.conf)
- jid Jabber ID of the buddy to send the message to. It can be a bare JID (username@domain) or a full JID (username@domain/resource).
- message The message to send.

See Also

- Function_JABBER_STATUS
- Function_JABBER_RECEIVE

Import Version

Application_JabberSendGroup

JabberSendGroup()

Synopsis

Send a Jabber Message to a specified chat room

Description

Allows user to send a message to a chat room via XMPP.



Note

To be able to send messages to a chat room, a user must have previously joined it. Use the JabberJoin function to do so.

Syntax

JabberSendGroup(Jabber,RoomJID,Message[,Nickname])

Arguments

- Jabber Client or transport Asterisk uses to connect to Jabber.
- ROOMJID XMPP/Jabber JID (Name) of chat room.
- Message Message to be sent to the chat room.
- Nickname The nickname Asterisk uses in the chat room.

Import Version

Application_JabberStatus

JabberStatus()

Synopsis

Retrieve the status of a jabber list member

Description

This application is deprecated. Please use the JABBER_STATUS() function instead.

Retrieves the numeric status associated with the specified buddy JID. The return value in the _Variable_will be one of the following.

- 1 Online.
- 2 Chatty.
- 3 Away.
- 4 Extended Away.
- 5 Do Not Disturb.
- 6 Offline.
- 7 Not In Roster.

Syntax

JabberStatus(Jabber,JID,Variable)

Arguments

- Jabber Client or transport Asterisk users to connect to Jabber.
- JID XMPP/Jabber JID (Name) of recipient.
- Variable Variable to store the status of requested user.

Import Version

Application_JACK

JACK()

Synopsis

Jack Audio Connection Kit

Description

When executing this application, two jack ports will be created; one input and one output. Other applications can be hooked up to these ports to access audio coming from, or being send to the channel.

Syntax

JACK([options])

Arguments

- options
 - s
- name Connect to the specified jack server name
- i
- name Connect the output port that gets created to the specified jack input port
- 0
- name Connect the input port that gets created to the specified jack output port
- c
- name By default, Asterisk will use the channel name for the jack client name. Use this option to specify a custom client name.

Import Version

Application_Log

Log()

Synopsis

Send arbitrary text to a selected log level.

Description

Sends an arbitrary text message to a selected log level.

Syntax

Log(level,message)

Arguments

- level Level must be one of ERROR, WARNING, NOTICE, DEBUG, VERBOSE or DTMF.
- message Output text message.

Import Version

Application_Macro

Macro()

Synopsis

Macro Implementation.

Description

Executes a macro using the context macro- name, jumping to the s extension of that context and executing each step, then returning when the steps end.

The calling extension, context, and priority are stored in MACRO_EXTEN, MACRO_CONTEXT and MACRO_PRIORITY respectively. Arguments become ARG1, ARG2, etc in the macro context.

If you Goto out of the Macro context, the Macro will terminate and control will be returned at the location of the Goto.

If MACRO_OFFSET is set at termination, Macro will attempt to continue at priority MACRO_OFFSET + N + 1 if such a step exists, and N + 1 otherwise.



Warning

Because of the way Macro is implemented (it executes the priorities contained within it via sub-engine), and a fixed per-thread memory stack allowance, macros are limited to 7 levels of nesting (macro calling macro, etc.); It may be possible that stack-intensive applications in deeply nested macros could cause asterisk to crash earlier than this limit. It is advised that if you need to deeply nest macro calls, that you use the Gosub application (now allows arguments like a Macro) with explict Return() calls instead.



Warning

Use of the application WaitExten within a macro will not function as expected. Please use the Read application in order to read DTMF from a channel currently executing a macro.

Syntax

Macro(namearglarg2[...])

Arguments

- name The name of the macro
- args
 - arg1
 - arg2

See Also

- Application_MacroExit
- Application_Goto
- Application_Gosub

Import Version

Application_MacroExclusive

MacroExclusive()

Synopsis

Exclusive Macro Implementation.

Description

Executes macro defined in the context macro- name. Only one call at a time may run the macro. (we'll wait if another call is busy executing in the Macro)

Arguments and return values as in application Macro()



Warning

Use of the application WaitExten within a macro will not function as expected. Please use the Read application in order to read DTMF from a channel currently executing a macro.

Syntax

MacroExclusive(name,arg1,arg2[,...])

Arguments

- name The name of the macro
- arg1
- arg2

See Also

• Application_Macro

Import Version

Application_MacroExit

MacroExit()

Synopsis

Exit from Macro.

Description

Causes the currently running macro to exit as if it had ended normally by running out of priorities to execute. If used outside a macro, will likely cause unexpected behavior.

Syntax

MacroExit()

Arguments

See Also

• Application_Macro

Import Version

Application_Macrolf

Macrolf()

Synopsis

Conditional Macro implementation.

Description

Executes macro defined in *macroiftrue* if *expr* is true (otherwise *macroiffalse* if provided)

Arguments and return values as in application Macro()



Warning

Use of the application WaitExten within a macro will not function as expected. Please use the Read application in order to read DTMF from a channel currently executing a macro.

Syntax

MacroIf(exprmacroiftrue:macroiffalse)

Arguments

- expr
- destination
 - macroiftrue
 - macroiftrue
 - arg1
 - macroiffalse
 - macroiffalse
 - arg1

See Also

- Application_Gotolf
- Application_GosubIf
- Function_IF

Import Version

Application_MailboxExists

MailboxExists()

Synopsis

Check to see if Voicemail mailbox exists.

Description

Check to see if the specified mailbox exists. If no voicemail context is specified, the default context will be used.

This application will set the following channel variable upon completion:

- VMBOXEXISTSSTATUS This will contain the status of the execution of the MailboxExists application. Possible values include:
 - SUCCESS
 - FAILED

Syntax

MailboxExists(mailbox@context,options)

Arguments

- mailbox
 - \bullet mailbox
 - context
- options None options.

Import Version

Application_MeetMe

MeetMe()

Synopsis

MeetMe conference bridge.

Description

Enters the user into a specified MeetMe conference. If the *confno* is omitted, the user will be prompted to enter one. User can exit the conference by hangup, or if the p option is specified, by pressing #.



Note

The DAHDI kernel modules and a functional DAHDI timing source (see dahdi_test) must be present for conferencing to operate properly. In addition, the chan_dahdi channel driver must be loaded for the i and r options to operate at all.

Syntax

MeetMe(confno,options,pin)

Arguments

- confno The conference number
- options
 - a Set admin mode.
 - A Set marked mode.
 - b Run AGI script specified in MEETME_AGI_BACKGROUND Default: conf-background.agi.
 - c Announce user(s) count on joining a conference.
 - C Continue in dialplan when kicked out of conference.
 - d Dynamically add conference.
 - $\bullet~$ D Dynamically add conference, prompting for a PIN.
 - e Select an empty conference.
 - E Select an empty pinless conference.
 - F Pass DTMF through the conference.
 - G Play an intro announcement in conference.
 - x The file to playback
 - i Announce user join/leave with review.
 - I Announce user join/leave without review.
 - 1 Set listen only mode (Listen only, no talking).
 - m Set initially muted.
 - M Enable music on hold when the conference has a single caller. Optionally, specify a musiconhold class to use. If one is not provided, it will use the channel's currently set music class, or default.
 - class
 - n Disable the denoiser. By default, if func_speex is loaded, Asterisk will apply a denoiser to channels in the MeetMe conference. However, channel drivers that present audio with a varying rate will experience degraded performance with a denoiser attached. This parameter allows a channel joining the conference to choose not to have a denoiser attached without having to unload func_speex.
 - o Set talker optimization treats talkers who aren't speaking as being muted, meaning (a) No encode is done on transmission and (b) Received audio that is not registered as talking is omitted causing no buildup in background noise.
 - p Allow user to exit the conference by pressing # (default) or any of the defined keys. Dial plan execution will continue at the next priority following MeetMe. The key used is set to channel variable MEETME_EXIT_KEY.
 - keys
 - P Always prompt for the pin even if it is specified.
 - q Quiet mode (don't play enter/leave sounds).
 - r Record conference (records as MEETME_RECORDINGFILE using format MEETME_RECORDINGFORMAT. Default filename is me etme-conf-rec-\${CONFNO}-\${UNIQUEID} and the default format is way.
 - s Present menu (user or admin) when * is received (send to menu).

- t Set talk only mode. (Talk only, no listening).
- T Set talker detection (sent to manager interface and meetme list).
- w Wait until the marked user enters the conference.
 - secs
- x Leave the conference when the last marked user leaves.
- x Allow user to exit the conference by entering a valid single digit extension MEETME_EXIT_CONTEXT or the current context if that variable is not defined.
- 1 Do not play message when first person enters
- s Kick the user x seconds **after** he entered into the conference.
 - -
- L Limit the conference to x ms. Play a warning when y ms are left. Repeat the warning every z ms. The following special variables can be used with this option:
 - CONF_LIMIT_TIMEOUT_FILE File to play when time is up.
 - CONF_LIMIT_WARNING_FILE File to play as warning if y is defined. The default is to say the time remaining.
 - x
 - v
 - z
- pin

See Also

- Application_MeetMeCount
- Application_MeetMeAdmin
- Application_MeetMeChannelAdmin

Import Version

Application_MeetMeAdmin

MeetMeAdmin()

Synopsis

MeetMe conference administration.

Description

Run admin command for conference confno.

Will additionally set the variable MEETMEADMINSTATUS with one of the following values:

- MEETMEADMINSTATUS
 - NOPARSE Invalid arguments.
 - NOTFOUND User specified was not found.
 - FAILED Another failure occurred.
 - · OK The operation was completed successfully.

Syntax

MeetMeAdmin(confno,command,user)

Arguments

- confno
- command
 - e Eject last user that joined.
 - E Extend conference end time, if scheduled.
 - k Kick one user out of conference.
 - K Kick all users out of conference.
 - 1 Unlock conference.
 - L Lock conference.
 - m Unmute one user.
 - M Mute one user.
 - n Unmute all users in the conference.
 - N Mute all non-admin users in the conference.
 - r Reset one user's volume settings.
 - R Reset all users volume settings.
 - s Lower entire conference speaking volume.
 - S Raise entire conference speaking volume.
 - t Lower one user's talk volume.
 - T Raise one user's talk volume.
 - u Lower one user's listen volume.
 - U Raise one user's listen volume.
 - v Lower entire conference listening volume.
 - v Raise entire conference listening volume.
- user

See Also

Application_MeetMe

Import Version

Application_MeetMeChannelAdmin

MeetMeChannelAdmin()

Synopsis

MeetMe conference Administration (channel specific).

Description

Run admin command for a specific channel in any conference.

Syntax

MeetMeChannelAdmin(channel,command)

Arguments

- channel
- command
 - k Kick the specified user out of the conference he is in.
 - $\bullet \ \ m$ Unmute the specified user.
 - M Mute the specified user.

Import Version

Application_MeetMeCount

MeetMeCount()

Synopsis

MeetMe participant count.

Description

Plays back the number of users in the specified MeetMe conference. If *var* is specified, playback will be skipped and the value will be returned in the variable. Upon application completion, MeetMeCount will hangup the channel, unless priority n+1 exists, in which case priority progress will continue.

Syntax

MeetMeCount(confno,var)

Arguments

- confno Conference number.
- var

See Also

Application_MeetMe

Import Version

Application_Milliwatt

Milliwatt()

Synopsis

Generate a Constant 1004Hz tone at 0dbm (mu-law).

Description

Previous versions of this application generated the tone at 1000Hz. If for some reason you would prefer that behavior, supply the o option to get the old behavior.

Syntax

Milliwatt(options)

Arguments

- options
 - o Generate the tone at 1000Hz like previous version.

Import Version

Application_MinivmAccMess

MinivmAccMess()

Synopsis

Record account specific messages.

Description

This application is part of the Mini-Voicemail system, configured in minium.conf.

Use this application to record account specific audio/video messages for busy, unavailable and temporary messages.

Account specific directories will be created if they do not exist.

- MVM_ACCMESS_STATUS This is the result of the attempt to record the specified greeting.
 FAILED is set if the file can't be created.
 - SUCCESS
 - FAILED

Syntax

MinivmAccMess(username@domain[,options])

Arguments

- mailbox
 - username Voicemail username
 - domain Voicemail domain
- options
 - u Record the unavailable greeting.
 - b Record the busy greeting.
 - t Record the temporary greeting.
 - n Account name.

Import Version

Application_MinivmDelete

MinivmDelete()

Synopsis

Delete Mini-Voicemail voicemail messages.

Description

This application is part of the Mini-Voicemail system, configured in minium.conf.

It deletes voicemail file set in MVM_FILENAME or given filename.

- MVM_DELETE_STATUS This is the status of the delete operation.
 - SUCCESS
 - FAILED

Syntax

MinivmDelete(filename)

Arguments

• filename - File to delete

Import Version

Application_MinivmGreet

MinivmGreet()

Synopsis

Play Mini-Voicemail prompts.

Description

This application is part of the Mini-Voicemail system, configured in minivm.conf.

MinivmGreet() plays default prompts or user specific prompts for an account.

Busy and unavailable messages can be choosen, but will be overridden if a temporary message exists for the account.

- MVM_GREET_STATUS This is the status of the greeting playback.
 - SUCCESS
 - USEREXIT
 - FAILED

Syntax

MinivmGreet(username@domain[,options])

Arguments

- mailbox
 - username Voicemail username
 - domain Voicemail domain
- \bullet options
 - b Play the busy greeting to the calling party.
 - s Skip the playback of instructions for leaving a message to the calling party.
 - u Play the unavailable greeting.

Import Version

Application_MinivmMWI

MinivmMWI()

Synopsis

Send Message Waiting Notification to subscriber(s) of mailbox.

Description

This application is part of the Mini-Voicemail system, configured in minium.conf.

MinivmMWI is used to send message waiting indication to any devices whose channels have subscribed to the mailbox passed in the first parameter.

Syntax

MinivmMWI(username@domain,urgent,new,old)

Arguments

- mailbox
 - username Voicemail username
 - domain Voicemail domain
- urgent Number of urgent messages in mailbox.
- new Number of new messages in mailbox.
- old Number of old messages in mailbox.

Import Version

Application_MinivmNotify

MinivmNotify()

Synopsis

Notify voicemail owner about new messages.

Description

This application is part of the Mini-Voicemail system, configured in minivm.conf.

MiniVMnotify forwards messages about new voicemail to e-mail and pager. If there's no user account for that address, a temporary account will be used with default options (set in minium.conf).

If the channel variable MVM_COUNTER is set, this will be used in the message file name and available in the template for the message.

If no template is given, the default email template will be used to send email and default pager template to send paging message (if the user account is configured with a paging address.

- MVM_NOTIFY_STATUS This is the status of the notification attempt
 - SUCCESS
 - FAILED

Syntax

MinivmNotify(username@domain[,options])

Arguments

- mailbox
 - username Voicemail username
 - domain Voicemail domain
- \bullet options
 - template E-mail template to use for voicemail notification

Import Version

Application_MinivmRecord

MinivmRecord()

Synopsis

Receive Mini-Voicemail and forward via e-mail.

Description

This application is part of the Mini-Voicemail system, configured in minium.conf

MiniVM records audio file in configured format and forwards message to e-mail and pager.

If there's no user account for that address, a temporary account will be used with default options.

The recorded file name and path will be stored in MVM_FILENAME and the duration of the message will be stored in MVM_DURATION



Note

If the caller hangs up after the recording, the only way to send the message and clean up is to execute in the h extension. The application will exit if any of the following DTMF digits are received and the requested extension exist in the current context.

- MVM_RECORD_STATUS This is the status of the record operation
 - SUCCESS
 - USEREXIT
 - FAILED

Syntax

MinivmRecord(username@domain[,options])

Arguments

- mailbox
 - username Voicemail username
 - domain Voicemail domain
- options
 - $\bullet~$ 0 Jump to the \circ extension in the current dialplan context.
 - * Jump to the a extension in the current dialplan context.
 - g Use the specified amount of gain when recording the voicemail message. The units are whole-number decibels (dB).
 - gain Amount of gain to use

Import Version

Application_MixMonitor

MixMonitor()

Synopsis

Record a call and mix the audio during the recording. Use of StopMixMonitor is required to guarantee the audio file is available for processing during dialplan execution.

Description

Records the audio on the current channel to the specified file.

This application does not automatically answer and should be preceded by an application such as Answer or Progress().



Note

MixMonitor runs as an audiohook. In order to keep it running through a transfer, AUDIOHOOK_INHERIT must be set for the channel which ran mixmonitor. For more information, including dialplan configuration set for using AUDIOHOOK_INHERIT with MixMonitor, see the function documentation for AUDIOHOOK_INHERIT.

• MIXMONITOR_FILENAME - Will contain the filename used to record.

Syntax

MixMonitor(filename.extension,options,command)

Arguments

- file
 - filename If filename is an absolute path, uses that path, otherwise creates the file in the configured monitoring directory from asterisk.conf.
 - extension
- options
 - a Append to the file instead of overwriting it.
 - b Only save audio to the file while the channel is bridged.
 - v Adjust the **heard** volume by a factor of x (range -4 to 4)
 - x
 - V Adjust the **spoken** volume by a factor of x (range -4 to 4)
 - x
 - w Adjust both, heard and spoken volumes by a factor of x (range -4 to 4)
 - x
- command Will be executed when the recording is over.

Any strings matching ^{x} will be unescaped to x.

All variables will be evaluated at the time MixMonitor is called.

See Also

- Application_Monitor
- Application_StopMixMonitor
- Application_PauseMonitor
- Application_UnpauseMonitor
- Function_AUDIOHOOK_INHERIT

Import Version

Application_Monitor

Monitor()

Synopsis

Monitor a channel.

Description

Used to start monitoring a channel. The channel's input and output voice packets are logged to files until the channel hangs up or monitoring is stopped by the StopMonitor application.

By default, files are stored to /var/spool/asterisk/monitor/. Returns -1 if monitor files can't be opened or if the channel is already monitored, otherwise 0.

Syntax

Monitor(file_format:urlbase,fname_base,options)

Arguments

- file_format
 - file_format optional, if not set, defaults to wav
 - urlbase
- fname_base if set, changes the filename used to the one specified.
- options
 - m when the recording ends mix the two leg files into one and delete the two leg files. If the variable MONITOR_EXEC is set, the application referenced in it will be executed instead of soxmix/sox and the raw leg files will NOT be deleted automatically. soxmix/sox or MONITOR_EXEC is handed 3 arguments, the two leg files and a target mixed file name which is the same as the leg file names only without the in/out designator.

If $\texttt{MONITOR_EXEC_ARGS}$ is set, the contents will be passed on as additional arguments to $\texttt{MONITOR_EXEC}$. Both $\texttt{MONITOR_EXEC}$ and the Mix flag can be set from the administrator interface.

- b Don't begin recording unless a call is bridged to another channel.
- i Skip recording of input stream (disables $\tt m$ option).
- o Skip recording of output stream (disables m option).

See Also

Application_StopMonitor

Import Version

Application_Morsecode

Morsecode()

Synopsis

Plays morse code.

Description

Plays the Morse code equivalent of the passed string.

This application does not automatically answer and should be preceded by an application such as Answer() or Progress().

This application uses the following variables:

- MORSEDITLEN Use this value in (ms) for length of dit
- MORSETONE The pitch of the tone in (Hz), default is 800

Syntax

Morsecode(string)

Arguments

• string - String to playback as morse code to channel

See Also

- · Application_SayAlpha
- Application_SayPhonetic

Import Version

Application_MP3Player

MP3Player()

Synopsis

Play an MP3 file or M3U playlist file or stream.

Description

Executes mpg123 to play the given location, which typically would be a mp3 filename or m3u playlist filename or a URL. Please read http://en.wikipedia.org /wiki/M3U to see how M3U playlist file format is like, Example usage would be exten => 1234,1,MP3Player(/var/lib/asterisk/playlist.m3u) User can exit by pressing any key on the dialpad, or by hanging up.

This application does not automatically answer and should be preceded by an application such as Answer() or Progress().

Syntax

MP3Player(Location)

Arguments

Location - Location of the file to be played. (argument passed to mpg123)

Import Version

Application_MSet

MSet()

Synopsis

Set channel variable(s) or function value(s).

Description

This function can be used to set the value of channel variables or dialplan functions. When setting variables, if the variable name is prefixed with __, the variable will be inherited into channels created from the current channel If the variable name is prefixed with ___, the variable will be inherited into channels created from the current channel and all children channels. MSet behaves in a similar fashion to the way Set worked in 1.2/1.4 and is thus prone to doing things that you may not expect. For example, it strips surrounding double-quotes from the right-hand side (value). If you need to put a separator character (comma or vert-bar), you will need to escape them by inserting a backslash before them. Avoid its use if possible.

Syntax

MSet(name1=value1name2=value2)

Arguments

- set1
 - name1
 - value1
- set2
 - name2
 - value2

See Also

Application_Set

Import Version

Application_MusicOnHold

MusicOnHold()

Synopsis

Play Music On Hold indefinitely.

Description

Plays hold music specified by class. If omitted, the default music source for the channel will be used. Change the default class with Set(CHANNEL(musicclass)=...). If duration is given, hold music will be played specified number of seconds. If duration is ommitted, music plays indefinitely. Returns 0 when done, -1 on hangup.

This application does not automatically answer and should be preceded by an application such as Answer() or Progress().

Syntax

MusicOnHold(class,duration)

Arguments

- class
- duration

Import Version

Application_NBScat

NBScat()

Synopsis

Play an NBS local stream.

Description

Executes nbscat to listen to the local NBS stream. User can exit by pressing any key.

Syntax

NBScat()

Arguments

Import Version

Application_NoCDR

NoCDR()

Synopsis

Tell Asterisk to not maintain a CDR for the current call

Description

This application will tell Asterisk not to maintain a CDR for the current call.

Syntax

NoCDR()

Arguments

Import Version

Application_NoOp

NoOp()

Synopsis

Do Nothing (No Operation).

Description

This application does nothing. However, it is useful for debugging purposes.

This method can be used to see the evaluations of variables or functions without having any effect.

Syntax

NoOp(text)

Arguments

• text - Any text provided can be viewed at the Asterisk CLI.

See Also

- Application_Verbose
- Application_Log

Import Version

Application_ODBC_Commit

ODBC_Commit()

Synopsis

Commits a currently open database transaction.

Description

Commits the database transaction specified by transaction ID or the current active transaction, if not specified.

Syntax

ODBC_Commit([transaction ID])

Arguments

• transaction ID

Import Version

Application_ODBC_Rollback

ODBC_Rollback()

Synopsis

Rollback a currently open database transaction.

Description

Rolls back the database transaction specified by transaction ID or the current active transaction, if not specified.

Syntax

ODBC_Rollback([transaction ID])

Arguments

• transaction ID

Import Version

Application_ODBCFinish

ODBCFinish()

Synopsis

Clear the resultset of a sucessful multirow query.

Description

For queries which are marked as mode=multirow, this will clear any remaining rows of the specified resultset.

Syntax

ODBCFinish(result-id)

Arguments

• result-id

Import Version

Application_Originate

Originate()

Synopsis

Originate a call.

Description

This application originates an outbound call and connects it to a specified extension or application. This application will block until the outgoing call fails or gets answered. At that point, this application will exit with the status variable set and dialplan processing will continue.

This application sets the following channel variable before exiting:

- ORIGINATE_STATUS This indicates the result of the call origination.
 - FAILED
 - SUCCESS
 - BUSY
 - CONGESTION
 - HANGUP
 - RINGING
 - UNKNOWN In practice, you should never see this value. Please report it to the issue tracker if you ever see it.

Syntax

Originate(tech_data,type,arg1[,arg2[,arg3]])

Arguments

- tech_data Channel technology and data for creating the outbound channel. For example, SIP/1234.
- type This should be app or exten, depending on whether the outbound channel should be connected to an application or extension.
- arg1 If the type is app, then this is the application name. If the type is exten, then this is the context that the channel will be sent to.
- arg2 If the type is app, then this is the data passed as arguments to the application. If the type is exten, then this is the extension that the channel will be sent to.
- arg3 If the type is exten, then this is the priority that the channel is sent to. If the type is app, then this parameter is ignored.

Import Version

Application_OSPAuth

OSPAuth()

Synopsis

OSP Authentication.

Description

Authenticate a call by OSP.

Input variables:

- OSPINPEERIP The last hop IP address.
- OSPINTOKEN The inbound OSP token.

Output variables:

- OSPINHANDLE The inbound call OSP transaction handle.
- OSPINTIMELIMIT The inbound call duration limit in seconds.

 This application sets the following channel variable upon completion:
- OSPAUTHSTATUS The status of OSPAuth attempt as a text string, one of
 - SUCCESS
 - FAILED
 - ERROR

Syntax

OSPAuth(provider,options)

Arguments

- provider The name of the provider that authenticates the call.
- options Reserverd.

See Also

- Application_OSPLookup
- Application_OSPNext
- Application_OSPFinish

Import Version

Application_OSPFinish

OSPFinish()

Synopsis

Report OSP entry.

Description

Report call state.

Input variables:

- OSPINHANDLE The inbound call OSP transaction handle.
- OSPOUTHANDLE The outbound call OSP transaction handle.
- OSPAUTHSTATUS The OSPAuth status.
- OSPLOOKUPSTATUS The OSPLookup status.
- OSPNEXTSTATUS The OSPNext status.
- OSPINAUDIOQOS The inbound call leg audio QoS string.
- OSPOUTAUDIOQOS The outbound call leg audio QoS string.

 This application sets the following channel variable upon completion:
- OSPFINISHSTATUS The status of the OSPFinish attempt as a text string, one of
 - SUCCESS
 - FAILED
 - ERROR

Syntax

OSPFinish(cause,options)

Arguments

- cause Hangup cause.
- options Reserved.

See Also

- Application_OSPAuth
- Application_OSPLookup
- Application_OSPNext

Import Version

Application_OSPLookup

OSPLookup()

Synopsis

Lookup destination by OSP.

Description

Looks up destination via OSP.

Input variables:

- OSPINACTUALSRC The actual source device IP address in indirect mode.
- OSPINPEERIP The last hop IP address.
- OSPINHANDLE The inbound call OSP transaction handle.
- OSPINTIMELIMIT The inbound call duration limit in seconds.
- OSPINNETWORKID The inbound source network ID.
- OSPINNPRN The inbound routing number.
- OSPINNPCIC The inbound carrier identification code.
- OSPINNPDI The inbound number portability database dip indicator.
- OSPINSPID The inbound service provider identity.
- OSPINOCN The inbound operator company number.
- OSPINSPN The inbound service provider name.
- OSPINALTSPN The inbound alternate service provider name.
- OSPINMCC The inbound mobile country code.
- OSPINMNC The inbound mobile network code.
- OSPINTOHOST The inbound To header host part.
- OSPINDIVUSER The inbound Diversion header user part.
- OSPINDIVHOST The inbound Diversion header host part.
- OSPINCUSTOMINFON The inbound custom information, where n is the index beginning with 1 upto 8.
 Output variables:
- OSPOUTHANDLE The outbound call OSP transaction handle.
- OSPOUTTECH The outbound channel technology for the call.
- OSPDESTINATION The outbound destination IP address.
- OSPOUTCALLING The outbound calling number.
- OSPOUTCALLED The outbound called number.
- OSPOUTNETWORKID The outbound destination network ID.
- OSPOUTNPRN The outbound routing number.
- OSPOUTNPCIC The outbound carrier identification code.
- OSPOUTNPDI The outbound number portability database dip indicator.
- OSPOUTSPID The outbound service provider identity.
- OSPOUTOCN The outbound operator company number.
- OSPOUTSPN The outbound service provider name.
- OSPOUTALTSPN The outbound alternate service provider name.
- OSPOUTMCC The outbound mobile country code.
- OSPOUTMNC The outbound mobile network code.
- OSPOUTTOKEN The outbound OSP token.
- OSPDESTREMAILS The number of remained destinations.
- OSPOUTTIMELIMIT The outbound call duration limit in seconds.
- OSPOUTCALLIDTYPES The outbound Call-ID types.
- OSPOUTCALLID The outbound Call-ID. Only for H.323.
- OSPDIALSTR The outbound Dial command string.

This application sets the following channel variable upon completion:

- OSPLOOKUPSTATUS The status of OSPLookup attempt as a text string, one of
 - SUCCESS
 - FAILED

• ERROR

Syntax

OSPLookup(exten,provider,options)

Arguments

- exten The exten of the call.
- provider The name of the provider that is used to route the call.
- options
 - h generate H323 call id for the outbound call
 - $\bullet\ \ {\rm s}$ generate SIP call id for the outbound call. Have not been implemented
 - i generate IAX call id for the outbound call. Have not been implemented

See Also

- Application_OSPAuth
- Application_OSPNext
- Application_OSPFinish

Import Version

Application_OSPNext

OSPNext()

Synopsis

Lookup next destination by OSP.

Description

Looks up the next destination via OSP.

Input variables:

- OSPINHANDLE The inbound call OSP transaction handle.
- OSPOUTHANDLE The outbound call OSP transaction handle.
- OSPINTIMELIMIT The inbound call duration limit in seconds.
- OSPOUTCALLIDTYPES The outbound Call-ID types.
- OSPDESTREMAILS The number of remained destinations.
 Output variables:
- OSPOUTTECH The outbound channel technology.
- OSPDESTINATION The destination IP address.
- OSPOUTCALLING The outbound calling number.
- OSPOUTCALLED The outbound called number.
- OSPOUTNETWORKID The outbound destination network ID.
- OSPOUTNPRN The outbound routing number.
- OSPOUTNPCIC The outbound carrier identification code.
- OSPOUTNPDI The outbound number portability database dip indicator.
- OSPOUTSPID The outbound service provider identity.
- OSPOUTOCN The outbound operator company number.
- OSPOUTSPN The outbound service provider name.
- OSPOUTALTSPN The outbound alternate service provider name.
- OSPOUTMCC The outbound mobile country code.
- OSPOUTMNC The outbound mobile network code.
- OSPOUTTOKEN The outbound OSP token.
- OSPDESTREMAILS The number of remained destinations.
- OSPOUTTIMELIMIT The outbound call duration limit in seconds.
- OSPOUTCALLID The outbound Call-ID. Only for H.323.
- OSPDIALSTR The outbound Dial command string.

This application sets the following channel variable upon completion:

- OSPNEXTSTATUS The status of the OSPNext attempt as a text string, one of
 - SUCCESS
 - FAILED
 - ERROR

See Also

- Application_OSPAuth
- Application_OSPLookup
- Application_OSPFinish

Import Version

Application_Page

Page()

Synopsis

Page series of phones

Description

Places outbound calls to the given *technology/resource* and dumps them into a conference bridge as muted participants. The original caller is dumped into the conference as a speaker and the room is destroyed when the original callers leaves.

Syntax

Page(Technology/Resource&Technology2/Resource2[&...],options,timeout)

Arguments

- Technology/Resource
 - Technology/Resource Specification of the device(s) to dial. These must be in the format of Technology/Resource,
 where Technology represents a particular channel driver, and Resource represents a resource available to that particular
 channel driver.
 - Technology2/Resource2 Optional extra devices to dial inparallel
 If you need more then one enter them as Technology2/Resource2& Technology3/Resourse3&.....
- options
 - d Full duplex audio
 - i Ignore attempts to forward the call
 - q Quiet, do not play beep to caller
 - r Record the page into a file (meetme option r)
 - ${\tt s}$ Only dial a channel if its device state says that it is NOT_INUSE
 - A Play an announcement to all paged participants
 - x The announcement to playback in all devices
 - n Do not play announcement to caller (implies A)
- timeout Specify the length of time that the system will attempt to connect a call. After this duration, any intercom calls that have not been answered will be hung up by the system.

See Also

Application_MeetMe

Import Version

Application_Park

Park()

Synopsis

Park yourself.

Description

Used to park yourself (typically in combination with a supervised transfer to know the parking space).

If you set the PARKINGEXTEN variable to a parking space extension in the parking lot, Park() will attempt to park the call on that extension. If the extension is already is in use then execution will continue at the next priority.

If the parkeddynamic option is enabled in features.conf the following variables can be used to dynamically create new parking lots.

If you set the PARKINGDYNAMIC variable and this parking lot exists then it will be used as a template for the newly created dynamic lot. Otherwise, the default parking lot will be used.

If you set the PARKINGDYNCONTEXT variable then the newly created dynamic parking lot will use this context.

If you set the PARKINGDYNEXTEN variable then the newly created dynamic parking lot will use this extension to access the parking lot.

If you set the PARKINGDYNPOS variable then the newly created dynamic parking lot will use those parking postitions.



Note

This application must be used as the first extension priority to be recognized as a parking access extension. DTMF transfers and some channel drivers need this distinction to operate properly. The parking access extension in this case is treated like a dialplan hint.



Note

Parking lots automatically create and manage dialplan extensions in the parking lot context. You do not need to explicitly use this application in your dialplan. Instead, all you should do is include the parking lot context in your dialplan.

Syntax

Park(timeout,return_context,return_exten,return_priority,options,parking_lot_name)

Arguments

- timeout A custom parking timeout for this parked call. Value in milliseconds.
- return_context The context to return the call to after it times out.
- return exten The extension to return the call to after it times out.
- return_priority The priority to return the call to after it times out.
- options A list of options for this parked call.
 - r Send ringing instead of MOH to the parked call.
 - $\bullet \;\; \mbox{\ensuremath{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\mbox{\ensuremath{\ensuremath{\mbox{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath{\ensuremath}\ensuremath{\ensuremath{\ensuremath{\ensuremath}\ensu$
 - s Silence announcement of the parking space number.
- parking_lot_name Specify in which parking lot to park a call.

The parking lot used is selected in the following order:

- 1) parking_lot_name option
- 2) PARKINGLOT variable
- 3) CHANNEL (parkinglot) function (Possibly preset by the channel driver.)
- 4) Default parking lot.

See Also

- Application_ParkAndAnnounce
- Application_ParkedCall

Import Version

Application_ParkAndAnnounce

ParkAndAnnounce()

Synopsis

Park and Announce.

Description

Park a call into the parkinglot and announce the call to another channel.

The variable PARKEDAT will contain the parking extension into which the call was placed. Use with the Local channel to allow the dialplan to make use of this information.

Syntax

ParkAndAnnounce(announce:announce1[:...],timeout,dial,return_context)

Arguments

- announce_template
 - announce Colon-separated list of files to announce. The word PARKED will be replaced by a say_digits of the extension in
 which the call is parked.
 - announce1
- timeout Time in seconds before the call returns into the return context.
- dial The app_dial style resource to call to make the announcement. Console/dsp calls the console.
- return_context The goto-style label to jump the call back into after timeout. Default priority+1.

See Also

- Application_Park
- Application_ParkedCall

Import Version

Application_ParkedCall

ParkedCall()

Synopsis

Retrieve a parked call.

Description

Used to retrieve a parked call from a parking lot.



Note

Parking lots automatically create and manage dialplan extensions in the parking lot context. You do not need to explicitly use this application in your dialplan. Instead, all you should do is include the parking lot context in your dialplan.

Syntax

ParkedCall(exten,parking_lot_name)

Arguments

- exten Parking space extension to retrieve a parked call. If not provided then the first available parked call in the parking lot will be retrieved
- parking_lot_name Specify from which parking lot to retrieve a parked call.

The parking lot used is selected in the following order:

- 1) parking_lot_name option
- 2) PARKINGLOT variable
- 3) CHANNEL (parkinglot) function (Possibly preset by the channel driver.)
- 4) Default parking lot.

See Also

- Application_Park
- Application_ParkAndAnnounce

Import Version

Application_PauseMonitor

PauseMonitor()

Synopsis

Pause monitoring of a channel.

Description

Pauses monitoring of a channel until it is re-enabled by a call to UnpauseMonitor.

Syntax

PauseMonitor()

Arguments

See Also

• Application_UnpauseMonitor

Import Version

Application_PauseQueueMember

PauseQueueMember()

Synopsis

Pauses a queue member.

Description

Pauses (blocks calls for) a queue member. The given interface will be paused in the given queue. This prevents any calls from being sent from the queue to the interface until it is unpaused with UnpauseQueueMember or the manager interface. If no queuename is given, the interface is paused in every queue it is a member of. The application will fail if the interface is not found.

This application sets the following channel variable upon completion:

- POMSTATUS The status of the attempt to pause a queue member as a text string.
 - PAUSED
 - NOTFOUND

Example: PauseQueueMember(,SIP/3000)

Syntax

PauseQueueMember(queuename,interface,options,reason)

Arguments

- queuename
- interface
- options
- reason Is used to add extra information to the appropriate queue_log entries and manager events.

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function QUEUE MEMBER LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Application_Pickup

Pickup()

Synopsis

Directed extension call pickup.

Description

This application can pickup a specified ringing channel. The channel to pickup can be specified in the following ways.

- 1) If no extension targets are specified, the application will pickup a channel matching the pickup group of the requesting channel.
- 2) If the extension is specified with a context of the special string PICKUPMARK (for example 10@PICKUPMARK), the application will pickup a channel which has defined the channel variable PICKUPMARK with the same value as extension (in this example, 10).
- 3) If the extension is specified with or without a context, the channel with a matching extension and context will be picked up. If no context is specified, the current context will be used.



Note

The *extension* is typically set on matching channels by the dial application that created the channel. The *context* is set on matching channels by the channel driver for the device.

Syntax

Pickup(extension&extension2[&...])

Arguments

- targets
 - extension Specification of the pickup target.
 - extension
 - context
 - \bullet $\tt extension2$ Additional specifications of pickup targets.
 - extension2
 - context2

Import Version

Application_PickupChan

PickupChan()

Synopsis

Pickup a ringing channel.

Description

This will pickup a specified channel if ringing.

Syntax

 ${\tt PickupChan(Technology/Resource[\&Technology2/Resource2[\&...]][,options])}$

Arguments

- Technology/Resource
 - Technology/Resource
 - Technology2/Resource2
- options
 - p Channel name specified partial name. Used when find channel by callid.

Import Version

Application_Playback

Playback()

Synopsis

Play a file.

Description

Plays back given filenames (do not put extension of wav/alaw etc). The playback command answer the channel if no options are specified. If the file is non-existant it will fail

This application sets the following channel variable upon completion:

- PLAYBACKSTATUS The status of the playback attempt as a text string.
 - SUCCESS
 - FAILED

See Also: Background (application) - for playing sound files that are interruptible

WaitExten (application) - wait for digits from caller, optionally play music on hold

Syntax

Playback(filename&filename2[&...],options)

Arguments

- filenames
 - filename
 - filename2
- options Comma separated list of options
 - skip Do not play if not answered
 - noanswer Playback without answering, otherwise the channel will be answered before the sound is played.

Import Version

Application_PlayTones

PlayTones()

Synopsis

Play a tone list.

Description

Plays a tone list. Execution will continue with the next step in the dialplan immediately while the tones continue to play.

See the sample indications.conf for a description of the specification of a tonelist.

Syntax

PlayTones(arg)

Arguments

• arg - Arg is either the tone name defined in the indications.conf configuration file, or a directly specified list of frequencies and durations.

See Also

• Application_StopPlayTones

Import Version

Application_PrivacyManager

PrivacyManager()

Synopsis

Require phone number to be entered, if no CallerID sent

Description

If no Caller*ID is sent, PrivacyManager answers the channel and asks the caller to enter their phone number. The caller is given *maxretries* attempts to do so. The application does **nothing** if Caller*ID was received on the channel.

The application sets the following channel variable upon completion:

- PRIVACYMGRSTATUS The status of the privacy manager's attempt to collect a phone number from the user.
 - SUCCESS
 - FAILED

Syntax

PrivacyManager(maxretries,minlength,options,context)

Arguments

- maxretries Total tries caller is allowed to input a callerid. Defaults to 3.
- minlength Minimum allowable digits in the input callerid number. Defaults to 10.
- options Position reserved for options.
- context Context to check the given callerid against patterns.

See Also

Application_Zapateller

Import Version

Application_Proceeding

Proceeding()

Synopsis

Indicate proceeding.

Description

This application will request that a proceeding message be provided to the calling channel.

Syntax

Proceeding()

Arguments

Import Version

Application_Progress

Progress()

Synopsis

Indicate progress.

Description

This application will request that in-band progress information be provided to the calling channel.

Syntax

Progress()

Arguments

See Also

- Application_Busy
- Application_Congestion
- Application_Ringing
- Application_Playtones

Import Version

Application_Queue

Queue()

Synopsis

Queue a call for a call queue.

Description

In addition to transferring the call, a call may be parked and then picked up by another user.

This application will return to the dialplan if the queue does not exist, or any of the join options cause the caller to not enter the queue.

This application does not automatically answer and should be preceded by an application such as Answer(), Progress(), or Ringing().

This application sets the following channel variable upon completion:

- QUEUESTATUS The status of the call as a text string.
 - TIMEOUT
 - FULL
 - JOINEMPTY
 - LEAVEEMPTY
 - JOINUNAVAIL
 - LEAVEUNAVAIL
 - CONTINUE

Syntax

Queue(queuename,options,URL,announceoverride,timeout,AGI,macro,gosub,rule,position)

Arguments

- queuename
- options
 - C Mark all calls as "answered elsewhere" when cancelled.
 - $\bullet\ _{\text{\tiny C}}$ Continue in the dialplan if the callee hangs up.
 - d data-quality (modem) call (minimum delay).
 - h Allow callee to hang up by pressing *.
 - H Allow caller to hang up by pressing *.
 - n No retries on the timeout; will exit this application and go to the next step.
 - i Ignore call forward requests from queue members and do nothing when they are requested.
 - I Asterisk will ignore any connected line update requests or any redirecting party update requests it may receive on this dial attempt.
 - r Ring instead of playing MOH. Periodic Announcements are still made, if applicable.
 - R Ring instead of playing MOH when a member channel is actually ringing.
 - t Allow the **called** user to transfer the calling user.
 - T Allow the calling user to transfer the call.
 - w Allow the called user to write the conversation to disk via Monitor.
 - w Allow the calling user to write the conversation to disk via Monitor.
 - k Allow the **called** party to enable parking of the call by sending the DTMF sequence defined for call parking in features.con f.
 - K Allow the calling party to enable parking of the call by sending the DTMF sequence defined for call parking in features.co
 - x Allow the **called** user to write the conversation to disk via MixMonitor.
 - x Allow the calling user to write the conversation to disk via MixMonitor.
- URL URL will be sent to the called party if the channel supports it.
- announceoverride
- timeout Will cause the queue to fail out after a specified number of seconds, checked between each queues.conf timeout and retry cycle.
- AGI Will setup an AGI script to be executed on the calling party's channel once they are connected to a queue member.

- macro Will run a macro on the calling party's channel once they are connected to a queue member.
- gosub Will run a gosub on the calling party's channel once they are connected to a queue member.
- rule Will cause the queue's defaultrule to be overridden by the rule specified.
- position Attempt to enter the caller into the queue at the numerical position specified. 1 would attempt to enter the caller at the head of the queue, and 3 would attempt to place the caller third in the queue.

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Application_QueueLog

QueueLog()

Synopsis

Writes to the queue_log file.

Description

Allows you to write your own events into the queue log.

Example: QueueLog(101,\${UNIQUEID},\${AGENT},WENTONBREAK,600)

Syntax

QueueLog(queuename,uniqueid,agent,event,additionalinfo)

Arguments

- queuename
- uniqueid
- agent
- event
- additionalinfo

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Application_RaiseException

RaiseException()

Synopsis

Handle an exceptional condition.

Description

This application will jump to the e extension in the current context, setting the dialplan function EXCEPTION(). If the e extension does not exist, the call will hangup.

Syntax

RaiseException(reason)

Arguments

• reason

See Also

• Function_Exception

Import Version

Application_Read

Read()

Synopsis

Read a variable.

Description

Reads a #-terminated string of digits a certain number of times from the user in to the given variable.

This application sets the following channel variable upon completion:

- READSTATUS This is the status of the read operation.
 - OK
 - ERROR
 - HANGUP
 - INTERRUPTED
 - SKIPPED
 - TIMEOUT

Syntax

Read(variablefilename&filename2[&...],maxdigits,options,attempts,timeout)

Arguments

- variable The input digits will be stored in the given variable name.
- filenames
 - filename file(s) to play before reading digits or tone with option i
 - filename2
- maxdigits Maximum acceptable number of digits. Stops reading after maxdigits have been entered (without requiring the user to
 press the # key).

Defaults to 0 - no limit - wait for the user press the # key. Any value below 0 means the same. Max accepted value is 255.

- options
 - $\bullet\ \ {\rm s}$ to return immediately if the line is not up.
 - i to play filename as an indication tone from your indications.conf.
 - n to read digits even if the line is not up.
- attempts If greater than 1, that many attempts will be made in the event no data is entered.
- timeout The number of seconds to wait for a digit response. If greater than 0, that value will override the default timeout. Can be
 floating point.

See Also

Application_SendDTMF

Import Version

Application_ReadExten

ReadExten()

Synopsis

Read an extension into a variable.

Description

Reads a # terminated string of digits from the user into the given variable.

Will set READEXTENSTATUS on exit with one of the following statuses:

- READEXTENSTATUS
 - OK A valid extension exists in \${variable}.
 - TIMEOUT No extension was entered in the specified time. Also sets \${variable} to "t".
 - INVALID An invalid extension, \${INVALID_EXTEN}, was entered. Also sets \${variable} to "i".
 - SKIP Line was not up and the option 's' was specified.
 - ERROR Invalid arguments were passed.

Syntax

ReadExten(variable,filename,context,option,timeout)

Arguments

- variable
- filename File to play before reading digits or tone with option i
- context Context in which to match extensions.
- option
 - s Return immediately if the channel is not answered.
 - i Play filename as an indication tone from your indications.conf or a directly specified list of frequencies and durations.
 - n Read digits even if the channel is not answered.
- timeout An integer number of seconds to wait for a digit response. If greater than 0, that value will override the default timeout.

Import Version

Application_ReadFile

ReadFile()

Synopsis

Read the contents of a text file into a channel variable.

Description

Read the contents of a text file into channel variable varname



Warning

ReadFile has been deprecated in favor of Set(varname=\${FILE(file,0,length)})

Syntax

ReadFile(varnamefile[length])

Arguments

- varname Result stored here.
- \bullet fileparams
 - file The name of the file to read.
 - length Maximum number of characters to capture.
 If not specified defaults to max.

See Also

- Application_System
- Application_Read

Import Version

Application_ReceiveFax

ReceiveFax()

Synopsis

Receive a FAX and save as a TIFF/F file.

Description

This application is provided by res_fax, which is a FAX technology agnostic module that utilizes FAX technology resource modules to complete a FAX transmission

Session arguments can be set by the FAXOPT function and to check results of the ReceiveFax() application.

Syntax

ReceiveFax(filename[,options])

Arguments

- filename
- options
 - d Enable FAX debugging.
 - f Allow audio fallback FAX transfer on T.38 capable channels.
 - s Send progress Manager events (overrides statusevents setting in res_fax.conf).

See Also

Function_FAXOPT

Import Version

Application_ReceiveFAX_app_fax

ReceiveFAX() - [app_fax]

Synopsis

Receive a Fax

Description

Receives a FAX from the channel into the given filename overwriting the file if it already exists.

File created will be in TIFF format.

This application sets the following channel variables:

- LOCALSTATIONID To identify itself to the remote end
- LOCALHEADERINFO To generate a header line on each page
- FAXSTATUS
 - SUCCESS
 - FAILED
- FAXERROR Cause of failure
- REMOTESTATIONID The CSID of the remote side
- FAXPAGES Number of pages sent
- FAXBITRATE Transmission rate
- FAXRESOLUTION Resolution of sent fax

Syntax

ReceiveFAX(filename[,c])

Arguments

- filename Filename of TIFF file save incoming fax
- C Makes the application behave as the calling machine (Default behavior is as answering machine)

Import Version

Application_ReceiveFAX_res_fax

ReceiveFAX() - [res_fax]

Synopsis

Receive a FAX and save as a TIFF/F file.

Description

This application is provided by res_fax, which is a FAX technology agnostic module that utilizes FAX technology resource modules to complete a FAX transmission

Session arguments can be set by the FAXOPT function and to check results of the ReceiveFax() application.

Syntax

ReceiveFAX(filename,options)

Arguments

- filename
- options
 - d Enable FAX debugging.
 - f Allow audio fallback FAX transfer on T.38 capable channels.
 - s Send progress Manager events (overrides statusevents setting in res_fax.conf).

See Also

Function_FAXOPT

Import Version

Application_ReceiveFAX (app_fax)

Moved to Application_ReceiveFAX_app_fax.

Application_ReceiveFAX (res_fax)

Move to Application_ReceiveFAX_res_fax.

Application_Record

Record()

Synopsis

Record to a file.

Description

If filename contains %d, these characters will be replaced with a number incremented by one each time the file is recorded. Use core show file formats to see the available formats on your system User can press # to terminate the recording and continue to the next priority. If the user hangs up during a recording, all data will be lost and the application will terminate.

- RECORDED_FILE Will be set to the final filename of the recording.
- RECORD_STATUS This is the final status of the command
 - DTMF A terminating DTMF was received ('#' or '*', depending upon option 't')
 - · SILENCE The maximum silence occurred in the recording.
 - SKIP The line was not yet answered and the 's' option was specified.
 - TIMEOUT The maximum length was reached.
 - HANGUP The channel was hung up.
 - ERROR An unrecoverable error occurred, which resulted in a WARNING to the logs.

Syntax

Record(filename.format,silence,maxduration,options)

Arguments

- filename
 - filename
 - format Is the format of the file type to be recorded (wav, gsm, etc).
- silence Is the number of seconds of silence to allow before returning.
- maxduration Is the maximum recording duration in seconds. If missing or 0 there is no maximum.
- options
 - a Append to existing recording rather than replacing.
 - n Do not answer, but record anyway if line not yet answered.
 - q quiet (do not play a beep tone).
 - $\bullet\ \ {\bf s}$ skip recording if the line is not yet answered.
 - t use alternate '*' terminator key (DTMF) instead of default '#'
 - $\bullet\ \ {\rm x}$ Ignore all terminator keys (DTMF) and keep recording until hangup.
 - k Keep recorded file upon hangup.
 - y Terminate recording if any DTMF digit is received.

Import Version

Application_RemoveQueueMember

RemoveQueueMember()

Synopsis

Dynamically removes queue members.

Description

If the interface is **NOT** in the queue it will return an error.

This application sets the following channel variable upon completion:

- RQMSTATUS
 - REMOVED
 - NOTINQUEUE
 - NOSUCHQUEUE
 - NOTDYNAMIC

Example: RemoveQueueMember(techsupport,SIP/3000)

Syntax

RemoveQueueMember(queuename,interface)

Arguments

- queuename
- interface

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Application_ResetCDR

ResetCDR()

Synopsis

Resets the Call Data Record.

Description

This application causes the Call Data Record to be reset.

Syntax

ResetCDR(options)

Arguments

- options
 - w Store the current CDR record before resetting it.
 - a Store any stacked records.
 - v Save CDR variables.
 - e Enable CDR only (negate effects of NoCDR).

See Also

- Application_ForkCDR
- Application_NoCDR

Import Version

Application_RetryDial

RetryDial()

Synopsis

Place a call, retrying on failure allowing an optional exit extension.

Description

This application will attempt to place a call using the normal Dial application. If no channel can be reached, the *announce* file will be played. Then, it will wait *sleep* number of seconds before retrying the call. After *retries* number of attempts, the calling channel will continue at the next priority in the dialplan. If the *retries* setting is set to 0, this application will retry endlessly. While waiting to retry a call, a 1 digit extension may be dialed. If that extension exists in either the context defined in EXITCONTEXT or the current one, The call will jump to that extension immediately. The *dialargs* are specified in the same format that arguments are provided to the Dial application.

Syntax

RetryDial(announce, sleep, retries, dialargs)

Arguments

- announce Filename of sound that will be played when no channel can be reached
- sleep Number of seconds to wait after a dial attempt failed before a new attempt is made
- retries Number of retries
 - When this is reached flow will continue at the next priority in the dialplan
- dialargs Same format as arguments provided to the Dial application

Import Version

Application_Return

Return()

Synopsis

Return from gosub routine.

Description

Jumps to the last label on the stack, removing it. The return value, if any, is saved in the channel variable GOSUB_RETVAL.

Syntax

Return(value)

Arguments

• value - Return value.

See Also

- Application_Gosub
- Application_StackPop

Import Version

Application_Ringing

Ringing()

Synopsis

Indicate ringing tone.

Description

This application will request that the channel indicate a ringing tone to the user.

Syntax

Ringing()

Arguments

See Also

- Application_Busy
- Application_Congestion
- Application_Progress
- Application_Playtones

Import Version

Application_SayAlpha

SayAlpha()

Synopsis

Say Alpha.

Description

This application will play the sounds that correspond to the letters of the given string.

Syntax

SayAlpha(string)

Arguments

• string

See Also

- Application_SayDigits
- Application_SayNumber
- Application_SayPhonetic
- Function_CHANNEL

Import Version

Application_SayCountedAdj

SayCountedAdj()

Synopsis

Say a adjective in declined form in order to count things

Description

Selects and plays the proper form of an adjective according to the gender and of the noun which it modifies and the number of objects named by the noun-verb combination which have been counted. Used when saying things such as "5 new messages". The various singular and plural forms of the adjective are selected by adding suffixes to *filename*.

If the channel language is English, then no suffix will ever be added (since, in English, adjectives are not declined). If the channel language is Russian or some other slavic language, then the suffix will the specified *gender* for nominative, and "x" for genative plural. (The genative singular is not used when counting things.) For example, SayCountedAdj(1,new,f) will play sound file "newa" (containing the word "novaya"), but SayCountedAdj(5,new,f) will play sound file "newx" (containing the word "novikh").

This application does not automatically answer and should be preceded by an application such as Answer(), Progress(), or Proceeding().

Syntax

SayCountedAdj(number,filename,gender)

Arguments

- number The number of things
- filename File name stem for the adjective
- gender The gender of the noun modified, one of 'm', 'f', 'n', or 'c'

See Also

- Application_SayCountedNoun
- Application_SayNumber

Import Version

Application_SayCountedNoun

SayCountedNoun()

Synopsis

Say a noun in declined form in order to count things

Description

Selects and plays the proper singular or plural form of a noun when saying things such as "five calls". English has simple rules for deciding when to say "call" and when to say "calls", but other languages have complicated rules which would be extremely difficult to implement in the Asterisk dialplan language.

The correct sound file is selected by examining the *number* and adding the appropriate suffix to *filename*. If the channel language is English, then the suffix will be either empty or "s". If the channel language is Russian or some other Slavic language, then the suffix will be empty for nominative, "x1" for genative singular, and "x2" for genative plural.

Note that combining *filename* with a suffix will not necessarily produce a correctly spelled plural form. For example, SayCountedNoun(2,man) will play the sound file "mans" rather than "men". This behavior is intentional. Since the file name is never seen by the end user, there is no need to implement complicated spelling rules. We simply record the word "men" in the sound file named "mans".

This application does not automatically answer and should be preceded by an application such as Answer() or Progress.

Syntax

SayCountedNoun(number,filename)

Arguments

- number The number of things
- filename File name stem for the noun that is the the name of the things

See Also

- Application_SayCountedAdj
- Application_SayNumber

Import Version

Application_SayCountPL

SayCountPL()

Synopsis

Say Polish counting words.

Description

Polish grammar has some funny rules for counting words. for example 1 zloty, 2 zlote, 5 zlotych. This application will take the words for 1, 2-4 and 5 and decide based on grammar rules which one to use with the number you pass to it.

Example: SayCountPL(zloty,zlote,zlotych,122) will give: zlote

Syntax

SayCountPL(word1,word2,word5,number)

Arguments

- word1
- word2
- word5
- number

Import Version

Application_SayDigits

SayDigits()

Synopsis

Say Digits.

Description

This application will play the sounds that correspond to the digits of the given number. This will use the language that is currently set for the channel.

Syntax

SayDigits(digits)

Arguments

• digits

See Also

- Application_SayAlpha
- Application_SayNumber
- Application_SayPhonetic
- Function_CHANNEL

Import Version

Application_SayNumber

SayNumber()

Synopsis

Say Number.

Description

This application will play the sounds that correspond to the given *digits*. Optionally, a *gender* may be specified. This will use the language that is currently set for the channel. See the CHANNEL() function for more information on setting the language for the channel.

Syntax

SayNumber(digits,gender)

Arguments

- digits
- gender

See Also

- Application_SayAlpha
- Application_SayDigits
- Application_SayPhonetic
- Function_CHANNEL

Import Version

Application_SayPhonetic

SayPhonetic()

Synopsis

Say Phonetic.

Description

This application will play the sounds from the phonetic alphabet that correspond to the letters in the given string.

Syntax

SayPhonetic(string)

Arguments

• string

See Also

- Application_SayAlpha
- Application_SayDigits
- Application_SayNumber

Import Version

Application_SayUnixTime

SayUnixTime()

Synopsis

Says a specified time in a custom format.

Description

Uses some of the sound files stored in /var/lib/asterisk/sounds to construct a phrase saying the specified date and/or time in the specified format.

Syntax

SayUnixTime(unixtime,timezone,format)

Arguments

- unixtime time, in seconds since Jan 1, 1970. May be negative. Defaults to now.
- \bullet timezone timezone, see /usr/share/zoneinfo for a list. Defaults to machine default.
- format a format the time is to be said in. See voicemail.conf. Defaults to ABdY "digits/at" IMp

See Also

- Function_STRFTIME
- Function_STRPTIME
- Function_IFTIME

Import Version

Application_SendDTMF

SendDTMF()

Synopsis

Sends arbitrary DTMF digits

Description

It will send all digits or terminate if it encounters an error.

Syntax

SendDTMF(digits[,timeout_ms[,duration_ms[,channel]]])

Arguments

- digits List of digits 0-9,*#,a-d,A-D to send also w for a half second pause, and f or F for a flash-hook if the channel supports
 flash-hook.
- timeout_ms Amount of time to wait in ms between tones. (defaults to .25s)
- duration_ms Duration of each digit
- channel Channel where digits will be played

See Also

Application_Read

Import Version

Application_SendFax

SendFax()

Synopsis

Sends a specified TIFF/F file as a FAX.

Description

This application is provided by res_fax, which is a FAX technology agnostic module that utilizes FAX technology resource modules to complete a FAX transmission

Session arguments can be set by the FAXOPT function and to check results of the SendFax() application.

Syntax

```
SendFax([filename2[&...]][,options])
```

Arguments

- filename
 - filename2 TIFF file to send as a FAX.
- options
 - d Enable FAX debugging.
 - f Allow audio fallback FAX transfer on T.38 capable channels.
 - s Send progress Manager events (overrides statusevents setting in res_fax.conf).
 - $\bullet\ \ z$ Initiate a T.38 reinvite on the channel if the remote end does not.

See Also

Function_FAXOPT

Import Version

Application_SendFAX_app_fax

SendFAX() - [app_fax]

Synopsis

Send a Fax

Description

Send a given TIFF file to the channel as a FAX.

This application sets the following channel variables:

- LOCALSTATIONID To identify itself to the remote end
- LOCALHEADERINFO To generate a header line on each page
- FAXSTATUS
 - SUCCESS
 - FAILED
- FAXERROR Cause of failure
- $\bullet\ \ \mbox{\tt REMOTESTATIONID}$ The CSID of the remote side
- FAXPAGES Number of pages sent
- FAXBITRATE Transmission rate
- FAXRESOLUTION Resolution of sent fax

Syntax

SendFAX(filename[,a])

Arguments

- filename Filename of TIFF file to fax
- a Makes the application behave as the answering machine (Default behavior is as calling machine)

Import Version

Application_SendFAX_res_fax

SendFAX() - [res_fax]

Synopsis

Sends a specified TIFF/F file as a FAX.

Description

This application is provided by res_fax, which is a FAX technology agnostic module that utilizes FAX technology resource modules to complete a FAX transmission

Session arguments can be set by the FAXOPT function and to check results of the SendFax() application.

Syntax

SendFAX(filename2[&...],options)

Arguments

- filename
 - filename2 TIFF file to send as a FAX.
- options
 - d Enable FAX debugging.
 - f Allow audio fallback FAX transfer on T.38 capable channels.
 - s Send progress Manager events (overrides statusevents setting in res_fax.conf).
 - $\bullet\ \ z$ Initiate a T.38 reinvite on the channel if the remote end does not.

See Also

Function_FAXOPT

Import Version

Application_SendFAX (app_fax)

 ${\bf Moved\ to\ Application_SendFAX_app_fax.}$

Application_SendFAX (res_fax)

Moved to Application_SendFAX_res_fax.

Application_SendImage

SendImage()

Synopsis

Sends an image file.

Description

Send an image file on a channel supporting it.

Result of transmission will be stored in SENDIMAGESTATUS

- SENDIMAGESTATUS
 - SUCCESS Transmission succeeded.
 - FAILURE Transmission failed.
 - UNSUPPORTED Image transmission not supported by channel.

Syntax

SendImage(filename)

Arguments

• filename - Path of the filename (image) to send.

See Also

- Application_SendText
- Application_SendURL

Import Version

Application_SendText

SendText()

Synopsis

Send a Text Message.

Description

Sends text to current channel (callee).

Result of transmission will be stored in the SENDTEXTSTATUS

- SENDTEXTSTATUS
 - SUCCESS Transmission succeeded.
 - FAILURE Transmission failed.
 - UNSUPPORTED Text transmission not supported by channel.



Note

At this moment, text is supposed to be 7 bit ASCII in most channels.

Syntax

SendText(text)

Arguments

• text

See Also

- Application_SendImage
- Application_SendURL

Import Version

Application_SendURL

SendURL()

Synopsis

Send a URL.

Description

Requests client go to URL (IAX2) or sends the URL to the client (other channels).

Result is returned in the SENDURLSTATUS channel variable:

- SENDURLSTATUS
 - SUCCESS URL successfully sent to client.
 - FAILURE Failed to send URL.
 - NOLOAD Client failed to load URL (wait enabled).
 - UNSUPPORTED Channel does not support URL transport.
 SendURL continues normally if the URL was sent correctly or if the channel does not support HTML transport. Otherwise, the channel is hung up.

Syntax

SendURL(URL,option)

Arguments

- URL
- option
 - w Execution will wait for an acknowledgement that the URL has been loaded before continuing.

See Also

- Application_SendImage
- Application_SendText

Import Version

Application_Set

Set()

Synopsis

Set channel variable or function value.

Description

This function can be used to set the value of channel variables or dialplan functions. When setting variables, if the variable name is prefixed with __, the variable will be inherited into channels created from the current channel. If the variable name is prefixed with __, the variable will be inherited into channels created from the current channel and all children channels.



Note

If (and only if), in /etc/asterisk/asterisk.conf, you have a [compat] category, and you have app_set = 1.4 under that, then the behavior of this app changes, and strips surrounding quotes from the right hand side as it did previously in 1.4. The advantages of not stripping out quoting, and not caring about the separator characters (comma and vertical bar) were sufficient to make these changes in 1.6. Confusion about how many backslashes would be needed to properly protect separators and quotes in various database access strings has been greatly reduced by these changes.

Syntax

Set(name=value)

Arguments

- name
- value

See Also

- Application_MSet
- Function_GLOBAL
- Function_SET
- Function_ENV

Import Version

Application_SetAMAFlags

SetAMAFlags()

Synopsis

Set the AMA Flags.

Description

This application will set the channel's AMA Flags for billing purposes.

Syntax

SetAMAFlags(flag)

Arguments

• flag

See Also

• Function_CDR

Import Version

Application_SetCallerPres

SetCallerPres()

Synopsis

Set CallerID Presentation.

Description

Set Caller*ID presentation on a call.

Syntax

SetCallerPres(presentation)

Arguments

- presentation
 - allowed_not_screened Presentation Allowed, Not Screened.
 - allowed_passed_screen Presentation Allowed, Passed Screen.
 - allowed_failed_screen Presentation Allowed, Failed Screen.
 - allowed Presentation Allowed, Network Number.
 - prohib_not_screened Presentation Prohibited, Not Screened.
 - prohib_passed_screen Presentation Prohibited, Passed Screen.
 - prohib_failed_screen Presentation Prohibited, Failed Screen.
 - prohib Presentation Prohibited, Network Number.
 - unavailable Number Unavailable.

Import Version

Application_SetMusicOnHold

SetMusicOnHold()

Synopsis

Set default Music On Hold class.

Description

!!! DEPRECATED. USe Set(CHANNEL(musicclass)=...) instead !!!

Sets the default class for music on hold for a given channel. When music on hold is activated, this class will be used to select which music is played.

!!! DEPRECATED. USe Set(CHANNEL(musicclass)=...) instead !!!

Syntax

SetMusicOnHold(class)

Arguments

• class

Import Version

Application_SIPAddHeader

SIPAddHeader()

Synopsis

Add a SIP header to the outbound call.

Description

Adds a header to a SIP call placed with DIAL.

Remember to use the X-header if you are adding non-standard SIP headers, like X-Asterisk-Accountcode:. Use this with care. Adding the wrong headers may jeopardize the SIP dialog.

Always returns 0.

Syntax

SIPAddHeader(Header:Content)

Arguments

- Header
- Content

Import Version

Application_SIPDtmfMode

SIPDtmfMode()

Synopsis

Change the dtmfmode for a SIP call.

Description

Changes the dtmfmode for a SIP call.

Syntax

SIPDtmfMode(mode)

Arguments

- \bullet mode
 - inband
 - ullet info
 - rfc2833

Import Version

Application_SIPRemoveHeader

SIPRemoveHeader()

Synopsis

Remove SIP headers previously added with SIPAddHeader

Description

SIPRemoveHeader() allows you to remove headers which were previously added with SIPAddHeader(). If no parameter is supplied, all previously added headers will be removed. If a parameter is supplied, only the matching headers will be removed.

For example you have added these 2 headers:

SIPAddHeader(P-Asserted-Identity: sip:foo@bar);

SIPAddHeader(P-Preferred-Identity: sip:bar@foo);

// remove all headers

SIPRemoveHeader();

// remove all P- headers

SIPRemoveHeader(P-);

// remove only the PAI header (note the : at the end)

SIPRemoveHeader(P-Asserted-Identity ;



Always returns 0.

Syntax

SIPRemoveHeader([Header])

Arguments

• Header

Import Version

Application_Skel

Skel()

Synopsis

Simple one line explaination.

Description

This application is a template to build other applications from. It shows you the basic structure to create your own Asterisk applications.

Syntax

Skel(dummy,options)

Arguments

- dummy
- options
 - a Option A.
 - b Option B.
 - c Option C.

Import Version

Application_SLAStation

SLAStation()

Synopsis

Shared Line Appearance Station.

Description

This application should be executed by an SLA station. The argument depends on how the call was initiated. If the phone was just taken off hook, then the argument *station* should be just the station name. If the call was initiated by pressing a line key, then the station name should be preceded by an underscore and the trunk name associated with that line button.

For example: station1_line1

On exit, this application will set the variable SLASTATION_STATUS to one of the following values:

- SLASTATION_STATUS
 - FAILURE
 - CONGESTION
 - SUCCESS

Syntax

SLAStation(station)

Arguments

• station - Station name

Import Version

Application_SLATrunk

SLATrunk()

Synopsis

Shared Line Appearance Trunk.

Description

This application should be executed by an SLA trunk on an inbound call. The channel calling this application should correspond to the SLA trunk with the name *trunk* that is being passed as an argument.

On exit, this application will set the variable SLATRUNK_STATUS to one of the following values:

- SLATRUNK_STATUS
 - FAILURE
 - SUCCESS
 - UNANSWERED
 - RINGTIMEOUT

Syntax

SLATrunk(trunk,options)

Arguments

- trunk Trunk name
- options
 - M Play back the specified MOH class instead of ringing
 - class

Import Version

Application_SMS

SMS()

Synopsis

Communicates with SMS service centres and SMS capable analogue phones.

Description

SMS handles exchange of SMS data with a call to/from SMS capable phone or SMS PSTN service center. Can send and/or receive SMS messages. Works to ETSI ES 201 912; compatible with BT SMS PSTN service in UK and Telecom Italia in Italy.

Typical usage is to use to handle calls from the SMS service centre CLI, or to set up a call using outgoing or manager interface to connect service centre to SMS().

"Messages are processed as per text file message queues. smsq (a separate software) is a command to generate message queues and send messages.



Note

The protocol has tight delay bounds. Please use short frames and disable/keep short the jitter buffer on the ATA to make sure that responss (ACK etc.) are received in time.

Syntax

SMS(name,options,addr,body)

Arguments

- name The name of the queue used in /var/spool/asterisk/sms
- options
 - a Answer, i.e. send initial FSK packet.
 - s Act as service centre talking to a phone.
 - t Use protocol 2 (default used is protocol 1).
 - p Set the initial delay to N ms (default is 300). addr and body are a deprecated format to send messages out.
 - r Set the Status Report Request (SRR) bit.
 - o The body should be coded as octets not 7-bit symbols.
- addr
- body

Import Version

Application_SoftHangup

SoftHangup()

Synopsis

Hangs up the requested channel.

Description

Hangs up the requested channel. If there are no channels to hangup, the application will report it.

Syntax

SoftHangup(Technology/Resource,options)

Arguments

- Technology/Resource
- options
 - a Hang up all channels on a specified device instead of a single resource

Import Version

Application_SpeechActivateGrammar

SpeechActivateGrammar()

Synopsis

Activate a grammar.

Description

This activates the specified grammar to be recognized by the engine. A grammar tells the speech recognition engine what to recognize, and how to portray it back to you in the dialplan. The grammar name is the only argument to this application.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechActivateGrammar(grammar_name)

Arguments

• grammar_name

Import Version

Application_SpeechBackground

SpeechBackground()

Synopsis

Play a sound file and wait for speech to be recognized.

Description

This application plays a sound file and waits for the person to speak. Once they start speaking playback of the file stops, and silence is heard. Once they stop talking the processing sound is played to indicate the speech recognition engine is working. Once results are available the application returns and results (score and text) are available using dialplan functions.

The first text and score are \${SPEECH_TEXT(0)} AND \${SPEECH_SCORE(0)} while the second are \${SPEECH_TEXT(1)} and \${SPEECH_SCORE(1)}.

The first argument is the sound file and the second is the timeout integer in seconds.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechBackground(sound_file,timeout,options)

Arguments

- sound_file
- timeout Timeout integer in seconds. Note the timeout will only start once the sound file has stopped playing.
- options
 - n Don't answer the channel if it has not already been answered.

Import Version

Application_SpeechCreate

SpeechCreate()

Synopsis

Create a Speech Structure.

Description

This application creates information to be used by all the other applications. It must be called before doing any speech recognition activities such as activating a grammar. It takes the engine name to use as the argument, if not specified the default engine will be used.

Sets the ERROR channel variable to 1 if the engine cannot be used.

Syntax

SpeechCreate(engine_name)

Arguments

• engine_name

Import Version

Application_SpeechDeactivateGrammar

SpeechDeactivateGrammar()

Synopsis

Deactivate a grammar.

Description

This deactivates the specified grammar so that it is no longer recognized.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechDeactivateGrammar(grammar_name)

Arguments

• grammar_name - The grammar name to deactivate

Import Version

Application_SpeechDestroy

SpeechDestroy()

Synopsis

End speech recognition.

Description

This destroys the information used by all the other speech recognition applications. If you call this application but end up wanting to recognize more speech, you must call SpeechCreate() again before calling any other application.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechDestroy()

Arguments

Import Version

Application_SpeechLoadGrammar

SpeechLoadGrammar()

Synopsis

Load a grammar.

Description

Load a grammar only on the channel, not globally.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechLoadGrammar(grammar_name,path)

Arguments

- grammar_name
- path

Import Version

Application_SpeechProcessingSound

SpeechProcessingSound()

Synopsis

Change background processing sound.

Description

This changes the processing sound that SpeechBackground plays back when the speech recognition engine is processing and working to get results.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechProcessingSound(sound_file)

Arguments

• sound_file

Import Version

Application_SpeechStart

SpeechStart()

Synopsis

Start recognizing voice in the audio stream.

Description

Tell the speech recognition engine that it should start trying to get results from audio being fed to it.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechStart()

Arguments

Import Version

Application_SpeechUnloadGrammar

SpeechUnloadGrammar()

Unload a grammar.

Description

Unload a grammar.

Hangs up the channel on failure. If this is not desired, use TryExec.

Syntax

SpeechUnloadGrammar(grammar_name)

Arguments

• grammar_name

Import Version

Application_StackPop

StackPop()

Synopsis

Remove one address from gosub stack.

Description

Removes last label on the stack, discarding it.

Syntax

StackPop()

Arguments

See Also

- Application_Return
- Application_Gosub

Import Version

Application_StartMusicOnHold

StartMusicOnHold()

Synopsis

Play Music On Hold.

Description

Starts playing music on hold, uses default music class for channel. Starts playing music specified by class. If omitted, the default music source for the channel will be used. Always returns 0.

Syntax

StartMusicOnHold(class)

Arguments

• class

Import Version

Application_StopMixMonitor

StopMixMonitor()

Synopsis

Stop recording a call through MixMonitor, and free the recording's file handle.

Description

Stops the audio recording that was started with a call to MixMonitor() on the current channel.

Syntax

StopMixMonitor()

Arguments

See Also

• Application_MixMonitor

Import Version

Application_StopMonitor

StopMonitor()

Synopsis

Stop monitoring a channel.

Description

Stops monitoring a channel. Has no effect if the channel is not monitored.

Syntax

StopMonitor()

Arguments

Import Version

Application_StopMusicOnHold

StopMusicOnHold()

Synopsis

Stop playing Music On Hold.

Description

Stops playing music on hold.

Syntax

StopMusicOnHold()

Arguments

Import Version

Application_StopPlayTones

StopPlayTones()

Synopsis

Stop playing a tone list.

Description

Stop playing a tone list, initiated by PlayTones().

Syntax

StopPlayTones()

Arguments

See Also

Application_PlayTones

Import Version

Application_System

System()

Synopsis

Execute a system command.

Description

Executes a command by using system(). If the command fails, the console should report a fallthrough.

Result of execution is returned in the SYSTEMSTATUS channel variable:

- SYSTEMSTATUS
 - FAILURE Could not execute the specified command.
 - SUCCESS Specified command successfully executed.

Syntax

System(command)

Arguments

• command - Command to execute

Import Version

Application_TestClient

TestClient()

Synopsis

Execute Interface Test Client.

Description

Executes test client with given testid. Results stored in /var/log/asterisk/testreports/<testid>-client.txt

Syntax

TestClient(testid)

Arguments

• testid - An ID to identify this test.

See Also

• Application_TestServer

Import Version

Application_TestServer

TestServer()

Synopsis

Execute Interface Test Server.

Description

Perform test server function and write call report. Results stored in /var/log/asterisk/testreports/<testid>-server.txt

Syntax

TestServer()

Arguments

See Also

Application_TestClient

Import Version

Application_Transfer

Transfer()

Synopsis

Transfer caller to remote extension.

Description

Requests the remote caller be transferred to a given destination. If TECH (SIP, IAX2, LOCAL etc) is used, only an incoming call with the same channel technology will be transferred. Note that for SIP, if you transfer before call is setup, a 302 redirect SIP message will be returned to the caller.

The result of the application will be reported in the TRANSFERSTATUS channel variable:

- TRANSFERSTATUS
 - SUCCESS Transfer succeeded.
 - FAILURE Transfer failed.
 - UNSUPPORTED Transfer unsupported by channel driver.

Syntax

Transfer(Tech/destination)

Arguments

- dest
 - Tech/
 - destination

Import Version

Application_TryExec

TryExec()

Synopsis

Executes dialplan application, always returning.

Description

Allows an arbitrary application to be invoked even when not hard coded into the dialplan. To invoke external applications see the application System. Always returns to the dialplan. The channel variable TRYSTATUS will be set to one of:

- TRYSTATUS
 - SUCCESS If the application returned zero.
 - FAILED If the application returned non-zero.
 - NOAPP If the application was not found or was not specified.

Syntax

TryExec(arguments)

Arguments

- appname
 - arguments

Import Version

Application_TrySystem

TrySystem()

Synopsis

Try executing a system command.

Description

Executes a command by using system().

Result of execution is returned in the SYSTEMSTATUS channel variable:

- SYSTEMSTATUS
 - FAILURE Could not execute the specified command.
 - SUCCESS Specified command successfully executed.
 - APPERROR Specified command successfully executed, but returned error code.

Syntax

TrySystem(command)

Arguments

• command - Command to execute

Import Version

Application_UnpauseMonitor

UnpauseMonitor()

Synopsis

Unpause monitoring of a channel.

Description

Unpauses monitoring of a channel on which monitoring had previously been paused with PauseMonitor.

Syntax

UnpauseMonitor()

Arguments

See Also

• Application_PauseMonitor

Import Version

Application_UnpauseQueueMember

UnpauseQueueMember()

Synopsis

Unpauses a queue member.

Description

Unpauses (resumes calls to) a queue member. This is the counterpart to PauseQueueMember() and operates exactly the same way, except it unpauses instead of pausing the given interface.

This application sets the following channel variable upon completion:

- UPQMSTATUS The status of the attempt to unpause a queue member as a text string.
 - UNPAUSED
 - NOTFOUND

Example: UnpauseQueueMember(,SIP/3000)

Syntax

UnpauseQueueMember(queuename,interface,options,reason)

Arguments

- queuename
- interface
- options
- reason Is used to add extra information to the appropriate queue_log entries and manager events.

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function QUEUE WAITING COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Application_UserEvent

UserEvent()

Synopsis

Send an arbitrary event to the manager interface.

Description

Sends an arbitrary event to the manager interface, with an optional *body* representing additional arguments. The *body* may be specified as a , delimited list of headers. Each additional argument will be placed on a new line in the event. The format of the event will be:

Event: UserEvent

UserEvent: <specified event name>

[body]

If no body is specified, only Event and UserEvent headers will be present.

Syntax

UserEvent(eventname,body)

Arguments

- eventname
- body

Import Version

Application_Verbose

Verbose()

Synopsis

Send arbitrary text to verbose output.

Description

Sends an arbitrary text message to verbose output.

Syntax

Verbose(level,message)

Arguments

- level Must be an integer value. If not specified, defaults to 0.
- message Output text message.

Import Version

Application_VMAuthenticate

VMAuthenticate()

Synopsis

Authenticate with Voicemail passwords.

Description

This application behaves the same way as the Authenticate application, but the passwords are taken from voicemail.conf. If the *mailbox* is specified, only that mailbox's password will be considered valid. If the *mailbox* is not specified, the channel variable AUTH_MAILBOX will be set with the authenticated mailbox.

The VMAuthenticate application will exit if the following DTMF digit is entered as Mailbox or Password, and the extension exists:

• * - Jump to the a extension in the current dialplan context.

Syntax

VMAuthenticate(mailbox@context,options)

Arguments

- mailbox
 - mailbox
 - context
- options
 - s Skip playing the initial prompts.

Import Version

Application_VMSayName

VMSayName()

Synopsis

Play the name of a voicemail user

Description

This application will say the recorded name of the voicemail user specified as the argument to this application. If no context is provided, default is assumed.

Syntax

VMSayName(mailbox@context)

Arguments

- mailbox
 - ullet mailbox
 - context

Import Version

Application_VoiceMail

VoiceMail()

Synopsis

Leave a Voicemail message.

Description

This application allows the calling party to leave a message for the specified list of mailboxes. When multiple mailboxes are specified, the greeting will be taken from the first mailbox specified. Dialplan execution will stop if the specified mailbox does not exist.

The Voicemail application will exit if any of the following DTMF digits are received:

- 0 Jump to the o extension in the current dialplan context.
- * Jump to the a extension in the current dialplan context.

This application will set the following channel variable upon completion:

- VMSTATUS This indicates the status of the execution of the VoiceMail application.
 - SUCCESS
 - USEREXIT
 - FAILED

Syntax

VoiceMail(mailbox1&mailbox2[&...],options)

Arguments

- mailboxs
 - mailbox1
 - mailbox
 - context
 - mailbox2
 - mailbox
 - context
- options
 - b Play the busy greeting to the calling party.
 - d Accept digits for a new extension in context c, if played during the greeting. Context defaults to the current context.
 - g Use the specified amount of gain when recording the voicemail message. The units are whole-number decibels (dB). Only works on supported technologies, which is DAHDI only.
 - s Skip the playback of instructions for leaving a message to the calling party.
 - u Play the unavailable greeting.
 - U Mark message as URGENT.
 - P Mark message as PRIORITY.

See Also

• Application_VoiceMailMain

Import Version

Application_VoiceMailMain

VoiceMailMain()

Synopsis

Check Voicemail messages.

Description

This application allows the calling party to check voicemail messages. A specific *mailbox*, and optional corresponding *context*, may be specified. If a *mailbo x* is not provided, the calling party will be prompted to enter one. If a *context* is not specified, the default context will be used.

The VoiceMailMain application will exit if the following DTMF digit is entered as Mailbox or Password, and the extension exists:

• * - Jump to the a extension in the current dialplan context.

Syntax

VoiceMailMain(mailbox@context,options)

Arguments

- mailbox
 - mailbox
 - context
- options
 - p Consider the *mailbox* parameter as a prefix to the mailbox that is entered by the caller.
 - g Use the specified amount of gain when recording a voicemail message. The units are whole-number decibels (dB).
 - #
 - s Skip checking the passcode for the mailbox.
 - a Skip folder prompt and go directly to folder specified. Defaults to INBOX (or 0).
 - folder
 - 0 INBOX
 - 1 Old
 - 2 Work
 - 3 Family
 - 4 Friends
 - 5 Cust1
 - 6 Cust2
 - 7 Cust38 Cust4
 - 9 Cust5

See Also

Application_VoiceMail

Import Version

Application_Wait

Wait()

Synopsis

Waits for some time.

Description

This application waits for a specified number of seconds.

Syntax

Wait(seconds)

Arguments

• seconds - Can be passed with fractions of a second. For example, 1.5 will ask the application to wait for 1.5 seconds.

Import Version

Application_WaitExten

WaitExten()

Synopsis

Waits for an extension to be entered.

Description

This application waits for the user to enter a new extension for a specified number of seconds.



Warning

Use of the application WaitExten within a macro will not function as expected. Please use the Read application in order to read DTMF from a channel currently executing a macro.

Syntax

WaitExten(seconds,options)

Arguments

- seconds Can be passed with fractions of a second. For example, 1.5 will ask the application to wait for 1.5 seconds.
- options
 - $\bullet \ \ m$ Provide music on hold to the caller while waiting for an extension.
 - x Specify the class for music on hold. CHANNEL(musicclass) will be used instead if set

See Also

- Application_Background
- Function_TIMEOUT

Import Version

Application_WaitForNoise

WaitForNoise()

Synopsis

Waits for a specified amount of noise.

Description

Waits for up to noiserequired milliseconds of noise, iterations times. An optional timeout specified the number of seconds to return after, even if we do not receive the specified amount of noise. Use timeout with caution, as it may defeat the purpose of this application, which is to wait indefinitely until noise is detected on the line.

Syntax

WaitForNoise(noiserequired,iterations,timeout)

Arguments

- noiserequired
- iterations If not specified, defaults to 1.
- timeout Is specified only to avoid an infinite loop in cases where silence is never achieved.

See Also

• Application_WaitForSilence

Import Version

Application_WaitForRing

WaitForRing()

Synopsis

Wait for Ring Application.

Description

Returns 0 after waiting at least timeout seconds, and only after the next ring has completed. Returns 0 on success or -1 on hangup.

Syntax

WaitForRing(timeout)

Arguments

• timeout

Import Version

Application_WaitForSilence

WaitForSilence()

Synopsis

Waits for a specified amount of silence.

Description

Waits for up to *silencerequired* milliseconds of silence, *iterations* times. An optional *timeout* specified the number of seconds to return after, even if we do not receive the specified amount of silence. Use *timeout* with caution, as it may defeat the purpose of this application, which is to wait indefinitely until silence is detected on the line. This is particularly useful for reverse-911-type call broadcast applications where you need to wait for an answering machine to complete its spiel before playing a message.

Typically you will want to include two or more calls to WaitForSilence when dealing with an answering machine; first waiting for the spiel to finish, then waiting for the beep, etc.

Examples:

WaitForSilence(500,2) will wait for 1/2 second of silence, twice

WaitForSilence(1000) will wait for 1 second of silence, once

WaitForSilence(300,3,10) will wait for 300ms silence, 3 times, and returns after 10 sec, even if silence is not detected

Sets the channel variable WAITSTATUS to one of these values:

- WAITSTATUS
 - SILENCE if exited with silence detected.
 - TIMEOUT if exited without silence detected after timeout.

Syntax

WaitForSilence(silencerequired,iterations,timeout)

Arguments

- silencerequired
- iterations If not specified, defaults to 1.
- timeout Is specified only to avoid an infinite loop in cases where silence is never achieved.

See Also

Application_WaitForNoise

Import Version

Application_WaitMusicOnHold

WaitMusicOnHold()

Synopsis

Wait, playing Music On Hold.

Description

!!! DEPRECATED. Use MusicOnHold instead !!!

Plays hold music specified number of seconds. Returns 0 when done, or -1 on hangup. If no hold music is available, the delay will still occur with no sound.

!!! DEPRECATED. Use MusicOnHold instead !!!

Syntax

WaitMusicOnHold(delay)

Arguments

• delay

Import Version

Application_WaitUntil

WaitUntil()

Synopsis

Wait (sleep) until the current time is the given epoch.

Description

Waits until the given epoch.

Sets WAITUNTILSTATUS to one of the following values:

- WAITUNTILSTATUS
 - OK Wait succeeded.
 - FAILURE Invalid argument.
 - HANGUP Channel hungup before time elapsed.
 - PAST Time specified had already past.

Syntax

WaitUntil(epoch)

Arguments

• epoch

Import Version

Application_While

While()

Synopsis

Start a while loop.

Description

Start a While Loop. Execution will return to this point when EndWhile() is called until expr is no longer true.

Syntax

While(expr)

Arguments

• expr

See Also

- Application_EndWhile
- Application_ExitWhile
- Application_ContinueWhile

Import Version

Application_Zapateller

Zapateller()

Synopsis

Block telemarketers with SIT.

Description

Generates special information tone to block telemarketers from calling you.

This application will set the following channel variable upon completion:

- ZAPATELLERSTATUS This will contain the last action accomplished by the Zapateller application. Possible values include:
 - NOTHING
 - ANSWERED
 - ZAPPED

Syntax

Zapateller(options)

Arguments

- options Comma delimited list of options.
 - answer Causes the line to be answered before playing the tone.
 - nocallerid Causes Zapateller to only play the tone if there is no callerid information available.

Import Version

Dialplan Application Template Page

MyApplication()

Synopsys
.....

Description
...

Syntax

• MyApplication(arg[,something,options])

Arguments

- arg
- something
- options
- · option 'a' is asdfadf
- k
- option 'b' is asdfasdfadf
- c
- option 'c' is for cookie

See Also

Dialplan Function Template page AGI Command Template Page AMI Action Template Page

Import Version

This documentation was imported from Asterisk version ${\tt VERSION}\ {\tt STRING}\ {\tt HERE}.$

Dialplan Functions

Dialplan Function Template Page

MY_FUNCTION()

Synopsys
.....

Description
...

Syntax

MY_FUNCTION(arg[,something,options])

Arguments

- arg
- something
- options
- · option 'a' is asdfadf
- b
- option 'b' is asdfasdfadf
- c
- option 'c' is for cookie

See Also

Dialplan Application Template page AGI Command Template Page AMI Action Template Page

Import Version

This documentation was imported from Asterisk version VERSION STRING HERE.

Function_AES_DECRYPT

AES_DECRYPT()

Synopsis

Decrypt a string encoded in base64 with AES given a 16 character key.

Description

Returns the plain text string.

Syntax

AES_DECRYPT(key,string)

Arguments

- key AES Key
- string Input string.

See Also

- Function_AES_ENCRYPT
- Function_BASE64_ENCODE
- Function_BASE64_DECODE

Import Version

Function_AES_ENCRYPT

AES_ENCRYPT()

Synopsis

Encrypt a string with AES given a 16 character key.

Description

Returns an AES encrypted string encoded in base64.

Syntax

AES_ENCRYPT(key,string)

Arguments

- key AES Key
- string Input string

See Also

- Function_AES_DECRYPT
- Function_BASE64_ENCODE
- Function_BASE64_DECODE

Import Version

Function_AGC

AGC()

Synopsis

Apply automatic gain control to audio on a channel.

Description

The AGC function will apply automatic gain control to the audio on the channel that it is executed on. Using xx for audio received and tx for audio transmitted to the channel. When using this function you set a target audio level. It is primarily intended for use with analog lines, but could be useful for other channels as well. The target volume is set with a number between 1–32768. The larger the number the louder (more gain) the channel will receive.

Examples:

exten => 1,1,Set(AGC(rx)=8000)

exten => 1,2,Set(AGC(tx)=off)

Syntax

AGC(channeldirection)

Arguments

• channeldirection - This can be either rx or tx

Import Version

Function_AGENT

AGENT()

Synopsis

Gets information about an Agent

Description

Syntax

AGENT(agentid:item)

Arguments

- agentid
- item The valid items to retrieve are:
 - status (default) The status of the agent (LOGGEDIN | LOGGEDOUT)
 - password The password of the agent
 - name The name of the agent
 - mohclass MusicOnHold class
 - channel The name of the active channel for the Agent (AgentLogin)
 - fullchannel The untruncated name of the active channel for the Agent (AgentLogin)

Import Version

Function_ARRAY

ARRAY()

Synopsis

Allows setting multiple variables at once.

Description

The comma-delimited list passed as a value to which the function is set will be interpreted as a set of values to which the comma-delimited list of variable names in the argument should be set.

Example: Set(ARRAY(var1,var2)=1,2) will set var1 to 1 and var2 to 2

Syntax

```
ARRAY(var1[,var2[,...][,varN]])
```

Arguments

- var1
- var2
- varN

Import Version

Function_AST_CONFIG

AST_CONFIG()

Synopsis

Retrieve a variable from a configuration file.

Description

This function reads a variable from an Asterisk configuration file.

Syntax

AST_CONFIG(config_file,category,variable_name)

Arguments

- config_file
- category
- variable_name

Import Version

Function_AUDIOHOOK_INHERIT

AUDIOHOOK_INHERIT()

Synopsis

Set whether an audiohook may be inherited to another channel

Description

By enabling audiohook inheritance on the channel, you are giving permission for an audiohook to be inherited by a descendent channel. Inheritance may be be disabled at any point as well.

Example scenario:

exten => 2000,1,MixMonitor(blah.wav)

exten => 2000,n,Set(AUDIOHOOK_INHERIT(MixMonitor)=yes)

exten => 2000,n,Dial(SIP/2000)

exten => 4000,1,Dial(SIP/4000)

exten => 5000,1,MixMonitor(blah2.wav)

exten => 5000,n,Dial(SIP/5000)

In this basic dialplan scenario, let's consider the following sample calls

Call 1: Caller dials 2000. The person who answers then executes an attended

transfer to 4000.

Result: Since extension 2000 set MixMonitor to be inheritable, after the

transfer to 4000 has completed, the call will continue to be recorded to blah.wav

Call 2: Caller dials 5000. The person who answers then executes an attended

transfer to 4000.

Result: Since extension 5000 did not set MixMonitor to be inheritable, the

recording will stop once the call has been transferred to 4000.

Syntax

AUDIOHOOK_INHERIT(source)

Arguments

- source The built-in sources in Asterisk are
 - MixMonitor
 - Chanspy
 - Volume
 - Speex
 - pitch_shift
 - JACK_HOOK
 - Mute

Note that the names are not case-sensitive

Import Version

Function_BASE64_DECODE BASE64_DECODE()

Synopsis

Decode a base64 string.

Description

Returns the plain text string.

Syntax

BASE64_DECODE(string)

Arguments

• string - Input string.

See Also

- Function_BASE64_ENCODE
- Function_AES_DECRYPT
- Function_AES_ENCRYPT

Import Version

Function_BASE64_ENCODE BASE64_ENCODE()

Synopsis

Encode a string in base64.

Description

Returns the base64 string.

Syntax

BASE64_ENCODE(string)

Arguments

• string - Input string

See Also

- Function_BASE64_DECODE
- Function_AES_DECRYPT
- Function_AES_ENCRYPT

Import Version

Function_BLACKLIST

BLACKLIST()

Synopsis

Check if the callerid is on the blacklist.

Description

Uses astdb to check if the Caller*ID is in family blacklist. Returns 1 or 0.

Syntax

BLACKLIST()

Arguments

See Also

• Function_DB

Import Version

Function_CALENDAR_BUSY

CALENDAR_BUSY()

Synopsis

Determine if the calendar is marked busy at this time.

Description

Check the specified calendar's current busy status.

Syntax

CALENDAR_BUSY(calendar)

Arguments

• calendar

See Also

- Function_CALENDAR_EVENT
- Function_CALENDAR_QUERY
- Function_CALENDAR_QUERY_RESULT
- Function_CALENDAR_WRITE

Import Version

Function_CALENDAR_EVENT

CALENDAR_EVENT()

Synopsis

Get calendar event notification data from a notification call.

Description

Whenever a calendar event notification call is made, the event data may be accessed with this function.

Syntax

CALENDAR_EVENT(field)

Arguments

- field
 - summary The VEVENT SUMMARY property or Exchange event 'subject'
 - description The text description of the event
 - organizer The organizer of the event
 - location The location of the eventt
 - categories The categories of the event
 - priority The priority of the event
 - calendar The name of the calendar associated with the event
 - uid The unique identifier for this event
 - start The start time of the event
 - end The end time of the event
 - busystate The busy state of the event 0=FREE, 1=TENTATIVE, 2=BUSY

See Also

- Function_CALENDAR_BUSY
- Function_CALENDAR_QUERY
- Function_CALENDAR_QUERY_RESULT
- Function_CALENDAR_WRITE

Import Version

Function_CALENDAR_QUERY

CALENDAR_QUERY()

Synopsis

Query a calendar server and store the data on a channel

Description

Get a list of events in the currently accessible timeframe of the *calendar* The function returns the id for accessing the result with CALENDAR_QUERY_RESULT()

Syntax

CALENDAR_QUERY(calendar[,start[,end]])

Arguments

- calendar The calendar that should be queried
- start The start time of the query (in seconds since epoch)
- end The end time of the query (in seconds since epoch)

See Also

- Function_CALENDAR_BUSY
- Function_CALENDAR_EVENT
- Function_CALENDAR_QUERY_RESULT
- Function_CALENDAR_WRITE

Import Version

Function_CALENDAR_QUERY_RESULT

CALENDAR_QUERY_RESULT()

Synopsis

Retrieve data from a previously run CALENDAR_QUERY() call

Description

After running CALENDAR_QUERY and getting a result *id*, calling CALENDAR_QUERY with that *id* and a *field* will return the data for that field. If multiple events matched the query, and *entry* is provided, information from that event will be returned.

Syntax

CALENDAR_QUERY_RESULT(id,field[,entry])

Arguments

- id The query ID returned by CALENDAR_QUERY
- field
 - getnum number of events occurring during time range
 - summary A summary of the event
 - description The full event description
 - organizer The event organizer
 - location The event location
 - categories The categories of the event
 - priority The priority of the event
 - calendar The name of the calendar associted with the event
 - uid The unique identifier for the event
 - start The start time of the event (in seconds since epoch)
 - end The end time of the event (in seconds since epoch)
 - busystate The busy status of the event 0=FREE, 1=TENTATIVE, 2=BUSY
- entry Return data from a specific event returned by the query

See Also

- Function_CALENDAR_BUSY
- Function_CALENDAR_EVENT
- Function_CALENDAR_QUERY
- Function_CALENDAR_WRITE

Import Version

Function_CALENDAR_WRITE

CALENDAR_WRITE()

Synopsis

Write an event to a calendar

Description

Example: CALENDAR_WRITE(calendar,field1,field2,field3)=val1,val2,val3

The field and value arguments can easily be set/passed using the HASHKEYS() and HASH() functions

Syntax

CALENDAR_WRITE(calendar,field[,...])

Arguments

- calendar The calendar to write to
- field
 - summary A summary of the event
 - description The full event description
 - organizer The event organizer
 - location The event location
 - categories The categories of the event
 - priority The priority of the event
 - uid The unique identifier for the event
 - start The start time of the event (in seconds since epoch)
 - end The end time of the event (in seconds since epoch)
 - busystate The busy status of the event 0=FREE, 1=TENTATIVE, 2=BUSY

See Also

- Function_CALENDAR_BUSY
- Function_CALENDAR_EVENT
- Function_CALENDAR_QUERY
- Function_CALENDAR_QUERY_RESULT

Import Version

Function_CALLCOMPLETION

CALLCOMPLETION()

Synopsis

Get or set a call completion configuration parameter for a channel.

Description

The CALLCOMPLETION function can be used to get or set a call completion configuration parameter for a channel. Note that setting a configuration parameter will only change the parameter for the duration of the call. For more information see <code>doc/AST.pdf</code>. For more information on call completion parameters, see <code>configs/ccss.conf.sample</code>.

Syntax

CALLCOMPLETION(option)

Arguments

- option The allowable options are:
 - cc_agent_policy
 - cc_monitor_policy
 - cc_offer_timer
 - ccnr_available_timer
 - ccbs_available_timer
 - cc_recall_timer
 - cc_max_agents
 - cc_max_monitors
 - cc_callback_macro
 - cc_agent_dialstring

Import Version

Function_CALLERID

CALLERID()

Synopsis

Gets or sets Caller*ID data on the channel.

Description

Gets or sets Caller*ID data on the channel. Uses channel callerid by default or optional callerid, if specified.

The allowable values for the name-charset field are the following:

- unknown Unknown
- iso8859-1 ISO8859-1
- withdrawn Withdrawn
- iso8859-2 ISO8859-2
- iso8859-3 ISO8859-3
- iso8859-4 ISO8859-4
- iso8859-5 ISO8859-5
- iso8859-7 ISO8859-7
- bmp ISO10646 Bmp String
- utf8 ISO10646 UTF-8 String

Syntax

CALLERID(datatype,CID)

Arguments

- datatype The allowable datatypes are:
 - all
 - name
 - ullet name-valid
 - name-charset
 - name-pres
 - num
 - num-valid
 - num-plan
 - num-pres
 - subaddr
 - subaddr-valid
 - subaddr-type
 - subaddr-odd
 - tag
 - ANI-all
 - ANI-name
 - ANI-name-valid
 - ANI-name-charset
 - ANI-name-pres
 - ANI-num
 - ANI-num-valid
 - ANI-num-plan
 - ANI-num-pres
 - ANI-tag
 - RDNIS
 - DNID
 - dnid-num-plan
 - dnid-subaddr
 - dnid-subaddr-valid

- dnid-subaddr-type
- dnid-subaddr-odd
- CID Optional Caller*ID to parse instead of using the Caller*ID from the channel. This parameter is only optional when reading the Caller*ID.

Import Version

Function_CALLERPRES

CALLERPRES()

Synopsis

Gets or sets Caller*ID presentation on the channel.

Description

Gets or sets Caller*ID presentation on the channel. This function is deprecated in favor of CALLERID(num-pres) and CALLERID(name-pres). The following values are valid:

- allowed_not_screened Presentation Allowed, Not Screened.
- \bullet allowed_passed_screen Presentation Allowed, Passed Screen.
- allowed_failed_screen Presentation Allowed, Failed Screen.
- allowed Presentation Allowed, Network Number.
- prohib_not_screened Presentation Prohibited, Not Screened.
- prohib_passed_screen Presentation Prohibited, Passed Screen.
- prohib_failed_screen Presentation Prohibited, Failed Screen.
- prohib Presentation Prohibited, Network Number.
- unavailable Number Unavailable.

Syntax

CALLERPRES()

Arguments

Import Version

Function_CDR

CDR()

Synopsis

Gets or sets a CDR variable.

Description

All of the CDR field names are read-only, except for accountcode, userfield, and amaflags. You may, however, supply a name not on the above list, and create your own variable, whose value can be changed with this function, and this variable will be stored on the cdr.



Note

For setting CDR values, the 1 flag does not apply to setting the accountcode, userfield, or amaflags.

CDRs can only be modified before the bridge between two channels is torn down. For example, CDRs may not be modified after the Dial applic ation has returned.

Raw values for disposition:

- 0 NO ANSWER
- 1 NO ANSWER (NULL record)
- 2 FAILED
- 4 BUSY
- 8 ANSWERED

Raw values for amaflags:

- 1 OMIT
- 2 BILLING
- 3 DOCUMENTATION

Example: exten => 1,1,Set(CDR(userfield)=test)

Syntax

CDR(name[,options])

Arguments

- name CDR field name:
 - clid Caller ID.
 - lastdata Last application arguments.
 - disposition ANSWERED, NO ANSWER, BUSY, FAILED.
 - src Source.
 - start Time the call started.
 - amaflags DOCUMENTATION, BILL, IGNORE, etc.
 - dst Destination.
 - answer Time the call was answered.
 - account code The channel's account code.
 - dcontext Destination context.
 - end Time the call ended.
 - uniqueid The channel's unique id.
 - dstchannel Destination channel.
 - duration Duration of the call.
 - userfield The channel's user specified field.
 - lastapp Last application.
 - billsec Duration of the call once it was answered.
 - channel Channel name.
 - sequence CDR sequence number.

- options
 - f Returns billsec or duration fields as floating point values.
 - 1 Uses the most recent CDR on a channel with multiple records
 - r Searches the entire stack of CDRs on the channel.
 - s Skips any CDR's that are marked 'LOCKED' due to forkCDR() calls. (on setting/writing CDR vars only)
 - u Retrieves the raw, unprocessed value.

For example, 'start', 'answer', and 'end' will be retrieved as epoch values, when the $\mathfrak u$ option is passed, but formatted as YYYY-MM-DD HH:MM:SS otherwise. Similarly, disposition and amaflags will return their raw integral values.

Import Version

Function_CHANNEL

CHANNEL()

Synopsis

Gets/sets various pieces of information about the channel.

Description

Gets/sets various pieces of information about the channel, additional *item* may be available from the channel driver; see its documentation for details. Any *it em* requested that is not available on the current channel will return an empty string.

Syntax

CHANNEL(item)

Arguments

- item Standard items (provided by all channel technologies) are:
 - amaflags R/W the Automatic Message Accounting (AMA) flags on the channel. When read from a channel, the integer value will always be returned. When written to a channel, both the string format or integer value is accepted.
 - 1 OMIT
 - 2 BILLING
 - 3 DOCUMENTATION
 - account code R/W the channel's account code.
 - audioreadformat R/O format currently being read.
 - audionativeformat R/O format used natively for audio.
 - audiowriteformat R/O format currently being written.
 - callgroup R/W call groups for call pickup.
 - channeltype R/O technology used for channel.
 - checkhangup R/O Whether the channel is hanging up (1/0)
 - language R/W language for sounds played.
 - musicclass R/W class (from musiconhold.conf) for hold music.
 - name The name of the channel
 - parkinglot R/W parkinglot for parking.
 - rxgain R/W set rxgain level on channel drivers that support it.
 - secure_bridge_signaling Whether or not channels bridged to this channel require secure signaling
 - secure_bridge_media Whether or not channels bridged to this channel require secure media
 - state R/O state for channel
 - tonezone R/W zone for indications played
 - transfercapability R/W ISDN Transfer Capability, one of:
 - SPEECH
 - DIGITAL
 - RESTRICTED_DIGITAL
 - 3K1AUDIO
 - DIGITAL_W_TONES
 - VIDEO
 - txgain R/W set txgain level on channel drivers that support it.
 - videonativeformat R/O format used natively for video
 - trace R/W whether or not context tracing is enabled, only available if CHANNEL_TRACE is defined.
 chan_sip provides the following additional options:
 - peerip R/O Get the IP address of the peer.
 - recvip R/O Get the source IP address of the peer.
 - from R/O Get the URI from the From: header.
 - uri R/O Get the URI from the Contact: header.
 - useragent R/O Get the useragent.
 - peername R/O Get the name of the peer.
 - $\bullet~$ t38passthrough R/O 1 if T38 is offered or enabled in this channel, otherwise 0

rtpqos - R/O Get QOS information about the RTP stream

This option takes two additional arguments:

Argument 1:

audio Get data about the audio stream

video Get data about the video stream

text Get data about the text stream

Argument 2:

local_ssrc Local SSRC (stream ID)

local_lostpackets Local lost packets

local_jitter Local calculated jitter

local_maxjitter Local calculated jitter (maximum)

local_minjitter Local calculated jitter (minimum)

{{local_normdevjitter}}Local calculated jitter (normal deviation)

local_stdevjitter Local calculated jitter (standard deviation)

local_count Number of received packets

remote_ssrc Remote SSRC (stream ID)

{{remote_lostpackets}}Remote lost packets

remote_jitter Remote reported jitter

remote maxjitter Remote calculated jitter (maximum)

remote_minjitter Remote calculated jitter (minimum)

{{remote_normdevjitter}}}Remote calculated jitter (normal deviation)

{{remote_stdevjitter}}Remote calculated jitter (standard deviation)

remote_count Number of transmitted packets

rtt Round trip time

maxrtt Round trip time (maximum)

minrtt Round trip time (minimum)

normdevrtt Round trip time (normal deviation)

stdevrtt Round trip time (standard deviation)

all All statistics (in a form suited to logging, but not for parsing)

 \bullet $\mbox{rtpdest}$ - R/O Get remote RTP destination information.

This option takes one additional argument:

Argument 1:

audio Get audio destination

video Get video destination

text Get text destination

Defaults to audio if unspecified.

• rtpsource - R/O Get source RTP destination information.

This option takes one additional argument:

Argument 1:

audio Get audio destination

video Get video destination

text Get text destination

Defaults to audio if unspecified.

chan_iax2 provides the following additional options:

- osptoken R/O Get the peer's osptoken.
- peerip R/O Get the peer's ip address.
- peername R/O Get the peer's username.
- secure signaling R/O Get the if the IAX channel is secured.
- secure_media R/O Get the if the IAX channel is secured.

chan_dahdi provides the following additional options:

- dahdi_channel R/O DAHDI channel related to this channel.
- dahdi_span R/O DAHDI span related to this channel.
- dahdi_type R/O DAHDI channel type, one of:
 - analog
 - mfc/r2
 - pri
 - pseudo
 - ss7

- keypad_digits R/O PRI Keypad digits that came in with the SETUP message.
- reversecharge R/O PRI Reverse Charging Indication, one of:
 - −1 None
 - {{ 1}} Reverse Charging Requested
- no_media_path R/O PRI Nonzero if the channel has no B channel. The channel is either on hold or a call waiting call.
- buffers W/O Change the channel's buffer policy (for the current call only)

This option takes two arguments:

Number of buffers,

Buffer policy being one of:

full

immediate

half

• echocan_mode - W/O Change the configuration of the active echo canceller on the channel (if any), for the current call only. Possible values are:

{{on}}Normal mode (the echo canceller is actually reinitalized)

{{off}}}Disabled

{{fax}}FAX/data mode (NLP disabled if possible, otherwise completely disabled)

{{voice}}Voice mode (returns from FAX mode, reverting the changes that were made)

Import Version

Function_CHANNELS

CHANNELS()

Synopsis

Gets the list of channels, optionally filtering by a regular expression.

Description

Gets the list of channels, optionally filtering by a *regular_expression*. If no argument is provided, all known channels are returned. The *regular_expression* must correspond to the POSIX.2 specification, as shown in **regex(7)**. The list returned will be space-delimited.

Syntax

CHANNELS(regular_expression)

Arguments

• regular_expression

Import Version

Function_CHECKSIPDOMAIN

CHECKSIPDOMAIN()

Synopsis

Checks if domain is a local domain.

Description

This function checks if the *domain* in the argument is configured as a local SIP domain that this Asterisk server is configured to handle. Returns the domain name if it is locally handled, otherwise an empty string. Check the domain= configuration in sip.conf.

Syntax

CHECKSIPDOMAIN(domain)

Arguments

• domain

Import Version

Function_CONNECTEDLINE

CONNECTEDLINE()

Synopsis

Gets or sets Connected Line data on the channel.

Description

Gets or sets Connected Line data on the channel.

The allowable values for the name-charset field are the following:

- unknown Unknown
- iso8859-1 ISO8859-1
- withdrawn Withdrawn
- iso8859-2 ISO8859-2
- iso8859-3 ISO8859-3
- iso8859-4 ISO8859-4
- iso8859-5 ISO8859-5
- iso8859-7 ISO8859-7
- bmp ISO10646 Bmp String
- utf8 ISO10646 UTF-8 String

Syntax

CONNECTEDLINE(datatype,i)

Arguments

- datatype The allowable datatypes are:
 - all
 - name
 - ullet name-valid
 - name-charset
 - name-pres
 - num
 - num-valid
 - num-plan
 - num-pres
 - subaddr
 - subaddr-valid
 - subaddr-type
 - subaddr-odd
 - tag
- · i If set, this will prevent the channel from sending out protocol messages because of the value being set

Import Version

Function_CSV_QUOTE

CSV_QUOTE()

Synopsis

Quotes a given string for use in a CSV file, escaping embedded quotes as necessary

Description

Example: \${CSV_QUOTE("a,b" 123)} will return """a,b"" 123"

Syntax

CSV_QUOTE(string)

Arguments

• string

Import Version

Function_CURL

CURL()

Synopsis

Retrieve content from a remote web or ftp server

Description

Syntax

CURL(url,post-data)

Arguments

- url
- post-data If specified, an HTTP POST will be performed with the content of post-data, instead of an HTTP GET (default).

See Also

• Function_CURLOPT

Import Version

Function_CURLOPT

CURLOPT()

Synopsis

Sets various options for future invocations of CURL.

Description

Options may be set globally or per channel. Per-channel settings will override global settings.

Syntax

CURLOPT(key)

Arguments

- key
- cookie A cookie to send with the request. Multiple cookies are supported.
- conntimeout Number of seconds to wait for a connection to succeed
- dnstimeout Number of seconds to wait for DNS to be resolved
- ftptext For FTP URIs, force a text transfer (boolean)
- ftptimeout For FTP URIs, number of seconds to wait for a server response
- header Include header information in the result (boolean)
- httptimeout For HTTP(S) URIs, number of seconds to wait for a server response
- maxredirs Maximum number of redirects to follow
- proxy Hostname or IP address to use as a proxy server
- proxytype Type of proxy
 - http
 - socks4
 - socks5
- proxyport Port number of the proxy
- proxyuserpwd A username: password combination to use for authenticating requests through a proxy
- referer Referer URL to use for the request
- useragent UserAgent string to use for the request
- userpwd A username: password to use for authentication when the server response to an initial request indicates a 401 status code.
- ssl_verifypeer Whether to verify the server certificate against a list of known root certificate authorities (boolean).
- hashcompat Assuming the responses will be in key1=value1&key2=value2 format, reformat the response such that it can be used by the HASH function.

See Also

- Function_CURL
- Function_HASH

Import Version

Function_CUT

CUT()

Synopsis

Slices and dices strings, based upon a named delimiter.

Description

Cut out information from a string (varname), based upon a named delimiter.

Syntax

CUT(varname,char-delim,range-spec)

Arguments

- varname Variable you want cut
- char-delim Delimiter, defaults to -
- range-spec Number of the field you want (1-based offset), may also be specified as a range (with -) or group of ranges and fields (with &)

Import Version

Function_DB

DB()

Synopsis

Read from or write to the Asterisk database.

Description

This function will read from or write a value to the Asterisk database. On a read, this function returns the corresponding value from the database, or blank if it does not exist. Reading a database value will also set the variable DB_RESULT. If you wish to find out if an entry exists, use the DB_EXISTS function.

Syntax

DB(family/key)

Arguments

- family
- key

See Also

- Application_DBdel
- Function_DB_DELETE
- Application_DBdeltree
- Function_DB_EXISTS

Import Version

Function_DB_DELETE

DB_DELETE()

Synopsis

Return a value from the database and delete it.

Description

This function will retrieve a value from the Asterisk database and then remove that key from the database. DB_RESULT will be set to the key's value if it exists.

Syntax

DB_DELETE(family/key)

Arguments

- \bullet family
- key

See Also

- Application_DBdel
- Function_DB
- Application_DBdeltree

Import Version

Function_DB_EXISTS

DB_EXISTS()

Synopsis

Check to see if a key exists in the Asterisk database.

Description

This function will check to see if a key exists in the Asterisk database. If it exists, the function will return 1. If not, it will return 0. Checking for existence of a database key will also set the variable DB_RESULT to the key's value if it exists.

Syntax

DB_EXISTS(family/key)

Arguments

- \bullet family
- key

See Also

• Function_DB

Import Version

Function_DEC

DEC()

Synopsis

Decrements the value of a variable, while returning the updated value to the dialplan

Description

Decrements the value of a variable, while returning the updated value to the dialplan

Example: DEC(MyVAR) - Decrements MyVar

Note: DEC(\${MyVAR}) - Is wrong, as DEC expects the variable name, not its value

Syntax

DEC(variable)

Arguments

• variable - The variable name to be manipulated, without the braces.

Import Version

Function_DENOISE

DENOISE()

Synopsis

Apply noise reduction to audio on a channel.

Description

The DENOISE function will apply noise reduction to audio on the channel that it is executed on. It is very useful for noisy analog lines, especially when adjusting gains or using AGC. Use rx for audio received from the channel and tx to apply the filter to the audio being sent to the channel.

Examples:

exten => 1,1,Set(DENOISE(rx)=on)

exten => 1,2,Set(DENOISE(tx)=off)

Syntax

DENOISE(channeldirection)

Arguments

• channeldirection - This can be either rx or tx the values that can be set to this are either on and off

Import Version

Function_DEVICE_STATE

DEVICE_STATE()

Synopsis

Get or Set a device state.

Description

The DEVICE_STATE function can be used to retrieve the device state from any device state provider. For example:

NoOp(SIP/mypeer has state \${DEVICE_STATE(SIP/mypeer)})

NoOp(Conference number 1234 has state \${DEVICE_STATE(MeetMe:1234)})

The DEVICE_STATE function can also be used to set custom device state from the dialplan. The Custom: prefix must be used. For example:

Set(DEVICE_STATE(Custom:lamp1)=BUSY)

 $Set(DEVICE_STATE(Custom:lamp2) = NOT_INUSE)$

You can subscribe to the status of a custom device state using a hint in the dialplan:

exten => 1234,hint,Custom:lamp1

The possible values for both uses of this function are:

UNKNOWN | NOT_INUSE | INUSE | BUSY | INVALID | UNAVAILABLE | RINGING | RINGINUSE | ONHOLD

Syntax

DEVICE_STATE(device)

Arguments

• device

Import Version

Function_DIALGROUP

DIALGROUP()

Synopsis

Manages a group of users for dialing.

Description

Presents an interface meant to be used in concert with the Dial application, by presenting a list of channels which should be dialled when referenced.

When DIALGROUP is read from, the argument is interpreted as the particular *group* for which a dial should be attempted. When DIALGROUP is written to with no arguments, the entire list is replaced with the argument specified.

Functionality is similar to a queue, except that when no interfaces are available, execution may continue in the dialplan. This is useful when you want certain people to be the first to answer any calls, with immediate fallback to a queue when the front line people are busy or unavailable, but you still want front line people to log in and out of that group, just like a queue.

Example:

exten => 1,1,Set(DIALGROUP(mygroup,add)=SIP/10)
exten => 1,n,Set(DIALGROUP(mygroup,add)=SIP/20)
exten => 1,n,Dial(\${DIALGROUP(mygroup)})

Syntax

DIALGROUP(group,op)

Arguments

- group
- op The operation name, possible values are:
 add add a channel name or interface (write-only)
 del remove a channel name or interface (write-only)

Import Version

Function_DIALPLAN_EXISTS

DIALPLAN_EXISTS()

Synopsis

Checks the existence of a dialplan target.

Description

This function returns 1 if the target exits. Otherwise, it returns 0.

Syntax

DIALPLAN_EXISTS(context,extension,priority)

Arguments

- context
- extension
- priority

Import Version

Function_DUNDILOOKUP

DUNDILOOKUP()

Synopsis

Do a DUNDi lookup of a phone number.

Description

This will do a DUNDi lookup of the given phone number.

This function will return the Technology/Resource found in the first result in the DUNDi lookup. If no results were found, the result will be blank.

Syntax

DUNDILOOKUP(number,context,options)

Arguments

- number
- context If not specified the default will be e164.
- options
 - b Bypass the internal DUNDi cache

Import Version

Function_DUNDIQUERY

DUNDIQUERY()

Synopsis

Initiate a DUNDi query.

Description

This will do a DUNDi lookup of the given phone number.

The result of this function will be a numeric ID that can be used to retrieve the results with the <code>DUNDIRESULT</code> function.

Syntax

DUNDIQUERY(number,context,options)

Arguments

- number
- context If not specified the default will be e164.
- options
 - b Bypass the internal DUNDi cache

Import Version

Function_DUNDIRESULT

DUNDIRESULT()

Synopsis

Retrieve results from a DUNDIQUERY.

Description

This function will retrieve results from a previous use\n" of the DUNDIQUERY function.

Syntax

DUNDIRESULT(id,resultnum)

Arguments

- id The identifier returned by the DUNDIQUERY function.
- resultnum
 - ullet number The number of the result that you want to retrieve, this starts at 1
 - getnum The total number of results that are available.

Import Version

Function_ENUMLOOKUP

ENUMLOOKUP()

Synopsis

General or specific querying of NAPTR records for ENUM or ENUM-like DNS pointers.

Description

For more information see doc/AST.pdf.

Syntax

ENUMLOOKUP(number,method-type,options,record#,zone-suffix)

Arguments

- number
- method-type If no method-type is given, the default will be sip.
- options
 - c Returns an integer count of the number of NAPTRs of a certain RR type.

 Combination of c and Method-type of ALL will return a count of all NAPTRs for the record.
 - u Returns the full URI and does not strip off the URI-scheme.
 - s Triggers ISN specific rewriting.
 - i Looks for branches into an Infrastructure ENUM tree.
 - d for a direct DNS lookup without any flipping of digits.
- record# If no record# is given, defaults to 1.
- zone-suffix If no zone-suffix is given, the default will be e164.arpa

Import Version

Function_ENUMQUERY

ENUMQUERY()

Synopsis

Initiate an ENUM query.

Description

This will do a ENUM lookup of the given phone number.

Syntax

ENUMQUERY(number,method-type,zone-suffix)

Arguments

- number
- method-type If no method-type is given, the default will be sip.
- zone-suffix If no zone-suffix is given, the default will be e164.arpa

Import Version

Function_ENUMRESULT

ENUMRESULT()

Synopsis

Retrieve results from a ENUMQUERY.

Description

This function will retrieve results from a previous use of the ENUMQUERY function.

Syntax

ENUMRESULT(id,resultnum)

Arguments

- id The identifier returned by the ENUMQUERY function.
- resultnum The number of the result that you want to retrieve.

 Results start at 1. If this argument is specified as getnum, then it will return the total number of results that are available.

Import Version

Function_ENV

ENV()

Synopsis

Gets or sets the environment variable specified.

Description

Variables starting with AST_ are reserved to the system and may not be set.

Syntax

ENV(varname)

Arguments

• varname - Environment variable name

Import Version

Function_EVAL

EVAL()

Synopsis

Evaluate stored variables

Description

Using EVAL basically causes a string to be evaluated twice. When a variable or expression is in the dialplan, it will be evaluated at runtime. However, if the results of the evaluation is in fact another variable or expression, using EVAL will have it evaluated a second time.

Example: If the MYVAR contains OTHERVAR, then the result of \${EVAL(MYVAR)} in the dialplan will be the contents of OTHERVAR. Normally just putting MYV AR in the dialplan the result would be OTHERVAR.

Syntax

EVAL(variable)

Arguments

• variable

Import Version

Function_EXCEPTION

EXCEPTION()

Synopsis

Retrieve the details of the current dialplan exception.

Description

Retrieve the details (specified field) of the current dialplan exception.

Syntax

EXCEPTION(field)

Arguments

- field The following fields are available for retrieval:
 - reason INVALID, ERROR, RESPONSETIMEOUT, ABSOLUTETIMEOUT, or custom value set by the RaiseException()
 application
 - context The context executing when the exception occurred.
 - exten The extension executing when the exception occurred.
 - priority The numeric priority executing when the exception occurred.

See Also

• Application_RaiseException

Import Version

Function_EXISTS

EXISTS()

Synopsis

Test the existence of a value.

Description

Returns 1 if exists, 0 otherwise.

Syntax

EXISTS(data)

Arguments

• data

Import Version

Function_EXTENSION_STATE EXTENSION_STATE()

Synopsis

Get an extension's state.

Description

The EXTENSION_STATE function can be used to retrieve the state from any hinted extension. For example:

NoOp(1234@default has state \${EXTENSION_STATE(1234)})

NoOp(4567@home has state \${EXTENSION_STATE(4567@home)})

The possible values returned by this function are:

UNKNOWN | NOT_INUSE | INUSE | BUSY | INVALID | UNAVAILABLE | RINGING | RINGINUSE | HOLDINUSE | ONHOLD

Syntax

EXTENSION_STATE(extension@context)

Arguments

- extension
- context If it is not specified defaults to default.

Import Version

Function_FAXOPT

Moved to Function_FAXOPT_res_fax.

Function_FAXOPT_res_fax

FAXOPT() - [res_fax]

Synopsis

Gets/sets various pieces of information about a fax session.

Description

FAXOPT can be used to override the settings for a FAX session listed in res_fax.conf, it can also be used to retreive information about a FAX session that has finished eg. pages/status.

Syntax

FAXOPT(item)

Arguments

- item
 - ecm R/W Error Correction Mode (ECM) enable with 'yes', disable with 'no'.
 - error R/O FAX transmission error code upon failure.
 - filename R/O Filename of the first file of the FAX transmission.
 - filenames R/O Filenames of all of the files in the FAX transmission (comma separated).
 - headerinfo R/W FAX header information.
 - localstationid R/W Local Station Identification.
 - minrate R/W Minimum transfer rate set before transmission.
 - maxrate R/W Maximum transfer rate set before transmission.
 - modem R/W Modem type (v17/v27/v29).
 - pages R/O Number of pages transferred.
 - rate R/O Negotiated transmission rate.
 - remotestationid R/O Remote Station Identification after transmission.
 - resolution R/O Negotiated image resolution after transmission.
 - sessionid R/O Session ID of the FAX transmission.
 - status R/O Result Status of the FAX transmission.
 - statusstr R/O Verbose Result Status of the FAX transmission.

See Also

- Application_ReceiveFax
- Application_SendFax

Import Version

Function_FIELDNUM

FIELDNUM()

Synopsis

Return the 1-based offset of a field in a list

Description

Search the variable named *varname* for the string *value* delimited by *delim* and return a 1-based offset as to its location. If not found or an error occured, return 0

The delimiter may be specified as a special or extended ASCII character, by encoding it. The characters \n , \n , and \t are all recognized as the newline, carriage return, and tab characters, respectively. Also, octal and hexadecimal specifications are recognized by the patterns \n mn and \x HH, respectively. For example, if you wanted to encode a comma as the delimiter, you could use either \n 054 or \x 2C.

Example: If \${example} contains ex-amp-le, then \${FIELDNUM(example,-,amp)} returns 2.

Syntax

FIELDNUM(varname,delim,value)

Arguments

- varname
- delim
- value

Import Version

Function_FIELDQTY

FIELDQTY()

Synopsis

Count the fields with an arbitrary delimiter

Description

The delimiter may be specified as a special or extended ASCII character, by encoding it. The characters \n , \n , and \t are all recognized as the newline, carriage return, and tab characters, respectively. Also, octal and hexadecimal specifications are recognized by the patterns \n mn and \x HH, respectively. For example, if you wanted to encode a comma as the delimiter, you could use either \n 054 or \x 2C.

Example: If ${\text{example}}$ contains ex-amp-le, then ${\text{FIELDQTY}}$ (example,-)} returns 3.

Syntax

FIELDQTY(varname,delim)

Arguments

- varname
- delim

Import Version

Function_FILE

FILE()

Synopsis Read or write text file. Description Read and write text file in character and line mode. Examples: Read mode (byte): ;reads the entire content of the file. Set(foo=\${FILE(/tmp/test.txt)}) ;reads from the 11th byte to the end of the file (i.e. skips the first 10). Set(foo=\${FILE(/tmp/test.txt,10)}) ;reads from the 11th to 20th byte in the file (i.e. skip the first 10, then read 10 bytes). Set(foo=\${FILE(/tmp/test.txt,10,10)}) Read mode (line): ; reads the 3rd line of the file. Set(foo=\${FILE(/tmp/test.txt,3,1,I)}) ; reads the 3rd and 4th lines of the file. Set(foo=\${FILE(/tmp/test.txt,3,2,I)}) ; reads from the third line to the end of the file. Set(foo=\${FILE(/tmp/test.txt,3,,I)}) ; reads the last three lines of the file. Set(foo=\${FILE(/tmp/test.txt,-3,,I)}) ; reads the 3rd line of a DOS-formatted file. Set(foo=\${FILE(/tmp/test.txt,3,1,I,d)}) Write mode (byte): ; truncate the file and write "bar" Set(FILE(/tmp/test.txt)=bar) ; Append "bar" Set(FILE(/tmp/test.txt,,,a)=bar) ; Replace the first byte with "bar" (replaces 1 character with 3) Set(FILE(/tmp/test.txt,0,1)=bar) ; Replace 10 bytes beginning at the 21st byte of the file with "bar" Set(FILE(/tmp/test.txt,20,10)=bar) ; Replace all bytes from the 21st with "bar" Set(FILE(/tmp/test.txt,20)=bar) ; Insert "bar" after the 4th character

Set(FILE(/tmp/test.txt,4,0)=bar)

Write mode (line):

; Replace the first line of the file with "bar"

Set(FILE(/tmp/foo.txt,0,1,I)=bar)

; Replace the last line of the file with "bar"

Set(FILE(/tmp/foo.txt,-1,,I)=bar)

; Append "bar" to the file with a newline

Set(FILE(/tmp/foo.txt,,,al)=bar)

Syntax

FILE(filename,offset,length,options,format)

Arguments

- filename
- · offset Maybe specified as any number. If negative, offset specifies the number of bytes back from the end of the file.
- length If specified, will limit the length of the data read to that size. If negative, trims length bytes from the end of the file.
- options
 - 1 Line mode: offset and length are assumed to be measured in lines, instead of byte offsets.
 - a In write mode only, the append option is used to append to the end of the file, instead of overwriting the existing file.
 - d In write mode and line mode only, this option does not automatically append a newline string to the end of a value. This is useful for deleting lines, instead of setting them to blank.
- format The format parameter may be used to delimit the type of line terminators in line mode.
 - u Unix newline format.
 - d DOS newline format.
 - m Macintosh newline format.

See Also

- Function_FILE_COUNT_LINE
- Function_FILE_FORMAT

Import Version

Function_FILE_COUNT_LINE

FILE_COUNT_LINE()

Synopsis

Obtains the number of lines of a text file.

Description

Returns the number of lines, or -1 on error.

Syntax

FILE_COUNT_LINE(filename,format)

Arguments

- filename
- format Format may be one of the following:
 - u Unix newline format.
 - d DOS newline format.
 - m Macintosh newline format.



Note

If not specified, an attempt will be made to determine the newline format type.

See Also

- Function_FILE
- Function_FILE_FORMAT

Import Version

Function_FILE_FORMAT

FILE_FORMAT()

Synopsis

Return the newline format of a text file.

Description

Return the line terminator type:

'u' - Unix "\n" format

'd' - DOS "\r\n" format

'm' - Macintosh "\r" format

'x' - Cannot be determined

Syntax

FILE_FORMAT(filename)

Arguments

• filename

See Also

- Function_FILE
- Function_FILE_COUNT_LINE

Import Version

Function_FILTER

FILTER()

Synopsis

Filter the string to include only the allowed characters

Description

Permits all characters listed in *allowed-chars*, filtering all others outs. In addition to literally listing the characters, you may also use ranges of characters (delimited by a –

Hexadecimal characters started with a $\xspace \times (i.e. \xspace x20)$

Octal characters started with a $\0$ (i.e. $\040$)

Also \t , \n and \n are recognized.



Note

If you want the - character it needs to be prefixed with a {{}}

Syntax

FILTER(allowed-chars,string)

Arguments

- allowed-chars
- string

Import Version

Function_FRAME_TRACE

FRAME_TRACE()

Synopsis

View internal ast_frames as they are read and written on a channel.

Description

Examples:

exten => 1,1,Set(FRAME_TRACE(white)=DTMF_BEGIN,DTMF_END); view only DTMF frames.

exten => 1,1,Set(FRAME_TRACE()=DTMF_BEGIN,DTMF_END); view only DTMF frames.

exten => 1,1,Set(FRAME_TRACE(black)=DTMF_BEGIN,DTMF_END); view everything except DTMF frames.

Syntax

```
FRAME_TRACE(filter list type)
```

Arguments

- filter list type A filter can be applied to the trace to limit what frames are viewed. This filter can either be a white or black list of frame types. When no filter type is present, white is used. If no arguments are provided at all, all frames will be output.

 Below are the different types of frames that can be filtered.
 - DTMF_BEGIN
 - DTMF_END
 - VOICE
 - VIDEO
 - CONTROL
 - NULL
 - IAX
 - TEXT
 - IMAGE
 - HTML
 - CNGMODEM

Import Version

Function_GLOBAL

GLOBAL()

Synopsis

Gets or sets the global variable specified.

Description

Set or get the value of a global variable specified in varname

Syntax

GLOBAL(varname)

Arguments

• varname - Global variable name

Import Version

Function_GROUP

GROUP()

Synopsis

Gets or sets the channel group.

Description

category can be employed for more fine grained group management. Each channel can only be member of exactly one group per category.

Syntax

GROUP(category)

Arguments

• category - Category name.

Import Version

Function_GROUP_COUNT

GROUP_COUNT()

Synopsis

Counts the number of channels in the specified group.

Description

Calculates the group count for the specified group, or uses the channel's current group if not specifed (and non-empty).

Syntax

GROUP_COUNT(groupname@category)

Arguments

- groupname Group name.
- category Category name

Import Version

Function_GROUP_LIST

GROUP_LIST()

Synopsis

Gets a list of the groups set on a channel.

Description

Gets a list of the groups set on a channel.

Syntax

GROUP_LIST()

Arguments

Import Version

Function_GROUP_MATCH_COUNT

GROUP_MATCH_COUNT()

Synopsis

Counts the number of channels in the groups matching the specified pattern.

Description

Calculates the group count for all groups that match the specified pattern. Note: category matching is applied after matching based on group. Uses standard regular expression matching on both (see regex(7)).

Syntax

GROUP_MATCH_COUNT(groupmatch@category)

Arguments

- groupmatch A standard regular expression used to match a group name.
- category A standard regular expression used to match a category name.

Import Version

Function_HASH

HASH()

Synopsis

Implementation of a dialplan associative array

Description

In two arguments mode, gets and sets values to corresponding keys within a named associative array. The single-argument mode will only work when assigned to from a function defined by func_odbc

Syntax

HASH(hashname,hashkey)

Arguments

- hashname
- hashkey

Import Version

Function_HASHKEYS

HASHKEYS()

Synopsis

Retrieve the keys of the HASH() function.

Description

Returns a comma-delimited list of the current keys of the associative array defined by the HASH() function. Note that if you iterate over the keys of the result, adding keys during iteration will cause the result of the HASHKEYS() function to change.

Syntax

HASHKEYS(hashname)

Arguments

• hashname

Import Version

Function_HINT

HINT()

Synopsis

Get the devices set for a dialplan hint.

Description

The HINT function can be used to retrieve the list of devices that are mapped to a dialplan hint. For example:

NoOp(Hint for Extension 1234 is \${HINT(1234)})

Syntax

HINT(extension,options)

Arguments

- \bullet extension
 - extension
 - context
- options
 - n Retrieve name on the hint instead of list of devices.

Import Version

Function_IAXPEER

IAXPEER()

Synopsis

Gets IAX peer information.

Description

Gets information associated with the specified IAX2 peer.

Syntax

IAXPEER(peername,item)

Arguments

- peername
 - · CURRENTCHANNEL If peername is specified to this value, return the IP address of the endpoint of the current channel
- item If peername is specified, valid items are:
 - ip (default) The IP address.
 - status The peer's status (if qualify=yes)
 - mailbox The configured mailbox.
 - context The configured context.
 - expire The epoch time of the next expire.
 - dynamic Is it dynamic? (yes/no).
 - callerid_name The configured Caller ID name.
 - callerid_num The configured Caller ID number.
 - codecs The configured codecs.
 - codecx Preferred codec index number x (beginning with 0)

See Also

• Function_SIPPEER

Import Version

Function_IAXVAR

IAXVAR()

Synopsis

Sets or retrieves a remote variable.

Description

Gets or sets a variable that is sent to a remote IAX2 peer during call setup.

Syntax

IAXVAR(varname)

Arguments

• varname

Import Version

Function_ICONV

ICONV()

Synopsis

Converts charsets of strings.

Description

Converts string from in-charset into out-charset. For available charsets, use iconv -1 on your shell command line.



Note

Due to limitations within the API, ICONV will not currently work with charsets with embedded NULLs. If found, the string will terminate.

Syntax

ICONV(in-charset,out-charset,string)

Arguments

- in-charset Input charset
- out-charset Output charset
- string String to convert, from in-charset to out-charset

Import Version

Function_IF

IF()

Synopsis

Check for an expresion.

Description

Returns the data following ? if true, else the data following :

Syntax

IF(expresion?retvalue)

Arguments

- \bullet expresion
- retvalue
 - true
 - false

Import Version

Function_IFMODULE

IFMODULE()

Synopsis

Checks if an Asterisk module is loaded in memory.

Description

Checks if a module is loaded. Use the full module name as shown by the list in module list. Returns 1 if module exists in memory, otherwise 0

Syntax

IFMODULE(modulename.so)

Arguments

• modulename.so - Module name complete with .so

Import Version

Function_IFTIME

IFTIME()

Synopsis

Temporal Conditional.

Description

Returns the data following ? if true, else the data following :

Syntax

IFTIME(timespec?retvalue)

Arguments

- timespec
- retvalue
 - true
 - false

Import Version

Function_IMPORT

IMPORT()

Synopsis

Retrieve the value of a variable from another channel.

Description

Syntax

IMPORT(channel,variable)

Arguments

- ullet channel
- variable

Import Version

Function_INC

INC()

Synopsis

Increments the value of a variable, while returning the updated value to the dialplan

Description

Increments the value of a variable, while returning the updated value to the dialplan

Example: INC(MyVAR) - Increments MyVar

Note: INC(\${MyVAR}) - Is wrong, as INC expects the variable name, not its value

Syntax

INC(variable)

Arguments

• variable - The variable name to be manipulated, without the braces.

Import Version

Function_ISNULL

ISNULL()

Synopsis

Check if a value is NULL.

Description

Returns 1 if NULL or 0 otherwise.

Syntax

ISNULL(data)

Arguments

• data

Import Version

Function_JABBER_RECEIVE JABBER_RECEIVE()

Synopsis

Reads XMPP messages.

Description

Receives a text message on the given account from the buddy identified by jid and returns the contents.

Example: \${JABBER_RECEIVE(asterisk,bob@domain.com)} returns an XMPP message sent from bob@domain.com(or nothing in case of a time out), to the asterisk XMPP account configured in jabber.conf.

Syntax

JABBER_RECEIVE(account, jid, timeout)

Arguments

- account The local named account to listen on (specified in jabber.conf)
- jid Jabber ID of the buddy to receive message from. It can be a bare JID (username@domain) or a full JID (username@domain/resource).
- timeout In seconds, defaults to 20.

See Also

- Function_JABBER_STATUS
- Application_JabberSend

Import Version

Function_JABBER_STATUS JABBER_STATUS()

Synopsis

Retrieves a buddy's status.

Description

Retrieves the numeric status associated with the buddy identified by jid. If the buddy does not exist in the buddylist, returns 7.

Status will be 1-7.

1=Online, 2=Chatty, 3=Away, 4=XAway, 5=DND, 6=Offline

If not in roster variable will be set to 7.

Example: \${JABBER_STATUS(asterisk,bob@domain.com)} returns 1 if bob@domain.com is online. asterisk is the associated XMPP account configured in jabber.conf.

Syntax

JABBER_STATUS(account, jid)

Arguments

- account The local named account to listen on (specified in jabber.conf)
- jid Jabber ID of the buddy to receive message from. It can be a bare JID (username@domain) or a full JID (username@domain/resource).

See Also

- Function_JABBER_RECEIVE
- Application_JabberSend

Import Version

Function_KEYPADHASH

KEYPADHASH()

Synopsis

Hash the letters in string into equivalent keypad numbers.

Description

Example: \${KEYPADHASH(Les)} returns "537"

Syntax

KEYPADHASH(string)

Arguments

• string

Import Version

Function_LEN

LEN()

Synopsis

Return the length of the string given.

Description

Example: \${LEN(example)} returns 7

Syntax

LEN(string)

Arguments

• string

Import Version

Function_LISTFILTER

LISTFILTER()

Synopsis

Remove an item from a list, by name.

Description

Remove *value* from the list contained in the *varname* variable, where the list delimiter is specified by the *delim* parameter. This is very useful for removing a single channel name from a list of channels, for example.

Syntax

LISTFILTER(varname,delim,value)

Arguments

- varname
- delim
- value

Import Version

Function_LOCAL

LOCAL()

Synopsis

Manage variables local to the gosub stack frame.

Description

Read and write a variable local to the gosub stack frame, once we Return() it will be lost (or it will go back to whatever value it had before the Gosub()).

Syntax

LOCAL(varname)

Arguments

• varname

See Also

- Application_Gosub
- Application_GosubIf
- Application_Return

Import Version

Function_LOCAL_PEEK

LOCAL_PEEK()

Synopsis

Retrieve variables hidden by the local gosub stack frame.

Description

Read a variable *varname* hidden by *n* levels of gosub stack frames. Note that \${LOCAL_PEEK(0,foo)} is the same as £00, since the value of *n* peeks under 0 levels of stack frames; in other words, 0 is the current level. If *n* exceeds the available number of stack frames, then an empty string is returned.

Syntax

LOCAL_PEEK(n,varname)

Arguments

- n
- varname

See Also

- Application_Gosub
- Application_GosubIf
- Application_Return

Import Version

Function_LOCK

LOCK()

Synopsis

Attempt to obtain a named mutex.

Description

Attempts to grab a named lock exclusively, and prevents other channels from obtaining the same lock. LOCK will wait for the lock to become available. Returns 1 if the lock was obtained or 0 on error.



Note

To avoid the possibility of a deadlock, LOCK will only attempt to obtain the lock for 3 seconds if the channel already has another lock.

Syntax

LOCK(lockname)

Arguments

• lockname

Import Version

Function_MAILBOX_EXISTS

MAILBOX_EXISTS()

Synopsis

Tell if a mailbox is configured.

Description

Returns a boolean of whether the corresponding mailbox exists. If context is not specified, defaults to the default context.

Syntax

MAILBOX_EXISTS(mailbox@context)

Arguments

- ullet mailbox
- context

Import Version

Function_MASTER_CHANNEL MASTER_CHANNEL()

Synopsis

Gets or sets variables on the master channel

Description

Allows access to the channel which created the current channel, if any. If the channel is already a master channel, then accesses local channel variables.

Import Version

Function_MATH

MATH()

Synopsis

Performs Mathematical Functions.

Description

Performs mathematical functions based on two parameters and an operator. The returned value type is type

Example: Set(i=\${MATH(123%16,int)}) - sets var i=11

Syntax

MATH(expression,type)

Arguments

- expression Is of the form: number1opnumber2 where the possible values for op are:
 - $+,-,/,*,\%,<<,>>,^AND,OR,XOR,<,>,<=,>==$ (and behave as their C equivalents)
- type Wanted type of result:
 - f, float float(default)
 - i, int integer
 - h, hex hex
 - c, char char

Import Version

Function_MD5

MD5()

Synopsis

Computes an MD5 digest.

Description

Computes an MD5 digest.

Syntax

MD5(data)

Arguments

• data

Import Version

Function_MEETME_INFO

MEETME_INFO()

Synopsis

Query a given conference of various properties.

Description

Syntax

MEETME_INFO(keyword,confno)

Arguments

- keyword Options:
 - lock Boolean of whether the corresponding conference is locked.
 - parties Number of parties in a given conference
 - activity Duration of conference in seconds.
 - dynamic Boolean of whether the corresponding conference is dynamic.
- confino Conference number to retrieve information from.

See Also

- Application_MeetMe
- Application_MeetMeCount
- Application_MeetMeAdmin
- Application_MeetMeChannelAdmin

Import Version

Function_MINIVMACCOUNT

MINIVMACCOUNT()

Synopsis

Gets MiniVoicemail account information.

Description

Syntax

MINIVMACCOUNT(account:item)

Arguments

- account
- item Valid items are:
 - path Path to account mailbox (if account exists, otherwise temporary mailbox).
 - hasaccount 1 is static Minivm account exists, 0 otherwise.
 - fullname Full name of account owner.
 - email Email address used for account.
 - etemplate Email template for account (default template if none is configured).
 - ptemplate Pager template for account (default template if none is configured).
 - account code Account code for the voicemail account.
 - pincode Pin code for voicemail account.
 - timezone Time zone for voicemail account.
 - language Language for voicemail account.
 - <channel variable name> Channel variable value (set in configuration for account).

See Also

- Application_MinivmRecord
- Application_MinivmGreet
- Application_MinivmNotify
- Application_MinivmDelete
- Application_MinivmAccMess
- Application_MinivmMWI
- Function_MINIVMCOUNTER

Import Version

Function_MINIVMCOUNTER

MINIVMCOUNTER()

Synopsis

Reads or sets counters for MiniVoicemail message.

Description

The operation is atomic and the counter is locked while changing the value. The counters are stored as text files in the minivm account directories. It might be better to use realtime functions if you are using a database to operate your Asterisk.

Syntax

MINIVMCOUNTER(account:name:operand)

Arguments

- account If account is given and it exists, the counter is specific for the account.
 If account is a domain and the domain directory exists, counters are specific for a domain.
- name The name of the counter is a string, up to 10 characters.
- operand The counters never goes below zero. Valid operands for changing the value of a counter when assigning a value are:
 - i Increment by value.
 - d Decrement by value.
 - s Set to value.

See Also

- Application_MinivmRecord
- Application_MinivmGreet
- Application_MinivmNotify
- Application_MinivmDelete
- Application_MinivmAccMess
- Application_MinivmMWI
- Function_MINIVMACCOUNT

Import Version

Function_MUTEAUDIO

MUTEAUDIO()

Synopsis

Muting audio streams in the channel

Description

The MUTEAUDIO function can be used to mute inbound (to the PBX) or outbound audio in a call. Example:

MUTEAUDIO(in)=on MUTEAUDIO(in)=off

Syntax

MUTEAUDIO(direction)

Arguments

- direction Must be one of
 - in Inbound stream (to the PBX)
 - out Outbound stream (from the PBX)
 - all Both streams

Import Version

Function_ODBC

ODBC()

Synopsis

Controls ODBC transaction properties.

Description

The ODBC() function allows setting several properties to influence how a connected database processes transactions.

Syntax

ODBC(property[,argument])

Arguments

- property
 - transaction Gets or sets the active transaction ID. If set, and the transaction ID does not exist and a *database name* is specified as an argument, it will be created.
 - forcecommit Controls whether a transaction will be automatically committed when the channel hangs up. Defaults to false. If a *transaction ID* is specified in the optional argument, the property will be applied to that ID, otherwise to the current active ID.
 - isolation Controls the data isolation on uncommitted transactions. May be one of the following: read_committed, read_u ncommitted, repeatable_read, or serializable. Defaults to the database setting in res_odbc.conf or read_committed if not specified. If a transaction ID is specified as an optional argument, it will be applied to that ID, otherwise the current active ID.
- argument

Import Version

Function_ODBC_FETCH

ODBC_FETCH()

Synopsis

Fetch a row from a multirow query.

Description

For queries which are marked as mode=multirow, the original query returns a *result-id* from which results may be fetched. This function implements the actual fetch of the results.

This also sets ODBC_FETCH_STATUS.

- ODBC_FETCH_STATUS
 - SUCESS If rows are available.
 - FAILURE If no rows are available.

Syntax

ODBC_FETCH(result-id)

Arguments

• result-id

Import Version

Function_PASSTHRU

PASSTHRU()

Synopsis

Pass the given argument back as a value.

Description

Literally returns the given *string*. The intent is to permit other dialplan functions which take a variable name as an argument to be able to take a literal string, instead.



Note

The functions which take a variable name need to be passed var and not \${var}. Similarly, use PASSTHRU() and not \${PASSTHRU()}.

Example: \${CHANNEL} contains SIP/321-1

\${CUT(PASSTHRU(\${CUT(CHANNEL,-,1)}),/,2)}) will return 321

Syntax

PASSTHRU([string])

Arguments

• string

Import Version

Function_PITCH_SHIFT

PITCH_SHIFT()

Synopsis

Pitch shift both tx and rx audio streams on a channel.

Description

Examples:

```
exten => 1,1,Set(PITCH_SHIFT(tx)=highest); raises pitch an octave
exten => 1,1,Set(PITCH_SHIFT(rx)=higher); raises pitch more
exten => 1,1,Set(PITCH_SHIFT(both)=high); raises pitch
exten => 1,1,Set(PITCH_SHIFT(rx)=low); lowers pitch
exten => 1,1,Set(PITCH_SHIFT(tx)=lower); lowers pitch more
exten => 1,1,Set(PITCH_SHIFT(both)=lowest); lowers pitch an octave
exten => 1,1,Set(PITCH_SHIFT(rx)=0.8); lowers pitch
```

Syntax

PITCH_SHIFT(channel direction)

exten => 1,1,Set(PITCH_SHIFT(tx)=1.5); raises pitch

Arguments

• channel direction - Direction can be either rx, tx, or both. The direction can either be set to a valid floating point number between 0.1 and 4.0 or one of the enum values listed below. A value of 1.0 has no effect. Greater than 1 raises the pitch. Lower than 1 lowers the pitch.

The pitch amount can also be set by the following values

- highest
- higher
- high
- low
- lower
- lowest

Import Version

Function_POP

POP()

Synopsis

Removes and returns the last item off of a variable containing delimited text

Description

Example:

exten => s,1,Set(array=one,two,three)

exten => s,n,While(\$["\${SET(var=\${POP(array)})}" != ""])

exten => s,n,NoOp(var is \${var})

exten => s,n,EndWhile

This would iterate over each value in array, right to left, and would result in NoOp(var is three), NoOp(var is two), and NoOp(var is one) being executed.

Syntax

POP(varname[,delimiter])

Arguments

- varname
- delimiter

Import Version

Function_PP_EACH_EXTENSION PP_EACH_EXTENSION()

Execute specified template for each extension.

Description

Output the specified template for each extension associated with the specified MAC address.

Syntax

PP_EACH_EXTENSION(mac,template)

Arguments

- mac
- template

Import Version

Function_PP_EACH_USER PP_EACH_USER()

Synopsis

Generate a string for each phoneprov user.

Description

Pass in a string, with phoneprov variables you want substituted in the format of %{VARNAME}, and you will get the string rendered for each user in phoneprov excluding ones with MAC address exclude_mac. Probably not useful outside of res_phoneprov.

Example: \${PP_EACH_USER(<item><fn>%{DISPLAY_NAME}</fn></item>|\${MAC})

Syntax

PP_EACH_USER(string,exclude_mac)

Arguments

- string
- exclude_mac

Import Version

Function_PUSH

PUSH()

Synopsis

Appends one or more values to the end of a variable containing delimited text

Description

Example: Set(PUSH(array)=one,two,three) would append one, two, and three to the end of the values stored in the variable "array".

Syntax

PUSH(varname[,delimiter])

Arguments

- varname
- delimiter

Import Version

Function_QUEUE_EXISTS

QUEUE_EXISTS()

Synopsis

Check if a named queue exists on this server

Description

Returns 1 if the specified queue exists, 0 if it does not

Syntax

QUEUE_EXISTS(queuename)

Arguments

• queuename

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Function_QUEUE_MEMBER

QUEUE_MEMBER()

Synopsis

Count number of members answering a queue.

Description

Returns the number of members currently associated with the specified queuename.

Syntax

QUEUE_MEMBER(queuename,option)

Arguments

- queuename
- option
 - logged Returns the number of logged-in members for the specified queue.
 - free Returns the number of logged-in members for the specified queue that either can take calls or are currently wrapping up after a previous call.
 - ready Returns the number of logged-in members for the specified queue that are immediately available to answer a call.
 - count Returns the total number of members for the specified queue.

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Function_QUEUE_MEMBER_COUNT

QUEUE_MEMBER_COUNT()

Synopsis

Count number of members answering a queue.

Description

Returns the number of members currently associated with the specified queuename.



Warning

This function has been deprecated in favor of the QUEUE_MEMBER() function

Syntax

QUEUE_MEMBER_COUNT(queuename)

Arguments

• queuename

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Function_QUEUE_MEMBER_LIST

QUEUE_MEMBER_LIST()

Synopsis

Returns a list of interfaces on a queue.

Description

Returns a comma-separated list of members associated with the specified queuename.

Syntax

QUEUE_MEMBER_LIST(queuename)

Arguments

• queuename

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Function_QUEUE_MEMBER_PENALTY

QUEUE_MEMBER_PENALTY()

Synopsis

Gets or sets queue members penalty.

Description

Gets or sets queue members penalty.

Syntax

QUEUE_MEMBER_PENALTY(queuename,interface)

Arguments

- queuename
- interface

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Function_QUEUE_VARIABLES

QUEUE_VARIABLES()

Synopsis

Return Queue information in variables.

Description

Makes the following queue variables available.

Returns 0 if queue is found and setqueuevar is defined, -1 otherwise.

Syntax

QUEUE_VARIABLES(queuename)

Arguments

- queuename
 - QUEUEMAX Maxmimum number of calls allowed.
 - QUEUESTRATEGY The strategy of the queue.
 - QUEUECALLS Number of calls currently in the queue.
 - QUEUEHOLDTIME Current average hold time.
 - QUEUECOMPLETED Number of completed calls for the queue.
 - QUEUEABANDONED Number of abandoned calls.
 - QUEUESRVLEVEL Queue service level.
 - QUEUESRVLEVELPERF Current service level performance.

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function QUEUE MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Function_QUEUE_WAITING_COUNT

QUEUE_WAITING_COUNT()

Synopsis

Count number of calls currently waiting in a queue.

Description

Returns the number of callers currently waiting in the specified queuename.

Syntax

QUEUE_WAITING_COUNT(queuename)

Arguments

• queuename

See Also

- Application_Queue
- Application_QueueLog
- Application_AddQueueMember
- Application_RemoveQueueMember
- Application_PauseQueueMember
- Application_UnpauseQueueMember
- Function_QUEUE_VARIABLES
- Function_QUEUE_MEMBER
- Function_QUEUE_MEMBER_COUNT
- Function_QUEUE_EXISTS
- Function_QUEUE_WAITING_COUNT
- Function_QUEUE_MEMBER_LIST
- Function_QUEUE_MEMBER_PENALTY

Import Version

Function_QUOTE

QUOTE()

Synopsis

Quotes a given string, escaping embedded quotes as necessary

Description

Example: \${QUOTE(ab"c"de)} will return "abcde"

Syntax

QUOTE(string)

Arguments

• string

Import Version

Function_RAND

RAND()

Synopsis

Choose a random number in a range.

Description

Choose a random number between min and max. min defaults to 0, if not specified, while max defaults to RAND_MAX (2147483647 on many systems).

Example: Set(junky=\${RAND(1,8)}); Sets junky to a random number between 1 and 8, inclusive.

Syntax

RAND(min,max)

Arguments

- min
- max

Import Version

Function_REALTIME

REALTIME()

Synopsis

RealTime Read/Write Functions.

Description

This function will read or write values from/to a RealTime repository. REALTIME(....) will read names/values from the repository, and REALTIME(....) will write a new value/field to the repository. On a read, this function returns a delimited text string. The name/value pairs are delimited by *delim1*, and the name and value are delimited between each other with delim2. If there is no match, NULL will be returned by the function. On a write, this function will always return NULL.

Syntax

REALTIME(family,fieldmatch,matchvalue,delim1|field,delim2)

Arguments

- family
- fieldmatch
- matchvalue
- delim1 | field Use delim1 with delim2 on read and field without delim2 on write If we are reading and delim1 is not specified, defaults to ,
- delim2 Parameter only used when reading, if not specified defaults to =

See Also

- Function_REALTIME_STORE
- Function_REALTIME_DESTROY
- Function_REALTIME_FIELD
- Function_REALTIME_HASH

Import Version

Function_REALTIME_DESTROY

REALTIME_DESTROY()

Synopsis

RealTime Destroy Function.

Description

This function acts in the same way as REALTIME(....) does, except that it destroys the matched record in the RT engine.

Syntax

REALTIME_DESTROY(family,fieldmatch,matchvalue,delim1,delim2)

Arguments

- family
- fieldmatch
- matchvalue
- ullet delim1
- delim2

See Also

- Function_REALTIME
- Function_REALTIME_STORE
- Function_REALTIME_FIELD
- Function_REALTIME_HASH

Import Version

$Function_REALTIME_FIELD$

REALTIME_FIELD()

Synopsis

RealTime query function.

Description

This function retrieves a single item, *fieldname* from the RT engine, where *fieldmatch* contains the value *matchvalue*. When written to, the REALTIME_FIELD() function performs identically to the REALTIME() function.

Syntax

REALTIME_FIELD(family,fieldmatch,matchvalue,fieldname)

Arguments

- family
- fieldmatch
- ullet matchvalue
- fieldname

See Also

- Function_REALTIME
- Function_REALTIME_STORE
- Function_REALTIME_DESTROY
- Function_REALTIME_HASH

Import Version

Function_REALTIME_HASH

REALTIME_HASH()

Synopsis

RealTime query function.

Description

This function retrieves a single record from the RT engine, where *fieldmatch* contains the value *matchvalue* and formats the output suitably, such that it can be assigned to the HASH() function. The HASH() function then provides a suitable method for retrieving each field value of the record.

Syntax

REALTIME_HASH(family,fieldmatch,matchvalue)

Arguments

- family
- fieldmatch
- ullet matchvalue

See Also

- Function_REALTIME
- Function_REALTIME_STORE
- Function_REALTIME_DESTROY
- Function_REALTIME_FIELD

Import Version

Function_REALTIME_STORE

REALTIME_STORE()

Synopsis

RealTime Store Function.

Description

This function will insert a new set of values into the RealTime repository. If RT engine provides an unique ID of the stored record, REALTIME_STORE(...)=.. creates channel variable named RTSTOREID, which contains value of unique ID. Currently, a maximum of 30 field/value pairs is supported.

Syntax

REALTIME_STORE(family,field1,fieldN[,...],field30)

Arguments

- family
- field1
- ullet fieldN
- field30

See Also

- Function_REALTIME
- Function_REALTIME_DESTROY
- Function_REALTIME_FIELD
- Function_REALTIME_HASH

Import Version

Function_REDIRECTING

REDIRECTING()

Synopsis

Gets or sets Redirecting data on the channel.

Description

Gets or sets Redirecting data on the channel.

The allowable values for the *reason* field are the following:

- unknown Unknown
- cfb Call Forwarding Busy
- cfnr Call Forwarding No Reply
- unavailable Callee is Unavailable
- time_of_day Time of Day
- dnd Do Not Disturb
- deflection Call Deflection
- follow_me Follow Me
- out_of_order Called DTE Out-Of-Order
- away Callee is Away
- cf_dte Call Forwarding By The Called DTE
- cfu Call Forwarding Unconditional

The allowable values for the xxx-name-charset field are the following:

- unknown Unknown
- iso8859-1 ISO8859-1
- withdrawn Withdrawn
- iso8859-2 ISO8859-2
- iso8859-3 ISO8859-3
- iso8859-4 ISO8859-4
- iso8859-5 ISO8859-5
- iso8859-7 ISO8859-7
- bmp ISO10646 Bmp String
- utf8 ISO10646 UTF-8 String

Syntax

REDIRECTING(datatype,i)

Arguments

- datatype The allowable datatypes are:
 - from-all
 - from-name
 - from-name-valid
 - from-name-charset
 - from-name-pres
 - from-num
 - from-num-valid
 - from-num-plan
 - from-num-pres
 - from-subaddr
 - from-subaddr-valid
 - from-subaddr-type
 - from-subaddr-odd
 - from-tag

- to-all
- to-name
- to-name-valid
- to-name-charset
- to-name-pres
- to-num
- to-num-valid
- \bullet to-num-plan
- to-num-pres
- to-subaddr
- ullet to-subaddr-valid
- to-subaddr-type
- to-subaddr-odd
- to-tag
- reason
- count
- ullet i If set, this will prevent the channel from sending out protocol messages because of the value being set

Import Version

Function_REGEX

REGEX()

Synopsis

Check string against a regular expression.

Description

Return 1 on regular expression match or 0 otherwise

Please note that the space following the double quotes separating the regex from the data is optional and if present, is skipped. If a space is desired at the beginning of the data, then put two spaces there; the second will not be skipped.

Syntax

REGEX("regular expression" string)

Arguments

- "regular expression"
- string

Import Version

Function_REPLACE

REPLACE()

Synopsis

Replace a set of characters in a given string with another character.

Description

Iterates through a string replacing all the *find-chars* with *replace-char*. *replace-char* may be either empty or contain one character. If empty, all *find-chars* will be deleted from the output.



Note

The replacement only occurs in the output. The original variable is not altered.

Syntax

REPLACE(varname,find-chars[,replace-char])

Arguments

- varname
- find-chars
- replace-char

Import Version

Function_SET

SET()

Synopsis

SET assigns a value to a channel variable.

Description

Syntax

SET(varname=value)

Arguments

- varname
- value

Import Version

Function_SHA1

SHA1()

Synopsis

Computes a SHA1 digest.

Description

Generate a SHA1 digest via the SHA1 algorythm.

Example: Set(sha1hash=\${SHA1(junky)})

 $Sets the asterisk \ variable \ sha1hash \ to \ the \ string \ 60 fa5675b9303eb62f99a9cd47f9f5837d18f9a0 \ which \ is \ known \ as \ his \ hash \ ha$

Syntax

SHA1(data)

Arguments

• data - Input string

Import Version

Function_SHARED

SHARED()

Synopsis

Gets or sets the shared variable specified.

Description

Implements a shared variable area, in which you may share variables between channels.

The variables used in this space are separate from the general namespace of the channel and thus SHARED(foo) and foo represent two completely different variables, despite sharing the same name.

Finally, realize that there is an inherent race between channels operating at the same time, fiddling with each others' internal variables, which is why this special variable namespace exists; it is to remind you that variables in the SHARED namespace may change at any time, without warning. You should therefore take special care to ensure that when using the SHARED namespace, you retrieve the variable and store it in a regular channel variable before using it in a set of calculations (or you might be surprised by the result).

Syntax

SHARED(varname,channel)

Arguments

- varname Variable name
- channel If not specified will default to current channel. It is the complete channel name: SIP/12-abcd1234 or the prefix only SIP/12

Import Version

Function_SHELL

SHELL()

Synopsis

Executes a command using the system shell and captures its output.

Description

Collects the output generated by a command executed by the system shell

Example: Set(foo=\${SHELL(echo \bar)})



Note

The command supplied to this function will be executed by the system's shell, typically specified in the SHELL environment variable. There are many different system shells available with somewhat different behaviors, so the output generated by this function may vary between platforms.

Syntax

SHELL(command)

Arguments

• command - The command that the shell should execute.

Import Version

Function_SHIFT

SHIFT()

Synopsis

Removes and returns the first item off of a variable containing delimited text

Description

Example:

exten => s,1,Set(array=one,two,three)

exten $=> s,n,While(["\{SET(var=\{SHIFT(array)\})\}" != ""])$

exten => s,n,NoOp(var is \${var})

exten => s,n,EndWhile

This would iterate over each value in array, left to right, and would result in NoOp(var is one), NoOp(var is two), and NoOp(var is three) being executed.

Syntax

```
SHIFT(varname[,delimiter])
```

Arguments

- varname
- delimiter

Import Version

Function_SIP_HEADER

SIP_HEADER()

Synopsis

Gets the specified SIP header from an incoming INVITE message.

Description

Since there are several headers (such as Via) which can occur multiple times, SIP_HEADER takes an optional second argument to specify which header with that name to retrieve. Headers start at offset 1.

Syntax

SIP_HEADER(name,number)

Arguments

- name
- number If not specified, defaults to 1.

Import Version

Function_SIPCHANINFO

SIPCHANINFO()

Synopsis

Gets the specified SIP parameter from the current channel.

Description

Syntax

SIPCHANINFO(item)

Arguments

- item
 - peerip The IP address of the peer.
 - recvip The source IP address of the peer.
 - from The URI from the From: header.
 - uri The URI from the Contact: header.
 - useragent The useragent.
 - peername The name of the peer.
 - t38passthrough 1 if T38 is offered or enabled in this channel, otherwise 0.

Import Version

Function_SIPPEER

SIPPEER()

Synopsis

Gets SIP peer information.

Description

Syntax

SIPPEER(peername,item)

Arguments

- peername
- item
 - ip (default) The ip address.
 - port The port number.
 - mailbox The configured mailbox.
 - context The configured context.
 - expire The epoch time of the next expire.
 - dynamic Is it dynamic? (yes/no).
 - callerid_name The configured Caller ID name.
 - callerid_num The configured Caller ID number.
 - callgroup The configured Callgroup.
 - pickupgroup The configured Pickupgroup.
 - codecs The configured codecs.
 - status Status (if qualify=yes).
 - regexten Registration extension.
 - limit Call limit (call-limit).
 - busylevel Configured call level for signalling busy.
 - curcalls Current amount of calls. Only available if call-limit is set.
 - language Default language for peer.
 - account code Account code for this peer.
 - useragent Current user agent id for peer.
 - maxforwards The value used for SIP loop prevention in outbound requests
 - chanvarname A channel variable configured with setvar for this peer.
 - codecx Preferred codec index number x (beginning with zero).

Import Version

Function_SMDI_MSG

SMDI_MSG()

Synopsis

Retrieve details about an SMDI message.

Description

This function is used to access details of an SMDI message that was pulled from the incoming SMDI message queue using the SMDI_MSG_RETRIEVE() function.

Syntax

SMDI_MSG(message_id,component)

Arguments

- message id
- component Valid message components are:
 - number The message desk number
 - terminal The message desk terminal
 - station The forwarding station
 - callerid The callerID of the calling party that was forwarded
 - type The call type. The value here is the exact character that came in on the SMDI link. Typically, example values are: Options:
 - D Direct Calls
 - A Forward All Calls
 - B Forward Busy Calls
 - N Forward No Answer Calls

See Also

• Function_SMDI_MSG_RETRIEVE

Import Version

Function_SMDI_MSG_RETRIEVE

SMDI_MSG_RETRIEVE()

Synopsis

Retrieve an SMDI message.

Description

This function is used to retrieve an incoming SMDI message. It returns an ID which can be used with the SMDI_MSG() function to access details of the message. Note that this is a destructive function in the sense that once an SMDI message is retrieved using this function, it is no longer in the global SMDI message queue, and can not be accessed by any other Asterisk channels. The timeout for this function is optional, and the default is 3 seconds. When providing a timeout, it should be in milliseconds.

The default search is done on the forwarding station ID. However, if you set one of the search key options in the options field, you can change this behavior.

Syntax

SMDI_MSG_RETRIEVE(smdi port,search key,timeout,options)

Arguments

- smdi port
- search key
- ullet timeout
- options
 - t Instead of searching on the forwarding station, search on the message desk terminal.
 - n Instead of searching on the forwarding station, search on the message desk number.

See Also

• Function_SMDI_MSG

Import Version

Function_SORT

SORT()

Synopsis

Sorts a list of key/vals into a list of keys, based upon the vals.

Description

Takes a comma-separated list of keys and values, each separated by a colon, and returns a comma-separated list of the keys, sorted by their values. Values will be evaluated as floating-point numbers.

Syntax

```
SORT(keyval,keyvaln[,...])
```

Arguments

- keyval
 - key1
 - val1
- keyvaln
 - key2
 - val2

Import Version

Function_SPEECH

SPEECH()

Synopsis

Gets information about speech recognition results.

Description

Gets information about speech recognition results.

Syntax

SPEECH(argument)

Arguments

- argument
 - \bullet status Returns 1 upon speech object existing, or 0 if not
 - spoke Returns 1 if spoker spoke, or 0 if not
 - results Returns number of results that were recognized.

Import Version

Function_SPEECH_ENGINE
SPEECH_ENGINE()

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SV	n	0	n	C	ī	C

Change a speech engine specific attribute.

Description

Changes a speech engine specific attribute.

Syntax

SPEECH_ENGINE(name)

Arguments

• name

Import Version

Function_SPEECH_GRAMMAR SPEECH_GRAMMAR()

Synopsis

Gets the matched grammar of a result if available.

Description

Gets the matched grammar of a result if available.

Syntax

SPEECH_GRAMMAR(nbest_number/result_number)

Arguments

- nbest_number
- result_number

Import Version

Function_SPEECH_RESULTS_TYPE SPEECH_RESULTS_TYPE()

Synopsis

Sets the type of results that will be returned.

Description

Sets the type of results that will be returned. Valid options are normal or nbest.

Syntax

SPEECH_RESULTS_TYPE()

Arguments

Import Version

Function_SPEECH_SCORE SPEECH_SCORE()

Synopsis

Gets the confidence score of a result.

Description

Gets the confidence score of a result.

Syntax

SPEECH_SCORE(nbest_number/result_number)

Arguments

- nbest_number
- result_number

Import Version

Function_SPEECH_TEXT SPEECH_TEXT()

Synopsis

Gets the recognized text of a result.

Description

Gets the recognized text of a result.

Syntax

SPEECH_TEXT(nbest_number/result_number)

Arguments

- nbest_number
- result_number

Import Version

Function_SPRINTF

SPRINTF()

Synopsis

Format a variable according to a format string.

Description

Parses the format string specified and returns a string matching that format. Supports most options found in **sprintf(3)**. Returns a shortened string if a format specifier is not recognized.

Syntax

SPRINTF(format,arg1,arg2[,...],argN)

Arguments

- format
- arg1
- arg2
- argN

See Also

• sprintf(3)

Import Version

Function_SQL_ESC

SQL_ESC()

Synopsis

Escapes single ticks for use in SQL statements.

Description

Used in SQL templates to escape data which may contain single ticks ' which are otherwise used to delimit data.

Example: SELECT foo FROM bar WHERE baz='\${SQL_ESC(\${ARG1})}'

Syntax

SQL_ESC(string)

Arguments

• string

Import Version

Function_SRVQUERY SRVQUERY()

Synopsis

Initiate an SRV query.

Description

This will do an SRV lookup of the given service.

Syntax

SRVQUERY(service)

Arguments

• service - The service for which to look up SRV records. An example would be something like _sip._udp.example.com

Import Version

Function_SRVRESULT

SRVRESULT()

Synopsis

Retrieve results from an SRVQUERY.

Description

This function will retrieve results from a previous use of the SRVQUERY function.

Syntax

SRVRESULT(id,resultnum)

Arguments

- id The identifier returned by the SRVQUERY function.
- resultnum The number of the result that you want to retrieve.

 Results start at 1. If this argument is specified as getnum, then it will return the total number of results that are available.

Import Version

Function_STACK_PEEK

STACK_PEEK()

Synopsis

View info about the location which called Gosub

Description

Read the calling {{c}}ontext, {{e}}xtension, {{p}}riority, or {{I}}abel, as specified by which, by going up n frames in the Gosub stack. If suppress is true, then if the number of available stack frames is exceeded, then no error message will be printed.

Syntax

STACK_PEEK(n,which[,suppress])

Arguments

- n
- which
- suppress

Import Version

Function_STAT

STAT()

Synopsis

Does a check on the specified file.

Description

Syntax

STAT(flag,filename)

Arguments

- flag Flag may be one of the following:
 - d Checks if the file is a directory.
 - e Checks if the file exists.
 - f Checks if the file is a regular file.
 - m Returns the file mode (in octal)
 - s Returns the size (in bytes) of the file
 - A Returns the epoch at which the file was last accessed.
 - C Returns the epoch at which the inode was last changed.
 - M Returns the epoch at which the file was last modified.
- filename

Import Version

Function_STRFTIME

STRFTIME()

Synopsis

Returns the current date/time in the specified format.

Description

STRFTIME supports all of the same formats as the underlying C function **strftime(3)**. It also supports the following format: %[n]q - fractions of a second, with leading zeros.

Example: \$3q will give milliseconds and \$1q will give tenths of a second. The default is set at milliseconds (n=3). The common case is to use it in combination with %S, as in \$S.\$3q.

Syntax

STRFTIME(epoch,timezone,format)

Arguments

- epoch
- timezone
- format

See Also

• strftime(3)

Import Version

Function_STRPTIME

STRPTIME()

Synopsis

Returns the epoch of the arbitrary date/time string structured as described by the format.

Description

This is useful for converting a date into EPOCH time, possibly to pass to an application like SayUnixTime or to calculate the difference between the two date strings

Example: \${STRPTIME(2006-03-01 07:30:35,America/Chicago,%Y-%m-%d %H:%M:%S)} returns 1141219835

Syntax

STRPTIME(datetime,timezone,format)

Arguments

- datetime
- timezone
- format

Import Version

Function_SYSINFO

SYSINFO()

Synopsis

Returns system information specified by parameter.

Description

Returns information from a given parameter.

Syntax

SYSINFO(parameter)

Arguments

- parameter
 - loadavg System load average from past minute.
 - numcalls Number of active calls currently in progress.
 - uptime System uptime in hours.



Note

This parameter is dependant upon operating system.

• totalram - Total usable main memory size in KiB.



Note

This parameter is dependant upon operating system.

• freeram - Available memory size in KiB.



Note

This parameter is dependant upon operating system.

• bufferram - Memory used by buffers in KiB.



Note

This parameter is dependant upon operating system.

• totalswap - Total swap space still available in KiB.



Note

This parameter is dependant upon operating system.

• freeswap - Free swap space still available in KiB.



Note

This parameter is dependant upon operating system.

• numprocs - Number of current processes.



Note

This parameter is dependant upon operating system.

Import Version

Function_TESTTIME

TESTTIME()

Synopsis

Sets a time to be used with the channel to test logical conditions.

Description

To test dialplan timing conditions at times other than the current time, use this function to set an alternate date and time. For example, you may wish to evaluate whether a location will correctly identify to callers that the area is closed on Christmas Day, when Christmas would otherwise fall on a day when the office is normally open.

Syntax

TESTTIME(date,time[,zone])

Arguments

- date Date in ISO 8601 format
- time Time in HH:MM:SS format (24-hour time)
- zone Timezone name

See Also

• Application_GotolfTime

Import Version

Function_TIMEOUT

TIMEOUT()

Synopsis

Gets or sets timeouts on the channel. Timeout values are in seconds.

Description

The timeouts that can be manipulated are:

absolute: The absolute maximum amount of time permitted for a call. Setting of 0 disables the timeout.

digit: The maximum amount of time permitted between digits when the user is typing in an extension. When this timeout expires, after the user has started to type in an extension, the extension will be considered complete, and will be interpreted. Note that if an extension typed in is valid, it will not have to timeout to be tested, so typically at the expiry of this timeout, the extension will be considered invalid (and thus control would be passed to the i extension, or if it doesn't exist the call would be terminated). The default timeout is 5 seconds.

response: The maximum amount of time permitted after falling through a series of priorities for a channel in which the user may begin typing an extension. If the user does not type an extension in this amount of time, control will pass to the t extension if it exists, and if not the call would be terminated. The default timeout is 10 seconds.

Syntax

TIMEOUT(timeouttype)

Arguments

• timeouttype - The timeout that will be manipulated. The possible timeout types are: absolute, digit or response

Import Version

Function_TOLOWER

TOLOWER()

Synopsis

Convert string to all lowercase letters.

Description

Example: \${TOLOWER(Example)} returns "example"

Syntax

TOLOWER(string)

Arguments

• string

Import Version

Function_TOUPPER

TOUPPER()

Synopsis

Convert string to all uppercase letters.

Description

Example: \${TOUPPER(Example)} returns "EXAMPLE"

Syntax

TOUPPER(string)

Arguments

• string

Import Version

Function_TRYLOCK

TRYLOCK()

Synopsis

Attempt to obtain a named mutex.

Description

Attempts to grab a named lock exclusively, and prevents other channels from obtaining the same lock. Returns 1 if the lock was available or 0 otherwise.

Syntax

TRYLOCK(lockname)

Arguments

• lockname

Import Version

Function_TXTCIDNAME

TXTCIDNAME()

Synopsis

TXTCIDNAME looks up a caller name via DNS.

Description

This function looks up the given phone number in DNS to retrieve the caller id name. The result will either be blank or be the value found in the TXT record in DNS

Syntax

TXTCIDNAME(number,zone-suffix)

Arguments

- numbor
- zone-suffix If no zone-suffix is given, the default will be e164.arpa

Import Version

Function_UNLOCK

UNLOCK()

Synopsis

Unlocks a named mutex.

Description

Unlocks a previously locked mutex. Returns 1 if the channel had a lock or 0 otherwise.



Note

It is generally unnecessary to unlock in a hangup routine, as any locks held are automatically freed when the channel is destroyed.

Syntax

UNLOCK(lockname)

Arguments

• lockname

Import Version

Function_UNSHIFT

UNSHIFT()

Synopsis

Inserts one or more values to the beginning of a variable containing delimited text

Description

Example: Set(UNSHIFT(array)=one,two,three) would insert one, two, and three before the values stored in the variable "array".

Syntax

UNSHIFT(varname[,delimiter])

Arguments

- varname
- delimiter

Import Version

Function_URIDECODE

URIDECODE()

Synopsis

Decodes a URI-encoded string according to RFC 2396.

Description

Returns the decoded URI-encoded data string.

Syntax

URIDECODE(data)

Arguments

• data - Input string to be decoded.

Import Version

Function_URIENCODE

URIENCODE()

Synopsis

Encodes a string to URI-safe encoding according to RFC 2396.

Description

Returns the encoded string defined in data.

Syntax

URIENCODE(data)

Arguments

• data - Input string to be encoded.

Import Version

Function_VALID_EXTEN

VALID_EXTEN()

Synopsis

Determine whether an extension exists or not.

Description

Returns a true value if the indicated context, extension, and priority exist.

Syntax

VALID_EXTEN(context,extension,priority)

Arguments

- context Defaults to the current context
- ullet extension
- priority Priority defaults to 1.

Import Version

Function_VERSION

VERSION()

Synopsis

Return the Version info for this Asterisk.

Description

If there are no arguments, return the version of Asterisk in this format: SVN-branch-1.4-r44830M

Example: Set(junky=\${VERSION()};

Sets junky to the string SVN-branch-1.6-r74830M, or possibly, SVN-trunk-r45126M.

Syntax

VERSION(info)

Arguments

- info The possible values are:
 - ASTERISK_VERSION_NUM A string of digits is returned, e.g. 10602 for 1.6.2 or 100300 for 10.3.0, or 999999 when using an SVN build.
 - BUILD_USER The string representing the user's name whose account was used to configure Asterisk, is returned.
 - BUILD_HOSTNAME The string representing the name of the host on which Asterisk was configured, is returned.
 - BUILD_MACHINE The string representing the type of machine on which Asterisk was configured, is returned.
 - BUILD_OS The string representing the OS of the machine on which Asterisk was configured, is returned.
 - BUILD_DATE The string representing the date on which Asterisk was configured, is returned.
 - BUILD_KERNEL The string representing the kernel version of the machine on which Asterisk was configured, is returned.

Import Version

Function_VMCOUNT

VMCOUNT()

Synopsis

Count the voicemails in a specified mailbox.

Description

Count the number of voicemails in a specified mailbox, you could also specify the context and the mailbox folder.

```
Example: exten => s,1,Set(foo=${VMCOUNT(125)})
```

Syntax

VMCOUNT(vmbox[,folder])

Arguments

- vmbox
 - vmbox
 - context If not specified, defaults to default.
- folder If not specified, defaults to INBOX

Import Version

Function_VOLUME

VOLUME()

Synopsis

Set the TX or RX volume of a channel.

Description

The VOLUME function can be used to increase or decrease the tx or rx gain of any channel.

For example:

Set(VOLUME(TX)=3)

Set(VOLUME(RX)=2)

Set(VOLUME(TX,p)=3)

Set(VOLUME(RX,p)=3)

Syntax

VOLUME(direction,options)

Arguments

- direction Must be TX or RX.
- options
 - p Enable DTMF volume control

Import Version