## 1 Arquivo queues.conf

```
[general]
.
; Global settings for call queues
;
; Persistent Members
    Store each dynamic member in each queue in the astdb so that
    when asterisk is restarted, each member will be automatically
   read into their recorded queues. Default is 'yes'.
;
persistentmembers = ves
;
; Keep Stats
   Keep queue statistics during a reload. Default is 'no'
;
keepstats = no
;
; AutoFill Behavior
   The old/current behavior of the queue has a serial type behavior
;
    in that the queue will make all waiting callers wait in the queue
;
    even if there is more than one available member ready to take
;
;
    calls until the head caller is connected with the member they
    were trying to get to. The next waiting caller in line then
;
    becomes the head caller, and they are then connected with the
;
    next available member and all available members and waiting callers
;
    waits while this happens. The new behavior, enabled by setting
;
    autofill=yes makes sure that when the waiting callers are connecting
;
;
    with available members in a parallel fashion until there are
    no more available members or no more waiting callers. This is
;
    probably more along the lines of how a queue should work and
;
    in most cases, you will want to enable this behavior. If you
    do not specify or comment out this option, it will default to no
;
    to keep backward compatibility with the old behavior.
;
autofill = yes
;
; Monitor Type
    By setting monitor-type = MixMonitor, when specifying monitor-format
;
    to enable recording of queue member conversations, app_queue will
;
    now use the new MixMonitor application instead of Monitor so
;
    the concept of "joining/mixing" the in/out files now goes away
;
    when this is enabled. You can set the default type for all queues
;
   here, and then also change monitor-type for individual queues within
;
   queue by using the same configuration parameter within a queue
;
   configuration block. If you do not specify or comment out this option,
   it will default to the old 'Monitor' behavior to keep backward
;
   compatibility.
;
;
monitor-type = MixMonitor
; UpdateCDR behavior.
   This option is implemented to mimic chan agents behavior of populating
;
   CDR dstchannel field of a call with an agent name, which you can set
;
   at the login time with AddQueueMember membername parameter.
; updatecdr = no
;
; Note that a timeout to fail out of a queue may be passed as part of
; an application call from extensions.conf:
; Queue (queuename, [options], [optionalurl], [announceoverride], [timeout])
; example: Queue(dave,t,,,45)
; shared_lastcall will make the lastcall and calls received be the same in
; members logged in more than one queue.
```

```
; This is useful to make the queue respect the wrapuptime of another queue % \left( {{{\mathbf{x}}_{i}}} \right)
```

```
;
shared_lastcall=no
;[markq]
;
; A sample call queue
; Musicclass sets which music applies for this particular call queue.
; The only class which can override this one is if the MOH class is set
; directly on the channel using Set(CHANNEL(musicclass)=whatever) in the
; dialplan.
;musicclass = default
; An announcement may be specified which is played for the member as
; soon as they answer a call, typically to indicate to them which queue
; this call should be answered as, so that agents or members who are
; listening to more than one queue can differentiated how they should
; engage the customer
;
;announce = queue-markq
; A strategy may be specified. Valid strategies include:
; ringall - ring all available channels until one answers (default)
; leastrecent - ring interface which was least recently called by this queue
; fewestcalls - ring the one with fewest completed calls from this queue
; random - ring random interface
; rrmemory - round robin with memory, remember where we left off last ring pass
; linear - rings interfaces in the order specified in this configuration file.
           If you use dynamic members, the members will be rung in the order in
;
          which they were added
;
; wrandom - rings random interface, but uses the member's penalty as a weight
           when calculating their metric. So a member with penalty 0 will have
;
           a metric somewhere between 0 and 1000, and a member with penalty 1 will
:
                       have a metric between 0 and 2000, and a member with penalty 2 will have
           a metric between 0 and 3000. Please note, if using this strategy, the member
;
;
           penalty is not the same as when using other queue strategies. It is ONLY used
           as a weight for calculating metric.
.
;strategy = ringall
; Second settings for service level (default 0)
; Used for service level statistics (calls answered within service level time
; frame)
;servicelevel = 60
; A context may be specified, in which if the user types a SINGLE
; digit extension while they are in the queue, they will be taken out
; of the queue and sent to that extension in this context.
; context = goutcon
;
:----OUEUE TIMING OPTIONS-----
; A Queue has two different "timeout" values associated with it. One is the
; timeout parameter configured in queues.conf. This timeout specifies the
; amount of time to try ringing a member's phone before considering the
; member to be unavailable. The other timeout value is the second argument
; to the Queue() application. This timeout represents the absolute amount
; of time to allow a caller to stay in the queue before the caller is
; removed from the queue. In certain situations, these two timeout values
; may clash. For instance, if the timeout in queues.conf is set to 5 seconds,
; the retry value in queues.conf is set to 4, and the second argument to Queue()
; is 10, then the following may occur:
; A caller places a call to a queue.
; The gueue selects a member and attempts to ring that member.
; The member's phone is rung for 5 seconds and he does not answer.
; The retry time of 4 seconds occurs.
; The queue selects a second member to call.
; How long does that second member's phone ring? Does it ring for 5 seconds
; since the timeout set in app_queue is 5 seconds? Does it ring for 1 second since
```

```
; being in the queue for 10 seconds? This is configurable with the timeoutpriority
; option. By setting the timeoutpriority to "conf" then you are saying that you would
; rather use the time specified in the configuration file even if it means having the
; caller stay in the queue longer than the time specified in the application argument.
; For the scenario described above, timeoutpriority=conf would result in the second
; member's phone ringing for 5 seconds. By specifying "app" as the value for
; timeoutpriority, you are saying that the timeout specified as the argument to the
; Queue application is more important. In the scenario above, timeoutpriority=app
; would result in the second member's phone ringing for 1 second.
; There are a few exceptions to the priority rules. For instance, if timeoutpriority=appp
; and the configuration file timeout is set to 0, but the application argument timeout is
; non-zero, then the timeoutpriority is ignored and the application argument is used as
; the timeout. Furthermore, if no application argument timeout is specified, then the
; timeoutpriority option is ignored and the configuration file timeout is always used
; when calling gueue members.
; In timeoutpriority=conf mode however timeout specified in config file will take higher
; priority than timeout in application arguments, so if config file has timeout 0, each
; queue member will be called indefineately and application timeout will be checked only
; after this call attempt. This is useful for having queue members with custom timeouts
; specified within Dial application of Local channel, and allows handling NO ANSWER which
; would otherwise be interrupted by queue destroying child channel on timeout.
; The default value for timeoutpriority is "app" since this was how previous versions of
; Asterisk behaved.
;timeout = 15
; retry = 5
;timeoutpriority = app|conf
:----END OUEUE TIMING OPTIONS-----
; Weight of queue - when compared to other queues, higher weights get
; first shot at available channels when the same channel is included in
; more than one queue.
;
;weight=0
.
; After a successful call, how long to wait before sending a potentially
; free member another call (default is 0, or no delay)
;wrapuptime=15
; Autofill will follow queue strategy but push multiple calls through
; at same time until there are no more waiting callers or no more
; available members. The per-queue setting of autofill allows you
; to override the default setting on an individual queue level.
;
;autofill=yes
; Autopause will pause a queue member if they fail to answer a call
;autopause=ves
; Maximum number of people waiting in the queue (0 for unlimited)
.
;maxlen = 0
;
; If set to yes, just prior to the caller being bridged with a queue member
; the following variables will be set
; MEMBERINTERFACE is the interface name (eg. Agent/1234)
; MEMBERNAME is the member name (eq. Joe Soap)
; MEMBERCALLS is the number of calls that interface has taken,
; MEMBERLASTCALL is the last time the member took a call.
; MEMBERPENALTY is the penalty of the member
: MEMBERDYNAMIC indicates if a member is dynamic or not
; MEMBERREALTIME indicates if a member is realtime or not
;setinterfacevar=no
; If set to ves, just prior to the caller being bridged with a gueue member
; the following variables will be set:
```

; the caller has been in the queue for 9 seconds and is supposed to be removed after

```
; QEORIGINALPOS original position of the caller in the queue
;setqueueentryvar=no
;
; If set to yes, the following variables will be set
; just prior to the caller being bridged with a queue member
; and just prior to the caller leaving the queue
; QUEUENAME name of the queue
; 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
; OUEUEABANDONED number of abandoned calls
; QUEUESRVLEVEL queue service level
; QUEUESRVLEVELPERF current service level performance
;setgueuevar=no
;
; if set, run this macro when connected to the queue member
; you can override this macro by setting the macro option on
; the queue application
; membermacro=somemacro
; How often to announce queue position and/or estimated
; holdtime to caller (0=off)
; Note that this value is ignored if the caller's gueue
; position has changed (see min-announce-frequency)
;
;announce-frequency = 60
; The absolute minimum time between the start of each
; queue position and/or estimated holdtime announcement
; This is useful for avoiding constant announcements
; when the caller's queue position is changing frequently
; (see announce-frequency)
;min-announce-frequency = 15
; How often to make any periodic announcement (see periodic-announce)
;periodic-announce-frequency=60
; Should the periodic announcements be played in a random order? Default is no.
;
;random-periodic-announce=no
;
; Should we include estimated hold time in position announcements?
; Either yes, no, or only once.
; Hold time will be announced as the estimated time.
;announce-holdtime = yes|no|once
; Queue position announce?
; Valid values are "yes," "no," "limit," or "more." If set to "no," then the caller's position will
; never be announced. If "yes," then the caller's position in the queue will be announced
; to the caller. If set to "more," then if the number of callers is more than the number
; specified by the announce-position-limit option, then the caller will hear that there
; are more than that many callers waiting (i.e. if a caller number 6 is in a queue with the
; announce-position-limit set to 5, then that caller will hear that there are more than 5
; callers waiting). If set to "limit," then only callers within the limit specified by announce-position-limit
; will have their position announced.
;announce-position = yes
; If you have specified "limit" or "more" for the announce-position option, then the following
; value is what is used to determine what announcement to play to waiting callers. If you have
; set the announce-position option to anything else, then this will have no bearing on queue operation
;announce-position-limit = 5
;
```

; OEHOLDTIME callers hold time

```
; If this is non-zero, then we announce the seconds as well as the minutes
; rounded to this value.
; Valid values are 0, 5, 10, 15, 20, and 30.
; announce-round-seconds = 10
; Use these sound files in making position/holdtime announcements. The
; defaults are as listed below -- change only if you need to.
; Keep in mind that you may also prevent a sound from being played if you
; explicitly set a sound to be an empty string. For example, if you want to
; prevent the queue from playing queue-thankyou, you may set the sound using
; the following line:
;
; queue-thankyou=
;
                             ("You are now first in line.")
                      ;
;queue-youarenext = queue-youarenext
                     ; ("There are")
;queue-thereare = queue-thereare
                     ;
                              ("calls waiting.")
;queue-callswaiting = queue-callswaiting
                           ("The current est. holdtime is")
                     ;
;queue-holdtime = queue-holdtime
                     ;
                              ("minutes.")
;queue-minutes = queue-minutes
                              ("seconds.")
                     ;
; queue-seconds = queue-seconds
                    ; ("Thank you for your patience.")
;queue-thankyou = queue-thankyou
                 ; ("Hold time")
;queue-reporthold = queue-reporthold
                   ; ("All reps busy / wait for next")
;periodic-announce = queue-periodic-announce
;
; A set of periodic announcements can be defined by separating
; periodic announcements to reproduce by commas. For example:
;periodic-announce = queue-periodic-announce,your-call-is-important,please-wait
; The announcements will be played in the order in which they are defined. After
; playing the last announcement, the announcements begin again from the beginning.
; Calls may be recorded using Asterisk's monitor/MixMonitor resource
; This can be enabled from within the Queue application, starting recording
; when the call is actually picked up; thus, only successful calls are
; recorded, and you are not recording while people are listening to MOH.
; To enable monitoring, simply specify "monitor-format"; it will be disabled
; otherwise.
; You can specify the monitor filename with by calling
; Set (MONITOR FILENAME=foo)
; Otherwise it will use MONITOR FILENAME=${UNIQUEID}
; Pick any one valid extension for monitor format recording. If you leave
; monitor-format commented out, it will not record calls.
;
; monitor-format = gsm|wav|wav49
;
; Monitor Type
  By setting monitor-type = MixMonitor, when specifying monitor-format
;
   to enable recording of queue member conversations, app queue will
;
   now use the new MixMonitor application instead of Monitor so
;
  the concept of "joining/mixing" the in/out files now goes away
;
; when this is enabled. If you do not specify or comment out this option,
  it will default to the old 'Monitor' behavior to keep backward
;
   compatibility.
;
;
; monitor-type = MixMonitor
; ----- TYPE MIXMONITOR OPTIONS -----
;
```

; What's the rounding time for the seconds?

```
; You can specify the options supplied to MixMonitor by calling
; Set (MONITOR_OPTIONS=av(<x>)V(<x>)W(<x>))
; The 'b' option for MixMonitor (only save audio to the file while bridged) is
; implied.
; You can specify a post recording command to be executed after the end of
; recording by calling
; Set(MONITOR_EXEC=mv /var/spool/asterisk/monitor/^{MONITOR_FILENAME} /tmp/^{MONITOR_FILENAME})
: The command specified within the contents of MONITOR EXEC will be executed when
; the recording is over. Any strings matching ^{X} will be unescaped to X and
; all variables will be evaluated just prior to recording being started.
; The contents of MONITOR_FILENAME will also be unescaped from ^{X} to X and
; all variables will be evaluated just prior to recording being started.
; This setting controls whether callers can join a queue with no members. There
; are three choices:
        - callers can join a queue with no members or only unavailable members
; yes
; no
        - callers cannot join a queue with no members
; strict - callers cannot join a queue with no members or only unavailable
          members
; loose - same as strict, but paused queue members do not count as unavailable
;
; joinempty = yes
; If you wish to remove callers from the queue when new callers cannot join,
; set this setting to one of the same choices for 'joinempty'
; leavewhenempty = yes
; If this is set to yes, the following manager events will be generated:
; AgentCalled, AgentDump, AgentConnect, AgentComplete; setting this to
; vars also sends all channel variables with the event.
; (may generate some extra manager events, but probably ones you want)
; eventwhencalled = yes|no|vars
; If this is set to yes, the following manager events will be generated:
; QueueMemberStatus
; (may generate a WHOLE LOT of extra manager events)
; eventmemberstatus = no
; If you wish to report the caller's hold time to the member before they are
; connected to the caller, set this to yes.
; reportholdtime = no
; If you want the queue to avoid sending calls to members whose devices are
; known to be 'in use' (via the channel driver supporting that device state)
; uncomment this option. (Note: only the SIP channel driver currently is able
; to report 'in use'.)
;
; ringinuse = no
; If you wish to have a delay before the member is connected to the caller (or
; before the member hears any announcement messages), set this to the number of
; seconds to delay.
; memberdelay = 0
; If timeoutrestart is set to yes, then the timeout for an agent to answer is
; reset if a BUSY or CONGESTION is received. This can be useful if agents
; are able to cancel a call with reject or similar.
; timeoutrestart = no
; If you wish to implement a rule defined in queuerules.conf (see
```

```
; configs/queuerules.conf.sample from the asterisk source directory for
; more information about penalty rules) by default, you may specify this
; by setting defaultrule to the rule's name
; defaultrule = myrule
; Each member of this call queue is listed on a separate line in
; the form technology/dialstring. "member" means a normal member of a
; queue. An optional penalty may be specified after a comma, such that
; entries with higher penalties are considered last. An optional member
; name may also be specified after a second comma, which is used in log
; messages as a "friendly name". Multiple interfaces may share a single
; member name. An optional state interface may be specified after a third
; comma. This interface will be the one for which app_queue receives device
; state notifications, even though the first interface specified is the one
; that is actually called.
; It is important to ensure that channel drivers used for members are loaded
; before app_queue.so itself or they may be marked invalid until reload. This
; can be accomplished by explicitly listing them in modules.conf before
; app_queue.so. Additionally, if you use Local channels as queue members, you
; must also preload pbx_config.so and chan_local.so (or pbx_ael.so, pbx_lua.so,
; or pbx_realtime.so, depending on how your dialplan is configured).
;member => DAHDI/1
;member => DAHDI/2,10
;member => DAHDI/3,10,Bob Johnson
;member => Agent/1001
;member => Agent/1002
;member => Local/1000@default,0,John Smith,SIP/1000
;
; Note that using agent groups is probably not what you want. Strategies do
; not propagate down to the Agent system so if you want round robin, least
; recent, etc, you should list all the agents in this file individually and not
; use agent groups.
                               ; Any agent in group 1
;member => Agent/01
;member => Agent/:1,1
                               ; Any agent in group 1, wait for first
                                ; available, but consider with penalty
; Cola de administradores
[administradores]
music=default
strategy=ringall
timeout=15
retrv=5
wrapuptime=0
maxlen = 0
announce-frequency = 0
announce-holdtime = ves
member => SIP/7000
```

member => SIP/5006