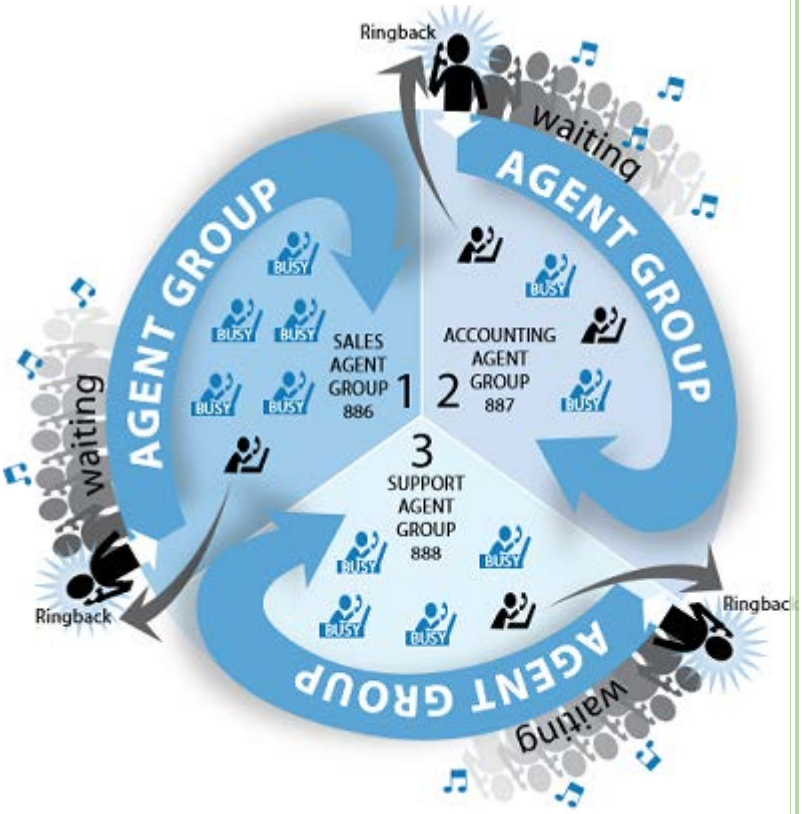
REAL TELECOM

2017

Real Agent Group



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Contents

Real Agent Groups 5

Scenario 5

Agent Groups Features 6

- Agent log in/log out 6
- Overflow assistance. 6
- Audio in the queue 6
- Recovery time. 7
- Missed calls. 7
- Multiple ACD membership 7
- Multiple "ring" algorithms. 7
- Agent group identification. 7
- When to connect call. 7
- Trunk overload prevention. 7
- Repeat callers to same agent 7
- Redirection. 7
- Instant messaging. 7
- Email of activity. 7
- Exiting the queue. 7
- Recording calls. 7
- Safety net for no agents available. 8
- Mobility. 8
- Outbound dialing. 8

- Mobility. 8
- Outbound dialing. 8
- Simple CDR Integration. 8

Configuring Real Agent Group 8

- Account Number(s): 8
- Display Name: 8
- All agents for this ACD: 8
- Currently logged in agents: 9
- Extensions that may jump in or out (* for all): 9
- Minimum number of agents for jumping out: 9
- Agent recovery time(s): 9
- Automatically log out the agent if they missed the last call: 9
- Minimum number of agents for jumping out: 10
- Agent recovery time(s): 10
- Automatically log out the agent if they missed the last call: 10
- Allow multiple ACD calls on agent - even if busy: 10

Agent Selection 10

- Agent selection algorithm: 10
  - Random: 10
  - Ring longest idle first: 11
  - Use preference from the Agent's setting: 11
- Insert the newly logged in agent: 11
- Ring stage duration (secs): 11
- Number of agents added per stage: 11

Caller in Queue 11
Miscellaneous 13
- Ring Melody for agents: 13
- Event for connecting the call: 13
  - Entering the agent group: 13
  - Music playback 13
  - Agent picks up call: 13
  - Never connect: 13
- Priority: 14
- Maximum calls: 14
- After the maximum calls is reached: 14
- From-Header: 14
- Automatically add CMC: 14
- Caller priority: 14
  - Queue entry time: 14
  - Try to pull out callers when their last agent becomes available: 14
- Dial plan for outbound calls: 15
- Turn off the cell phone forking: 15
- ANI: 15

Night Service 15
- When primary agents are logged out, send calls to: 15
- When all agents are logged out, send calls to: 15
- When all agents are unregistered, send calls to: 16
- Service Flag Account: 16

Night Service Number: 16
Caller Setup 16
Audio 16
Ringback tone: 16
- Music on Hold source: 17
- Background Music: 17
- Accounts that may record a message: 17
- Gap between announcement(s): 17
- Queue position announcement: 17

Upload Messages 17
The Message-Music Cycle 17
Record Greetings 19
Listening to Greetings from the Phone 20
Caller Options 20
Outbound Calling 21
Initiating ACD Outbound Calls 21
Managing the Outbound Call List 21
Agent Log in/Log out 22
Important: 22
Method 1: Buttons 22
Method 2: Star Codes 22

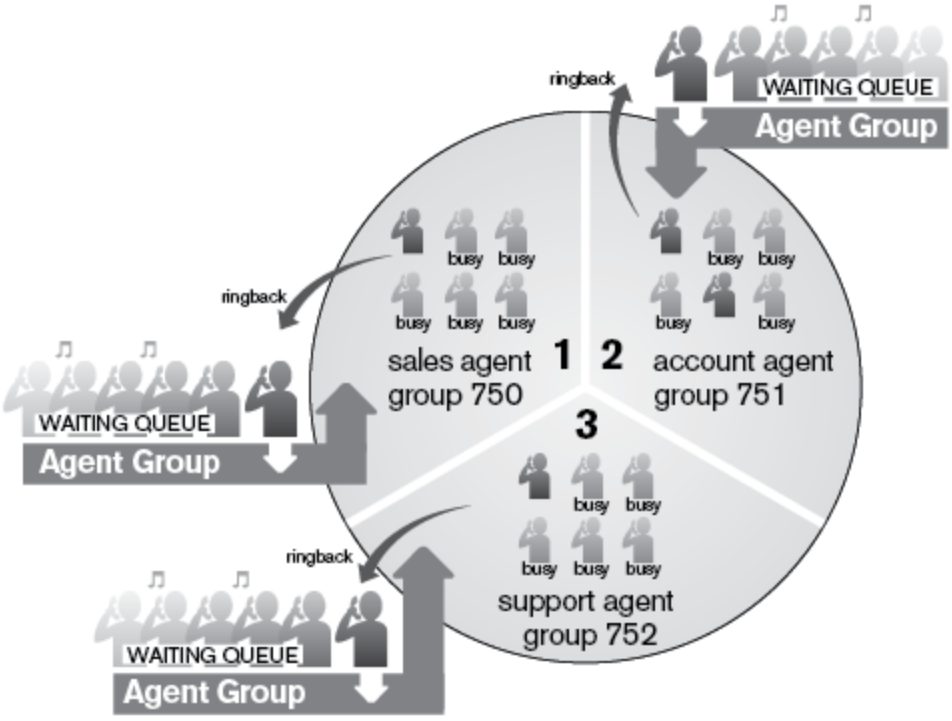
Real Agent Groups

The new Real Agent Group (RAG) is designed to support Answering Services and Call Centers' activities in managing callers, calls, and the agents that answer and make the calls.

Traditionally, Answering and Call Centers services use Automatic Call Distribution (ACD) systems to route incoming calls to agents. The Real Agent Group system, in addition to providing the traditional ACD, is a system that routes incoming calls to a specific group of agents and callers are placed inside a queue, allowing agents to deal with incoming calls without losing other callers to busy signals or unanswered calls. While waiting, callers hear music and pre-recorded announcements. Agent groups can be monitored using a number of monitoring methods.

Scenario

A company has 3 Groups of agents, Sales, Accounting, and Support groups. A caller reaches an agent group in one of two ways: either by calling the agent group directly if each group has its own telephone number or by calling a company's auto attendant programed with three branches. When caller reach the Auto Attendant they must press the number that corresponds with their choice. The caller hears the programmed options in the form of pre-recorded messages. Each option will connect the caller to an agent group, and the caller will be placed inside a queue until an agent becomes available.



Agent groups are often found in offices that handle high-volume customer calls from callers who do not need to speak with a specific person but who require assistance from any of multiple persons, like sales representatives and airline reservations attendants. Agent groups have a wide range of features.

Agent Groups Features

- **Agent log in/log out.** Queue managers can statically log their agents in, or agents can dynamically log in using star codes. A minimum number of agents that must always remain in the group can be defined.
- **Overflow assistance.** Additional agents or overflow queues can be added to the list of agents when the queue gets busy and the waiting duration exceeds a programmable duration.
- **Audio in the queue.** Callers hear music on hold mixed with announcements that can be either uploaded (studio recordings) or recorded from an extension. The

announcements can be mixed with position announcements so that callers are aware of their queue position.

- **Recovery time.** Agents can be given a short period to take notes between the calls; for example, 20 seconds to prepare for the next call.
- **Missed calls.** Agents can be automatically logged out for missed calls.
- **Multiple ACD membership.** Agents can be part of multiple ACD groups. The groups can be prioritized to arbitrate conflicts over which queue should ring the agent.
- **Multiple "ring" algorithms.** Different algorithms are available for distributing calls to the agents, including random, longest idle first, and predefined priorities.
- **Agent group identification.** Agents who belong to multiple agent groups can determine which group the call is coming from by using two different methods: (1) ring tone (the PBX can signal different ring tones to the agents; this requires support from the connected device), and (2) the caller-ID can be displayed along with the queue name.
- **When to connect call.** The connection event for the PBX can be set to various points in the call to avoid unnecessary cost to the caller.
- **Trunk overload prevention.** The maximum number of calls for the queue can be defined to ensure that limited trunk resources are not overloaded.
- **Repeat callers to same agent.** The system can automatically assign a customer-ID to a caller and add it to the address book, enabling repeat callers to be connected to the same agent.
- **Redirection.** Calls can be redirected based on time or user-initiated events to other destinations.
- **Instant messaging.** Queue managers can receive SIP instant messages related to the queue status.
- **Email of activity.** Daily email reports summarize the calls for the group. The reports include waiting times, connection times, and the duration of calls on hold, grouped by each agent and in total.
- **Exiting the queue.** Callers can use DTMF to leave the queue and move to other destinations.
- **Recording calls.** Calls can be recorded automatically and saved to a predefined folder. For devices that support the XML format, recording can be turned on and off by the agent to comply with legal and credit card requirements.

- **Safety net for no agents available.** When all agents are logged out or are no longer registered, calls can be automatically redirected to a programmable destination.

- **Mobility.** Calls to the queue can be forked to the agent's cell phone, enabling highly mobile groups (e.g. real estate agents working together in a group on the road) to take advantage of the feature-rich agent group account.
- **Outbound dialing.** Call lists can be uploaded to an agent group for automatic outbound dialing support. Agents can use a star code to initiate the callback and then use DTMF tones to mark numbers as completed or to indicate that a follow-up is needed without disconnecting the call. This feature is also available from the cell phone.
- **Mobility.** Calls to the queue can be forked to the agent's cell phone, enabling highly mobile groups (e.g. real estate agents working together in a group on the road) to take advantage of the feature-rich agent group account.
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- **Simple CDR Integration.** Incoming calls on Microsoft Windows may pop-up a browser windows with a link to an URL that contains the caller-ID. This makes it easy to integrate with most of the available CRM systems for inbound calls.

Configuring Real Agent Group

- **Account Number(s):** This field takes extension number(s) and/or DID number(s). The number of DIDs that can be entered into this field is unlimited.
- **Display Name:** This field allows you to create an alias so that you can quickly identify the Account among other Accounts.

- **All agents for this ACD:** This settings contains the list of the agents for the ACD and is used in some reports from this ACD. If the algorithm for the ACD was set to "Use preference from the Agent's setting" then the system will add the additional agents

from below ("After hearing ring back for (X) seconds", escalation) and use the resulting list as the preference to find the next agent from the front of the list to the back.

- **Currently logged in agents:** This setting controls who is logged in the ACD as agent. The setting can be changed through the web interface, but it can also be changed with star codes, e.g. when the agent logs in from the IP phone. In the case of escalation the list of the additional agents will be added to the list, so that those agents don't have to log in.
- **Extensions that may jump in or out (* for all):** This setting controls which agents can dynamically join or leave the agent group. It can also be used to add non-agents to the agent group, which can be useful during especially busy periods when additional people are needed for the queue. If a star is used in this field, extensions that use *64 will automatically be listed in this field, i.e., the list will grow and decrease as people log in and out. It is recommended that actual extensions be entered into this field.
- **Minimum number of agents for jumping out:** This setting specifies the number of agents that must remain in the agent group before agents are permitted to jump out. If this setting is too high, agents will be unable to log out of the agent group. For small agent groups, a value of 1 is recommended.
- **Agent recovery time(s):** Use this setting to ensure that an agent has adequate time to recover from the previous call before taking another call. In busy call centers, 2 seconds might be an appropriate setting. However, agents who are required to record notes about the call will need a longer value. In these cases, 60 seconds might be more appropriate. The recovery time also allows an agent to log out of the agent group.
- **Automatically log out the agent if they missed the last call:** This setting will log out an agent who has missed a call. Agents need only log back in to return to the agent group. This setting is directly linked to the after hearing ring back settings. The caller is redirected to the extension or agent (whichever is chosen) that has been specified in that setting after the timeout in that setting has been reached.

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- **Allow multiple ACD calls on agent - even if busy:** This setting allows a caller to be sent directly to an agent, even if all agents are busy. It prevents the caller from sitting there listening to music and gives the agent the opportunity to put their current call on hold and take the new call. This setting should generally not be used.

Agent Selection

- Agent selection algorithm: The agent selection algorithm allows you to establish the method that will be used by the system when connecting a caller to an agent. Choose from the following options:
    - **Random:** This algorithm randomly selects the next agent. This is a reasonable algorithm in environments where it is not important as to which agent processes the call.

- **Ring longest idle first:** This algorithm is designed to balance active call time amongst all the agents. The queue keeps a list of the agents and moves an agent to the end of the list when an agent connects a call. This ensures that the agent with the longest idle is at the front of the list.
- **Use preference from the Agent's setting:** This algorithm uses the extensions listed in the Agent setting. The agent listed first will be tried first. If that agent is busy, then the system will jump to the second one and so on.

- Insert the newly logged in agent: Depending on your setting, newly logged in agents will be positioned at the front of the queue or the back.
- Ring stage duration (secs): At regular intervals, the system checks agent availability and determines whether the next caller should be pulled out of the waiting state. The ring stage duration setting establishes this interval. For larger queues, shorter intervals are recommended, as it is quicker to get callers out of the queue and into a ring back state. The default value for this setting is 5 seconds.
- Number of agents added per stage: In every scheduling interval, the system adds only a limited number of agents from its pool of available agents to its list of ringing agents. For large agent groups, a typical value would be one or two, as this will ensure that not all agents receive calls at the same time and so that the system CPU is not overtaxed with simultaneous calls.

Caller in Queue

This section allows you to establish timeout settings that will determine the length of time a call is kept in queue or ring back state in a given situation. In this section, you can instruct the system to add additional agents or to redirect a call after the call has been in ring back for a given length of time. You can also instruct the system to redirect a call once a caller's wait time has passed a certain threshold.

After/if...	Then...	How/when to use...

After hearing ring back for (X) seconds,	Include the following additional agents (e.g., 41 42).	Use this setting when additional people in the office can help out when no one else is picking up. Result: When calls are not picked up within the specified period, the system calls these extensions.
After hearing ring back for (X) seconds,	The system will redirect the call to the destination (e.g., 73).	The destination can be either an internal number (e.g., a hunt group) or an external number (e.g., a cell phone or home number). This option is similar to the previous option but instead of ringing both the original and new agents, the system cancels the original agents and redirects calls to the new agent(s) or to the external number. Result: After-hour callers are directed to a phone that will be picked up.
If the caller has already waited longer than (X) seconds,	The system will redirect the call to the destination (e.g., 73).	If a caller has waited a while in the queue, this will immediately redirect the call to another destination. Note: The caller is classified as "waiting" when all agents are busy with other customers and the new caller is waiting for a free agent. Result: If none of the agents free up within the specified period, the call will be redirected to the indicated number.

Miscellaneous

- **Ring Melody for agents:** It is important to set the ring melody so that the phone knows which one to play and so that agents will be able to distinguish regular calls from agent group calls.
    - Custom 1 through 4: Custom ringtones allow users in an agent group to distinguish agent group calls from other calls. Before customized ringtones can be used, you will need to provide your own ringtones, modify the ringtones.xml file, and then place it into the html directory. When the phone receives the alert-info header from the system, it will respond with a different ring tone based on the ringtone that was selected from the web interface.
    - External Call: The ring tone will be long.
    - Internal Call: This ring tone will be short.
- Event for connecting the call: This setting allows you to tell the system when to pick up the line if the line has not been picked up already (for example, by an auto attendant).
    - **Entering the agent group:** The call is picked up when it enters the agent group. In most cases, this is suitable behavior.
    - **Music playback**: If the caller has to wait for an available agent, the caller is put on hold and hears music while waiting. If the call goes directly to an agent, the queue waits until the agent picks up the call before connecting it.
    - **Agent picks up call:** The call is not connected until the agent picks up the call, even if music on hold and/or announcements have been set. This option is useful if the waiting time in the queue is typically very short and there's no risk of the carrier disconnecting the call due to no answer.
    - **Never connect:** The call is never connected. This is useful if you want to provide free services to callers. This setting prevents the carrier from seeing the

call. As with the other options, there is a risk that the carrier will not tolerate this behavior and will hang up the call after a certain timeout.

- Priority: This setting determines which agent group will be the priority when an agent is part of multiple agent groups. For example, if two calls are on two agent groups and the PBX has to choose this agent, it uses this setting to determine which agent group call has the higher priority.
- Maximum calls: If you want to limit the number of active calls on the agent group, you can use this setting.
- After the maximum calls is reached: This setting determines what the system should do when the maximum calls have been reached. The system can either reject the call or instead connect the call and play a message.
- From-Header: This setting allows agents to see who the call is coming from. By default, the name of the calling party is displayed, but the system can be configured to display the name of the queue (see From Header in Groups), either by itself or with the calling party. When both are shown, the system puts the caller-ID in brackets after the display name. This mode requires that the phone have enough space to display a long number. When using this mode, choose a short group name so that it requires less space.
- Automatically add CMC: When this feature is turned on, the caller's CMC will appear in every CDR that is written on the disk. The CMC is used for automatic billing.
- Caller priority: This feature allows callers to be connected to agents who have handled their calls in the past.
    - **Queue entry time:** All callers will be placed in queue and will remain there until an agent becomes available.
    - **Try to pull out callers when their last agent becomes available:** Callers will be pulled from the queue if their last agent becomes available.

- Dial plan for outbound calls: Select the dial plan that will be used for this account. For more information on dial plans.
- Turn off the cell phone forking: By default the ACD will try to include the agent cell phone when trying to connect a call. This behavior can be turned on on the user's profile, but it can be disabled per ACD as well.
- ANI: The agent group uses an ANI (automatic number identification) when sending a caller to an external number. This setting is necessary when the user input handling destinations take callers to external numbers rather than extension numbers within the domain.

> When an extension logs into a RAG, it will use the RAG ANI for outbound calls (if it was set) and replace the ANI of the extension.

Night Service

Night service is used to redirect calls to other extensions or phone numbers during certain times of the day/night or other events that are outside normal business hours. Before night service can be used, a service flag account must be created for each night service number.

The first three settings in Night Service allow you to make provision for when no agents are available:

- When primary agents are logged out, send calls to: "Primary agents" refers to the agents that are entered into the all agents for this ACD field.
- When all agents are logged out, send calls to: "All agents" refers to the agents that are entered into the all agents for this ACD field, as well as the extensions that are entered into the Caller in Queue fields.

- When all agents are unregistered, send calls to: It is best to enter a number that is not part of the PBX (e.g., an external number) since the extensions may also be unregistered if the registration issue is due to a power outage.

The following two settings are used to configure the service flag(s) to night service numbers:

- Service Flag Account: Once you have created the service flag account(s), enter the number of the account(s) into this field.

Note: You may specify more than one night service flag (separated by a space). The first service flag account will correspond to the first night service number, and the second service flag account will correspond to the second night service number, etc.

Night Service Number: Once a service flag is in place, calls will be directed to the night service number(s) indicated here. Internal extensions or external number phone numbers are permitted in this field.

Note: You can also use a special character pattern (#L) to activate the service flag when all agents are logged out, even if the logout period is within normal working hours. All calls will automatically be redirected to the specified night service number(s).

Caller Setup

Audio

Ring back tone:

- Regular ring back tone when agent rings: The caller will hear the agent ringing.
- No ring back tone, continue playing music: Instead of hearing a ring back tone, the caller will hear music. If an agent is no longer at his desk but has not

logged out of the agent group, the caller will hear music on hold instead of ring back.

- **Music on Hold source:** From the dropdown list, choose the music that the caller will hear while waiting for an agent.
- **Background Music:** This setting enables you to continue playing the music on hold while playing the messages.
- **Accounts that may record a message:** Specify which accounts may record announcements. When this setting is left empty, all extensions will have permission to record announcements.
- **Gap between announcement(s):** From the dropdown list, select the number of seconds that the system should wait between each announcement.
- **Queue position announcement:** When Announce queue position is selected, an announcement will let callers know their position in queue.

Upload Messages

The number of available greetings within any agent group is nine. Record only those greetings that should be used. If no greetings are needed, even an initial greeting, don't record any. When recording greetings, you need to assign a number to each greeting; for example, `*0` is the entry greeting, `*1` is the first greeting, `*2` is the second greeting, etc. The number is entered as the last number in the string.

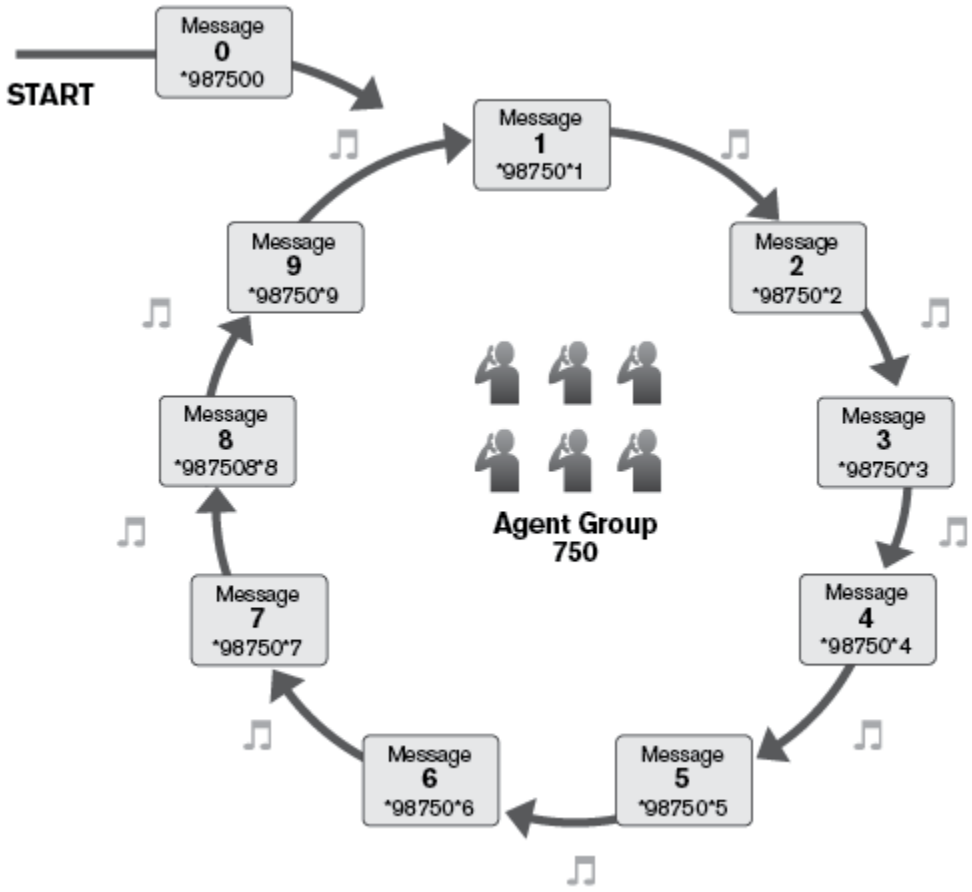
The Message-Music Cycle

While the caller is waiting, the system delivers a combination of pre-recorded messages and music. The messages can be used to provide additional information about your company, or they can be used to provide the caller with additional options and/or a way to exit the queue. Each agent group can be configured to play up to nine recorded messages. Between the messages are "gaps" of music which can be configured to span 5 to 180 seconds. This message music cycle continues for as long as the caller is in the queue. Message 0 is considered the entry point message (which will never be replayed), and message 1 is the first message.

An agent group using six different messages for its message-music cycle. Once message 6 has been played, the system returns to message 1 and repeats the cycle.

This sequencing of messages and music will continue until an agent becomes available. Once an agent is available, the system automatically takes the next call out of the queue, rings the agents, and puts the call into ring back state. Within any one agent group, only one call at a time can be in ring back state, regardless of the number of agents that are available. All other calls remain queued until the ringing call is connected and at least one agent becomes available.

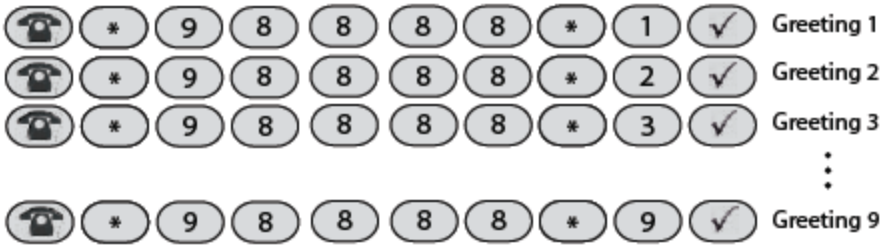
While it might seem logical to conclude that a caller's time in the queue has ended once the call has been placed in ring back state, this is not always the case. If an agent leaves the desk without logging out of the queue, the ring back state will continue until the system finds another agent to answer the call. To prevent nonstop ringing, you can take two precautions: (1) you can configure the agent group to include additional agents at specified intervals in the ring back cycle and (2) you can configure the agent group to play music during the ring back state. This will prevent the caller from hearing long periods of ringing in the event there are episodes of extended ring back.



Record Greetings

Dial `*98` followed by the number of the agent group, then the greeting number (e.g., `*1`).

Press the confirm button on the telephone keypad.



Listening to Greetings from the Phone

To listen to greetings quickly from the phone, change the gap between announcements to 1 and call the agent group directly from your phone. The recorded messages will be played quickly.

Caller Options

Caller options allow the caller to exit the agent group queue and connect to another destination. To give the caller this option, use the Caller Options fields to map telephone keypad numbers to other extensions or phone numbers.

Once extensions or phone numbers have been entered into the "Key" fields, the caller must be made aware that these options are available. The system will not do this automatically. The place to do this is through the greetings that are delivered by the system (using the *98 star code feature). One greeting or several greetings can be used to inform the caller that this additional option is available. In the following table, greeting 2 informs that caller that key 1 can be pressed to leave a message.

Greeting	Message	Caller Option
0	Welcome to CompanyABC. Your call is important to us. Please hold.	

1	Sorry our lines are still busy . . . Have you looked at the support site for answer to your question?	
2	Our newest release offers this and that . . . If you want to leave a message, please press 1 now.	503
3	Another message . . .	
4	Another message . . .	

Outbound Calling

The agent group's Outbound Calling page allows the agent group admin to set up outbound numbers for agent dialing. Once the outbound numbers have been configured for the agent group, users can initiate calling using the ACD outbound calling star code.

Initiating ACD Outbound Calls

To initiate dialing, agent group members can dial `*5573` (where `73` is the number of the agent group).
The REAL PBX plays a few prompts to help the agent navigate during the calling process.

Managing the Outbound Call List

After a successful call, the *Status* changes to *Ok* for the dialed number. This means that the number will not be attempted again. If you want the REAL PBX to attempt that number again, you have to reset the *Status* for that number. This can be done by selecting the check box and clicking the Reset button. If you do not want to keep the number in the outbound call list, you can select the number and click *Delete*. This removes the number from the list.

Agent Log in/Log out

Agents must log into the queue to begin receiving calls. When agents have finished for the day or would like to stop receiving calls from the queue, they must log out of the queue.

Agent group members can use one of two methods (buttons or star codes) when logging in and out of agent groups.

Important: Before agents can use either method, agents must be included in the Extensions that may jump in or out setting. Another setting that must be considered is the Minimum number of agents for jumping out setting (shown below). The latter setting is used to prevent the agent group from becoming too small; however, if this setting is too high, agents will be unable to log out of the agent group.

Method 1: Buttons

This method allows users to use a button on their phone to log in and out of agent groups. When configured properly, the button will have a toggle effect. When the button is pressed, users will be logged in to all agent groups, and the associated LED(s) on their phone will light. When the button is pressed again, users will be logged out of all agent groups and the associated LED(s) will no longer be lit. If users need to log out of one agent group before logging into another, multiple **Agent login/logout** buttons can be configured.

Important: Before you can use this button, the star codes for Agent logged in/Agent logged out must match (e.g., `*65`/`*65`).

Method 2: Star Codes

When using star codes to log in and out of agent groups, users have the flexibility of logging in and out of all agent groups to which they belong or just a specific group. The standard **Agent**

logged in/Agent logged out (*64/*65) star codes (without any argument) will log the agent in to or out of all agent groups:

Agents who are members of numerous agent groups and who need to log out of one agent group before logging into another can do so by entering the agent group number after the star code. Using the sample shown below, the agent will be logged out of agent group 666 and will retain logged-in status for all other agent groups.